

140820 Brunswick Centre Eyecatcher: Pedestrian Comfort Level Assessment



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Project No

Subject Brunswick Centre Eyecatcher. Pedestrian Comfort Level Assessment

1. Introduction

On the 4th July 2014, the London Borough of Camden (LBC) registered a planning application (reference 2014/3806) for a development proposal referred to as the Brunswick Centre Eyecatcher.

The Eyecatcher proposals are for a new restaurant building (A3 land use classification), with gross floor area (GFA) of 360sqm, set within a new structure that will sit above the existing Renoir cinema foyer box that fronts the eastern entrance to the Brunswick Centre. Either side of the foyer box there exists two pedestrian access routes into the main Brunswick Centre courtyard and the various retail units that front such. Access to the Eyecatcher will be achieved via a staircase and lift, both of which are located on the northern edge of the cinema foyer box. As a result, the northern pedestrian access route will be narrowed.

As the result of a separate stand-alone planning application however (reference 2014/0481/P), granted 19th February 2014, Curzon Cinemas are redeveloping the existing cinema foyer box. Construction works are currently being undertaken and as a result the cinema is not currently operational. The Eyecatcher proposals have therefore been developed assuming the proposed cinema foyer box is in place.

The existing site plan, site plan associated with Curzon Cinema's approved application and proposed site plan associated with the Eyecatcher are therefore attached as **Appendices A, B and C** respectively.

As part of the consideration of the Eyecatcher application, LBC's planning case officer has requested additional information to assess the impact the resultant narrowing of the northern pedestrian access route will have on pedestrian comfort levels around the structure to/from the main central Brunswick Centre courtyard.

Jacobs have therefore been instructed by Jones Lang LaSalle to undertake a Pedestrian Comfort Level Assessment, the results of which are detailed within this Technical Note.

The Technical Note provides further detail on the development proposals, before describing the assessment methodology and results.

2. Proposals

Existing Arrangement

Appendix A, taken from the publically accessible design and access statement that was submitted as part of the Curzon Cinema redevelopment proposal, details the location and layout of the existing Renoir Cinema foyer box. This confirms the existing foyer box is approximately 15m long, 7m wide at its narrowest point, and 9m wide at its widest point where it accommodates a lift shaft along its northern boundary. Pedestrian access to the foyer box is achieved from both the northern and southern boundaries.



The foyer box sits between two rows of concrete columns approximately 10.5m apart, beyond which are another row of columns on either side of the foyer box, with 5.2m wide clearance in between. This clearance is used by pedestrians to pass to/from the main Brunswick Centre courtyard that provides access to the retail units that front such.

Future Baseline Arrangement (with Curzon Cinema foyer proposals)

Appendix B, taken from the publically accessible design and access statement that was submitted as part of the Curzon Cinema redevelopment proposal, details the location and layout of the foyer box. This confirms that the foyer box will be extended in length, toward Hunter Street, and in width, occupying the significant majority of the 10.5m clearance between the existing concrete columns as a result. Pedestrian access to the foyer from both the northern and southern boundaries will be retained and pedestrian through movements to the main Brunswick Centre courtyard along the 5.2m wide access routes, either side of the foyer box, will also be unaffected.

It should be noted that the Eyecatcher proposals are in fact included within Curzon's application drawings for reference purposes only.

Proposals

The Eyecatcher proposals are for a new restaurant building (A3 land use classification), set within a new structure that will sit above Curzon's new cinema box, with proposed layout indicated in **Appendix C**.

Access to the Eyecatcher will be achieved via a staircase and lift, both of which are located on the northern edge of the foyer box, accommodated within the 5.2m wide northern pedestrian route that provides access to the main Brunswick Centre courtyard. This will reduce the width of the northern pedestrian route to approximately 2.9m.

The existing 5.2m wide access route along the southern boundary of the foyer box will remain unaffected by the proposals.

The assessment will therefore quantify the impact the reduction in available width has on pedestrian comfort levels along the northern edge of the foyer box.

3. Assessment

Methodology

An assessment of the capacity of the remaining footway has been undertaken using TfL's Pedestrian Comfort Guidance Assessment (PCGA) methodology. A PCGA is undertaken to ensure that the design of pedestrian footways are appropriate for the volume and type of users of that environment and is applicable to evaluating both a new or existing footway. Going further than a traditional Fruin Level of Service assessment, which simply assesses crowding, the PCGA takes into account user perceptions, different user behaviour within a variety of area types and includes the real impact of street furniture.

Pedestrian Survey

The analysis is informed by a pedestrian count undertaken between 12.00-14.00 and 19.00-21.00 on Friday the 8th and Saturday 9th August 2014, times when there is anticipated to be a peak in existing demand. The survey counted existing pedestrian movements, in both directions, on each side of the foyer box, with a summary of the results presented below as Table 3.1 and indicated as **Figure 3.1**, with full survey outputs attached as **Appendix D**.

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Table 3.1: Pedestrian Counts

Time Period	Friday 8 th August						Saturday 9 th August					
	Northern Footway			Southern Footway			Northern Footway			Southern Footway		
	Eastbound (exit)	Westbound (entry)	Two Way	Eastbound (exit)	Westbound (entry)	Two Way	Eastbound (exit)	Westbound (entry)	Two Way	Eastbound (exit)	Westbound (entry)	Two Way
12.00-13.00	217	321	538	209	299	508	218	173	391	102	143	245
13.00-14.00	421	410	831	296	455	751	261	238	499	135	203	338
19.00-20.00	174	118	292	176	127	303	184	114	298	128	127	255
20.00-21.00	164	118	282	145	174	319	137	81	218	122	93	215

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From Table 3.1, it is apparent that the peak hour of assessment during the afternoon, within the two hour survey period, was 13.00-14.00 for both the Friday and Saturday, with the evening demand more evenly spread across each hour. A peak pedestrian flow of 831 two way movements occurred along the northern footway on Friday during 13.00-14.00, with a peak two-way hourly flow on the southern footway occurring during 13.00-14.00 on the Friday, with 751 movements.

Scenarios

A number of scenarios have been tested, summarised below in Table 3.2.

Table 3.2: Scenario Testing

Scenario	Description
Existing Scenario	Using observed peak pedestrian flows, ie cinema not operational
Future Baseline Scenario (cinema operational)	Using observed peak pedestrian flows and including additional pedestrian movements accessing cinema based on proxy site analysis
Future Development Scenario (cinema and Eyecatcher operational)	Using observed peak pedestrian flows and including additional pedestrian accessing cinema based on proxy site analysis and proposed restaurant being operational, with restricted northern pedestrian access width

Cinema Movements

As the cinema is currently closed for refurbishment, assumptions need to be made regarding the potential scale of pedestrian demand that will be generated by that land use for those scenarios where the cinema is operational (future baseline and future baseline with development). The TRAVL database has therefore been relied upon, with representative trip rates sourced from proxy cinema sites located within inner and central London, with a public transport accessibility level rating of between 3-6, with restricted car parking and with a survey period that encompasses the assessment hours of 12.00-14.00 and 19.00-21.00.

A total of 4 sites satisfied this selection criteria, with details summarised in Table 3.3 below.

Table 3.3: Cinema Proxy TRAVL Sites

Survey Reference	Site	PTAL	Parking	Seats
317	Electric Cinema Kensington and Chelsea	3	0	220
155	Odeon Cinema Islington	5	9	1700
209	Virgin Cinema Hammersmith and Fulham	4	0	1176
273	Warner Villages Westminster	6	0	2400

Table 3.4 below then details the all mode trip rates per seat using these proxy sites for the relevant periods of assessment and applies these rates to the proposed number of cinema seats, 320, to generate the anticipated number of arrival and departure movements, with TRAVL outputs included as **Appendix E**.

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Table 3.4: Anticipated Cinema Trips

Time Period	Rates Per Seat			Trips (320 Seats)		
	IN	OUT	Total	IN	OUT	Total
12.00-13.00	0.059	0.028	0.088	19	9	28
13.00-14.00	0.074	0.040	0.114	24	13	36
19.00-20.00	0.158	0.111	0.269	50	36	86
20.00-21.00	0.161	0.138	0.299	51	44	96

Upon reviewing the trip generation data at an individual site level however, it was apparent that survey reference 317 detailed a total number of arrival and departure movements that were significantly higher than the other sites. Table 3.5 therefore presents revised all mode trip rates and trips using just this site to ensure a robust assessment.

Table 3.5: Anticipated Cinema Trips (survey reference 317)

Time Period	Rates Per Seat			Trips (320 Seats)		
	IN	OUT	Total	IN	OUT	Total
12.00-13.00	0.218	0.159	0.377	70	51	121
13.00-14.00	0.495	0.455	0.950	159	145	304
19.00-20.00	0.164	0.127	0.291	52	41	93
20.00-21.00	0.582	0.368	0.950	186	118	304

As the approved foyer box has pedestrian access points on either side, these arrival and departure movements have been distributed to both the northern and southern pedestrian access routes based on the observed proportions indicated in **Figure 3.1**. These movements are indicated in **Figure 3.2**.

Development Movements

The development proposals are for a restaurant with GFA of 360sqm.

Using restaurant sites within the TRAVL database, it is possible to estimate the number of seats that would be accommodated within this GFA. **Appendix F** lists these sites and confirms a ratio of approximately 2.47 sqm per seat, which translates to approximately 146 seats for the proposed GFA.

For the purpose of this assessment therefore, the robust assumption has been made that within any hour period of assessment there are a total of 146 departures and 146 arrivals, all of which will use the northern pedestrian access as indicated on **Figure 3.3**.

Analysis

The cross section that will be assessed is the area between the first two concrete columns at the start of the pedestrian access routes, indicated on **Sketch A** under **Appendix G**, with an available pedestrian width of 5.2m for the existing and future baseline scenarios, reducing to 2.9m with the proposed Eyecatcher in place along the northern pedestrian access.

As the available pedestrian access widths are consistent for the full length of these routes there is no requirement to assess other sections.

In terms of assumptions to inform the assessment, given there is no street furniture within each of the northern and southern pedestrian routes, the location type has been assumed to

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be *Full Footway Width*, the area type has been assumed to be *High Street* and there is assumed to be no existing static pedestrian activity.

In terms of results, Table 3.6 below therefore summarises the Pedestrian Comfort Level Categorisation during the peak hour, with detailed calculations for each scenario using TfL's standard spreadsheet attached as **Appendix G**.

Table 3.6: Pedestrian Comfort Level

Scenario	Day	Time	Figures	Pedestrian Comfort Level Categorisation at Peak Hour Flow	
				Northern Footway	Southern Footway
Existing Scenario	Friday	12.00-14.00	Figure 3.1	A	A
		19.00-21.00		A+	A+
	Saturday	12.00-14.00		A+	A+
		19.00-21.00		A+	A+
Future Baseline Scenario (cinema operational)	Friday	12.00-14.00	Figure 3.3	A	A
		19.00-21.00		A+	A+
	Saturday	12.00-14.00		A+	A+
		19.00-21.00		A+	A+
Future Development Scenario (cinema and Eyecatcher operational)	Friday	12.00-14.00	Figure 3.5	B+	A
		19.00-21.00		A	A+
	Saturday	12.00-14.00		A-	A+
		19.00-21.00		A	A+

Table 3.6 confirms that, during the existing scenario, for each period of assessment and on each day, the Pedestrian Comfort Level Categorisation during the peak hour is at least an 'A' rating.

Table 3.6 also confirms that, during the baseline scenario, with the cinema being operational, the Pedestrian Comfort Level Categorisation during the peak hour remains at least an 'A'.

Finally, Table 3.6 confirms that during the future development scenario, with the Eyecatcher being operational and the northern footway width reduced as a result, the Pedestrian Comfort Level Categorisation reduces along this northern access route to a minimum of 'B+'.

Assessment

TfL's guidance document states that Pedestrian Comfort Level Categorisations of 'A-' to 'A+' are '*comfortable for all areas,*' with '*plenty of space for people to walk at the speed and the route that they choose.*'

TfL's guidance document also states that the minimum Pedestrian Comfort Level Categorisation that should be achieved for all area types is 'B+', and that this level '*provides enough space for normal walking speed and some choice in routes taken.*'

In this regard, based on the results above, the northern footway satisfies the minimum recommended Pedestrian Comfort Level Categorisation with the development proposals in place with the restricted footway width.

The assessment is considered robust due to the trip rates adopted for the cinema land use and the assumptions with regards to number of movements to/from the proposed restaurant.



It should also be noted that pedestrians who are accessing the main Brunswick centre courtyard have the alternative southern pedestrian route, which remains unaffected by the proposals and has been demonstrated to operate well within acceptable Pedestrian Comfort Levels.

4. Conclusion

It can be concluded therefore that, based on TfL's Pedestrian Comfort Level Assessment, the development proposals have no material impact on Pedestrian Comfort along the northern access route and this should not be identified as a reason for refusal.



Figures

Figure 3.1 – Existing Pedestrian Movements

Figure 3.2 – Anticipated Cinema Pedestrian Movements

Figure 3.3 – Future Baseline Pedestrian Movements

Figure 3.4 – Robust Development Pedestrian Movements

Figure 3.5 – Future With Development Pedestrian Movements



Appendix A – Existing Layout

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Appendix B – Approved Layout



Appendix C – Proposed Layout



Appendix D – Pedestrian Survey



Appendix E – D1 Cinema TRAVL Outputs



Appendix F – A3 Restaurant TRAVL Outputs



Appendix G – Pedestrian Comfort Level Calculations