

London City Airport

City Airport Development Programme

Updated Transport Assessment

September 2015

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EXECUTIVE SUMMARY

Vectos is retained by London City Airport to advise on surface access matters in relation to the City Airport Development Programme (CADP) planning applications. Vectos has prepared this Updated Transport Assessment (UTA) to consider the surface access issues associated with the proposed CADP. It should be read alongside the Planning Statement, Need Statement and its Update, the Updated Environmental Statement (UES), in particular Chapter 11 covering Surface Access aspects, and the Design and Access Statement and its Update that accompany the CADP Appeal Proposals.

So as to avoid confusion, all replacement or new text in this UTA is shown in blue font to allow the reader to appreciate and follow the updated information more easily.

Existing Situation

London City Airport is located between the Royal Albert Dock and King George V (KGV) Dock, adjacent to the Woolwich Reach and Gallions Reach of the River Thames.

Vehicle access to the Airport is provided from Hartmann Road, a private road with an east-west orientation. It forms a signalised junction with the A112 Connaught Road at its western end, which currently functions as the single point of access to the Airport from the wider highway network. At its eastern end, Hartmann Road forms a signalised junction with the A117 Woolwich Manor Way, although this junction is presently closed for access to the Airport.

Existing Travel Patterns

In the calendar year 2014 there were 3.65 million passengers passing through the Airport. The average passenger mode split for 2014 shows that DLR comprised the greatest proportion of the mode share at 61%, followed by Private Hire Minicab at 14% and Black Taxi at 10%.

Baseline employment data shows that in 2014 there were some 1,830 Full Time Equivalent (FTE) employees who are principally located on-site at the Airport.

A full staff travel survey was undertaken in 2013 and this showed that the greatest proportion of employees travel by car, with 41% of the total in 2013. This is followed by bus with 19% and DLR with 18%.

Development Proposals

The proposed development project, known as the City Airport Development Programme (CADP), comprises a full planning application to construct new passenger facilities, 7 new aircraft stands and associated infrastructure (CADP1) together with a separate outline planning application for a Hotel (CADP2).

Vehicle access will continue to be provided from the junction of Hartmann Road / A1011 Connaught Road. In addition, it is proposed to create a further permanent access and vehicle link to the Airport from the junction with the A117 Woolwich Manor Way / Fishguard Way.

A new passenger Forecourt area is proposed to the south and east of the extended Terminal. The Forecourt area has been designed to provide sufficient capacity to accommodate the forecast demand of approximately 6 mppa by 2025.

It is proposed to replace the main car parking areas with three passenger car parks, a new staff car park and two new car hire areas. Each of the car parks would be accessed from Hartmann Road. It is proposed to increase the parking provision from 974 spaces to 1,251 spaces, i.e. an increase of 277 spaces or a 28% increase. This compares with passenger numbers which will be increasing by 62% and staff numbers which will be increasing by 60%, compared to 2014. The car parking will also serve a Hotel with up to 260 bedrooms, proposed in CADP2.

The Airport's Travel Plan is being updated. This has been discussed through the Airport Transport Forum. Detailed Travel Plans will be prepared to consider passenger and staff travel in conjunction with CADP and the new Surface Access Strategy.

A Construction Logistics Plan, Delivery and Servicing Plan, Car Park Management Plan and Taxi Management Plan will be implemented as likely planning conditions.

Policy Context

CADP has been considered in the context of national, regional and local transport policies. This includes the National Planning Policy Framework, [National Planning Practice Guidance](#) and Aviation Policy Framework at national level, the London Plan and Mayor's Transport Strategy at regional level and Newham's Core Strategy at local level. This has demonstrated that CADP accords with the relevant transport policies.

Trip Attraction

[Passenger numbers are predicted to grow incrementally from 3.65 mppa in 2014 to 6.0 mppa in 2025 With Development compared to 4.8 mppa Without Development.](#)

[Whilst passenger numbers are not forecast to increase above 6.0 mppa in 2025, a reasonable worst case sensitivity test has been undertaken assuming 6.5 mppa \(referred to as the 'With CADP Higher Passenger Sensitivity Test'.](#)

[Staff numbers are expected to increase from 1,830 direct employees in 2014 to a maximum of 2,930 employees in 2025 in the Core CADP Scenario.](#)

Impact on Public Transport Networks

The assessment of the public transport networks considers DLR, Crossrail and bus services.

DLR crowding factors have been calculated for each link in both directions on the Airport route between Canning Town and Woolwich Arsenal. The results show that with CADP in place, planning capacity is not exceeded on any link. The maximum increase in passengers is just [27](#) passengers per train or [9](#) per train carriage (since there are three carriages per train).

The Stratford to Woolwich Arsenal Branch of the DLR currently operates with two carriages per DLR train. Future plans are to increase the DLR trains to operate with three carriages on this branch, in line with the Bank to Woolwich Arsenal Branch. [As part of the CADP proposals, London City Airport has agreed to contribute to costs of two carriages to support this.](#)

[It is concluded that the additional Airport-related passengers can be accommodated on the Airport branch of the DLR network, and indeed that comfort levels on DLR will improve with the DLR proposals that CADP contribute to.](#)

Crossrail will have a broadly neutral impact on passenger numbers and the mode split at the Airport.

The Airport benefits from bus services serving the Airport Forecourt and providing connections to a range of local destinations. These facilities will be enhanced and modernised through the CADP.

There are existing bus services giving access to potential future connections to river services.

Impact on Walking and Cycling Networks

The proposals enhance the attractiveness of walking and cycling to the Airport, potentially increasing the demand for both modes, particularly for staff. The proposals include additional cycle parking and facilitate an additional cycle route to / from Woolwich Manor Way.

An audit of pedestrian routes has demonstrated that for pedestrians the Airport is well-connected to the surrounding area.

Impact on the Road Network

A highway link flow and junction capacity assessment has been undertaken in order to assess the impact on the highway network. The assessment has taken account of the planned and committed development in the vicinity of the Airport.

The assessment of the road network shows that the proposals result in a reassignment of traffic on the local highway network, resulting in a reduction in traffic on certain links and an increase on others.

It has been demonstrated that the development contributes to a minor increase in traffic flows at each of the junctions assessed; namely the existing Airport access junction of Hartmann Road / Connaught Road, the proposed Airport access junction of Hartmann Road / Woolwich Manor Way / Fishguard Way and the roundabout junction of Connaught Road / Connaught Bridge Road which is in close proximity to the Airport.

Conclusion

It is concluded that the proposed CADP is appropriate and acceptable in sustainable traffic and transport terms.

1 INTRODUCTION

- 1.1 Vectos is retained by London City Airport ("the Airport") to advise on surface access matters in relation to the proposed City Airport Development Programme (CADP).
- 1.2 The CADP chiefly comprises a full application for new passenger facilities and infrastructure that are required to enable the Airport to respond to forecast growth in passenger numbers and accommodate the new generation aircraft which are physically larger, more fuel efficient and quieter than the current fleet. There is a separate but related outline application for a hotel - [Application CADP2, \(Planning ref. 13/01373/OUT\) which received a resolution to grant planning permission from the London Borough of Newham on 3rd February 2015 and is expected to be granted later in 2015.](#)
- 1.3 Since 2007, there has been continued growth in the size of aircraft using the Airport, which has resulted in changes in the demand for airport infrastructure in the critical morning and early evening peak periods.
- 1.4 London City Airport is an international Airport primarily serving the business community. After many years of growth at the Airport, the recession contributed to a decline in passenger numbers between 2008 and 2010. [Since 2010 annual passenger numbers have begun increasing again and in 2014 approximately 3.65 million passengers per annum \(mppa\) used the Airport, compared to 3.4 mppa in 2013 and 3.0 mppa in 2012.](#)
- 1.5 In January 2013, the Department for Transport (DfT) published its latest Aviation Forecasts. In respect of the Airport, the DfT anticipate it reaching 104,000 Air Transport Movements (ATMs) and handling some 4.9 mppa by 2020, rising to 120,000 ATMs and handling some 6.2 mppa by 2030.
- 1.6 [The proposed CADP would enable the Airport to accommodate forecast demand of 6.0 mppa on approximately 108,000 scheduled movements by 2025, compared to 4.8 mppa on approximately 86,000 scheduled movements without the proposed CADP.](#)
- 1.7 In preparing the planning applications, discussions have been held with key stakeholders including the highway authorities (London Borough of Newham (LBN) and Transport for London (TfL)), DLR and the Cab Rank Committee. A Transport Scoping Report was prepared in December 2012 in advance of a pre-application meeting with representatives from these

stakeholders which was held on 19th December 2012. A copy of the Transport Scoping Report along with TfL's subsequent advice letter of 17th January 2013 is included at **Appendix A**. Further meetings have subsequently taken place to update the authorities as the scheme design has progressed.

- 1.8 The proposed CADP has also been the subject of a three stage consultation; between November 2012 to January 2013, March 2013 to April 2013 and November 2014 to January 2015. Further details are provided in the proposed CADP's Statement of Community Involvement accompanying the planning submission. The main comments in respect of surface access have been considered in the preparation of the proposals.
- 1.9 In addition, a further meeting was held with DLR on 23rd July 2015. The purpose of this meeting was to discuss the update to the DLR assessment presented within Chapter 7 of the UES. This includes the DLR mode split and the updated DLR baseline forecasts.
- 1.10 The remainder of this Updated Transport Assessment (UTA) is set out as follows:
- Section 2 – sets out a description of the existing conditions and transport characteristics of the Airport;
 - Section 3 – describes the existing passenger and staff travel patterns;
 - Section 4 - describes the proposed CADP in detail;
 - Section 5 - describes the relevant transport policy;
 - Section 6 - considers the trip attraction;
 - Section 7 – provides an assessment of effects on the public transport networks including DLR;
 - Section 8 – provides an assessment of effects on the walking and cycling networks;
 - Section 9 – provides an assessment of effects on the highway network;
 - Section 10 – provides a summary and conclusion.
- 1.11 This UTA should be read alongside the Planning Statement, the Need Statement and its Update, the Updated Environmental Statement (UES), in particular Chapter 11 covering

Surface Access aspects, and the Design and Access Statement [and its Update](#) that accompany the CADP [Appeal Proposals](#).

- 1.12 So as to avoid confusion, all replacement or new text in this UTA is shown in blue font to allow the reader to appreciate and follow the updated information more easily.

2 EXISTING SITUATION

2.1 This section describes the existing conditions and transport characteristics at the Airport.

Site Location

2.2 London City Airport is located within the London Borough of Newham, between the Royal Albert Dock and King George V (KGV) Dock, adjacent to the Woolwich Reach and Gallions Reach of the River Thames.

2.3 There are two elements to the Airport; firstly the main Airport building and secondly the Jet Centre that serves corporate clients. Vehicle access to the Airport is provided from Hartmann Road, which is accessed from a signalised junction with the A112 Connaught Road.

2.4 **Figure 1** shows the strategic location of the Airport and the surrounding transport system.

Surrounding Area

2.5 The surrounding area is comprised of a mix of residential, industrial and commercial uses. There is a significant amount of planned development and regeneration in the vicinity of the Airport.

2.6 The location of the Airport is adjacent to a designated Air Quality Management Area (AQMA). The impact of the increase in flights on both air quality and noise is considered in the CADP [UES](#) accompanying the [CADP Appeal Proposals](#).

2.7 **Figure 2** shows that location of the Airport in relation to the surrounding area.

Local Road Network

2.8 Vehicle access to the Airport is provided from Hartmann Road, a private road with an east-west orientation. It forms a signalised junction with the A112 Connaught Road at its western end, which currently functions as the single point of access to the Airport from the wider highway network. At its eastern end, Hartmann Road forms a signalised junction with the A117 Woolwich Manor Way, although this junction is presently closed for access to the Airport.

- 2.9 The A112 Connaught Road has an east-west orientation to the south of the Airport, parallel with Hartmann Road. It continues to the A112 Albert Road, which links with the Woolwich Ferry river crossing via Pier Road.
- 2.10 The A1020 Royal Albert Way is a two-lane dual carriageway that links the Airport, via the A1020 Connaught Bridge and A112 Connaught Road, to the A406 / A13 intersection, approximately five kilometres north-east of the Airport.
- 2.11 The main strategic road connections to the Airport are the east-west A13 and the A406 North Circular that connects with the M11 and M25 motorways. The Airport is approximately 1.5 kilometres from the A13 (Prince Regent's Lane junction), five kilometres from the A406 and 25 kilometres from the M25. In addition, the A102(M) passes beneath the Thames north-south via the Blackwall Tunnel approximately five kilometres from the Airport. This is the nearest road river crossing point to the Airport.

Car Parking

- 2.12 There are two main car parking areas within the Airport, shared between passengers and staff. The short stay car park is located closest to the terminal building and the main stay car park is adjacent to and to east of the short stay car park.
- 2.13 Staff parking is available within both the short and main stay car parks. Further staff parking is provided at the western and triangle staff car parks which are both located west of the existing terminal building. Staff are required to apply for and display a parking permit. [As of June 2015, 1,693 staff have been issued with parking permits which are free for Airport staff \(572 active permits for staff employed directly at the Airport\), but charged for third party employees.](#) However a significant proportion of staff with parking permits do not drive to work on a regular basis.
- 2.14 Both short stay and main stay car parks have a pay at the barrier controlled exit to Hartmann Road. The fee schedule for the two car parks for passengers is shown in **Table 2.1**.

Table 2.1: August 2015 Parking Charges at the Airport

Short Stay Car Park		Main Car Park	
Hours	Price	Hours	Price
0 – 0.5	£7.00	0 – 4	£20.00
0.5 – 1	£12.00	4 – 8	£30.00
1 – 2	£15.00	8 – 24	£45.00
2 – 4	£22.00	2 Days	£90.00
4 – 8	£34.00	3 Days	£135.00
8 – 12	£48.00	4 Days	£180.00
12 – 24	£55.00	5 Days	£225.00
Additional 24 hours	£55.00	6 Days	£270.00
		7 Days	£315.00
		8 Days	£350.00
		9 Days	£385.00
		10 Days	£420.00
		11 Days	£455.00
		12 Days	£490.00
		13 Days	£525.00
		14 Days	£560.00
		Additional 24 hours	£25.00

- 2.15 The parking charges outlined above in **Table 2.1** are applicable to those who drive-up on the day. Discounts are available for those who pre-book parking.
- 2.16 The short-stay car park has 148 spaces whilst the long-stay car park has 644 spaces. Fifty two spaces are provided in the western staff car park, whilst 10 spaces are provided in the triangle staff car park.
- 2.17 In addition, 120 parking spaces are allocated to car hire companies. These are located within the Forecourt and in an area adjacent to Hartmann Road.

Accident Analysis

- 2.18 An analysis of Personal Injury Accident (PIA) data has been undertaken for the period between February 2010 and February 2015. Further details of each accident along with a plan showing the extent of the Study Area is included at **Appendix B**.
- 2.19 In summary, over a five year period, a total of thirty-seven accidents occurred within the Study Area. Thirty-two accidents resulted in slight injuries, five accidents caused serious injuries and there were no fatalities. Eight accidents resulted in injuries to pedestrians

including one which resulted in serious injuries. Only one accident involving cyclists occurred. A summary of the accidents in the Study Area is shown in **Table 2.2**.

Table 2.2: Summary of Accidents

Location	No. of Accidents	Severity		
		Slight	Serious	Fatal
Albert Road	17	14	3	0
Hartmann Road	6	6	0	0
Connaught Road	5	4	1	0
Parker Street	1	0	1	0
Woodman Street	1	1	0	0
Thames Road	1	1	0	0
Manwood Street	1	1	0	0
Connaught Bridge	5	5	0	0
Total	37	32	5	0

Albert Road

- 2.20 A total of seventeen accidents occurred on Albert Road within the five year study period. Of these, fourteen resulted in slight injuries and three accidents caused serious injuries. The three serious accidents were attributed to driver error. Three accidents resulted in slight injuries to pedestrians.

Hartmann Road

- 2.21 On Hartmann Road, which provides the main access to the Airport, a total of six accidents occurred during the five year study period, all of which were recorded as slight. Two pedestrians were slightly injured as a result of failing to look properly when crossing the road. The remaining accidents involved vehicles only.

Connaught Road

- 2.22 There were five accidents on Connaught Road within the 5 year study period. Four of these caused slight injuries while one accident resulted in serious injuries to a driver. The serious accident was attributed to the driver losing control of their vehicle.

Parker Street

- 2.23 One accident was recorded on Parker Street, north of Connaught Road. The accident resulted in serious injuries to a pedestrian who failed to look properly as they crossed the road.

Woodman Street

- 2.24 One accident was recorded on Woodman Street, north of Albert Road. The accident resulted in slight injuries to a driver who failed to look properly as they turned at the junction with Albert Road.

Thames Road

- 2.25 There was one accident involving a cyclist on Thames Road when they collided with a vehicle after having entered the road from the pavement. The cyclist suffered slight injuries.

Manwood Street

- 2.26 During the 5 year study period only one accident was recorded on Manwood Street where a pedestrian collided with a vehicle as they crossed the road (not at a pedestrian crossing). The causation of the accident was due to the pedestrian not looking properly. The pedestrian suffered slight injuries.

Connaught Bridge

- 2.27 Five slight accidents were reported on Connaught Bridge, all of which involved vehicles. The primary cause of these accidents was driver error.

Summary

- 2.28 Given the size of the Study Area (as defined in Appendix B) and the nature of the local highway network, the number and severity of accidents is not considered to be excessive, or atypical for this part of London.

Accessibility by Non-Car Modes

- 2.29 A key factor in determining the suitability of a location for development is its accessibility by non-car modes of transport. This helps to reduce the reliance on the use of the private car as well as promoting the aims of sustainable travel choices.

- 2.30 London City Airport already has the highest proportion of passengers travelling to / from the Airport by public transport compared to any other London Airport. The key features of the Airport's accessibility by walking, cycling and public transport are discussed further in the following sub-sections.

Walking

- 2.31 London City Airport is accessible on foot from the surrounding residential and commercial areas. Hartmann Road has a footway on its southern side which connects directly with footways on Connaught Road to the west. There are controlled pedestrian facilities at the traffic signal controlled junction of Connaught Road and Hartmann Road. Pedestrians can also access the Airport from a dedicated pedestrian link between Hartmann Road and Newland Street.
- 2.32 Because of these facilities local residents and visitors to the area can walk to the Airport in order to access bus services and the DLR.
- 2.33 A number of staff working at the Airport live locally and walk to work. [The most recent staff travel survey undertaken in 2013 showed that 8% of the staff walk to work, compared to 7% in 2011, which was a significant increase in the 2% of staff who walked to work in 2009.](#)

Cycling

- 2.34 There are 30 covered cycle parking spaces located beneath the DLR adjacent to the motorcycle parking area. This is opposite the main entrance to the Airport Terminal. There are a further 12 cycle parking spaces located within a secure bike store in the short stay car park. Cycle stands are predominantly used by staff.
- 2.35 Cyclists access the Airport from Hartmann Road.

Taxis

- 2.36 The current arrangement for black taxis is that on arrival at the Airport with passengers, the taxi will drop passengers at the front of the Airport terminal building within the forecourt. [Once the passenger has paid the taxi fare, the vehicle departs from the forecourt and either turns right away from the Airport or turns left and joins the back of the queue in the taxi feeder park that is located further east on Hartmann Road. Taxis are called from the feeder](#)

park to the forecourt by a CCTV camera system. There is capacity for approximately 200 queuing at the Airport.

- 2.37 Currently the forecourt area has no formal vehicle controls in place, with black taxis, private hire minicabs and private cars sharing drop-off areas.
- 2.38 Taxis perform an important role as a public transport provider by reducing the passenger's reliance on the private car. They are particularly useful for passengers using the Airport from Central London because they are not restricted to a time table or constrained by fixed routes. Taxis also fulfil a demand that cannot be met by bus, train or tube, especially early in the morning or late at night.

Private Hire Minicabs

- 2.39 Private hire minicabs use the pick-up / drop-off areas for private vehicles within the Airport forecourt. Should private hire minicabs need to wait for longer periods, they are able to use the short-stay car park.

Buses

- 2.40 There are three bus stops adjacent to the 'ready' hire car parking area outside the Airport terminal building on Hartmann Road and adjacent to the Jet Centre (used by staff, crew and passengers). All buses that visit the site perform a 'U' turn around the pick-up / drop-off area. Only single stops are required ensuring that passengers do not have to cross Hartmann Road to access the stops.
- 2.41 The Airport is served by two London Bus routes, the 473 and the 474.
- 2.42 The 473 service travels from Stratford – Plaistow – London City Airport – North Woolwich, departing about every 8-12 minutes from the Airport Forecourt in both directions. The service commences from Stratford at 05:04 (06:10 Sunday) with the last bus at 01:15. The first bus from North Woolwich departs at 04:30 (05:40 Sunday) with the last bus at 00:17.
- 2.43 The 474 bus operates between Canning Town – London City Airport – Beckton – Manor Park, departing about every 10-13 minutes in both directions from the Airport terminal Forecourt. The service operates over a 24 hour period, 7 days a week.

- 2.44 Bus usage is greatest amongst staff, with the 2013 staff travel survey indicating that 25% of staff travel to / from the Airport by bus.

Docklands Light Railway (DLR)

- 2.45 The DLR opened in 1987 to serve the first developments in Docklands, with eleven trains and fifteen stations. Since then, the DLR has progressively been extended to Bank, Beckton, Lewisham, Stratford International and Woolwich Arsenal via London City Airport. The DLR London City Airport extension opened in December 2005, with the extension onwards to Woolwich Arsenal completed in 2009. The section between Canning Town and London City Airport is known as 'the Airport Route.'
- 2.46 The DLR is extensive and currently comprises a 40 km railway with 45 stations and more than 100 trains. According to Transport for London (TfL), DLR carries 100.5 million passengers annually. DLR is a fully accessible and fully integrated railway - it connects with more than 100 bus routes, five mainline railways, eight Underground lines and coach, taxi and river services.
- 2.47 DLR operates between 05:30 – 00:46 on Monday to Saturdays and between 07:00 – 23:43 on Sundays.
- 2.48 Since January 2012 DLR trains on the Bank to Woolwich Arsenal service have been increased from two to three-carriage trains, to help accommodate increasing DLR passenger numbers using the service from Woolwich Arsenal. DLR trains on the Woolwich Arsenal to Stratford service are currently two-carriage trains.

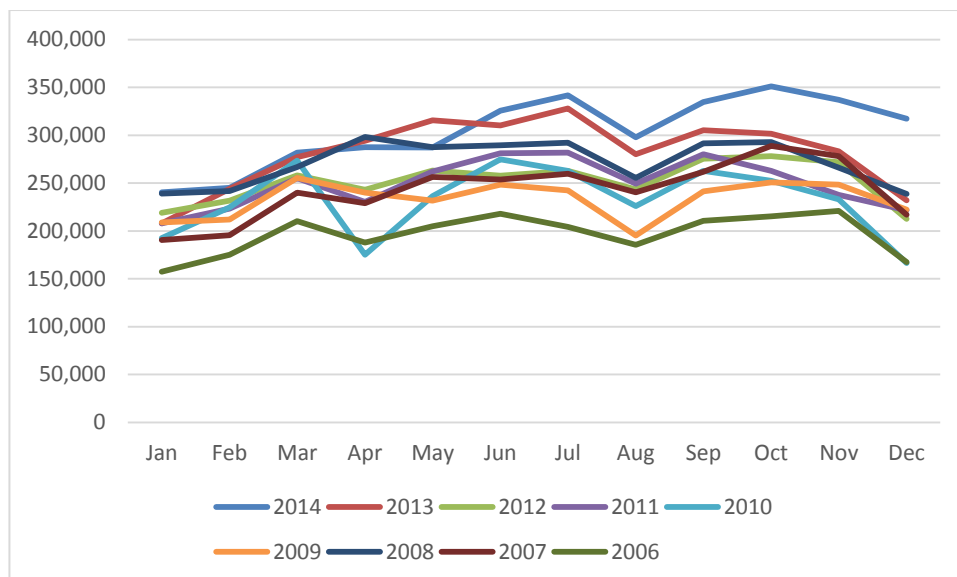
3 EXISTING TRAVEL PATTERNS

Passenger Profile

3.1 Since 2010 annual passenger numbers have begun increasing again and in 2014 approximately 3.65 million passengers per annum (mppa) used the Airport, compared to 3.4 mppa in 2013 and 3.0 mppa in 2012.

3.2 **Chart 3.1** shows how the annual passenger numbers are broken down on a monthly basis between 2006 and 2014.

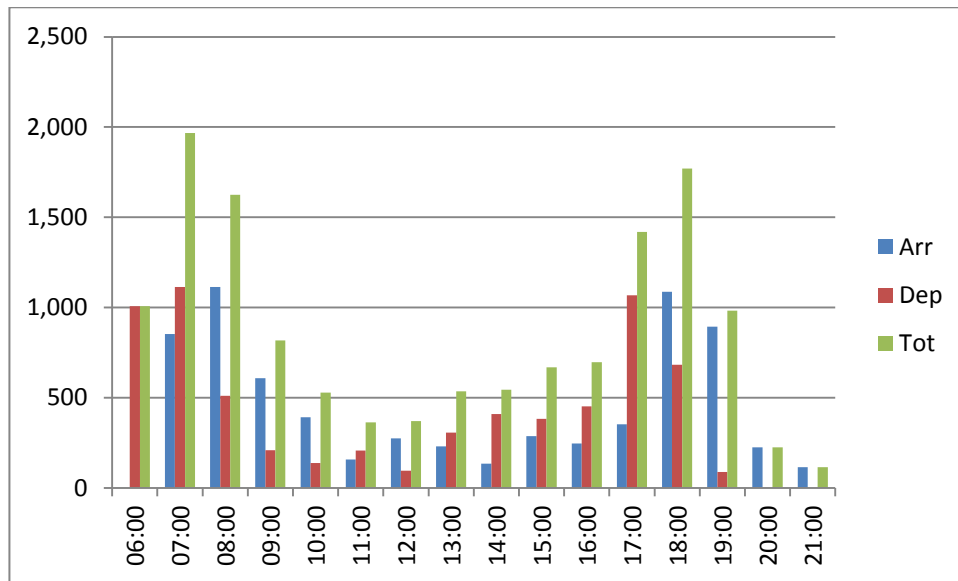
Chart 3.1: 2006 – 2014 Monthly Passenger Numbers



3.3 Chart 3.1 shows that passenger numbers follow a fairly consistent pattern of variation across the year, with passenger numbers peaking in June and September / October and lowest during August and December / January.

3.4 **Chart 3.2** shows the daily passenger profile of passengers accessing the Airport for a busy day during 2014. This takes into account that on average, passengers arrive 1 hour and 15 minutes prior to their flight departing from the Airport if travelling on a scheduled flight, and 15 minutes if flying from the Jet Centre. When a flight arrives at the Airport it takes on average 15 minutes for passengers to depart from the Airport from both the scheduled flights and Jet Centre. Departures on the chart are those having arrived on a flight and leaving the Airport, whilst Arrivals on the chart are those arriving at the Airport to depart on a flight.

Chart 3.2: 2014 Daily Passenger Profile



3.5 Chart 3.2 shows that the busiest hours of the day for accessing the Airport are during 07:00 – 08:00 and 18:00 – 19:00. There is a noticeable dip in passengers at the Airport between 10:00 and 16:00 and after 20:00 in the evenings.

3.6 In terms of the types of passengers using London City Airport, a Civil Aviation Authority (CAA) 2014 survey indicates that 52% of passengers are travelling for business purposes, which is substantially higher than the average for the other London airports. The Airport's own surveys suggest the current proportion of business travel is 61%.

3.7 The Airport also has the highest proportion of foreign resident passengers using it after Heathrow.

Passenger Mode Split

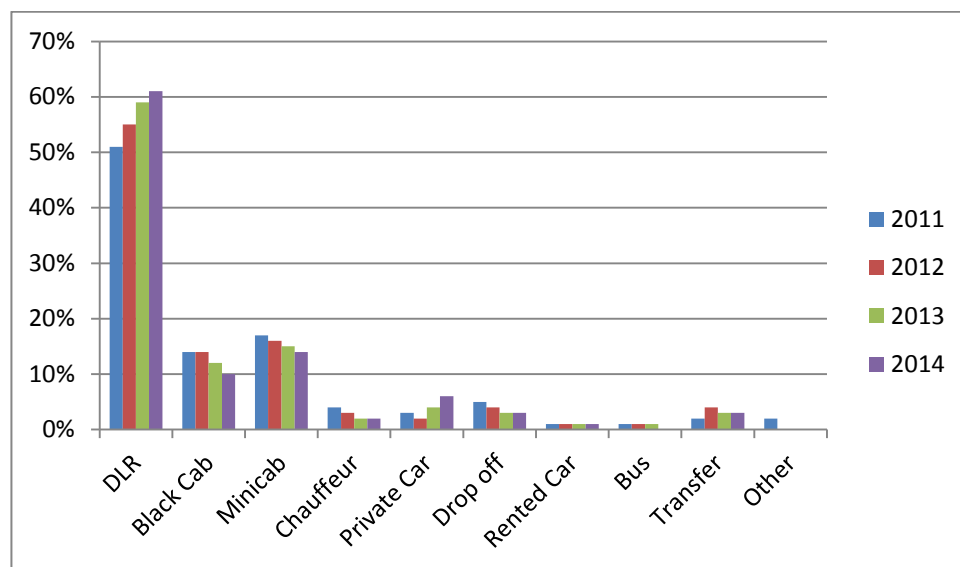
3.8 The Airport, as part of its on-going monitoring programme, undertakes regular passenger surveys. As part of this survey it asks passengers their last mode of transport to the Airport. The results of surveys undertaken between 2011 and 2014 are summarised in **Table 3.1**, in order to show the change in mode split over time.

Table 3.1: Change in Mode Split 2011-2014 - ALL Passengers

Year	DLR	Black Cab	Minicab	Chauffeur	Private Car	Drop off	Rented Car	Bus	Transfer	Other
2011	51%	14%	17%	4%	3%	5%	1%	1%	2%	2%
2012	55%	14%	16%	3%	2%	4%	1%	1%	4%	
2013	59%	12%	15%	2%	4%	3%	1%	1%	3%	
2014	61%	10%	14%	2%	6%	3%	1%		3%	

3.9 **Chart 3.3** illustrates the change in mode split over time between 2011 and 2014.

Chart 3.3: Change in Mode Split over time 2011 – 2014



3.10 Table 3.1 and Chart 3.3 reveal that the mode share for DLR has increased between 2011 and 2014 from 51% to 61%. The use of Black Cabs / Private Hire Minicabs has decreased slightly and the use of private cars is fairly constant. Bus usage is low at between 0% and 1% whilst transfer passengers (those who arrive on one flight and depart on another without leaving the Airport) varies between 2% and 4%.

3.11 The use of the mode split figures derived from the Airport's passenger surveys has previously been agreed with DLR, since DLR do not collect this data themselves.

Staff Travel Patterns

- 3.12 A staff travel survey was undertaken in 2013 and this showed that the greatest proportion of employees travel by car, with 41% of the total in 2013. This is followed by bus with 25% and DLR with 24%.
- 3.13 The latest full staff travel survey, which included information on shift patterns, was undertaken in 2011. This reveals that 74% of staff employed at the Airport work shifts, as opposed to regular office hours. This is demonstrated by the fact that 49% of staff regularly start work before 05:59 and 56% of staff regularly finish work between 21:00 – 24:00. This reduces the proportion of staff travel during peak hours, but limits the choice of modes available for travel to work.
- 3.14 The greatest proportion of employees directly employed by the Airport who participated in the full survey are employed in Terminal Services with 18% of the total, followed by Ramp Services (ground handling) with 13% of the total.

4 DEVELOPMENT PROPOSALS

Scheme Elements

- 4.1 The proposed development project, known as the City Airport Development Programme (CADP), comprises a full planning application to construct new passenger facilities, 7 new aircraft stands and associated infrastructure (CADP1) together with a separate outline planning application for a Hotel (CADP2).
- 4.2 The Scheme Layout Drawings are provided at **Appendix C**. This includes the existing Site Plan and proposed Site Plan, and the Dockside layout.
- 4.3 The proposed description of development is as follows:

Planning Application 1

“LONDON CITY CADP Planning Application 1: Detailed planning permission is being sought for

- (a) Demolition of existing buildings and structures;*
- (b) Works to provide 4 no. upgraded aircraft stands and 7 new aircraft parking stands;*
- (c) The extension and modification of the existing airfield to include the creation of a taxiline running parallel to the eastern part of the runway and connecting with the existing holding point;*
- (d) The creation of a vehicle access point over King George V dock for emergency vehicle access;*
- (e) Laying out of replacement landside forecourt area to include vehicle circulation, pick up and drop off areas and hard and soft landscaping;*
- (f) The Eastern Extension to the existing terminal building (including alteration works to the existing Terminal Building) to provide reconfigured and additional passenger facilities and circulation areas, landside and airside offices, immigration areas, security areas, landside and airside retail and catering areas, baggage handling facilities, storage and ancillary accommodation;*
- (g) The construction of a 3 storey Passenger Pier to the east of the existing terminal building to serve the proposed passenger parking stands;*
- (h) Erection of a noise barrier at the eastern end of the proposed passenger pier*

- (i) *Erection of a temporary noise barrier along part the southern boundary of the site to the north of Woodman Street;*
- (j) *Western Extension and alterations to the existing Terminal Building to provide reconfigured additional passenger facilities and circulation areas, security areas, landside and airside offices, landside retail and catering areas and ancillary storage and accommodation;*
- (k) *Western Energy Centre, storage, ancillary accommodation and landscaping to the west of the existing Terminal;*
- (l) *Temporary facilitation works including the erection of a noise barrier to the south of 3 aircraft stands, a coaching facility and the extension to the baggage area;*
- (m) *Works to upgrade Hartmann Road;*
- (n) *Landside passenger and staff parking, car hire parking and associated facilities, taxi feeder park and ancillary and related work;*
- (o) *Eastern Energy Centre;*
- (p) *Dock Source Heat Exchange System and Fish Refugia within King George V Dock;*
and
- (q) *Ancillary and related works*

Planning Application 2 (CADP2)

- 4.4 At the same time as a planning application for CADP1 was submitted, Outline Planning Permission was also sought for a hotel (Application CADP2, Planning ref. 13/01373/OUT). This received a resolution to grant planning permission from the London Borough of Newham on 3rd February 2015 and planning permission is expected to be granted later in 2015. This application is described as:

“Planning Application CADP2: Erection of a Hotel with up to 260 bedrooms, ancillary flexible A1-A4 floorspace at ground floor, meeting/conference facilities together with associated amenity space, landscaping, plant and ancillary works.”

Phasing

- 4.5 It is anticipated that under the *Likely Construction Sequence* and *Updated Construction Programme* the construction of CADP1 would be completed by 2023.

- 4.6 For the purposes of assessment, 2025 represents the optimisation of the CADP infrastructure and associated improvements at the Airport. The two year period after the completion of the proposed CADP physical works allows for a gradual increase in passenger numbers to approximately 6.0 mppa in the 'With CADP Core Case'.

Vehicle Access

- 4.7 Vehicle access will continue to be provided from the junction of Hartmann Road / A1011 Connaught Road.
- 4.8 In addition, it is proposed to create a further permanent access and vehicle link to the Airport from the junction with the A117 Woolwich Manor Way / Fishguard Way. Although not open to public traffic, the link already exists and has previously provided access to the Airport for staff and most recently has provided temporary access during the Olympics. The link is, and will remain, within the Airport's ownership. It provides a direct connection between the eastern end of Hartmann Road and the signalised junction with the A117 Woolwich Manor Way / Fishguard Way. The proposed link is shown on **Figure 3**. Detailed drawings showing the specification for the link are included in at **Appendix C**.
- 4.9 The existing layout of the junction is shown on **Drawing no. 110116A/A/SK01**. No changes are proposed to the physical layout of the junction.
- 4.10 Whilst London Buses have indicated that they do not intend to operate bus services through the junction and along Hartmann Road in the short-term, the swept path analysis for a bus manoeuvring at the junction has been undertaken to show that this could be accommodated in the future. The swept paths are shown on **Drawing no. 110116A/AT/A01**.
- 4.11 Provision of the additional access improves the Airport's resilience to potential access disruption, as well as shortening the distance travelled on the local highway network for journeys to / from the east. In particular, it will reduce the number of Airport related vehicles using the A1020 Royal Albert Way.
- 4.12 It is not anticipated that a significant amount of non-Airport related traffic will be attracted to the new link, since it will remain a private road associated with Airport activity. Should this not be the case, measures to reduce and control speeds could be implemented, to discourage the route being used as an alternative to the A112 Albert Road.

- 4.13 Directional signage for the Airport on the wider highway network will be reviewed to ensure that vehicles arriving from the east via the Gallions Reach roundabout are signed along the A117 Woolwich Manor Way instead of the A1020 Royal Docks Way.

Airport Forecourt

- 4.14 A new passenger forecourt area is proposed to the south and east of the extended Terminal. To meet security requirements there will be a 30m wide landscaped vehicle free zone in front of the extended Terminal.
- 4.15 The Forecourt area has been designed to provide sufficient capacity to accommodate the forecast demand of approximately 6 mppa. Drawings showing the Forecourt layout are provided at **Appendix D** including [Atkins drawing no. Plan 7.4 Proposed Forecourt Ground Level 00, Drawing Number FC20002 Rev. B.](#)
- 4.16 A Stage 1 Road Safety Audit has been undertaken and is included in **Appendix E**, along with the Designer's Response.
- 4.17 The Forecourt will continue to be actively managed by Airport staff, particularly during peak periods. This will ensure that the Forecourt operates efficiently and is used appropriately by the designated modes.
- 4.18 The proposed capacity of the forecourt for each mode is compared to the existing capacity of the forecourt in **Table 4.1** and discussed in the following paragraphs. [In relation to taxis, 'forecourt' is to be taken to mean both the forecourt itself in front of the extended Terminal and the detached Taxi Feeder Park along the Dockside to the east, as described further in the Black Taxi sub-section below.](#)

Table 4.1: Forecourt Capacity

	Existing Forecourt	Proposed Forecourt
Car pick-up / drop-off spaces	8	48
Black taxi pick-up spaces	200	336*
Black taxi drop-off spaces	8	10
Bus stops	3	3
Bus stand	1	1

** Total in forecourt, taxi feeder queue and park*

- 4.19 The car hire spaces located within the existing Forecourt will not be reprovided in the replacement Forecourt. Separate car hire areas further east will accommodate all of the car hire spaces.

Car Pick-Up / Drop-Off

- 4.20 As shown in Table 4.1, the number of car pick-up / drop-off spaces (including private hire minicabs and chauffeur driven vehicles) is being increased from 8 to 48 spaces. This is because the existing pick-up / drop-off area is intensely used during peak periods and requires management by Airport staff to minimise dwell times and discourage vehicles from waiting to pick-up passengers. Further capacity is required in future for the following reasons:

- (a) To accommodate the increase in passenger demand associated with the proposed CADP;
- (b) To permit a modest increase in dwell times;
- (c) To provide a facility for vehicles to wait to pick-up passengers for a short period of time within the Forecourt area, particularly those such as chauffeur driven vehicles who are required to pick-up passengers directly from the Forecourt;
- (d) To ensure that the pick-up / drop-off area maintains an efficient circulation of vehicles at all times, minimising the opportunity for vehicles queuing back onto Hartmann Road; and
- (e) To recognise that the car parking areas will be located further from the Terminal than existing and that some drivers will prefer the convenience of using the Forecourt area to drop-off / pick-up.

- 4.21 The purpose of the enlarged Forecourt is to encourage pick-up / drop-off at the Airport and not elsewhere, such as Hartmann Road and Newland Street, which would result in disbenefits to the local area. This is particularly important once two-way traffic is permitted on Hartmann Road to prevent pick-up / drop-off's inhibiting traffic flows.

- 4.22 Private car pick-up / drop-off will be chargeable and this would be enforced by barriers at the entrance and exit to the pick-up / drop-off lanes. To discourage the area being used as a short/ long stay car park a charging system will be implemented by a managing agent to

make staying in the drop-off/ pick-up area progressively more expensive as time passes. There would also be a short grace period with no charge should a Controlled Parking Zone on local residential roads not have been introduced by the highway authority in time for the completion of the proposed CADP.

- 4.23 Wide footways and pedestrian crossings linking the Terminal and car pick-up / drop-off would be provided.

Black Taxis

- 4.24 Black taxis are a form of public transport and they comprise a significant proportion of the mode share for passengers travelling to / from the Airport. Thus black taxis have been given greatest priority within the new Forecourt, with black taxi pick-up and drop-off being located as physically close to the Terminal as possible.
- 4.25 For black taxi drop-off, the line of visibility and shortest walking route to the proposed extended Terminal is just 59 metres and there is no requirement to cross the carriageway. For black taxi pick-up, the line of visibility and shortest walking route from the Terminal is just 121 metres, less than a two minute walk, and there is also no requirement to cross the carriageway.
- 4.26 It is proposed that the black taxi pick-up / drop-off area is barrier-controlled to ensure that it is used appropriately by black taxis only. The barriers will be operated by automatic number plate recognition. This will ensure that it is not used by private vehicles.
- 4.27 Canopies will be provided along the full length of the pedestrianised area adjoining the taxi pick-up area, providing a covered waiting area for passengers and allowing a passenger queuing system to be implemented to manage demand at peak times.
- 4.28 The layout of the proposed Taxi Feeder Park is included as part of the submitted CADP planning applications and shown [within Set 9 of the Application Drawings at drawing 9.11 Proposed Taxi Feeder Park.](#)
- 4.29 The existing taxi queue on Hartmann Road would be removed, in order to facilitate the two-way movement of traffic along the full length of Hartmann Road and at the same time resolve adverse air quality impacts caused by taxis idling.

- 4.30 A replacement taxi feeder park would be located further east along the dock, close to the junction of Hartmann Road with Woolwich Manor Way. It would be approximately 1 kilometre from the Forecourt, equivalent to less than a two minute drive.
- 4.31 The feeder park would have the capacity for up to 326 taxis. This is broken between 307 waiting spaces within the feeder park and 19 rest spaces for taxi drivers using the facilities provided, without joining the queue. The facilities comprise maintenance bays, welfare facilities and an office. The layout of the feeder park incorporates an escape lane, so that there would be a maximum queue of approximately 15 taxis in any single lane within the feeder park. The layout of the feeder park is provided at **Appendix D** on Atkins Drawing no. P_5115752_TP_PD_138.
- 4.32 A third party transport management specialist company is being appointed to manage and regulate the taxi rank and feeder park.
- 4.33 A number of potential options have been identified for a taxi call-forward system between the proposed Taxi Feeder Park and new Forecourt. Based on the systems currently available on the market, it has been decided that a system using CCTV and Marshall Control is most appropriate for the Airport. This is the system that is already operational at the existing taxi feeder park. During peak periods, which are typically between 08:00 – 09:00 and 17:00 – 18:00, it is anticipated that taxi marshals will be employed on the Forecourt and in the feeder park. The marshal at the front of the feeder park will release taxis in response to images on a monitor showing the live feed from the forecourt CCTV.
- 4.34 During quieter periods, it is anticipated that CCTV images of the Forecourt displayed within the feeder park will be sufficient to inform taxi drivers when to move forward to the Forecourt.
- 4.35 It is proposed that a Taxi Management Plan will be implemented in conjunction with the proposals which would set out the arrangements for black taxis and private hire minicabs. It is likely that it will be a planning condition. The Taxi Management Plan will comprise the following elements:
- a) A description of the proposed arrangements for black taxis and private hire minicabs;

- b) A commitment for the Airport to provide taxi marshals at peak times, to manage the taxi and passenger queues;
- c) Details of the Black Taxi Feeder Park and black taxi call-forward system; and
- d) Management measures to ensure the continued efficiency of the taxi operation at the Airport.

4.36 A copy of the draft Taxi Management Plan is included at **Appendix M**.

Bus Services

- 4.37 Three bus stops and a bus stand will be provided within the Forecourt area, to match the provision within the existing Forecourt. The existing bus stops and bus stand are under-utilised and could accommodate an increase in bus services. TfL have stated that the nature of the bus network may change in future due to demand elsewhere on the network. Maintaining the existing bus stop provision provides TfL with the flexibility to increase the frequency of bus services should they desire to do so.
- 4.38 Swept paths for the bus manoeuvres in / out of the Forecourt are displayed in **Appendix D** on Atkins drawing no. 5115752/TP/PD/131.

Car Parking

- 4.39 It is proposed to replace the main car parking areas with three passenger car parks, a new staff car park and two new car hire areas. Each of the car parks would be accessed from Hartmann Road. This enables passenger and staff parking to be managed and monitored separately.
- 4.40 Passenger Car Park 1 will be a twin level car park deck structure with 485 spaces. Passenger Car Parks 2 and 3 will be surface level car parks, with 189 and 75 spaces respectively. This gives a total of 749 passenger car parking spaces.
- 4.41 Passenger car parking will continue to be chargeable, with differing price structures for each passenger car park. Staff car parking will continue to operate on a permit basis.
- 4.42 The location of the car parks along with the proposed layouts is shown on the Atkins Dockside layout drawings in **Appendix C**.

4.43 A summary of the existing and proposed car parking provision is set out in **Table 4.2**.

Table 4.2: Comparison of Existing and Proposed Car Parking Provision

	Existing	Proposed
Short Stay	148	749
Main Stay	644	
Staff Car Park	Within short and main stay	300
Western Staff Car Park	52	52
Triangle Staff Car Park	10	0
Car Hire	120	150
Total	974	1,251

4.44 Table 4.2 shows that it is proposed to increase the parking provision from 974 spaces to 1,251 spaces, i.e. an increase of 277 spaces or a 28% increase. [This compares with passenger numbers which will be increasing by 62% and staff numbers which will be increasing by 60%, compared to 2014.](#) The car parking will also serve a Hotel with up to 260 bedrooms, proposed in CADP2.

4.45 [A Draft Parking Management Plan \(PMP\), a full and detailed version of which can be secured by way of a condition on any planning permission, has been prepared by which sets out the parameters of the PMP; clarifies the level of parking provision on site for all users; and a mechanism for monitoring and reviewing the operation of parking over time to ensure operational efficiency. A copy of the Draft PMP is attached as Appendix N.](#)

4.46 To summarise, the additional car parking is required for the following reasons:

- a) There will be an increase in demand from passengers, staff and hotel customers at the Airport. However, the increase in the parking provision is not pro rata to the increase in passengers, staff and hotel customers that will be associated with the proposals. This demonstrates the Airport's commitment to encourage travel by alternatives to the car which are conveniently available;
- b) The car park will also serve a Hotel with up to 260 bedrooms. It is not proposed to provide any dedicated parking for the hotel and the additional parking demand will instead be accommodated within the main-stay car park;

- c) Some passengers carrying luggage will always decide to drive to the Airport and will require a parking space;
- d) Many staff frequently work shift patterns with anti-social hours when public transport options are limited; and
- e) It is necessary to ensure that an appropriate parking provision is provided in order to minimise the potential for overspill parking on surrounding residential roads which do not have parking controls.

4.47 Hence the car parks have been designed in order that they operate at practical capacity at peak times and assuming that a realistic mode shift to other modes will be achieved. [In particular, London City Airport is committed to maximising use of the DLR by passengers and staff, and is aiming to achieve a 65% mode share by DLR for passengers. This is an increase from the 2014 average of 61%.](#) Further details of the car park accumulation are included in **Appendix F.**

Motorcycle Parking

4.48 A dedicated motorcycle parking area will be provided adjacent to the new staff car park. This will accommodate at least 22 motorcycles.

Cycle Parking

4.49 It is proposed to increase the number of cycle parking spaces from 42 to 70. All cycle parking will be located in the covered area underneath the DLR. Demand for cycle parking will continue to be monitored through the Travel Plan and additional cycle stands will be provided as necessary.

Coach Parking

4.50 Coach parking, when needed, will be provided in a layby located adjacent to the proposed hotel, immediately off Hartmann Road. This will be used by coach parties using the Airport and the proposed Hotel.

- 4.51 It is worth noting that demand for coach parking and group travel to / from the Airport is low, as illustrated by the results of the passenger travel surveys. This is not anticipated to change in the future.

Pedestrians

- 4.52 Pedestrians will continue to be able to access the Airport from Hartmann Road to the west and Newland Street to the south.
- 4.53 A further pedestrian access will be created along the dockside from the east, connecting to Woolwich Manor Way. This improves the permeability of the surroundings of the Airport for pedestrians and is particularly beneficial for employees, since a significant proportion live within walking distance.

River Services

- 4.54 It is not anticipated that there would be a significant demand for travel to / from the Airport by river services. Nonetheless, it is worth noting that the Airport is already connected to the Woolwich Ferry Terminal by bus routes 473 and 474, should Thames Clipper serve the existing pier in future if the Woolwich Ferry were to be relocated to Gallions Reach. Similarly, the proposed Minoco Wharf pier would be within acceptable walking distance of bus stops serving routes 473 and 474 and thereby providing a direct bus connection to the Airport.
- 4.55 The Airport will continue to engage with TfL and Thames Clippers to ensure that opportunities to connect the Airport to river services are optimised.

Travel Plan

- 4.56 The Airport has implemented a Travel Plan, a copy of which is included at **Appendix G**. The Travel Plan includes a comprehensive set of travel measures which has helped to encourage a modal shift away from the single occupancy private car.
- 4.57 The Airport has consulted on and produced a draft Airport Surface Access Strategy in 2013 which reflects passenger and staff related surface access requirements, both in the short term and those associated with CADP in the longer term. This document set new targets for increasing the use of sustainable transport among passengers and staff and establishes a series of priorities that would support the attainment of these targets. The Airport Transport

Forum was reformed in 2013 and has met annually since - this group brings together key stakeholders to discuss relevant transport issues and to maintain a pro-active programme of partnership working to ensure that the ASAS and the Airport's Travel Plans are delivered.

- 4.58 The Airport's Travel Plan 2011 is being updated through an interim Travel Action Plan for both staff and passengers. This has been discussed through the Airport Transport Forum. Detailed Travel Plans will be prepared to consider passenger and staff travel in conjunction with CADP and the new Surface Access Strategy.
- 4.59 The interim Travel Action Plan includes a series of 'live actions' for key issues regarding how passengers and staff access the Airport. As an interim document, the Travel Action Plan will be in place until the end of 2016 or until detailed CADP Travel Plans are in place. Progress against these actions will be reviewed by the Airport's Transport Forum and annually through the APR. The interim Travel Plan reflects the key issues included in the draft Airport Surface Access Strategy, which are as follows :
- i. Offering the right services - engaging transport providers, passengers and staff to understand travel requirements
 - ii. Improving integrated journeys - ensuring passengers and staff are provided with the information, ticketing and wayfinding they need
 - iii. Facilitating local connectivity - supporting the use of bus, bicycles and walking among passengers, staff and other airport-users
 - iv. Offering low carbon alternatives - considering ways of de-carbonising passenger and staff travel
 - v. A collaborative approach - developing a collaborative approach to encouraging sustainable travel
 - vi. Monitoring and Reporting - measuring and communicating the impact of the Travel Plan
- 4.60 Through the actions contained within the Staff Travel Plan the Airport will seek to maintain staff car parking provision at a level comparable with 2009 levels, until such time that

increased staff numbers requires additional parking provision. This will be required in time for the completion of the proposed CADP infrastructure in 2023.

- 4.61 A copy of the Travel Plan and emerging Staff Travel Plan is included at **Appendix G**.

Construction

- 4.62 The Airport will implement a Construction Logistics Plan (CLP) which will include details on the proposals to manage the construction impacts. This will include consideration of the transportation of construction materials to / from the Airport.
- 4.63 Deliveries during construction will be undertaken by both road and where feasible, river. The river will be used where possible, in order to minimise the impacts on the local road network. As an example, it is anticipated that a number of large precast concrete units will be delivered to the site by barge.
- 4.64 It is envisaged that the construction compound and landside site access will be provided from the junction with the A117 Woolwich Manor Way, whilst Airside Site access will be provided via the A1020 Connaught Bridge Road and the A112 Connaught Road.
- 4.65 A full CLP cannot be confirmed until a contractor has been appointed, but it is envisaged that the key points which will be included in the CLP are as follows:
- a) Details of the designated construction traffic routes to / from the Airport;
 - b) An estimate of the number and type of construction vehicles;
 - c) The access and egress arrangements for all construction vehicles;
 - d) The proposed mitigation measures such as wheel washing, road cleansing and dust and noise suppression measures; and
 - e) Details of any local traffic management measures, in discussion with the highway authorities.

Deliveries and Servicing

- 4.66 A Delivery and Servicing Plan (DSP) has been prepared and will be implemented at the Airport in conjunction with the CADP. A copy of the DSP is included at **Appendix H**.

5 POLICY CONTEXT

- 5.1 This section of the report considers the current and emerging planning policy guidance at national, regional and local level.

National Policy

National Planning Policy Framework (NPPF) (March 2012)

- 5.2 The National Planning Policy Framework sets out the Government's planning policies for England and how these are expected to be applied.

- 5.3 One of the 12 core land-use principles within the NPPF includes:

"[to] actively manage patterns of growth to make the fullest possible use of public transport, walking and cycling, and focus significant development in locations which are or can be made sustainable."

- 5.4 Section 4 of the NPPF deals with 'Promoting sustainable transport.' Paragraph 29 states that:

"the transport systems needs to be balanced in favour of sustainable transport modes, giving people a real choice about how they travel."

- 5.5 Paragraph 32 sets out the transport issues which should be addressed within Development Plans and decisions. These are:

- *"the opportunities for sustainable transport modes have been taken up depending on the nature and location of the site, to reduce the need for major transport infrastructure;*
- *safe and suitable access to the site can be achieved for all people; and*
- *improvements can be undertaken within the transport network that cost effectively limit the significant impacts of the development. Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe."*

National Planning Practice Guidance (NPPG) (March 2014)

- 5.6 On 6 March 2014, the Department for Communities and Local Government (DCLG) launched the National Planning Practice Guidance (NPPG) web-based resource. One section relates

specifically to Transport and is titled 'Travel Plans, Transport Assessments and Statements in decision-taking' and this provides the overarching principles of Travel Plans, Transport Assessments and Statements.

The guidance explains the role of Transport Assessments and Statements as: *"ways of assessing the potential transport impacts of developments (and they may propose mitigation measures to promote sustainable development. Where that mitigation relates to matters that can be addressed by management measures, the mitigation may inform the preparation of Travel Plans)".* The guidance also states that Travel Plans are "long term management strategies for integrating proposals for sustainable travel into the planning process" and they; *"should where possible be considered in parallel to development proposals and readily integrated into the design and occupation of the new site rather than retrofitted after occupation."*

Aviation Policy Framework (March 2013)

5.7 Paragraphs 1.96 and 1.97 of the Aviation Policy Framework states that:

"High quality, efficient and reliable road and rail access to airports contributes greatly to the experience of passengers, freight operators and people working at the airport.

We are committed to working with airport operators, transport operators, local authorities and LEPs to improve surface access to airports across the country, whilst taking into account the associated environmental impacts. We are already contributing funding to make this happen."

5.8 In relation to Airport surface access strategies and Airport Transport Forums (ATFs), paragraph 4.20 states:

"Government attaches a high priority to effective public involvement in local transport policy. Local people, town and parish councils which have qualifying airports within their boundaries, business representatives, health and education providers, environmental and community groups should be involved in the development of airport surface access strategies.... We recommend that ATFs produce airport surface access strategies to set out:

- *targets for increasing the proportion of journeys made to the airport by public transport for both airport workers and passengers*

- *the strategy to achieve those targets.”*

5.9 Paragraph 5.11 states that:

“All proposals for airport development must be accompanied by clear surface access proposals which demonstrate how the airport will ensure easy and reliable access for passengers, increase the use of public transport by passengers to access the airport, and minimise congestion and other local impacts.”

Davies Commission Final Report (July 2015)

5.10 The Davies Commission developed an Appraisal Framework to inform its assessment of the proposals for airport expansion in the south-east of England. Table 4.1 of the final report sets out objectives assessed by the Appraisal Framework, which covered a broad range of economic, environmental and social impacts, along with operational and commercial viability and deliverability aspects. In respect of Surface Access, the objectives taken into account were whether proposals would:

- *“maximise the number of passengers and workforce accessing the Airport via sustainable modes;*
- *accommodate the needs of other users of transport networks, such as commuters, intercity workers and freight;*
- *enable access to the Airport from a wide catchment area.”*

Regional Policy

Mayor’s Transport Strategy (May 2010)

5.11 One of the key objectives of the Mayor’s Transport Strategy (MTS) is that:

‘London’s transport system should excel among those of world cities, providing access to opportunities for all its people and enterprises, achieving the highest environmental standards and leading the world in its approach to tackling urban transport challenges of the 21st century.’

5.12 The MTS further recognises that:

“As the economy of east London has changed, developments such as Canary Wharf, ExCel and The O2 have increased the demand for travel across the river significantly. Many of the large new economic drivers for London are located in east London, with the majority of these lying north of the river, such as the Olympic Park and adjacent Stratford City development, Canary Wharf, ExCel and City airport.”

5.13 With regard to Airport Policy, paragraph 435 states that:

“The Mayor recognises that adequate airport capacity is critical to the continued competitiveness of London’s economy. For this reason, the Mayor will consider whether optimum use is being made of existing airport infrastructure.”

5.14 On surface access to airports, the MTS states the following:

“TfL has worked with airport operators through their airport transport forums to help improve surface access to airports. Continued close engagement with airport operators and local boroughs will be essential to serve the increasing numbers of air passengers and encourage a shift from private car to reduce congestion and improve surrounding air quality.”

London Plan (March 2015)

5.15 The London Plan, Spatial Development Strategy for Greater London was adopted in July 2011 and has been subject to two alteration documents; The Revised Early Minor Alterations to the London Plan was published in October 2013 which aimed to ensure that the London Plan is fully consistent with NPPF, and The Draft Further Alterations to the London Plan was adopted in March 2015 to address key housing and employment issues emerging from analysis of Census 2011 data.

5.16 The London Plan sets out an integrated economic, environmental, transport and social framework for the development of London over the next 20-25 years.

5.17 Policy 6.6 of the London Plan deals with Aviation. Part B states that The Mayor:

“supports improvements of the facilities for passengers and other London airports in ways other than increasing the number of aircraft movements, particularly to optimise efficiency

and sustainability, enhance the user experience and to ensure the availability of viable and attractive public transport options to access them.”

5.18 It continues to state that:

“Development proposals affecting airport operations or patterns of air traffic should:

Provide access to airports by travellers and staff by sustainable means, particularly by public transport.”

Vision 2020 (June 2013)

5.19 In June 2013, the Mayor produced his Vision 2020 – The Greatest City on Earth. This identifies the Royal Docks as an Opportunity Area and the role of London City Airport is serving the Royals:

“We are returning the Royal Docks to their former glory at the forefront of international trade and exchange. This 125 hectare site - including the regeneration areas of Silvertown Quays, Royal Albert Dock and Royal Albert Basin has £22bn of development potential. Already, innovative and iconic developments are springing up to create a world class business destination - such as The Siemens Crystal and the Emirates Air Line cable car.

A new Enterprise Zone will support business ventures creating 6,000 new jobs. A beautiful ‘floating village’ will host just some of 11,000 new homes built. A £1bn joint public and private investment will create London’s first Asian Business Park.

We will install transport links to Crossrail 1 at Woolwich and London City Airport.”

Local Policy

London Borough of Newham Core Strategy (January 2012)

5.20 London Borough Newham’s Core Strategy was adopted in January 2012. It sets out to ensure that *“new development will achieve the Council’s objective to make Newham a place where people will choose to live, work and stay”*.

5.21 Policy INF 2 on Sustainable Transport within the Core Strategy states that:

“Major development proposals that generate or attract large numbers of trips, including higher density residential and commercial development, should be located in areas with good public transport accessibility and demonstrate the existence of, or propose new safe, attractive walking and cycling routes to public transport nodes.”

5.22 It continues to state that:

“Development proposals will not be supported where they would have an unacceptable adverse impact on the capacity or environment of the highway network. Where applicable proposals must be accompanied by Transport Assessments which show the likely impacts of trip generation, and which include acceptable robust, monitored proposals to counter or minimise the potential impacts; these include ‘smarter travel’ plans and measures to facilitate and encourage more widespread walking, cycling and public transport use.”

Summary

5.23 London City Airport is accessible by public transport via black taxi, DLR and bus services, providing connections locally within Newham by bus and via DLR to central London and Canary Wharf. Targets are being set to increase the public transport mode share, in accordance with the Aviation Policy Framework. The Airport continues to engage with stakeholders to improve surface access. The Airport’s Travel Plan is being updated, to promote access to the airport by sustainable modes and reducing the proportion of journeys by private car.

5.24 Hence the CADP accords with national, regional and local transport policies.

6 TRIP ATTRACTION

Background

- 6.1 The Airport's extant 2009 Planning Permission allows the annual number of permitted aircraft movements to grow to 120,000 'noise-factored' movements. The forecasts made in 2006 (and used to inform the 2007 Environmental Statement which accompanied the planning application for the 2009 planning permission), predicted that the 120,000 movement limit would be reached in 2010, of which 25,000 movements were predicted to derive from the Jet Centre, with the number of passengers carried reaching 3.9 million per annum on 95,000 scheduled movements. The actual increase in movements has not reached these amounts, due primarily to the global recession.
- 6.2 However, the effect of the recession has seen airlines introduce larger, more fuel efficient aircraft, with lower seat / mile costs. A comparison of the aircraft size and capacity of the current and future scheduled fleet mix is provided in **Table 6.1**.

Table 6.1: Aircraft Size and Capacity

Aircraft	Seats	Wingspan (m)	Length (m)	Height (m)
<i>Existing</i>				
Airbus A318	32 - 107	34.09	31.45	12.56
BAe 146 / Avro RJ	82-112	26.21	30.99	8.61
Bombardier Q400	70-78	28.42	32.84	8.36
Dornier 328	33-39	20.98	21.22	7.24
Embraer 170	76	26.00	29.90	9.67
Embraer 190	98-112	28.72	36.24	10.28
Fokker F50	50	29.00	25.25	8.32
ATR-42	46-50	24.57	22.67	7.59
ATR-72	68-74	27.10	27.20	7.65
Saab 2000	50	24.76	27.28	7.73
<i>Future</i>				
Airbus A318	32 - 107	34.09	31.45	12.56
Embraer 170	76	26.00	29.90	9.67
Embraer 190	98-112	28.72	36.24	10.28
Bombardier Q400	78	28.42	32.84	8.36
ATR-42	46-50	24.57	22.67	7.59
Canadair C100	100-120	35.10	34.90	11.50

- 6.3 Table 6.1 shows that whilst the future fleet is physically larger in terms of wingspan, length and height, there is not a significant increase in seating capacity.

Passenger Numbers

Annual Passenger Numbers

- 6.4 Updated aircraft and passenger forecasts for the period between 2014 and 2025 have been prepared by York Aviation LLP. The annual aircraft movements / passenger numbers both With and Without Development are set out in **Table 6.2**.

Table 6.2: Annual Passenger Numbers and Aircraft Movement Core Forecasts

	2014	2023		2025	
	Existing	With Dev.	Without Dev.	With Dev.	Without Dev.
Scheduled Movements (per '100)	70.5	107.1	86.1	108.3	86.1
Passengers (mppa)	3.7	5.9	4.7	6.0	4.8

Source: York Aviation. Note: all figures rounded to 1dp.

- 6.5 This shows that under the core scenario, passenger numbers are predicted to grow incrementally from 3.65 mppa in 2014 to 6.0 mppa in 2025 With CADP Core Case compared to 4.8 mppa Without CADP Core Case.
- 6.6 The difference in passenger numbers With and Without Development occurs as a result of the following:
- a) The constraint on the growth of movements in peak periods imposed by the limit of 18 stands and 38 runway movements per hour; and
 - b) Larger aircraft being able to operate from the new aircraft stands which are able to accommodate the new generation of larger planes.
- 6.7 Further details underpinning the forecasts are provided in the CADP [Update to the Need Statement](#) accompanying the CADP [Appeal Proposals](#).
- 6.8 As explained in Chapter 3 of the Updated Environmental Statement, while the 'With CADP' Core Case forecast shown in Table 6.2 is considered the most likely scenario, a sensitivity test

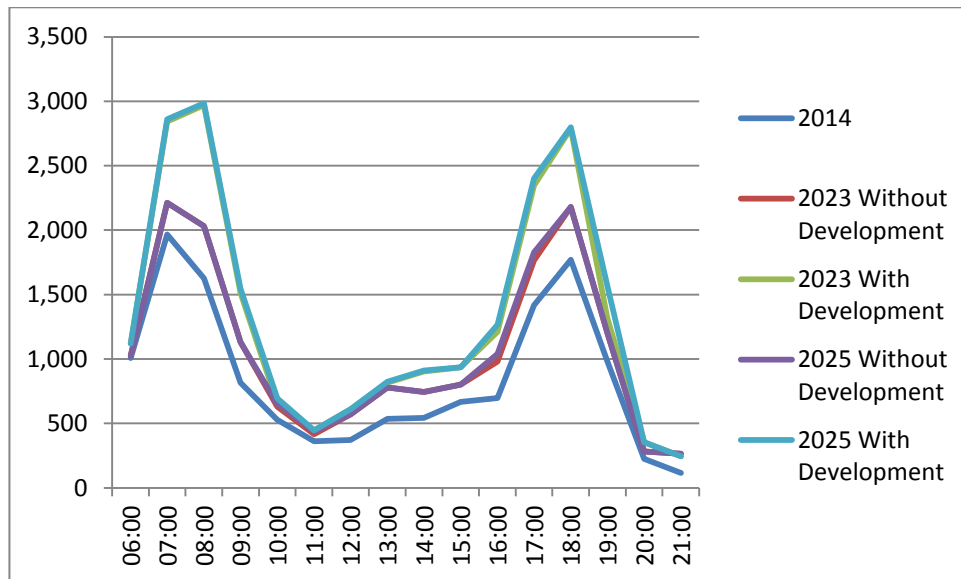
is applied to the 'With CADP' Core Case, assuming a higher average load factor of 67% by 2025 (known as the 'With CADP Higher Passenger Sensitivity Test'). This scenario derives approximately 6.5 mppa by 2025.

- 6.8.1 Some of the assessments in the UES also consider the implications of a faster introduction of new jets. As such a scenario would not result in materially more passengers than the With CADP Core scenario, the implications of this 'Faster Mover to Jets Case' in transport terms is not assessed further in this UTA.

Daily Profile

- 6.9 York Aviation has derived a scheduled timetable and daily profile of flight and passenger arrivals / departures for the base year 2014 as well as the predicted pattern for future years of 2020, 2023 and 2025. This is based on a typical busy day at the Airport and expected changes as demand grows.
- 6.10 The predicted change in passenger numbers at the Airport across a weekday is illustrated in **Graph 6.1**. This takes into account that on average, passengers arrive 1 hour and 15 minutes prior to their flight departing from the airport if travelling on a scheduled flight, and when a flight arrives at the airport it takes on average 15 minutes for passengers to depart from the airport. This has previously been accepted by LBN and TfL and is not expected to change significantly in the future with CADP.

Graph 6.1: Profile of Passenger Numbers on Surface Access on a Weekday



- 6.11 **Graph 6.1** shows that there is anticipated to be an increase in passengers at all times of day, but particularly during the AM peak between 07:00 and 10:00 and during the PM peak between 17:00 and 20:00.
- 6.12 It is evident that the number of passengers using surface access modes is significantly lower during the off-peak period between 10:00 and 17:00.
- 6.13 This is because the recession has also driven the demand for peak period flights higher, with less peak spreading than anticipated at the time of forecasts prepared pre-recession. In addition, it is now recognised that flights tend to operate at lower load factors in off-peak periods.
- 6.14 Hence the assessment of the impacts on surface access to the Airport are focused on the peak hours.

Peak Hours

- 6.15 Growth in scheduled movements and passenger numbers is driven by the Airport's primary role in supporting the business travel needs associated with the Canary Wharf Financial Services cluster, resulting in a greater dependence on peak period travel compared to other airports which have a broader mix of passenger types, allowing a greater spread of services.

- 6.16 The CADP facilitates a change to the daily profile of passengers arriving / departing the Airport, compared to the Without Development Scenario. The proportions in the peak periods are similar, but there will be a higher demand in the off peak period in the With Development Case. This is because the With Development Case will allow market growth overall so making a number of off-peak services viable.
- 6.17 A load factor is the proportion of passenger seating capacity occupied on a plane. Load factors are predicted to vary throughout the day, with higher load factors at peak times which is driven by higher demand. The predicted peak period load factors both With and Without Development are shown in **Table 6.3**.

Table 6.3: Peak Period Load Factors

	2023		2025		2025 Sensitivity Test
	With Dev.	Without Dev.	With Dev.	Without Dev.	With Dev
Peak Periods	85%	90%	85%	90%	85%

- 6.18 As can be seen from Table 6.3, peak period load factors are predicted to be 85% With Development and 90% Without Development. Load factors are higher Without Development because of the shortage of peak period flights to meet the underlying market demand. In other words, the With Development Case enables demand to be spread across a greater number of flights.
- 6.19 Peak hour load factors will never consistently reach 100% because airlines need to maintain a proportion of free seats on all flights, particularly during peak times, in order to accommodate those passengers with flexible tickets who require a seat on their desired flight. In the With Development Case, it is anticipated that the airlines will be able to operate more off-peak services to match their growth in peak operations, and this further explains the difference in peak load factors between scenarios, as a greater proportion of peak services may be booked but unused, as passengers switch to a more convenient flight through the day.
- 6.20 The Airport confirms that whilst some flights have occasionally operated at 100% load factors, there has never been a scenario where 100% load factors have occurred across all

flights within a single hour at any time. Furthermore, where flights have occasionally operated at 100%, there is no consistent pattern by day/month/year or any other variable. Hence, there is no reason to believe that this will occur in the future.

- 6.21 The predicted change in passenger numbers on surface transport (taking into account the time lag between passengers arriving / departing on a plane and arriving / departing the Airport) for the weekday AM peak hour of 08:00 – 09:00 and for the weekday PM peak hour of 17:00 – 18:00 is shown in **Tables 6.4 - 6.7** for 2014, 2023 and 2025 respectively. It is worth noting that both of these hours are the combined network and development peak hours.

Table 6.4: 2014 Peak Hour Passenger Numbers

	AM Peak (08:00 – 09:00)			PM Peak (17:00 – 18:00)		
	Arr's	Dep's	Total	Arr's	Dep's	Total
Observed	470	1,114	1,584	1,067	352	1,418

Table 6.5: 2023 Peak Hour Passenger Numbers – CADP Core Case

	AM Peak (08:00 – 09:00)			PM Peak (17:00 – 18:00)		
	Arr's	Dep's	Total	Arr's	Dep's	Total
Without Development	755	1,275	2,030	1,246	520	1,766
With Development	1,080	1,889	2,969	1,646	701	2,347
Difference	325	614	939	400	181	581

Table 6.6: 2025 Peak Hour Passenger Numbers – CADP Core Case

	AM Peak (08:00 – 09:00)			PM Peak (17:00 – 18:00)		
	Arr's	Dep's	Total	Arr's	Dep's	Total
Without Development	755	1,275	2,030	1,246	581	1,827
With Development	1,080	1,906	2,986	1,646	756	2,402
Difference	325	631	956	400	176	575

Table 6.7: 2025 Passenger Numbers - Higher Passenger Sensitivity Test Peak Hour

	AM Peak (08:00 – 09:00)			PM Peak (17:00 – 18:00)		
	Arr's	Dep's	Total	Arr's	Dep's	Total
Without Development	755	1,275	2,030	1,246	581	1,827
With Development	1,127	1,906	3,033	1,646	790	2,436
Difference	373	631	1,003	400	209	609

- 6.22 This shows that during the AM peak hour in 2025 there would be an increase of 956 passengers compared to the Core Without Development Scenario, whilst during the PM peak

hour in 2025 there would be an increase of 575 passengers compared to the Without Development Scenario.

Staff Numbers

- 6.23 Staff numbers at the Airport are also anticipated to increase overtime. An estimate of the number of staff employed on-site at the Airport has been derived by York Aviation. This is summarised in **Table 6.8**.

Table 6.8: Number of Direct Full Time Equivalent Jobs at the Airport

	2014	2023	2025
Without Development	1,830	2,120	2,140
With Development	-	2,890	2,930

** NB. Numbers are rounded to the nearest 10.*

Hotel

- 6.24 The starting point in estimating the trip attraction associated with the hotel has been to interrogate the TRAVL v8.17 database. The search of similar hotels in the database was based on the following criteria:
- a) PTAL's of 3 and 4;
 - b) Hotels with greater than 34 bedrooms; and
 - c) Parking provision of between 14 and 40 spaces.
- 6.25 It is envisaged that many customers at the proposed Hotel will already be using the Airport and may simply decide to extend their stay before or after their flight. However, a proportion of hotel customers may be visiting local attractions such as ExCel.

Mode Split

Passengers

- 6.26 The mode split assumptions for passengers are set out in **Table 6.9**.

Table 6.9: Mode Split - Passengers

Mode	2014	2023 / 2025
Car (driven away)	5.5%	4.9%
Car Other (rental and parked)	4.0%	3.5%
Chauffeur	2.0%	1.8%
Minicab	14.3%	12.7%
Black Cab	9.5%	8.4%
DLR	61.0%	65.0%
Bus	<1%	<1%
Transfer	3.7%	3.7%
TOTAL	100 %	100 %

- 6.27 The future year mode split is considered to represent the maximum mode share for the DLR, having regard to the Airport's aspiration to maximise the use of public transport as a means of surface access. It is considered that, with appropriate encouragement and publicity, DLR mode share can realistically increase over time to reach **65% by 2023**.

Staff

The mode split assumptions for staff is set out in **Table 6.10**.

Table 6.10: Mode Split – Staff

Mode	Existing	2023 / 2025
Car	41.0%	37.0%
Mini Cab	0.0%	0.0%
DLR	24.0%	24.5%
Bus	25.0%	25.5%
M'bike	0.0%	0.0%
Walk	8.0%	9.0%
Cycle	3.0%	4.0%
TOTAL	100%	100 %

- 6.28 The starting point for estimating the mode split for staff is the existing mode split as revealed through the staff travel surveys. However, it is anticipated that the proportion of staff travelling by sustainable modes will increase with the continued implementation of the Airport's Travel Plan.

- 6.29 With regards to the DLR mode share for staff travel, in the TfL consultation response of 17th January 2013, DLR recognise that since most staff work shifts the DLR operating hours may not support their working pattern so a low DLR mode share for staff would be expected.

Hotel

- 6.30 The mode split assumptions for the are hotel is set out in **Table 6.11**.

Table 6.11: Mode Split – Hotel

Mode	Existing
Car Driver	27 %
Car Passenger	11 %
DLR	27 %
Bus	8 %
Walk	19 %
Cycle	0 %
Motorcycle	1 %
Coach	2 %
Taxi	5 %
TOTAL	100 %

- 6.31 The mode split has been derived from the site selection from the TRAVL database used to derive the trip attraction.

Multi-Modal Trip Attraction

- 6.32 It should be noted that the hotel has been assumed to be developed in conjunction with CADP, although it is subject to a separate planning application with resolution to grant outline planning permission from LBN on 3rd February 2015. The resultant multi-modal person trip attraction for the peak hours is shown in **Tables 6.12 – 6.17**.

Table 6.12: Multi-Modal Trip Attraction (Passenger and Staff) - 2014

Mode	AM Peak (08:00 – 09:00)			PM Peak (17:00 – 18:00)		
	Arrivals	Departures	Total	Arrivals	Departures	Total
Car (driven away)	102	61	164	59	96	154
Car Other (rental and parked)	19	45	63	43	14	57
Chauffeur	9	22	32	21	7	28
Minicab	67	159	227	153	50	203
Black Cab	45	106	151	101	33	135
DLR	331	680	1,010	651	258	909
Bus	46	0	46	0	46	46
M’bike	0	0	0	0	0	0
Walk	15	0	15	0	15	15
Cycle	6	0	6	0	6	6
Transfer	17	41	59	39	13	52
TOTAL	657	1,114	1,771	1,067	538	1,605

Table 6.13: Multi-Modal Trip Attraction (Passenger and Staff) - 2023 Without Development

Mode	AM Peak (08:00 – 09:00)			PM Peak (17:00 – 18:00)		
	Arrivals	Departures	Total	Arrivals	Departures	Total
Car (driven away)	110	62	172	61	99	160
Car Other (rental and parked)	27	45	72	44	18	63
Chauffeur	13	23	36	22	9	31
Minicab	96	162	257	158	66	224
Black Cab	64	107	171	105	44	149
DLR	539	829	1,368	810	387	1,197
Bus	51	0	51	0	51	51
M’bike	0	0	0	0	0	0
Walk	18	0	18	0	18	18
Cycle	8	0	8	0	8	8
Transfer	28	47	75	46	19	65
TOTAL	953	1,275	2,228	1,246	719	1,965

Table 6.14: Multi-Modal Trip Attraction (Passenger, Staff and Hotel) - 2023 With Development

Mode	AM Peak (08:00 – 09:00)			PM Peak (17:00 – 18:00)		
	Arrivals	Departures	Total	Arrivals	Departures	Total
Car (driven away)	163	118	281	110	147	257
Car Other (rental and parked)	38	67	105	58	25	83
Chauffeur	19	33	53	29	12	42
Minicab	139	244	383	214	91	305
Black Cab	91	159	250	139	59	198
DLR	778	1,253	2,031	1,100	534	1,634
Bus	72	8	80	9	73	82
M’bike	0	0	0	0	0	0
Walk	24	0	24	0	24	24
Cycle	11	0	11	0	11	11
Transfer	40	70	110	61	26	87
TOTAL	1,375	1,952	3,328	1,721	1,002	2,723

Table 6.15: Multi-Modal Trip Attraction (Passenger and Staff) - 2025 Without Development

Mode	AM Peak (08:00 – 09:00)			PM Peak (17:00 – 18:00)		
	Arrivals	Departures	Total	Arrivals	Departures	Total
Car (driven away)	111	62	173	61	102	163
Car Other (rental and parked)	27	45	72	44	21	65
Chauffeur	13	23	36	22	10	32
Minicab	96	162	257	158	74	232
Black Cab	64	107	171	105	49	154
DLR	540	829	1,368	810	427	1,236
Bus	51	0	51	0	51	51
M’bike	0	0	0	0	0	0
Walk	18	0	18	0	18	18
Cycle	8	0	8	0	8	8
Transfer	28	47	75	46	21	68
TOTAL	955	1,275	2,230	1,246	781	2,027

Table 6.16: Multi-Modal Trip Attraction (Passenger, Staff and Hotel) - 2025 With Development

	AM Peak (08:00 – 09:00)			PM Peak (17:00 – 18:00)		
Mode	Arrivals	Departures	Total	Arrivals	Departures	Total
Car (driven away)	164	119	282	110	150	261
Car Other (rental and parked)	38	68	106	58	27	85
Chauffeur	19	34	53	29	13	43
Minicab	139	246	385	214	98	312
Black Cab	91	161	251	139	64	202
DLR	779	1264	2043	1,100	571	1670
Bus	73	8	80	9	73	82
M'bike	0	0	0	0	0	0
Walk	25	0	25	0	25	25
Cycle	11	0	11	0	11	11
Transfer	40	71	110	61	28	89
TOTAL	1,378	1,969	3,348	1,721	1,060	2,781

Table 6.17: Multi-Modal Trip Attraction (Passenger, Staff and Hotel) - 2025 With Development Higher Passenger Sensitivity Test

	AM Peak (08:00 – 09:00)			PM Peak (17:00 – 18:00)		
Mode	Arrivals	Departures	Total	Arrivals	Departures	Total
Car (driven away)	166	119	285	110	152	262
Car Other (rental and parked)	40	68	108	58	28	86
Chauffeur	20	34	54	29	14	43
Minicab	145	246	391	214	102	317
Black Cab	95	161	255	139	67	205
DLR	810	1,264	2,074	1,100	593	1692
Bus	73	8	80	9	73	82
M'bike	0	0	0	0	0	0
Walk	25	0	25	0	25	25
Cycle	11	0	11	0	11	11
Transfer	42	71	112	61	29	90
TOTAL	1,426	1,969	3,395	1,721	1,094	2,814

Summary

6.33 The proposed approach to trip attraction is therefore as follows:

- a) Derive the person trip attraction from the daily profile of passenger forecasts supplied from York Aviation;
- b) Derive the staff trip attraction from the staff forecasts supplied from York Aviation;
- c) Apply mode splits to the passenger, staff and hotel trips; and
- d) Derive the multi-modal trip attraction for the combined passenger, staff and hotel trips.

6.34 Further details regarding Trip Attraction for passengers and staff are included at [Appendix I](#).

7 IMPACT ON PUBLIC TRANSPORT NETWORKS

DLR

Study Area

- 7.1 It has been agreed with DLR that the impact of the proposed CADP will be examined on 'the Airport route' of the DLR network. This comprises the section between Canning Town and Woolwich Arsenal via London City Airport.

Assessment Years

- 7.2 An assessment of the capacity of the Airport route is conducted for the With / Without Development Scenarios:
- a) 2014: Baseline Year;
 - b) 2023: Design Year as this represents completion of CADP1 works;
 - c) 2025: Principal Assessment Year as this represents optimisation of the CADP Development and other associated improvements at the Airport; and
 - d) 2025: Higher Passenger Sensitivity Test (ST).
- 7.3 The DLR loadings have been adjusted to take account of the anticipated Airport-related passengers in the With and Without Development Scenarios in the above assessment years.
- 7.4 DLR have not provided predicted loadings data for 2023 or 2025. To assess 2023 / 2025, it has been necessary to use the 2026 DLR loadings data. This provides a robust assessment since the 2026 loadings data for non-Airport related DLR passengers would be higher than 2023. Therefore, there would be a greater amount of spare capacity on the DLR in 2023 / 2025 than suggested by the results for this scenario.

DLR Passenger Forecasts

- 7.5 DLR have provided passenger loadings for the Airport route for the weekday AM peak hour of 08:00 – 09:00. This is the busiest hour of the day on the DLR network.
- 7.6 For the future years up to 2026 this includes the predicted increase in DLR passengers associated with planned developments in the vicinity of the Airport route.

Airport-Related DLR Passengers

- 7.7 The Airport-related DLR passengers for the weekday AM peak hour of 08:00 – 09:00 is shown in **Table 7.1**.

Table 7.1 – Weekday AM Peak Hour Airport-related DLR Passengers

Year	Without Development			With Development			Difference		
	Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total
2014	331	680	1,010	-	-	-	-	-	-
2023	539	829	1,368	778	1,253	2,031	239	425	664
2025	540	829	1,368	779	1,264	2,043	239	436	675
2025 ST	540	829	1,368	810	1,264	2,074	270	436	706

- 7.8 Table 7.1 shows that the greatest increase in DLR passengers occurs in 2025 when there is a total of 675 additional DLR passengers in the weekday AM peak hour. The actual increase in passengers per train is low when seen in the context of the frequency of trains on the Airport route; of 15 trains per hour each way.
- 7.9 Airport-related DLR passengers have been distributed according to Origin-Destination data for existing journeys to / from the Airport.
- 7.10 DLR passenger flow diagrams showing the number of DLR passengers on the Airport route for the AM Peak hour in the With and Without Development Scenarios for the assessment years of 2023 and 2025 are included at **DLR Figures 1 to 20**.

Crowding Factors

- 7.11 DLR apply crowding factors as a measure of capacity on the DLR network. Crowding factors are calculated on the number of standing passengers per sqm of standing space (ppm²). Factors are categorised according to the following scale:

Crowding level key

ppm ²	
0	No crowding (all passengers seated)
0-1	Slight crowding (some standing)
1-2	Medium crowding
2-3	Heavy crowding
3-4	Severe crowding
4-4.6	Maximal crowding (very close to capacity)
>4.6	Overcrowding* (beyond stated crush loads)

* NB that overcrowding would more likely result in queuing on platforms instead

- 7.12 DLR consider that 'planning capacity' is reached at 3 ppm², after which there is potential for passengers to be left behind at stations. However, the actual capacity of a train is reached at 4.6 ppm². DLR reduce the amount of available standing space on the Airport route by 15% to take account passengers with luggage.
- 7.13 A crowding factor is calculated for each link in both directions on the Airport route between Canning Town and Woolwich Arsenal.

Results

- 7.14 **Tables 7.2 - 7.4** illustrates how the increase in passengers affects the capacity of DLR services for the weekday AM peak hour in [2023 and 2025](#).

Table 7.2 – DLR Passengers 2023 Weekday AM Peak (CADP Core Scenario)

Link	DLR Passengers		Crowding Factor pp sqm		Category	
	Without Dev	With Dev	Without Dev	With Dev	Without Dev	With Dev
Canning Town → West Silvertown	3,879	4,063	1.09	1.99	Medium crowding	Medium crowding
West Silvertown → Pontoon Dock	3,720	3,904	0.99	1.85	Medium crowding	Medium crowding
Pontoon Dock → London City Airport	1471	1655	-0.03	-0.11	No crowding	No crowding
London City Airport → King George V	759	789	-0.90	-0.87	No crowding	No crowding
King George V → Woolwich Arsenal	808	838	-0.88	-0.83	No crowding	No crowding
Woolwich Arsenal → King George V	1,917	1,972	-0.02	0.16	Low crowding	Low crowding
King George V → London City Airport	2,340	2,395	0.44	0.53	Low crowding	Low crowding
London City Airport → Pontoon Dock	3,408	3,803	1.77	1.76	Medium crowding	Medium crowding
Pontoon Dock → West Silvertown	4,790	5,185	2.80	2.96	Heavy crowding	Heavy crowding
West Silvertown → Canning Town	5,318	5,714	3.02	3.42	Severe Crowding	Severe Crowding

Table 7.3 – DLR Passengers 2025 Weekday AM Peak (CADP Core Scenario)

Link	DLR Passengers		Crowding Factor pp sqm		Category	
	Without Dev	With Dev	Without Dev	With Dev	Without Dev	With Dev
Canning Town → West Silvertown	3,879	4,063	1.82	1.99	Medium crowding	Medium crowding
West Silvertown → Pontoon Dock	3,720	3,904	1.69	1.85	Medium crowding	Medium crowding
Pontoon Dock → London City Airport	1,471	1,655	-0.27	-0.11	No crowding	No crowding
London City Airport → King George V	759	789	-0.89	-0.87	No crowding	No crowding
King George V → Woolwich Arsenal	808	839	-0.85	-0.82	No crowding	No crowding
Woolwich Arsenal → King George V	1,917	1,972	0.12	0.16	Low crowding	Low crowding
King George V → London City Airport	2,340	2,395	0.48	0.53	Low crowding	Low crowding
London City Airport → Pontoon Dock	3,408	3,813	1.41	1.77	Medium crowding	Medium crowding
Pontoon Dock → West Silvertown	4,790	5,196	2.62	2.97	Heavy crowding	Heavy Crowding
West Silvertown → Canning Town	5,318	5,724	3.08	3.43	Severe Crowding	Severe Crowding

Table 7.4 – DLR Passengers 2025 Weekday AM Peak (Sensitivity Test (ST) Scenario)

Link	DLR Passengers		Crowding Factor pp sqm		Category	
	Without Dev	With Dev ST	Without Dev	With Dev ST	Without Dev	With Dev
Canning Town → West Silvertown	3,879	4,087	1.82	2.00	Medium crowding	Medium crowding
West Silvertown → Pontoon Dock	3,720	3,928	1.69	1.87	Medium crowding	Medium crowding
Pontoon Dock → London City Airport	1,471	1,679	-0.27	-0.09	No crowding	No crowding
London City Airport → King George V	759	789	-0.89	-0.87	No crowding	No crowding
King George V → Woolwich Arsenal	808	839	-0.85	-0.82	No crowding	No crowding
Woolwich Arsenal → King George V	1,917	1,979	0.12	0.17	Low crowding	Low crowding
King George V → London City Airport	2,340	2,402	0.48	0.54	Low crowding	Low crowding
London City Airport → Pontoon Dock	3,408	3,813	1.41	1.77	Medium crowding	Medium crowding
Pontoon Dock → West Silvertown	4,790	5,196	2.62	2.97	Heavy crowding	Heavy Crowding
West Silvertown → Canning Town	5,318	5,724	3.08	3.43	Severe Crowding	Severe Crowding

7.15 Tables 7.2 - 7.4 shows that for all links the descriptive level of crowding does not change between the With and Without Development Scenarios. This is because there is a marginal change in the crowding factor as a direct result of the Development.

7.16 In summary, in 2025, the maximum crowding factor recorded is for the West Silvertown to Canning Town link which scores 3.08 in the Without Development Case compared to 3.43 in the With Development Case. This shows that 'Severe Crowding' is anticipated to occur without the Development in place and that the Development does not increase crowding significantly, with the assessed crowding key level not changing. The corresponding increase in passengers on this link as a result of the Development is 407, an increase of 27 passengers per train or nine per train carriage (since there are three carriages per train on the Bank to Woolwich Arsenal line).

- 7.17 The 2025 Higher Passenger sensitivity test results do not show a significant change in results, as passenger flows during the AM peak hour do not materially change.
- 7.18 Although DLR loadings are not available for the weekday PM peak hour, it should be noted that Airport-related DLR passengers are lower in the weekday PM peak hour compared to the weekday AM peak hour. This demonstrates that the assessment provided in Tables 7.2 to Table 7.4 represents a worst-case in terms of the level of impact of the Development.
- 7.19 It should be further noted that the results include a 15% reduction in standing capacity to take account of passengers luggage. This is a very robust reduction when in reality few passengers travelling to / from the Airport carry bulky luggage and simply need to be instructed to move further down the train carriages.
- 7.20 The Stratford to Woolwich Arsenal Branch of the DLR currently operates with two carriages per DLR train. DLR's plans to increase the DLR trains to operate with three carriages on this branch, in line with the Bank to Woolwich Arsenal Branch. The CADP proposals contribute to cumulative change in demand and capacity on this line, and, London City Airport has agreed to contribute the cost of two carriages towards adding such capacity as well as funding additional station staff in the London City Airport DLR Station. **Table 7.5** below shows the results of the capacity analysis with three carriages on all DLR trains.

Table 7.5 – DLR Passengers 2025 Weekday AM Peak with DLR Proposals for Three Carriages

Link	DLR Passengers		Crowding Factor pp sqm		Category	
	Without Dev	With Dev ST	Without Dev	With Dev ST	Without Dev	With Dev
Canning Town → West Silvertown	3,879	4,063	1.82	1.39	Medium crowding	Medium crowding
West Silvertown → Pontoon Dock	3,720	3,904	1.69	1.28	Medium crowding	Medium crowding
Pontoon Dock → London City Airport	1,471	1,655	-0.27	-0.35	No crowding	No crowding
London City Airport → King George V	759	789	-0.89	-0.98	No crowding	No crowding
King George V → Woolwich Arsenal	808	839	-0.85	-0.95	No crowding	No crowding
Woolwich Arsenal → King George V	1,917	1,972	0.12	-0.12	Low crowding	No crowding
King George V → London City Airport	2,340	2,395	0.48	0.18	Low crowding	Low crowding
London City Airport → Pontoon Dock	3,408	3,813	1.41	1.21	Medium crowding	Medium crowding
Pontoon Dock → West Silvertown	4,790	5,196	2.62	2.22	Heavy crowding	Heavy crowding
West Silvertown → Canning Town	5,318	5,724	3.08	2.60	Severe Crowding	Heavy crowding

- 7.21 Table 7.5 indicates that all crowding factors in the Core 2025 ‘with development’ scenario will either remain constant or reduce compared to the Core 2025 ‘without development’ scenario, with the addition of the DLR proposals, to which CADP contributes.

Crossrail

- 7.22 The current proposals for Crossrail do not include a station at London City Airport. However, both London Borough of Newham and London City Airport continue to lobby for a Crossrail proposal that includes access to the Airport. This aspiration is set out on the Air Quality Action Plan prepared by London Borough of Newham.
- 7.23 The Airport anticipates that Crossrail as currently approved will have a broadly neutral impact on future passenger numbers, as whilst Crossrail will improve the accessibility of Heathrow, it will also improve the accessibility of the Airport from Westminster.

- 7.24 Similarly, it is not anticipated that Crossrail will have a significant impact on the mode split of passenger and staff travel to the Airport. This is because there are currently no proposals for a direct link between Crossrail and the Airport. The nearest Crossrail station will be at Custom House.
- 7.25 DLR forecasts show that some DLR passengers will transfer their journey from DLR to Crossrail. This increases the spare capacity on the Airport Route of the DLR network.

Buses

- 7.26 The travel surveys identified that a fraction of a percentage of passengers use the bus to access the airport. Thus, the projected increase in passengers travelling to and from the Airport during the AM and PM peak hours is low in 2023 and 2025. A greater proportion of staff travel to / from the Airport by bus, with the mode share approximately 25%.
- 7.27 **Table 7.6** shows the number of peak hour bus passengers boarding / alighting in 2025.

Table 7.6: Peak Hour Bus Passengers in 2025

		Arrivals	Departures	Total
AM Peak (08:00 – 09:00)	Without Development	51	0	51
	With Development	73	8	80
	Change	22	8	29
PM Peak (17:00 – 18:00)	Without Development	0	51	51
	With Development	9	73	82
	Change	9	22	31

- 7.28 This shows that the number of peak hour bus passengers boarding / alighting bus services at City Airport is low, particularly when the passengers are distributed across bus services. The number of additional bus passengers is just 29 during the 2025 AM peak hour and 31 during the 2025 PM peak hour.
- 7.29 As there are in the order of 11 buses per hour calling at the airport during peak periods, it is not considered that the marginal increase in bus passengers will have any impact upon the operation of these services. It is likely that this increase will be well within daily fluctuations that would occur in any event.

- 7.30 In addition, the results of the highway modelling show that the proposals will result in limited delay to traffic at key junctions on the local highway network. This shows that there will be a minimal impact on bus journey times.

River Services

- 7.31 It is not anticipated that there would be a significant demand for travel to / from the Airport by river services. Nonetheless, it is worth noting that the Airport is already connected to the Woolwich Ferry Terminal by bus routes 473 and 474, should Thames Clipper serve the existing pier in future. Similarly, the proposed Minoco Wharf pier would be within acceptable walking distance of bus stops serving routes 473 and 474 and thereby providing a direct bus connection to the Airport.
- 7.32 The Airport will continue to engage with TfL and Thames Clippers to ensure that opportunities to connect the Airport to river services are optimised.

Summary

- 7.33 This section has considered the impact that the development would have on public transport modes of travel to / from the Airport. This is summarised below:
- a) The additional Airport-related passengers can be accommodated on the 'Airport Route' of the DLR network;
 - b) Crossrail will have a broadly neutral impact on passenger numbers and the mode split at the Airport;
 - c) The Airport benefits from bus services serving the Airport Forecourt and providing connections to a range of local destinations. These facilities will be enhanced and modernised through CADP;
 - d) The additional bus passengers associated with the proposals are likely to be able to be accommodated on existing bus services; and
 - e) There are existing bus services giving access to potential future connections to river services.

8 IMPACT ON WALKING AND CYCLING NETWORKS

Walking

- 8.1 The mode split data identifies that [currently less than 1% of passengers and 8%](#) of staff walk to the Airport. Staff includes flight crew staying at hotels and of course locally based employees.
- 8.2 It is anticipated that in future there is the potential for a greater proportion of journeys to the Airport to be made on foot, particularly since a further pedestrian access will be created along the dockside from the east, connecting to Woolwich Manor Way. This improves the permeability of the Airport for pedestrians and reduces the walk distance from areas to the east, thereby increasing the attractiveness of walking to the Airport.
- 8.3 A Pedestrian Environment Review System (PERS) walking audit has been undertaken on the key existing pedestrian routes to / from the Airport. PERS is a tool that measures the quality of the pedestrian environment through subjective review, and provides an objective measure to pedestrian quality. The auditing process allows for an overall review of pedestrian accessibility to and from the site.
- 8.4 The PERS audit focused on the following routes:
- a) Hartmann Road – along its full length;
 - b) Albert Road / Connaught Road / Woolwich Manor Way – along the full length; and
 - c) Airport Terminal to Newland Street via Hartmann Road.
- 8.5 A full copy of the PERS audit, along with a plan illustrating the audited routes is provided at [Appendix J](#).
- 8.6 The key findings can be summarised as:
- a) Hartmann Road scored positively for each of the criteria, with the highest score of +3 awarded for ‘surface quality,’ with the existing footway surfaces being well-maintained;
 - b) Albert Road / Connaught Road / Woolwich Manor Way did not score negatively for any of the criteria, with the highest scores of +2 for permeability, legibility, lighting

and tactile information, and the lowest score of 0 for maintenance and surface quality; and

- c) The Airport Terminal to Newland Street route also did not score negatively for any of the criteria, with each criteria scoring between +1 and +2.

- 8.7 The audit identified that there are some minor improvement works which could be undertaken to improve the pedestrian environment and increase the attractiveness of walking to / from the Airport. Specifically, this includes repairing broken paving slabs and resurfacing on Albert Road, at the locations identified within the audit.

Cycling

- 8.8 It is proposed to increase the number of cycle parking spaces from 42 to 70, although the existing cycle stands are under-utilised. Demand for cycle parking will continue to be monitored through the Travel Plan and additional cycle stands will be provided as necessary.
- 8.9 Cyclists will also benefit from the creation of the further vehicle access point from Woolwich Manor Way. This reduces the cycle distance to the Airport from areas to the east, which should encourage employees in particular to cycle to the Airport.

Summary

- 8.10 This section has considered the impact the development would have on walking and cycling modes of transport for travel to / from the Airport. This is summarised below:
- a) The proposals enhance the attractiveness of walking and cycling to the Airport, potentially increasing the demand for both modes, particularly for staff;
 - b) The PERS audit has demonstrated that for pedestrians the Airport is well-connected to the surrounding area; and
 - c) The proposals include additional cycle parking and facilitate an additional cycle route to / from Woolwich Manor Way.

9 IMPACT ON THE ROAD NETWORK

Methodology

Study Area

- 9.1 The change in daily traffic flows is considered for the study area. The scope of the study area is shown on **Figure 4**. It includes the key strategic vehicle routes in the vicinity of the Airport including the A1020 Royal Albert Way / Connaught Bridge and the A117 Woolwich Manor Way / Albert Road. It also includes links where this is anticipated to be a greater than 10% change in traffic flows, as well as those in environmentally sensitive areas in proximity to the Airport. Further details regarding the scope of the study area are provided in Chapter 11 of the Updated Environmental Statement.
- 9.2 For the purposes of further assessment of the traffic impact during peak hours, the Study Area for the [Updated](#) Transport Assessment includes the following junctions:
- a) Hartmann Road / Connaught Road;
 - b) Connaught Road / Connaught Bridge Road; and
 - c) Proposed Access / A1011 Woolwich Manor Way / Fishguard Way
- 9.3 Detailed capacity analyses have been undertaken at the above junctions. This has been agreed with the highway authorities. A copy of the traffic survey data is included at [Appendix K](#).
- 9.4 In their consultation response of 17th January 2013, TfL commented that *“the data collection that is set out in the scoping note is broadly acceptable.”*

Assessment Years and Periods

- 9.5 The assessment of the impact of the proposals on the Study Area has been conducted for the With / Without Development Scenarios for the following assessment years:
- a) [2014: Baseline Year](#);
 - b) [2023: Design Year as this represents completion of CADP1 works](#);;
 - c) [2025: Principal Assessment Year as this represents optimisation of the CADP Development and other associated improvements at the Airport](#); and

d) 2025: Higher Passenger Sensitivity Test.

9.6 The network peak hours are as follows:

- a) Weekday AM Peak – 08:00 – 09:00
- b) Weekday PM Peak – 17:00 – 18:00

9.7 These hours are also the development peak hours when the number of Airport passengers on surface modes is greatest.

Committed Developments

9.8 The assessment considers the predicted trip generation of committed developments in the vicinity of the Airport, which will have a traffic impact in the Study Area. Committed developments are those which have been granted planning permission but which have not yet been fully constructed. [They comprise the following:](#)

- a) IVAX Quays;
- b) Great Eastern Quays;
- c) Barrier Park East;
- d) Royal Wharf (formally Minoco Wharf);
- e) Peruvian Wharf;
- f) UNEX Land, Thames Road;
- g) Pumping Station Site, Tidal Basin;
- h) Royals Business Park – Hotel Site (2.2/2.3);
- i) Tidal Basin;
- j) UEL Docklands Campus Extension;
- k) Land North of Gallions Roundabout (Porsche Centre);
- l) Former Goswell Bakeries;
- m) Gallions Quarter;
- n) Land Bounded by Connaught Road;
- o) 1018 Dockside Road;
- p) Silvertown Quays;
- q) Canning Town Areas 7 and 1c;

- r) Rathbone Market;
- s) Royal Albert Dock.

Traffic Growth

- 9.9 Due to the congested nature of the transport network in London during peak hours, it is generally accepted that a traffic growth factor should not be applied to future year assessments. Given the high number of committed developments, it was not considered necessary to apply a further traffic growth factor to the future year assessments as it is likely this would over-estimate traffic levels.

East London River Crossings

- 9.10 The additional traffic associated with the proposed CADP is expected to have a broadly neutral impact on the proposed East London River Crossings. Whilst the crossings proposed at Silvertown Tunnel and Gallions Ferry will improve the accessibility of the Airport to areas south of the river, it is expected that Airport traffic would reassign from existing crossings such as the Blackwall Tunnel and Woolwich Ferry. Traffic which would relocate from the Woolwich Ferry would actually reduce traffic flows in the vicinity of the Airport.

Results

Daily Traffic Flows

- 9.11 **Traffic Figures 1 to 6** show the change in daily traffic flows on key highway links in the vicinity of the Airport.
- 9.12 **Table 9.1** shows the overall effect of the proposed Development traffic flows on the surrounding routes serving the Airport for the future year of 2025, the assumed year of optimisation of the CADP.

Table 9.1: 2025 Annual Average Daily Traffic Flows – CADP Core Scenario

Link	Without Dev	With Dev	Change	% Change
1. Royal Docks Road	29,257	30,417	1,161	4.0%
2. Woolwich Manor Way (North)	10,575	10,575	0	0.0%
3. Royal Albert Way (East)	26,231	23,088	-3,143	-12.0%
4. Woolwich Manor Way South	9,962	14,265	4,304	43.2%
5. Pier Road	5,305	5,337	32	0.6%
6. Connaught Road (East)	6,268	5,205	-1,063	-17.0%
7. Hartmann Road (West)	10,890	8,732	-2,158	-19.8%
8. Connaught Road (West)	15,913	14,819	-1,095	-6.9%
9. Connaught Bridge (South)	26,379	27,908	1,529	5.8%
10. North Woolwich Road (East)	5,024	5,024	0	0.0%
11. North Woolwich Road (West)	25,915	27,444	1,529	5.9%
12. Connaught Bridge (North)	24,526	21,902	-2,624	-10.7%
13. Royal Albert Way (West)	28,741	25,598	-3,143	-10.9%
14. Victoria Dock Road	16,475	16,994	519	3.2%
15. Hartmann Road (East)	-	5,560	5,560	N/A

- 9.13 Table 9.1 demonstrates that there is an increase in traffic on some links and a reduction in traffic on others. This is because of the creation of an additional vehicle access point to the Airport from Woolwich Manor Way through to Hartmann Road (East). This results in a redistribution of Airport-related traffic and a reduction in traffic on some links.
- 9.14 The greatest proportional reduction in traffic is forecast for Hartmann Road (West) with a -19.8% reduction and Connaught Road (East) with a -17.0% reduction.
- 9.15 The greatest proportional increase in traffic flows are forecast for Hartmann Road (East) adjacent to the new vehicle access; however this is only because the access is not currently in operation. This is followed by Woolwich Manor Way South, with a +43.2% increase and North Woolwich Road (West) which scored a +5.9% increase. This increase is a result of the redistribution of traffic to Woolwich Manor Way with the creation of the additional vehicle access point.
- 9.16 **Table 9.2** shows the overall effect of the proposed Development traffic flows on the surrounding routes serving the Airport for the 2025 Higher Passenger sensitivity test.

Table 9.2: 2025 Annual Average Daily Traffic Flows - Higher Passenger Sensitivity Test

Link	Without Dev	Sensitivity Test	Change	% Change
1. Royal Docks Road	29,257	30,837	1,581	5.4%
2. Woolwich Manor Way (North)	10,575	10,575	0	0.0%
3. Royal Albert Way (East)	26,231	23,088	-3,143	-12.0%
4. Woolwich Manor Way South	9,962	14,685	4,724	47.4%
5. Pier Road	5,305	5,348	43	0.8%
6. Connaught Road (East)	6,268	5,216	-1,052	-16.8%
7. Hartmann Road (West)	10,890	9,402	-1,488	-13.7%
8. Connaught Road (West)	15,913	15,478	-436	-2.7%
9. Connaught Bridge (South)	26,379	28,420	2,041	7.7%
10. North Woolwich Road (East)	5,024	5,024	0	0.0%
11. North Woolwich Road (West)	25,915	27,956	2,041	7.9%
12. Connaught Bridge (North)	24,526	22,050	-2,476	-10.1%
13. Royal Albert Way (West)	28,741	25,598	-3,143	-10.9%
14. Victoria Dock Road	16,475	17,142	667	4.0%
15. Hartmann Road (East)	-	6,111	6,111	N/A

- 9.17 Table 9.2 shows that there is not a significant difference in traffic flows for the sensitivity test compared to the Core CADP With Development traffic flows shown in Table 9.1.

Junction Assessment

- 9.18 **Traffic Figures 7 to 65** illustrate the peak hour traffic flows for the key junctions in the Study Area.
- 9.19 Stand-alone junction assessments have been undertaken at the junctions within the Study Area. The results are set out in the following paragraphs and the modelling output is included at **Appendix L**.

Hartmann Road / Connaught Road

- 9.20 **Tables 9.3 - 9.6** provide a summary of the LINSIG output for the operation of the signalised junctions for the weekday AM Peak and PM Peak hours.

Table 9.3: Hartmann Road / Connaught Road – 2023 Weekday AM Peak Hour

	Observed 2014		2023 Without Dev		2023 With Dev	
	<i>96 seconds cycle</i>		<i>96 seconds cycle</i>		<i>96 seconds cycle</i>	
	DoS	Queue	DoS	Queue	DoS	Queue
Connaught Road (West)	49.0%	5	59.8%	5	61.5%	5
Hartmann Road	52.8%	9	61.8%	11	64.1%	11
Connaught Road (East)	52.0%	6	62.9%	8	63.9%	8

Note: DoS – degree of saturation

Table 9.4: Hartmann Road / Connaught Road - 2025 Weekday AM Peak Hour

	2025 Without Dev		2025 With Dev		2025 Sensitivity Test	
	<i>96 seconds cycle</i>		<i>96 seconds cycle</i>		<i>96 seconds cycle</i>	
	DoS	Queue	DoS	Queue	DoS	Queue
Connaught Road (West)	59.9%	5	62.4%	6	63.0%	6
Hartmann Road	61.8%	10	64.7%	11	64.7%	11
Connaught Road (East)	62.9%	8	63.9%	8	63.9%	8

Table 9.5: Hartmann Road / Connaught Road – 2023 Weekday PM Peak Hour

	Observed 2014		2023 Without Dev		2023 With Dev	
	<i>96 seconds cycle</i>		<i>96 seconds cycle</i>		<i>96 seconds cycle</i>	
	DoS	Queue	DoS	Queue	DoS	Queue
Connaught Road (West)	58.6%	5	56.5%	5	56.0%	5
Hartmann Road	59.4%	10	57.5%	7	54.1%	6
Connaught Road (East)	42.6%	4	40.9%	6	32.3%	5

Table 9.6: Hartmann Road / Connaught Road – 2025 Weekday PM Peak Hour

	2025 Without Dev		2025 With Dev		2025 Sensitivity Test	
	<i>96 seconds cycle</i>		<i>96 seconds cycle</i>		<i>96 seconds cycle</i>	
	DoS	Queue	DoS	Queue	DoS	Queue
Connaught Road (West)	58.6%	6	57.0%	5	57.0%	5
Hartmann Road	56.9%	7	54.5%	6	57.3%	6
Connaught Road (East)	43.6%	6	33.2%	5	33.2%	5

9.21 It is apparent from Table 9.3 and 9.5 that based on the observed flows; the junction operates within theoretical capacity during both weekday AM and PM peak hours, with a maximum queue of 11 PCU's on the Hartmann Road approach.

- 9.22 In the future years of 2023 and 2025, the junction performs better in the With Development Case, since the Airport traffic flows using the junction are reduced compared to the Without Development Case. This is because of the additional vehicle access with Woolwich Manor Way that will be open in the With Development Case. However, the junction still continues to operate within theoretical capacity even in the Without Development Case, with a maximum Degree of Saturation (DoS) of 67.7% with a corresponding queue of 11 PCU's for the Hartmann Road approach in the 2025 AM Peak hour for the Without Development Case.
- 9.23 In the 2025 sensitivity test scenario, there is not a significant difference in the performance of the junction as compared with 2025 With and Without Development scenarios, with a marginal increase in the Degree of Saturation.

Connaught Road / Connaught Bridge Road

- 9.24 **Tables 9.7 – 9.10** provide a summary of the ARCADY output for the operation of the signalised junctions for the weekday AM Peak and PM Peak hours.

Table 9.7: Connaught Road / Connaught Bridge Road – 2023 Weekday AM Peak Hour

	Observed 2014		2023 Without Dev		2023 With Dev	
	RFC	Queue	RFC	Queue	RFC	Queue
Connaught Bridge Road (N)	0.42	1	0.59	2	0.57	2
Connaught Road	0.42	1	0.61	2	0.67	2
Connaught Bridge Road (S)	0.35	1	0.49	1	0.52	1
Silvertown Quays	0	0	0.1	1	0.09	1

Note: RFC – Ratio of Flow to Capacity

Table 9.8: Connaught Road / Connaught Bridge Road – 2025 Weekday AM Peak Hour

	2025 Without Dev		2025 With Dev		2025 Sensitivity Test	
	RFC	Queue	RFC	Queue	RFC	Queue
Connaught Bridge Road (N)	0.59	2	0.57	2	0.57	2
Connaught Road	0.61	2	0.67	2	0.67	2
Connaught Bridge Road (S)	0.49	2	0.52	2	0.52	2
Silvertown Quays	0.1	1	0.09	1	0.09	1

Table 9.9: Connaught Road / Connaught Bridge Road – 2023 Weekday PM Peak Hour

	Observed 2014		2023 Without Dev		2023 With Dev	
	RFC	Queue	RFC	Queue	RFC	Queue
Connaught Bridge Road (N)	0.35	1	0.51	2	0.38	2
Connaught Road	0.36	1	0.39	1	0.34	1
Connaught Bridge Road (S)	0.6	2	0.69	3	0.70	3
Silvertown Quays	0	0	0.21	1	0.22	1

Table 9.10: Connaught Road / Connaught Bridge Road – 2025 Weekday PM Peak Hour

	2025 Without Dev		2025 With Dev		2025 Sensitivity Test	
	RFC	Queue	RFC	Queue	RFC	Queue
Connaught Bridge Road (N)	0.51	1	0.48	1	0.48	1
Connaught Road	0.42	1	0.40	1	0.40	1
Connaught Bridge Road (S)	0.70	3	0.76	3	0.76	3
Silvertown Quays	0.21	1	0.22	1	0.22	1

- 9.25 Tables 9.7 and 9.9 illustrate that the junction currently operates with spare capacity during both the AM and PM peak hours, with a maximum queue of just two vehicles on any approach.
- 9.26 In the future year assessments, the junction continues to operate within capacity in both the With and Without Development Cases. The greatest RFC is **0.76** recorded for the Connaught Bridge Road (South) approach in the **2025** With Development Case for the weekday PM peak hour with a corresponding queue of three vehicles. This compares with **0.70** and a queue of three vehicles for the **2025** Without Development Case, illustrating that there is not a significant difference between the With and Without Development Cases. The increase in the With Development Case is because of the additional traffic travelling to the Airport from destinations to the west.
- 9.27 In the **2025** sensitivity test scenario, there is a negligible difference in the performance of the junction as compared with the **2025** With Development Case. For example, the RFC increases by just 0.01 on one approach, with no increase in queue lengths.
- 9.28 Overall, the analysis shows that the impact of the development at this junction does not warrant mitigation measures since the development effect is minimal.

Proposed Access / A1011 Woolwich Manor Way / Fishguard Way

9.29 **Tables 9.11 – 9.14** provide a summary of the LINSIG output for the operation of the signalised junction for the weekday AM Peak and PM Peak hours.

Table 9.11: Proposed Access / A1011 Woolwich Manor Way / Fishguard Way – 2023 Weekday AM Peak Hour

	Observed 2014		2023 Without Dev		2023 With Dev	
	<i>90 seconds cycle</i>		<i>90 seconds cycle</i>		<i>90 seconds cycle</i>	
	DoS	Queue	DoS	Queue	DoS	Queue
Woolwich Manor Way	36.3%	6	39.1%	6	56.5%	7
Fishguard Way	36.9%	3	36.9%	3	48.8%	3
Albert Road	35.2%	5	36.0%	5	37.9%	6
Hartmann Road	1.0%	1	1.0%	1	53.9%	5

Table 9.12: Proposed Access / A1011 Woolwich Manor Way / Fishguard Way – 2025 Weekday AM Peak Hour

	2025 Without Dev		2025 With Dev		2025 Sensitivity Test	
	<i>90 seconds cycle</i>		<i>90 seconds cycle</i>		<i>90 seconds cycle</i>	
	DoS	Queue	DoS	Queue	DoS	Queue
Woolwich Manor Way	39.1%	6	56.4%	7	56.7%	7
Fishguard Way	36.9%	3	48.8%	3	48.8%	3
Albert Road	36.0%	5	37.9%	6	37.9%	6
Hartmann Road	1.0%	1	54.5%	5	54.5%	5

Table 9.13: Proposed Access / A1011 Woolwich Manor Way / Fishguard Way – 2023 Weekday PM Peak Hour

	Observed 2014		2023 Without Dev		2023 With Dev	
	<i>90 seconds cycle</i>		<i>90 seconds cycle</i>		<i>90 seconds cycle</i>	
	DoS	Queue	DoS	Queue	DoS	Queue
Woolwich Manor Way	33.8%	6	34.6%	6	52.7%	7
Fishguard Way	34.5%	1	34.5%	2	30.2%	2
Albert Road	36.1%	5	37.3%	6	39.0%	6
Hartmann Road	0.6%	0	0.6	0	50.7%	4

Table 9.14: Proposed Access / A1011 Woolwich Manor Way / Fishguard Way – 2025 Weekday PM Peak Hour

	2025 Without Dev		2025 With Dev		2025 Sensitivity Test	
	90 seconds cycle		90 seconds cycle		90 seconds cycle	
	DoS	Queue	DoS	Queue	DoS	Queue
Woolwich Manor Way	34.6%	6	52.7%	7	53.8%	7
Fishguard Way	34.5%	2	30.2%	2	27.2%	2
Albert Road	37.3%	6	41.6%	6	42.5%	7
Hartmann Road	0.6%	0	53.6%	4	51.5%	4

- 9.30 It is apparent from Table 9.11 to 9.14 that the junction operates without difficulty in each of the observed and future years, even under the sensitivity test scenario. For all of the approaches, the queue is less than **seven PCU's**. This shows that the junction is capable of accommodating the additional demand from the development and that there are no capacity issues with allowing it to provide access to the Airport on a permanent basis.

Summary

- 9.31 A link flow and junction capacity assessment has been undertaken in order to assess the impact on the highway network. The assessment has taken account of the planned and committed development in the vicinity of the Airport.
- 9.32 The proposals result in a reassignment of traffic on the local highway network, resulting in a reduction in traffic on certain links and an increase on others.
- 9.33 The junction capacity assessment was undertaken for the network and development peak hours of 08:00 – 09:00 and 17:00 – 18:00 on a weekday.
- 9.34 It has been demonstrated that the development contributes to a minor increase in traffic flows at each of the junctions assessed; namely the existing Airport access junction of Hartmann Road / Connaught Road the proposed Airport access junction of Hartmann Road / Woolwich Manor Way / Fishguard Way and the roundabout junction of Connaught Road / Connaught Bridge Road which is in close proximity to the Airport.
- 9.35 It is also noteworthy that each of the junctions operates with spare capacity in the With Development Cases in both **2023 and 2025**, with minimal queuing.

- 9.36 The 2025 sensitivity test scenario does not result in a material difference in the performance of any of the three junctions in the study network.
- 9.37 The implementation of a second vehicle access to the Airport provides additional capacity on the highway network and enables the impact of development traffic to be spread between two vehicle access points.
- 9.38 Therefore, it is considered that the traffic impact assessment is robust and the impact of the development traffic on the local highway network is acceptable.

10 SUMMARY AND CONCLUSIONS

Summary

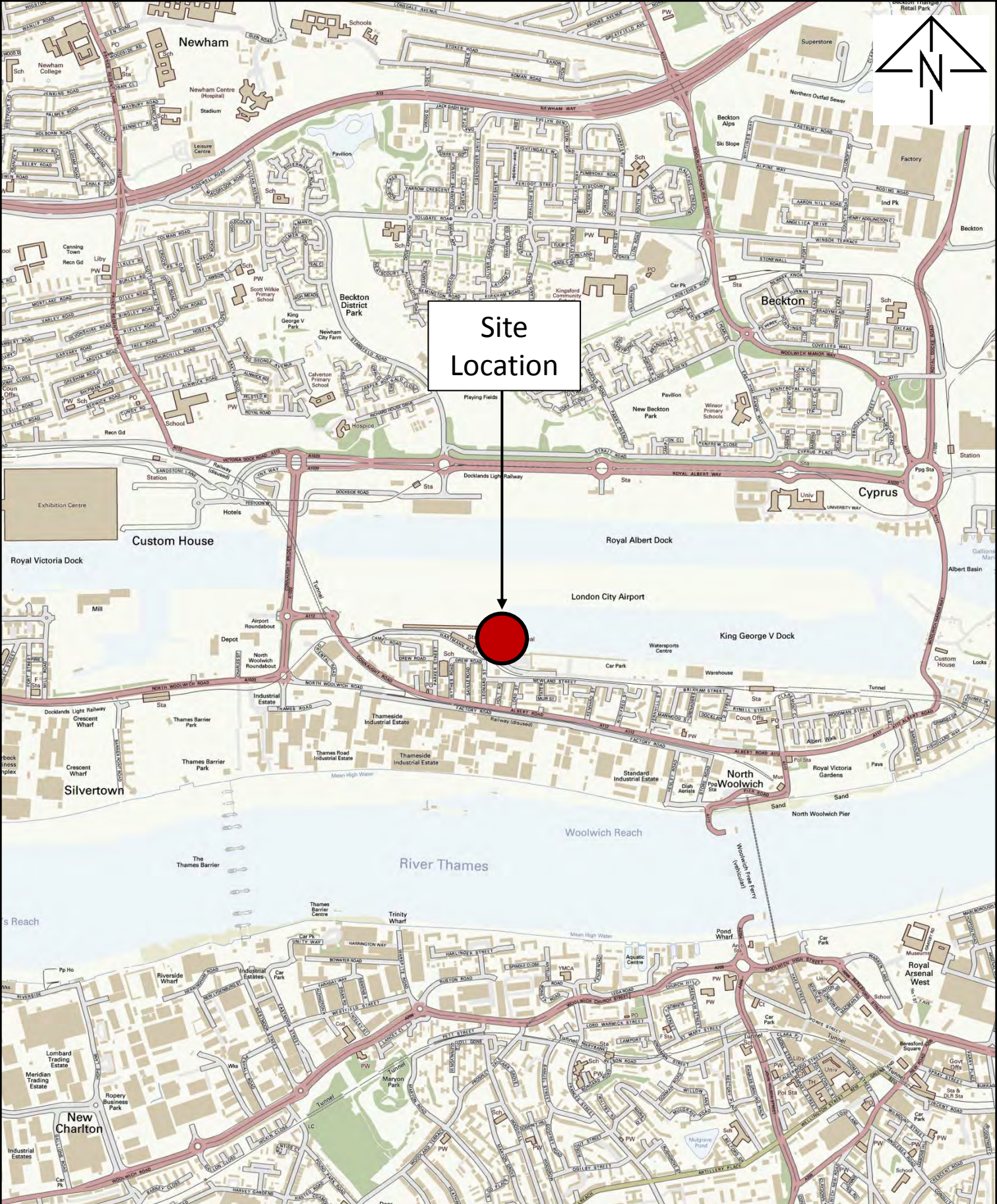
- 10.1 London City Airport proposes to construct additional aircraft stands, piers and associated infrastructure at the Airport, as part of the City Airport Development Programme. The proposals include a replacement passenger forecourt, a new permanent vehicle access and additional car parking for passengers and staff.
- 10.2 Passenger numbers are forecast to increase incrementally from 3.65 mppa in 2014 to 6.0 mppa in 2025 With Development Core Case compared to 4.8 mppa Without Development Core Case. Staff numbers are expected to increase from 1,830 employees in 2014 to a maximum of 2,930 direct employees in 2025.
- 10.3 This [Updated Transport Assessment](#) has assessed the impact on surface access modes arising from this planning application. The main transport modes used to access the Airport are the DLR and road-based modes including Black Taxis, Private Hire Minicabs and Private Cars.
- 10.4 The assessment of the highway and DLR networks has considered the cumulative impact of committed and planned developments in the vicinity of the Airport.
- 10.5 The increase in passengers as a result of the Development using the DLR equates to at most, [27](#) additional passengers per DLR train during the AM peak hour. [Therefore the CADP proposals contribute to cumulative change in demand and capacity on this line, and, London City Airport has agreed to contribute the cost of two carriages towards adding such capacity.](#)
- 10.6 Analysis of the impact on the highway network shows that the key junctions in proximity to the Airport would continue to operate within capacity with minimal queuing. This shows that no mitigation measures would be required on the highway network.
- 10.7 A sensitivity test assuming a reasonable worst case increase in passenger numbers has been undertaken. This has shown that the impact on the highway and DLR network is acceptable.
- 10.8 This [Updated Transport Assessment](#) has reviewed transport policy relevant to surface access at London City Airport and concluded that the likely transport effects of the increase in passenger and staff numbers are acceptable in relation to national, regional and local policy and guidance.

- 10.9 Overall, it is considered that in terms of surface access the proposals improve access to the Airport for all users, not only passengers and staff, but also those already living in the wider area.

Conclusion

- 10.10 It is concluded that the increase passenger and staff numbers associated with the proposed CADP will not have an adverse impact on the local highway network, or the efficient operation of public transport services. The Airport location and design accords with the requirements of current transport and land use policy, and there are no traffic and transport related impacts that cause demonstrable harm to interests of acknowledged importance.
- 10.11 Therefore, it is concluded that the proposed CADP is appropriate and acceptable in sustainable traffic and transport terms.

FIGURES



City Airport Development Programme

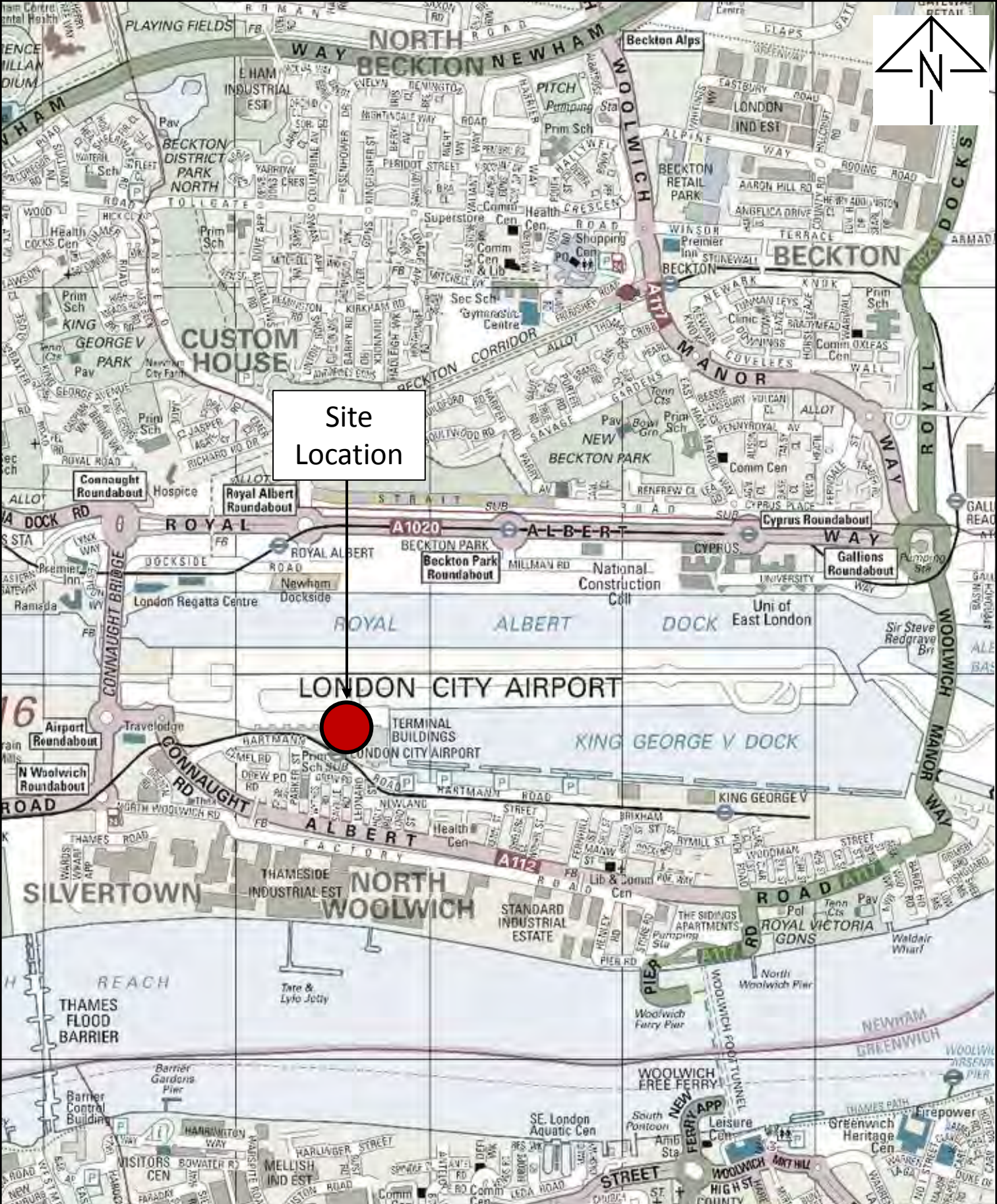
London City Airport

Site Location - Strategic Location



Network Building, 97 Tottenham Court Road, London W1T 4TP
Tel: 020 7580 7373 Email: london@vectos.co.uk www.vectos.co.uk

DRAWN: R.R:	CHECKED: E.G	DATE: 17/05/13	SCALES: NTS	DRAWING REFERENCE: Figure 1	REVISION:
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City Airport Development Programme

London City Airport

Site Location –
Surrounding Area



Network Building, 97 Tottenham Court Road, London W1T 4TP
Tel: 020 7580 7373 Email: london@vectos.co.uk www.vectos.co.uk

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Key:

- Existing Vehicle Access Route
- - - - - Proposed Vehicle Access Route
- ↔ Proposed Vehicle Access Junction
- ↔ Existing Vehicle Access Junction

London City Airport

CADP

Proposed Vehicle Access Arrangements



Network Building, 97 Tottenham Court Road, London W1T 4TP
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NTS

DRAWING REFERENCE:

Figure 3



Key:

- Existing Vehicle Access Route
- - - Proposed Vehicle Access Route
- 1 Junction Assessment
- 1 Link Flow Assessment

London City Airport

CADP

Highway Study Area



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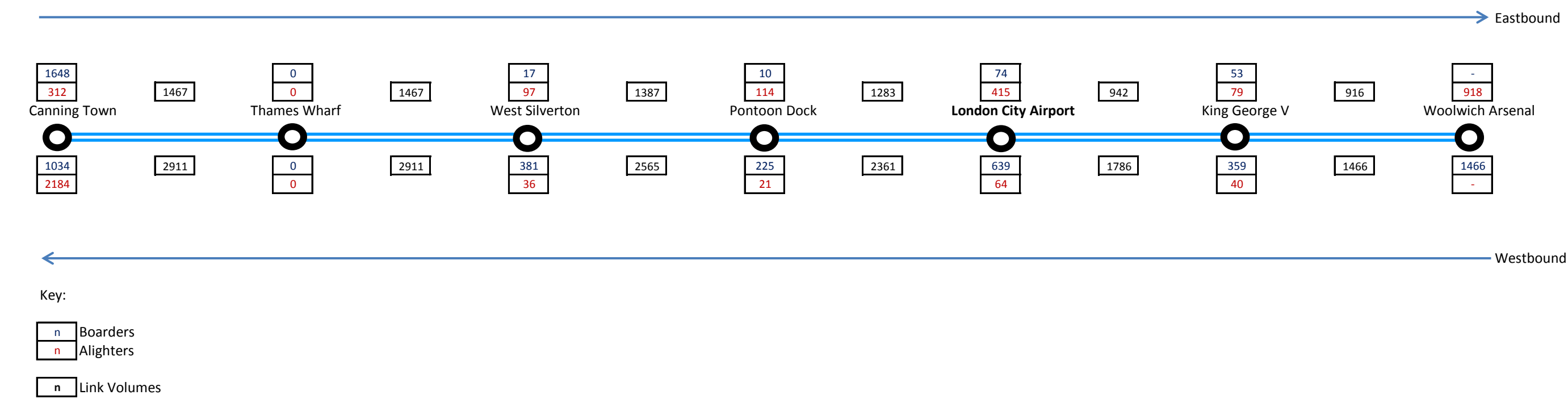
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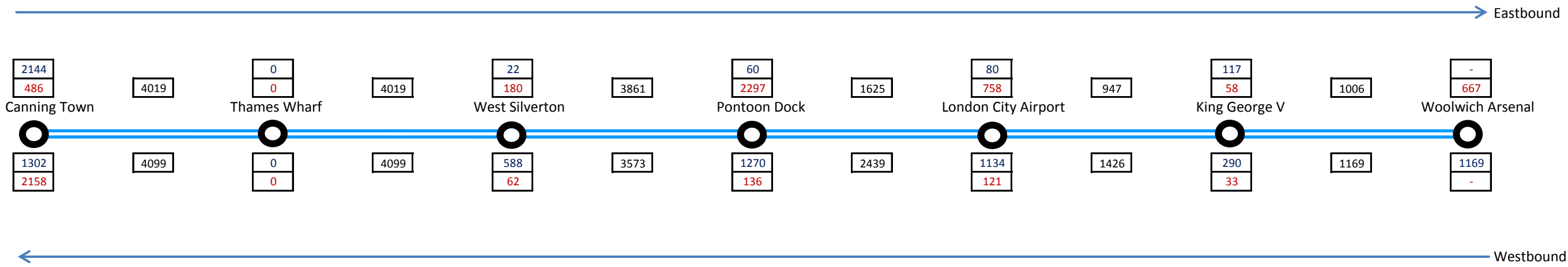
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Figure 4

DLR FIGURES



DLR Figure 1: AM Peak 2014 (DLR numbers)



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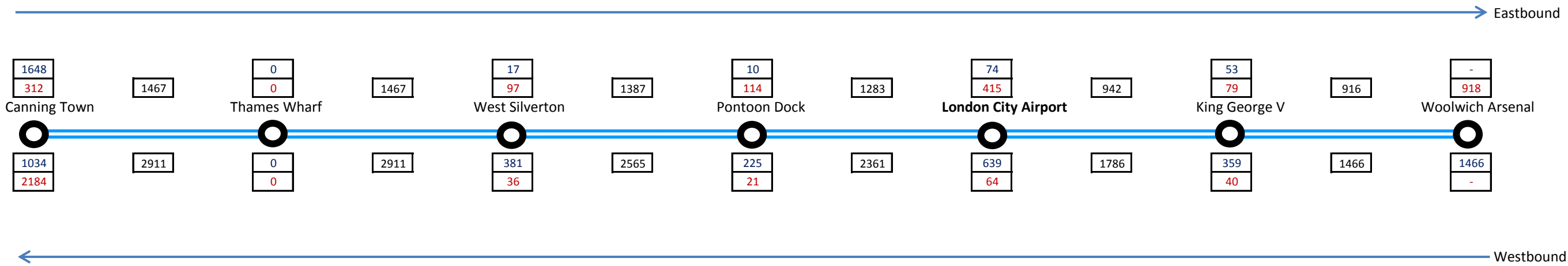
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 Boarders
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 Alighters
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 Link Volumes

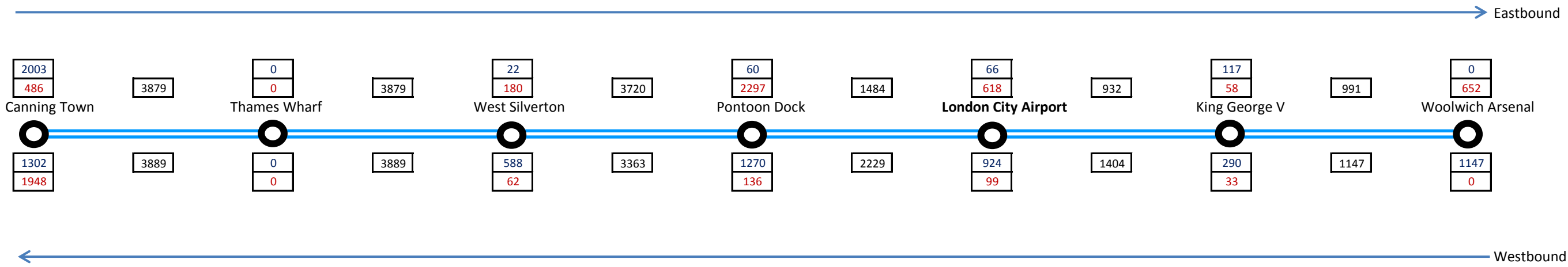
DLR Figure 2: AM Peak 2026 (DLR numbers)



Key:

- n Boarders
- n Alighters
- n Link Volumes

DLR Figure 3: AM Peak 2014 (updated numbers)



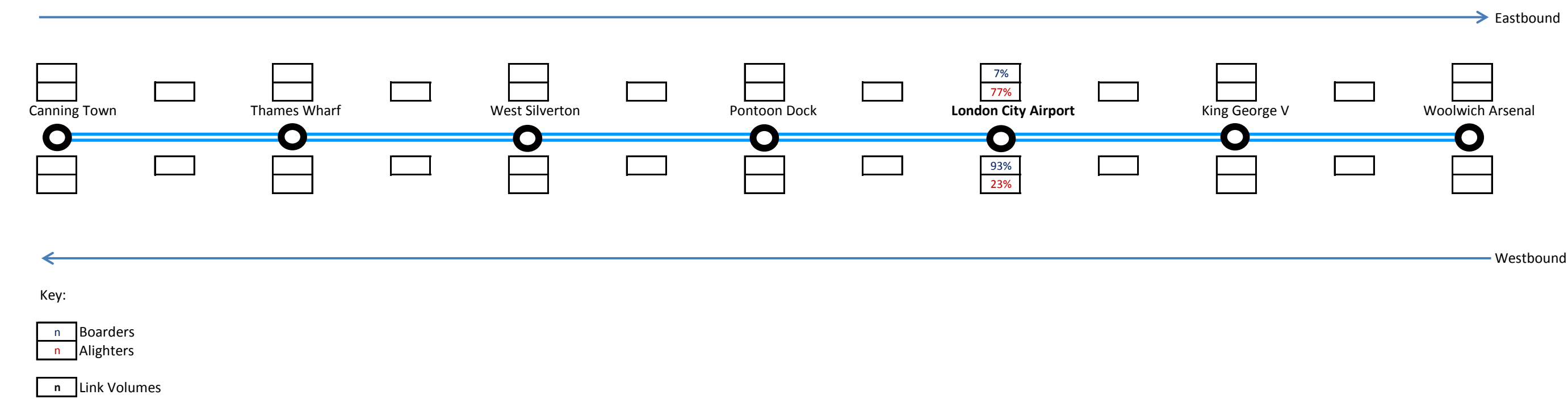
Key:

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n	Alighters

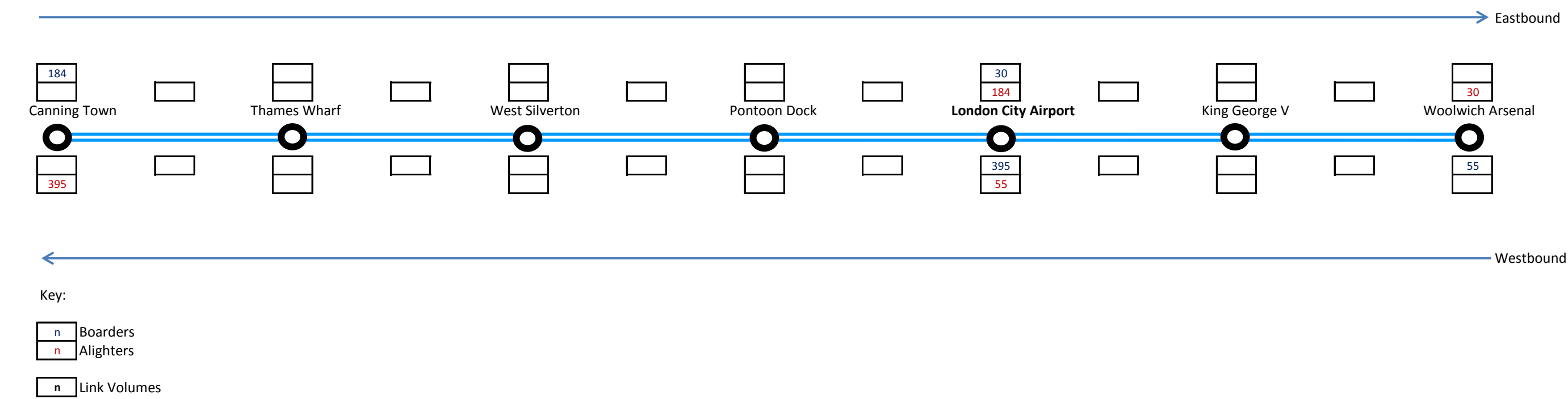
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Link Volumes

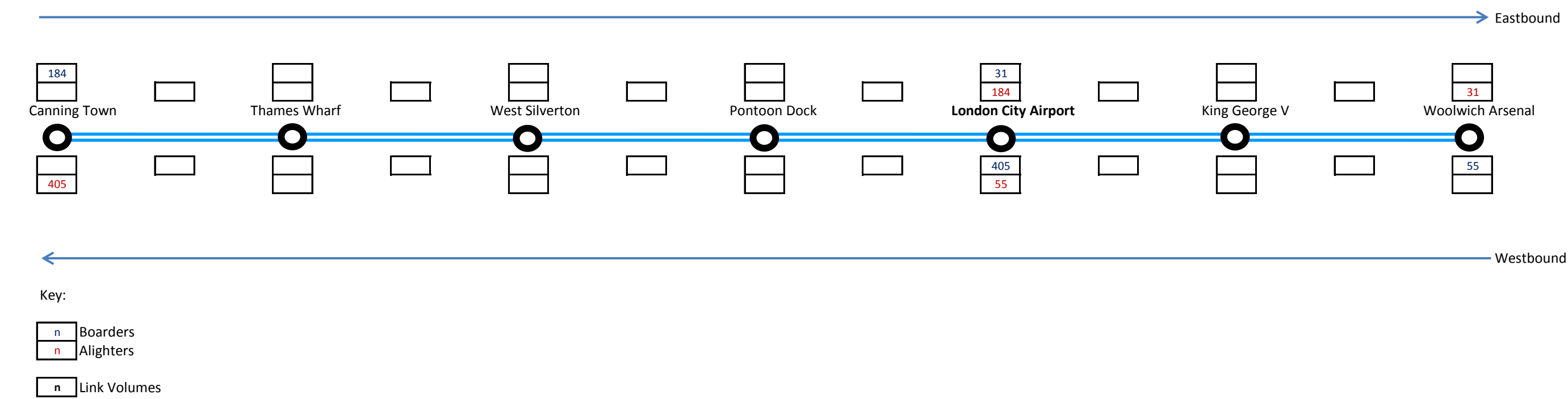
DLR Figure 4: AM Peak Base 2026 (updated numbers)

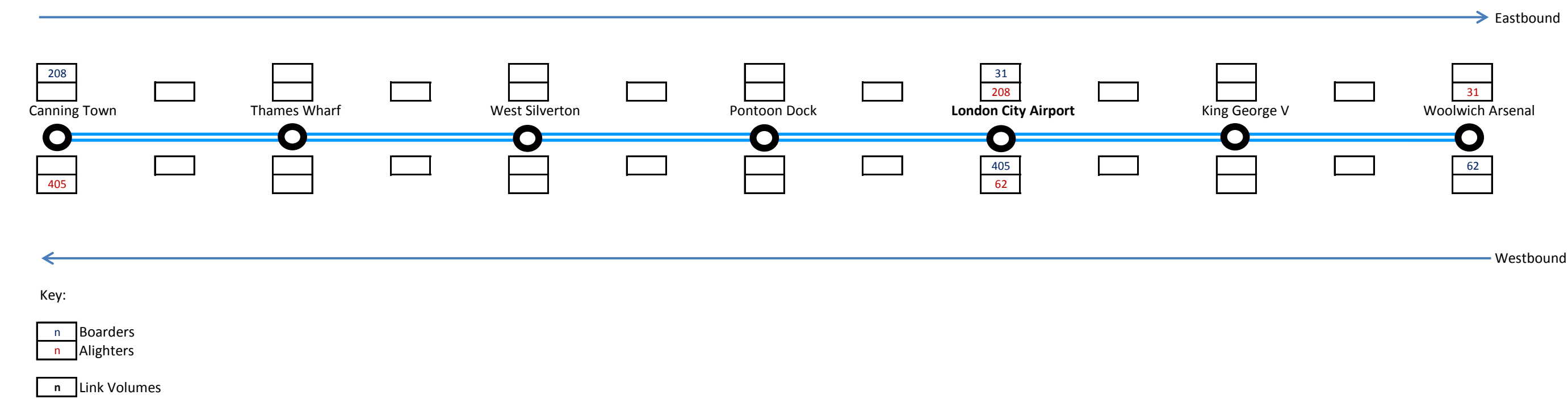


DLR Figure 5: Passenger distribution

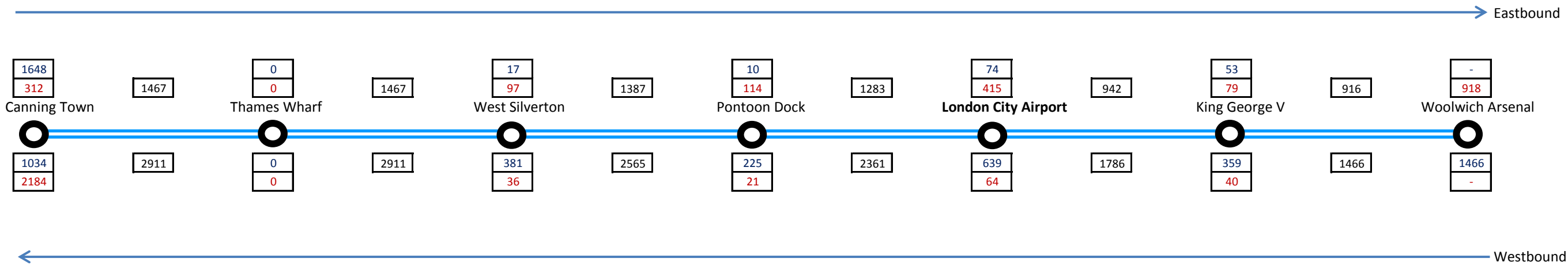


DLR Figure 6: AM Peak 2023 Development





DLR Figure 8: AM Peak 2025 Development (Sensitivity)



Key:

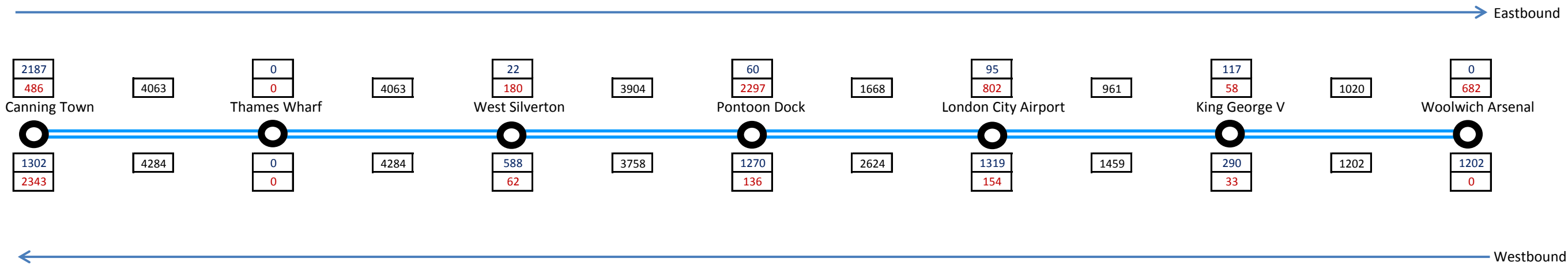
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 Boarders
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 Link Volumes

DLR Figure 9: AM Peak - Observed 2014



Key:

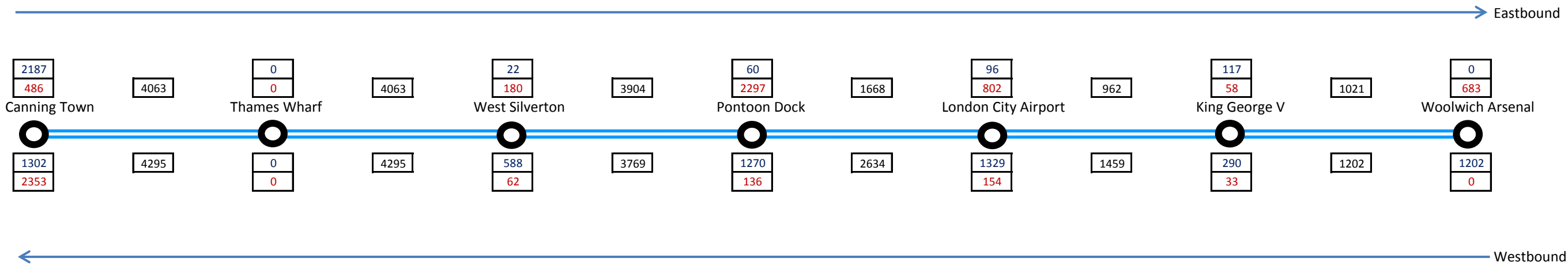
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 Link Volumes

DLR Figure 10: AM Peak - Base 2026 + Development Passengers 2023

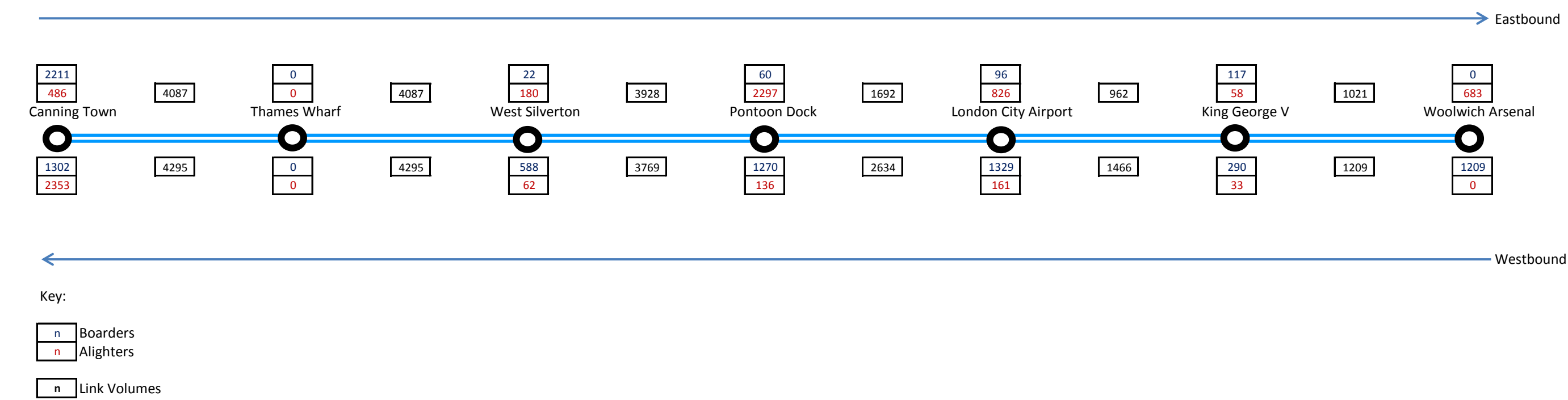


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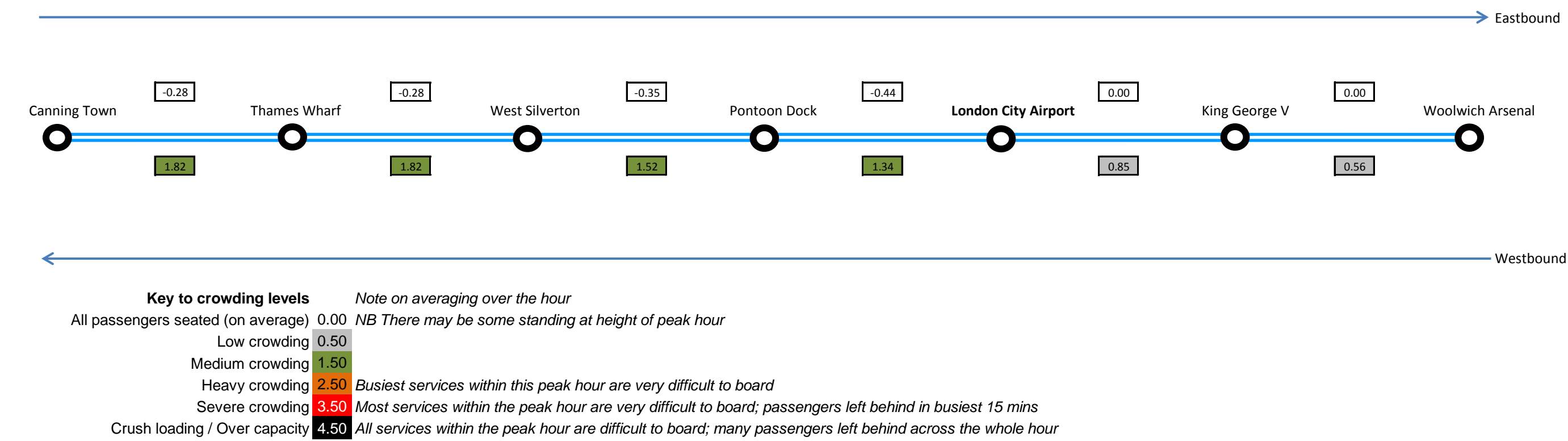
n Boarders
n Alighters

n Link Volumes

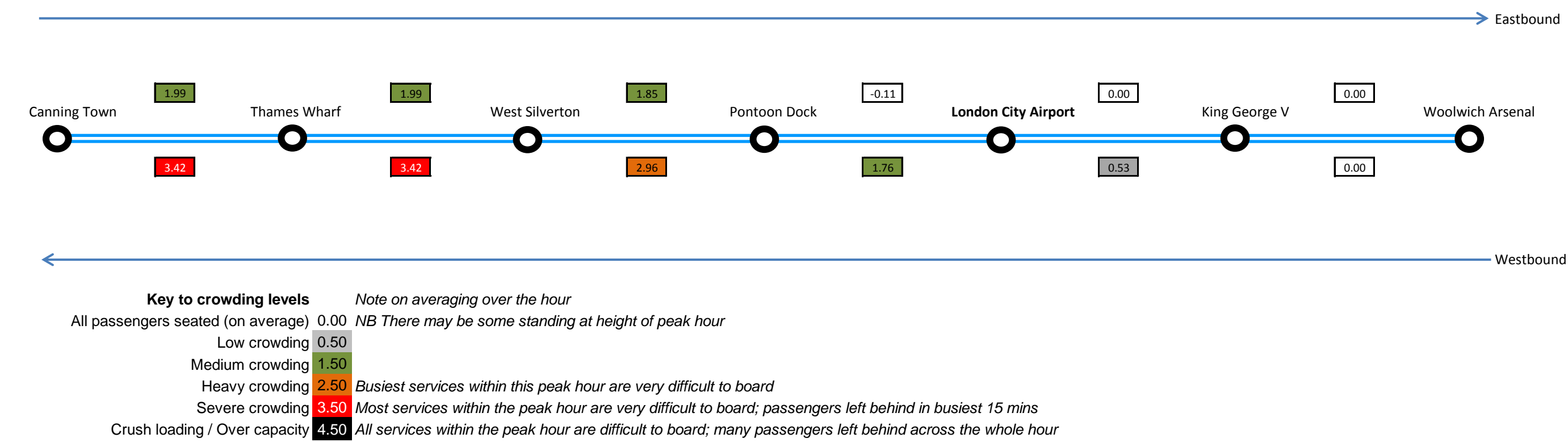
DLR Figure 11: AM Peak - Base 2026 + Development Passengers 2025



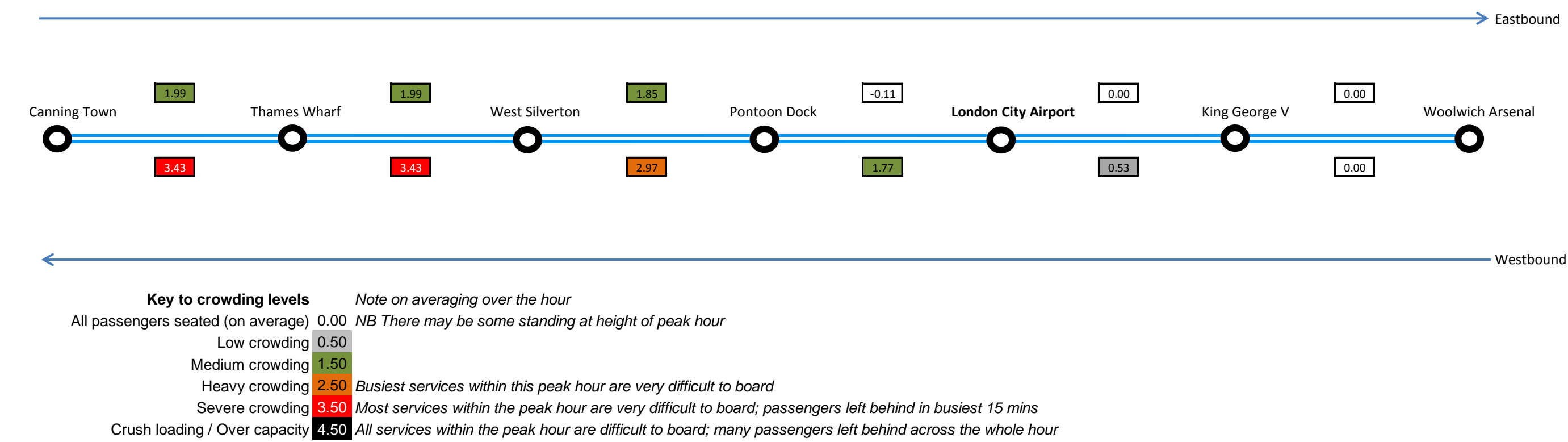
DLR Figure 12: AM Peak - Base 2026 + Sensitivity Development Passengers 2025



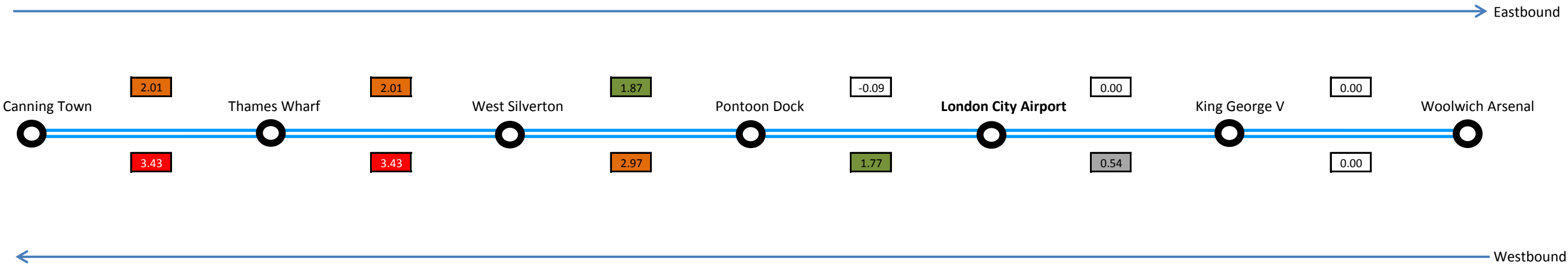
DLR Figure 13: Link Crowding - Base 2014



DLR Figure 14: Link Crowding 2026 - Base 2026 + Development Passengers 2023



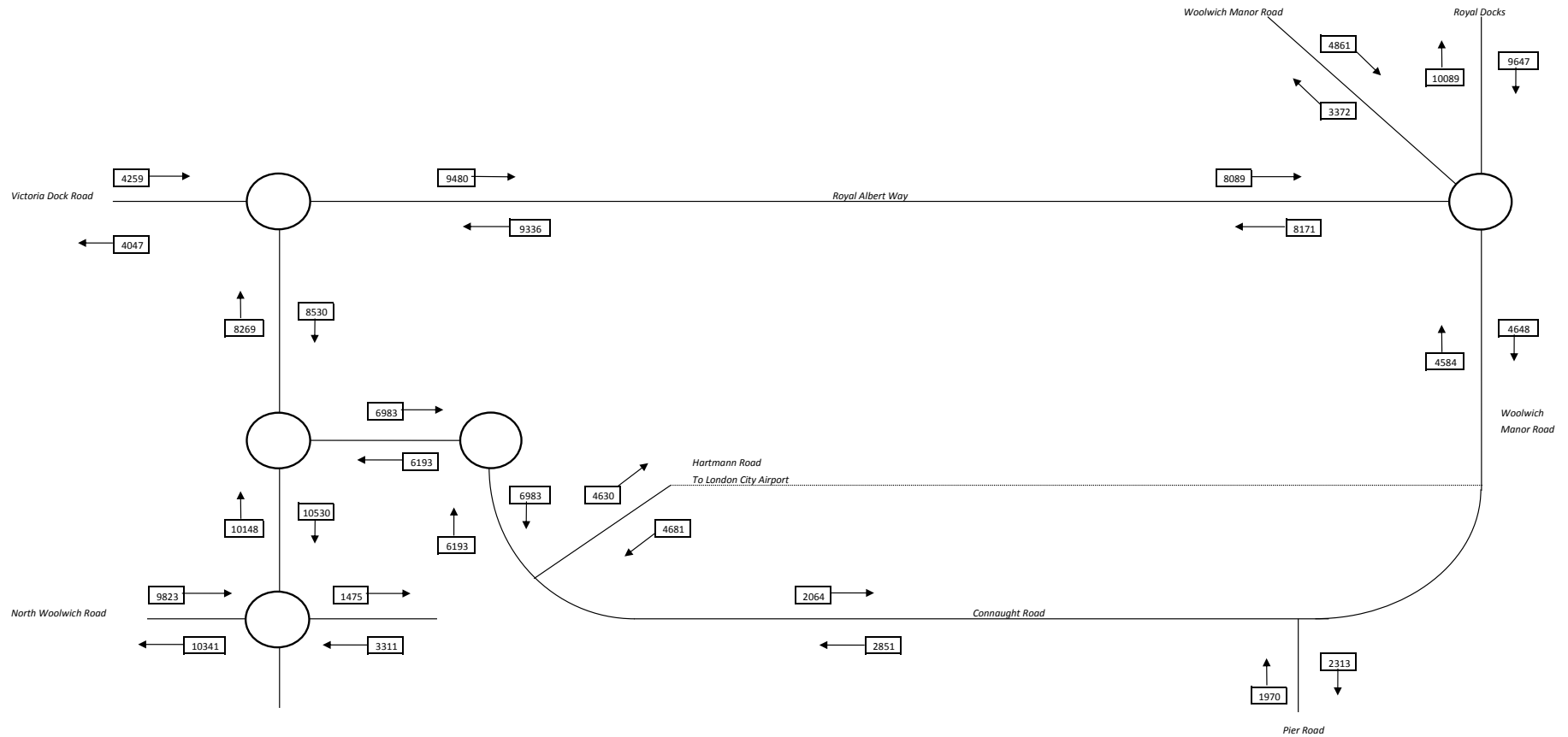
DLR Figure 15: Link Crowding 2026 - Base 2026 + Development Passengers 2025



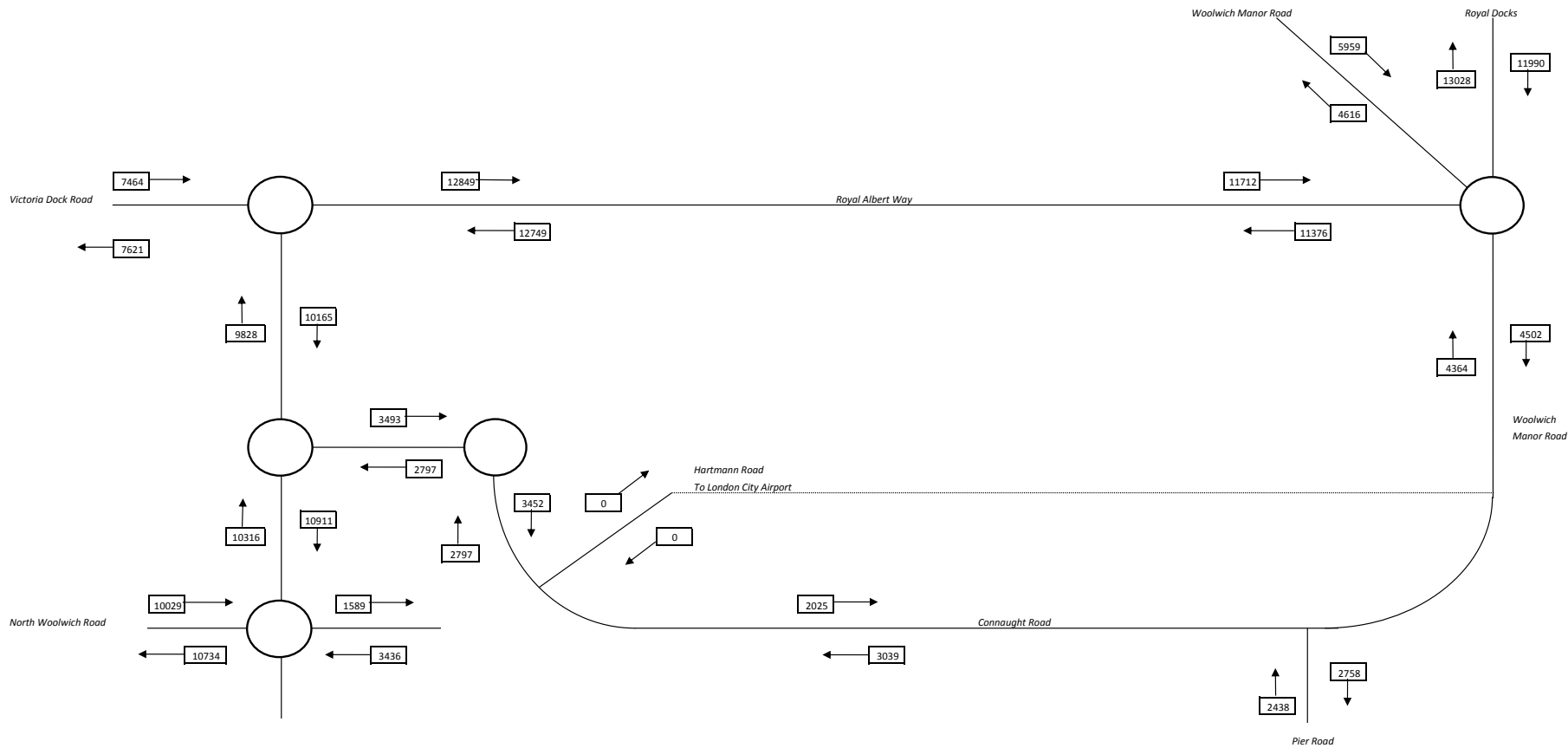
Key to crowding levels		Note on averaging over the hour
All passengers seated (on average)	0.00	NB There may be some standing at height of peak hour
Low crowding	0.50	
Medium crowding	1.50	Busiest services within this peak hour are very difficult to board
Heavy crowding	2.50	
Severe crowding	3.50	Most services within the peak hour are very difficult to board; passengers left behind in busiest 15 mins
Crush loading / Over capacity	4.50	All services within the peak hour are difficult to board; many passengers left behind across the whole hour

Figure 16: Link Crowding 2026 - Base 2026 + Sensitivity Development Passengers 2025

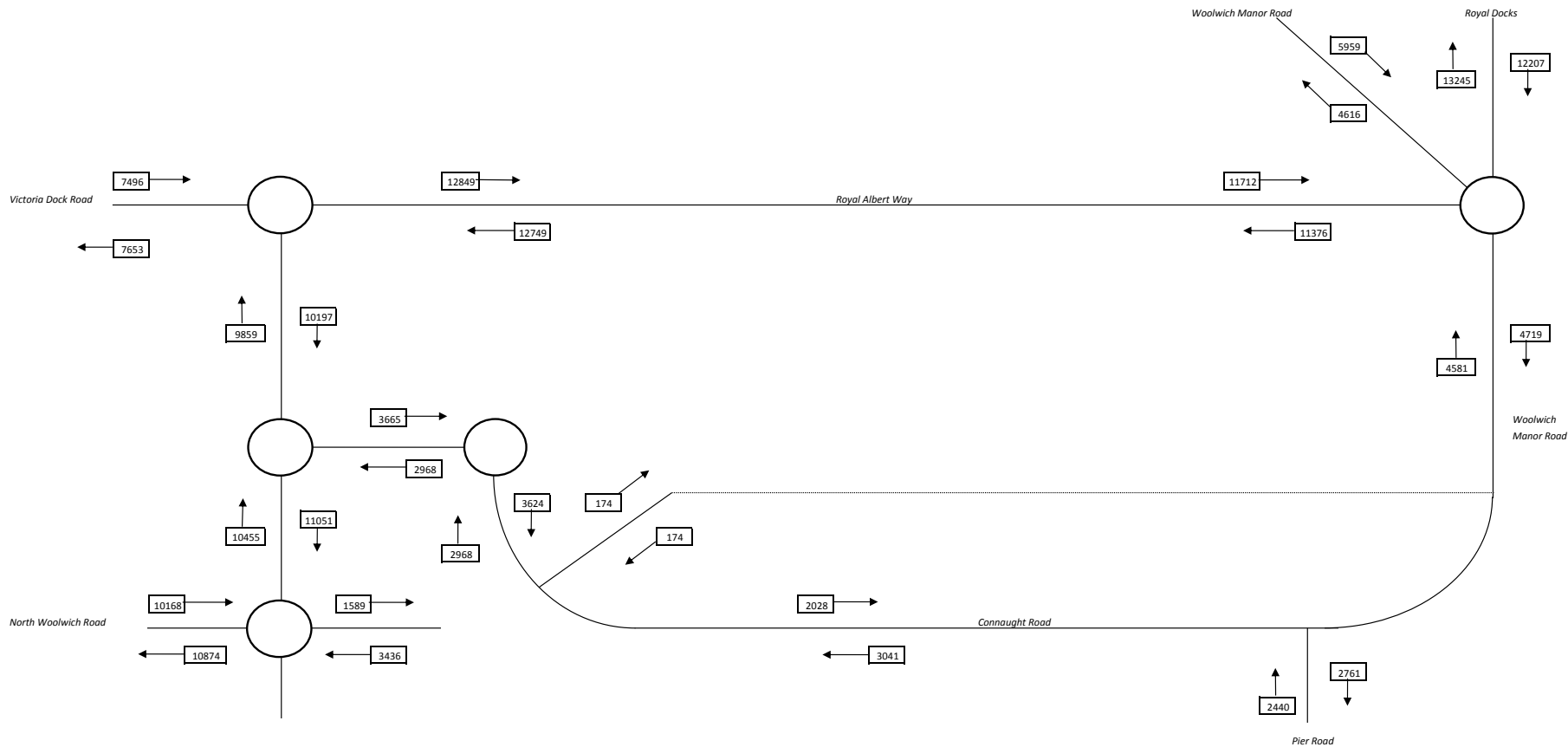
TRAFFIC FIGURES



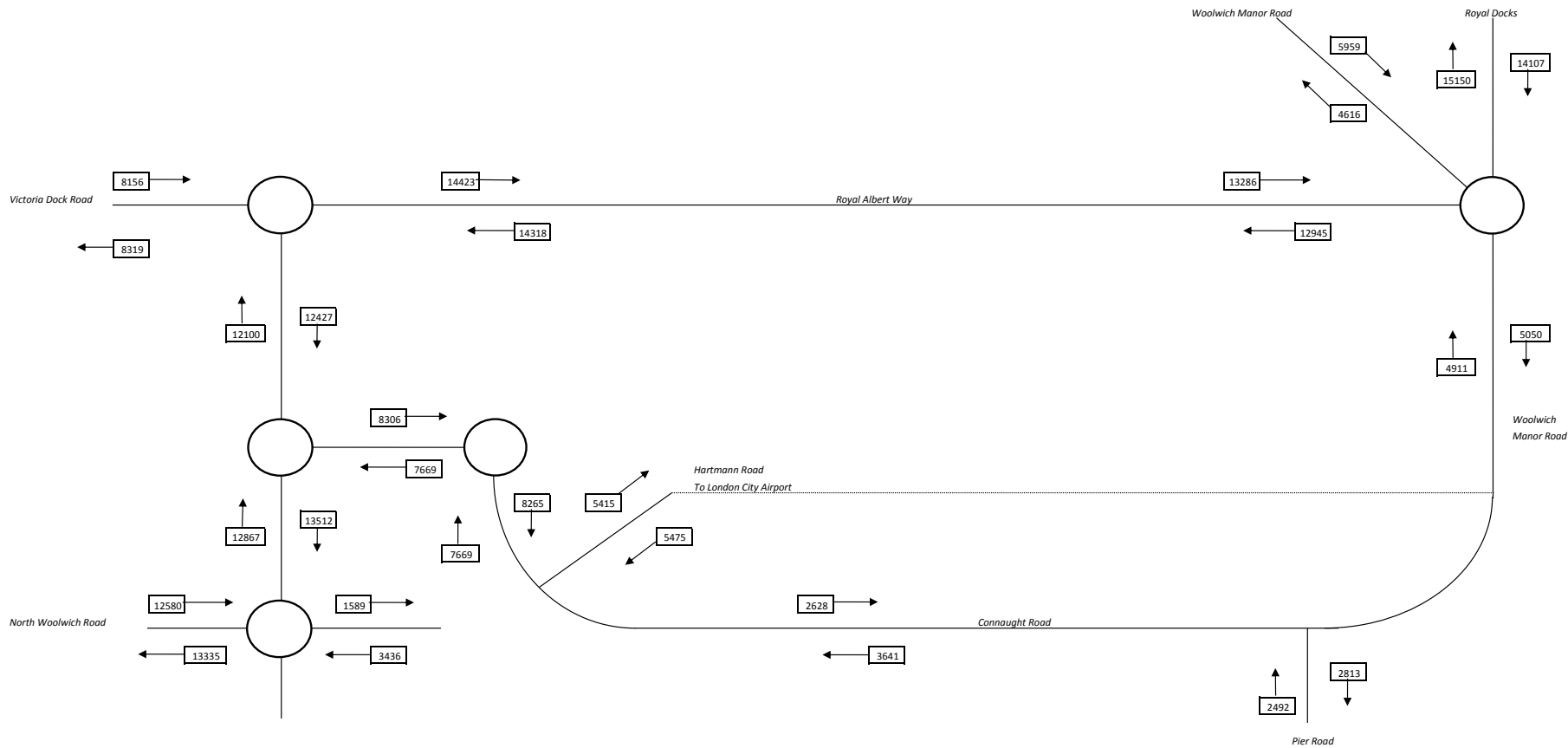
Traffic Figure 1: 2014 Observed Traffic Flows: AADT Flows - Link Flows



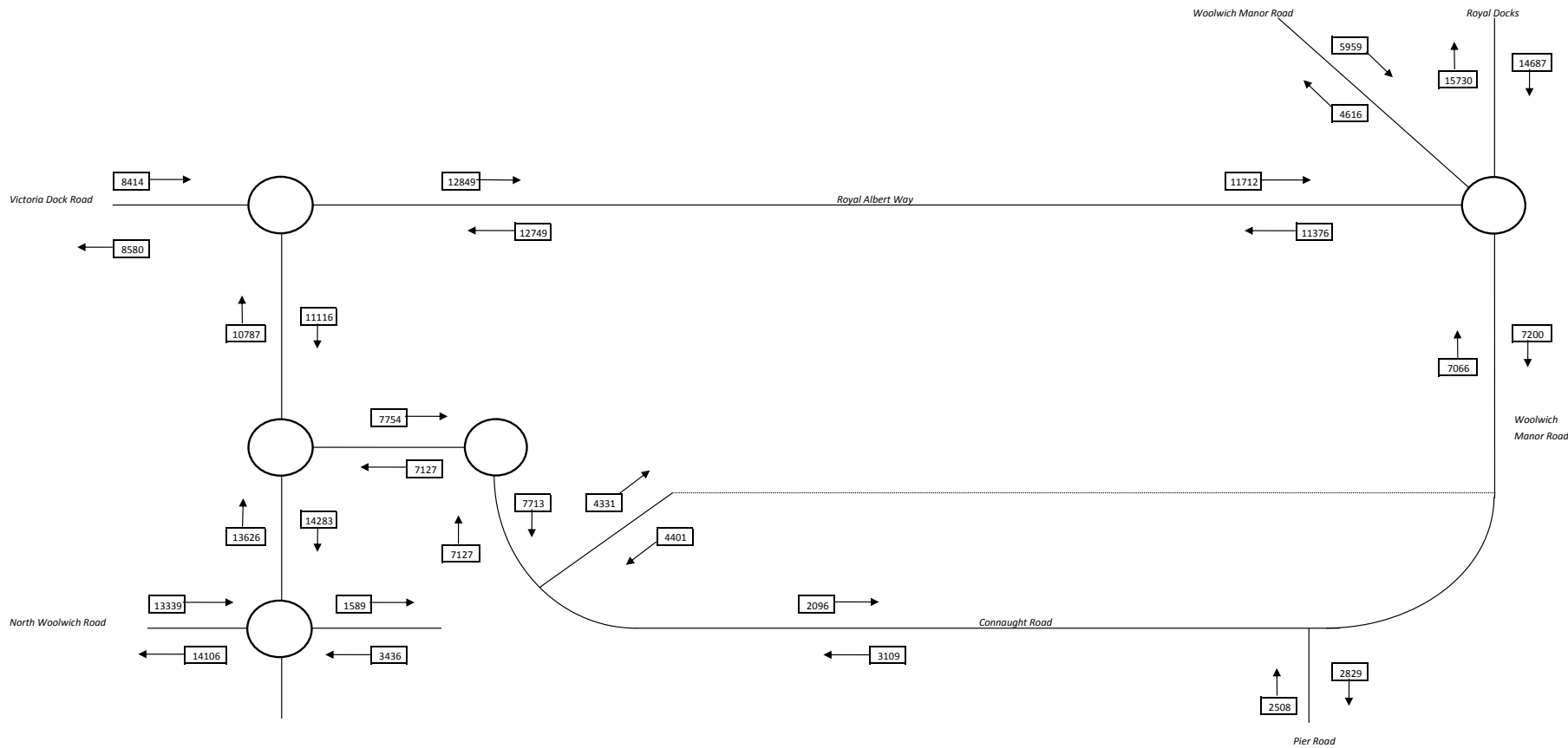
Traffic Figure 2: 2023 Base + Without Development Flows - AADT - Link Flows



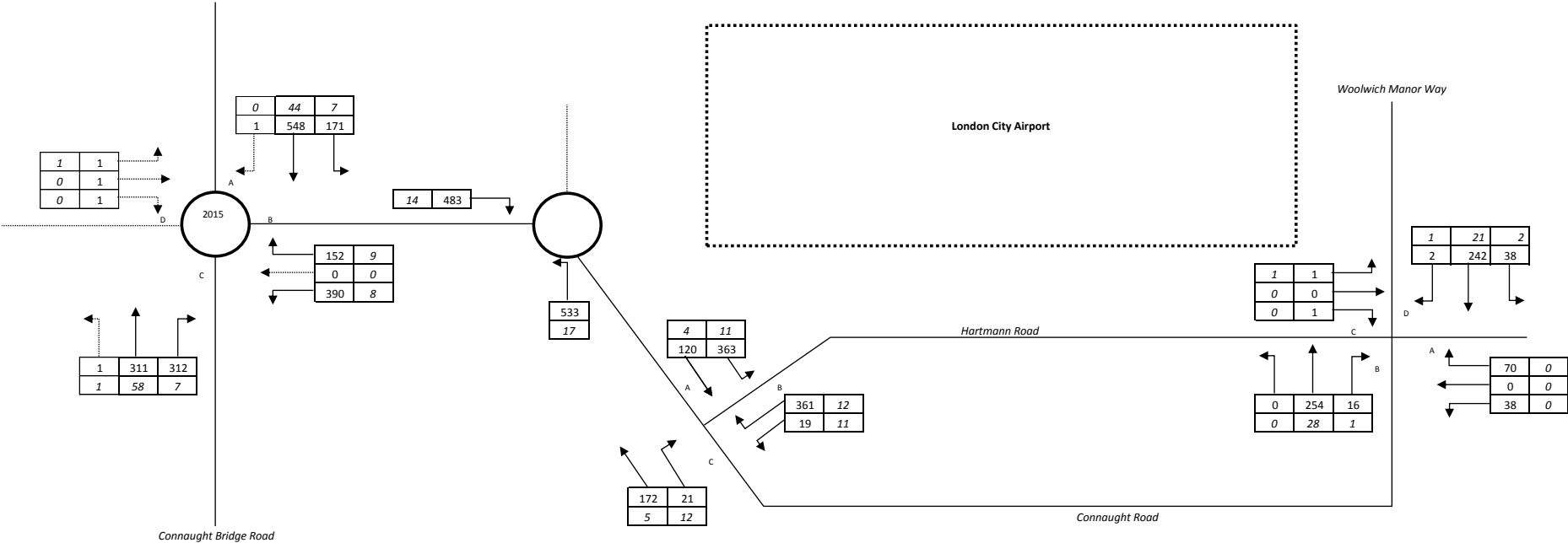
Traffic Figure 3: 2023 Base + Development Traffic Flows: AADT - Link Flows

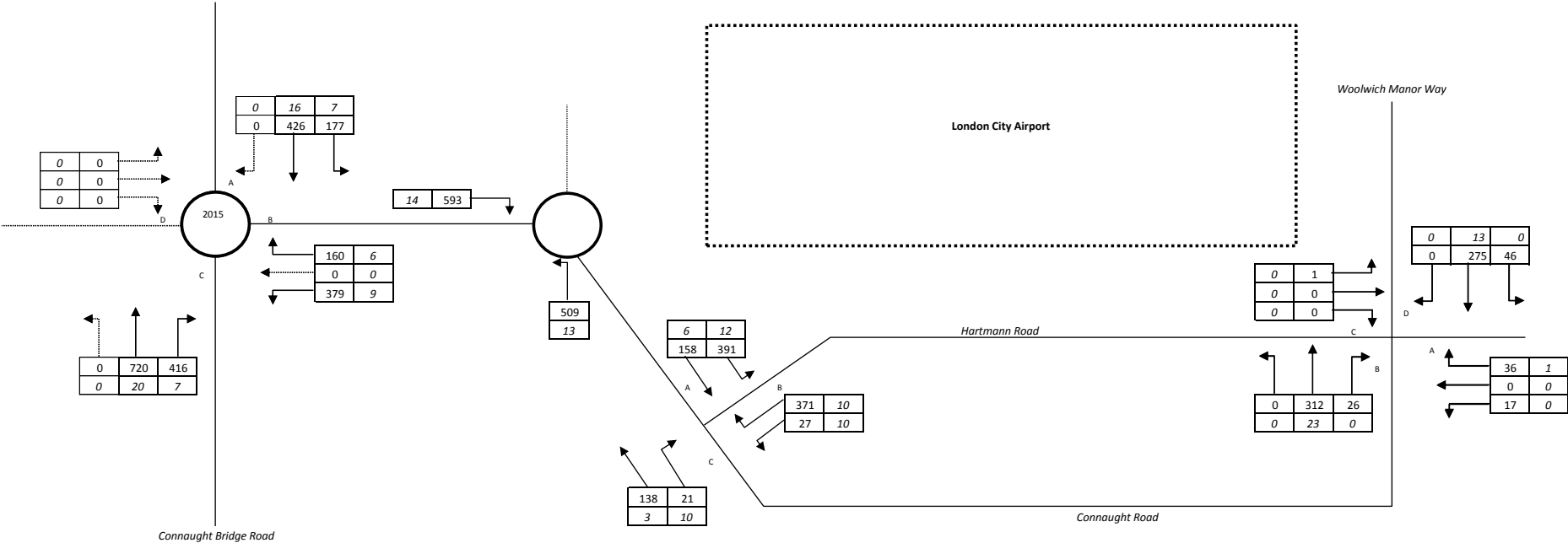


Traffic Figure 4: 2025 Base + Without Development Flows - AADT - Link Flows

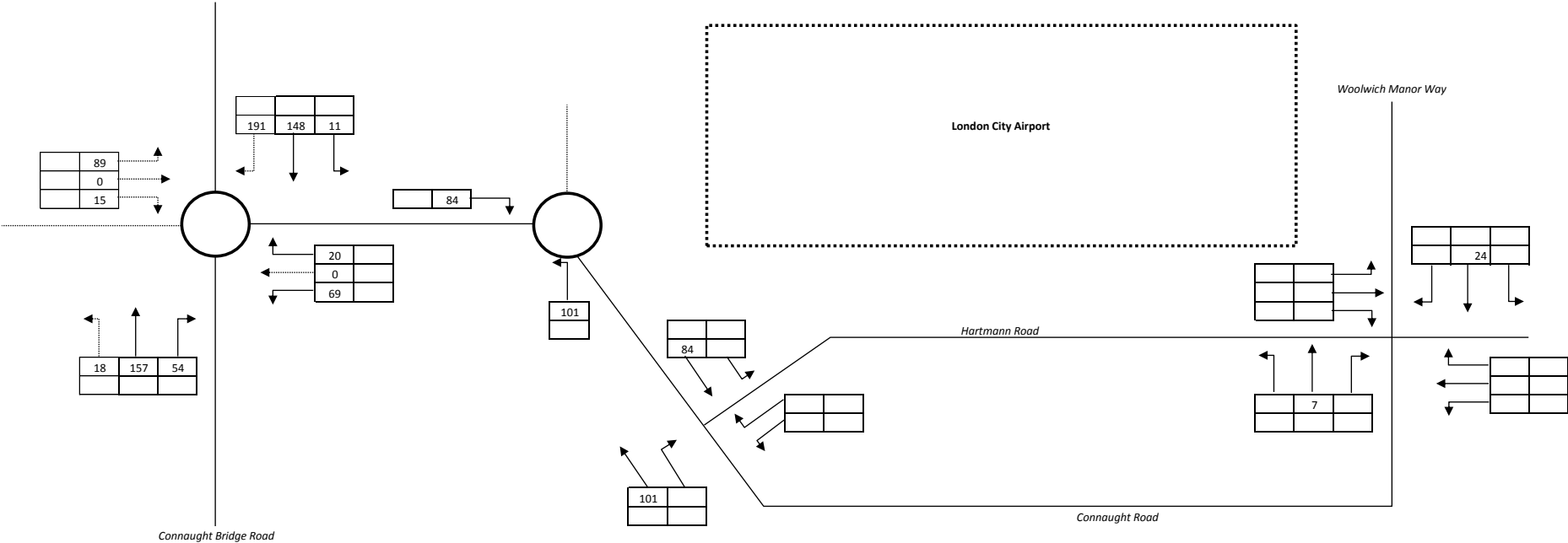


Traffic Figure 5: 2025 Base + Development Traffic Flows: AADT - Link Flows

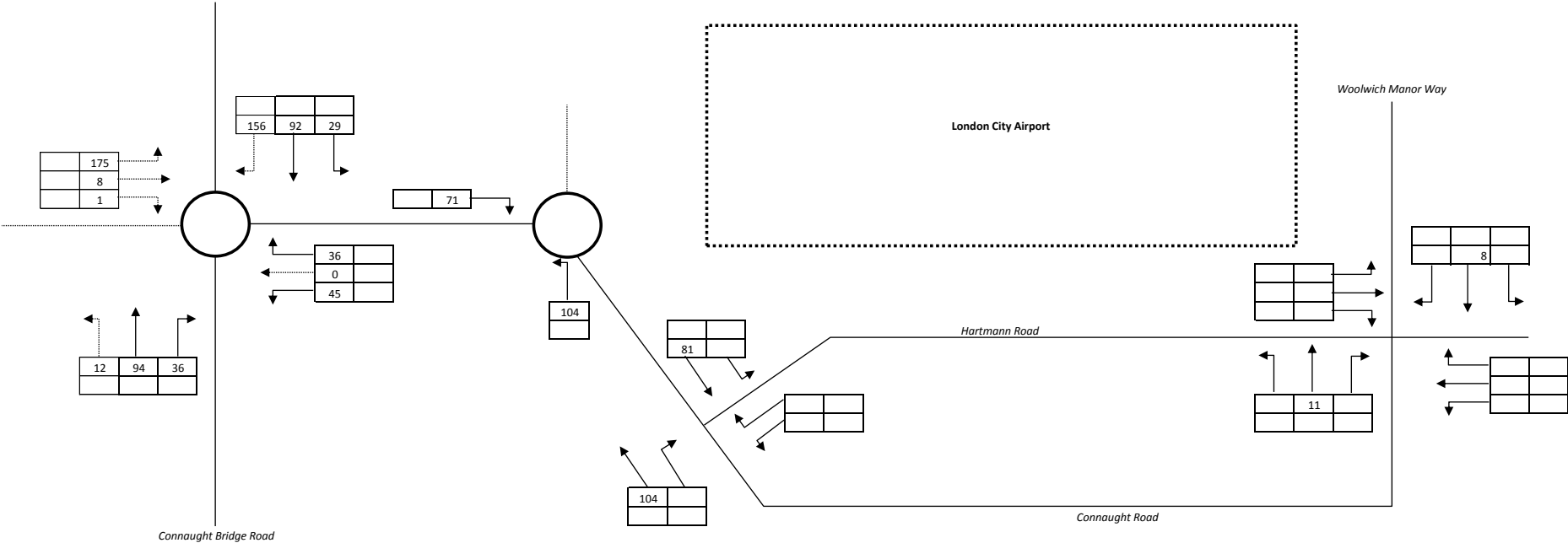




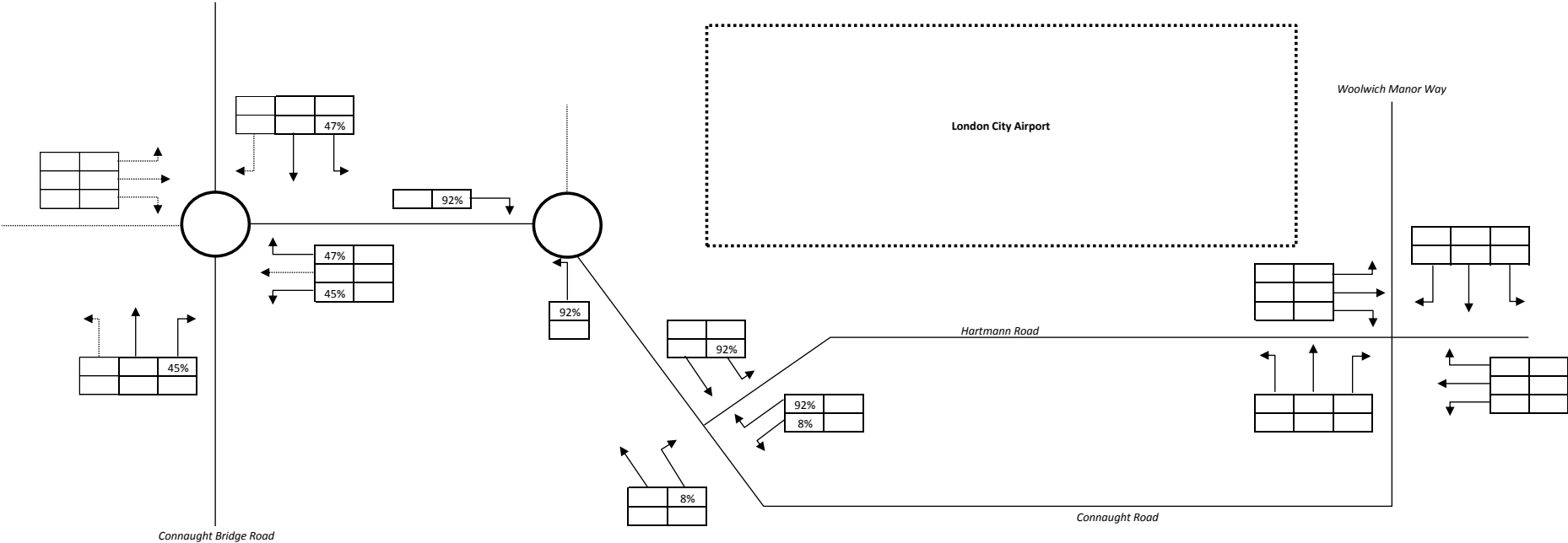
Traffic Figure 7: Observed Traffic Flows: Weekday PM Peak Hour - Turning Movements



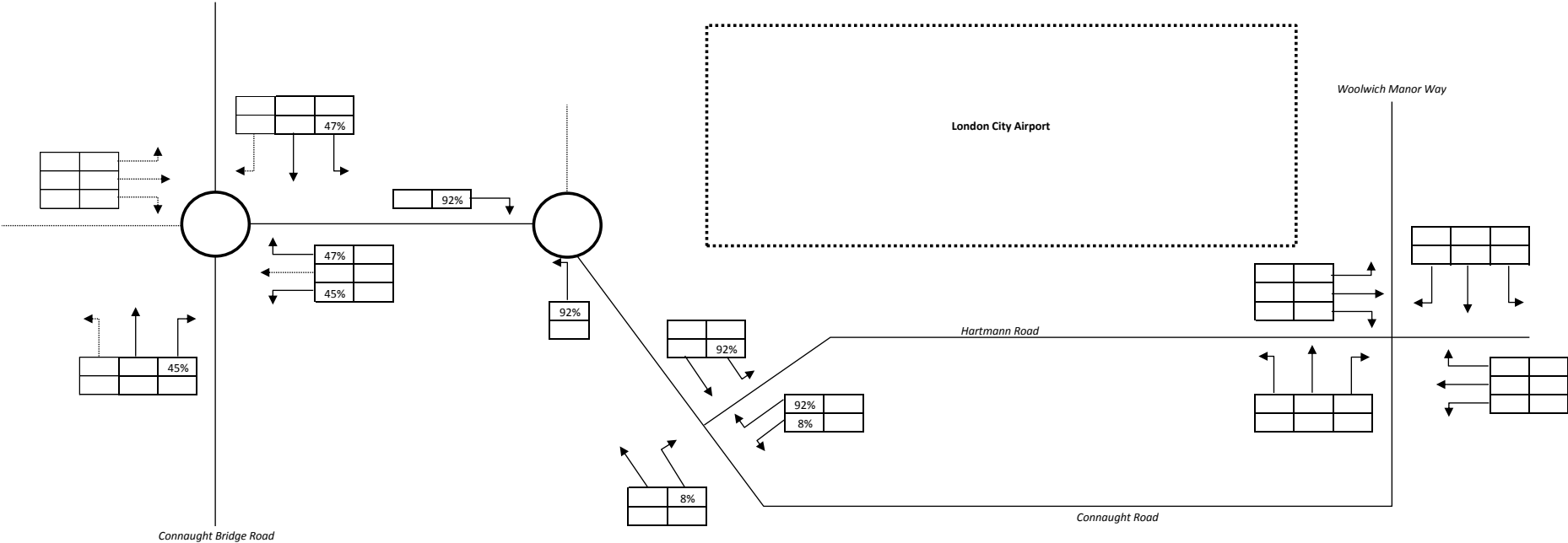
Traffic Figure 8: Committed Development Flows: Weekday AM Peak Hour - Turning Movements



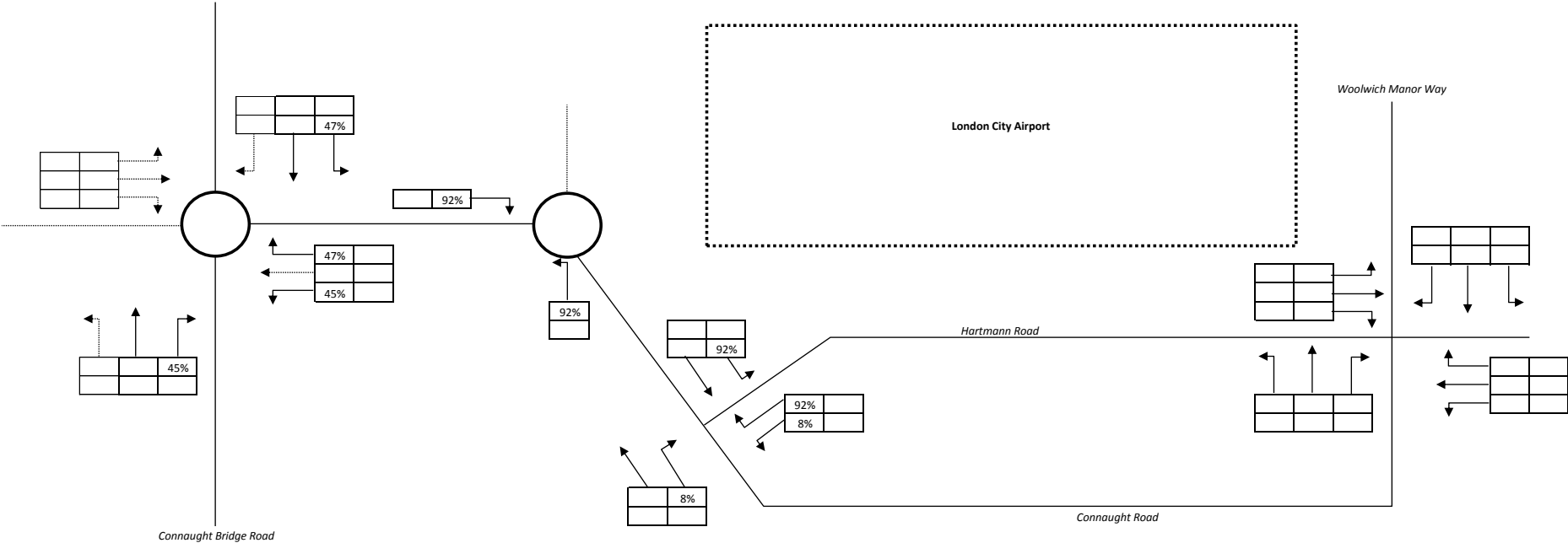
Traffic Figure 9: Committed Development Flows: Weekday PM Peak Hour - Turning Movements



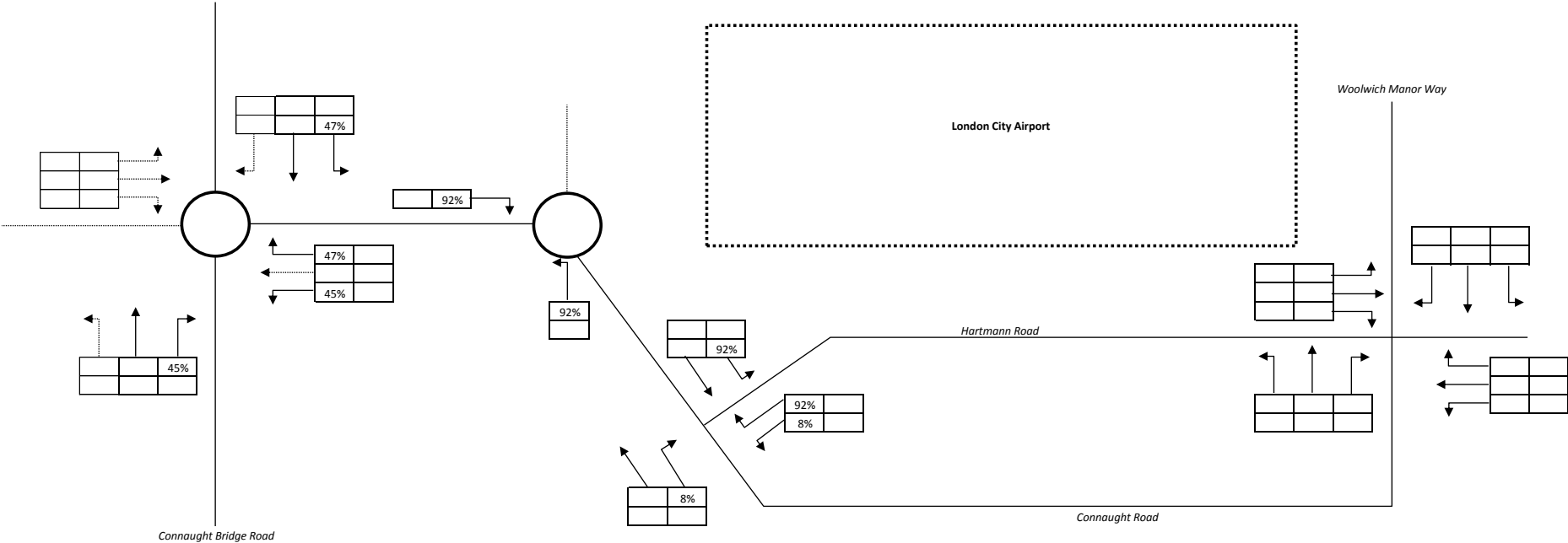
Traffic Figure 10: Without Development Passenger Distribution: AM Peak - Turning Movements



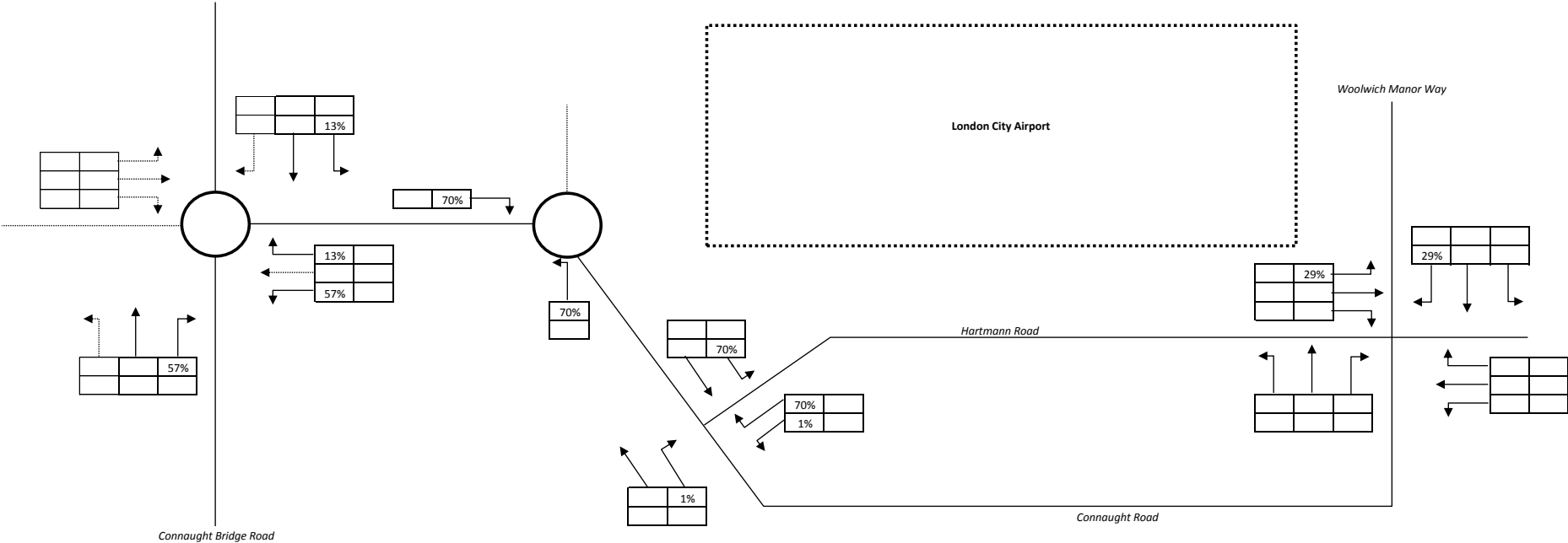
Traffic Figure 11: Without Development Passenger Development Distribution: PM Peak - Turning Movements



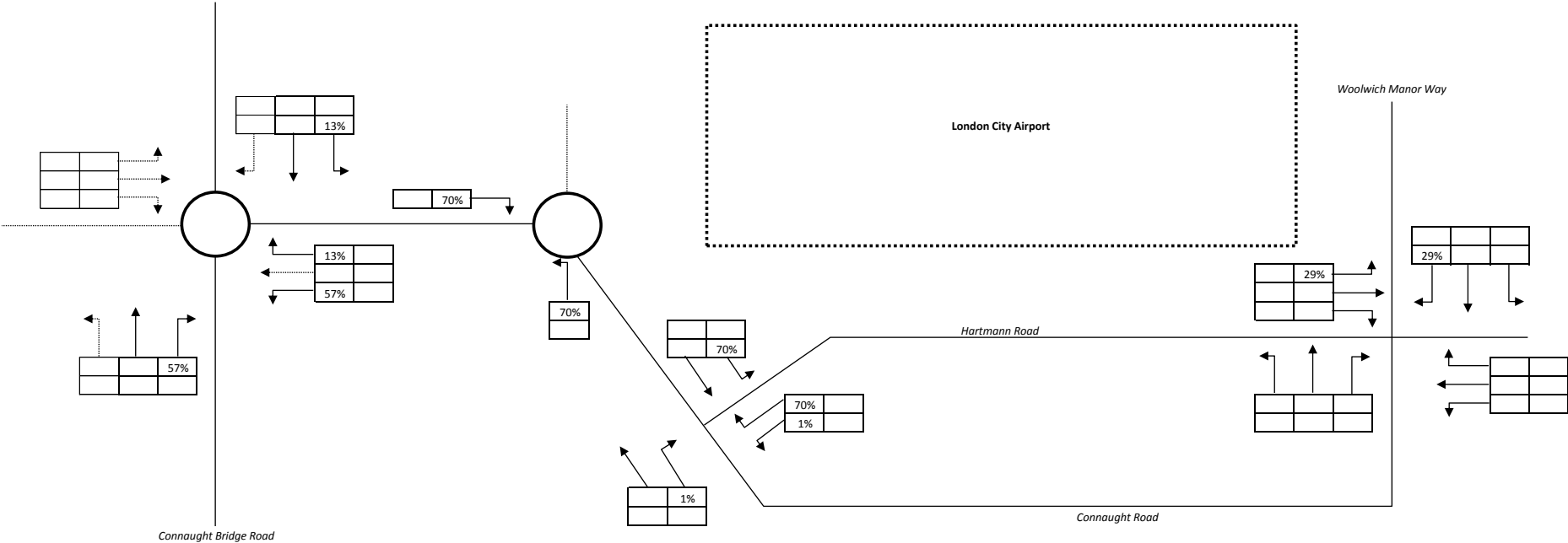
Traffic Figure 12: Without Development Staff Development Distribution: AM Peak - Turning Movements



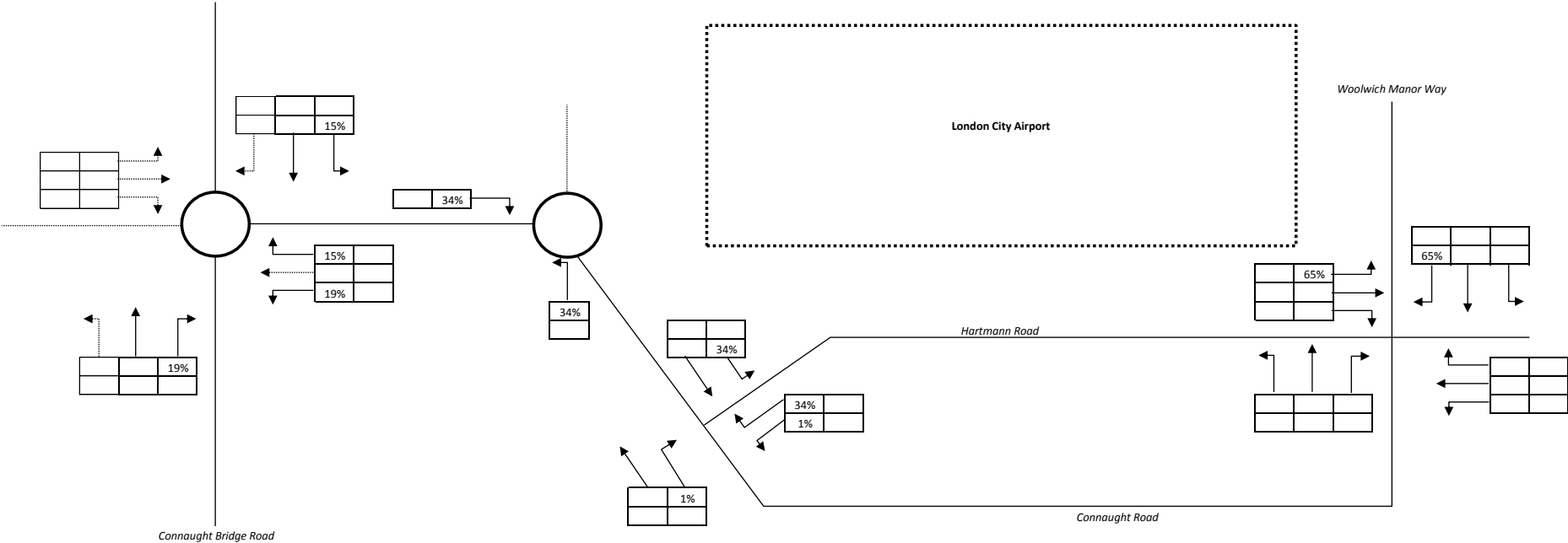
Traffic Figure 13: Without Development Staff Development Distribution: PM Peak - Turning Movements



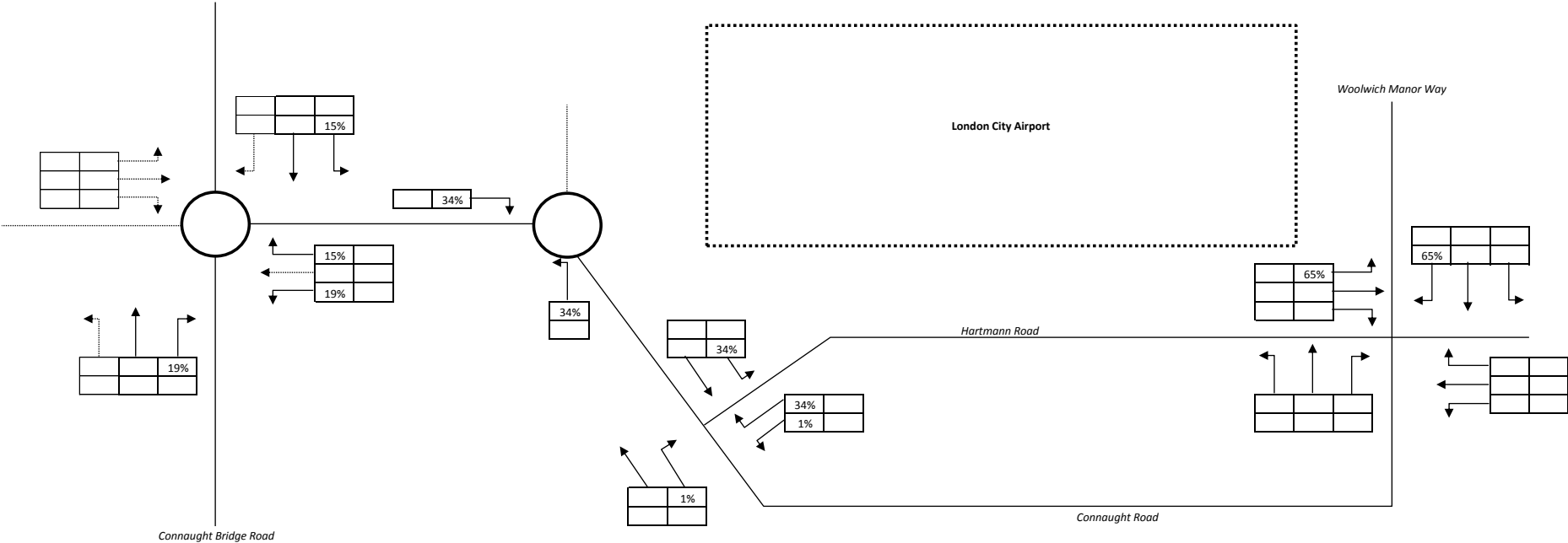
Traffic Figure 14: With Development Passenger Distribution: AM Peak - Turning Movements



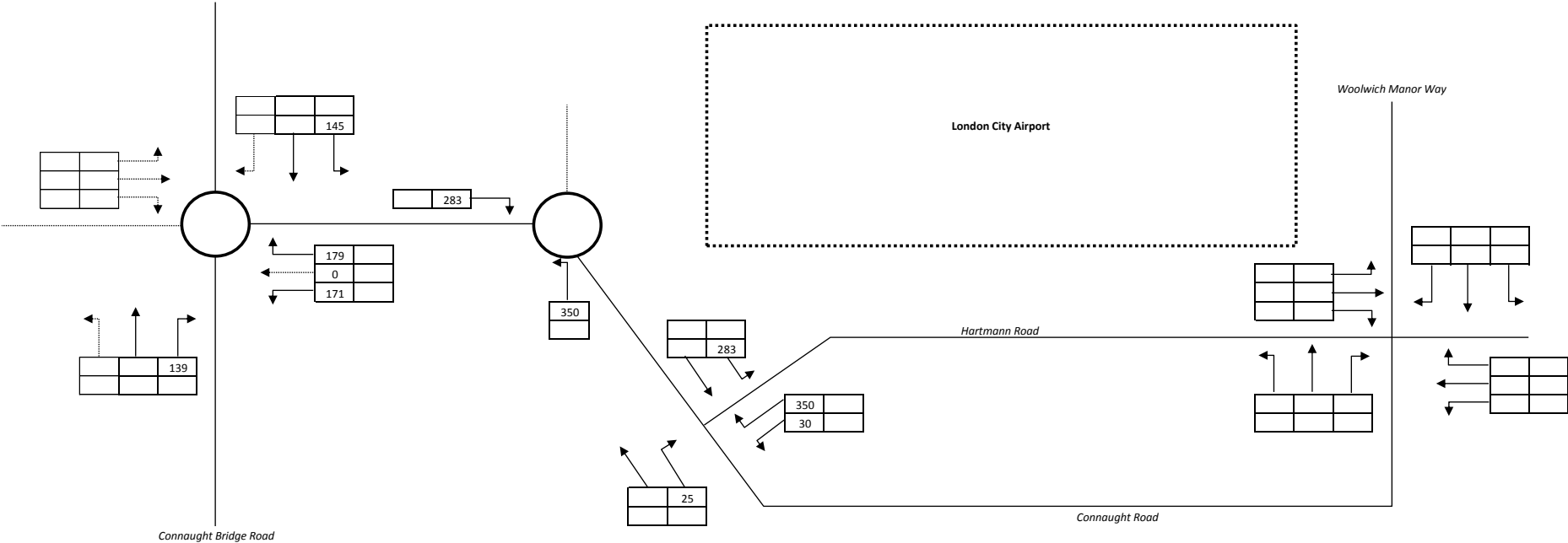
Traffic Figure 15: With Development Passenger Development Distribution: PM Peak - Turning Movements



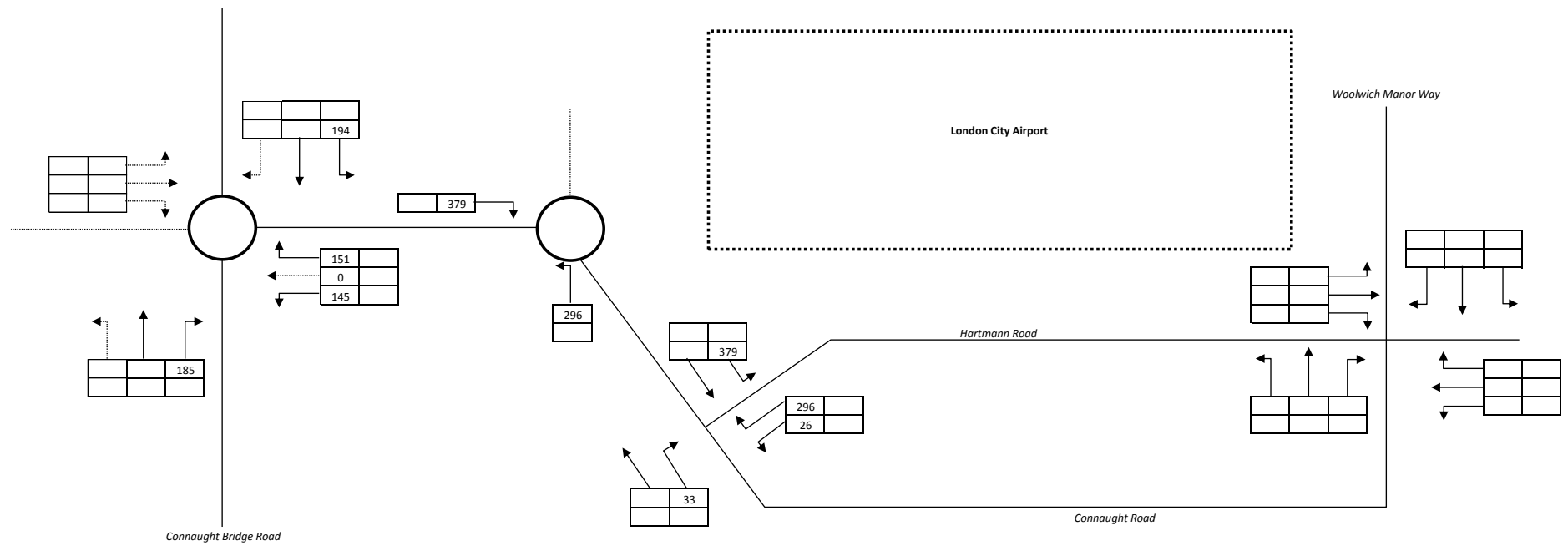
Traffic Figure 16: With Development Staff Development Distribution: AM Peak - Turning Movements



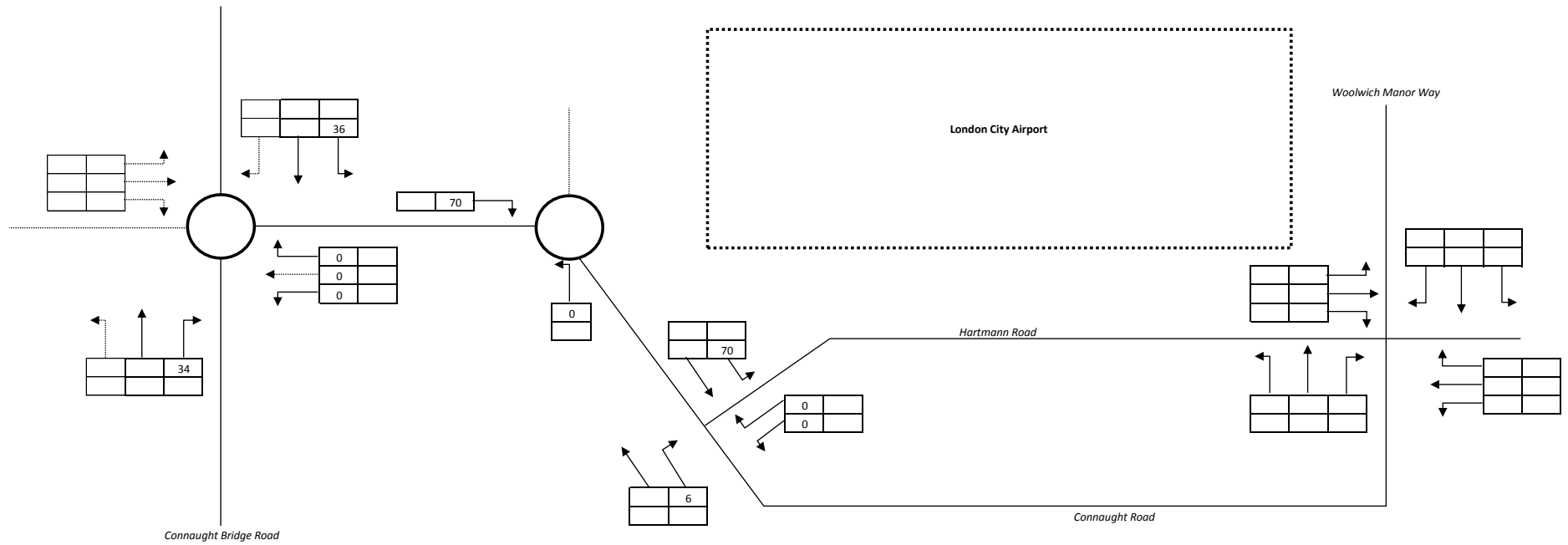
Traffic Figure 17: With Development Staff Development Distribution: PM Peak - Turning Movements



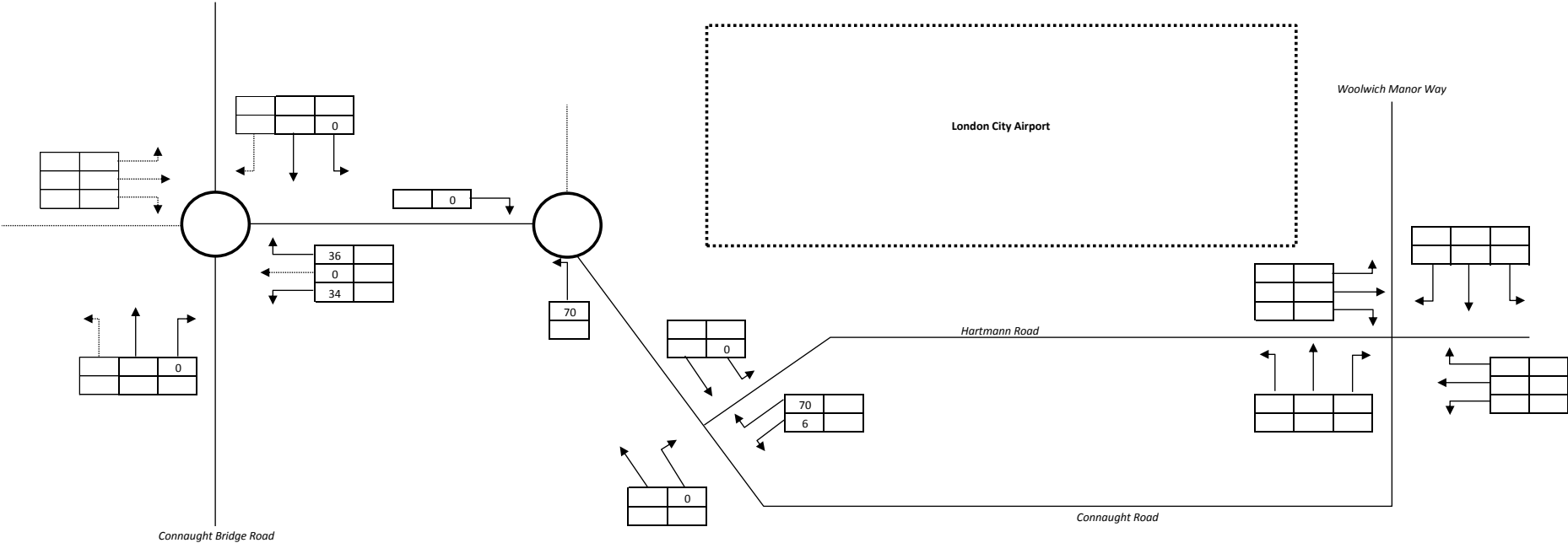
Traffic Figure 18: 2014 Existing LCY Passenger Trips: AM Peak - Turning Movements



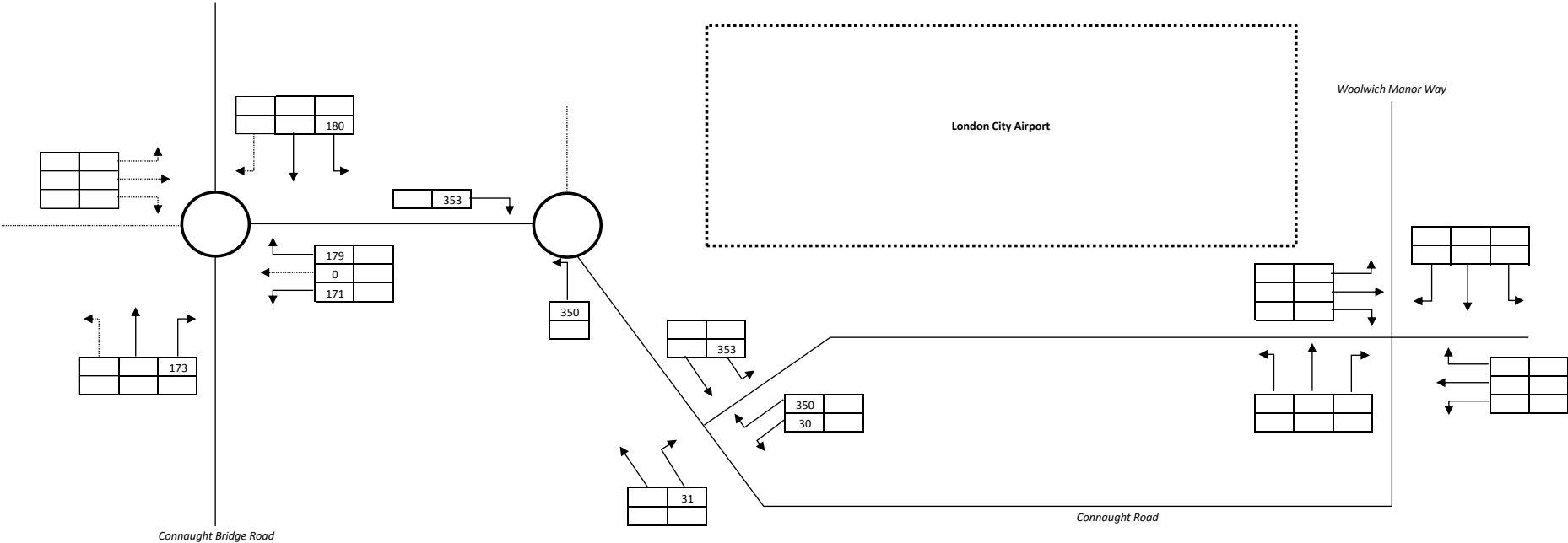
Traffic Figure 19: 2014 Existing LCY Passenger Trips: PM Peak - Turning Movements



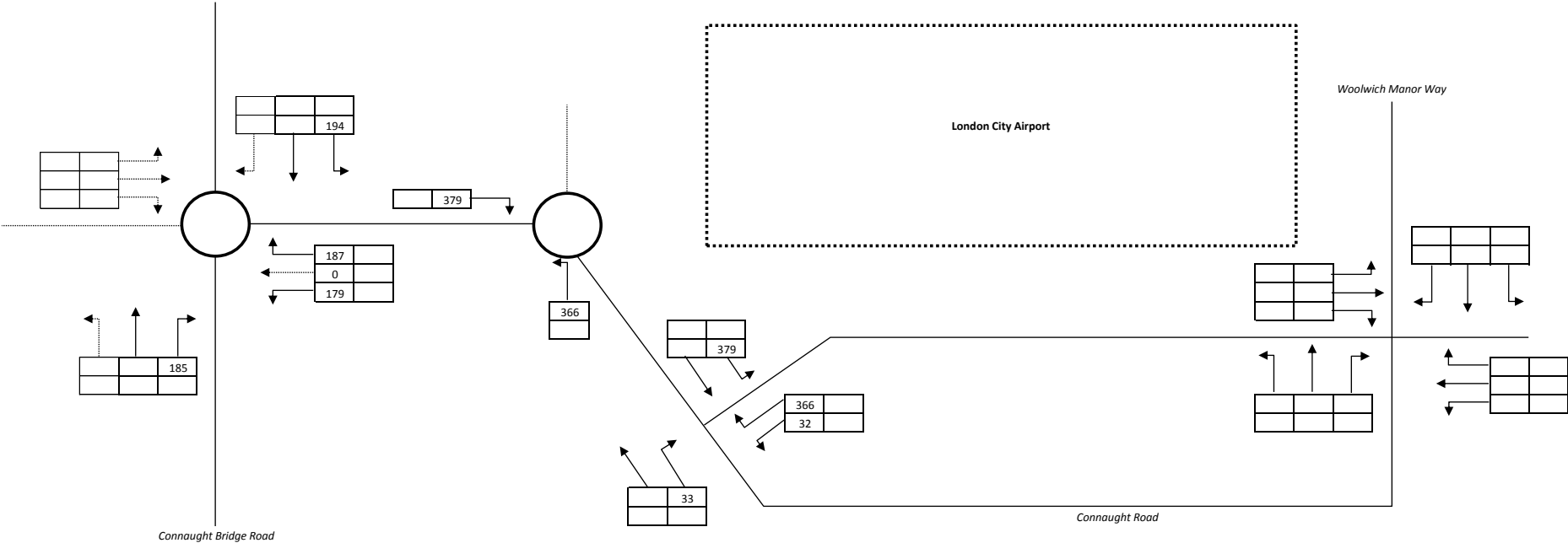
Traffic Figure 20: 2014 Existing LCY Staff Trips: AM Peak - Turning Movements



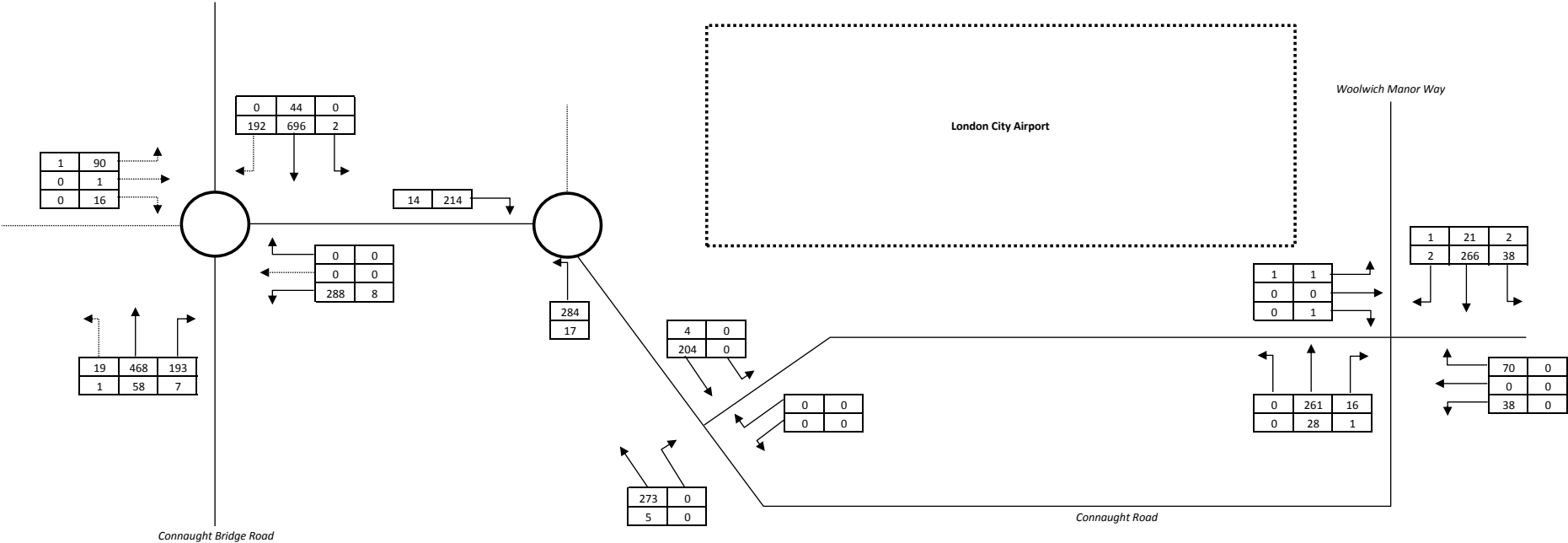
Traffic Figure 21: 2014 Existing LCY Staff Trips: PM Peak - Turning Movements



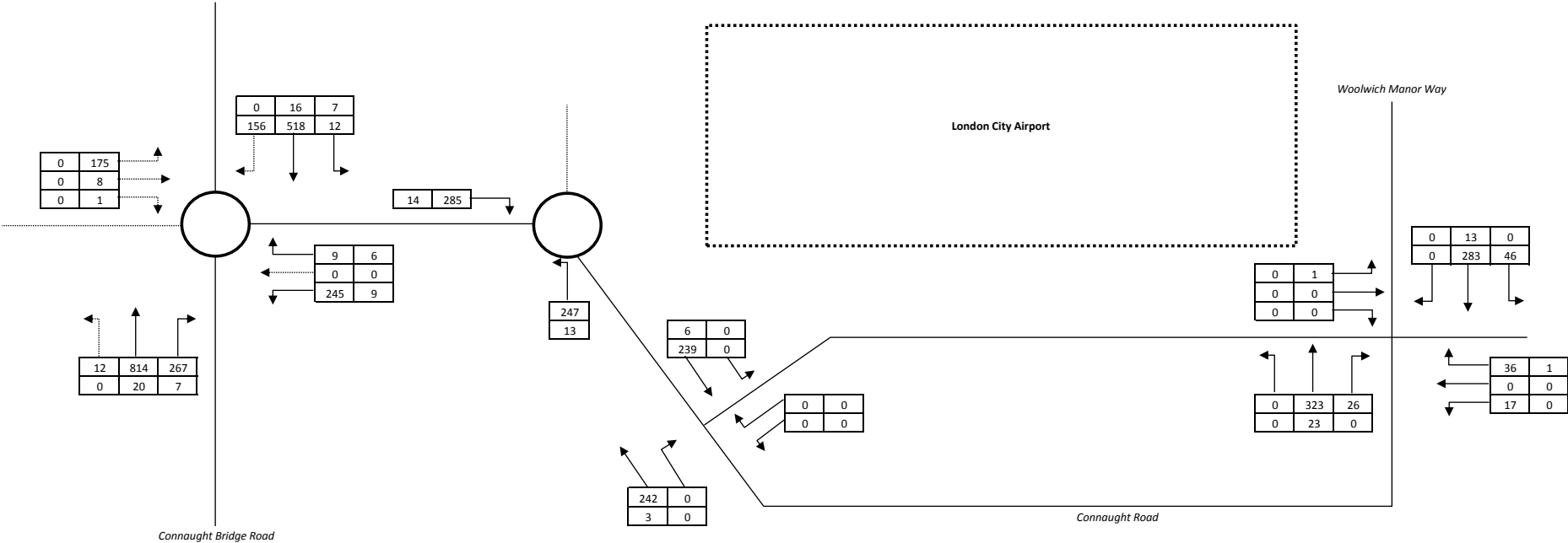
Traffic Figure 22: 2014 Total Existing LCY Trips: AM Peak - Turning Movements



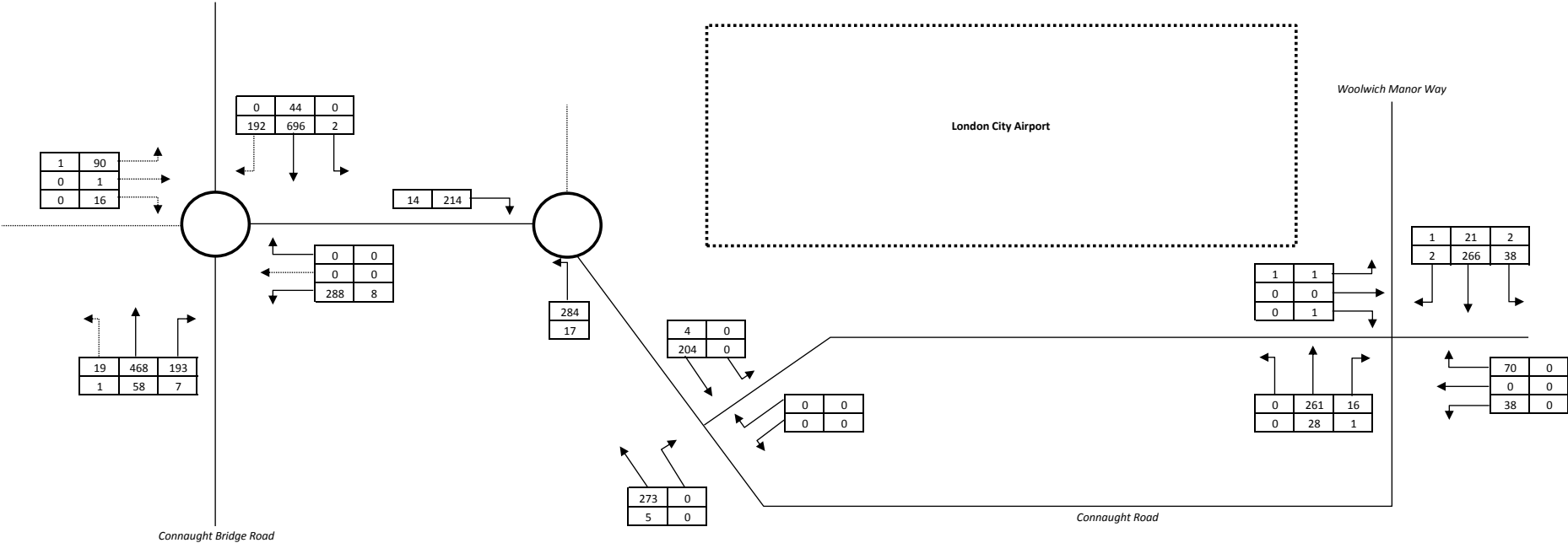
Traffic Figure 23: 2014 Total Existing LCY Trips: PM Peak - Turning Movements



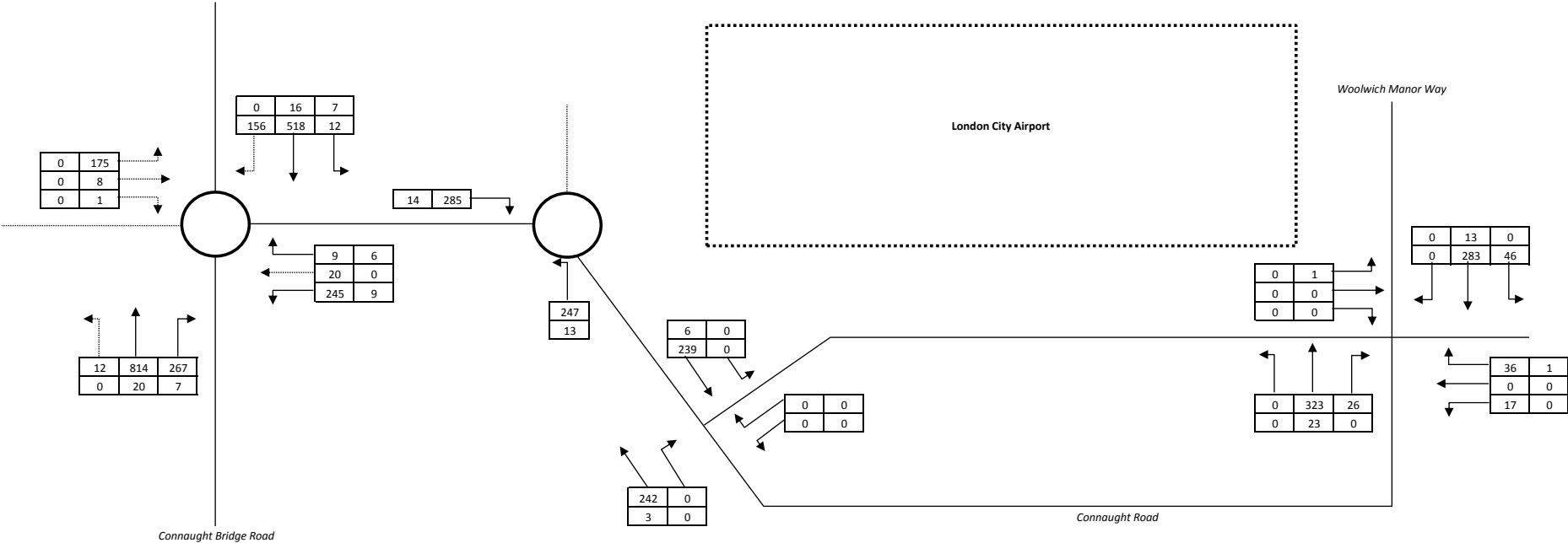
Traffic Figure 24: 2023 Base Traffic Flows (minus existing trips): Weekday AM Peak Hour - Turning Movements



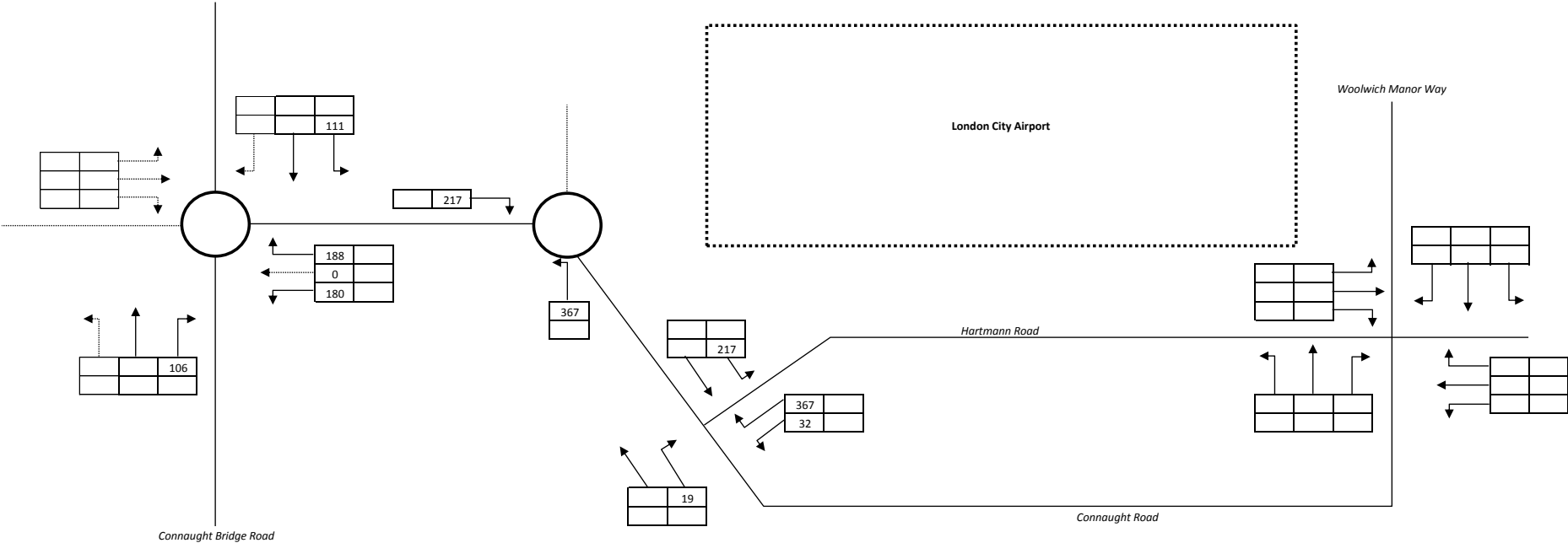
Traffic Figure 25: 2023 Base Traffic Flows (minus existing trips): Weekday PM Peak Hour - Turning Movements



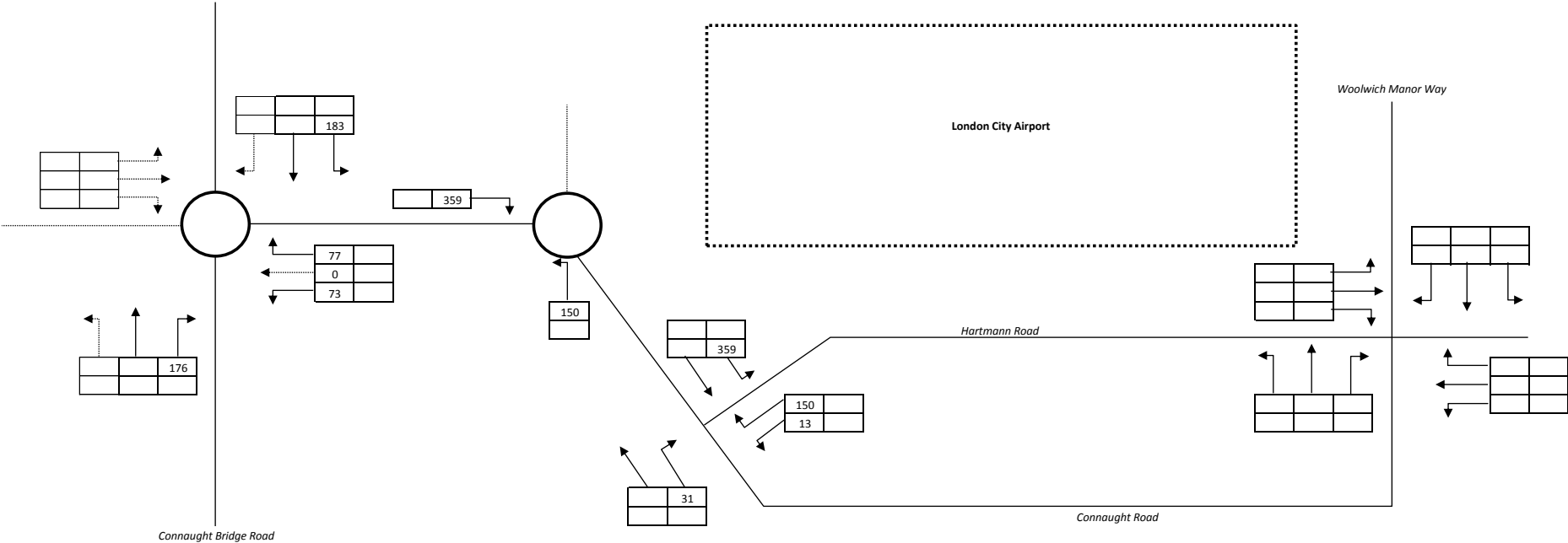
Traffic Figure 26: 2025 Base Traffic Flows (minus existing trips): Weekday AM Peak Hour - Turning Movements



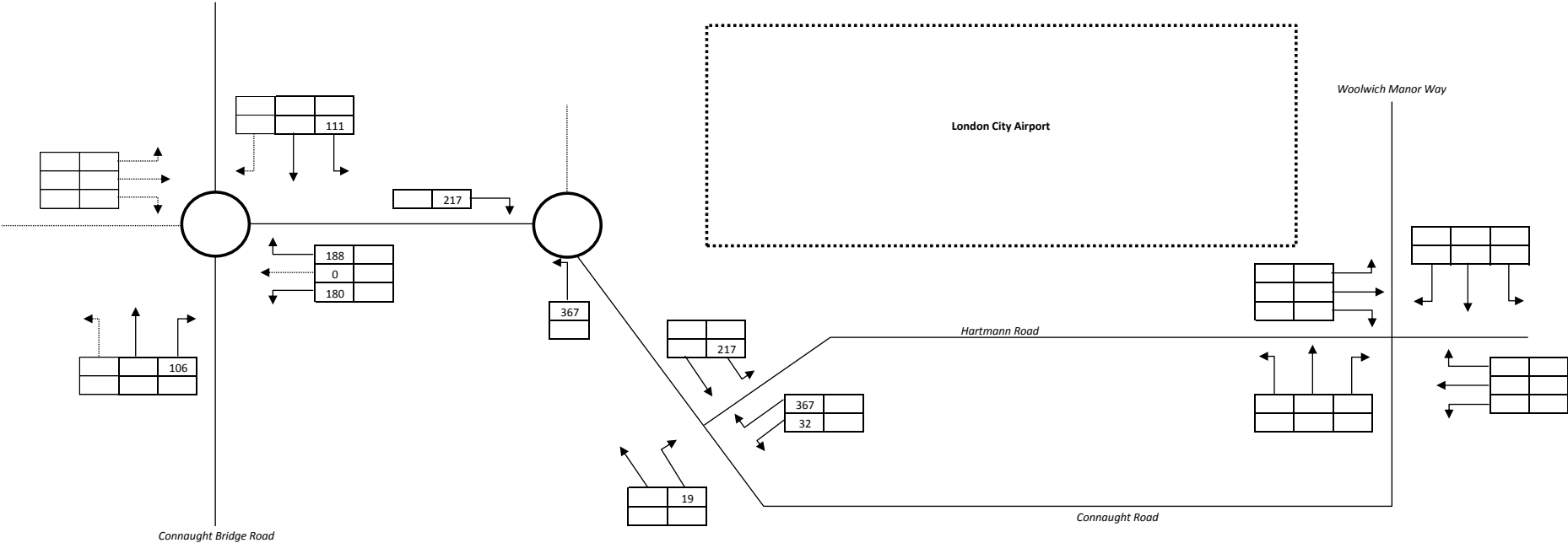
Traffic Figure 27: 2025 Base Traffic Flows (minus existing trips): Weekday PM Peak Hour - Turning Movements



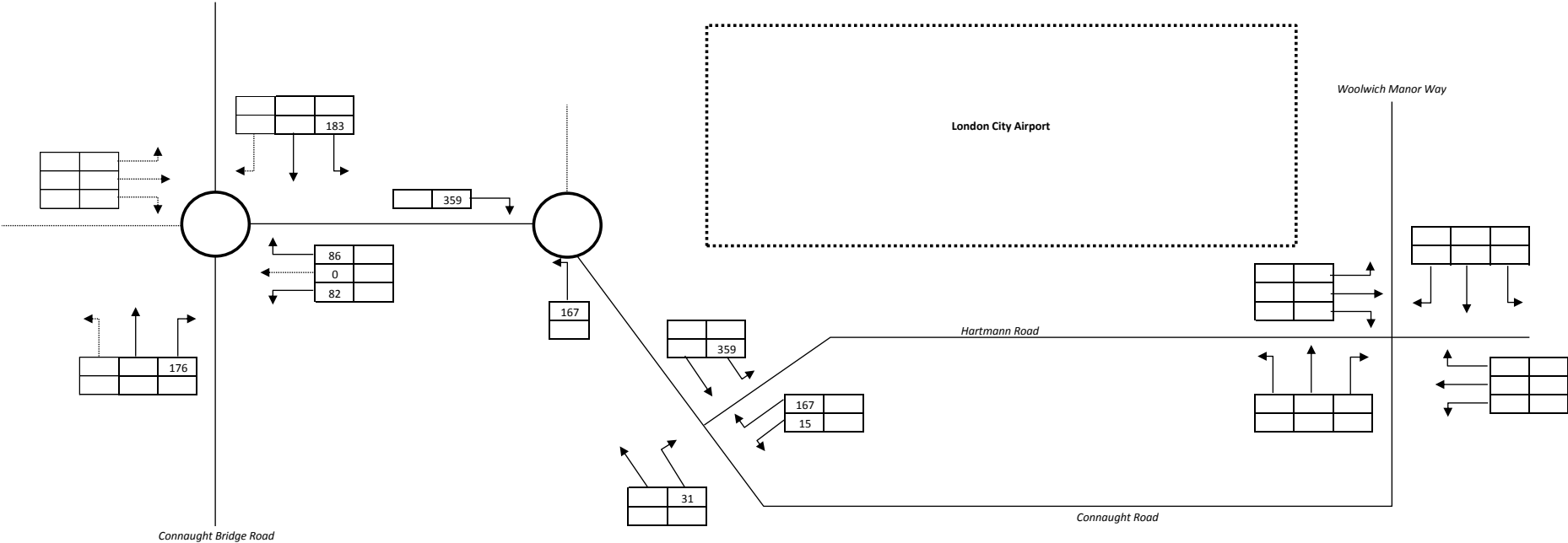
Traffic Figure 28: 2023 Passenger Trips - Without Development: AM Peak - Turning Movements



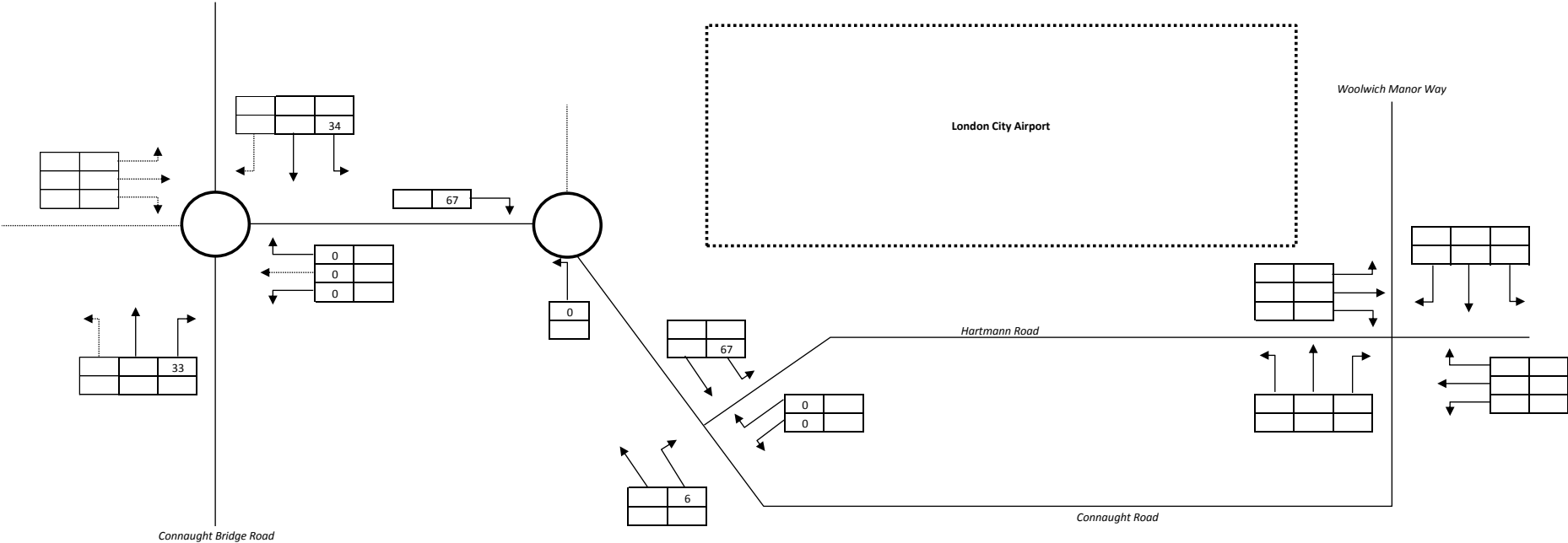
Traffic Figure 29: 2023 Passenger Trips - Without Development: PM Peak - Turning Movements



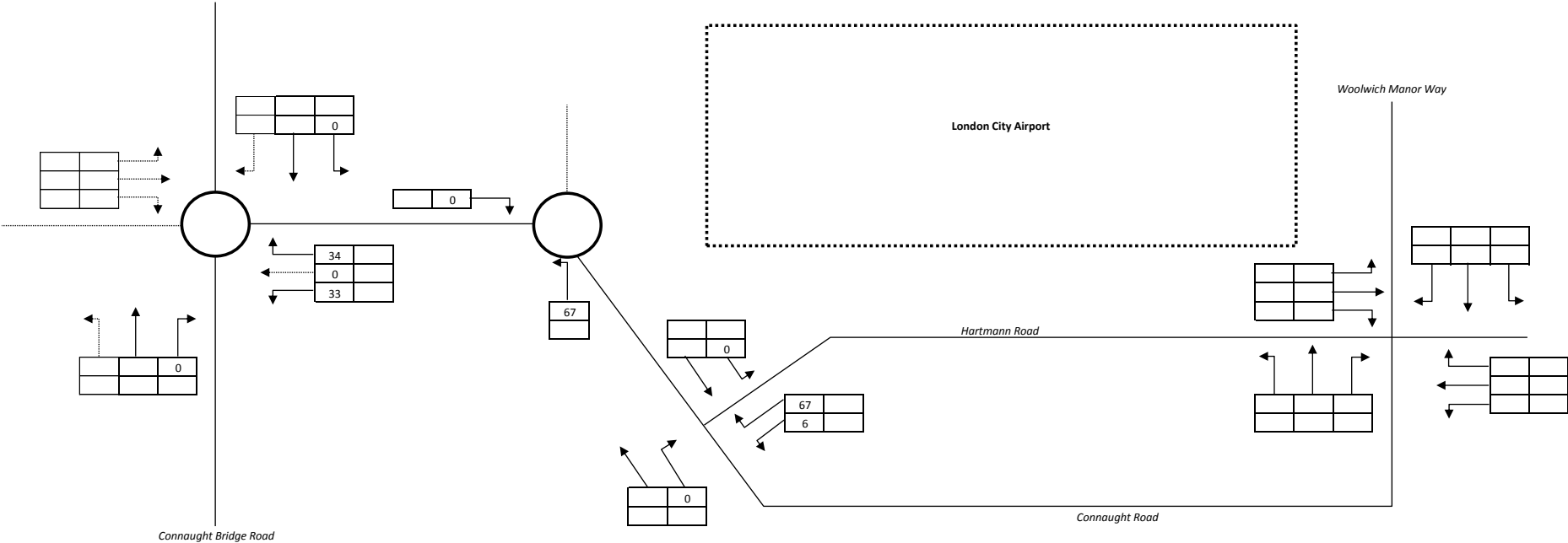
Traffic Figure 30: 2025 Passenger Trips - Without Development: AM Peak - Turning Movements



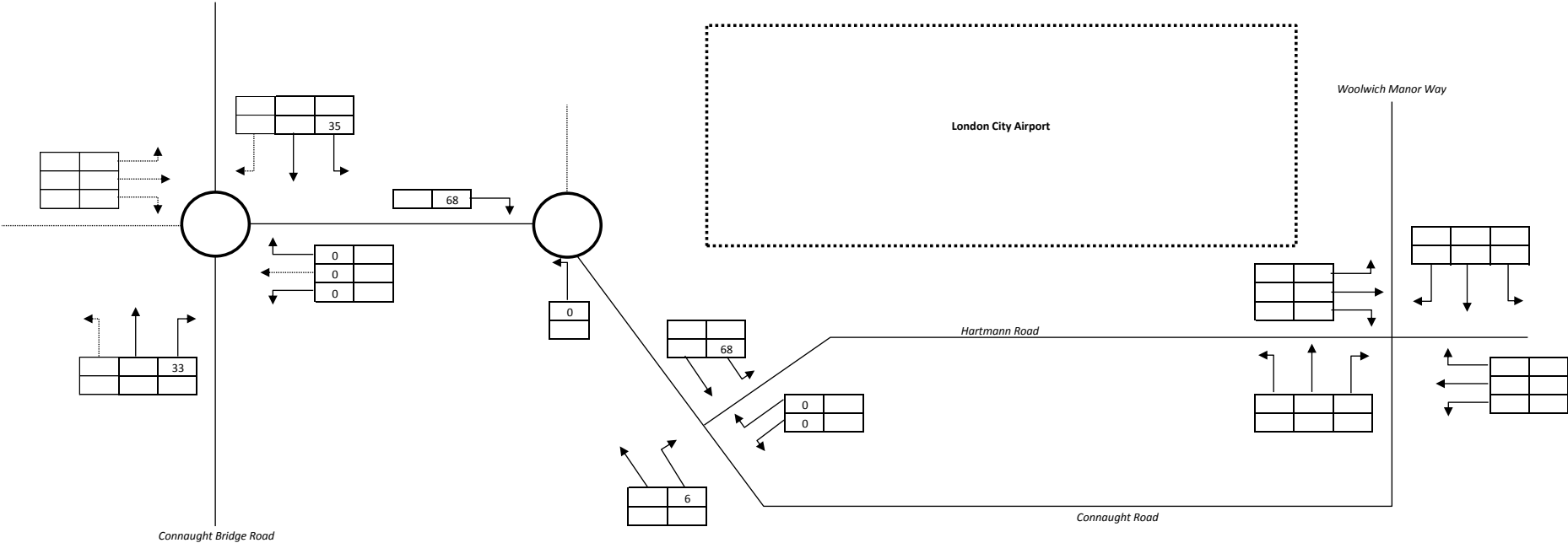
Traffic Figure 31: 2025 Passenger Trips - Without Development: PM Peak - Turning Movements



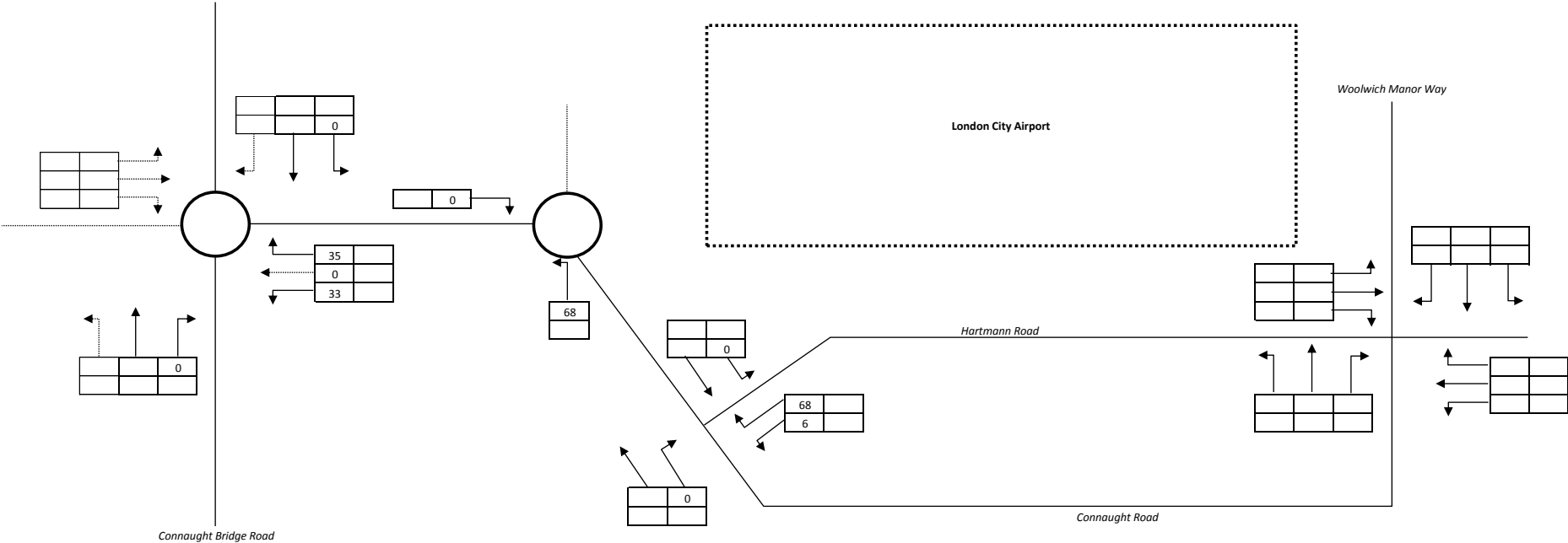
Traffic Figure 32: 2023 Staff Trips - Without Development: AM Peak - Turning Movements



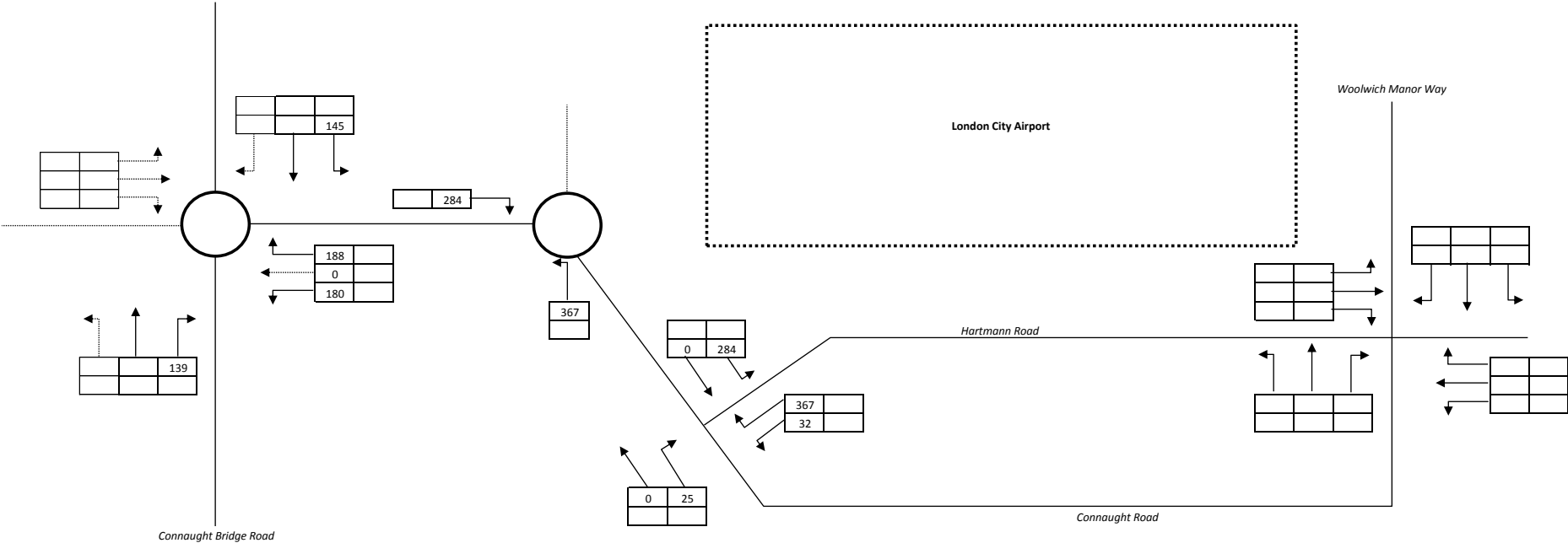
Traffic Figure 33: 2023 Staff Trips - Without Development: PM Peak - Turning Movements



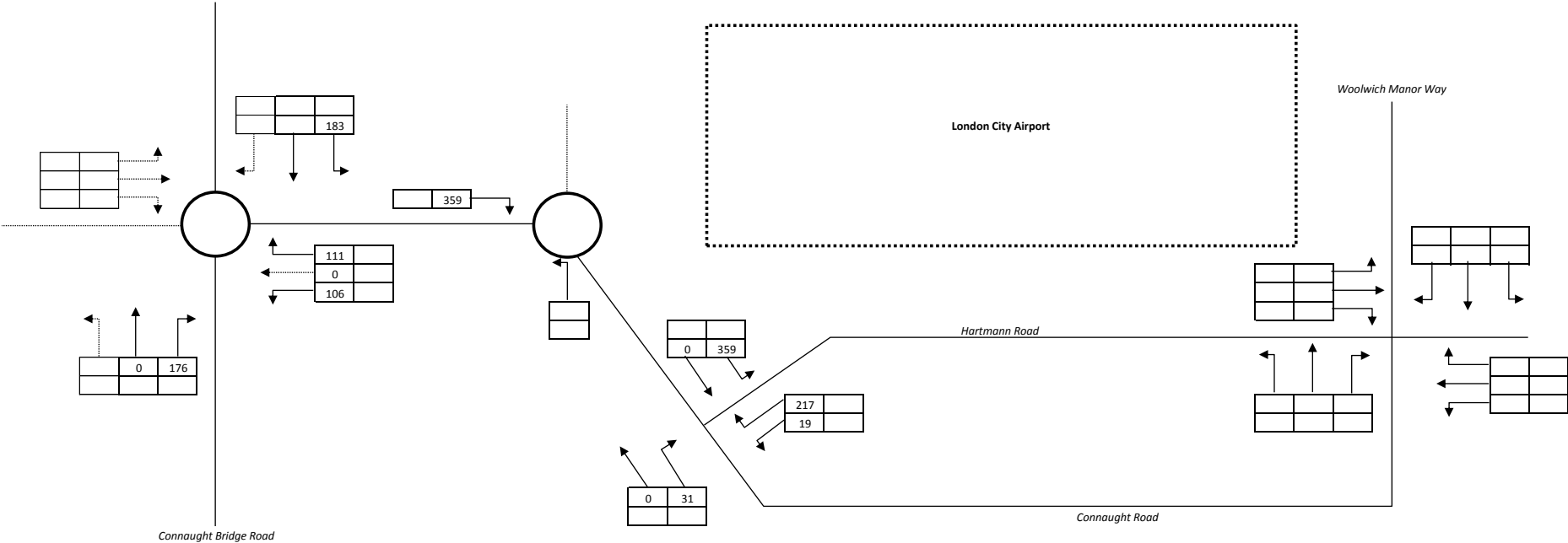
Traffic Figure 34: 2025 Staff Trips - Without Development: AM Peak - Turning Movements



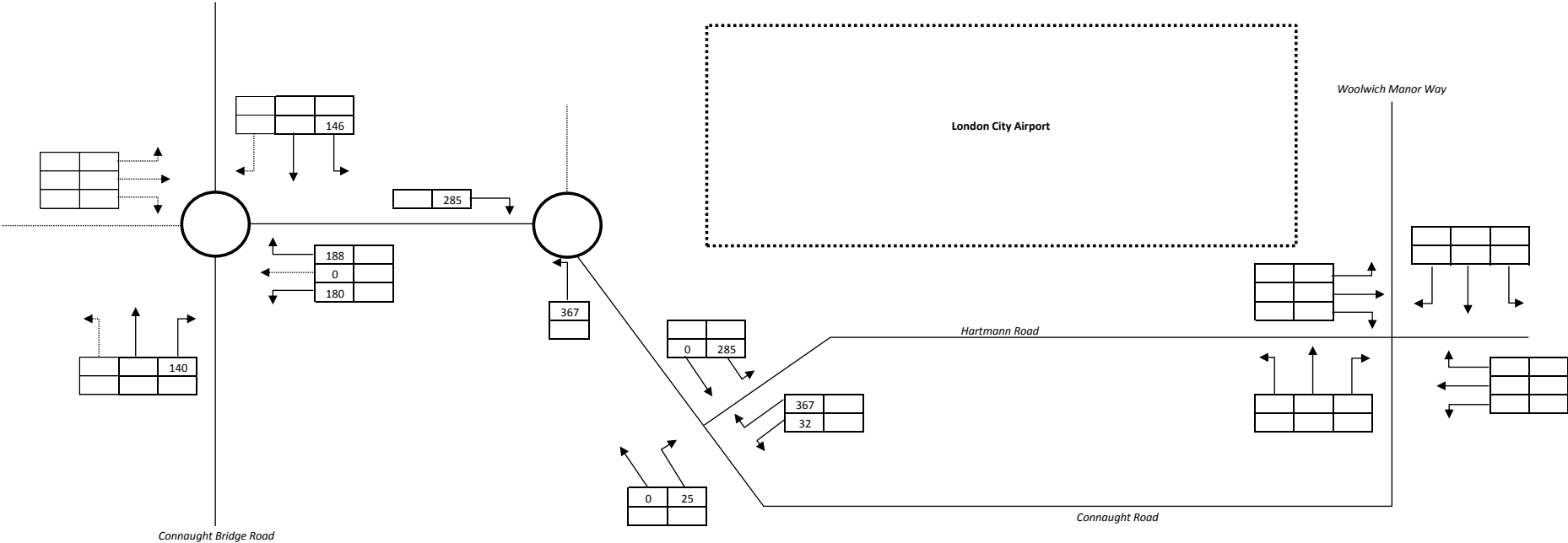
Traffic Figure 35: 2025 Staff Trips - Without Development: PM Peak - Turning Movements



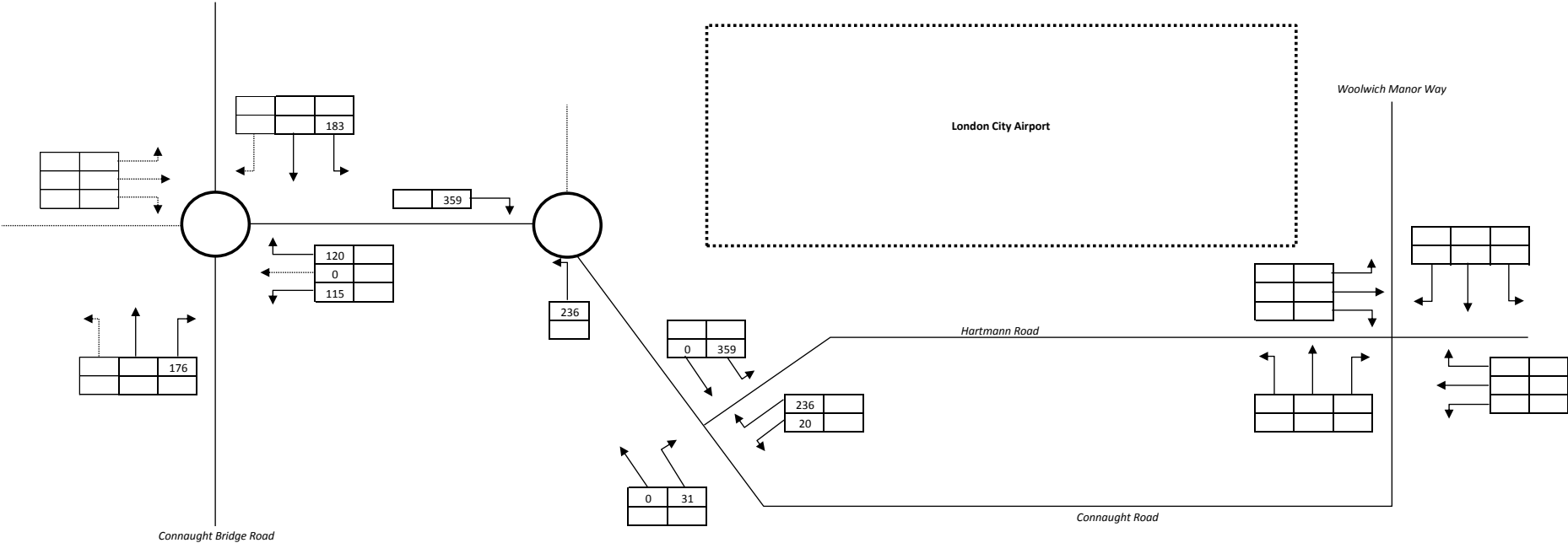
Traffic Figure 36: 2023 Total Trips - Without Development: AM Peak Hour - Turning Movements



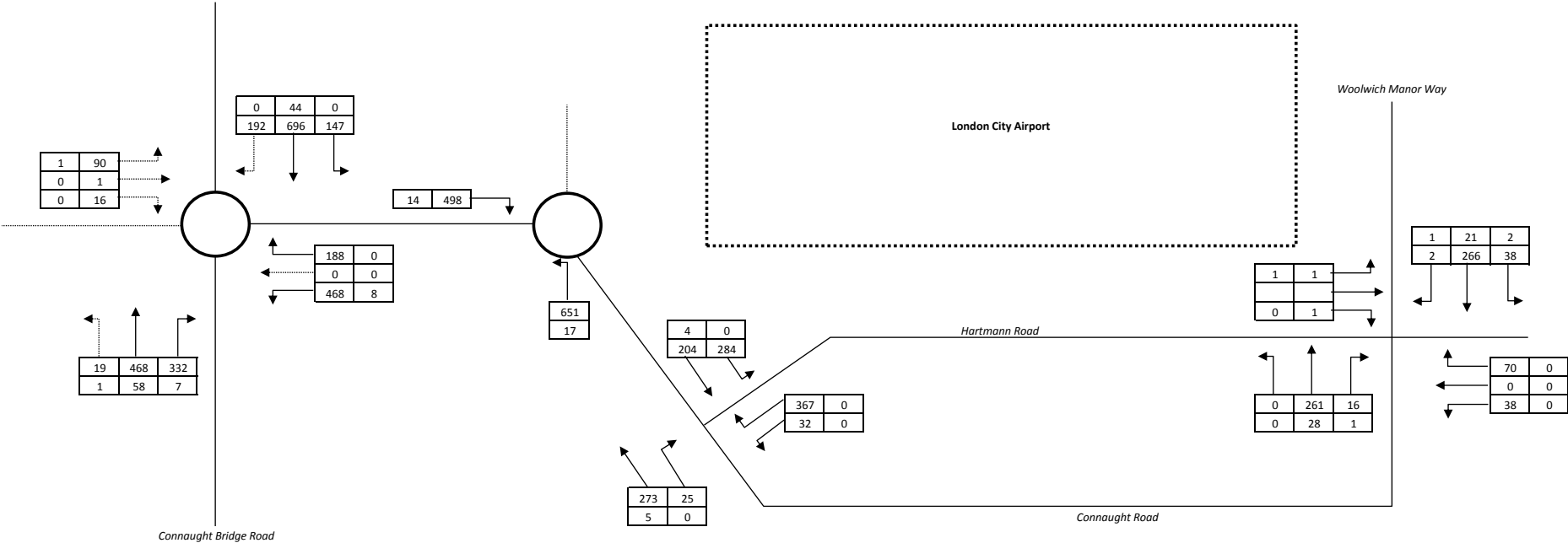
Traffic Figure 37: 2023 Total Trips - Without Development: PM Peak Hour - Turning Movements



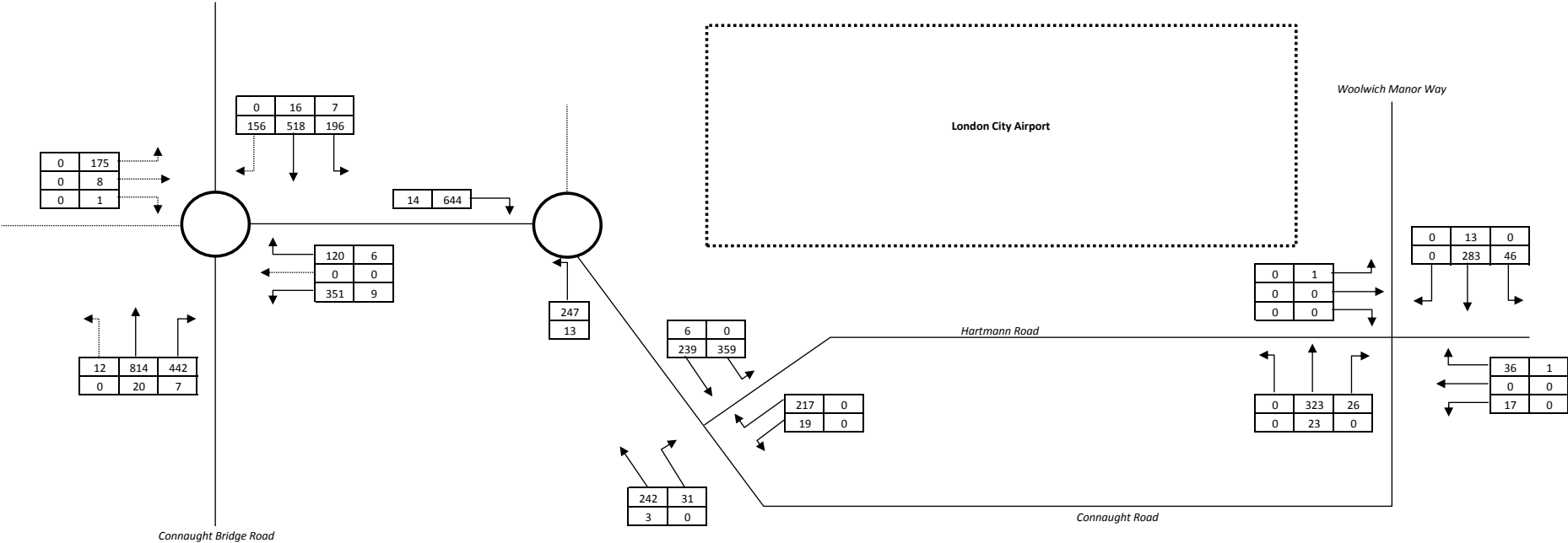
Traffic Figure 38: 2025 Total Trips - Without Development: AM Peak Hour - Turning Movements



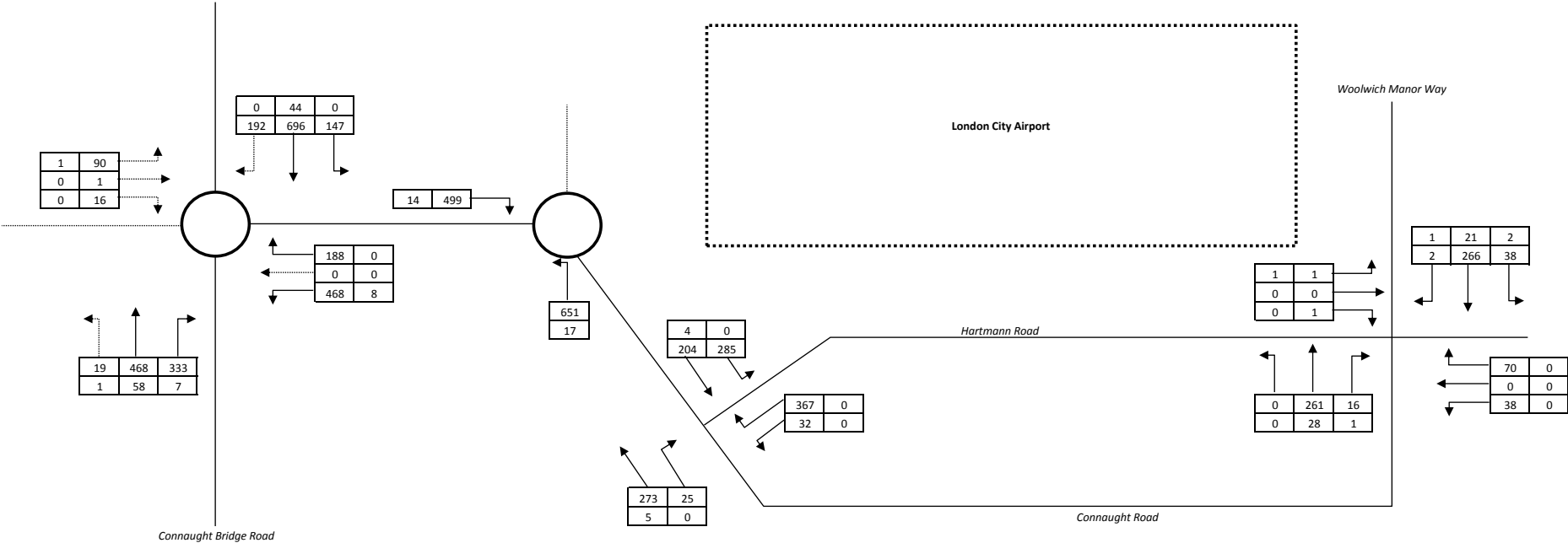
Traffic Figure 39: 2025 Total Trips - Without Development: PM Peak Hour - Turning Movements



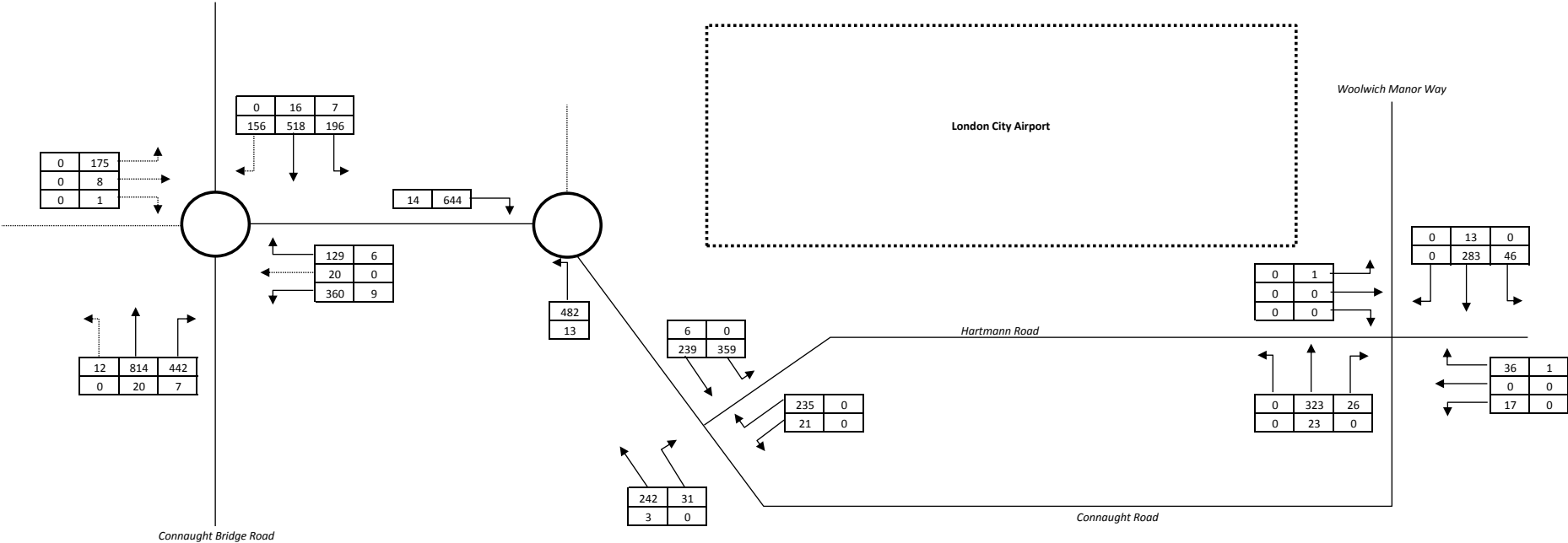
Traffic Figure 40: 2023 Base + Without Development Flows - AM Peak Hour - Turning Movements



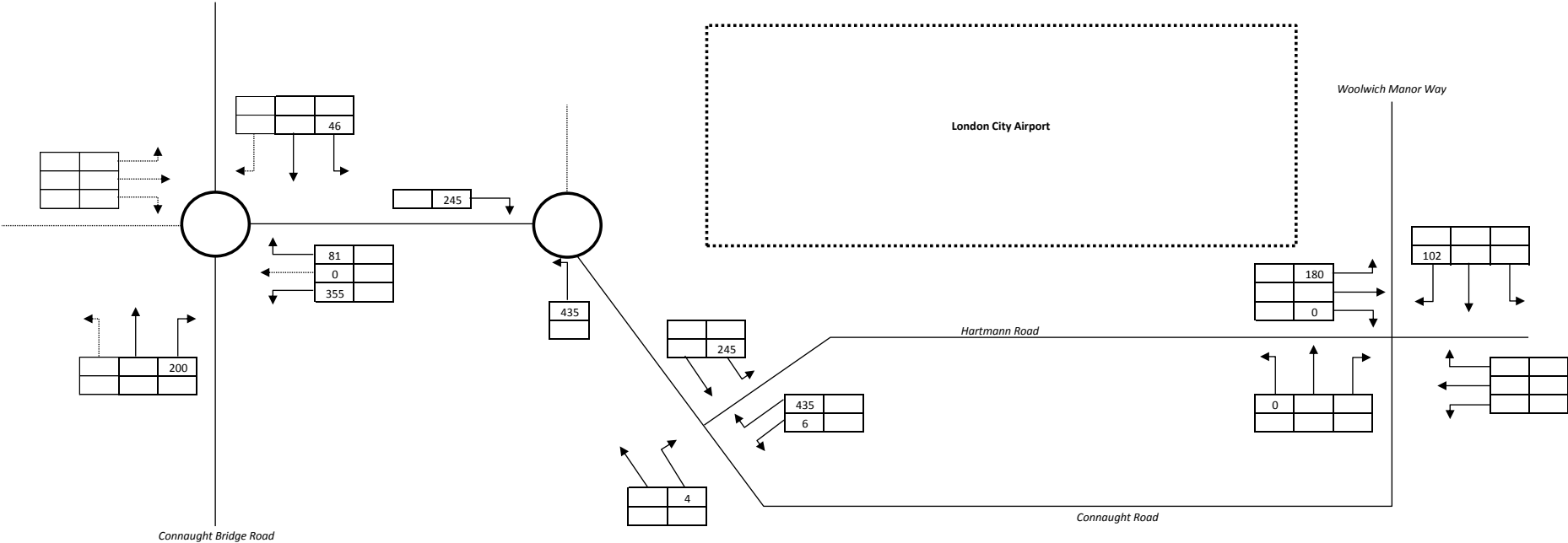
Traffic Figure 41: 2023 Base + Without Development Flows - PM Peak Hour - Turning Movements



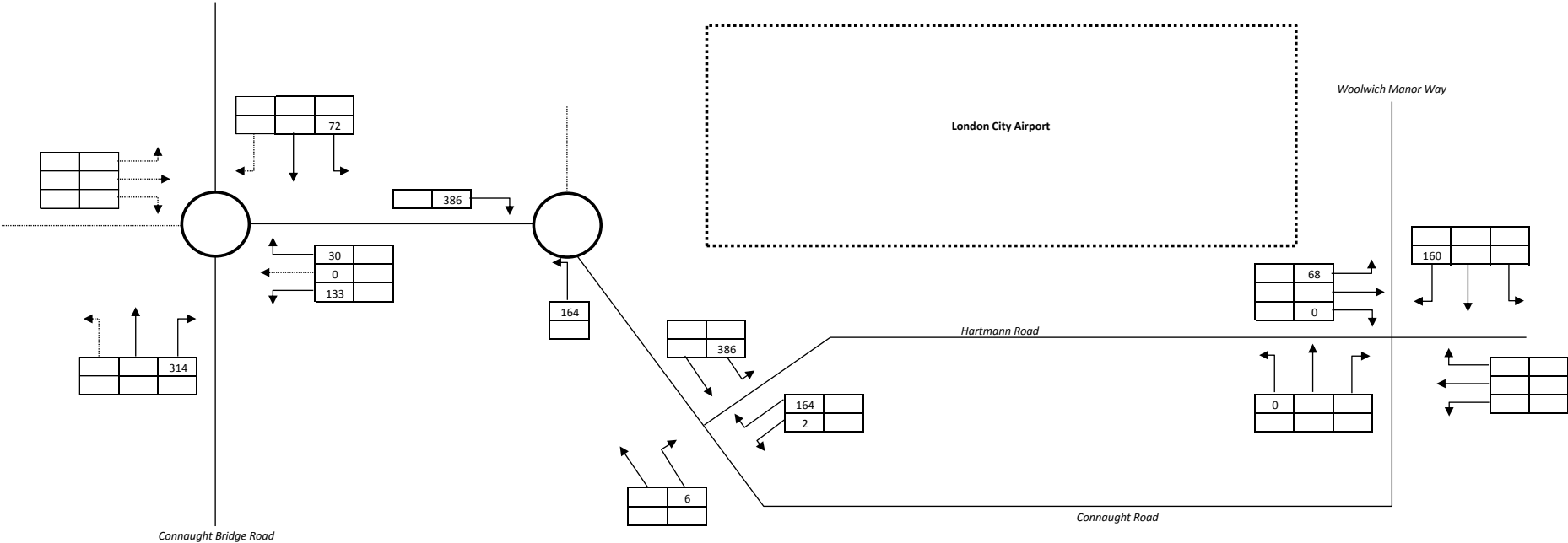
Traffic Figure 42: 2025 Base + Without Development Flows - AM Peak Hour - Turning Movements



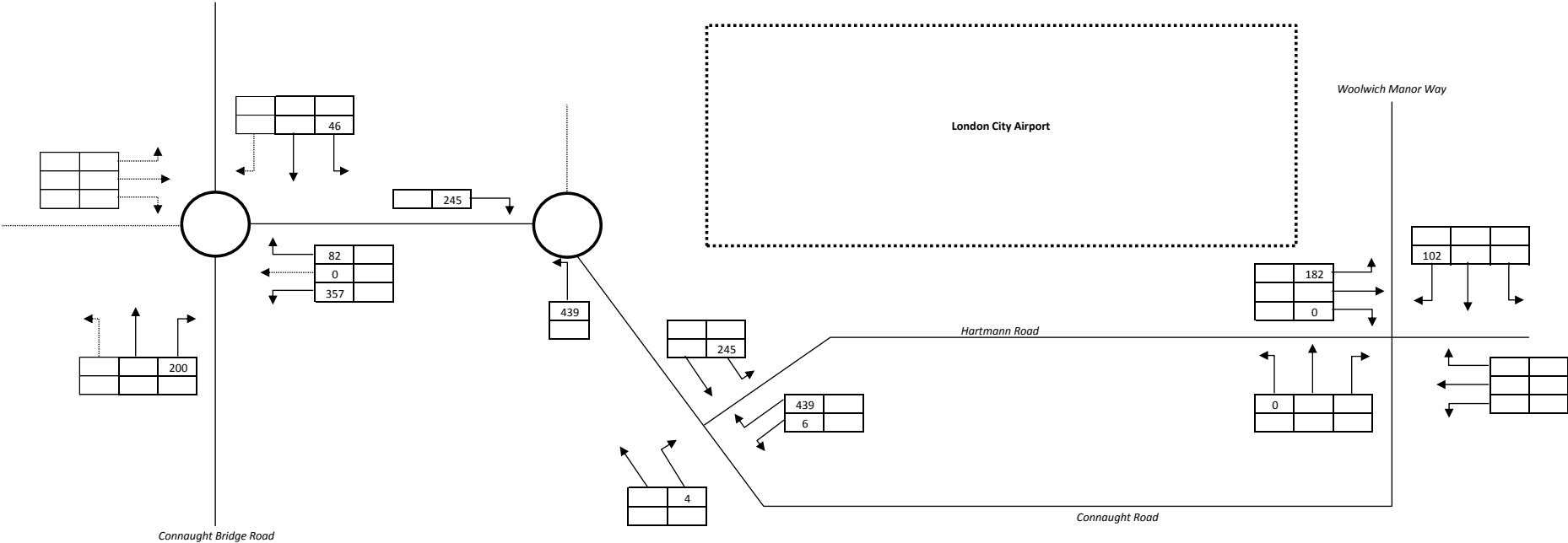
Traffic Figure 43: 2025 Base + Without Development Flows - PM Peak Hour - Turning Movements



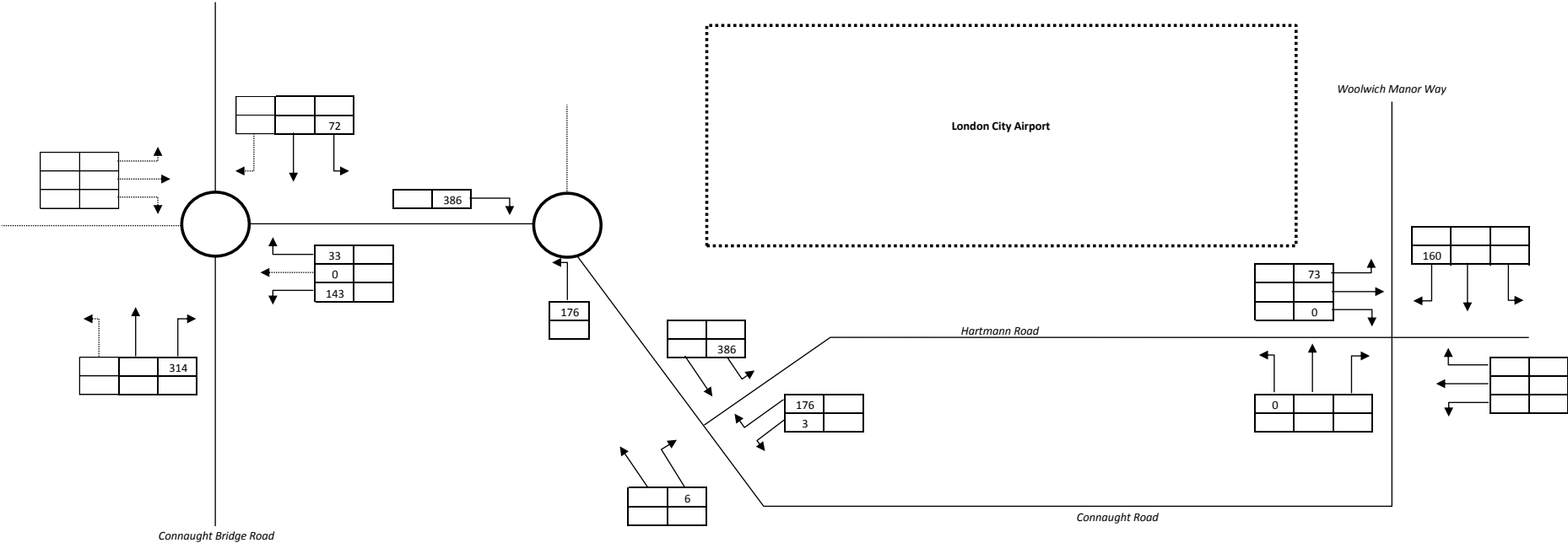
Traffic Figure 44: 2023 Passenger Trips - With Development: AM Peak - Turning Movements



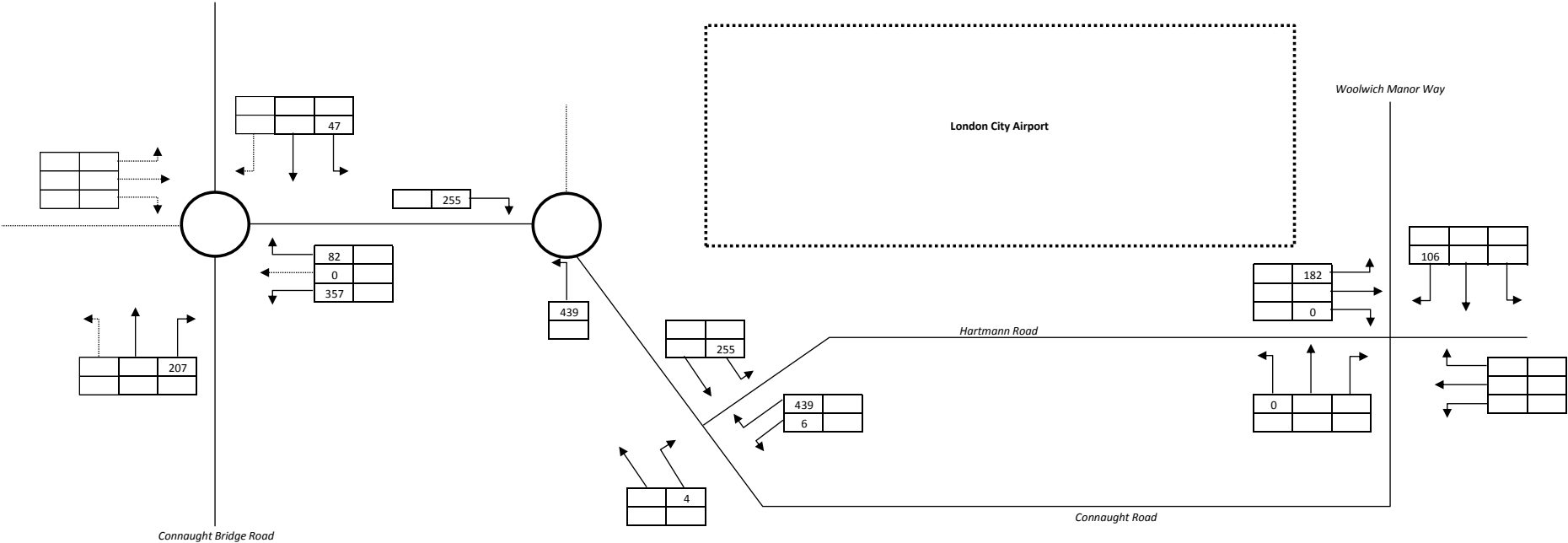
Traffic Figure 45: 2023 Passenger Trips - With Development: PM Peak - Turning Movements



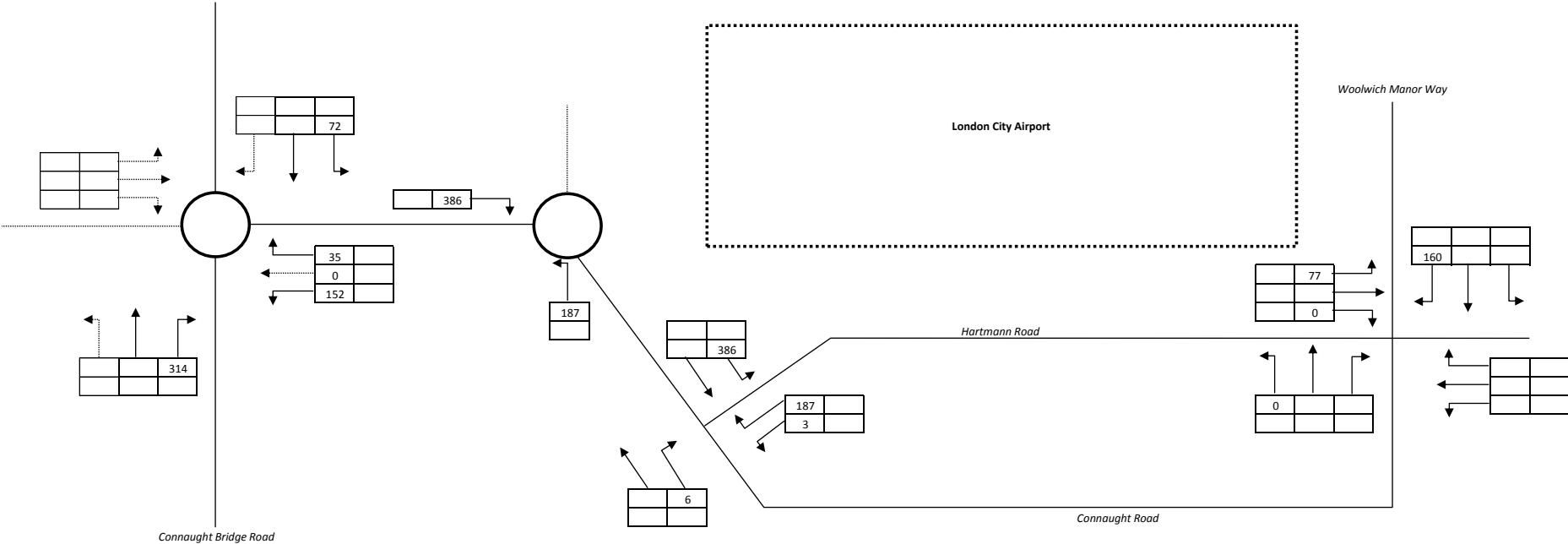
Traffic Figure 46: 2025 Passenger Trips - With Development: AM Peak - Turning Movements



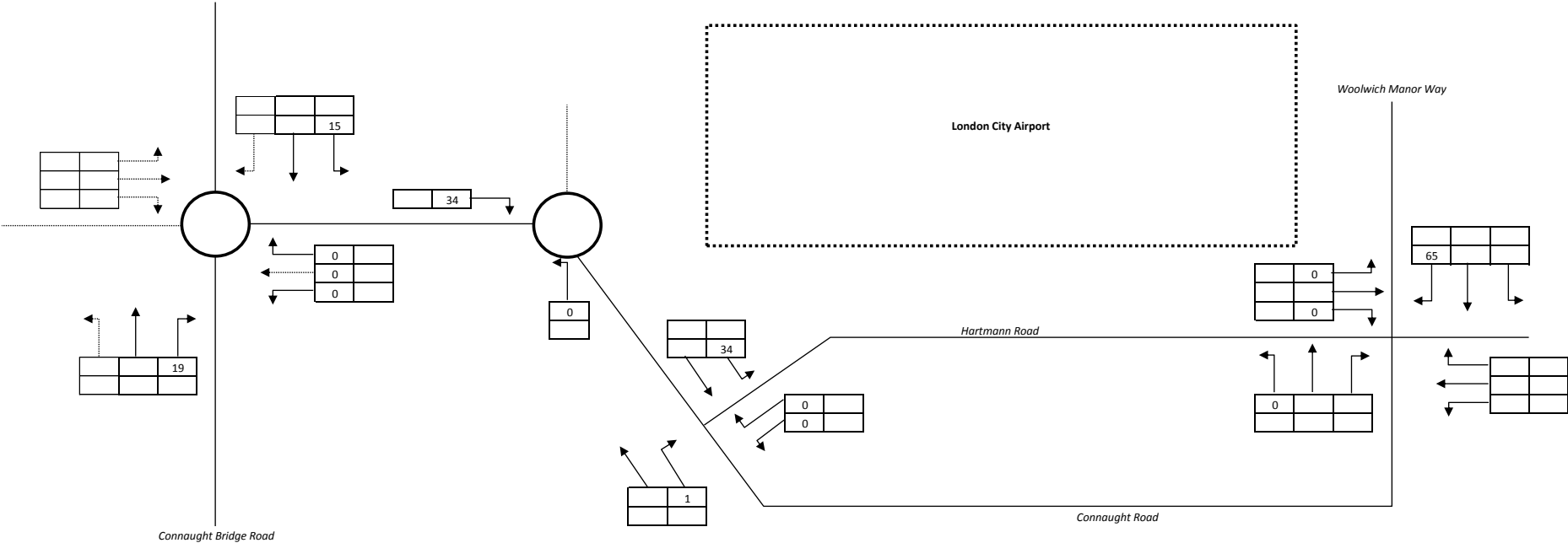
Traffic Figure 47: 2025 Passenger Trips - With Development: PM Peak - Turning Movements



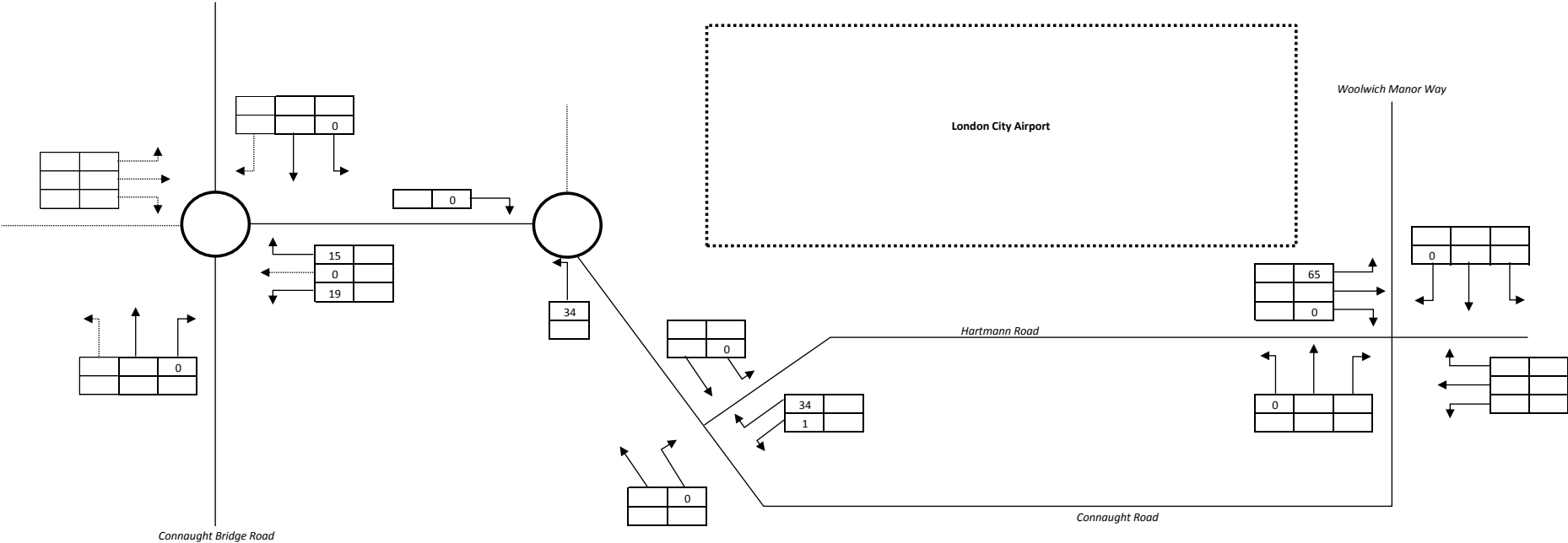
Traffic Figure 48: 2025 Passenger Trips - With Development: AM Peak - Sensitivity - Turning Movements



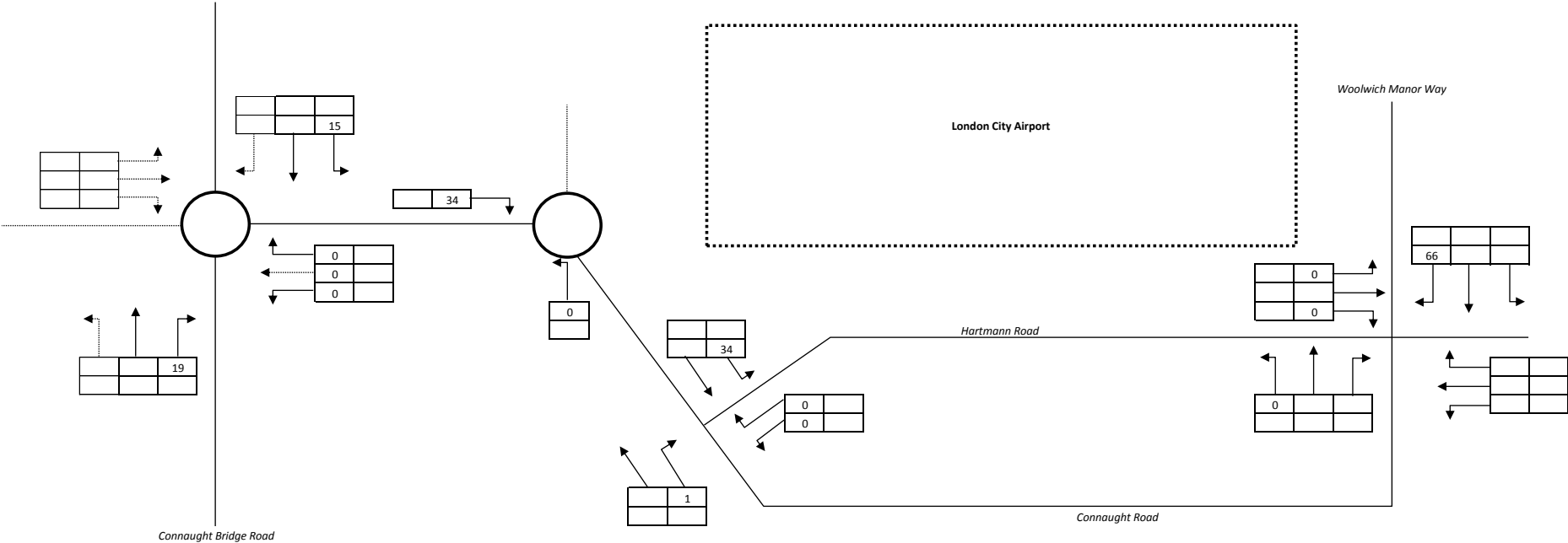
Traffic Figure 49: 2025 Passenger Trips - With Development: PM Peak - Sensitivity - Turning Movements



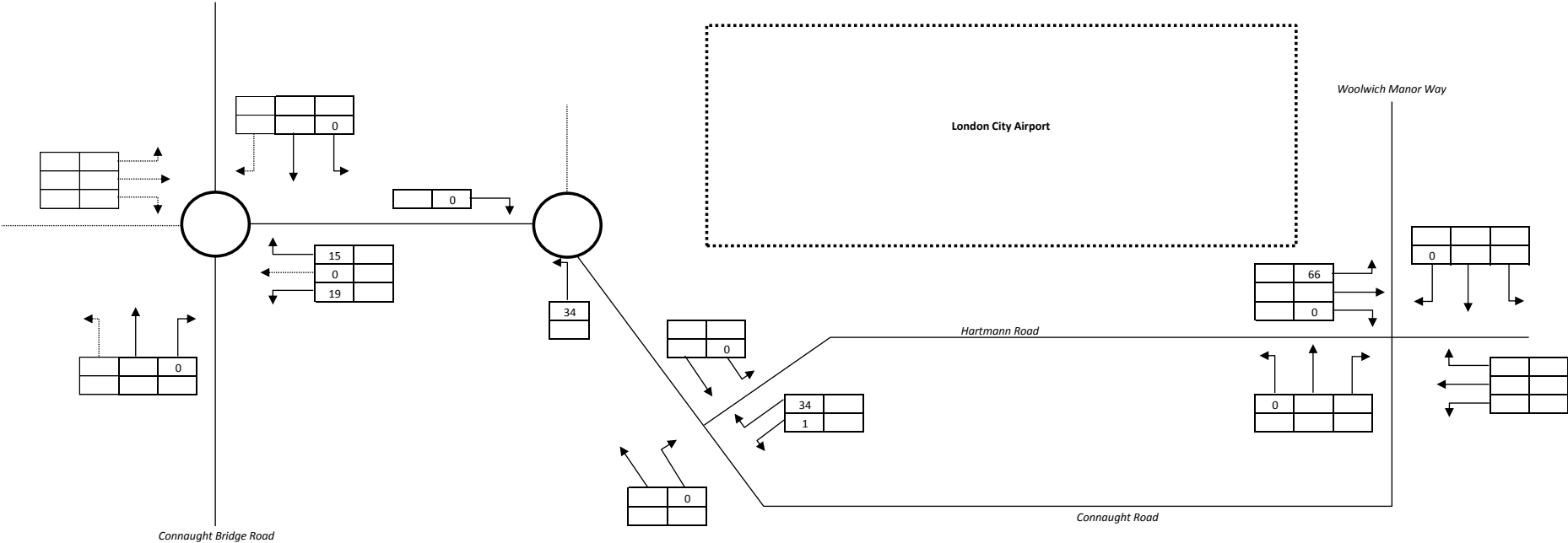
Traffic Figure 50: 2023 Staff Trips - With Development: AM Peak - Turning Movements



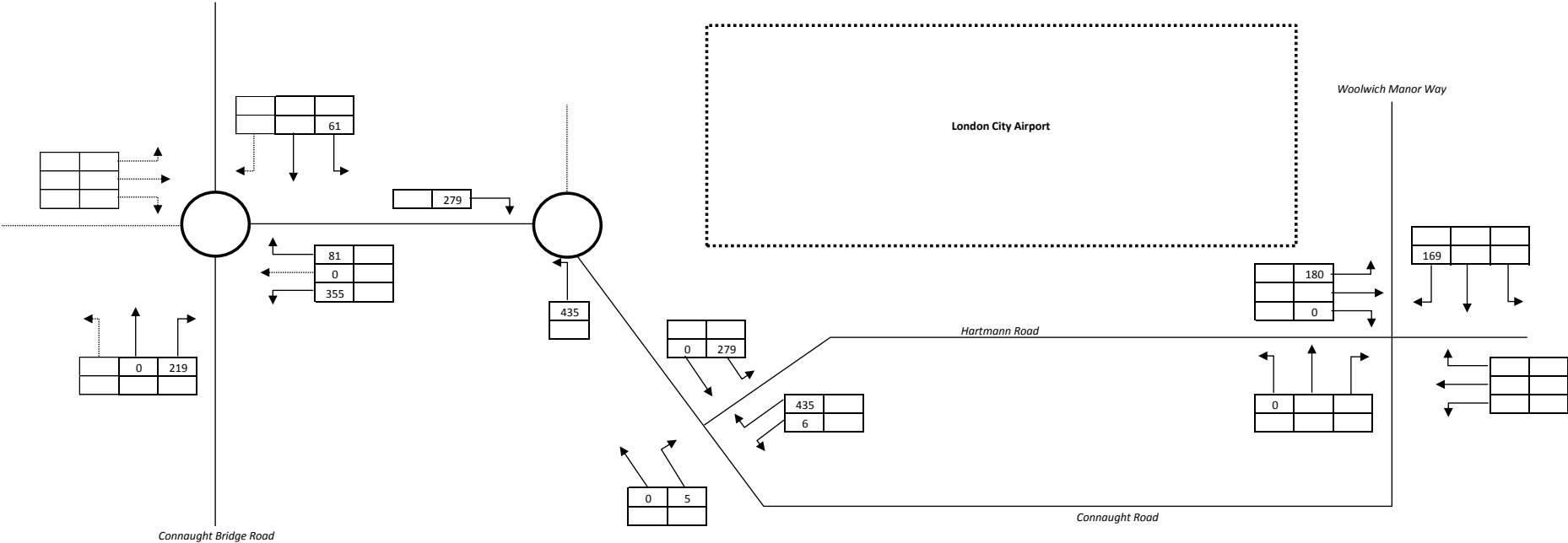
Traffic Figure 51: 2023 Staff Trips - With Development: PM Peak - Turning Movements



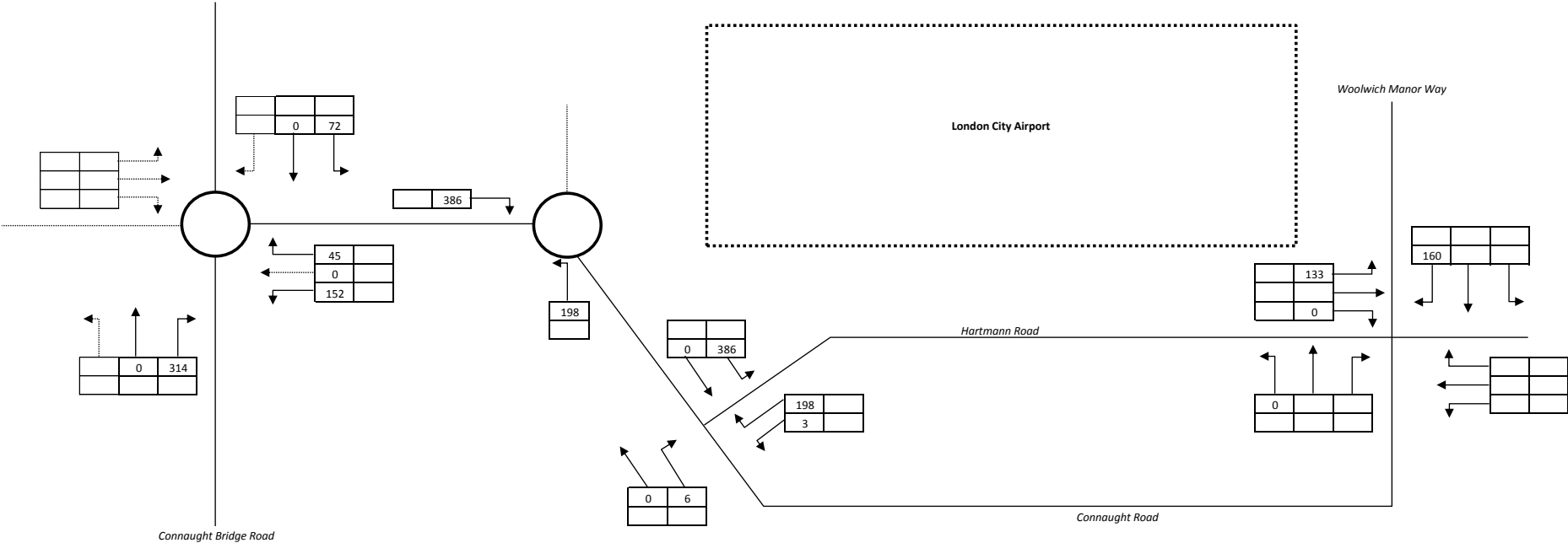
Traffic Figure 52: 2025 Staff Trips - With Development: AM Peak - Turning Movements



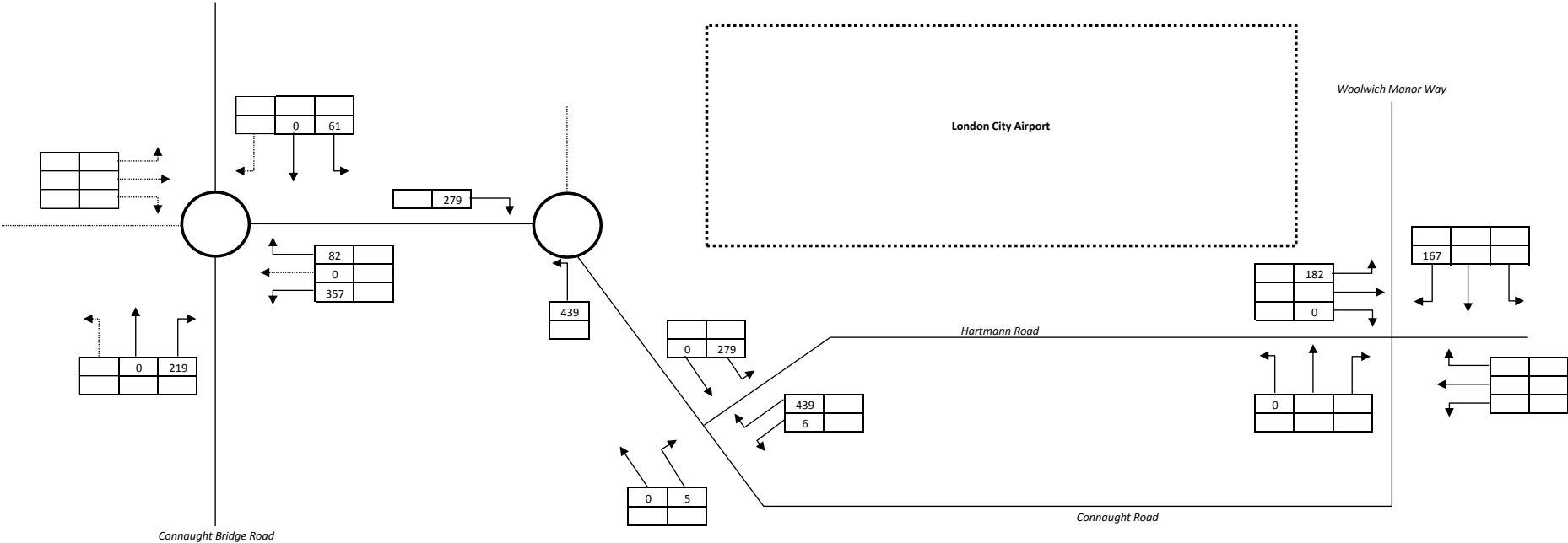
Traffic Figure 53: 2025 Staff Trips - With Development: PM Peak - Turning Movements



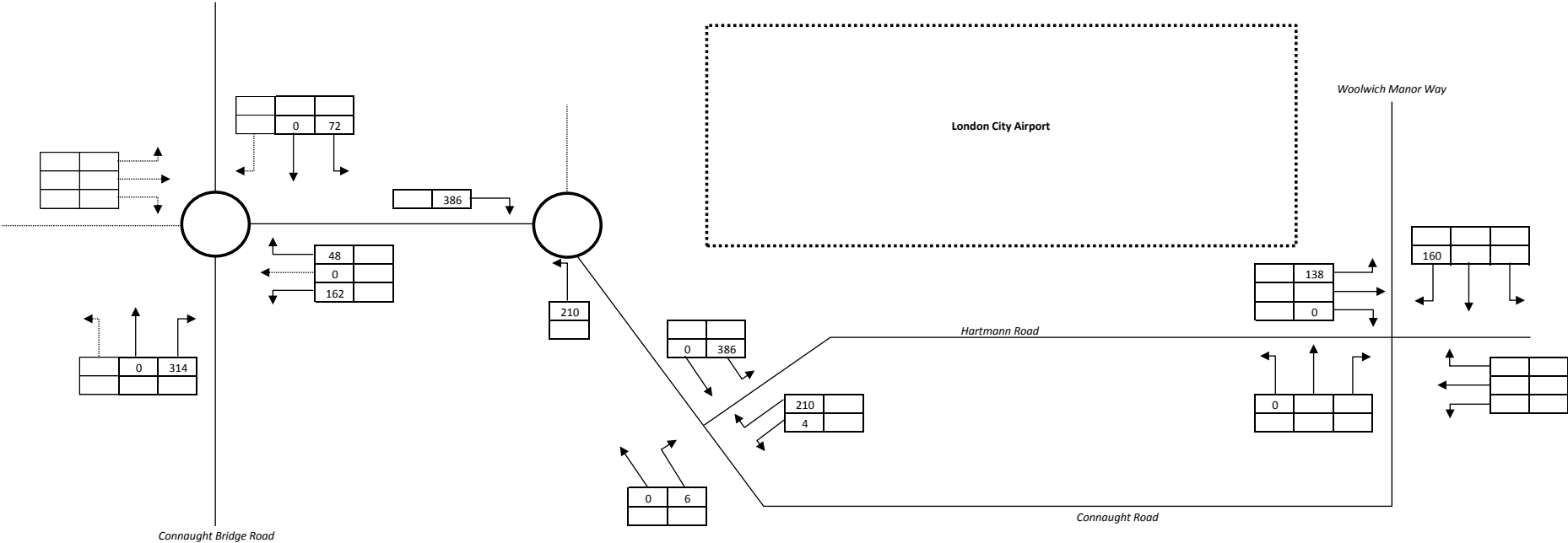
Traffic Figure 54: 2023 Total Development Traffic Flows: Weekday AM Peak Hour - Turning Movements



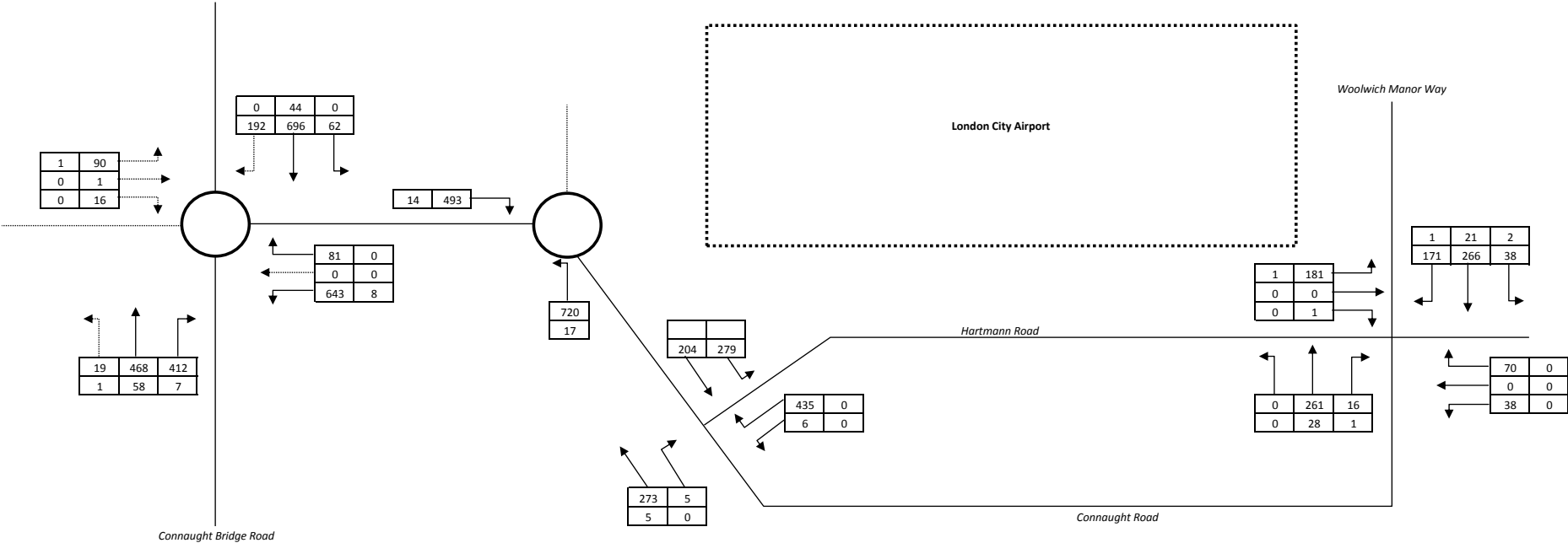
Traffic Figure 55: 2023 Total Development Traffic Flows: Weekday PM Peak Hour - Turning Movements



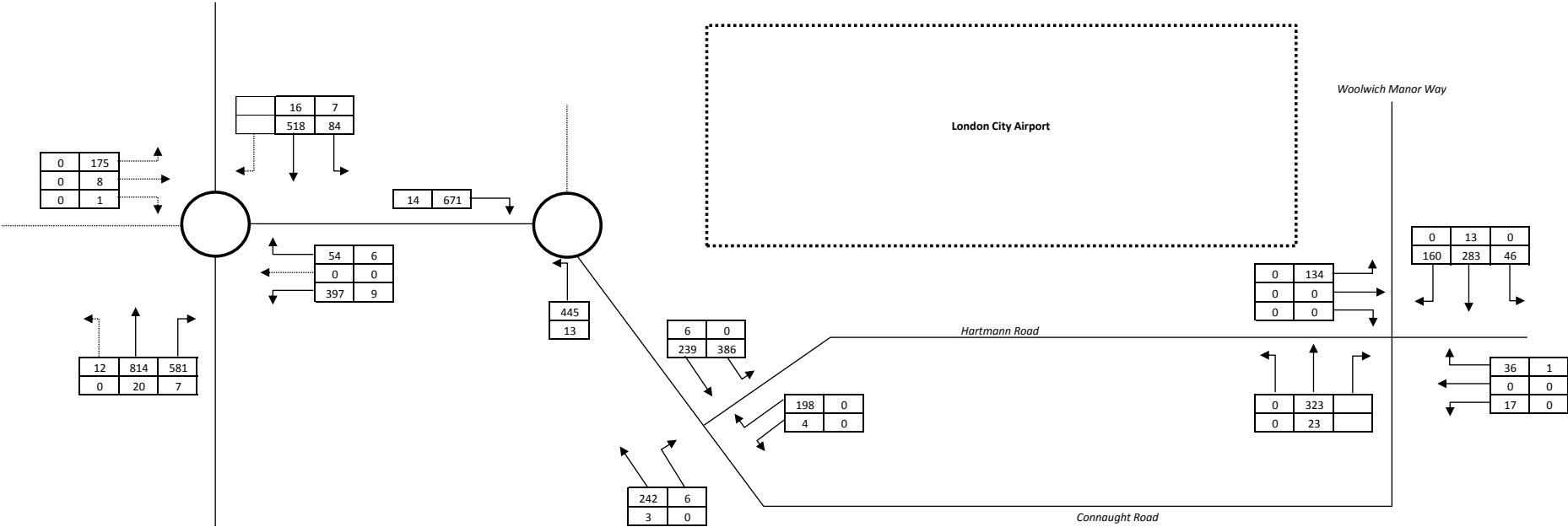
Traffic Figure 56: 2025 Total Development Traffic Flows: Weekday AM Peak Hour - Turning Movements



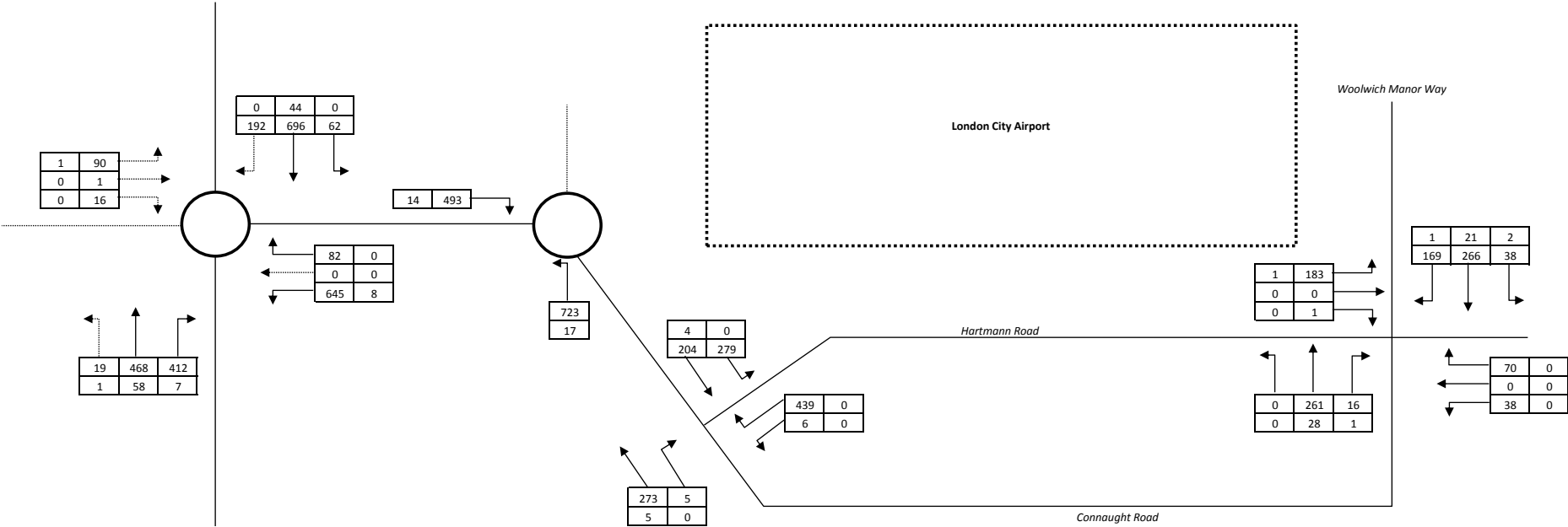
Traffic Figure 57: 2025 Total Development Traffic Flows: Weekday PM Peak Hour - Turning Movements



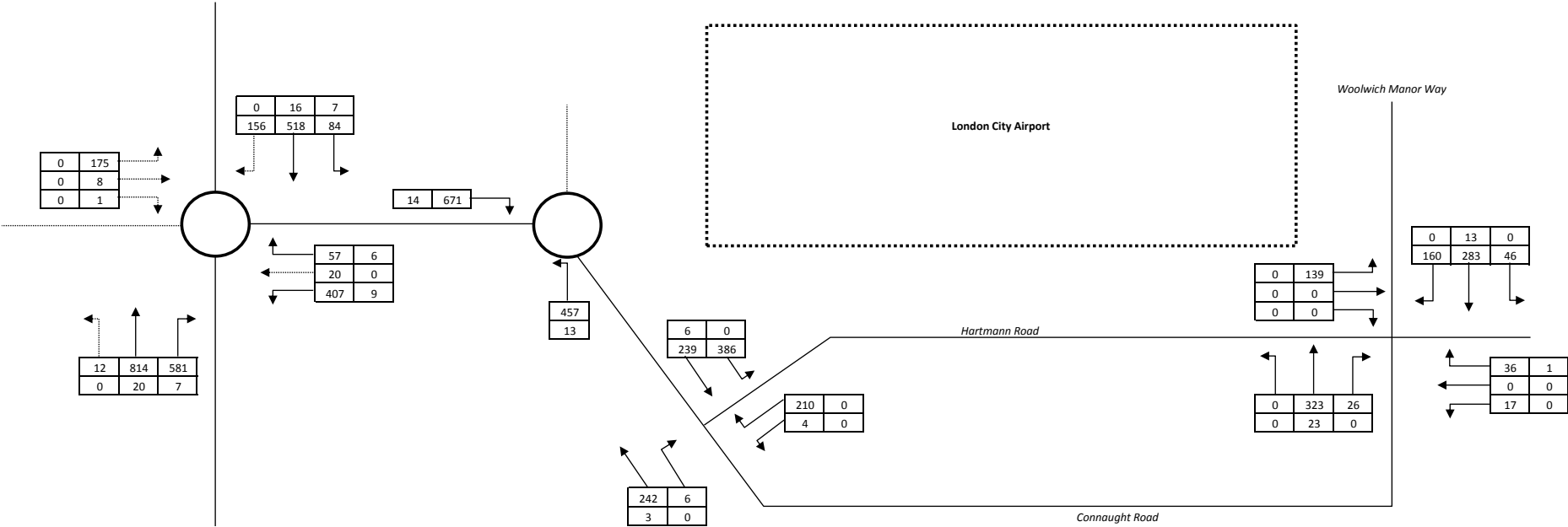
Traffic Figure 58: 2023 Base + Development Traffic Flows: Weekday AM Peak Hour - Turning Movements



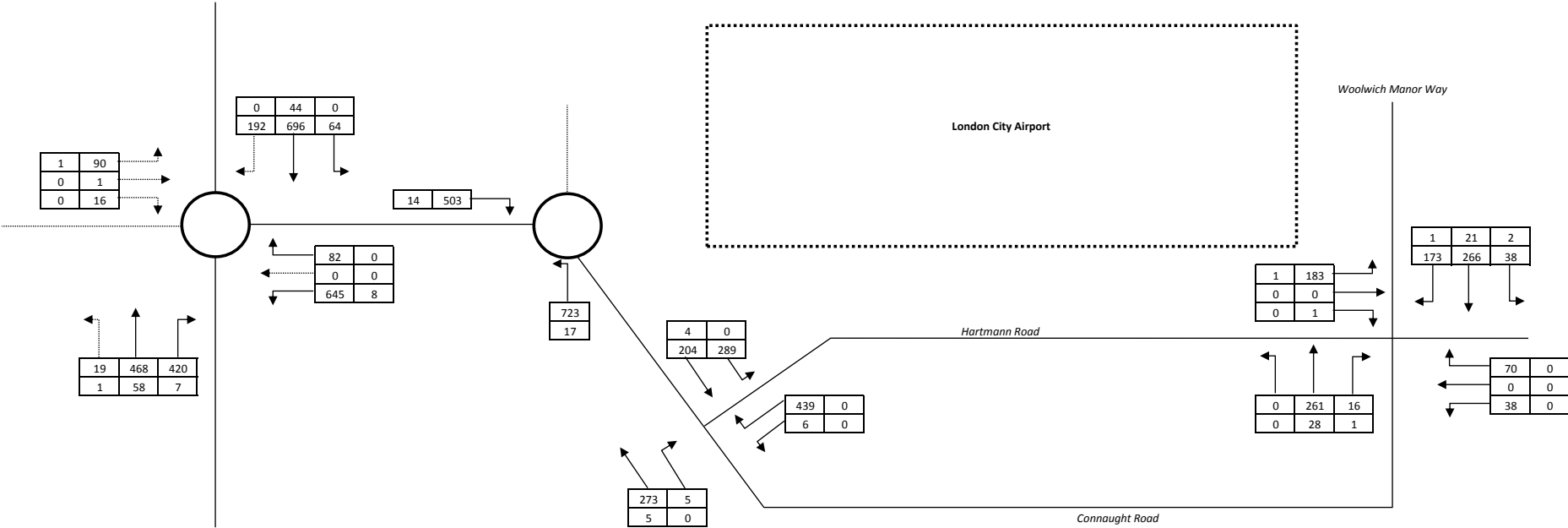
Traffic Figure 59: 2023 Base + Development Traffic Flows: Weekday PM Peak Hour - Turning Movements



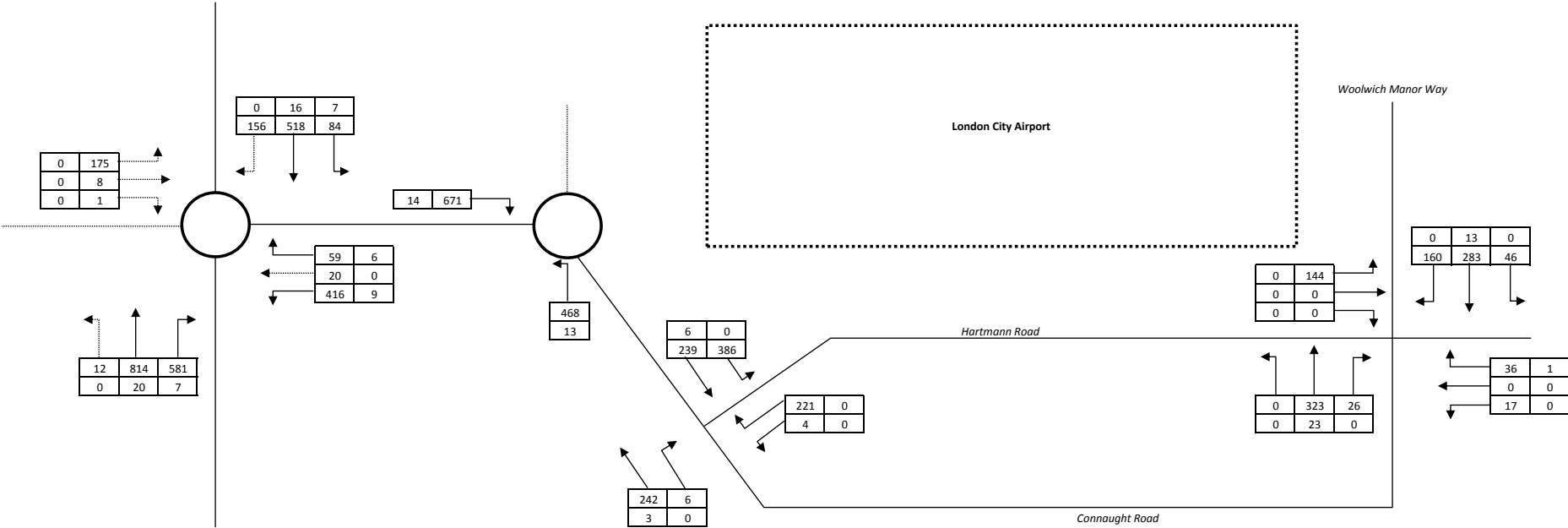
Traffic Figure 60: 2025 Base + Development Traffic Flows: Weekday AM Peak Hour - Turning Movements



Traffic Figure 61: 2025 Base + Development Traffic Flows: Weekday PM Peak Hour - Turning Movements

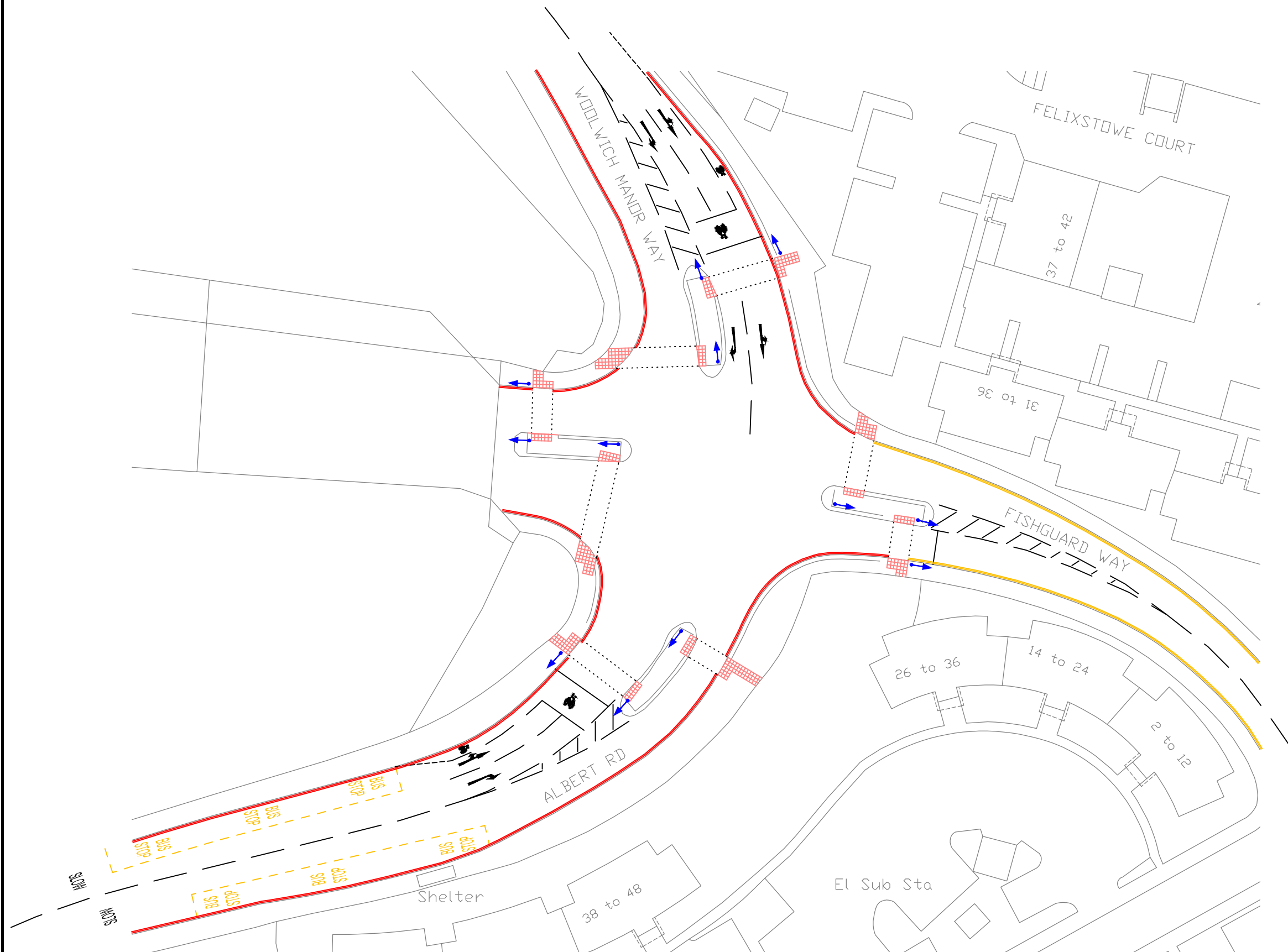


Traffic Figure 62: 2025 Base + Development Traffic Flows: Weekday AM Peak Hour - Sensitivity - Turning Movements



Traffic Figure 63: 2025 Base + Development Traffic Flows: Weekday PM Peak Hour - Sensitivity - Turning Movements

DRAWINGS



- Notes:
1. This is not a construction drawing and is intended for illustrative purposes only.
 2. White lining is indicative only.

REV.	DETAILS	DRAWN	CHECKED	DATE

CLIENT:
London City Airport Ltd

PROJECT:
City Airport ESD

DRAWING TITLE:
Existing Junction Layout

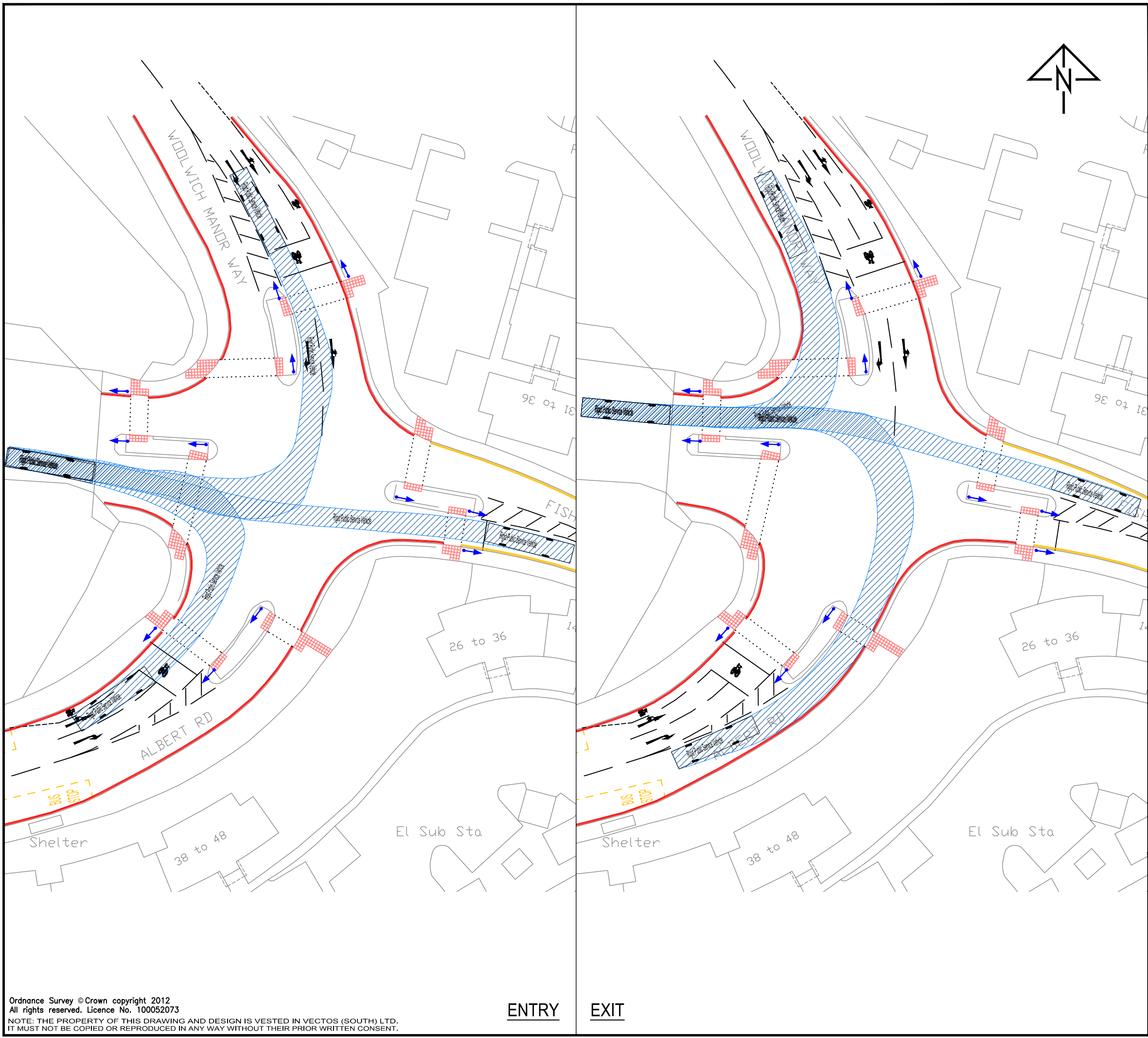
SCALES:
1:500 at A3

DRAWN: JM	CHECKED: EG	DATE: 23/01/2013
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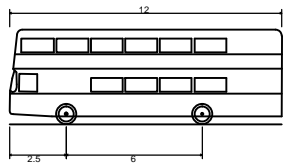


Network Building, 97 Tottenham Court Road, London W1T 4TP
t: 020 7580 7373 e: enquiries@vectors.co.uk

DRAWING NUMBER: 110116A/SK/01	REVISION: .
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- Notes:
1. This is not a construction drawing and is intended for illustrative purposes only.
 2. White lining is indicative only.



Rigid Public Service Vehicle
Overall Length 12.000m
Overall Width 2.550m
Overall Body Height 4.173m
Min Body Ground Clearance 0.344m
Track Width 2.550m
Lock to Lock Time 4.00s
Kerb to Kerb Turning Radius 10.500m

REV.	DETAILS	DRAWN	CHECKED	DATE
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CLIENT:

London City Airport Ltd

PROJECT:

City Airport ESD

DRAWING TITLE:

Swept Path
Bus

SCALES:

1:500 at A3

DRAWN: JM CHECKED: EG DATE: 01/02/2013



Network Building, 97 Tottenham Court Road, London W1T 4TP
t: 020 7580 7373 e: enquiries@vectos.co.uk

DRAWING NUMBER:

110116A/AT/A01

REVISION:

.

ENTRY

EXIT

APPENDIX A

Transport Scoping Report and TfL Response

London City Airport

Eastern Stand Development Project

Transport Scoping Report

December 2012

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Appendices

- Appendix A - Architect's Scheme Layout
- Appendix B - Airport Forecourt Layout

1 INTRODUCTION AND BACKGROUND

- 1.1 Vectos has been retained by London City Airport (LCY) to provide traffic and transportation advice in relation to their proposal for new and upgraded aircraft stands, an extension to the taxi-lane running adjacent to the runway, a new arrivals building, reconfigured forecourt area, hotel (in outline) and related infrastructure works.
- 1.2 This planning application, known as the Eastern Stand Development (ESD) project, forms part of planned on-going improvements at the Airport that will enhance operational efficiency, passenger service and capacity in accordance with current and future customer, airline and regulatory requirements. Such improvements are broadly consistent with the long term plans which were described in London City Airport's 2006 Master Plan.
- 1.3 Since 2007, there has been continued growth in the size of aircraft using the Airport. The aircraft are both physically larger and carry marginally more passengers, which has resulted in changes in the demand for airport infrastructure in the critical morning and early evening peak periods.
- 1.4 The new aircraft stands are required to accommodate new aircraft types, including the Bombardier C-Series which Swiss has advised it wishes to operate at LCY by 2015/16.
- 1.5 LCY is an international Airport primarily serving the business community of London. After many years of growth at the Airport, the recession contributed to a decline in passenger numbers between 2008 and 2010. Annual passenger numbers are now increasing again and in 2011 approximately 2.99 million passengers per annum (mppa) used the Airport, compared to 2.78 mppa in 2010, an increase of 7.6%.
- 1.6 In August 2011, the Department for Transport (DfT) published its latest Aviation Forecasts. In respect of London City Airport, the DfT anticipate it reaching 120,000 air transport movements by 2021 and handling approximately 7 mppa.
- 1.7 The ESD project would enable the Airport to accommodate 5.95 mppa on 107,008 scheduled movements by 2023, compared to 4.49 mppa on 87,602 scheduled movements without this planning application.

- 1.8 It is important to note that no increase in the permitted number of aircraft movements is being sought and the Airport will continue to be permitted to operate up to a maximum limit of 120,000 (noise factored) movements per annum, as approved by LBN in July 2009.
- 1.9 This scoping report sets out the background of the ESD project from a transport perspective, provides justification for the proposals, and sets out the further work that will be undertaken as part of the planning application submission.
- 1.10 The remainder of this scoping report is set out as follows:
- Section 2 – sets out a description of the existing conditions;
 - Section 3 – describes the existing passenger and staff travel patterns;
 - Section 4 - describes the proposals in detail;
 - Section 5 - describes the relevant transport policy;
 - Section 6 - considers the assessment on sustainable modes including the DLR;
 - Section 7 – considers the assessment of the highway network;
 - Section 8 – provides a summary.

2 EXISTING CONDITIONS

- 2.1 This section describes the existing conditions and transport characteristics at the Airport.

Site Location

- 2.2 **Figure 1** shows the London City Airport site in relation to the surrounding area and transport system. London City Airport is located between the Royal Albert Dock and the King George V Dock, adjacent to the Woolwich Reach and Gallions Reach of the River Thames.
- 2.3 The permitted and existing use of the site is as an International Airport. There are two elements to the Airport; the main Airport building with ancillary services and the Jet Centre that serves corporate clients.

Surrounding Area

- 2.4 The existing land uses in the vicinity of the site are varied and of mixed use. There are residential areas; industrial areas and commercial areas. There is a significant amount of planned development and regeneration in the vicinity of the Airport.
- 2.5 The Airport provides international links to cities in Europe and has excellent links to local public transport facilities that connect the Airport to London and its suburbs. The Airport also has an excellent domestic route network that is of value in terms of regeneration to the surrounding area.
- 2.6 The location of the Airport site is adjacent to a designated Air Quality Management Area (AQMA). The impact of the increase in flights on both air and noise is considered in the Environmental Statement.
- 2.7 There are no continuous movements of abnormal loads to and from the Airport by surface transport. However if they should be required, they will be considered within any application to the local highway authority should the need arise.

Local Road Network

- 2.8 The main trunk roads providing access to the Airport from the north are the east-west A13 and the A406 North Circular that connects with the M11 and M25 motorways. The Airport is just a mile from the A13 (Prince Regent's Lane junction), three miles from the A406 and 15

miles from the M25. In recent years, large sections of the A13 have been substantially upgraded and expanded. In particular the 10 mile stretch between Canning Town in Newham and Wennington near the junction with the M25 has been widened to three lanes in each direction. Grade separation at junctions with key north-south routes has relieved congestion at those junctions.

- 2.9 The A102(M) trunk road crosses the Thames north-south via the Blackwall Tunnel approximately three miles from LCY. Used intensively at peak periods, this is the nearest road river crossing point to the Airport.
- 2.10 The highway network in the vicinity of the Airport encompass a number of different routes. The highway runs eastwards from Tower Hill to Canary Wharf via the Limehouse Link. Aspen Way and the Lower Lea Crossing link the Blackwall Tunnel and the Isle of Dogs with the Royals. From the Lower Lea Crossing the Airport is accessed from the west via a four-lane single carriageway (Silvertown Way and North Woolwich Road).
- 2.11 The Royal Albert Way is a two-lane dual carriageway that links the Airport, via the Connaught Bridge to the A1020 and the A406/A13 intersection, just three miles north-east of the Airport. Albert Road links the Airport with Woolwich and the Woolwich Ferry river crossing. The Airport is connected to Connaught Bridge via Connaught Road and the Airport's own access road, Hartmann Road.
- 2.12 The junction of Hartmann Road with the A112 Connaught Road is signal controlled. There are no access constraints on the local highway network for any mode of movement to and from the Airport.

Car Parking

- 2.13 There are two main car parking areas within the Airport, shared between passengers and staff. The short stay car park is located closest to the terminal building; and the main stay car park adjacent to this. Staff parking is available within both the short and main stay car parks. Staff are required to apply for and display a parking permit.
- 2.14 Both short stay and main stay car parks are pay on exit and barrier controlled, with the access from Hartmann Road. The current fee schedule for the two car parks for passengers is shown in **Table 2.1**.

Table 2.1: December 2011 Parking Charges at LCY

Short Stay Car Park		Main Car Park	
Hours	Price	Hours	Price
0 - 0.5	£5.50	0 – 4	£16.00
0.5 - 1	£10.00	4 – 8	£18.00
1 – 2	£14.00	8 – 12	£22.00
2 – 4	£18.00	12 – 24	£40.00
4 – 8	£22.00	24 – 36	£60.00
8 – 12	£30.00	36 – 48	£80.00
12 – 24	£45.00	Additional 24 hours	£40.00
24 – 36	£75.00		
36 – 48	£90.00		
Additional 24 hours	£45.00		

- 2.15 The short-stay car park has 148 spaces whilst the long-stay car park has 644 spaces. In addition to this, there are 120 parking spaces allocated to car hire companies. These are located adjacent to Hartmann Road.

Accident Analysis

- 2.16 An analysis will be undertaken of Personal Injury Accident (PIA) data for the most recent 5 year period. The extent of the personal injury accident (PIA) investigation area is Connaught Bridge, the roundabout junction with Hartmann Road, the full length of Hartmann Road, Connaught Road up to its junction with Kennard Street and Woolwich Manor Way between Barge House Road and Fishguard Way. This is shown on **Figure 2**.

Accessibility by Non-Car Modes

- 2.17 A key factor in determining the suitability of a location is its accessibility by non-car modes of transport. This helps to reduce the reliance on the use of the private car as well as promoting the aims of sustainable travel choices.
- 2.18 The following section considers the accessibility of the Airport by walking, cycling and public transport.

Walking

- 2.19 London City Airport is very accessible on foot from the surrounding residential and commercial areas. The footways on the surrounding highways are lit, well maintained, are of sufficient width for their purpose and free of surplus street furniture. There are clear defined routes for pedestrians to use in and around the airport. There are controlled pedestrian facilities at the traffic signal controlled junction of Connaught Road and Hartmann Road.
- 2.20 Because of these facilities local residents and visitors to the area can walk to the Airport in order to catch bus services and the DLR.
- 2.21 Being a predominantly business orientated Airport the likelihood of many passengers walking to the Airport is limited, however a number of staff working within the Airport do live locally and walk to work. The most recent sample staff survey undertaken in September 2011 showed that 7% of the staff walk to work, a significant increase in the 2% of staff who walked to work in 2009. This illustrates the potential importance of walking as a mode of travel to the Airport, particularly for staff.
- 2.22 During the traffic surveys undertaken in 2010 / 2012, most pedestrian activity at the Airport was observed to be, to and from the car parks and the offices at City Aviation House.

Cycling

- 2.23 There are covered cycling parking stands located beneath the DLR adjacent to the motorcycle parking. These stands are opposite the main entrance to the Airport Terminal and can be utilised free of charge. Cycle stands are most likely to be used by staff, however there is still a significant number of unoccupied cycle stands available throughout the day.

Taxi

- 2.24 The current arrangement for taxi services is that on arrival at the airport with passengers, the taxi will drop passengers at the front of the terminal building. Once the passenger has paid the taxi fare, the vehicle departs from the drop off/pick up area and either turns right away from the Airport or turns left and joins the back of the taxi rank that extends towards the Airport parking areas.

- 2.25 The use of taxis helps to reduce the demand for parking spaces and the use of private motor vehicles. Taxis are often considered a more convenient form of transport for people with special mobility needs.
- 2.26 Taxis perform an important role as a public transport provider by reducing the passenger's reliance on the private car. They are particularly useful for passengers using the airport from Central London because they are not restricted to a time table or constrained by fixed routes. Taxis also fulfil a demand that cannot be met by bus, train or tube, especially early in the morning or late at night.
- 2.27 There is a large taxi rank at the entrance to the airport main terminal and therefore passengers arriving on a flight at the airport benefit from the close proximity of waiting black cabs.
- 2.28 On a typical busy day in 2012 there were 12,001 passengers using the airport. Travel surveys undertaken between 2009-2012 show that on average 14.7% of passengers used Black cabs and 16.8% used Minicabs to arrive at the airport; this is the equivalent of 3,780 passengers using taxis on a typical busy day in 2012.

Buses

- 2.29 There are bus stops adjacent to the 'ready' hire car parking area outside the terminal building on Hartmann Road and adjacent to the Jet Centre (used by staff, crew and passengers). All buses that visit the site perform a 'U' turn around the pick up/drop off area so only single stops are required ensuring that passengers do not have to cross Hartmann Road to get to the stops.
- 2.30 The Airport is served by two Transport for London Bus Services, the 473 and the 474.
- 2.31 The 473 service provides a bus that travels from Stratford – Plaistow – LCY - North Woolwich, departing about every 9-13 minutes from the terminal forecourt in both directions. The service commences from Stratford at 05:04 (06:11 Sunday) with the last bus at 01:14. The first bus from North Woolwich departs at 04:30 (05:39 Sunday) with the last bus at 00: 16.
- 2.32 The 474 bus runs along the route connecting Canning Town – LCY - North Woolwich – Beckton – East Ham – Manor Park, departing about every 10-13 minutes in both directions from the terminal forecourt. The service operates over a 24 hour period, 7 days a week. .

2.33 Passenger travel surveys show that between 2009-2012 approximately 0.3% of passengers use buses to arrive at the airport; this is the equivalent to an average of 36 passengers on a typical busy day in 2012.

2.34 It is noted that bus usage is greater amongst staff, with around 9-10% of the mode share.

Docklands Light Railway (DLR)

2.35 The DLR opened in 1987 to serve the first developments in Docklands, with eleven trains and fifteen stations. Since then, a number of extensions have been seen; the DLR has progressively been extended to Bank, Beckton, Lewisham, Stratford International and Woolwich Arsenal via London City Airport. The DLR London City Airport extension, opened in December 2005 with the extension onwards to Woolwich Arsenal completed in 2009. The section between Canning Town and London City Airport is known as 'the Airport route.'

2.36 The DLR is extensive and currently comprises a 34 km railway with 40 stations and more than 100 trains. According to Transport for London (TfL), DLR carries almost 70 million passengers, with this expected to rise to more than 100 million in 2012. DLR is a fully accessible and fully integrated railway - it connects with more than 100 bus routes, five mainline railways, eight Underground lines and coach, taxi and river services.

2.37 DLR operates between 05:30 – 00:30 on Monday to Saturdays and between 07:00 – 23:30 on Sundays.

2.38 In January 2012 DLR confirmed that trains on the Bank → Woolwich Arsenal service have been increased from two to three-carriage trains, to help accommodate increasing DLR passenger numbers using the service from Woolwich Arsenal. The new three-carriage trains will provide extra capacity and enhanced comfort for passengers.

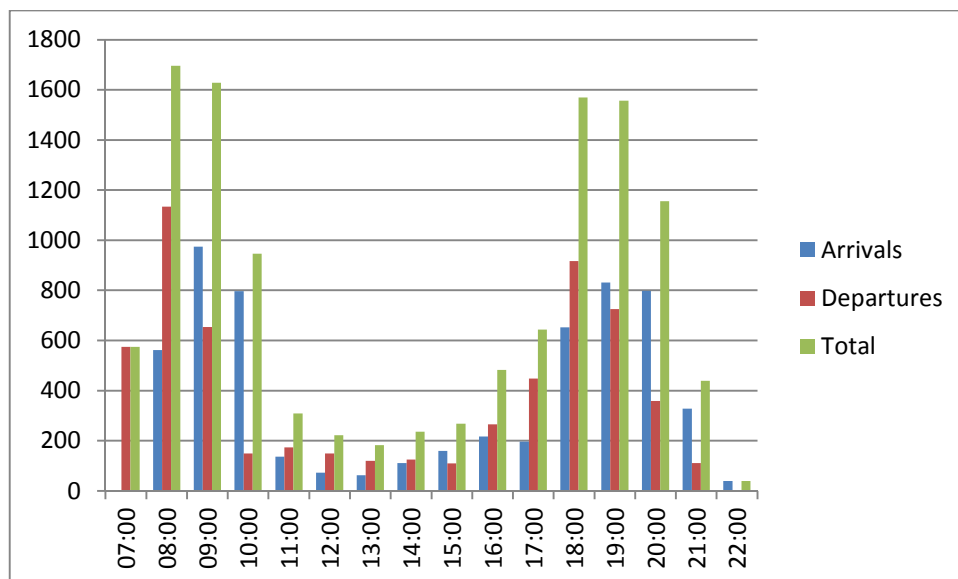
2.39 Travel surveys undertaken between 2009-2012 show that the DLR mode share has fluctuated between 46-56%, with an average of 51.5%. During a typical busy day during 2012, this equated to an average of 6,181 passengers per day.

3 EXISTING TRAVEL PATTERNS

Passenger Profile

- 3.1 In the calendar year 2011 there were 2,992,847 passengers passing through the airport, including passengers travelling on flights at the Jet Centre. Overall this is an increase of 7.1% on 2010, when there were 2,780,582 passengers passing through the airport.
- 3.2 At the same time the total number of aircraft movements at the Airport increased marginally from 67,871 in 2010, to 68,100 in 2011.
- 3.3 **Chart 3.1** shows the daily passenger profile of passengers accessing the airport during 2012. This takes into account that on average, passengers arrive 1 hour and 15 minutes prior to their flight departing from the airport if travelling on a scheduled flight, and 15 minutes if flying from the Jet Centre. When a flight arrives at the airport it takes on average 15 minutes for passengers to depart from the airport from both the scheduled flights and Jet Centre.

Chart 3.1: 2012 Daily Passenger Profile



- 3.4 Chart 3.2 shows that the busiest hours of the day for accessing the Airport are during 08:00 – 09:00 and 18:00 – 19:00. There is a noticeable dip in passengers at the Airport between 10:00 and 16:00 and after 20:00 in the evenings.

- 3.5 In terms of the types of passengers using London City Airport, a survey undertaken in 2010 indicates that 63% of passengers are travelling for business purposes, which is substantially higher than the average for the other London airports. Around 32% of passengers using London City Airport for business travel were foreign resident, compared with around 17% using Heathrow.

Staff Numbers

- 3.6 Baseline employment data shows that in 2010 shows that there were an estimated 2,264 FTE employees dependent on the Airport; broken down between 1,955 direct employees (principally on-site), 197 indirect employees and 112 induced employees located in the surrounding areas.
- 3.7 The greatest proportion of employees are employed in Airline / Passenger Handling with 30% of the total, followed by 27% employed by the Airport Operator.
- 3.8 The latest staff travel survey reveals that 74% of staff employed at the Airport work shifts, as opposed to regular office hours. This is demonstrated by the fact that 44% of staff regularly start work between 05:00 – 06:00 and 56% of staff regularly finish work between 21:00 – 24:00. This reduces the proportion of staff travel during peak hours, but limits the choice of modes available for travel to work.

Mode Split

Passengers

- 3.9 LCY, as part of its on-going monitoring programme, undertakes regular passenger surveys. As part of this survey it asks passengers their last mode of transport to the Airport. The latest survey for which information is available was undertaken in June 2012. The results of this and other surveys undertaken over the past six years are summarised in **Table 3.1**.

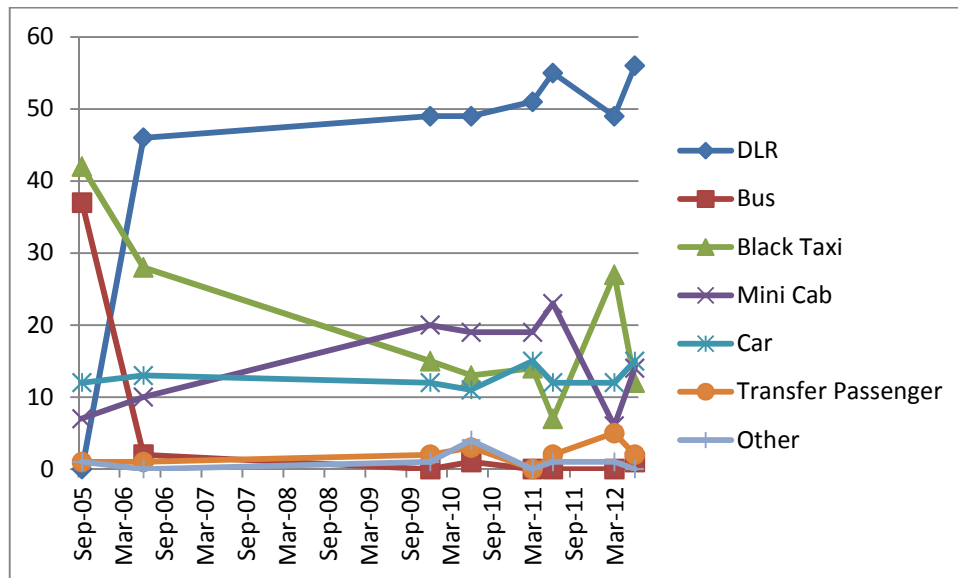
Table 3.2: Change in Mode Split over time - ALL Passengers

	DLR	Black Cab	Minicab	Car	Bus	Transfer	Other	Total
Sept 2005	0%	42%	7%	12%	37%	1%	1%	100%
June 2006	46%	28%	10%	13%	2%	1%	0%	100%
Dec 2009	49%	15%	20%	12%	0%	2%	1%	100%
June 2010	49%	13%	19%	11%	1%	3%	4%	100%
Mar 2011	51%	14%	19%	15%	0%	1%	0%	100%

Jun 2011	55%	7%	23%	12%	0%	1%	0%	100%
Mar 2012	49%	27%	6%	12%	0%	5%	1%	100%
June 2012	56%	12%	14%	15%	1%	2%	0%	100%
Av. 2009 - 2012	51.6%	14.7%	16.9%	12.9%	0.3%	2.4%	1.2%	100.0%

3.10 **Chart 3.2** illustrates the change in mode split over time between 2005 and 2012.

Chart 3.2: Change in Mode Split over time 2005 - 2012



3.11 Table 3.1 and Chart 3.2 reveals that the mode split has fluctuated since the introduction of the DLR in December 2005. Between 2009 and 2012, DLR mode share varies between 49% and 56%, with an average of 51.6% using the DLR. The average for Black Cabs / Minicabs and Private Car is similar, between 14.7% - 16.9% respectively. Bus usage is low at between 0% and 1% whilst transfer passengers (those who arrive on one flight and depart on another without leaving the Airport) comprise an average of 2.4%.

3.12 Since LCY has such a high proportion of passengers using public transport to access the Airport, it can be regarded as one of the most sustainable transport developments within London.

3.13 The use of the mode split figures from LCY's passenger surveys has previously been agreed with DLR, since DLR do not collect this data themselves.

Staff

- 3.14 London City Airport is committed to monitoring staff travel patterns through its Travel Plan. The latest staff travel survey was undertaken during September 2011. A total of 514 staff completed the questionnaire and provided information on their last mode of transport to work. The results of this survey, as compared to the previous survey in 2009, are included in **Table 3.3.**

Table 3.3: Change in Mode Split over time - Staff

	DLR	M'cab	Car	Bus	Walk	Cycle	M'bike	Other	Total
Sept 2009	19%	1%	66%	9%	2%	1%	1%	0%	100%
Sept 2011	22%	3%	53%	10%	7%	2%	2%	1%	100%

- 3.15 Table 3.3 illustrates that the greatest proportion of employees travel by car with 53% of the total in 2011. This is followed by DLR with 22% and bus with 10%. Compared to the 2009 survey, the proportion of car travel has decreased, with walking seeing the greatest increase in mode share from 2% to 7%.

4 DEVELOPMENT PROPOSALS

Scheme Elements

- 4.1 The Eastern Stand Development Project will allow the Airport to accommodate a new generation of aircraft as well as improving the facilities for passengers.
- 4.2 The application proposals specifically comprise the following elements:
- Seven new aircraft stands and reconfiguration of existing stands 21-24
 - New entry/exit links to the runway and an extension of the taxilane running adjacent to the runway
 - New arrivals building and terminal forecourt
 - New hotel (in outline)
 - New Multi-Storey Car Park
- 4.3 A copy of the Architect's Scheme Layout is shown in **Appendix A**.

Phasing

- 4.4 The indicative phasing for the construction of the proposals is as follows:
- Phase 1 (2016): 5 additional stands and extension to the taxi-lane; first phase of new arrivals building and forecourt
 - Phase 2 (2019): 2 additional stands; second phase of construction of arrivals building and forecourt.
 - Phase 3 (2021): Completion of construction for the ESD project.

Vehicle Access

- 4.5 Vehicle access will continue to be provided from the junction of Hartmann Road / A1011 Connaught Road.
- 4.6 In addition, it is proposed to create a further permanent access and vehicle link to the Airport from the junction with the A117 Woolwich Manor Way / Fishguard Way. The link already exists and has previously provided access to the Airport for staff and most recently

has provided temporary access during the Olympics. The link is within LCY's ownership and it provides a direct connection between the eastern end of Hartmann Road and the signalised junction with the A117 Woolwich Manor Way / Fishguard Way. The link is shown on **Figure 3**.

- 4.7 Provision of the additional access improves the Airport's resilience, as well as shortening the distance travelled on the local highway network for journeys to / from the east. In particular, it will reduce the number of LCY related vehicles using the A1020 Royal Albert Way.

Airport Forecourt

- 4.8 The Airport Forecourt is being relocated and redesigned to provide sufficient capacity to accommodate the predicted increase in passengers of up to 6 mppa. A copy of the Forecourt Layout is provided at **Appendix B**.
- 4.9 The forecourt has been relocated eastwards from its current location to enable the construction of the new arrivals building and for a 30m exclusion zone prohibiting vehicular activity near the arrivals building.
- 4.10 The forecourt has been redesigned to provide additional capacity in accordance with the predicted increase in demand for each mode utilising the forecourt. The key features of the design are as follows:
- Black taxi drop-off and pick-up located adjacent to the footway fronting the terminal
 - Black taxi pick-up queue located in two lanes within the forecourt with a further taxi feeder park located on land towards Kind George V
 - Two bus stops located in laybys on Hartmann Road
 - Car pick-up and drop-off lanes provided with wide footways and pedestrian crossings linking to the terminal
 - Blue badge pick-up / drop-off facility located nearest to the terminal
 - A new roundabout to facilitate the efficient movement of vehicles between the forecourt and Hartmann Road

Car Parking

- 4.11 Passengers and staff currently share the short stay and main stay car parks. It is proposed to provide separate passenger and staff car parks with passenger parking to be provided in a new multi-storey car park whilst staff parking will be provided in a new surface level car park near to King George V Dock. This enables staff and passenger parking to be managed and monitored separately.
- 4.12 The existing and proposed car parking provision is set out in **Table 4.1**.

Table 4.1: Car Parking Provision

	Existing	Proposed
Short Stay	148	200
Main Stay	644	550
Staff	Within short and main stay	300*
Car Hire	120	150
Total	912	1,200

** subject to confirmation of future staff numbers*

- 4.13 Table 4.1 shows that it is proposed to increase the parking provision from 912 spaces to 1,200 spaces. This increase is not pro rata to the increase in passengers and staff that will be associated with the proposals, demonstrating the Airport's commitment to encourage travel by sustainable modes.
- 4.14 However, it is necessary to ensure that an appropriate parking provision is provided in order to minimise the potential for overspill parking on surrounding residential roads which do not have parking controls. Hence the passenger car park has been designed in order that it operates at capacity at peak times and assuming that a realistic mode shift to other modes has been achieved (as set out in Tables 4.6 and 4.7). Similarly, the staff parking provision seeks to encourage a high mode share by sustainable modes, whilst recognising that many staff frequently work shift patterns with anti-social hours when public transport options are limited. Staff parking provision will be finalised once the future staff numbers have been confirmed.

Passenger Numbers

- 4.15 The 2009 planning consent allows the annual number of permitted aircraft movements at LCY to grow to 120,000 'noise-factored' movements. The forecasts made in 2006 (and used to inform the 2007 ES which accompanied the planning application), predicted that the 120,000 movement limit would be reached in 2010, of which 25,000 movements were predicted to derive from the Jet Centre, with the number of passengers carried reaching 3.9 million per annum. The projected increase in movements failed to materialise, due primarily to the global recession.
- 4.16 However, the effect of the recession has seen airlines introduce larger more fuel efficient aircraft, with lower seat mile costs. The recession has also driven to the demand for peak period flights higher, with less peak spreading than anticipated at the time of forecasts prepared pre-recession. Hence, revised aircraft and passenger forecasts for the period between 2011 and 2023 have been prepared by York Aviation LLP.
- 4.17 A comparison of the aircraft size and capacity of the current and future fleet mix is provided in **Table 4.2**.

Table 4.2: Aircraft Size and Capacity

Aircraft	Seats	Wingspan (m)	Length (m)	Height (m)
Existing				
BAE 146 / RJ 100	82-112	26.21	30.99	8.61
Bombardier Dash 8 / Q400	70-78	28.42	32.84	8.36
Dornier Do328	33-39	20.98	21.22	7.24
Embraer 170	76	26.00	29.90	9.67
Embraer 190	98-112	28.72	36.24	10.28
Fokker F50	50	29.00	25.25	8.32
ATR-42	46-50	24.57	22.67	7.59
ATR-72	68-74	27.10	27.20	7.65
Saab 2000	50	24.76	27.28	7.73
Future				
A318	32 - 107	34.09	31.45	12.56
Embraer 170	76	26.00	29.90	9.67
Embraer 190	98-112	28.72	36.24	10.28
Bombardier CS 100	110	35.05	34.9	11.5
Bombardier Q400	78	28.42	32.84	8.36
ATR-42	46-50	24.57	22.67	7.59

ATR-72	68-74	27.10	27.20	7.65
Saab 2000	50	24.76	27.28	7.73

- 4.18 Table 4.2 shows that whilst the future fleet are physically larger in terms of wingspan, length and height, there is only a marginal difference in seating capacity.

Annual Passenger Numbers

- 4.19 The annual aircraft movements / passenger numbers both With and Without Development are set out in **Table 4.3**.

Table 4.3: Annual Passenger Numbers

	2010	2021		2023	
	Existing	With Dev.	Without Dev.	With Dev.	Without Dev.
Scheduled Movements	59,752	104,790	87,602	107,008	87,602
Passengers	2,780,582	5,564,134	4,443,308	5,948,078	4,490,523

Source: York Aviation

- 4.20 This shows that passenger numbers are predicted to increase incrementally from 2.78 mppa in 2010 to 5.95 mppa in 2023 With Development compared to 4.49 mppa Without Development. The difference in passenger numbers With and Without Development occurs as a result of the difference in scheduled movements.

Peak Hour Passenger Numbers

- 4.21 Growth in scheduled movements and passenger numbers is driven by the Airport's primary role in supporting the business travel needs associated with the Docklands Financial Services cluster, resulting in a greater dependence on peak period travel compared to other airports which have a broader mix of passenger types, allowing a greater spread of services.
- 4.22 The ESD project facilitates a change to the daily profile of passengers arriving / departing the Airport, compared to the Without Development scenario. The proportions in the peak periods are similar, but there will be a higher demand in the off peak period in the With Development scenario.

- 4.23 A Load Factor is the proportion of passenger seating capacity occupied on a plane. Load factors are predicted to vary throughout the day, with higher load factors at peak times which is driven by higher demand. The peak period load factors both With and Without Development are shown in **Table 4.4**.

Table 4.4: Peak Period Load Factors

	2021		2023	
	With Dev.	Without Dev.	With Dev.	Without Dev.
Peak Periods	85%	90%	85%	90%

- 4.24 As can be seen from **Table 4.4**, peak period load factors are predicted to be 85% With Development and 90% Without Development. Load factors are higher Without Development because of the shortage of peak period flights whilst demand remains the same both With and Without Development. In other words, the With Development scenario enables demand to be spread across a greater number of flights.
- 4.25 Peak hour load factors will never reach 100% because airlines need to maintain a proportion of free seats on all flights, particularly during peak times, in order to accommodate those passengers with flexible tickets who require a seat on their desired flight. In the With Development scenario, it is anticipated that the airlines will be able to operate more off-peak services to match their growth in peak operations, and this further explains the difference in peak load factors between scenarios, as a greater proportion of peak services may be booked but unused, as passengers switch to a more convenient flight through the day.
- 4.26 The change in passenger numbers accessing the Airport has been calculated for the network peak hours for the weekday AM peak hour of 08:00 – 09:00 and for the weekday PM peak hour of 17:00 – 18:00. This takes into account that on average, passengers arrive 1 hour and 15 minutes prior to their flight departing from the airport if travelling on a scheduled flight, and when a flight arrives at the airport it takes on average 15 minutes for passengers to depart from the airport
- 4.27 The resultant peak hour passenger numbers accessing the Airport in 2021 and 2023 are shown in **Tables 4.5** and **4.6**.

Table 4.5: 2021 Peak Hour Passenger Numbers

	AM Peak (08:00 – 09:00)			PM Peak (17:00 – 18:00)		
	Arr's	Dep's	Total	Arr's	Dep's	Total
Without Development	761	1,528	2,290	315	670	985
With Development	677	1,717	2,394	379	711	1,089
Change	-85	189	104	63	41	105

Table 4.5: 2023 Peak Hour Passenger Numbers

	AM Peak (08:00 – 09:00)			PM Peak (17:00 – 18:00)		
	Arr's	Dep's	Total	Arr's	Dep's	Total
Without Development	761	1,508	2,270	315	670	985
With Development	695	1,785	2,480	465	748	1,213
Change	-66	277	211	150	78	228

- 4.28 This shows that during the AM peak hour there would be a 211 increase in passengers compared to the Without Development scenario, whilst during the PM peak hour there would be a 228 increase in passengers compared to the Without Development scenario.
- 4.29 The impact of this variation in passenger numbers will be considered on the main transport modes used to access the Airport, especially in the weekday peak hours.

Staff Numbers

- 4.30 The ESD project will increase the number of staff employed at the Airport. The change in staff numbers is currently being calculated by York Aviation and will be assessed within the Transport Assessment.

Mode Split

Passengers

- 4.31 The mode split assumptions for passengers is set out in **Table 4.6**.

Table 4.6: Mode Split - Passengers

Mode	Existing	2021 / 2023
Private car parked at Airport	2.3 %	2.0 %
Dropped off by car	5.3 %	4.8 %

Rented car	1.4 %	0.8 %
Chauffeur driven car	3.8 %	3.5 %
Minicab	16.9 %	13.0 %
Black Taxi	14.7 %	12.0 %
DLR	51.6 %	60.0 %
Bus	0.3 %	0.3 %
Transfer	2.4 %	2.3 %
Other	1.2 %	1.2 %
TOTAL	100 %	100 %

- 4.32 The existing mode split is the average between 2009 – 2012, as set out in Section 3. The future year mode split is considered to represent the maximum mode share for the DLR, taking into the fact that DLR mode share has not increased substantially since the Airport branch opened, and also the Airport’s aspiration to maximise the use of public transport as a means of surface access. Notwithstanding this, it is still considered that it may be difficult to achieve a 60% mode share for the DLR.

Staff

- 4.33 The starting point for estimating the mode split for staff will be the existing mode split as collected through the staff travel surveys. However, it is anticipated that the proportion of staff travelling by sustainable modes will increase with the continued implementation of the Airport’s Travel Plan.

Travel Plan

- 4.34 The Airport has implemented a Travel Plan. This will be reviewed and updated in the context of the ESD Project. In particular, it is proposed to revise the restriction on maintaining the existing level of staff car parking, since this will not be possible to achieve with the significant increase in staff that will arise from the ESD project and that many staff frequently work shift patterns with anti-social hours when public transport options are limited.

Construction

- 4.35 The construction arrangements will be set out as part of the ESD project planning submission. This will include consideration of the transportation of construction materials to / from the Airport. Options for moving materials and plant by barge (in preference to HGV’s) are currently being examined.

5 POLICY CONTEXT

- 5.1 This section of the report considers the current and emerging planning policy guidance at National, Regional and Local level.

National Policy

The Future of Air Transport White Paper (2003) (ATWP) and Progress Report (2006)

- 5.2 The Executive summary of the ATWP states that “There is scope for other existing South East Airports, including London City, Norwich, Southampton and some smaller airports, to help meet local demand, and their further development is supported in principle, subject to relevant environmental considerations”.
- 5.3 The Air Transport White Paper, in the context of planned growth of airports, seeks to reduce or minimise the impacts of airports on those who live nearby and on the natural environment. Paragraphs 4.55-4.58 state:

“Ensuring easy and reliable access for passengers, which minimises environmental, congestion and other local impacts, is a key factor in considering any proposal for new airport capacity. All such proposals must be accompanied by clear proposals on surface access which meets these criteria.

Increasing the proportion of passengers who get to airports by public transport can help to reduce road congestion and air pollution. We expect airport operators to share this objective, and to demonstrate how they will achieve it in putting forward their proposals for developing new capacity.

Airports are part of our national transport infrastructure, and need to be planned and developed in that context. The Strategic Rail Authority and (for strategic roads within England) the Highways Agency will take full account of likely future airport development, and regional and local transport strategies should do the same.

The Government expects developers to pay the costs of up-grading or enhancing road, rail or other transport networks or services where these are needed to cope with additional passengers travelling to and from expanded or growing airports. Where the scheme has a

wider range of beneficiaries, the Government, along with the devolved administrations, the Strategic Rail Authority, the Highways Agency and local authorities, will consider the need for additional public funding through their investment programmes on a case-by-case basis. ...”.

5.4 In paragraphs 11.9 of the ATWP it is made clear that it supports the development of smaller South East Airports subject to relevant environmental considerations.

5.5 The ATWP, in the context of planned growth of airports, seeks to reduce or minimise the impacts of airports on those who live nearby and on the natural environment.

5.6 With regards surface access, the Progress Report notes that:

“We continue to encourage airport operators to increase the use of public transport to help reduce road congestion and air pollution.”

5.7 The Progress Report further notes that:

“The airport continues to be an important factor in local regeneration, business development, transport and tourism infrastructure.”

National Planning Policy Framework (NPPF)

5.8 The National Planning Policy Framework sets out the Government’s planning policies for England and how these are expected to be applied.

5.9 One of the 12 core land-use principles within the NPPF includes:

“[to] actively manage patterns of growth to make the fullest possible use of public transport, walking and cycling, and focus significant development in locations which are or can be made sustainable.”

5.10 Section 4 of the NPPF deals with ‘Promoting sustainable transport.’ Paragraph 29 states that:

“the transport systems needs to be balanced in favour of sustainable transport modes, giving people a real choice about how they travel.”

5.11 Paragraph 32 sets out the transport issues which should be addressed within Development Plans and decisions. These are:

- *“the opportunities for sustainable transport modes have been taken up depending on the nature and location of the site, to reduce the need for major transport infrastructure;*
- *safe and suitable access to the site can be achieved for all people; and*
- *improvements can be undertaken within the transport network that cost effectively limit the significant impacts of the development. Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe.”*

Draft Aviation Policy Framework (July 2012)

5.12 Paragraph 2.80 of the Draft Aviation Policy Framework states that:

“High quality, efficient and reliable road and rail access to airports contributes greatly to the experience of passengers, freight operators and people working at the airport.”

5.13 Paragraph 6.9 states that:

“All proposals for airport development must be accompanied by clear surface access proposals which demonstrate how the airport will ensure easy and reliable access for passengers, increase the use of public transport by passengers to access the airport, and minimise congestion and other local impacts.”

Regional Policy

Mayor’s Transport Strategy (May 2010)

5.14 One of the key objectives of the Mayor’s Transport Strategy (MTS) is that:

‘London’s transport system should excel among those of world cities, providing access to opportunities for all its people and enterprises, achieving the highest environmental standards and leading the world in its approach to tackling urban transport challenges of the 21st century.’

5.15 The MTS further recognises that:

“As the economy of east London has changed, developments such as Canary Wharf, ExCel and The O2 have increased the demand for travel across the river significantly. Many of the large new economic drivers for London are located in east London, with the majority of these

lying north of the river, such as the Olympic Park and adjacent Stratford City development, Canary Wharf, ExCel and City airport.”

- 5.16 With regards Airport Policy, paragraph 435 states that:

“The Mayor recognises that adequate airport capacity is critical to the continued competitiveness of London’s economy. For this reason, the Mayor will consider whether optimum use is being made of existing airport infrastructure.”

- 5.17 On surface access to airports, the MTS states the following:

“TfL has worked with airport operators through their airport transport forums to help improve surface access to airports. Continued close engagement with airport operators and local boroughs will be essential to serve the increasing numbers of air passengers and encourage a shift from private car to reduce congestion and improve surrounding air quality.”

London Plan (July 2011)

- 5.18 Policy 6.6 of the London Plan deals with Aviation. Part B of the policy states that The Mayor:

“supports improvements of the facilities for passengers and other London airports in ways other than increasing the number of aircraft movements, particularly to optimise efficiency and sustainability, enhance the user experience and to ensure the availability of viable and attractive public transport options to access them.”

- 5.19 It continues to state that:

“Development proposals affecting airport operations or patterns of air traffic should:

Provide access to airports by travellers and staff by sustainable means, particularly by public transport.”

Local Policy

London Borough of Newham Core Strategy (January 2012)

5.20 London Borough Newham's Core Strategy was adopted in January 2012. It sets out to ensure that *"new development will achieve the Council's objective to make Newham a place where people will choose to live, work and stay"*.

5.21 Policy INF 2 on Sustainable Transport within the draft Core Strategy states that:

"Major development proposals that generate or attract large numbers of trips, including higher density residential and commercial development, should be located in areas with good public transport accessibility and demonstrate the existence of, or propose new safe, attractive walking and cycling routes to public transport nodes."

5.22 It continues to state that:

"Development proposals will not be supported where they would have an unacceptable adverse impact on the capacity or environment of the highway network. Where applicable proposals must be accompanied by Transport Assessments which show the likely impacts of trip generation, and which include acceptable robust, monitored proposals to counter or minimise the potential impacts; these include 'smarter travel' plans and measures to facilitate and encourage more widespread walking, cycling and public transport use."

Summary

5.23 London City Airport is recognised as a large economic driver in east London. There is general support for its development on the grounds of encouraging economic growth in the most efficient manner. Airport operators are also encouraged to engage stakeholders to improve access to airports by sustainable modes, reducing the proportion of trips by private car. The current development proposals accord with national, regional and local transport policies. London City Airport is accessible by public transport via black taxi, DLR and bus services providing connections locally within Newham by bus and via DLR to central London and Canary Wharf.

6 IMPACT ON SUSTAINABLE MODES

DLR

Study Area

- 6.1 It is proposed that the impact of the planning application will be considered on 'the Airport route' of the DLR network. This comprises the section between Canning Town and London City Airport. It is estimated that 90% of Airport-related DLR passengers arrive / depart using this section of the DLR.

DLR Loadings

- 6.2 DLR have agreed to provide passenger loadings for the Airport route for the weekday AM peak hour of 08:00 – 09:00. This is the busiest hour of the day on the DLR network.
- 6.3 For the future years this includes the predicted increase in DLR passengers associated with planned developments in the vicinity of the Airport route.

Assessment Years

- 6.4 An assessment of the capacity of the DLR Airport route will be conducted for the With / Without Development Scenarios:
- 2011: Baseline Year;
 - 2021: Movement Limit Year for the completed Development; and
 - 2023: Optimisation of the ESD Development and other associated improvements at the Airport.
- 6.5 The DLR loadings will be adjusted to take account of the anticipated Airport-related passengers in the With and Without Development Scenarios in the above assessment years.
- 6.6 It is noted that construction works will be completed in 2019, but this year will not be assessed in terms of surface access because passenger numbers are higher in both 2021 and 2023.

Crowding Factors

- 6.7 DLR apply crowding factors as a measure of capacity on the DLR network. Crowding factors are calculated on the number of standing passengers per sqm of standing space (ppm²). Factors are categorised according to the following scale:

Crowding level key

ppm ²	
0	No crowding (all passengers seated)
0-1	Slight crowding (some standing)
1-2	Medium crowding
2-3	Heavy crowding
3-4	Severe crowding
4-4.6	Maximal crowding (very close to capacity)
>4.6	Overcrowding* (beyond stated crush loads)

* NB that overcrowding would more likely result in queuing on platforms instead

- 6.8 DLR consider that 'planning capacity' is reached at 3 ppm², after which there is potential for passengers to be left behind at stations. However, the actual capacity of a train is reached at 4.6 ppm². DLR reduce the amount of available standing space on the Airport route by 15% to take account passengers with luggage.
- 6.9 A crowding factor is calculated for each link in both directions on the Airport route.

Crossrail

- 6.10 The Airport anticipates that Crossrail will have a broadly neutral impact on future passenger numbers, as whilst Crossrail will improve the accessibility of Heathrow, it will also improve the accessibility of the Airport from Westminster.
- 6.11 Similarly, it is not anticipated that Crossrail will have an impact on the mode split of passenger and staff travel to the Airport. This is because there will not be a direct link to Crossrail from LCY. The nearest Crossrail station will be at Custom House.

Buses

- 6.12 The proportion of passengers travelling to the airport by bus is between just 0-1%. Thus, the projected increase in passengers travelling to and from the airport during the AM and PM peak hours is low in 2021 and 2023. A greater proportion of staff travel to / from the Airport by bus, with the mode share varying between 9%-10%.

- 6.13 As there are in the order of 11 buses per hour calling at the airport during peak periods, it is not considered that the marginal increase in bus passengers in the peak hour arising from this planning application will have any impact upon the operation of these services. It is likely that this increase will be well within daily fluctuations that would occur in any event.
- 6.14 It is, therefore, not proposed to undertake any further assessment of bus capacity.

Taxis

- 6.15 The Transport Assessment will set out the difference in number of taxi passenger using both black cabs and minicabs.
- 6.16 Taxi occupancy rates have been obtained from a survey undertaken in November 2010. These are 1.32 passengers per black cabs and 1.34 for minicabs.
- 6.17 The impact of additional taxis will be considered as part of the impact on the road network.

Walking and Cycling

- 6.18 No changes are proposed to the walking and cycling facilities in the vicinity of the Airport. It is anticipated that the existing infrastructure is sufficient to accommodate the change in demand.

7 IMPACT ON THE ROAD NETWORK

Methodology

- 7.1 This section of the scoping report summarises the methodology that will be used to assess the impact on the highway network.

Traffic Assignment

- 7.2 Data showing the distribution of car journeys collected as part of the regular LCY passenger surveys will be used to determine the assignment of Airport-related traffic, once the additional access to the A1011 Woolwich Manor Way has been implemented.

Study Area

- 7.3 The change in daily traffic flows will be considered for the study area. The scope of the study area is shown on **Figure 4**.
- 7.4 For the purposes of further assessment of the traffic impact during peak hours, the study area for the Transport Assessment includes the following junctions:
- Hartmann Road / Connaught Road;
 - Connaught Road / Connaught Bridge Road; and
 - Proposed Access / A1011 Woolwich Manor Way / Fishguard Way
- 7.5 Detailed capacity analyses will be undertaken at the above junctions.

Data Collection

- 7.6 In order to understand existing traffic movements on the highway network surrounding the Airport, the following set of surveys were commissioned:
- Automatic Traffic Counters undertaken between Monday 15th November and Sunday 21st November 2010 or Tuesday 13th November and Monday 20th November 2012;
 - Weekday AM and PM peak period manual classified turning movements at the junctions of Hartmann Road / Connaught Road and the access / egress to the

Airport forecourt on 16th November and 14th December 2010 and at Connaught Bridge / Connaught Road on 15th November 2012; and

- On 16th November and 14th December 2010, a Drop off/Pick up zone outside of the Airport to collect data on the number of passengers using cars and taxis to arrive at and depart from the Airport.

7.7 The scope of the study area is identical to that used to assess the impact of the 'Interim Application' which was granted consent in July 2009.

Assessment Years and Periods

7.8 The assessment years and scenarios to be assessed are proposed to be as follows:

- 2011: Baseline Year;
- 2021: Movement Limit Year for the completed Development; and
- 2023: Optimisation of the ESD Development and other associated improvements at the Airport.

7.9 From the traffic surveys it has been determined that the network peak hours are as follows:

- **Weekday AM Peak** – 08:00 – 09:00
- **Weekday PM Peak** – 17:00 – 18:00

Committed Developments

7.10 The assessment considers the predicted trip generation of committed developments in the vicinity of the Airport, which will have a traffic impact in the study area. Committed developments are those which have been granted planning permission but which have not yet been constructed. It comprises the following:

- Silvertown Quays;
- Landmark Site / Siemens;
- Royals Business Park;
- IVAX Quays;
- Barrier Park East;

- Minoco Wharf; and
- Thames Road Industrial Estate (Unex Site).

Traffic Growth

- 7.11 Due to the congested nature of the transport network in London during peak hours, it is generally accepted that a traffic growth factor should not be applied to future year assessments. However, it is recognised that a significant amount of development is planned in the Docks areas in proximity to the Airport, which has not yet been granted planning permission. Therefore, medium rate traffic growth factors have been applied to the future year assessments of 2021 and 2023. The growth factors were calculated by adjusting a National Transport Model (NTEM) factor by a local TEMPRO factor for the London Borough of Newham. The resultant growth factors are shown in **Table 7.1**.

Table 7.1: Peak Hour Traffic Growth Factors*

	AM Peak	PM Peak
2010 - 2021	1.1570	1.1540
2010 - 2023	1.2012	1.1987
2012 - 2021	1.1455	1.1434
2012 - 2023	1.1892	1.1877

** adjusted to take account of committed developments*

- 7.12 A traffic growth factor will not be applied separately to peak hour traffic on Hartmann Road since it is almost exclusively used by Airport traffic.

Junction Assessment

- 7.13 It is proposed to undertake stand-alone junction and signalised network assessments with the appropriate modelling software (e.g. ARCADY 7 and LinSig 3.1 as necessary) for the junctions outlined above.

8 SUMMARY

8.1 This Pre-Application Transport Scoping Report sets out the proposed approach to the Transport Assessment which will accompany the planning application for the ESD project at London City Airport.

8.2 Further discussions will be required with London Borough of Newham, Transport for London and DLR to further develop the proposals and demonstrate the impacts associated with the ESD project. However, this scoping report seeks specific approval for the following elements of the proposals:

- The principle of the increase in passengers from 5.95 mppa on 107,008 scheduled movements by 2023, compared to 4.49 mppa on 87,602 scheduled movements without the ESD project.
- The proposed design for the forecourt with regards the arrangements for buses / taxis / cars / non-motorised modes.
- The proposed passenger and staff car parking provision increasing from 912 to 1,200 spaces.
- The additional permanent vehicle access to be provided from the junction of the A1011 Woolwich Manor Way / Fishguard Way.
- The renegotiation of the Airport's Travel Plan in the context of the ESD project proposals
- The proposed scope and methodology of the assessment of the DLR network as set out in Section 6
- The proposed scope and methodology of the assessment of the highway network as set out in Section 7



Our ref: 12/2379

Emma Grayson
Vectos
97 Tottenham Court Road
London W1T 4TP

Transport for London
Group Planning

Windsor House
42 – 50 Victoria Street
London SW1H 0TL

Phone 020 7222 5600
Fax 020 7126 4275
www.TfL.gov.uk

17 January 2013

Dear Emma

London City Airport, Eastern Stand Development - TfL's pre-application advice

Please note that these comments represent the views of Transport for London officers and are made entirely on a "without prejudice" basis. They should not be taken to represent an indication of any subsequent Mayoral decision in relation to a planning application based on the proposed scheme. These comments also do not necessarily represent the views of the Greater London Authority.

Firstly, I would take this opportunity to thank you for taking advantage of the TfL pre-application service, the aim of which is to ensure that development is successful in transport terms and in accordance with relevant London Plan policies. This letter follows the recent pre-application meeting held to discuss the development proposals

A site visit was undertaken by Melvyn Dresner on the 16 January 2013 and on 21 December 2012 the pre-planning application meeting was held with TfL and borough officers regarding the development proposals.

The meeting was attended by the following:

- | | |
|------------------|-------------------------------|
| - Anne Crane | TfL - Borough Planning |
| - Melvyn Dresner | TfL - Borough Planning |
| - Liam Henderson | TfL – Docklands Light Railway |
| - Ian Hyde | LB Newham |
| Emma Grayson | Vectos |
| Robert Roughan | Vectos |
| Charis Taylor | London City Airport |
| Nick Hollands | London City Airport |
| Nicole Harris | TfL Taxis and Private Hire |
| Jane Commons | TfL London River Services |
| Andy Meloy | TfL Bus Operations |
| Peter Orchard | TfL Bus Operations |

General

The Transport Assessment (TA) report to be produced by the applicant as part of the submission should be in line with TfL's 'Transport Assessment Best Practice Guidance' document (2010):

<http://www.tfl.gov.uk/assets/downloads/businessandpartners/transport-assessment-best-practice-guidance.pdf>

Should this application be granted planning permission, the developer and its representatives are reminded that this does not discharge the requirements under the Traffic Management Act 2004. Formal notifications and approval may be needed for both the permanent highway scheme and any temporary highway works required during the construction phase of the development.

The current access to the airport is via Connaught Bridge and Hartman Road. Connaught Bridge forms part of the A1020 and the Strategic Road Network (SRN) for which TfL has oversight with London Borough of Newham as highway authority. In addition to continued use of this access it is proposed to reopen the access onto Woolwich Manor Way, which forms part of the Transport for London Road Network (TLRN), which TfL is the highway authority. The re-opening of the access onto the TLRN is likely to require both permanent and temporary works. These works to the TLRN would be subject to an agreement under Section 278 of the Highways Act 1980 with TfL. It is envisaged that buses will continue to operate as currently via Connaught Bridge and Hartman Road rather than use the new access albeit that the design of the reopened access should take account of the future possible use of the Woolwich Manor Way access by buses.

Overview of development proposals

The Transport Scoping Note (12 December 2012) states the Eastern Stand Development (ESD) project forms part of planned on-going improvements at the Airport that will enhance operational efficiency, passenger service and capacity in accordance with current and future customer, airline and regulatory requirements. Such improvements aim to be broadly consistent with the long term plans, which were described in London City Airport's 2006 Master Plan, which provides an indication of London City Airport's long term plans, without planning policy status.

The current proposal includes new and upgraded aircraft stands (7 new stands and 2 upgraded ones), an extension to the taxi-lane running adjacent to the runway, a new arrivals building, reconfigured forecourt area, hotel (in outline) and related infrastructure works including re-opening of the old dock access road onto A117 Woolwich Manor Way, a new multi-storey car park.

The consultants review of facilities provided at the forecourt are as follows (with additional data on bus stands and stops added by TfL):

Facility	Existing forecourt	Proposed forecourt
Number of private car drop-off / pick-up spaces	8	48
Number of taxi pick-up spaces	1	7
Number of taxi queuing spaces in forecourt	11	13
Number of taxi queue spaces out of forecourt	143	400
Number of taxi drop-off spaces	8	10
Number of bus stops	3	2
Number of bus stands	1	1

There are three bus stops (for routes 473, 474) and a bus stand within the forecourt area. This includes a bus lay by on Hartman Road for alighting passengers and two bus stops for boarding passengers. The boarding stops provide points for common destinations. One of the boarding stops has bus cage markings whilst the other doesn't, which can cause enforcement and operational problems. The bus stand is marked as a bus stop. There are other bus stops on Newlands Road and Hartman

Road that should be assessed as they maybe use by staff at the airport. The TA should include a plan that provides the detail measurements of the existing and proposed forecourt facilities. There is a need for a bus shelter for all new or relocated stops. The stops should be designed in accord with TfL Bus Stop Accessibility Guidance, which recommends a minimum bus stop length of 37 metres, further information can be found here:

<http://www.tfl.gov.uk/businessandpartners/busoperators/1236.aspx>

Surface Transport implications

This is TfL's understanding of the transport implications are set below. In this case, when we refer to surface transport this includes Docklands Light Railway, bus, river, highway access including private car, taxi, private hire, coach etc. There will be increase in passenger and staff numbers at the airport within the existing cap set for annual movement of aircraft. On the basis of the data submitted for the pre application meeting there were 60,000 aircraft movements (in 2010) and this anticipated to increase to 88,000 in 2023 without the proposals and with the proposals this is set to increase to 107,000. Over the same period annual passenger numbers are expected to increase from 2.28 million per annum to 4.4 million per annum without development, whilst with development this would increase to 5.9 million passengers per annum. **Therefore, compared to the 2010 base, passenger numbers will be increase by 62% without development and 114% with the proposed East Stand Development.**

It also understood that due to the business nature of the airport that the proposed changes will allow more flights per hour than currently and larger aircraft. The TA will need to confirm these numbers and explain and justify to what extent TfL can rely upon these projections in planning the development of surface transport connections to the airport in the future with and without the impact of the development proposals.

The development will have implications for the Docklands Light Railway (DLR), bus and taxi operations and there will be a need to provide coach provision for the hotel as well as for the airport itself. The TA will need to demonstrate how public transport use will be encouraged and provide information with justification on future patronage arising from the development proposal.

The proposal may also increase road traffic and this has implications for the operation of the TLRN and SRN. It is proposed that this is assessed within the TA. TfL has developed a strategic model for East London and local models for the Royal Docks area. It may be necessary that the implications of these proposals are tested within local network and strategic highway models. The TA should provide information on the wider strategic impact. The applicant should be aware of the East London River Crossings and the proposals to relocate Woolwich Ferry to Gallions Reach and the provision of the Silvertown Link will have implications for local traffic levels, more details below.

The Scoping Note indicates there will be increased passengers compared to current usage with and without the proposed changes. For TfL to assess demand for additional capacity and impact we need to assess the impact with and without development against a base year for DLR, buses and the highway assessments. There is a judgement to be made and justified with evidence to assess how much predicted passenger could be accommodated without the proposed improvements to the airport and the surface transport network that serves the airport i.e. there is a risk of overestimating trend growth and underestimating growth due to Eastern Stand measures.

TfL note that the airport is busier during the week than weekends and that average day variation can be considerable. The peak assessment may need to vary per mode and should be the new peak once development trips are added to base data that is assessed. The exception would be for highway assessment when the current highway peak should be used for ease of analysis and consistency with other assessments in the area.

DLR

You propose that the impact of the development to be put forward in the planning application will be considered on 'the Airport route' of the DLR network. This comprises the section between Canning Town and London City Airport. You have stated that an assessment of the capacity of the DLR Airport route will be conducted for the 'with and without' Development Scenarios:

- 2011: Baseline Year;
- 2021: Movement Limit Year for the completed Development; and
- 2023: Optimisation of the ESD Development and other associated improvements at the Airport.

TfL accepts these assessment scenarios are reasonable. However, this should also include the DLR from London City Airport to Woolwich.

TfL is concerned that the full impact on each mode is assessed based on realistic assessment of planned capacity rather than upon commercial assumptions of predicted patronage. Furthermore it should be based on the policy objective of encouraging increased public transport use. For DLR to provide additional capacity would require significant capital investment and a target of 60% (for passengers) is envisaged for assessment purposes. Therefore, if the assumed demand is lower than the implied proposed capacity then TfL would seek a cap on hourly passenger movements to enable DLR to minimise the risk of capacity problems on the DLR.

TfL were given forecasts in 2006 for airport usage and patronage that were significantly different than now being predicted. Forecasting is not an exact science and it is important to assess likely impact and the variance around that impact for public transport patronage. TfL would expect to see a high and low figure for overall passenger numbers and likely mode split for DLR passengers based on positive assumption. TfL can supply data to assist with this assessment.

There are two other sets of assumptions that TfL would challenge, unless some proof is actually provided to back them up:

- The airline policy of limiting flights to 85% capacity; and
- the assumptions that only some airlines will buy larger aeroplanes.

These are both commercial predictions rather than observations and there is no guarantee that an airline will not sell out its flights in future. Evidence from other similar airports or other sources would be useful.

With regard to the road access at Woolwich Manor Way, TfL would highlight again that King George V DLR station does not have a step-free entrance onto the Airport's land so if this station was to be included in the TA a commitment would be expected from the Airport to install a lift at this location to allow step-free access in the future from here.

Regarding the proposed mode splits; we recognise that since most staff work shifts the DLR operating hours may not support their working pattern so a low DLR mode share for staff would be expected though measures to encourage staff to use DLR would be welcome. However, for passengers (as discussed in the meeting) it is only the very first few flights of the day that cannot be reached by rail and all arrivals can be served by DLR; therefore, the mode splits shown in Table 4.6 for 2021 are not particularly hopeful of any mode shift to rail. Rather than state in paragraph 4.32 that it will be difficult to achieve a 60% DLR mode share, the Airport should implement policies to promote the use of rail and set a more challenging target in accordance with sustainable transport policies.

Forecast passenger numbers are being estimated by York Aviation outside the TA. This work should be supplied to TfL for scrutiny and comments from TfL before this is confirmed as a reasonable assessment of likely person trips. TfL will expect the assumptions about overall passenger numbers should be supported by evidence and observations. Similarly the arrival and departure patterns of passengers should be supported by evidence and be based on appropriate statistical analysis e.g. mode average rather than mean average for passenger arrival time maybe appropriate.

Bus operations

TfL will seek to retain the two existing and separate bus stops that serve the Airport with at least the same kerb length. TfL would also like to retain the ability to re-use the existing bus stand, which is likely to be needed for future operational and network needs. As of writing, it is not in regular use though it is used occasionally and forms part of the current resilience planning for the bus network. TfL expect that the nature of the bus network will change due to demand elsewhere on the network with the Airport development playing a role to help facilitate improved bus links locally and provide local employment and regeneration.

TfL will expect the applicant to demonstrate that any changes to stops meets with TfL Bus Stop Accessibility Guidance and specific technical advice TfL may provide when consulted on a specific design proposal. We expect that public transport use in general and bus use in particular will be promoted by the Airport to both staff and passengers. We expect that bus use will be increasingly important for staff travel and this may require changes to the bus network. TfL will form a view once we have bus passenger forecast over a typical day related to shift patterns including hourly demand. TfL would also like information on the travel-to-work area covered by the Airport. TfL expect the TA to investigate increased use of buses.

To encourage bus use TfL expect the TA will consider three elements:

1. active promotion through the Travel Plan to both passengers and staff and recruiting staff within the local area and along PT routes;
2. provision of bus shelters at both bus stops and other supporting infrastructure/ accessibility measures; and
3. changes to local bus services and frequencies.

Point 1 is primary in the control of the applicant and TfL would expect to this be developed further in the submission. Points 2 and 3 will be influenced by factors on the wider network including committed development and the Crossrail station at Custom House requiring changes to local bus services as well as changes arising from the development proposal. At this stage, it is unlikely that TfL would seek to extend bus services beyond the forecourt area or runs route onto Woolwich Manor Way. However, pedestrian links to the forecourt area from other parts of the site such

as the hotel need to be considered as well as links to the existing residential area to the south. In addition TfL will seek a design for the reopened Woolwich Manor Way access to be suitable for future use by buses as this maybe desirable in the longer term

TfL have a specific interest in how the forecourt area will be managed in the future and its legibility from a drivers' perspective. The mechanism to keep bus stops and bus routes free of obstruction should be clearly set out in the TA and would likely require a legal agreement with TfL. Bus drivers may need access to facilities in the future, particularly if TfL decide to stand buses at the airport for network or operational reasons to enable better meeting of the demand from passengers and staff. The TA should provide sufficient information to allow TfL to assess the layout of the forecourt from driver's viewpoint. Bus stops in the wider area need to be assessed including pedestrian routes to them.

Finally, as part of the offsite highway modelling the impact on bus journey times should be assessed, particularly with regards to committed development.

Taxis/ Private Hire

Taxis and Private Hire Vehicles (PHV's) provide a vital service at London City Airport and we would support improvements to taxi and private hire facilities and extension of the current capacity of the taxi rank. We provide more detailed advice in a note appended to this letter (more details on the other modes can be provided on request. The key points are as follows:

- TfL welcomes the proposed increase in space for taxi operations. However, the TA will need to demonstrate that these are practicable (double ranking, remote feeder park, multiple loading). This will require contingency planning. The increase should not be at the cost of making appropriate provision for other modes – especially bus and DLR, cycling and walking.
- The demand for taxi space should be assessed including how this may vary over a typical day and over shorter periods of time to help understand the dynamics of the proposed taxi facilities and amount of space being suggested.
- There needs to be clear visibility of the taxi rank for arriving passengers exiting the terminal including a walking route that allows access to the nearside of the site by wheelchair users and those with visual impairments.
- The location of the taxi rank needs to be considered carefully from a passenger's point of view as do the queuing arrangements.
- There needs to a clear distinction between the area for taxi pick up and private hire.
- The Taxi rank needs to be operation during Airport operational hours and beyond. The rank should include a shelter. TfL can provide the shelter if the Airport makes a financial contribution through the s106 agreement. However, details will need to be agreed with the Taxi trade.
- A Taxi management plan will need to be developed and this may include provision for taxi marshals including how these marshals could be funded.

The detailed design of the taxi rank will need to be worked out in consultation with the taxi trade associations and local trade representatives and there will therefore need to

be a close collaboration between TfL Taxi and Private Hire and the consultants to ensure that the final design is sufficient for operational purposes.

River services

Currently, river buses services do operate on this part of the Thames but do not serve the area near City Airport. The nearest option for river services in the future would be at the proposed Minoco Wharf pier or if the Woolwich Ferry relocates to Gallions Reach, river services could stop at the existing pier. The local operator is as follows:

Sean Collins, Managing Director
Thames Clippers
Phone: 0207 001 2200
Email: sean.collins@thamesclippers.com

It is suggested that options are discussed with the operator. You would also need to consider in the TA how passengers would transfer from river services to the Airport from the nearest pier.

TfL would support the promotion of river access to the site. The development of passenger services within the docks could also be considered in the TA. However, it is recognised that a service along the river and/or through the docks may not be feasible.

However, during construction use of the by water should be more viable especially for the movement of bulk material and abnormal loads.

Highway Impact

The data collection that is set out in the scoping note is broadly acceptable. TfL has supplied additional data from our VISSIM model for this area. TfL does not require at this stage that the proposed re-opened junction or other junctions be assessed in this model. However, it is available to be used if TfL identifies any wider network concerns due to this development proposal and TfL may ask for this work to be completed. We would want a comparison of link flows (and performance) between the local models and TfL area models, which include committed development listed in the scoping note plus several other sites. It should be also used to assess relative impact on each approach to Gallions Roundabout or compare to your more recent data. The VISSIM model update was most recently updated in 2012 for a residential scheme on Royal Albert Basin site and before that in 2010 in relation to Silvertown Quays. This data has been forwarded to you already.

Though TfL is asking for checks between your proposed junction models and TfL's existing VISSIM model, you need to demonstrate base validation is in line with TfL Modelling Guidelines for your stand alone junction models or local network models. For the Woolwich Manor Road junction a standalone assessment is acceptable. For junctions on Hartman Road, Connaught Road, and Connaught Bridge the interaction between junctions should be considered and modelling methodology agreed with the Borough.

The factors that influence peak vehicle generation are the following:

- the amount of car parking – TfL encourages restraint;
- mode split for taxi and private hire/ other private car use – TfL encourages public transport, cycling and walking – and would suggest interventions to aid these modes.

- annual/ daily and hourly pattern of arrivals and departures – TfL will review the evidence supplied with the TA; and
- route choice to the airport – this should be aided by the proposed re-opening of the Woolwich Manor Way access.

It is suggested that if the reopened access to the airport is included in the application that a review of highway signage is undertaken and a way finding strategy is proposed within the TA. This will be primarily focussed on vehicle routing and construction traffic. Pedestrians and cyclists may use the new access and may also be aided by new signage.

The scoping note states that provision of the reopened access improves the Airport's resilience, as well as shortening the distance travelled on the local highway network for journeys to / from the east. In particular, it will reduce the number of LCY related vehicles using the A1020 Royal Albert Way. TfL agrees this is a reasonable assumption though we will consider the impact of these proposals once an assignment of traffic to the airport has been provide with supporting evidence.

TfL suggest the accident analysis includes the link south of Gallions Roundabout to Pier Road. TfL has provided the following information for reference only.

- Silvertown Quays (SQ) Transport Assessment (2010) prepared by Halcrow including Local Cycle Review and PERS audit
- VISSIM models prepared by AECOM to take account of SQ as well as supporting review
- GEQ TA (2012), Trip Assessment and VISSIM models prepared by JMP – I don't have the updated GEQ VISSIM models themselves. If you need access to these models please let me know, though it may be better if you got their changes direct from JMP.
-

The proposal for East London River Crossings (Gallions Ferry and Silvertown Link) will change local traffic patterns in time scales relevant to the TA. TfL may be able to supply data to help you assess this aspect or review your assessment against TfL modelling conclusions.

A new potential ferry service is proposed between Gallions Reach and Thamesmead, which could open in 2017 and replace the existing ferry service at Woolwich. One potential effect of moving the ferry service to Gallions Reach is a possible reduction in traffic flows on the roads to the south of Gallions Roundabout, including Woolwich Manor Way. However, further analysis is currently being undertaken by TfL to understand the full range of traffic implications associated with a new ferry service at Gallions Reach, including the likely impact on Gallions roundabout itself and on the wider highway network in east London. Specific data and results will be made available following the completion of this work, details of the public consultation can be found here: <https://consultations.tfl.gov.uk/rivercrossings/consultation>.

Cycling/ walking

The nearest part of the Cycle SuperHighway is along the A13. The Thames Path and the Capital Ring are the nearest part of the Strategic Walking Network. The Capital Ring passes through your proposed reopened junction and along Woolwich Manor Way and along the edge of Royal Albert Dock.

It is noted that for staff that walking and cycling to airport has increased over the last few years, which is a trend TfL supports. TfL has asked for developers in the area to undertake Pedestrian Environmental and Review System (PERS) audits of pedestrian routes in this area; TfL has supplied the Silvertown Quays PERS and suggests reviewing the Minoco Wharf TA with regards local junction works, cycle and walking measures and audits. It recommended that as part of the TA these audits are reviewed and potentially extended.

TfL recommends that pedestrian and cycle routes between the airport forecourt and the surrounding Strategic Road Network and residential areas are reviewed. The aim is to identify barriers to staff and others accessing the airport by cycle and foot. This work could be enhanced by interviewing staff to identify barriers to walking and cycling in this area. It would be most useful to interview those who currently walk or cycle to the airport and/or those who live within less than 1 kilometre for walkers (and 5 kilometres for cyclists) who choose to drive.

TfL is developing proposals to improve cycle facilities on Woolwich Manor Way within the vicinity of the re-opened access. TfL may request a contribution to aid delivery of these measures. It is also noted that LB Newham wishes to encourage cycling in the local area which includes improvements along North Woolwich Road and improved pedestrian wayfinding whether these measures are relevant to employees, passengers and others accessing the airport should be assessed in the TA.

TfL would expect the TA to include a draft Delivery and Servicing Plan for the airport. The TA should provide detail about current delivery and servicing arrangements, proposed changes and how this accords with best practice published by TfL and others, please see this link:

http://www.tfl.gov.uk/microsites/freight/delivery_servicing_plans.aspx

and here: <http://www.fors-online.org.uk/>

Travel Plan

TfL would expect an updated Travel Plan to be provided. This should set measures to encourage mode shift from car use to other modes. The TA should set out targets and measures. There should be baseline mode of travel assessment as well as targets for 1 year, 3 years and 5 years. There need to be measures to discourage car use as well as positive measures to encourage public transport use, walking and cycling.

TfL guidance on Travel Plan can be found here: <http://www.lscp.org.uk/newwaytoplan/>

Phasing and construction

A Construction Logistics Plan (CLP) will be required, and while this should be secured by condition or S106, the TA should still contain some information on how construction impacts are intended to be dealt with, in order to minimise the potential impact on the surrounding highway network. A CLP should include the cumulative impacts of construction traffic, likely construction trips generated, and mitigation proposed such as use of water especially to move bulky and abnormal loads. Details should include; site access arrangements, booking systems, construction phasing, vehicular routes and scope for load consolidation or modal shift to water use in order to reduce the total number of road trips generated.

Specific TfL advice can be found here:

http://www.tfl.gov.uk/microsites/freight/construction_logistics_plans.aspx

S106 Contributions and Community Infrastructure Levy (CIL)

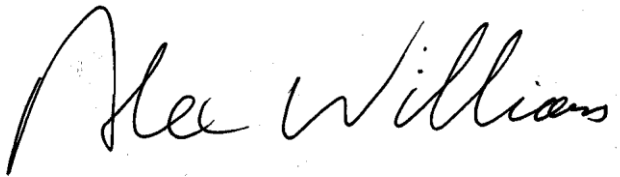
TfL would seek provisions within a S.106 agreement to both support projected demand for DLR and bus use arising

Once the Transport Assessment has been further advanced and has assessed the likely impacts of the proposals on the transport network, other detailed mitigation measures can then be further discussed and subsequently agreed with TfL and LB Newham.

In accordance with Policy 8.3 of the London Plan, the Mayor of London has introduced a London-wide Community Infrastructure Levy (CIL) that is paid by most new development in Greater London. Three charging bands with variable rates based on the per square metre net increase of floor space apply, in LB Newham the charge is £20 per square metre of development (indexed). More details are available via the GLA website www.london.gov.uk.

We would expect a clear statement, in the form of 'heads of terms', showing the transport related s106 expected to be paid and for what, to be included in the application material.

Yours sincerely

A handwritten signature in black ink that reads "Alex Williams". The signature is fluid and cursive, with the first name "Alex" and the last name "Williams" clearly distinguishable.

Alex Williams

Director of Borough Planning

Email: Alexwilliams@tfl.gov.uk

Direct Line: 020 7126 4284

Appendix A - Taxis/ Private Hire

Taxis and Private Hire Vehicles (PHVs) provide a vital service at London City Airport and we would support improvements to taxi and private hire facilities and extension of the current spaces of the taxi rank.

The taxi rank that is currently at London City Airport works relatively well and has a capacity for approximately 140 taxis. The improvements planned for the airport would lead to an increase in taxi passengers and we therefore welcome the extension of the taxi rank to 400 spaces. However, this would be provided through a feeder park located to the east on Hartman Road. We would need to see the detailed design for this taxi feeder and the route from the feeder park to the main rank to be able to assess it. We would also need to see detailed proposals of how the taxis will feed from the feeder rank to the main rank. It looks like there will be no direct sight line from the feeder rank to the main rank and therefore some sort of call up feeder system such as monitors will be required. We would need more details about how this would work and who would be maintaining the system. We have call up systems elsewhere which can break down from time to time and therefore an emergency plan would be needed in case this happens as the rank will not be operational if it breaks down and there is no contingency in place. We would also need confirmation of what other facilities would be at the feeder rank such as toilets for the drivers and if these are provided, who will be maintaining them.

All taxis are fitted with wheelchair ramps and other accessibility features which can only be deployed on the nearside so the taxi rank will need to be situated on the near side as it is currently to allow for wheelchair access. There also needs to be a clear walking route from the exit of the airport to the taxi rank for disabled customers, customers with heavy luggage, etc.

The plans show the proposed taxi rank using double ranking of taxis. This can work and works at other locations, but we would need to see more detailed designs to be able to assess this. There seems to be an area for car hire very close to the taxi rank and if the taxi rank gets busy this would likely be difficult to access for people hiring a car and there may also be issues with them being able to get out of this area, so this would not be advisable.

The taxi rank would need to operate during airport and beyond as it currently does and would need to have a shelter and a taxi pole to protect the customers waiting for a taxi. The design of the taxi shelter should be discussed directly with Taxi and Private Hire to ensure that it is adequate.

There is no detailed design of the queuing system for passengers waiting at the proposed taxi rank and we would need to see a more detailed design of the queuing system to be able to assess it. There are 7 spaces proposed that can be used for pick up on the station forecourt and the design would need to allow multiple loading at these 7 spaces. There would also need to be a clear exit point at the side for drivers to move away once they have picked up their passengers to avoid possible hold ups by taxis in front of them taking longer to load. The 7 bays would need to be clearly marked out with numbers both on the floor and on poles next to the rank and suitable signs to customers informing them to move to the first available taxi. During peak hours elsewhere stations, we have taxi marshals directing customers to their taxis and directing drivers to move forward. This ensures that the flow of both passengers and drivers at busy times is maintained and passengers board quickly and the rank maintains a steady flow of available taxis. We would not have the funding for this but

further discussions could be had with the airport on whether funding for a marshal at peak times would be available.

The current taxi rank is situated at the exit of the airports arrivals terminal and this is an ideal location for the taxi rank as it needs to be located in a prominent position for passengers to see as they exit the building. The proposed taxi rank is located slightly further afield to the current taxi rank and my concern is that this would be too far from the exit and there would not be a clear sight line to the head of the rank as customers exit the station. We would therefore need to see a clear pedestrian route from the arrivals to the taxi rank in order to be able to properly assess if this would be acceptable as judging from the current plans it does not look like the taxi rank would be immediately apparent for customers leaving the airport. It also looks like it may be over shadowed slightly by the other pick up/drop off points and the taxi rank needs to be one of the first things that customers see upon exiting the terminal. The drop off point for taxis looks as though it has a much clearer sight line for passengers exiting the arrivals concourse, although it is slightly further back from the doors than the current one. This was discussed as being necessary from an anti terrorist perspective but if it could be moved further forward to the doors then this would be preferable. It may be that we would need to tweak the design so that some taxis are able to rank in this drop off area as the sight lines are better from the exit of the building.

The area where taxis currently drop off caters for all vehicles including private hire vehicles (PHV), taxis and private vehicles. The suggestion on the plans is that the new drop off area is provided for taxis only. This may be difficult to enforce. It is essential to ensure that PHVs do not use the area to 'illegally rank up' outside the airport arrivals terminal as PHVs are not allowed to use taxi ranks and must be pre booked. A taxi management plan in terms of how this and the taxi rank will be managed would be useful so that we can ensure that we are confident of the plans that will be put in place. Additionally, this is proposed to be for 10 taxis. Could the consultants confirm how they arrived at this figure to ensure it will provide enough capacity? The dropping off area for taxis will also need to be located on the nearside for wheelchair access and with a clear walking route from the drop off area to the departures terminal.

The proposed hotel itself may require a standalone taxi rank and PHV facilities and this would need to be discussed further with TfL Taxi and Private Hire.

PHVs also provide a vital service but due to their licensing conditions they have different needs to taxis. The area for PHV drop off and pick up also needs to include a clear, short and easy pedestrian route for disabled passengers and passengers with luggage, etc. PHVs are not allowed to pick up passengers from a taxi rank and must be pre-booked. The area for picking up and setting down for PHVs must therefore be clearly distinguishable from the taxi rank so that waiting cars do not give the impression to passengers less familiar with these laws that the PHVs are 'ranking up' and can accept a hiring without being pre booked. This will help to guard against illegal touting which takes place at various locations in London.

The detailed design of the taxi rank and will need to be worked out in consultation with the taxi trade associations and local trade representatives and there will therefore need to be a close collaboration between TfL Taxi and Private Hire and the consultants to ensure that the final design is sufficient for operational purposes.