KINGSWAY HALL HOTEL, HOLBORN

Proposed Ground Floor Facade Modifications

Transport and Highways Impact Assessment

Prepared on behalf of Shiva Hotels

RLR/SHIV/15/2924/TS01 April 2016



DOCUMENT CONTROL

Project: Kingsway Hall Hotel, Holborn

Proposed Ground Floor Facade Modifications

Document: Transport and Highways Impact Assessment

Client: Shiva Hotels

Reference: RLR/SHIV/15/2924/TS01

Document Checking:

Author:	RLR	Rombougho	Date:	18/03/2016	
Checked by:	PJB	Part	Date:	18/03/2016	
Approved by:	NDR	M	Date:	18/03/2016	

Status:

<u>Issue</u>	<u>Date</u>	<u>Status</u>	Issued by
1.	17/03/2016	Draft	NDR
2.	18/03/2016	Planning	PJB
3.	12/04/2016	Revision 1	RLR
4.			

5.

6. 7.

© Copyright Russell Giles Partnership Limited 2016

No part of this publication may be reproduced by any means without the prior permission of Russell Giles Partnership Limited.



CONTENTS

1	INT	RODUCTION	3
-	1.1	Background	3
	1.2	-	4
2	EXIS	STING CONDITIONS	
	2.1	Site Location	
	2.2	Public Transport Accessibility Level	5
		Accessibility by Foot	
		Accessibility by Cycle	
		Accessibility by Bus	6
		Accessibility by Underground / Rail	7
		Summary	7
3		OPERATION	8
4	SER	VICING AND PARKING ARRANGEMENTS	
	4.1	Proposed Layout	9
	4.1	Taxi Drop-Off	9
	4.2	Coach Drop-Off	10
	4.3	Servicing Arrangements	10
	4.4	Delivery Vehicle Assessment	11
	4.5	Car Parking	11
	4.6	Cycle Parking	
5	CON	NSTRUCTION MANAGEMENT	13
6	SUN	MMARY AND CONCLUSIONS	15

APPENDICES

Proposed Ground Floor Plan PTAL Summary Swept Path – Taxi and 3.5t Panel Van Appendix A Appendix B Appendix C



1 INTRODUCTION

1.1 Background

- 1.1.1 RGP is instructed by Shiva Hotels to provide transport planning advice relating to the proposed alterations of the entrance screen and modifications at ground floor level at Kingsway Hall Hotel, 66 Great Queen Street, WC2B 5BX. The site is located within the London Borough of Camden (LBC).
- 1.1.2 The existing site comprises a 7 storey, 4 star hotel with 170 bedrooms and suites, conferencing and event facilities, restaurant and bar. Pedestrian access to the building is provided from the site's frontage with Great Queen Street, while servicing is undertaken from a loading bay approximately halfway down the shared access road to the right of the hotel. No on-site parking is provided for staff or guests.
- 1.1.1 The proposals are for modifications to the entrance / porte cochere at ground floor level, which include reducing the width of the existing driveway / coach drop-off area, to accommodate taxis / cars only. The proposed ground floor plan attached hereto at **Appendix A** provides an illustration of the proposed layout. Under the proposals servicing would be retained in its existing location.
- 1.1.2 As background to this report, discussions have been held with Camden's Highway Officer by way of a site visit on 6th November 2015 who has confirmed that there are no concerns in principle with the loss of coach drop-off provision, provided taxi / car drop-off and pick-up are retained. The existing on-street taxi bays situated between the porte cochere entrance and exit on Great Queen Street would be retained and unaltered by the proposals.
- 1.1.3 As background to this report, it is noteworthy that two recent applications for the hotel have been granted planning consent:
 - 2015/0670/P Alterations to existing hotel including partial demolition at rear first floor level this scheme comprises an additional 19 rooms.
 - 2014/2792/P Erection of a two storey extension at eighth and ninth floor levels to provide additional hotel accommodation (Class C1) 20 additional rooms. A Transport Statement was prepared for this application by TPP in March 2014.
- 1.1.4 Pre-Application advice received in relation to the 2015 proposals ascertained that as the additional guest rooms sit wholly within the existing envelope, and within the existing use class, they are not subject to planning. Therefore the application focussed upon the external alterations only.



- 1.1.5 Neither of these consents have been built-out to date and the hotel therefore currently comprises 170 rooms, however, it is understood that these planning permissions would be implemented as part of the wider re-development and refurbishment programme, including the ground floor façade alterations the subject of this report.
- 1.1.6 This Transport and Highway Impact Assessment details the proposed alterations to the hotel's entrance area and also contains an outline construction management plan for traffic, to minimise the impact on the surrounding highway during the wider redevelopment works.

1.2 Report Structure

- 1.2.1 The principal focus of this report is to consider the operation of the hotel proposals, with emphasis on the operation of the site in terms of drop-off/ pick-up activity.
- 1.2.2 The remainder of this Transport and Highways Impact Assessment comprises the following sections:
 - (i) Section 2: Existing Conditions;
 - (ii) Section 3: Site Operation;
 - (iii) Section 4: Parking and Servicing Arrangements;
 - (iv) Section 5: Construction Management; and
 - (v) Section 6: Summary and Conclusions.



2 EXISTING CONDITIONS

2.1 Site Location

- 2.1.1 The development site is located at 66 Great Queen Street within the LBC. The site currently comprises the Kingsway Hall Hotel, which is bounded by Great Queen Street (B402) to the north, the Grand Connaught Rooms to the west and retail and office buildings to the east.
- 2.1.2 Pedestrian access to the site is provided from Great Queen Street, which is a local distributor road joining Kingsway (A301) to the east and Drury Lane to the west. Double yellow lines are present between Kingsway and the junction with Newton Street, with the majority of the remainder of Great Queen Street restricted to parking for permit holders, with a limited number of pay by phone bays (**Figure 2.1**).



Figure 2.1. Great Queen Street

2.1.3 The site is conveniently located in close proximity to the City of London, a range of tourist attractions, retail facilities, and businesses; and with convenient access to a number of major transport interchanges. The hotel is well suited to cater for overnight accommodation associated with the many business and tourist attractions. In addition, the zero-provision of on-site parking discourages access by private car, particularly since public transport provides a viable alternative mode for guests.

2.2 Public Transport Accessibility Level

2.2.1 To assess the current Public Transport Accessibility Level (PTAL) of the site, a PTAL assessment has been undertaken using TfL's online WebCAT Tool. This assessment takes account of the distance to public transport facilities from the site and the relative frequencies of these services.



2.2.2 The PTAL for the site is a 6b which indicates an 'excellent' level of accessibility to public transport, as detailed by the attached PTAL output at **Appendix B**. For example, the site is within walking distance of numerous bus routes as well as the London Underground stations at Holborn, Covent Garden, Leicester Square and Temple. Such facilities would be used by staff and guests accessing the hotel and also by guests during their stay.

Accessibility by Foot

2.2.3 Pedestrian infrastructure is of a high standard. Local to the site there are wide, well-lit footways and crossing points with tactile paving. Signalised crossings are also provide throughout the vicinity, including on Kingsway, providing convenient facilities for pedestrians.

Accessibility by Cycle

- 2.2.4 A number of dedicated cycle routes are available throughout the locality, including a signed route along Great Queen Street, providing links to the London Cycle Network through Camden and into the surrounding boroughs.
- 2.2.5 Furthermore, a number of Santander cycle hire stations are situated in close proximity, the closest of which are located opposite the site on Newton Street. Further cycle docking stations are available throughout the locality including those on Kingsway, as illustrated within **Figure 2.2**, below.



Figure 2.2. Cycle Docking Station

Accessibility by Bus

2.2.6 The nearest bus stops to the site are located to the east on Kingsway, approximately 125m (a 1-2 minute walk) to the west of the site. These stops give access to 10 different bus routes and thus provide frequent access to destinations throughout London.



Accessibility by Underground / Rail

- 2.2.7 The site is situated within two minutes' walking distance of Holborn underground station, which lies on the Central and Piccadilly lines. Covent Garden (Piccadilly), Leicester Square (Northern) and Temple (District) can also all be reached within 10 minutes' on-foot, thus enabling easy access across the London Underground network.
- 2.2.8 Furthermore, mainline rail services are available from Farringdon station, located 18 minutes' walk to the west of the hotel.

Summary

2.2.9 As a consequence of the site's central London location, it is evident that the Kingsway Hall Hotel benefits from a particularly high level of public transport accessibility as well as benefiting from a high standard of walking and cycling facilities.



3 SITE OPERATION

- 3.1.1 The hotel's operation would not be affected by the proposals discussed herein and the proposed additional rooms have previously been assessed and considered acceptable in planning terms.
- 3.1.2 As detailed within the Transport Statement prepared by TPP as part of application 2014/2792/P, the hotel typically caters for 1700 guests per week, which equates to 242 guests per day.
- 3.1.3 A TRICS assessment within the previous Transport Statement established that during the AM peak hour (08:00-09:00) the extended hotel (190 bedrooms) would generate a total of 90 two-way movements (by all modes), while in the PM peak hour (17:00-18:00) a total of 61 two-way movements would be generated (by all modes).
- 3.1.4 It is acknowledged that a Transport Statement was not required as part of the subsequent application for an additional 19 bedrooms as the additional rooms sit wholly within the existing envelope, and within the existing use class. In any case the additional rooms would have a minimal traffic impact, resulting in a total of 99 and 67 two-way movements (by all modes) during the AM and PM peak, respectively.
- 3.1.5 From RGP's experience of comparably located high end hotels in London, the modal split can be assumed to be as follows: 91.5% walk/public transport, 7% car/taxi, 1.3% LGV and 0.2% refuse.
- 3.1.6 When applied to the trip rates for a 209 bedroom hotel this would equate to a total of 7 two-way taxi movements during the AM peak hour and 5 two-way taxi movements during the PM peak hour. As a worst case this would represent 1 taxi movement every 12 minutes which could be comfortably accommodated within the amended porte cochere area.
- 3.1.7 However, it is worth noting that taxis are part of the fabric of London's roads and that taxi activity therefore largely comprises vehicles already on the highway network making diverted trips or being flagged down when passing guests and do not necessarily represent vehicle trips primarily associated with the hotel use.
- 3.1.8 The site's retained but modified porte cochere and the adjacent taxi rank on Great Queen Street would facilitate the majority of taxi pick-ups. Therefore it is likely that guest arrivals / departures by taxi represent a single vehicle movement rather than two vehicle movements. After dropping a guest off a taxi would likely wait at the taxi rank before picking up another passenger. Similarly, when departing the site, guests are likely to utilise a taxi which is already waiting in the locality.



4 SERVICING AND PARKING ARRANGEMENTS

4.1 Proposed Layout

- 4.1.1 The proposals involve the modification of the porte cochere to enable the repositioning of the entrance screen and result in the width being reduced so that coaches can no longer be accommodated. Due to the nature or the hotel operator access for coaches was not required previously and would not be required in the future as part of the hotel's refurbishment proposal.
- 4.1.2 The drawing at **Appendix C** indicates the proposed arrangement and demonstrates the swept path route that would be taken by both a London taxi and a light goods vehicle (3.5t panel van). This layout avoids the requirement for any modifications to the on-street taxi bays and kerb edges and provides a 1.0m minimum clearance from the edge of the vehicle track (for a 3.5t panel van) to the building edge providing a pedestrian safety zone. A further 0.8m clearance is provided by way of a recessed entrance door, which creates additional space at the drop-off area.
- 4.1.3 To further ensure the safety of pedestrians, the surface opposite the entrance doors will be colour treated to distinguish the route as a pedestrian crossing point and bollards would be positioned to avoid any potential for conflict with the building façade.

4.1 Taxi Drop-Off

4.1.1 The modified site frontage will continue to cater for taxi pick-ups / drop-offs. In addition, a taxi stand for three vehicles is located between the entry and exit points of the hotel driveway, as indicated in **Figure 4.1** below.

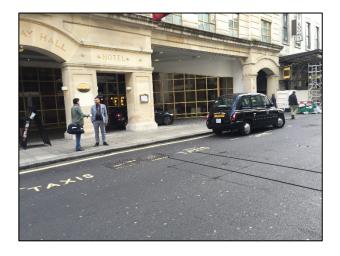


Figure 4.1. Taxi Stand – Great Queen Street



4.2 Coach Drop-Off

- 4.2.1 Owing to the site's operation the hotel rarely attracts coach party bookings. Furthermore, no incentives are offered to coach parties, nor does the hotel operator actively encourage this. Notwithstanding this, consideration is given to coaches in the unlikely event these were to arrive at the hotel.
- 4.2.2 Coach drop-off / pick-up activity could safely and legitimately take place from the local highway. If required, large vehicles are able to stop on Great Queen Street where there are no loading restrictions. The road is wide enough to allow vehicles to pass whilst unloading is taking place.
- 4.2.3 A number of coach bays / parks are also available throughout central London, which could be utilised by coaches in the unlikely event. **Figure 4.2**, below, identifies the coach facilities available within the vicinity of the site.

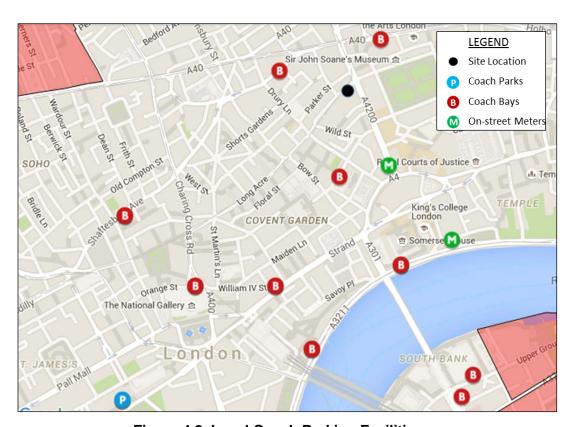


Figure 4.2. Local Coach Parking Facilities

4.3 Servicing Arrangements

4.3.1 As per the existing arrangements, delivery vehicles would utilise the shared access road / loading bay located between the hotel and the Grand Connaught Rooms. This arrangement operates well, with goods trolleyed from the loading area into the back of house area.



4.3.2 Waste collection will also continue as it does presently. Refuse is stored in the loading bay and wheeled to the refuse vehicle which waits on-street.

4.4 Delivery Vehicle Assessment

- 4.4.1 The following delivery vehicle movements are required in relation to the Kingsway Hall Hotel:
 - (i) 2 laundry deliveries per day;
 - (ii) Daily kitchen deliveries; and
 - (iii) Housekeeping supplies delivered weekly.
 - (iv) In addition, waste is collected daily, in the early morning.

4.5 Car Parking

- 4.5.1 In line with the London Plan standards and owing to the site's highly accessible location, the hotel does not include any on-site staff or guest car parking.
- 4.5.2 The London Plan does however state that consideration should be given to the need for parking for disabled people. Disabled parking bays are present along the northern side of Great Queen Street while the remainder of the parking comprises permits and pay by phone bays.
- 4.5.3 The nearest public car park to the site is the 330 space NCP Covent Garden car park, located off Parker Street, approximately 3 minutes' walk from the hotel. The car park is open 24 hours and costs between £4.50 for 30 minutes to £42.00 for a 24 hour stay.

4.6 Cycle Parking

- 4.6.1 The Further Alterations to the London Plan (FALP) were adopted in March 2015 and state that for hotel uses (C1 use class), the following minimum cycle parking levels should be provided:
 - (i) Long Stay: 1 space per 20 bedrooms
 - (ii) Short Stay: 1 space per 50 bedrooms



4.6.2 The existing hotel does not provide any formal cycle stands, although it is understood that staff can store their bicycles in the staff changing room within the basement and guests can leave their cycles in the luggage store near reception.



5 CONSTRUCTION MANAGEMENT

- 5.1.1 Traffic associated with construction sites can involve either pedestrians, vehicles or both. In order to ensure the efficient and safe movement of vehicles and materials to and from the site during the construction period, the following aspects will be considered:
 - 1, Vehicles
 - (i) Vehicle routes
 - 2. Pedestrians and Public
 - (i) Public interfaces
 - (ii) Public protection
 - (iii) Pedestrian routes
 - (iv) Pedestrian and vehicle segregation
 - 3. Environmental
 - (i) Delivery hours and interface with the public
- 5.1.2 In order to minimise congestion on local roads and inconvenience to third parties the following principles will be followed.
- 5.1.3 All deliveries to the site will be managed and coordinated by a Construction Manager. With all deliveries and collections planned and timed to ensure there is no back up of construction vehicles waiting in the vicinity of the hotel. All deliveries would be made within site working hours and be booked in advance.
- 5.1.4 If deemed necessary, vehicle movements and/or loading/unloading will be managed by a banksman.
- 5.1.5 All plant and material will be stored within the boundary of the site. Any deliveries will be unloaded and transported directly into the site for storage. Plant and materials will be stored away from pedestrian routes and appropriately signed.



- 5.1.6 Safe pedestrian routes along the public highway will be retained and be clearly signed, with safety barriers employed where needed, to temporarily block the footway, with pedestrians diverted, as appropriate.
- 5.1.7 It is expected that an application under Section 14(1) and/or "crane operation" will be needed. These applications will be submitted prior to commencement on site in accordance with the regulatory procedures adopted by the LBC, as detailed within the web link below:

https://www.camden.gov.uk/ccm/content/transport-and-streets/traffic-management/temporary-road-restrictions/

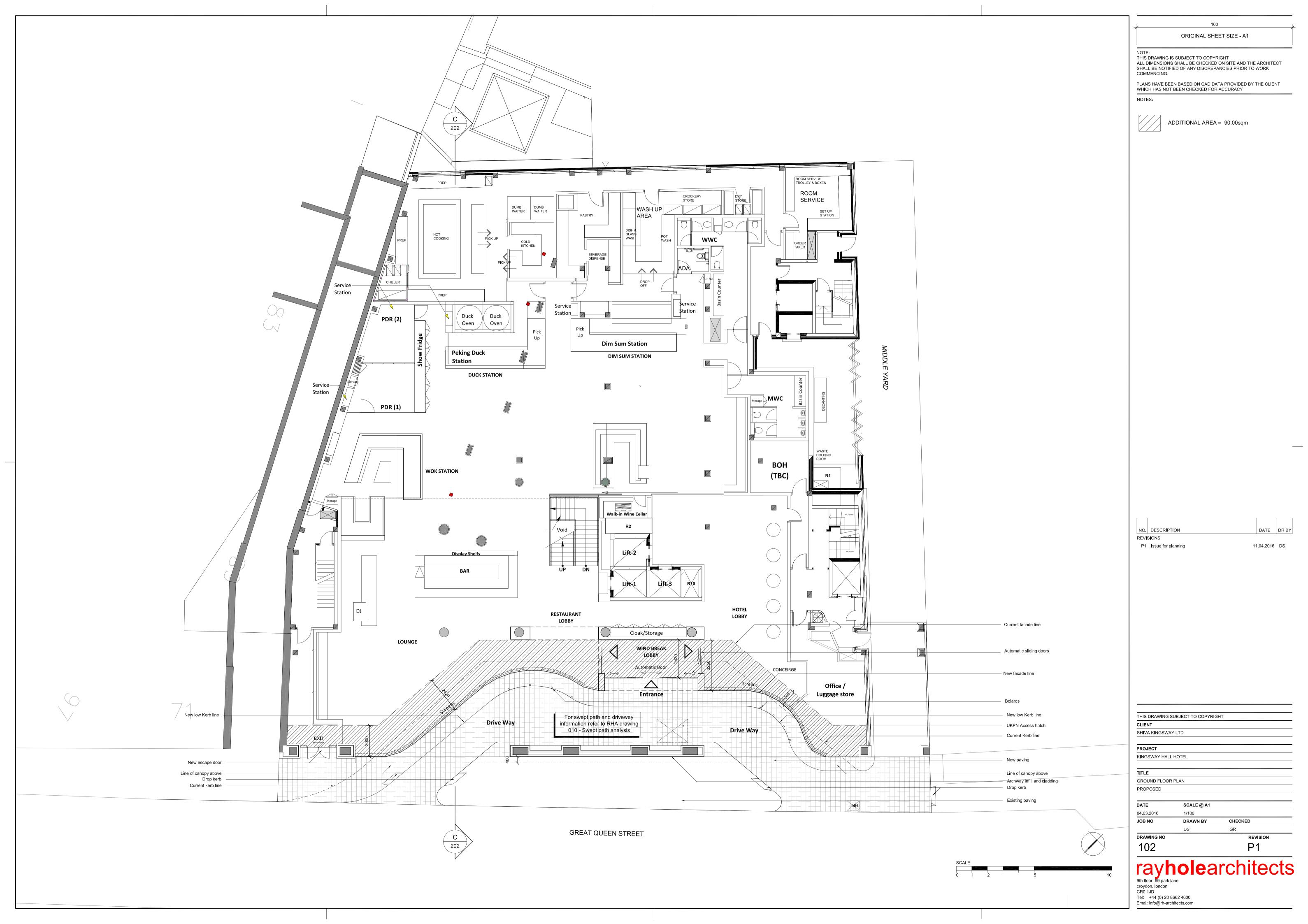


6 SUMMARY AND CONCLUSIONS

- 6.1.1 This Transport and Highway Impact Assessment has been prepared by RGP in association with a development proposal at the Kingsway Hall Hotel, Holborn, This report demonstrates that:
 - (i) The site is located in central London and as a consequence benefits from being accessible to a wide variety of transport modes, as reflected in its 'excellent' PTAL rating. Furthermore, many major tourist and business related attractions are situated within a short walking distance of the hotel;
 - (ii) The proposed alterations to the hotel's frontage would not have a detrimental impact on the local highway and would not alter the hotel's current operation;
 - (iii) The development proposals would not impact on the total number of person trips associated with the hotel or the daily vehicle movements, which would principally comprise of deliveries/servicing movements and car/taxi related drop-off and pick-up activity;
 - (iv) The current hotel and development proposals do not include any provision for on-site parking;
 - (v) Deliveries to the site would be accommodated as existing, without impacting on highway safety or the free-flow of traffic; and
 - (vi) Measures will be put in place to minimise the traffic impact during construction.
- 6.1.2 On the basis of the evidence provided in this report, LBC are respectfully requested to confirm that the proposals are acceptable in highway and transport planning terms.



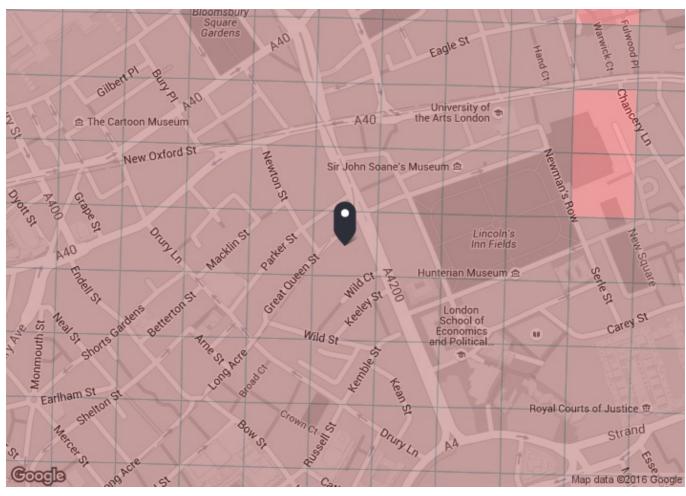
APPENDIX A

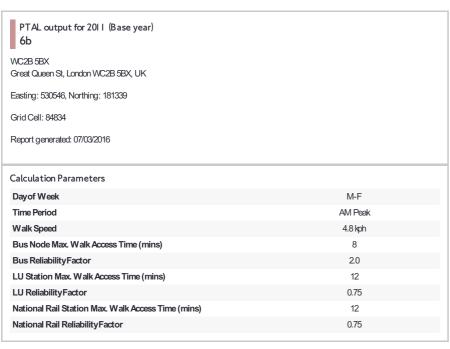




APPENDIX B







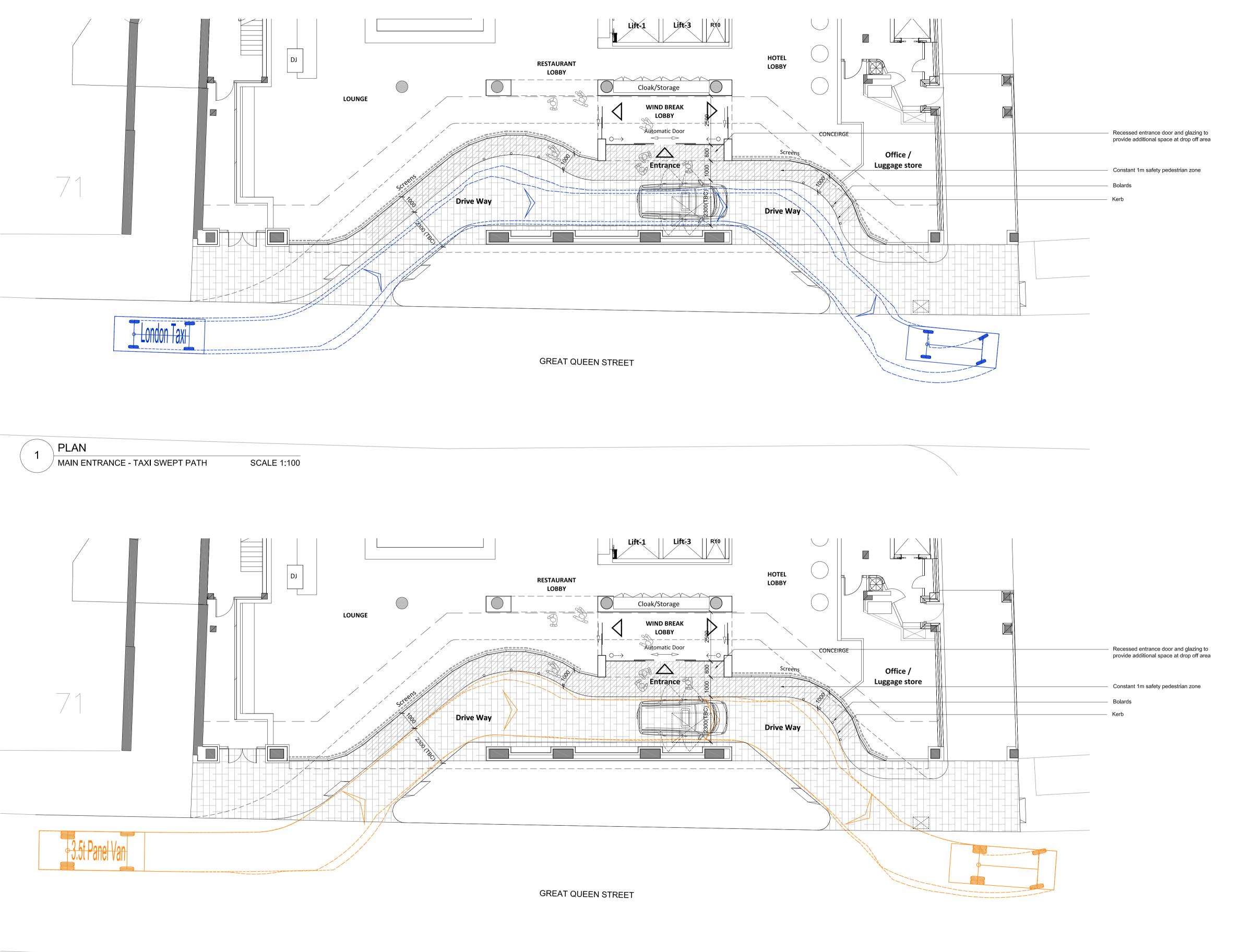


noue	Stop	Route	Distance (metres)	Frequency(vph)	Walk Time (mins)	SWT (mins)	TAT (mins)	EDF	Weight	Α
Bus	ALDWYCH WEST ARM	11	507.2	7.5	6.34	6	12.34	2.43	0.5	1.
us	ALDWYCH WEST ARM	23	507.2	8	6.34	5.75	12.09	2.48	0.5	1
us	ALDWYCH WEST ARM	9	507.2	12	6.34	4.5	10.84	2.77	0.5	1
us	ALDWYCH WEST ARM	26	507.2	7.5	6.34	6	12.34	2.43	0.5	1
us	ALDWYCH WEST ARM	13	507.2	8	6.34	5.75	12.09	2.48	0.5	•
us	ALDWYCH WEST ARM	4	507.2	6	6.34	7	13.34	2.25	0.5	-
lus	ALDWYCH WEST ARM	15	507.2	7.5	6.34	6	12.34	2.43	0.5	•
lus	ALDWYCH WEST ARM	341	507.2	6	6.34	7	13.34	2.25	0.5	
Bus	ALDWYCH WEST ARM	76	507.2	7.5	6.34	6	12.34	2.43	0.5	
Bus	ALDWYCH WEST ARM	87	507.2	10	6.34	5	11.34	2.65	0.5	•
Bus	ALDWYCH WEST ARM	172	507.2	6	6.34	7	13.34	2.25	0.5	
Bus	ALDWYCH WEST ARM	RV1	507.2	6	6.34	7	13.34	2.25	0.5	•
Bus	ALDWYCH WEST ARM	6	507.2	10	6.34	5	11.34	2.65	0.5	
Bus	HOLBORN STATION KINGSWAY	59	124.88	10	1.56	5	6.56	4.57	0.5	2
Bus	HOLBORN STATION KINGSWAY	243	124.88	11	1.56	4.73	6.29	4.77	0.5	2
Bus	HOLBORN STATION KINGSWAY	521	124.88	27	1.56	3.11	4.67	6.42	1	6
Bus	HOLBORN STATION KINGSWAY	91	124.88	9	1.56	5.33	6.89	4.35		2
Bus	HOLBORN STATION KINGSWAY	1	124.88	8	1.56	5.75	7.31	4.1	0.5	4
Bus	HOLBORN STATION KINGSWAY	68	124.88	9	1.56	5.33	6.89	4.35	0.5	1
Bus	HOLBORN STATION KINGSWAY	X68	124.88	4	1.56	9.5	11.06	2.71	0.5	
Bus	HOLBORN STATION KINGSWAY	188	124.88	8	1.56	5.75	7.31	4.1	0.5	-
Bus	HOLBORN STATION KINGSWAY	171	124.88	7.75	1.56	5.87	7.43	4.04	0.5	
Bus	HOLBORN STATION KINGSWAY	168	124.88	9	1.56	5.33	6.89	4.35		
Bus	BLOOMSBURY SQUARE	38	424.67	10	5.31	5	10.31	2.91		
Bus	BLOOMSBURY SQUARE	19	424.67	8	5.31	5.75	11.06	2.71		
Bus	BLOOMSBURY SQUARE	55	424.67	10	5.31	5	10.31	2.91		
Bus	HIGH HOLBORN NEWTON ST	8	292.83	10	3.66	5	8.66		0.5	
Bus	HIGH HOLBORN NEWTON ST	242	292.83	6.5	3.66	6.62	10.28	2.92		
		25	292.83		3.66		9.41	3.19		
Bus	HIGH HOLBORN NEWTON ST	24	627.56	10	7.84	5.75 5	12.84	2.34		
Bus	BLOOMSBURY ST SHAFTESBURY AVE							2.43		
Bus	BLOOMSBURY ST SHAFTESBURY AVE	134	627.56	12	7.84	4.5	12.34			
Bus .		29	627.56	15	7.84	4	11.84	2.53		
Bus		176	627.56	8.5	7.84	5.53	13.37	2.24		•
Bus	BLOOMSBURY ST SHAFTESBURY AVE	14	627.56	13	7.84	4.31	12.15	2.47		•
Bus	BRITISH MUSEUM	98	573.09	9	7.16	5.33	12.5	2.4	0.5	•
.UL	Leicester Square	'Morden-Edgware'	820.15	4.67	10.25	7.17	17.43	1.72		(
.UL	Leicester Square	'HighBarnet-Morden'	820.15	0.33	10.25	91.66	101.91	0.29		(
.UL	Leicester Square	'Kennington-Edgware'	820.15	14.67	10.25	2.79	13.05	2.3	0.5	•
.UL	Leicester Square	'HighBarnet-Kenningt'	820.15	5.33	10.25	6.38	16.63	1.8	0.5	(
.UL	Leicester Square	'MillHill-Morden'	820.15	1.67	10.25	18.71	28.97	1.04	0.5	(
.UL	Leicester Square	'MillHillE-Kenningt'	820.15	1.67	10.25	18.71	28.97	1.04	0.5	(
.UL	Covent Garden	'ArnosGrove-Uxbridge'	468.01	1	5.85	30.75	36.6	0.82	0.5	(
.UL	Temple	'Edgware-Hammersmith'	890.78	6	11.13	5.75	16.88	1.78	0.5	(
.UL	Temple	'Upminster-EalingBwy'	890.78	5	11.13	6.75	17.88	1.68	0.5	(
.UL	Temple	'TowerHill-EalingBwy'	890.78	0.33	11.13	91.66	102.79	0.29	0.5	(
.UL	Temple	'EalingBwy-Barking '	890.78	1.33	11.13	23.31	34.44	0.87	0.5	(
.UL	Temple	'Upminster-Richmond'	890.78	6	11.13	5.75	16.88	1.78	0.5	(
.UL	Temple	'Richmond-DagEast'	890.78	0.67	11.13	45.53	56.66	0.53	0.5	(
.UL	Temple	'Wimbledon-Upminster'	890.78	4	11.13	8.25	19.38	1.55	0.5	(
.UL	Temple	'Wimbledon-DagEast'	890.78	1	11.13	30.75	41.88	0.72	0.5	(
UL	Temple	'Barking-Wimbledon'	890.78	0.67	11.13	45.53	56.66	0.53	0.5	(
.UL	Temple	'TowerHill-Wimbledon'	890.78	2.67	11.13	11.99	23.12	1.3	0.5	(
.UL	Temple	'DagEast-EalingBwy'	890.78	0.67	11.13	45.53	56.66	0.53		(
UL	ChanceryLane	'WhiteCity-Loughton'	766.48	0.33	9.58	91.66	101.24	0.3	0.5	(
UL	Holborn	'Epping-Ealing '	168.35	3	2.1	10.75	12.85	2.33		
UL	Holborn	'Epping-Wruislip'	168.35	3	2.1	10.75	12.85	2.33		
UL	Holborn	'RuislipGar-Epping '	168.35	1	2.1	30.75	32.85	0.91		(
UL	Holborn	'WhiteCity-Epping '	168.35	0.33	21	91.66	93.76	0.32		(

Mode	Stop	Route	Distance (metres)	Frequency(vph)	Walk Time (mins)	SWT (mins)	TAT (mins)	EDF	Weight	A
UL	Holborn	'Epping-NActon'	168.35	1	2.1	30.75	32.85	0.91	0.5	0.46
LUL	Holborn	'Northolt-Epping '	168.35	0.67	2.1	45.53	47.63	0.63	0.5	0.31
LUL	Holborn	'Debden-WRuislip'	168.35	0.33	2.1	91.66	93.76	0.32	0.5	0.16
LUL	Holborn	'WhiteCity-Debden'	168.35	0.33	2.1	91.66	93.76	0.32	0.5	0.16
LUL	Holborn	'Debden-Northolt'	168.35	1	2.1	30.75	32.85	0.91	0.5	0.46
LUL	Holborn	'RuislipGdns-Debden'	168.35	0.33	2.1	91.66	93.76	0.32	0.5	0.16
LUL	Holborn	'Loughton-WRuislip'	168.35	1	2.1	30.75	32.85	0.91	0.5	0.46
LUL	Holborn	'NActon-Loughton'	168.35	0.67	2.1	45.53	47.63	0.63	0.5	0.3
LUL	Holborn	'RuislipGdns-Loughton'	168.35	0.67	2.1	45.53	47.63	0.63	0.5	0.3
LUL	Holborn	'Loughton-Northolt'	168.35	0.33	2.1	91.66	93.76	0.32	0.5	0.16
LUL	Holborn	'Ealing-Loughton'	168.35	1	2.1	30.75	32.85	0.91	0.5	0.46
LUL	Holborn	'Ealing-NewburyPark'	168.35	0.67	2.1	45.53	47.63	0.63	0.5	0.3
LUL	Holborn	'WRuislip-NewburyPark'	168.35	0.33	2.1	91.66	93.76	0.32	0.5	0.16
LUL	Holborn	'NActon-NewburyPark'	168.35	0.33	2.1	91.66	93.76	0.32	0.5	0.10
LUL	Holborn	'Ealing-Hainault'	168.35	5	2.1	6.75	8.85	3.39	0.5	1.6
LUL	Holborn	'Hainault-Nacton'	168.35	1.33	2.1	23.31	25.41	1.18	0.5	0.5
LUL	Holborn	'Hainault-WRuislip'	168.35	3.33	2.1	9.76	11.86	2.53	0.5	1.2
LUL	Holborn	'RuislipGdns-NP-Hain'	168.35	0.67	2.1	45.53	47.63	0.63	0.5	0.3
LUL	Holborn	'Hainault-WhiteCity'	168.35	1.67	2.1	18.71	20.82	1.44	0.5	0.72
LUL	Holborn	'Hainault-NP-Northolt'	168.35	1	2.1	30.75	32.85	0.91	0.5	0.46
LUL	Holborn	'GrangeHill-WD-Eal'	168.35	1	2.1	30.75	32.85	0.91	0.5	0.46
LUL	Holborn	'GrangeHill-Wdfd-Whit'	168.35	0.67	2.1	45.53	47.63	0.63	0.5	0.3
LUL	Holborn	'GrangeHill-Wdfd-WRsp'	168.35	0.67	2.1	45.53	47.63	0.63	0.5	0.3
LUL	Holborn	'Cockfosters-LHRT4LT'	168.35	4.67	2.1	7.17	9.28	3.23	0.5	1.62
LUL	Holborn	'RayLane-Cockfosters'	168.35	3.67	2.1	8.92	11.03	2.72	0.5	1.36
LUL	Holborn	'LHRT4LT-ArnosGrove'	168.35	4.67	2.1	7.17	9.28	3.23	0.5	1.62
LUL	Holborn	'ArnosGrove-RayLane'	168.35	0.33	2.1	91.66	93.76	0.32	0.5	0.16
LUL	Holborn	'ArnosGrove-Nthfields'	168.35	3	2.1	10.75	12.85	2.33	0.5	1.17
LUL	Holborn	'Oakwood-RayLane'	168.35	0.33	2.1	91.66	93.76	0.32	0.5	0.16
LUL	Holborn	'Nthfields-Cockfoster'	168.35	1	2.1	30.75	32.85	0.91	0.5	0.46
LUL	Holborn	'LHRT5-Cockfosters'	168.35	6	2.1	5.75	7.85	3.82	1	3.8
LUL	Holborn	'Uxbridge-Cockfosters'	168.35	3.67	2.1	8.92	11.03	2.72	0.5	1.30
LUL	Holborn	'Ruislip-Cockfosters'	168.35	2.33	2.1	13.63	15.73	1.91	0.5	0.9
LUL	Holborn	'Oakwood-Uxbridge'	168.35	0.33	2.1	91.66	93.76	0.32	0.5	0.16
LUL	Holborn	'Oakwood-Ruislip'	168.35	0.33	2.1	91.66	93.76	0.32	0.5	0.16
									Total Grid Cell Al:	93.7



APPENDIX C



MAIN ENTRANCE - VAN SWEPT PATH

SCALE 1:100

DATE DR BY NO. DESCRIPTION REVISIONS P1 Issue for planning 11.04.16 DS THIS DRAWING SUBJECT TO COPYRIGHT SHIVA KINGSWAY LTD PROJECT KINGSWAY HALL HOTEL TITLE ENTRANCE / SWEPT PATH ANALYSIS DATE SCALE @ A1 04.03.2016 1/100 JOB NO DRAWN BY CHECKED DRAWING NO REVISION P1 9th floor, 69 park lane croydon, london CR0 1JD Tel: +44 (0) 20 8662 4600 Email: info@rh-architects.com

100

ORIGINAL SHEET SIZE - A1

THIS DRAWING IS SUBJECT TO COPYRIGHT
ALL DIMENSIONS SHALL BE CHECKED ON SITE AND THE ARCHITECT
SHALL BE NOTIFIED OF ANY DISCREPANCIES PRIOR TO WORK
COMMENCING.

PLANS HAVE BEEN BASED ON CAD DATA PROVIDED BY THE CLIENT WHICH HAS NOT BEEN CHECKED FOR ACCURACY NOTES:

VEHICLE SWEPT PATHS AS PROVIDED BY TRANSPORT CONSULTANT CURVED FACADE AS PROPSED BY INTERIOR

DESIGNERS

KERB - SAFETY ZONE