

**THE LONDON BOROUGH OF HARINGEY  
(HIGH ROAD WEST PHASE A)  
COMPULSORY PURCHASE ORDER 2023**

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**DOCUMENT CD 10.10**

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**WITNESS 7: BECKY HAYWARD, BURO HAPPOLD**

**REBUTTAL**

1. **Introduction**

- 1.1 My name is Rebecca Hayward. Details of my qualifications and experience are set out in my main proof of evidence [CD 9.13].
- 1.2 In this short rebuttal statement ("**Rebuttal**") I adopt the same references and abbreviations as I used in my first proof [CD 9.13] (my "**Main Proof**").
- 1.3 This Rebuttal has been prepared to respond proof of evidence submitted by Simon Ancliffe of Movement Strategies submitted on behalf of THFC [CD 9.25].
- 1.4 Further rebuttal evidence in respect of Mr Ancliffe's proof of evidence ("**PoE**") is provided by Selina Mason of Lendlease [CD 10.3].
- 1.5 This is not intended to be an exhaustive rebuttal of the contentions made in the PoE of Mr Ancliffe. This document only deals with certain points where it is considered appropriate and helpful to respond in writing.

## 2. **Simon Ancliffe's Proof of Evidence**

2.1 The PoE of Mr Ancliffe makes a number of points. This Rebuttal responds to the following matters raised:

- (a) Dimensions assumed for existing crowd management;
- (b) Dimensions for end-state and interim phases of the Scheme;
- (c) Ability to determine whether the Scheme can deliver safe crowd management.

2.2 It is noted that Mr Ancliffe's PoE is based on documents submitted in support of the planning application for the Consented Scheme in May 2022, primarily the:

- (a) Buro Happold's Crowd Flow report ("**Report**") [CD 4.40]; and
- (b) Construction Environment Management Plan ("**CEMP**") (May 2022) [CD 4.41].

2.3 However, following submission of those documents the following information was received from/submitted to THFC:

- (a) 30 June 2022 / 7 July 2022 – THFC / Movement Strategies provided (for the first time) a PDF mark-up of the existing crowd flow queue layouts and areas [CD 10.11.1]; and
- (b) 13 July 2022 – DP9, on behalf of Lendlease, submitted a response to representations made on the planning application by THFC. Appendix B to the response contained a note prepared by Buro Happold comparing the existing and proposed southbound queue areas ("**July Note**" [CD 10.11.2]).

2.4 The assessment in my Main Proof reflects the information referred to at paragraph 2.3 above. Furthermore, the assessment in my Main Proof reflects the revised construction phasing for the Scheme [CD 5.9].

2.5 In light of the above, by focusing on the contents of the Report and the CEMP, Mr Ancliffe's PoE is largely based on historic information. As a result, I would like to make the below clarifications.

### 2.6 **Dimensions assumed for existing crowd management**

- (a) The following comments are in relation to paragraphs 6.3, 6.4, 6.26, 7.7, 7.8, 7.41 and 10.7 of Mr Ancliffe's PoE, whereby it is claimed that the crowd flow analysis contained within the Report [CD 4.40] understates the existing queue space by not including contingency and space for toilets.
- (b) In summary, Mr Ancliffe states that the existing queue space for the southbound queue is 1,020 m<sup>2</sup>. I can confirm that I agree with Mr Ancliffe's assessment.
- (c) Within the Report [CD 4.40], an area of 780 m<sup>2</sup> was stated as being the existing queue area for the southbound queue. This value was arrived at in the absence of any queue or barrier drawings from THFC. It was based upon Buro Happold's observations of the extent of the formal barriers and the value assumed that the informal queue area could extend to within 12 m of the vehicle mitigation barrier. A

request for information had been raised with THFC in November 2021 seeking CAD layouts of the existing queue systems to verify this measurement. These were shared by THFC on 30 June 2022 and 7 July 2022 [CD 10.11.1] – after the submission of the Report.

- (d) Following receipt of the layouts, my analysis of the existing queue area was updated. This updated analysis was set out within the July Note and was further clarified in my Main Proof which refers to an area of 1,020 m<sup>2</sup>
- (e) The total southbound queue area of ~1,020 m<sup>2</sup> comprises the following areas which were shown in the queue layout shared by THFC in July 2022 [CD 10.11.1]:
  - (i) Southbound queue: 797 m<sup>2</sup> minus an area of 128 m<sup>2</sup> which must be kept clear in front of the Station, resulting in 669 m<sup>2</sup>;
  - (ii) 3<sup>rd</sup> party resilience queue (contingency): 345 m<sup>2</sup>.
- (f) The latest diagram from Movement Strategies (Figure 12 of Mr Ancliffe's PoE) slightly shifts the boundary between the formal southbound queue and the contingency queue, but the total footprint area remains at 1,020 m<sup>2</sup>.
- (g) It is acknowledged that a footprint of 122 m<sup>2</sup> (Figure 16 of Mr. Ancliffe's PoE) can be considered for the existing provision of toilets (10 units and an area for queueing and access).
- (h) As stated in Condition 64 of the Planning Permission [CD 4.28], in addition to the areas, the available widths are critical to the crowd management. The existing widths along Whitehall Street and Love Lane are outlined in paragraphs 2.1.6, 2.1.7 and 2.1.8 of my Main Proof [CD 9.13] and within the Report [CD 4.40] (see end of Section 7, page 51). Mr Ancliffe does not appear to object to these widths in his PoE.

## 2.7 Dimensions for end-state and interim phases of the Scheme

- (a) The general theme of paragraphs 6.26, 10.8, 10.12 of Mr Ancliffe's PoE is that Buro Happold's crowd flow analysis overstates the queue area available in the end-state of the Scheme. I disagree that the area is overstated for the reasons outlined below. This section responds to both Mr Ancliffe's overarching claim and specific points in relation to the queue area available in the end-state and interim construction phases.
- (b) At paragraph 6.11 (and Figures 19 and 20) of his PoE, Mr Ancliffe's comments on alternative queue arrangements. These queue arrangements can be disregarded. They were demonstrative and sought to address comments from other stakeholders during the determination of the planning application about different ways the queue could be arranged within the space available. Ultimately the queue layout in Figure 18 at paragraph 6.2 of Mr Ancliffe's PoE was recommended. This queue arrangement is most similar in concept to Option 3 (Figure 20) which Mr Ancliffe states is the only option which would be acceptable. Dr Dickie, the Council's independent crowd flow advisor also agreed that this queue layout at Figure 18 of Mr Ancliffe's PoE would be an acceptable arrangement [CD 9.14.4 and CD 9.14.5]. Whilst it involves some

variation in width along the route (primarily due to details of tree locations which are taken in to account in the measurements), this is true of the current arrangements (see image below). Further, the width of the route within the arrangement shown on Figure 18 would not fall below the minimum existing width and can be monitored and managed by stewards.



*Figure 2: Existing funnelling of southbound queue*

- (c) In relation to Mr Ancliffe's point about barrier space at paragraph 6.15 and 7.11 of his PoE, I can confirm that the areas taken up by barriers (which are 0.7 to 0.8 m in width) have been taken into account in the measurements underlying my assessment. The area quoted within my PoE (and summarised in Table 1 below) is the effective queue area. This demonstrates that the queue footprints both in the end-state and during the construction phases will always be at least equivalent to the existing provision.
- (d) Paragraph 6.19 of Mr Ancliffe's PoE states that the Report does not include White Hart Lane or the High Road. I confirm that pedestrian routes along High Road are not impacted in the end-state. During detailed design I understand (from Lendlease) that the pedestrian routes along White Hart Lane will be at least equivalent to, or wider than the existing condition.
- (e) In relation to paragraphs 7.4, 7.5, 7.9 to 7.18, 7.23 to 7.34 and 7.39 to 7.41 of Mr Ancliffe's PoE, please note that the reference material in respect of the construction phase of the Scheme has been superseded. Reference should instead be made to my Main Proof, the Buro Happold Construction Phasing Report dated 5 October 2023 [CD 9.14.6] and associated construction phase drawings [CD 9.14.7], which reflect the updated analysis and updated phasing of the Scheme.
- (f) In relation to paragraphs 7.22, 7.23, 7.24 of Mr Ancliffe's PoE, during detailed design I understand (from Lendlease) that the hoarding will not reduce the available widths along the High Road or White Hart Lane during any construction phase. Crowd barriers used to separate queue lanes can be broken as per the below and in the same manner as existing:

- (i) along Whitehall Street the barrier south of the southbound queue can be broken to give access to an additional ~2 m width access route which is retained in all phases; and
- (ii) to the north of the southbound (and northbound) queue lanes along Whitehall Street, the barriers could be broken to give access to the contraflow lane, as per existing.
- (g) In relation to paragraph 7.26 of Mr Ancliffe's PoE, pedestrian routes along White Hart Lane will be equivalent to the existing and hence access to the shuttle bus will not be affected.
- (h) Mr Ancliffe notes the following in paragraph 10.11 of his PoE "*Lendlease shows a series of access routes through the future Moselle Square phases that provide near equivalency of space as the existing layout – but demonstrably less than the claimed End-state.*". This demonstrates that Mr Ancliffe agrees that even in the superseded material, the interim phases are shown to demonstrate near equivalency of space to the existing layout. Note that there is not a requirement for the interim phases to achieve the same space as the end-state. The end-state is an improvement on the existing route in terms of space, layout and safety.
- (i) The following table summarises the footprints available for the northbound and southbound queues and demonstrates that all phases provide equivalency (or improvements) to the existing layout:

*Table 1: Comparison of existing, end-state and interim queue areas and circulation widths*

	Southbound queue area	Northbound queue area	Min width Whitehall street	Min Width Love Lane (or equivalent)	SB queue min. width	NB queue min. width	Contraflow lane min. width
<b>Existing</b>	<b>1,020 m<sup>2</sup></b>	<b>1,268 m<sup>2</sup></b>	<b>11.3 m</b>	<b>9.5 m</b>	<b>3.6 m</b>	<b>1.5 m</b>	<b>1.4 m</b>
<b>Stage 1</b> (as existing)	1,020 m <sup>2</sup>	1,268 m <sup>2</sup>	11.3 m	9.5 m	3.6 m	1.5 m	1.4 m
<b>Stage 2</b> (as existing)	1,020 m <sup>2</sup>	1,268 m <sup>2</sup>	11.3 m	9.5 m	3.6 m	1.5 m	1.4 m
<b>Stage 3</b>	1,067 m <sup>2</sup>	1,268 m <sup>2</sup>	11.3 m	15.7 m	3.9 m	1.5 m	1.4 m
<b>Stage 4</b>	1,025 m <sup>2</sup>	1,268 m <sup>2</sup>	11.3 m	15.7 m	4.3 m	1.5 m	1.4 m
<b>Stage 5</b>	1,083 m <sup>2</sup>	1,268 m <sup>2</sup>	11.3 m	15.7 m	5.1 m	1.5 m	1.4 m
<b>Stage 6</b>	1,038 m <sup>2</sup>	1,268 m <sup>2</sup>	11.3 m	15.7 m	3.8 m	1.5 m	1.4 m
<b>Stage 7</b>	1,025 m <sup>2</sup>	1,268 m <sup>2</sup>	11.4 m	15.7 m	3.8 m	1.5 m	1.4 m
<b>Stage 8</b>	1,342 m <sup>2</sup>	1,268 m <sup>2</sup>	16.4 m	15.2 m	8.2 m	1.5 m	1.4 m
<b>Stage 9</b>	1,342 m <sup>2</sup>	1,268 m <sup>2</sup>	21 m	15.2 m	8.2 m	1.5 m	1.4 m
<b>Stage 10</b>	1,480 m <sup>2</sup>	1,268 m <sup>2</sup>	21 m	21 m	5.4 m	1.5 m	1.4 m
<b>Stage 11</b> <b>End state<sup>1</sup></b>	1,480 m <sup>2</sup>	1,268 m <sup>2</sup>	21 m	21 m	5.4 m	1.5 m	1.4 m

- (j) In relation to paragraphs 9.12 to 9.13 and Figure 35 of Mr Ancliffe's PoE, the parameter plans [CD 4.3] specify that the minimum separation between Plots E and C is 21 m. The queue and contraflow lanes shown for the end-state are based on this distance. However, the current illustrative masterplan also achieves an additional 12

<sup>1</sup> Min. widths along Whitehall Street and Love Lane - As per parameter plans, note Illustrative Masterplan provides additional width at the Whitehall Street location

m at ground floor. This will potentially provide further flexibility for managing crowds on event days.

- (k) 21 m width is nearly twice the existing width available (~11 m) at the junction between High Road and Whitehall Street. It will therefore provide a significant improvement to the existing situation.

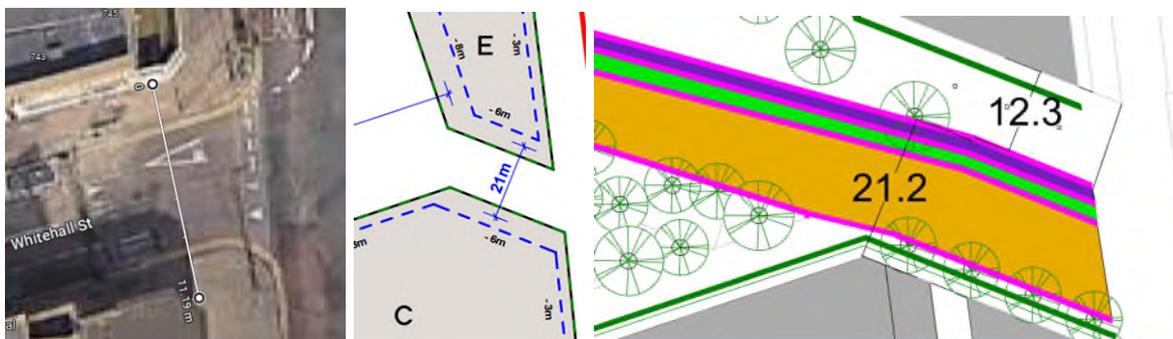


Figure 3: Existing width at Whitehall Street access (~11 m), Parameter plans minimum separation between plot E and C, current illustrative masterplan showing queue lanes within the 21 m width with an additional 12 m available.

- (l) In relation to paragraphs 6.16 and 6.17 of Mr Ancliffe's PoE, the end-state provides sufficient space for re-providing the current provision of toilets, along with access, within Moselle Square. There is a contiguous area of at least ~440 m<sup>2</sup> available in the square in addition to that considered for the queue space, circulation and landscaping.
- (m) As shown in Table 2 below, during the interim phases there are areas of at least 122 m<sup>2</sup> where toilets can be re-provided on event days. It would not be typical to show the details of a temporary overlay for toilets at this stage of the process – this would more typically be included as part of the dispersal plans or Local Area Management Plan (LAMP) for the stadium. However, I confirm the area is available and therefore it is possible to accommodate the existing provision for toilets. The details of these can be reviewed and agreed during each reserved matters application ("**RMA**") to ensure that access is maximised and workable for crowd flow or alternative options/locations developed.

Table 2: Area available for toilets in End State and interim phases

Area available in addition to queue and contraflow lane footprints	
Stage 1-2	As existing
Stage 3	465 m <sup>2</sup>
Stage 4-7	122 m <sup>2</sup> to 393 m <sup>2</sup>
Stage 8-10	~440 m <sup>2</sup>

- (n) Paragraphs 10.9 and 10.10 of Mr Ancliffe's PoE states that limited information related to crowd flow during construction phasing has been provided. Please refer to my Main Proof and appendices [CD 9.13 and 9.14] for my updated assessment of crowd flow during construction phasing which demonstrates equivalency to the existing and safe crowd management can be achieved.

## 2.8 Ability to determine whether the scheme can deliver safe crowd management

- (a) Before responding to the points raised by Mr Ancliffe on the Scheme's ability to deliver satisfactory crowd flow arrangements, I note that Mr Ancliffe's does not state anywhere within his PoE that the Scheme or the interim phases to deliver the Scheme cannot provide satisfactory arrangements for the safe movement and management of crowds.
- (b) In relation to paragraphs 1.19 and 10.5 of Mr Ancliffe's PoE, I agree that crowd flow is of importance. The topic has been considered and reviewed for the most demanding scenarios (egress post event) to demonstrate that safe crowd flow management is achievable and workable for the Scheme. The approach I have adopted is typical for a scheme at this stage of design. In fact, the level of detail provided to date exceeds that submitted at this stage in respect of other schemes Buro Happold have been involved in and which involve crowd movement.
- (c) Paragraphs 6.20, 6.21, 6.22, 6.25, 6.29, 7.25, 7.26, 7.27, 7.42, 10.6, 10.14 and 10.15 of Mr Ancliffe's PoE state that Lendlease has focused its crowd flow studies and assessments on the egress phase. However, as Mr Ancliffe states in paragraph 10.6, the *“egress phase is the most ‘demanding’ phase to be considered, and queue space is an important consideration”*.
- (d) Egress places the most demand on the space and so drives the overall quantum of space and routing. My observations of the site on event days and experience from precedent sites demonstrates that ingress is less demanding. It is also noted from my observations of the site during ingress that some of the barriers required for egress were already in place, as well as the required vehicle mitigation barriers along Whitehall Street (see Figure 4 below), which reduces the effective widths available during ingress. Section 8 of the THFC Local Area Management Plan document for the 25 September 2021 Boxing Event [CD 10.11.3] provides details of the management of spectators arriving and departing on foot. It does not provide detail of the specific arrangements and barrier layouts for ingress or emergency access and focuses primarily on egress arrangements and road closures. This demonstrates the importance of the egress scenario in defining the key requirements for crowd management.
- (e) I agree that the ingress scenario can generate additional considerations (for example, the positioning of stewards to aid arriving fans). The detailed placement of barriers, signing and other elements required for ingress and emergency access would be detailed during RMA stages with engagement with THFC and other relevant stakeholders, including the Metropolitan Police, as required by Condition 64 of the Planning Permission.



*Figure 4: Photos taken during the ingress scenario demonstrating current pinch points in place during ingress outside White Hart Lane Station and along Whitehall Street*

- (f) Paragraphs 6.23, 6.31, 7.44 and 10.17 of Mr Ancliffe's PoE variably state *"it has not been demonstrated that the CPO Scheme (in the End-state) will provide satisfactory arrangements for the safe movement and management of crowds"* (quoted from paragraph 6.31). I note that the review by Dr Dickie, the Council's independent crowd flow expert, concluded that the crowd control measures to be provided both during and after construction would provide at least equivalent provision for stadium crowds queuing for White Hart Lane Station and that post construction the situation for stadium crowds will be improved [CD 9.14.4 and 9.14.5], due to there being greater flexibility in how queues can be arranged in the proposed Moselle Square and through the provision of a less constrained and more direct route for spectators.
- (g) Paragraphs 7.25, 7.26, 7.27, 7.43, 10.12 and 10.13 of Mr Ancliffe's PoE claim that insufficient information on emergency planning has been provided. In response to this point, I highlight that the arrangements for the interim phases were presented to the Counter Terrorism Security Advisor for Metropolitan Police. Their objection to the Scheme was subsequently withdrawn on the basis of the information provided for planning. Dr Dickie also concurred in a letter to the Council dated 21 July 2022 responding to issues raised by THFC in relation to crowd flow that *"measures to ensure acceptable levels of risk during each phase of the construction will be assessed by the Safety Advisory Group. This is no different that the common practice of Local Authorities throughout the country when licensing events."* (please refer to paragraph 1.9 of CD 10.11.4). My Main Proof of evidence confirms that equivalent or increased route widths to the existing have been provided at all stages, and all alternative routes are equivalent which implies that emergency egress capacity would be at least equivalent.
- (h) In relation to paragraphs 6.18 and 6.30 of Mr Ancliffe's PoE, I agree with seeking opportunities to improve on the existing situation. The end-state results in greater area, which will provide a better experience for end users and greater flexibility for crowd management. Permanent Hostile Vehicle Mitigation barriers are also provided, to enhance security, and there is increased space within the end-state for management provisions such as Variable Message Signage and toilets. The details of which would be developed during detailed design which is an appropriate and typical approach for a scheme of this nature.

- (i) Finally, in sections 3 and 4 of his PoE, Mr Ancliffe sets out the background context and current management of crowd flow at Tottenham Hotspur Stadium. This is aligned with what I have observed on my visits to the stadium. In comparison to other major venues in the UK, the crowd flow routes and management requirements within the development are relatively straightforward. Take (for example), the flows and management through the land around Cardiff Central Station on event days for the nearby Principality Stadium (which Buro Happold provided crowd flow advice for during the construction of the new BBC Wales Headquarters). Cardiff Central Station accounts for ~40-50% of the 74,500 seat stadium (vs. ~20% mode share for White Hart Lane Station). It operates 8 separate queues (serving 8 key destinations) during egress (compared to two queues at White Hart Lane Station). These were successfully managed during the construction of the new BBC Wales HQ immediately outside the station.



*Figure 5: Crowd management at Cardiff Central Station*

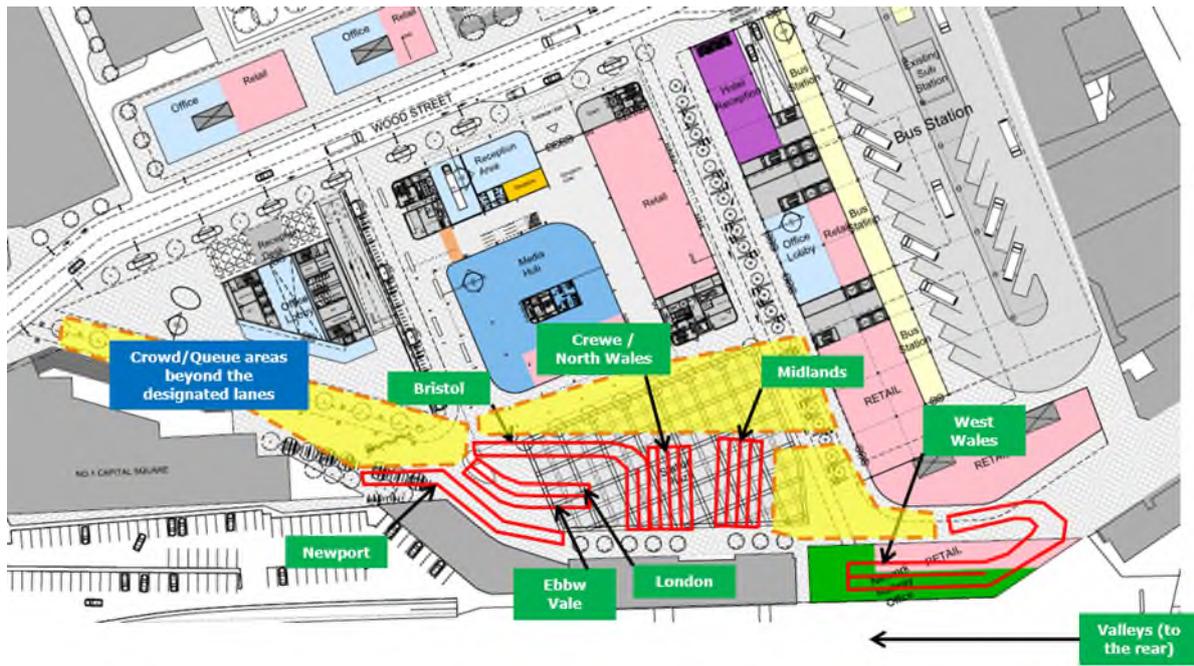


Figure 6: Crowd management at Cardiff Central Station

**3. Statement of Truth and Declaration**

3.1 I confirm that I have made clear which facts and matters referred to in this Rebuttal are within my own knowledge and which are not. Those that are within my own knowledge I confirm to be true. The opinions I have expressed represent my true and complete professional opinions on the matters to which they refer.

3.2 In preparing this Rebuttal, I confirm that:

- (a) I have drawn attention to all material facts which are relevant and have affected my professional opinion;
- (b) I understand and have complied my duty to the Inquiry as an expert witness which overrides any duty to those instructing or paying me, that I have understood this duty and complied with it in preparing my evidence impartially and objectively, and I will continue to comply with that duty as required;
- (c) I am not instructed under any conditional or other success-based fee arrangement;
- (d) I have no conflicts of interest; and
- (e) I am aware of and have complied with the requirements of the rules, protocols and directions of the Inquiry.

**Becky Hayward**

**31 October 2023**