Paul Robinson

From: Ellis, David <[redacted]WSPGroup.com>
Sent: 14 December 2015 16:02
To: Dresner Melvyn (ST) <[redacted]TfL.gov.uk> ([redacted]TfL.gov.uk); Matt Christie; Charleton Patricia
Cc: Claire Dutch; Hannah Quarterman; Julian Shirley; Jonathon Weston; [redacted]hammerson.com
Subject: The Goodsyard - Transport Response
Attachments: 151214 TGY Transport Response.pdf

Melvyn

Please find attached a complete response to the GLA, TfL and local Borough comments.

This provides the information/response you would be expecting following our last meeting. We have now completed the RS audit requested and the skeleton CLP, and after further consideration have responded on the Shoreditch Triangle S106 item. In this regard it would be good to discuss the mechanism and timescales.

Further to your last email, please could you let me know if you have any availability in the following slots:

- Tuesday 1500 onwards
- Wednesday 1200-1530

Many thanks

Regards
Dave

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POST-APPLICATION RESPONSE

Project Name: **The Goodsyard**

Project Number: **11141389**

Date: **11th December 2015**

Introduction

1.1. This technical note summarises post-application responses received regarding the Transport Assessment (June 2015) associated with the planning application for redevelopment of Bishopsgate Goodsyard (Application Ref. LBTH PA/14/02011; LBH Ref. 2014/2425):

- Transport for London (TfL) - dated 5th August 2015; and
- Greater London Authority (GLA) - dated 9th September 2015.
- London Borough of Tower Hamlets (LBTH) - dated 10th December 2015.
- London Borough of Hackney (LBH) Addendum comments – - dated 10th December 2015

1.2. This technical note responds initially to the GLA comments (blue boxes) as the combined response including the advice from TfL. The comments are quoted as received in italics and the response provided beneath for each in turn. The responses follow a meeting with TfL on 13 October 2015

1.3. Points raised by TfL which were excluded from the GLA response have been acknowledged in this technical note at the end of each topic in a similar manner (green boxes).

1.4. This technical note also considers the financial contributions as identified by the LBTH in their response dated 10th December 2015 (Red boxes). It is noted that the LBH has no objections to the proposed development on traffic and transportation grounds. The matters requested to form part of a legal agreement by LBH are discussed at the end of this document (Yellow boxes).

1.5. On the basis of the responses to the GLA and TfL comments below, we have prepared the resultant S106 heads of terms below.

S106 Item or Planning Conditions		Paragraph Ref. below
1	**Delivery and Servicing Management Plan** A site-wide Delivery and Servicing Management Plan will be submitted to and approved by Transport for London prior to development occupation. The DSMP shall include details of vehicle delivery and servicing arrangements, site operations and management strategy and the monitoring and review procedures. The DSMP will confirm details of the monitoring surveys that shall be undertaken upon 75% occupation of the first phase, and at 3 years and 5 years following.	1.5 / 1.6 / 1.8/1.30
2	**Car Park Management Plan** A Car Parking Management Plan should be submitted to and approved by Transport for London prior to development occupation. The Car Park Management provide:	1.10/1.11

	A mechanism to **ensure spaces are available for disabled users** through the life of the scheme. In all phases, spaces will first be offered to those wheelchair accessible units on a first come first serve basis. The proportional level of car parking will then be released to the remainder of that phase. A minimum of 5 spaces will be maintained available for any new disabled resident to the site who purchases a wheelchair accessible unit and requires a parking space. '**Car-free' development - no CPZ parking permits for residents**. A permit free agreement will be required to ensure that residents are not eligible for on street parking. Details of **electric vehicle charging points**, to be provided in accordance with the London Plan (March 2015) document. For the residential use 20 per cent of all spaces will be made suitable for electric vehicles with an additional 20 per cent passive provision for electric vehicles in the future.	
3	**Cycle Parking** Cycle Parking should be provided in accordance with London Plan (March 2015) standards. Cycle Maintenance Facilities to be provided in a central location prior to development completion. All approved cycle facilities to be retained and maintained for their approved use for the life of the development.	1.12 / 1.13
3	**Provision of TfL Roundel** The inclusion of a Roundel on the building immediately adjacent to Shoreditch High Street station (Plot B). The location of the Roundel should be agreed prior to occupation. The Construction Logistics Plan will seek to minimise the effect on access and wayfinding to the station, and it is also agreed that the CLP will be secured by planning condition. A skeleton CLP has been drafted providing initial details and is appended to this note for reference.	1.19
4	**Construction Logistics Plan** A Construction Logistics Plan should be submitted to and approved by Transport for London prior to development commencement. The CLP should provide details of the measures to: • minimise the effect on access and wayfinding to the station • *minimising impact on rail services, TLRN and local bus services/ stops FORS membership and commitment to cycle safety as principles.*	1.19/1.32
5	**Shoreditch High Street – Passive Second Entrance** To investigate with TfL an arrangement for a passive second entrance provision through the detailed design process of Block B (the surrounding Block B is part of the outline application).	1.20
6	**Shoreditch Triangle Scheme** Following a meeting with TfL on 13 October 2015, the developer agrees to pay a S106 contribution of up to 47.5% of the total scheme cost, capped to a maximum of £5.9M. This offer is made on the basis that no other transport financial contributions will be requested or agreed for items other than the Shoreditch Triangle scheme and for Cycle Hire docking stations. It is suggested that payment of this S106 sum would be tied to the commencement of Phase 2 (Blocks A and B) which is the first component of development that connects onto Shoreditch High Street. This is currently forecast for commencement in July 2020. It is the intention that the works identified by Zones 1 and 2 on the Shoreditch Triangle Option 2 plan (appended) would form the scope of works (or similar) the developer would deliver if the overall TfL scheme did not come forward within a suitable timeframe to support the	1.24/1.25

	development. In this instance, the developer would require step-in rights to recover the S106 contribution, to deliver the works themselves.	
7	**Cycle Hire** TfL Cycle Hire Docking Stations. 90 spaces required. £600,000 contribution for provision of 60 cycle docking stations within the developments immediate surrounds and funding of a further 30 cycle docking station at an off-site location within 1km of the site to be agreed with TfL.	1.26
8	**Travel Plan** Site wide Travel Plan to be submitted to TfL for approval prior to occupation. Travel Plan to be submitted for each phase of development with a 75% occupation trigger on either residential or commercial floorspace. Monitoring surveys and monitoring report in years 1, 3 and 5 of each phase.	1.29
9	***Crossrail CIL*** Crossrail CIL to be agreed.	1.32
10	***Infrastructure*** London Underground and London Overground infrastructure and assets in and around the site must be safeguarded during and after construction. TfL have noted that they have already provided further information and proposed conditions directly to the local planning authorities.	1.34
11	***Community Infrastructure Levy*** To be agreed.	1.35
12	***Requirement to Enter into a S278 agreement*** The developer shall enter into a S278 agreement with LBH, LBTH and TfL prior to the occupation of any building, for the completion of the following works on the site boundaries: • Creation of new crossovers, removal of crossovers no longer required, and footway reparations • Amendments to parking bays to facilitate development access. • New pedestrian crossing to be provided on a desire line on Bethnal Green Road, connecting the southern side of Bethnal Green Road (in proximity to Shoreditch High Street Overground Station) with its northern side. • Relocation of bus stop on Bethnal Green Road. Prior to relocation of any bus stop, the design and costs will need to be agreed with TfL taking account of TfL Bus Stop Accessibility Guidance and use of the appropriate standard of bus shelter and associated technology.	-

Servicing

GLA comment: (58)

TfL welcomes the proposed consolidation of refuse collection in the service yard for all elements of the scheme with exception of those in Plot K. Plot K fronts onto Quaker Street close to its junction with Commercial Street and adjoins the railway viaduct and as such there may be issues with the detailed approval of this plot

1.6. Information on the end users of the small ground floor retail component is not available at this outline stage. To support the operation of the site, a Delivery and Servicing Plan is to be implemented and will include additional detail on the strategy for deliveries.

TfL additional commentary:

Servicing and refuse collection is likely to depend on the type of retail use. Is there any further information available at this stage? How this land use is controlled and deliveries to this plot are of interest to TfL, please clarify.

1.7. As referenced, a ground floor component of Plot K is proposed to be retail land use class. A Delivery and Servicing Plan is to be implemented and will include additional information on the operational strategy. However, in the meantime, a robust approach to assessment can be taken through assuming the retail unit operates under A1 retail food class. For this land use class, survey data suggests servicing activity in the order of three daily deliveries, generally outside of peak hours.

GLA comment: (59)

The applicant has agreed to prepare a Road Safety Audit Stage 1 for all proposed access points to the site at the detail design stage. Parameters approved during planning may restrict the developers' ability to address road safety issues raised by the Road Safety Auditors – TfL therefore requires the audit to be undertaken prior to approving the outline application to help identify those issues through the designers' response to show how they will be addressed.

1.8. A Road Safety Audit Stage 1 (RSA 1) has been completed (October 2015). The RSA identified six areas of comment, which summarised below. None of these are considered to be issues that the outline consent would restrict the developer's ability to resolve at a later stage. For each of the points raised, we have provided a response below, with the full report appended to this note for reference.

- → Potential for vehicle incursions to reach the railway below

  WSP|PB – This design of protection to the railway, both during construction and operation, will be agreed with Network Rail as part of statutory requirements.

- → Drivers turning right into the service yard from Bethnal Green Road may cause traffic to 'block-back' to the nearby Shoreditch High Street –

  WSP|PB – Point of Clarification – This risk was identified at an early stage in the design and it is proposed that the bus stop opposite the access is to be relocated further east (which is also closer to the pedestrian crossing near the Station). This proposed mitigation is included as part of the application. Its relocation results in the eastbound lane opposite the service yard being increased in width to allow eastbound vehicles to pass a vehicle waiting to enter the service yard. To further reduce the time vehicles wait to enter the service yard, keep clear markings could be installed across the westbound lane at the point of access.

- → Drivers exiting could have their visibility restricted by on-road parking to their right (east) on Sclater Street –

WSP|PB – The parking bays have been relocated away from the immediate surrounds of the access positions. As traffic flow on Sclater Street is low (less than 100 two-way vehicles in peak hour) and the posted speed limit is 20mph, parking within the overall visibility splay in this location is considered acceptable and typical of the inner London location. The final position of parking bays can be reviewed at the detailed design stage.

→ Zebra crossing on Bethnal Green Road may not be the appropriate crossing type given pedestrian volumes and adjacent bus lane –

WSP|PB – The form of this junction can be reviewed at detailed design stage and agreed with TfL and the Boroughs.

→ Delivery activity at the Brick Lane/London Road access would be hazardous at times when Brick Lane market is busy (usually Sundays) – #

WSP|PB – Point of Clarification - The London Road / Brick Lane access is intended for very occasional use only e.g. ambulance access, initial shop fit out etc. not for general vehicle access. These events are expected to be uncommon and infrequent and in the case of shop fit out, would be managed and restricted to occur outside of retail periods. The control method for this access is to be identified at detailed design however droppable bollards or similar may be used as London Road is intended to feel primarily as a pedestrian route than a vehicular access

→ Delivery vehicles could come into conflict with cyclists at the cycle docking station adjacent to the Brick Lane / London Road access

WSP|PB – Point of Clarification - As above, the London Road / Brick Lane access is not delivery vehicle access route. In this context, no conflict with the cycle docking station is expected. The form of control will be identified during detailed design.

GLA comment: (60)

The applicant's rationale for on-street servicing seems reasonable. However, the local highway authorities should confirm this demand can be accommodated locally.

1.9. It should be noted that no on-street servicing is proposed on the public highway. The majority of servicing at the site is conducted within on-site, internal service yards. Due to the complex construction constraints for Plot K limited on-street servicing is proposed (also discussed above), however this will be undertaken from a private road, Phoenix Street. The TA notes that access is taken from Braithwaite Street, however no servicing will take place from this street. This will be secured as part of the Delivery and Servicing Plan.

GLA comment: (60)

Concerns are raised about ad-hoc arrangements for taxis or vehicular servicing.

1.10. It is assumed that this comment is in reference to the operation of Sclater Street. The operation of this area has been addressed in section 15.6 of the updated TA (appended to this response) and it is noted that TfL no longer raised concerns regarding the arrangement in their 2015 response.

Car Parking

GLA comment: (61)

TfL supports the Car Parking Management Plan within the s106 agreement including provisions related to permit free, compliance with Electric Vehicle Charging Points (EVCP).

1.11. It is expected that these points will form part of the s106 agreement.

GLA comment: (61)

The scheme should be car free apart from provision for disabled users

1.12. As per the comment above, TfL support the proposed approach to car parking. A flexible approach to the lease of parking spaces has been developed in consultation with TfL to ensure spaces are available for disabled users through the life of the scheme. In all phases, spaces will first be offered to those wheelchair accessible units on a first come first serve basis. The proportional level of car parking will then be released to the remainder of that phase. A minimum number of spaces will be maintained available for any new disabled resident to the site who purchases a wheelchair accessible unit and requires a parking space. Further detail of the agreed parking strategy is contained within section 8 of the Addendum TA.

Cycle Parking

GLA comment: (62)

The applicant has increased the amount of cycle parking in line with the London Plan (March 2015) standards based on the maximum quantum of development sought. The provision of changing and showering facilities is noted and welcomed.

1.13. Noted.

TfL additional commentary:

The approach to design of cycle parking seems to be an improvement. Not clear about the numbers, please clarify the numbers are in accord with London Plan.

1.14. As noted in the GLA response, the amount of cycle parking has been increased in line with the London Plan (March 2015) standards based on the maximum quantum of development sought. Table 1 shows the provision based on the Maximum Build Out scenario and meets the minimum level required.

Table 0-1 Cycle Parking – Maximum Build Out

LAND USE	QUANTUM (Max Build Out)	MINIMUM PROVISION BASED ON POLICY	
		Residents/staff	Visitor
C3 Residential	1356 units	2059	34
A1 Retail	15,830 sqm	40	72
A3 Retail	5,107 sqm	29	128
B1 Office	81,127 sqm	901	43

Trip Generation

GLA comment: (63)

The amended transport assessment suggests the applicant is still unable to retrieve data from the 2011 Census. TfL has provided a link to the data and this data should be used to update the transport assessment

1.15. Noted. The data supplied by TfL is for two Super Output Areas within Tower Hamlets. It was agreed as part of pre-application scoping with LBHF, LBH and TFL to use the nearby Bishopsgate ward (2001) within City of London as it is considered to represent a more comparable pattern of travel behaviour for future users of the site.

1.16. The 2011 data does not have a single ward or Super Output Area which covers the equivalent of the 2001 Bishopsgate ward. Instead information from 78 workplace zones from the 2011 Census has been compiled to create a comparable dataset.

1.17. The results have been adjusted in the same manner as in the TA (i.e. proportionally redistributing work from home and car driver and passenger trips). A comparison of the two datasets is shown in Table 2.

Table 0-2 Census Data comparison

MODE	ADJUSTED 2001 DATA (Bishopsgate Ward)	ADJUSTED 2011 DATA (Compiled 78 workplace zones)	NET DIFFERENCE
Underground	34.14%	34.21%	+0.1%
Train	54.67%	48.92%	-5.8%
Bus/coach	5.20%	6.36%	+1.2%
Taxi	0.72%	0.56%	-0.2%
Motorcycle	1.53%	1.50%	-0.0%
Car Driver	-	-	-
Car Passenger	-	-	-
Bicycle	1.06%	3.59%	+2.5%
On-foot	2.69%	4.86%	+2.2%

1.18. As shown, the 2001 and 2011 datasets are highly comparable with only minor variation between the two suggesting a slight increase in walk and cycle trips and a reduction in travel by rail. The conclusions of the TA are therefore considered to remain valid and are robust in their assessment of the development effects on the rail network.

Rail and Underground

GLA comment: (64-65)

At the initial consultation stage, the overall scale of impact on the transport network was identified as substantial. To illustrate this the forecast 1,847 combined rail and Underground trips in the morning peak hour is equivalent to 3-4 crush loaded Overground trains although it is accepted that these will be spread across a number of different services.

TfL expressed concern about the methodology used to allocate trips to specific corridors. As a primary gateway to the public transport network located within the site, it is likely that Shoreditch High Street station is likely to attract a much higher proportion of trips even where this involves interchange to/from other services, particularly once Crossrail services commence at Whitechapel with a two minute journey from Shoreditch High Street.

TfL additional commentary:

Crowding on the Central line westbound will be particularly mitigated by Crossrail, which the development is already contributing towards.

Crowding on the Northern line has been forecast to increase due to population and employment growth forecasts presented in the London Plan and these proposals will add growth with particular pressure at Old Street.

The Bishopsgate Goodsyard development will lead to 519 extra trips on the Northern line per am peak hour. If this is uplifted to the am peak three hour period it leads to an extra 1,153 trips (using a factor of 0.45 from 2014 Northern Line RODS boardings).

Railplan forecasts that there will be circa 76,000 extra trips in the am peak period with Northern line Full Separation, compared to Northern line upgrade 1. (Note both are modelled with a Full Separation demand matrix). This suggests that demand from the Bishopsgate Goodsyard development will use up 1.5% of the increased capacity on the Northern line. TfL has considered if this requires mitigation.

TfL view is that it is not clear cut regarding whether the Shoreditch High Street sensitivities can be relied upon. TfL believe the post-Crossrail sensitivity figures are more realistic (762 passenger movements in the peak hour vs 355) as from a common sense perspective, if you live right next to the station with 16 trains per hour, you'd often board there and change en-route rather than walk 1km+ for a direct journey, particularly in inclement weather, dark mornings or evenings. However, as we have stated previously (14.3.19), this station was built with development of this site in mind.

1.19. The 2015 update to the TA included a sensitivity test of use of Shoreditch Station. As noted in the TfL commentary, the sensitivity figures are felt to be more realistic. In addition, Shoreditch Station was built with development of Bishopsgate Goods Yard in mind.

GLA comment: (66)

TfL priority for Shoreditch High Street Station is to increase its visibility locally by use of signage such as installation of a Roundel. The applicant should commit to this and it should be secured by condition. The construction logistics plan should also include reference to it to keep the station visible and accessible from Bethnal Green Road.

1.20. Our client agrees to a planning condition requiring the inclusion of a Roundel, and is committed to its provision. The Construction Logistics Plan will seek to minimise the effect on access and wayfinding to the station, and it is also agreed that the CLP will be secured by planning condition. A skeleton CLP has been drafted providing initial details and is appended to this note for reference.

GLA comment: (67)

Shoreditch High Street station has been designed and built to accommodate future growth in this area and this included passive provision for a second entrance. The development should not preclude this being delivered in the future. It would be desirable for the detailed design of the development to safeguard the option to create such an entrance should funding became available and demand justifies the business case. The applicant should discuss options for this further with TfL.

1.21. The client agrees to investigate with TfL an arrangement for a passive second entrance provision through the detailed design process (the surrounding Block B is part of the outline application). This provision could therefore be secured by way of reasonable endeavours legal agreement or planning condition.

TfL additional commentary:

The scheme seems to incorporate space over the railway lines out of Liverpool Street (approximately where plot K is). This is Network Rail's infrastructure, so it would be up to them as to whether this is acceptable. TfL does however specify service levels on two routes (West Anglia and Shenfield) along this section of railway and thus we have a requirement that any construction works are designed to minimise the impact on the operation railway. This means working closely with TfL and Network Rail to plan large scale interventions when trains are not running i.e. Christmas Day, overnight etc. Any requirement for weekend or other closures must be minimise or eliminated.

1.22. Noted. The clients team are working closely with Network Rail.

Buses

GLA comment: (68)

Based on the current development proposals and given the intensive bus network in the surrounding area TfL expects that the additional bus trips can be accommodated on existing services.

1.23. Noted.

GLA comment: (69)

Prior to relocation of any bus stop, the design and costs will need to be agreed with TfL taking account of TfL Bus Stop Accessibility Guidance and use of the appropriate standard of bus shelter and associated technology. The new stop shall be delivered through a section 278 agreement with the relevant highway authority

1.24. Noted.

Shoreditch Triangle Scheme

GLA comment: (70-73)

TfL accepts that any contribution towards the Shoreditch Triangle Scheme will mitigate the additional walking and cycling demand from this scheme as will the request for Legible London signs (Cycle Hire is deal with separately, below). However, the local highway authorities will define their own requirements and TfL will continue to work with all stakeholders on this project.

In January 2015, discussions on a proposed improvement scheme took place with the applicant and lead to TfL's request for £5.9 million at the initial consultation stage. TfL is currently reviewing the objectives of this project in order to deliver a more transformative scheme, which aims to meet London Plan policy objectives, as well as addressing the interface with this development particularly with reference to Policy 6.7, 6.9 and 6.10 to better integrate the pedestrian and cycle routes.

A considerable element of the emerging TfL scheme will address the additional pedestrian and cycling demand from this scheme, improve the public realm adjacent to the site and is therefore necessary to make the development acceptable so should be funded by the developers. Although TfL is yet to agree a contribution, it is suggested that it would be reasonable to expect 50% of this cost to be secured from this developer. The current scheme is estimated at around £12.4 million, but could be subject to refinement as the project develops. TfL's funding will only take this scheme to the end of the feasibility stage of design. TfL does not propose to commit funds beyond this stage until it has clarity about any developer obligations towards funding.

TfL therefore welcomes early discussion with the applicant about this request as well as detailed design and options for the provision of the scheme.

1.25. Following a meeting with TfL on 13 October 2015, the developer agrees to pay a S106 contribution of up to 47.5% of the total scheme cost, capped to a maximum of £5.9M. This offer is made on the basis that no other transport financial contributions will be requested or agreed for items other than the Shoreditch Triangle scheme and for Cycle Hire docking stations. It is suggested that payment of this S106 sum would be tied to the commencement of Phase 2 (Blocks A and B) which is the first component of development that connects onto Shoreditch High Street. This is currently forecast for commencement in July 2020.

1.26. It is the intention that the works identified by Zones 1 and 2 on the Shoreditch Triangle Option 2 plan (appended) would form the scope of works (or similar) the developer would deliver if the overall TfL scheme did not come forward within a suitable timeframe to support the development. In this instance, the developer would require step-in rights to recover the S106 contribution, to deliver the works themselves.

TfL additional commentary:

TfL and the developer will be working to differing programmes and we would like to provide certainty of what is delivered, when and ensure flexibility that does not undermine TfL scheme or the developers' aspirations. We would like a fuller technical discussion before considering s106 obligations.

TfL can agree to a fixed contribution (index linked) related to a reference design (which TfL can provide – either the design already provided or updated design when available) and an early trigger (we can agree phase payments if following the trigger there is a bond or guarantee in place for future payments i.e. we want to create an integrated high design for the area).

If the developer wants to bring forward an element of TfL scheme in isolation via a section 278 with TfL this is not precluded – if the developer wishes to use non-standard materials (and we agree) then commuted maintenance sum payment would be necessary. The full cost estimated on signing the s278 can be offset from s106 payment, apart from commuted maintenance sums or other third party works. If costs arise subsequently that would be developers' (not TfL's) risk and would not be offset from s106 payment i.e. this is fair because for TfL delivered scheme we will take all the costs risks.

TfL commitment will relate to a reference design (which TfL would provide to attach to s106 agreement), specific outcomes (e.g. improved pedestrian crossings, east-west cycle route, improved cycle and pedestrian comfort levels – we would like to agree these with the developer), and shared information on design change and programme milestones. This should be document in s106.

TfL can also commit that once s106 funds are available to use that we arrange regular liaison meetings to help develop the TfL scheme design and manage construction programme in co-ordination with the developers' programme.

TfL once in receipt of s106 payment can commit to undertake the works in the vicinity of the site by a long stop date, say 10 years.

TfL appreciate that for the developer issues of viability play into the offer you are willing to make including contributions for Crossrail. For TfL it is important that the transport contributions that after Crossrail are prioritise towards this project and are sufficient to facilitate necessary improvements. We need to discuss this further with the developer.

1.27. As above

Cycle Hire

GLA comment: (74-78)

At the initial consultation stage, TfL stated that the scheme would need to provide three docking stations each providing 30 docking points located on land owned by the applicant would require a financial contribution of approximately £600,000, both secured through the section 106 agreement. The updated transport assessment makes some provision towards this requirement and TfL would like to discuss the use of space within the hub in addition to use of docking stations.

The scheme proposes to re-provide two existing docking points elsewhere on site. TfL needs certainty of where they will go and that they will be delivered before the existing ones are out of use. The amendments proposes to provide only 60 new dock hire points, when TfL considers that between 80 and 90 new dock hire points are actually required to meet demand from this development. The details of the provision and how it can get closer to the desired outcome should be discussed with TfL.

To inform the discussion, TfL has the following data:

- *Bethnal Green Road, Shoreditch, with 38 docking points is in the top 5% for both hires and docks. It ranks 17th out of 740 stations across the network for hires and 18th for docks.*
- *Brick Lane Market, Bangla Town, with 24 docking points is in the top 25% for both hires and docks. It ranks 196th out of 740 for hires and 208th out of 740 for docks.*
- *Commercial Street, Shoreditch with 16 docking points is in the top 25% for both hires and docks. It ranks 272nd out of 740 for hires and 246th out of 740 for docks.*

The proposed changes of use will further stress the network operationally. The demand on the closest stations is predicted to increase over the coming years as the modal shift towards cycling has been noted over the last 4 years, hence more docking stations are required in the immediate vicinity. This area has also been identified as a hotspot area for Cycle Hire redistribution and there is a strategic focus on increasing docking points in the area.

Therefore, the £600k contribution and land required for the docking stations remains valid. Further discussions on the delivery should be discussed with TfL.

TfL additional commentary:

The developer propose to provide 60 new dock hire points, which is 10 above our minimum requirements but below 80-90 new dock hire points we would ideally want for this development. We would like to discuss the detail of the provision and how we can get closer to our desired outcome.

1.28. As noted in the TfL commentary, the provision of 60 dock hire points is in excess of the minimum requirements. Public realm constraints within the site and significant pedestrian flows through the retail areas, limit the provision of further cycle docking stations on-site. It is agreed however that the full £600,000 contribution would be provided to support the on-site spaces (or on public highway immediately adjoining the site) and to also enable additional dock hire points to be installed off-site at a location of TfL's choosing, subject to the acceptance of our response to comment 79. This would form part of the developments wider contributions to encourage cycling to and around the site.

GLA comment: (79)

The proposal should also seek a contribution towards cycle membership for the residential dwellings as well as to cater for interest amongst private businesses, hotels etc. One cycle hire membership for three years costs £270 per residential unit. TfL suggests this is managed via the Travel Plan.

1.29. In this accessible location, we recognise the benefits that can be achieved from a modal shift towards cycling. However that the most significant benefits in achieving this aim for this development are through the measures already proposed. These include the extensive cycle parking for all uses on site, which caters both for existing demand and substantial growth in cycling. In addition, it is proposed that rather than provide this membership contribution, the development will provide the additional funding for off-site cycle hire docking stations (in addition to those proposed on-site), as well as a contribution to improvements in the surrounding transport infrastructure, which will both serve the site and the surrounding area. The use of these cycling facilities will be promoted and supported through the Travel Plan.

1.30. The development is therefore proposing to commit to the extensive promotion of cycling for residents, staff and visitors at the site, and aims to achieve significant use of the cycle parking provided within the development, along with increased provision of cycle hire docking stations. No further funding is therefore offered or deemed necessary for the cycle hire scheme beyond the £600,000 contribution listed above in order to adequately encourage cycling as a mode. The Travel Plan will however include information on how to register for membership and the locations of nearby facilities.

Travel Plan

GLA comment: (80)

TfL agrees the Travel Plan can be further developed at a latter stage, subject to it being secured within the S106.

1.31. Noted. Further documentation will be submitted once the S106 requirement is triggered to allow for occupation of the development.

Delivery and Servicing Plan

GLA comment: (81)

TfL agrees this can be secured at a latter date. As there is potential impact on the TLRN and local buses, TfL would like to be consulted on detail of the servicing and delivery arrangements.

1.32. Noted. The details will be discussed with TfL and further documentation submitted in accordance with trigger points which are to be defined within the S106 agreement.

Construction Logistics Plans

GLA comment: (82-83)

The applicant proposes to prepare a construction logistics plan post planning consent. However, TfL require the details at an early stage before submission. This needs to be supported by a condition for discharge in communication with TfL.

Construction needs good advance planning and should be developed along side the construction procurement process, so that good construction logistics planning is not an add on extra but one of the consideration when appointing a contractor, monitoring their performance and those of suppliers and sub-contractors

1.33. Noted. The content and strategy of the CLP has been provided in a skeleton draft (appended to this note for reference), with further documentation submitted in accordance with trigger points which are to be defined within the S106 agreement.

Crossrail SPG

GLA comment: (84)

At consultation stage TfL advised that the site lies within the Crossrail Central London Charging zone and as such as contribution will be required. Based on the greater quantum of B1 office and A1-A5 retail floorspace now proposed, TfL estimates that the sum will be £10,795,170. This should nonetheless be confirmed with the applicant and secured in the section 106 agreement.

1.34. Noted. CIL and S106 contributions are to the agreed.

TfL additional commentary:

The site is within the Central London Charging Area where section 106 contributions for Crossrail will be sought in accordance with London Plan policy 6.5 and the associated Supplementary Planning Guidance (SPG) 'Use of planning obligations in the funding of Crossrail and the Mayoral Community Infrastructure Levy' (April 2013). In paragraph 4.20 of the SPG, it can be seen that in these situations, the Mayor's CIL charge, referred to above, (but not the Council's) will be treated as a credit towards the section 106 liability. The practical effect of this will be that only the larger of the two amounts will normally be sought. As the CIL charge will not be confirmed until development is about to commence, the section 106 agreement will need to be worded so that if the section 106 contribution based on the assumed CIL proves incorrect the contribution is adjusted accordingly (assuming it is still more that the CIL). Other contributions towards the mitigation of transport impacts may also be sought in accordance with London Plan policy and relevant legislation as already outlined above.

For development in the Central London Charging area, a contribution of £140 per square metre GIA for offices, £90 per square meter for retail and £61 per square metre for hotels is expected. Based on the information submitted in the application form, the proposals provide an uplift of 65,859sqm of office and 17,499sqm of retail. This necessitates a Crossrail section 106 contribution of £10,805,170.

1.35. While the quoted sum varies from the TfL response, the principle of confirming and securing the sum within the S106 agreement is noted.

Infrastructure

GLA comment: (85)

London Underground and London Overground infrastructure and assets in and around the site must be safeguarded during and after construction. TfL has already provided further information and proposed conditions directly to the local planning authorities.

1.36. Noted. It is expected that appropriate safeguarding conditions would applied to planning permission.

Community Infrastructure Levy

TfL additional commentary:

The proposed development is within the London Borough of Tower Hamlets and London Borough of Hackney where the Mayoral charge is £35 per square metre. More details are available via the GLA website [website address provided]

1.37. Noted. CIL contributions are to be agreed.

LBTH Requests

LBTH comment (8.72):

Requests section 106 funding to mitigate the development and provide the link in LBTH to achieve proposals in the Local Plan and the Bishopsgate IPG that the development would fail to provide

- *£250,000 contribution to the London Borough of Tower Hamlets for improvements to pedestrian crossing along Bethnal Green Road in vicinity of the development;*

- *£150,000 contribution to the London Borough of Tower for a safety review & improvements at the Bethnal Green Rd / Brick Lane junction;*

- *£250,000 contribution to the London Borough of Tower Hamlets to fund cycle route improvements along Bethnal Green Road including upgrading facilities between St Matthews Road & Chilton Street;*

- *£300,000 contribution to the London Borough of Tower Hamlets for cycle route improvements and pedestrian linkages in the vicinity of the development including southwards in Quaker Street, Wheler Street, Braithwaite Street;*

1.38. A new pedestrian crossing on Bethnal Green Road is included within the off-site proposals for the development. A financial contribution to LBTH for provision is not required as this will be incorporated in the S278 agreement.

1.39. Accident data for the same three year period as analysed in the 2015 Transport Assessment has been reviewed for the Bethnal Green Road / Brick Lane junction (May 2010-Jun 2013). During this period, 20 collisions occurred and resulted in 21 casualties (17 slight, 4 serious, 0 fatalities).

MODE OF CASUALTY	SLIGHT	SERIOUS	FATAL
Pedestrian	6	1	0
Motorcycle	2	0	0
Pedal cycle	6	3	0
Taxi (driver or passenger)	3	0	0

1.40. The cause of these injuries has been reviewed and it is concluded that the data does not suggest an underlying issue with the physical design and control of the junction, with the collisions associated with behavioural factors.

MODE OF CASUALTY	SEVERITY	FACTORS
Pedestrian	Slight	Failed to look properly Impaired by alcohol Failed to judge other person's path or speed Careless / reckless / in a hurry Aggressive driving Crossed road masked by stationary or parked vehicle Vision affected – stationary or parked vehicles
	Serious	Crossed road masked by stationary or parked vehicle Vision affected – stationary or parked vehicles
Motorcycle	Slight	Poor turn or manoeuvre Aggressive driving Failed to look properly
Pedal cycle	Slight	Swerved Aggressive driving Loss of control Failed to look properly Careless / reckless / in a hurry Vehicle door opened or closed negligently Cyclist entering road from pavement Loss of control
	Serious	Failed to judge other person's path or speed Failed to signal / misleading signal

		Failed to look properly Passing too close to cyclist, horse rider or pedestrian Disobeyed automatic traffic signal Careless / reckless in a hurry
Taxi (driver or passenger)	Slight	Failed to look properly Careless / reckless / in a hurry Failed to judge other person's path or speed

1.41. Chapters 5 and 13 of the 2015 Transport Assessment summarise the cycle network and impact on it. It notes that the existing access to the cycle network and facilities is excellent with a large choice of cycle routes available including access to the wider London Cycle Network (LCN) including LCN route on Shoreditch High Street, Quaker Street, the western end of Bethnal Green Road and Chance Street. In addition, both Sclater Street / Bacon Street and Brick Lane form part of the quieter routes recommended by cyclists, offering east-west connections as well as to the LCN. Further east-west routes are available on Redchurch Street to the north and Folgate Street and Lamb Street to the south.

1.42. The site includes public realm improvements to Braithwaite Street and also a redesign of the western end of Quaker Street. These will be covered by a S278 agreement.

1.43. The forecast increase in traffic flow on Bethnal green Road has been reviewed and during the network peak hour (0800-0900), based upon the Transport Assessment, 15% of new cycle trips (21 trips two-way in the peak hour) are forecast to pass along Bethnal Green Road which is equivalent to only a 4.8% increase in the existing cycle flow.

1.44. On the basis of the above assessment and the items already agreed, it is suggested that the focus of the developments S106 contribution should be where the development has greatest effect and where existing conditions require improvement. On this basis the scheme will provide contribution towards the Shoreditch Triangle scheme adjacent to the site, along with the extensive on-site cycle parking and a substantial contribution to cycle hire docking stations.

LBTH additional commentary (8.73):

Also requests that any planning permission is conditioned require:

- *'Permit Free' agreement*
- *All approved car parking spaces to be retained and maintained for their approved use only for the life of the development. No renting out / leasing of spaces to non-residents.*
- *A Car Parking Management Plan to be submitted and approved prior to first occupation.*
- *All approved cycle facilities to be retained and maintained for their approved use for the life of the development.*
- *A service management Plan for all uses to be submitted and approved prior to first occupation*
- *A Demolition / Construction Logistics Plan to be submitted and approved prior to any works taking place.*
- *A Travel Plan for all uses to be submitted and approved prior to first occupation.*
- *A section 278 agreement to fund necessary works to the public highway.*

1.45. The above requests have not been addressed individually in this report however to confirm, all eight points are noted and the position is as summarised in the Table on page 1 of this document.

LBH additional commentary (8.33-8.38):

Highways and Transportation:

Car-free development – removal of entitlement of future residents to residents parking permits

Approval and implementation of commercial and residential travel plans

A contribution of £4,000 towards annual monitoring of the approved Travel Plans

Enter in a S278 agreement with LBH for reinstatement works on Bethnal Green Road to be completed in conjunction with the development to ensure that the required standards and appearance of the site is maintained – these works include but are not limited to damage to or relocation of street furniture, removal of redundant crossovers, paving, lighting and street trees etc.

Secure sufficient funding to enable the Shoreditch Triangle Scheme (currently estimated at £6.2million).

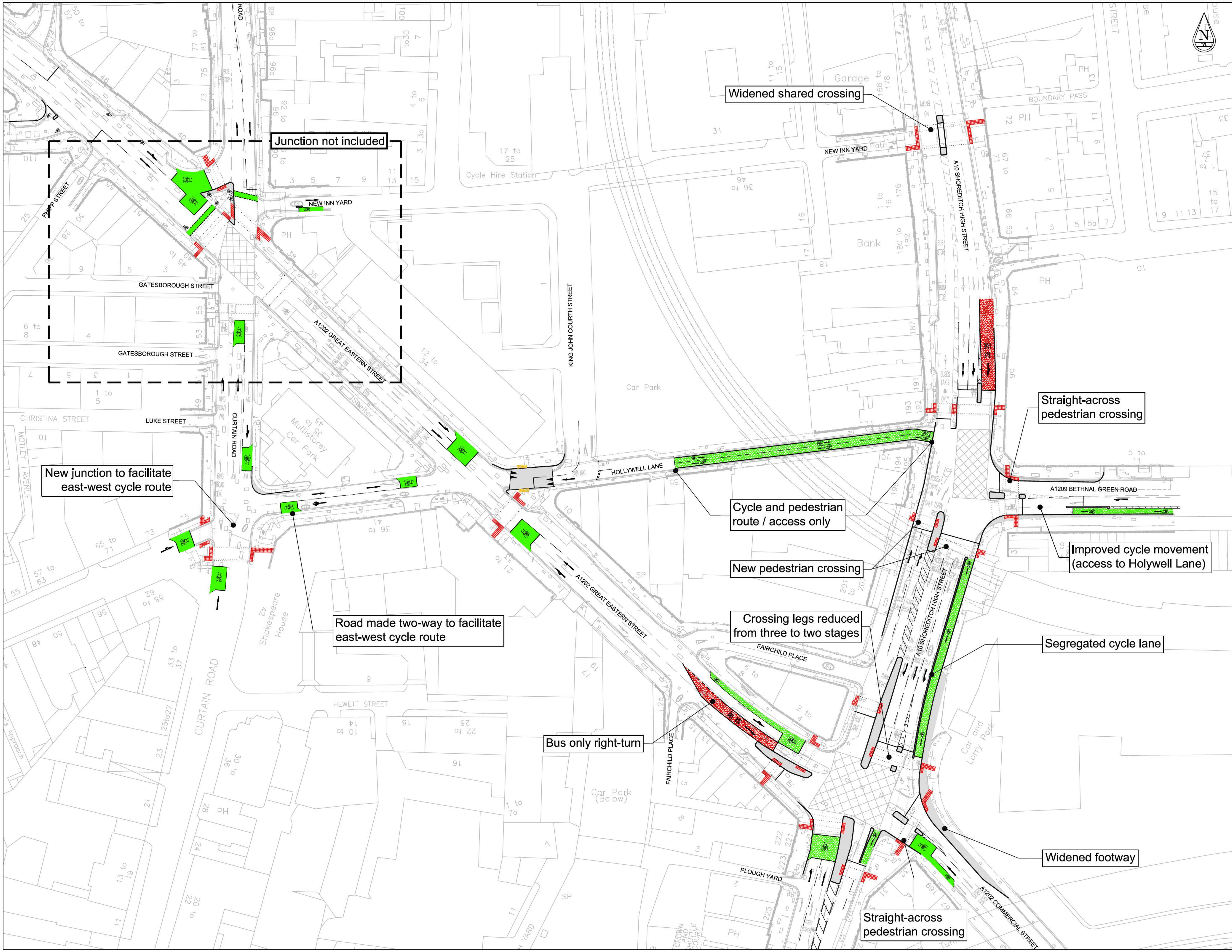
Establishment of a public realm steering group to inform the design of public realm improvements funded by the development including the Shoreditch Triangle Scheme.

1.46. As in the suggested heads of terms detailed at the start of this report, it is expected that the development would be subject to a car-free agreement negating residents' eligibility to on-street parking permits.

1.47. It is agreed that the site would be subject to a Travel Plan with an overarching framework for the whole site and specific plans relating to specific uses or phases for the residential, office and retail. A total of £4,000 towards the Travel Plan monitoring is acceptable.

1.48. In the suggested heads of terms, the developer is expecting to contribute towards the Shoreditch Triangle Scheme (value to be agreed) and also enter into a S278 agreement with LBH, LBTH and TfL prior to the occupation of any building, for the completion of works on the site boundaries.

1.49. The need for a public realm steering group should be considered by TfL / GLA.


Junction not included
Widened shared crossing
New junction to facilitate east-west cycle route
Road made two-way to facilitate east-west cycle route
Cycle and pedestrian route / access only
New pedestrian crossing
Crossing legs reduced from three to two stages
Straight-across pedestrian crossing
Improved cycle movement (access to Holywell Lane)
Segregated cycle lane
Bus only right-turn
Widened footway
Straight-across pedestrian crossing
A1202 GREAT EASTERN STREET
A10 SHOREDITCH HIGH STREET
A1209 BETHNAL GREEN ROAD
A1202 COMMERCIAL STREET
HOLLYWELL LANE
CURTAIN ROAD
KING JOHN COURTH STREET
GATESBOROUGH STREET
LUKE STREET
CHRISTINA STREET
NEW INN YARD
FAIRCHILD PLACE
PLOUGH YARD
HEWETT STREET
BOUNDARY PASS
Cycle Hire Station
Car Park
Shakespeare House

Surface Transport | Roads Directorate
Traffic Design Engineering

Palestra
197 Blackfriars Road
London
SE1 8NJ

scheme
SHOREDITCH TRIANGLE GYRATORY
SOUTH SIDE
OPTION 2

DRAFT

FOR DISCUSSION PURPOSES ONLY

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Sheet 2 of 2

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REPORT N^{O} 11141389 – CLP 01

THE GOODSYARD, BISHOPSGATE

CONSTRUCTION LOGISTICS PLAN (FRAMEWORK)

NOVEMBER 2015

WSP | PARSONS BRINCKERHOFF

THE GOODSYARD, BISHOPSGATE

CONSTRUCTION LOGISTICS PLAN (FRAMEWORK)

Bishopsgate Goodsyard Regeneration Ltd

Project no: 11141389
Date: November 2015

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QUALITY MANAGEMENT

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TABLES

FIGURES

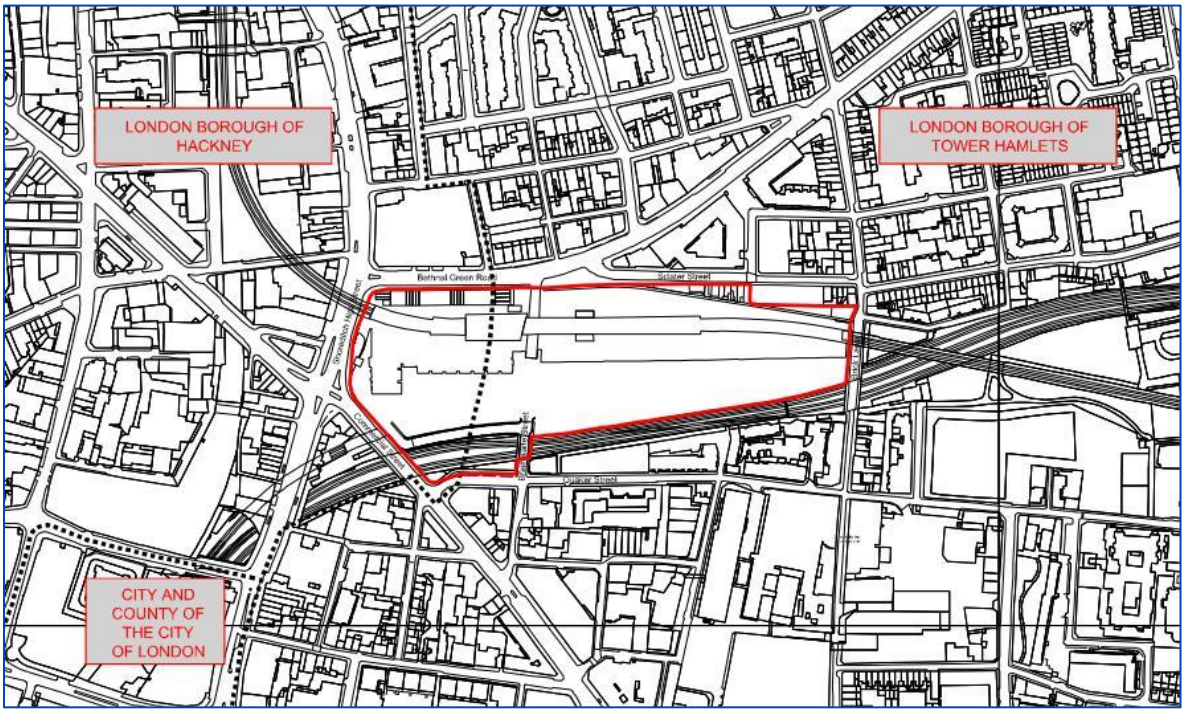
APPENDICES

1 INTRODUCTION

1.1.1 WSP | Parsons Brinkerhoff has been appointed by Bishopsgate Goodsyard Regeneration Ltd (BGRL) to provide a framework Construction Logistics Plan (CLP) for the development of Bishopsgate Goodsyard (the Site) which spans the boroughs of London Borough of Tower Hamlets and London Borough of Hackney. The location of the Site is shown in Figure 1-1 below.

1.1.2 Shoreditch Highstreet Overground station is located on-site and the Site is also within walking distance of London Liverpool Street rail and LUL station. There are 14 bus routes with a total of approximately 97 buses per hour in both directions easily accessible from the Site.

Figure 1-1 Site Location Plan



1.2 EXISTING SITE ACCESS ARRANGEMENTS

1.2.1 The site was formerly Bishopsgate Goods Yard; a passenger rail station from 1840 to 1875, then a freight terminal until destroyed by fire in 1964. The site is currently, in part, occupied by Powerleague and Box Park who use the site on a temporary basis, providing leisure and retail uses. The site is also partly occupied by Shoreditch High Street Overground Station. The remaining part of the site is currently vacant.

1.2.2 The existing vehicular access arrangement to the site is as follows:

- Braithwaite Street – the access road through the site connects with Bethnal Green Road to the north and Quaker Street to the south. Vehicles are permitted to enter/exit Braithwaite Street from the north and south, although, a barrier is in place towards the centre of the access road. Therefore, vehicles are not permitted to travel through the site via Braithwaite Street;

- Shoreditch High Street – a crossover is provided on Shoreditch High Street, however, access for public use is currently hoarded off; and
- Brick Lane – a crossover is provided on Brick Lane which is also currently hoarded off for public use.

1.3 SURROUNDING AREA

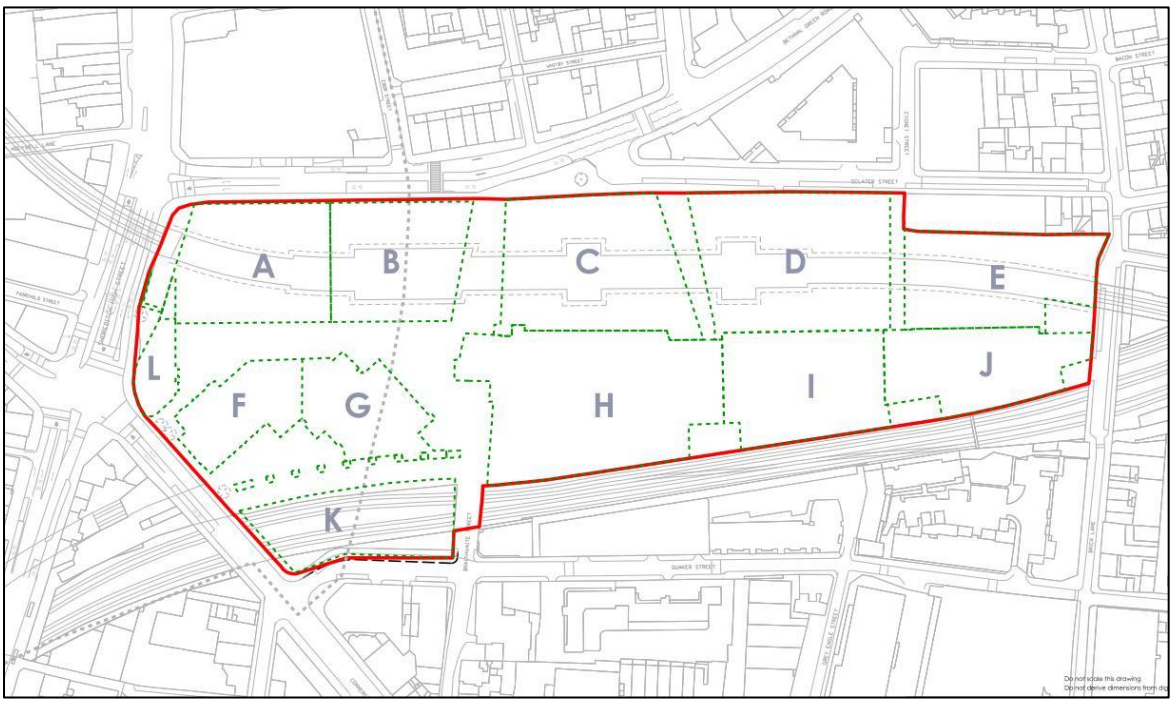
1.3.1 The site lies between the neighbourhoods of Shoreditch, Spitalfields and Banglatown, close to the northern edge of the City of London. Mixed use classes including office, retail, residential, hotel, educational facilities and leisure are located in the adjacent and wider area.

1.3.2 Specifically, the area immediately to the north of the site comprises a mix of former warehouses, small scale industrial estates, shops and the Rich Mix centre (an arts and cultural venue). Further north lays an extensive residential area developed in 1900s with wide residential streets centred on a green space at Arnold Circus. The eastern area of the site is defined by residential use, shops, bars and restaurants. The area to the south of the site contains a mix of residential, commercial and retail uses, extending south towards Spitalfields Market. Aldgate East station is located approximately 1 kilometre to the south of the site. The area to the west of the site contains a mix of residential, commercial and retail uses. Liverpool Street station is located approximately 950 metres to the southwest, whilst Old Street station is situated approximately 1 kilometre to the northwest.

1.4 DEVELOPMENT PROPOSALS

1.4.1 The site is approximately 4.4 hectares and has been divided into 12 plots of land (namely Plots A to L) as indicated in Figure 1-2.

Figure 1-2 Division of the Site into Plots



1.4.2 The plans submitted as part of the amended planning application divide the site into a number of 'Building Plots' within which the buildings will be developed. Building Plots C, D, E, H, I, and J are wholly within LBTH. Building Plots A and F are wholly within LBH. The LBTH/LBH Borough boundary runs through Building Plots B and G and K.

1.4.3 If one Borough approves the section of the development that falls within its boundary and the other Borough refuses, the Applicant would have planning permission to develop only part of the Proposed Development. This is not the intention of the Applicant; the Applicant hopes to obtain planning permissions from both LBH and LBTH and intends to build out a comprehensive cross-boundary scheme.

1.4.4 Within the phases the maximum quantum proposed includes:

- Residential (Class C3) (1,356 units);
- Business Use (Class B1) (81,127 square metres (m2));
- Retail Use (Class A1, A2,A3, and A5) (20,937 m2);
- Non-residential Institutions (Class D1) (112 m2);
- Assembly and Leisure (Class D2) (689 m2); and
- Sui Generis (37 m2).

1.5 SCOPE OF CLP

1.5.1 It is understood that no Principal Contractor has been appointed at present and therefore this framework CLP is intended to act as a guidance document, detailing the intended routes and management measures. It is intended to be reviewed and updated by the Principal Contractor before demolition or construction is started either as a standalone document or within a Construction Management Plan.

1.5.2 This document seeks to support sustainable development and compliance with:

- National Planning Policy Framework (NPPF) which promotes the use of sustainable transport for the movement of goods or people;
- The Traffic Management Act;
- The London Plan (2015) and any Council Specific policies such as road safety and air quality action plans;
- Where possible comply with the requirements of the Considerate Constructors Scheme; and
- Relevant Noise, Dust and Nuisance Regulations.

1.6 OBJECTIVE OF CLP

1.6.1 The CLP will seek to demonstrate that construction materials can be delivered and waste removed in a safe, efficient and environmentally friendly way by achieving the following objectives:

- Identify deliveries that could be reduce, re-timed or even consolidated, particularly during busy periods;
- Help cut congestion on London's streets and ease pressure on the environment;
- Improve the reliability of deliveries to the site; and
- Reduce freight operators' fuel costs.

1.7 REPORT STRUCTURE

1.7.1 This document has been drafted on the requirements outlined in the Transport for London (TfL) document "*Construction Logistics Plan Guidance for Planners*". Following this introductory chapter, the remainder of the framework CLP covers the key topics listed below:

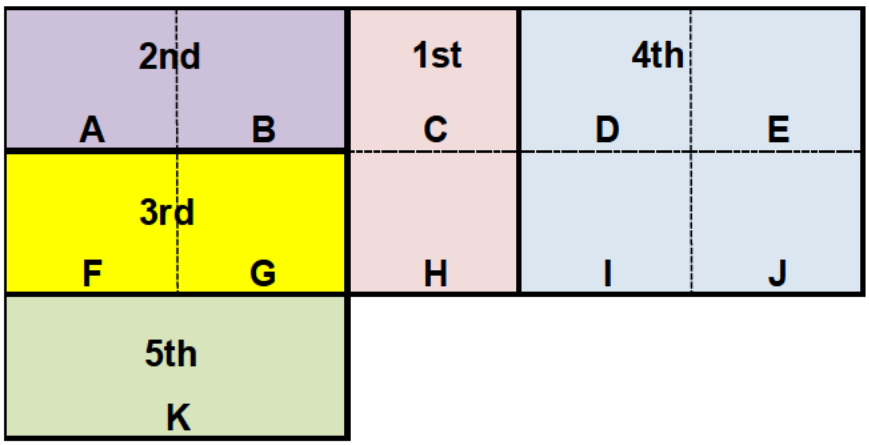
- **Section 2 – Construction Programme & Traffic Generation:** A summary of the phasing of development and a forecast of peak trip generation during the build out and its effect on the network;
- **Section 3 – Access Arrangements**: discussion of the vehicle routing and access for each phase;
- **Section 4 – Management Measures**: review of mitigation measures to address the impact of construction; and
- **Section 5 – Monitoring & Review**: Discussion of the importance of a monitoring and the role responsible for it

2 CONSTRUCTION PROGRAMME & TRAFFIC GENERATION

2.1 CONSTRUCTION PHASING

2.1.1 It is anticipated that demolition and construction works for the whole of the Proposed Development will take place over five phases as summarised in Figure 2-1.

Figure 2-1 Indicative Phasing for Proposed Development



2.1.2 The Demolition and Construction Chapter of the Environmental Statement indicates that construction works are expected to commence in 2016 with completion of Maximum Build Out by 2032. The anticipated duration of the overall works is approximately 16 years.

2.1.3 Whilst the phases are expected to overlap to some extent, the busiest period is expected to be during excavation/demolition and these activities are not expected to occur concurrently for all phases. A logistics procedure and delivery management system will be used to even out the frequency of deliveries and collections, as far as practicable, thereby reducing congestion and leading to more efficient use of delivery vehicles.

2.2 CONSTRUCTION VEHICLE TYPES

2.2.1 In terms of construction vehicles by type, a balance is offered between vehicular sizes and frequency. Generally, the larger the vehicle used, the fewer trips made. Therefore, with health and safety and environmental arrangements in place, it is generally better for demolition and construction works to rely on larger vehicles in order to limit the total number of vehicular movements.

2.2.2 The plant and equipment associated with the demolition and construction process has been considered as shown in Table 2-1. It is envisaged that the most heavily used HGV's on the site will be ready mix concrete trucks for the delivery of concrete, and flatbed lorries for the delivery of cladding panels.

Table 2-1 Estimated Plant Type and Equipment Required

PLANT	SITE CLEARANCE	ENABLING WORKS	FOUNDATIONS AND SUB-STRUCTURE	SUPERSTRUCTURE	CLADDING	INTERNAL FIT-OUT
Tracked excavator	✓					
Tower cranes			✓	✓	✓	
Cutters, drills and small tools	✓	✓	✓	✓		
Fork lift truck		✓	✓	✓		✓
Benders and cutters			✓	✓		
Lorries and vans	✓	✓	✓	✓	✓	✓
Mobile lorry mounted concrete pump			✓	✓		
Ready mixed concrete lorry			✓	✓		
Concrete crusher	✓					
Scaffolding and mobile hydraulic platform	✓		✓	✓	✓	✓
Tipper lorry	✓	✓	✓	✓		
Flat bed articulated lorry	✓	✓	✓	✓	✓	✓
Large rigid lorry	✓	✓	✓	✓	✓	✓
Piling rigs			✓			
Dust suppression equipment	✓		✓			
Haulage and muck away vehicles	✓		✓			
Jet wash	✓	✓	✓	✓	✓	✓
Lifting equipment	✓	✓	✓	✓	✓	✓
Mobile elevating work platforms (MEWPS) – boom and scissor				✓	✓	✓
Mortar silos			✓	✓		
Pallet trucks					✓	✓
Placing booms			✓	✓		
Skips (placing and waste removal – boat skips)	✓	✓	✓	✓	✓	✓
Survey equipment – levels – lasers – total stations etc.	✓	✓	✓	✓	✓	✓
Temporary support materials – props, tables	✓	✓	✓	✓		
Tower lights	✓	✓	✓	✓	✓	✓
Waste compactor	✓	✓	✓	✓	✓	✓
Water pumps			✓			
Welding equipment			✓	✓		
Wheel wash	✓	✓	✓	✓	✓	✓

2.3 SITE WORKING HOURS

2.3.1 It is anticipated that core working hours for both demolition and construction phases will be:

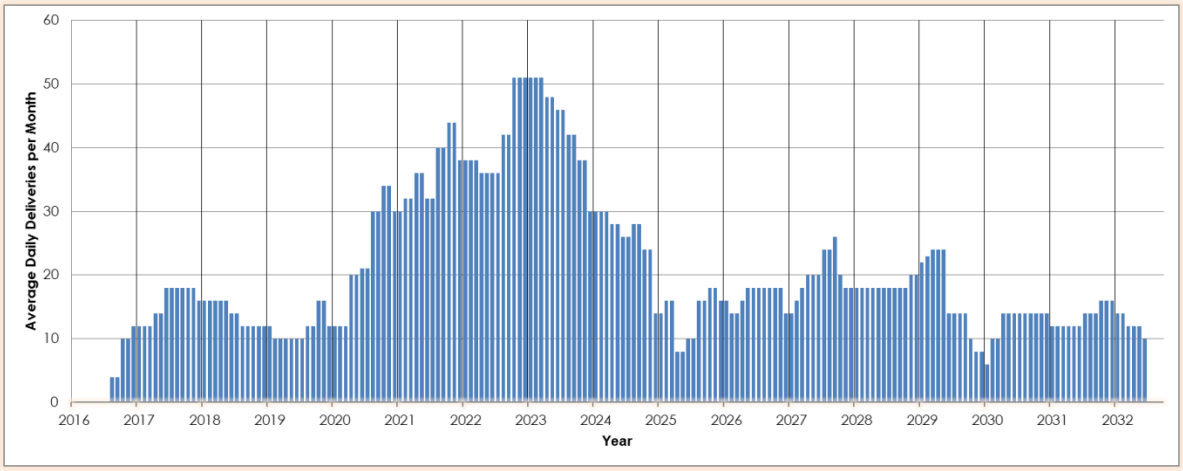
- Weekday: 08:00-18:00 hours;
- Saturday: 0800-1300 hours; and
- Sundays and Bank Holidays: No working normally undertaken

2.3.2 It is recognised that approval from LBH and LBTH will likely be required for any works that need to be undertaken outside these permitted hours, and that LBH and LBTH may vary these hours where the works are in close proximity to sensitive businesses or residential properties

2.4 VEHICULAR TRIP GENERATION

2.4.1 Chapter 5: Demolition and Construction of the ES, considers the assessment of construction traffic effects for 17 'timeslices' within the indicative programme. Collectively, the 17 timeslices cover a reasonable number of demolition and construction 'combinations'. The estimated numbers of demolition and construction related vehicle journeys have been calculated based on volumes of demolition/excavated waste material, together with imported concrete, cladding, paving and roofing materials by GVA Second London Wall. The estimated number of predicted deliveries during each of the timeslices is shown in Figure 2-2.

Figure 2-2 Predicted Construction Vehicles during Demolition and Construction Works



2.4.2 It is therefore anticipated that the number of construction vehicle movements will peak up to approximately 100 vehicle movements daily in 2023 when plots A, B, F and G are in construction.

2.5 EFFECT ON HIGHWAY NETWORK

2.5.1 Table 2-1 summarises a worst-case assessment regarding the effect of HGV vehicular movements on the adjacent highway network during excavation/demolition (expected to be the most intense activities). During all other construction phases, vehicular flows are generally a third, or less, than such peak activity periods.

Table 2-2 HGV Vehicular Movements

	TWO-WAY TRAFFIC FLOW					
	Weekday AM Peak			Weekday PM Peak		
	Total Existing Traffic Flow	Predicted HGV Demolition	% Increase	Total Existing Traffic Flow	Predicted HGV Demolition	% Increase
Bethnal Green Road	1079	12	1.1%	1009	12	1.2%
Sclater Street	189	12	6.3%	158	12	7.6%
Commercial Street	1843	12	0.7%	1451	12	0.8%
Shoreditch High Street	1090	12	1.1%	1045	12	1.1%

2.5.2 It is predicted that the percentage change in vehicular flow with demolition and construction traffic will be negligible along Bethnal Green Road, Commercial Street and Shoreditch High Street. The effect of demolition and construction traffic along Sclater Street will only occur during Phase 4, which forms approximately 10% of the density of the whole of the development being proposed. As such, Phase 4 will take place over a shorter time frame and consideration of 12 HGVs to and from the site during peak hour periods is likely to be an overestimation in any event.

2.5.3 In summary, the above shows a worst-case scenario which will be limited principally during excavation/demolition phases of the site. During all other construction phases, vehicular flows are generally a third, or less, than such peak activity periods.

2.5.4 The potential effects caused by construction vehicles are summarised in Table 2-2. Mitigation measures to address these are summarised in Section 4.

Table 2-3 Potential Effects during Demolition and Construction

ISSUE	POTENTIAL EFFECT
Noise	Increased noise levels from road vehicles.
Vibration	Increased vibration levels from vehicles.
Dust / Air Quality	Exhaust emissions from lorries and plant delivering and removing materials.
Traffic	Traffic congestion caused by site traffic. Increased vehicle movements mainly consisting of heavy goods vehicles (HGVs). Transfer of mud and material from vehicles onto the public highway. Disruption from abnormal or hazardous loads. Exhaust emissions.
Pedestrian access to site and surroundings	Restrictions on pedestrian access to walkways, footpaths and roads.

3 ACCESS ARRANGEMENTS

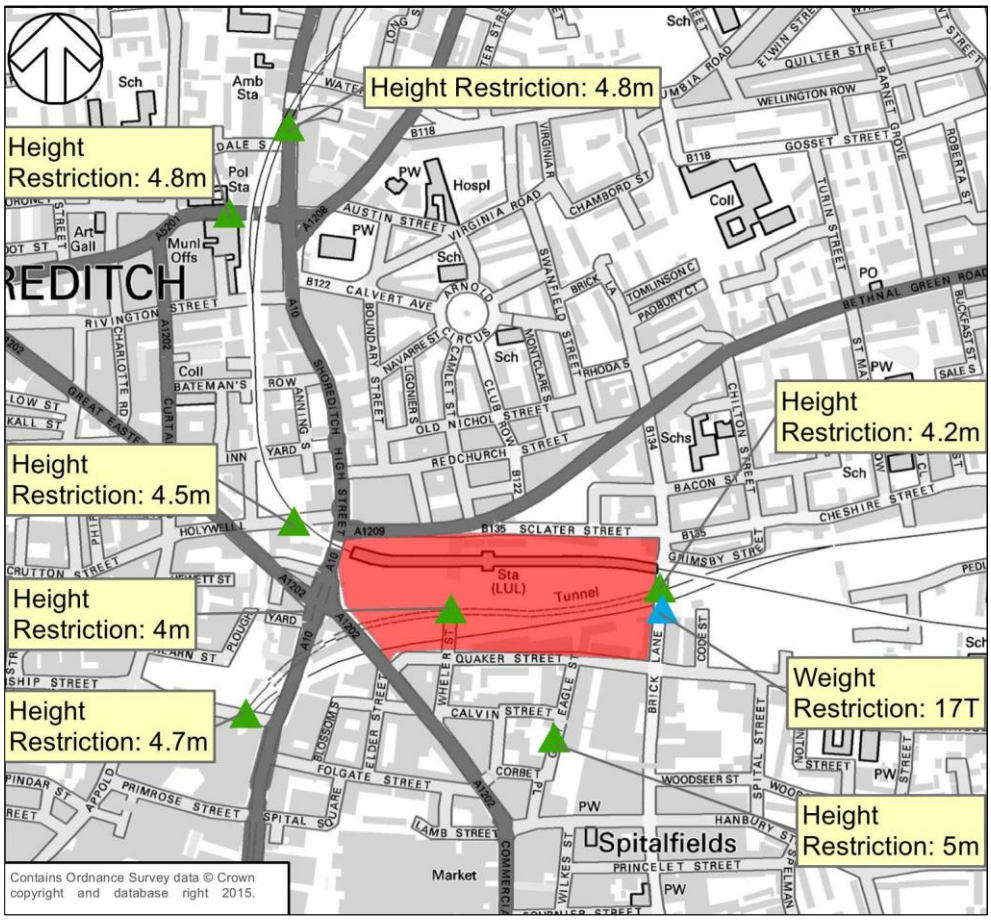
3.1.1 This section reviews the local highway network and proposes vehicle routing for HGVs per phase however it is noted that these access routes to and from the site will be agreed with LBH and LBTH prior to initiation of demolition and construction works.

3.2 ROUTE RESTRICTIONS

3.2.1 The local network has been reviewed to identify local restrictions on routes to and from the site. A detailed review of the routes based on specific vehicle dimensions including swept path assessments will be undertaken prior to commencement of construction on-site.

3.2.2 Figure 3-1 shows the local height and weight restrictions in the vicinity of the site

Figure 3-1 Vehicle Access Restrictions



TFL LONDON LORRY CONTROL SCHEME

3.2.3 The site and the local network are subject to the London Lorry Control Scheme (LLCS). LLCS restricts the night and weekend movement of HGVs weighing more than 18 tonnes to limit noise pollution in residential areas. LLCS is enforced by London Councils and restrictions apply:

- Monday to Friday: 21:00-07:00
- Weekends: 13:00 Saturday – 07:00 Monday
- Bank holidays: As weekdays

3.2.4 Both vehicle owners and the driver could receive a penalty charge notice if a vehicle uses restricted roads without valid permission, or if the use of restricted routes is not kept to a minimum during restricted times.

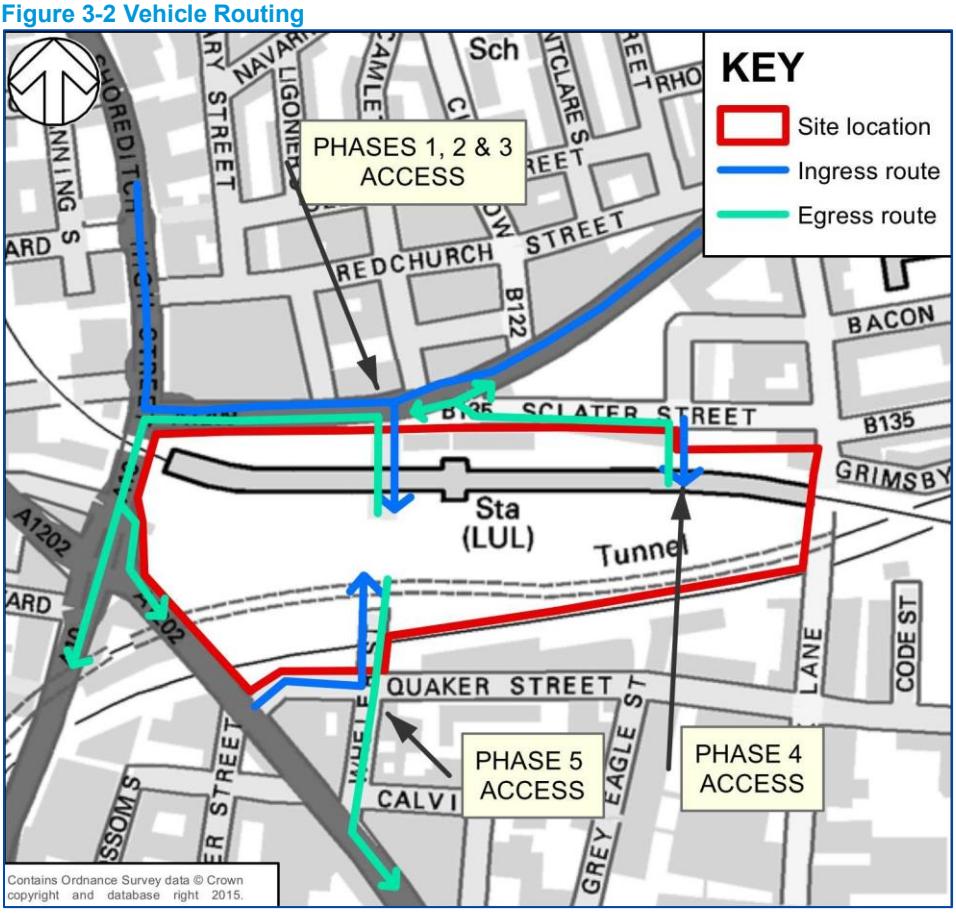
3.2.5 A specific agreement can be made however if there are good reasons for using a different route. An application is required to show that the proposed route is environmentally better than the LLCS route.

VEHICLE ROUTING

3.2.6 Flexibility in access location may be required during the phased construction with secondary access locations potentially required. This can be clarified once the Primary Contractor is appointed. The proposed primary access locations are illustrated in Figure 3-2 and detailed in the text beneath for clarity. Phased vehicle access and the maintained pedestrian route to Shoreditch High Street Station are shown in detail in Appendix A for reference.

3.2.7 Loading and unloading of materials and equipment will occur within the site boundary, thereby, minimising congestion on the adjacent highway network. Should there be any need for loading/unloading activity to take place on street at any point in time during the construction programme; this will be formally agreed with the respective borough/TfL, as appropriate, within the full CMS

Figure 3-2 Vehicle Routing



PHASES 1, 2 & 3

3.2.8 It is expected that all construction vehicles will access the site via the A1209, where possible approaching from the east to turn left into Braithwaite Street. Access across the site would be via Braithwaite Street / Wheler Street through the viaduct which has 13'3" or 4m headroom to allow tipper trucks 3.5m high to pass through into Braithwaite Street / Wheeler Street. Access to the top of the viaduct could alternatively be along this route turning right after passing under the viaduct. Egress would be via Braithwaite Street / Wheeler Street turning left onto Commercial Street.

PHASE 4

3.2.9 For Phase 4 it is expected that vehicles will enter and exit the site from a newly formed access point off Sclater Street. The use of Brick Lane will be avoided as far as practicable.

PHASE 5

3.2.10 Ingress and egress to Phase 5 is proposed to be from Wheler Street via the Commercial Street (A1202) and Quaker Street Junction.

3.3 SITE COMPOUND ARRANGEMENTS

3.3.1 Hoarding will be required around the Site for the various phases however, during the construction period it is not anticipated to be necessary to close the public footway adjacent to the Site. Appropriate pedestrian signage will be in place to ensure safety of the public is not compromised.

3.3.2 All plant and material storage areas will be within the site compound. No storage of materials outside the site hoarding will be allowed.

3.3.3 It is not anticipated that there would be a requirement to suspend parking or loading bays further to those proposed in the Proposed Development. However, in the event that a requirement arises, submissions would be made to the relevant authorities.

PERSONNEL ACCESS

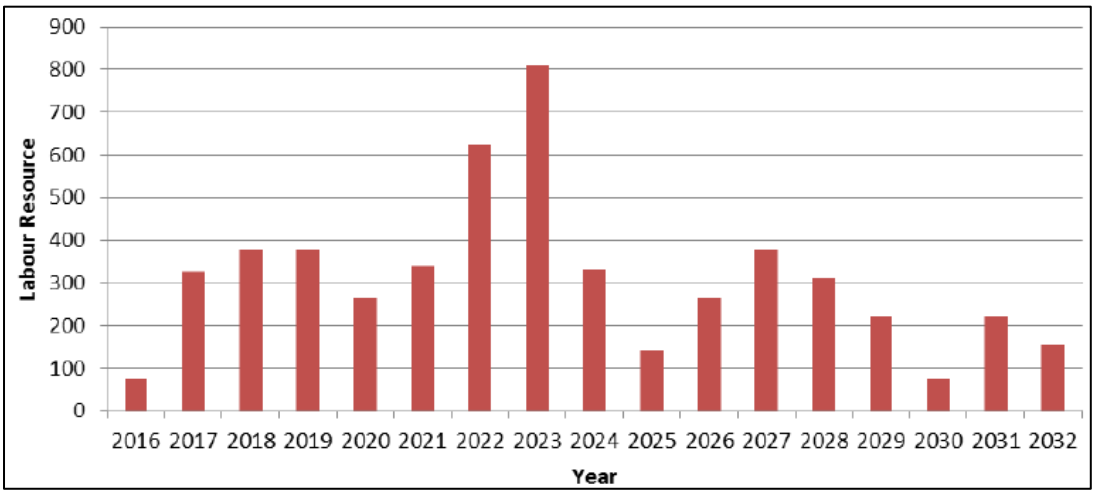
3.3.4 A separate site pedestrian and cycle entrance to each phase will be provided to ensure separation from vehicles. Within the site, pedestrian routes will be kept separate to vehicular ones wherever possible. The routes will be clearly signed where necessary by use of physical barriers in areas where there is a high risk of collisions.

3.3.5 A secure bike store will be located on-site along with lockers and showers to support and encourage use of the mode.

3.3.6 There are no areas in the surrounding streets for vehicles to park. All staff and contractors will be encouraged to use walking, cycling and the wide range of public transport services available where possible. Based on the site working hours, it is expected that the majority of staff and contractors would travel outside of network peak periods and therefore minimise congestion in the network.

3.3.7 In the event that contractors are unable to utilise public transport, limited on-site car parking will be provided however contractors will be encouraged to car share in order to minimise traffic impact in the area. The estimated labour resource levels are shown in Figure 3-3.

Figure 3-3 Predicted Labour Resource Levels



VEHICULAR ACCESS

3.3.8 Throughout the demolition and construction phases of the development, access/egress to and from the site by construction vehicles will be required. For any exceptional loads which require road closures, advance warning signs will be installed with a minimum 28 day notice.

3.3.9 Prior to leaving the Site, lorries will be inspected by the driver and the gateman to ensure that the vehicle is clean and any loads secured safely. Adjacent roads will be kept clean at all times by the use of manual and mechanical means as required, backed up by wheel washing/cleaning facilities as necessary.

SECURITY

3.3.10 To prevent unauthorised people accessing the construction site, hoarding will be placed where necessary. All entrances into the Site will be controlled by security gates, where a gateman will be in charge of checking all vehicles and people entering the site.

TRAFFIC MANAGEMENT

3.3.11 Availability of storage for materials will also be limited with all deliveries on a 'just in time' basis and drivers will be instructed to turn off their vehicles whilst being offloaded. Vehicles coming to the Site will be managed by a logistics manager and will have specific slots booked. It will be the responsibility of driver and company to ensure they arrive at the site at the specific time.

3.3.12 Deliveries to the site will be controlled to avoid congestion of the surrounding roads. The Contractor's Logistics Manager (who will be responsible for managing deliveries to site and their distribution to the point of use) will produce a rolling weekly programme of deliveries and a draft of this programme will be presented at weekly progress meetings and reviewed to smooth out obvious bottlenecks and clashes. Where possible, deliveries will be taken on site early to allow the vehicles to be offloaded during the peak period and to leave site once the peak period has ended. This will allow greater efficiency in predicting delivery times and reduces haulage costs. Similarly the latest delivery to the site will be scheduled to ensure that it can be offloaded by 18:00 and that the vehicle leaves the site as the evening peak is subsiding. The site will be closed up in accordance with the working hours allowed by the planning consent.

3.3.13 All vehicles will enter and leave the site in forward gear with large construction and delivery vehicles marshalled by banksmen as appropriate. During demolition and construction, a site speed restriction of 5 miles per hour (mph) will be actively enforced for all vehicular movements on-site.

4 MANAGEMENT MEASURES

4.1.1 In accordance with TfL's best practice guidance contained within their document entitled 'Building a better future: Construction Logistics Plans', the proposed management measures and initiatives have been grouped into the following sub-areas:

- Design;
- Procurement Strategy;
- Operational Efficiency;
- Waste Management; and
- Road Trip Reduction.

4.2 DESIGN

4.2.1 In addition to operational strategies, specific design features will be used to mitigate negative effects of construction phases. The final CLP will:

- Provide details on how construction vehicles will access the site, supported by a swept path analysis;
- Identify the on-site loading and unloading points; and
- Include a risk assessment of the loading points.

SAFETY

4.2.2 Construction vehicles will be fitted with cycle specific safety equipment, including side bars, blind spot mirrors and detection equipment to reduce the risk of collisions.

SHOREDITCH HIGH STREET STATION

4.2.3 Signage and access to Shoreditch Station will be maintained throughout construction phases from Bethnal Green Road / Braithwaite Street and/or Shoreditch High Street as accords with the works being undertaken in each phase. Pedestrian routes to the station are maintained throughout all phases as shown in Appendix A.

4.3 PROCUREMENT STRATEGY

4.3.1 The site will be registered with the 'Considerate Constructors Scheme'. This is a national initiative through which construction sites and companies registered with the scheme are monitored against a Code of Considerate Practice, designed to encourage best practice beyond statutory requirements.

4.3.2 The procurement process for contractors will take into account construction vehicle activity within and surrounding the site, together with its potential impacts and measures that should be introduced to minimise them.

4.3.3 The strategy will demonstrate a commitment to safer, more efficient and more environmentally friendly distribution by contacting operators registered with a best practice scheme, such as Freight Operator Recognition Scheme (FORS) and Construction Logistics and Cyclist Safety (CLOCS) Champions.

4.3.4 Contractors should also be encouraged to source material locally or from the same supplier, where possible, in order to reduce the number of delivery trips generated.

4.4 OPERATIONAL EFFICIENCY

MONITORING & ENFORCEMENT OF TRAFFIC ROUTES

4.4.1 The access routes will be a condition of all supply orders and subcontracts and no local roads should therefore be impacted. A record will be maintained of agreements with organisations and drivers to demonstrate their understanding of the proposed access routing.

4.4.2 In the event of non-compliance, the subcontractor or supplier would be in breach of contract, allowing disciplinary action against individual drivers.

4.4.3 Employees will be similarly advised of the access routes.

4.4.4 Contact details for local liaison will allow any complaints about vehicle routing to be handled quickly and appropriately. Meetings may be held as necessary with the Client and Highway Authority to review access arrangements. The Client's on-site representative will also be independently monitoring to ensure compliance with agreed arrangements.

ENCOURAGING OFF-PEAK DELIVERIES

4.4.5 Deliveries will be scheduled to avoid the network peak periods where possible. Daytime deliveries should not generate a significant impact if a proper management strategy is applied.

4.4.6 A noise abatement strategy will be introduced for deliveries, whereby vehicles are instructed by the gateman to turn off their engines once parked within designated areas for the duration of activity.

ROAD TRIP REDUCTION

4.4.7 As noted previously, a balance will be sought between 'just-in-time' deliveries to avoid storage of large amounts of materials on-site and minimising the number of road trips through use of larger vehicles.

4.4.8 Deliveries will be scheduled to occur outside of peak hours where possible and will be provided with a timed slot to enable efficient management of on-site space.

4.5 WASTE MANAGEMENT

4.5.1 Waste collections will be undertaken by approved contractors.

ENVIRONMENTAL CONTROLS

4.5.2 All London borough councils operate a strict policy ensuring that there are no nuisances to neighbouring sites and this will be closely monitored by the site management team to ensure it is controlled.

DUST MANAGEMENT

4.5.3 During construction and especially demolition, dust will be controlled through the use of water atomisers to supress particles. Cutting and crunching equipment / techniques will be selected to minimise the amount of dust, noise and disturbance caused by the activity.

4.5.4 Early installation of the hard standings could be used to help keep dust to a minimum and remove the risk of it becoming a nuisance.

WHEEL WASHING

4.5.5 Footways and the existing carriageway areas shall be kept in a clean condition at all times during the period of the works. The activity will be limited by the provision of a jet wheel wash and catch pit at the site access point.

NOISE

4.5.6 The works will be undertaken in such a manner so as to minimise the levels of site generated noise at all times. Procedures for noise control and the assessment of site noise shall be in accordance with BS 5228 Part 1 1984 (Noise control on Construction and Open Sites, Part 1 Code of Practice for basic information and procedures for noise control).

LOW EMISSIONS ZONE

4.5.7 The Low Emissions Zone (LEZ) I operated by TfL to encourage a reduction in the most polluting heavy diesel vehicles. Vehicles which are deemed to be polluting are required to pay a daily charge. The restriction is in operation 24 hours a day, 365 days a year.

4.5.8 Construction vehicles will be regularly maintained to reduce the risk of hydrocarbon contamination entering surface water runoff within the site and will only be active when required.

4.6 PUBLICITY AND COMMUNICATION

4.6.1 It is intended that the CLP is promoted to local residents and organisations to keep them informed of the intentions at the site. This could be undertaken through the use of letters/leaflets

PUBLIC & COMMUNITIES RELATIONS

4.6.2 A dedicated point of contact will be responsible for communication with statutory authorities, including LBTH and LBH, non-statutory authorities and local interest groups.

4.6.3 All queries and complaints received will be directed to the dedicated point of contact. The contact details and location of the site offices and the dedicated points of contact will be communicated as part of the CLP. A register of complaints will be maintained.

5 MONITORING & REVIEW

5.1.1 A programme of monitoring and review will be implemented to generate data against which the success of the CLP can be measured based on the objectives set out in Section 1.

5.1.2 The Principal Contractor will be responsible for monitoring and reviewing construction activity on the site, including construction vehicle arrivals and departures.

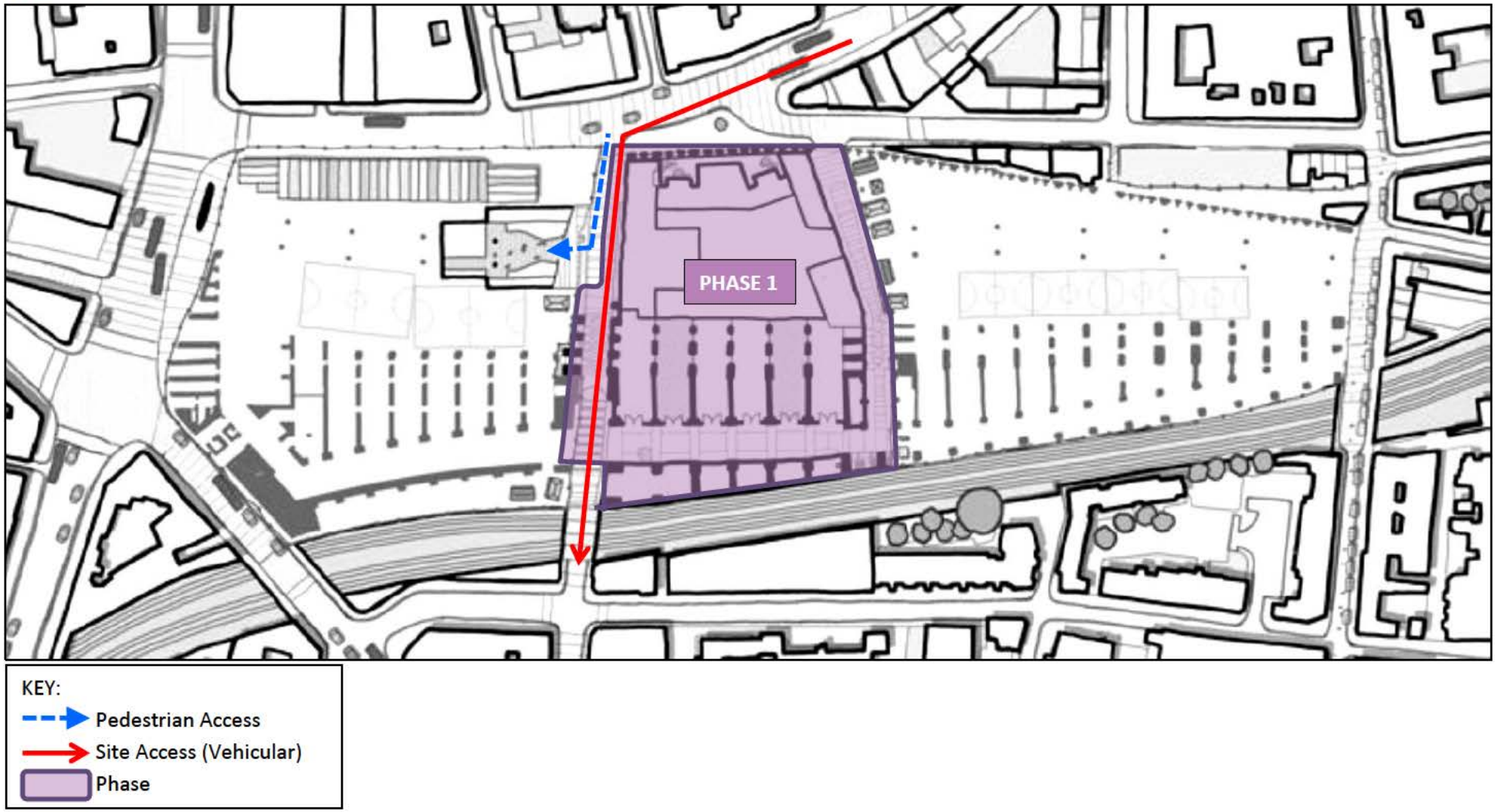
5.1.3 The process will allow construction operations and procedures on the site to be reviewed and new management measures to be introduced if necessary, to achieve the key CLP objectives. Monitoring will be documented and made available to the local authority upon request.

Appendix A

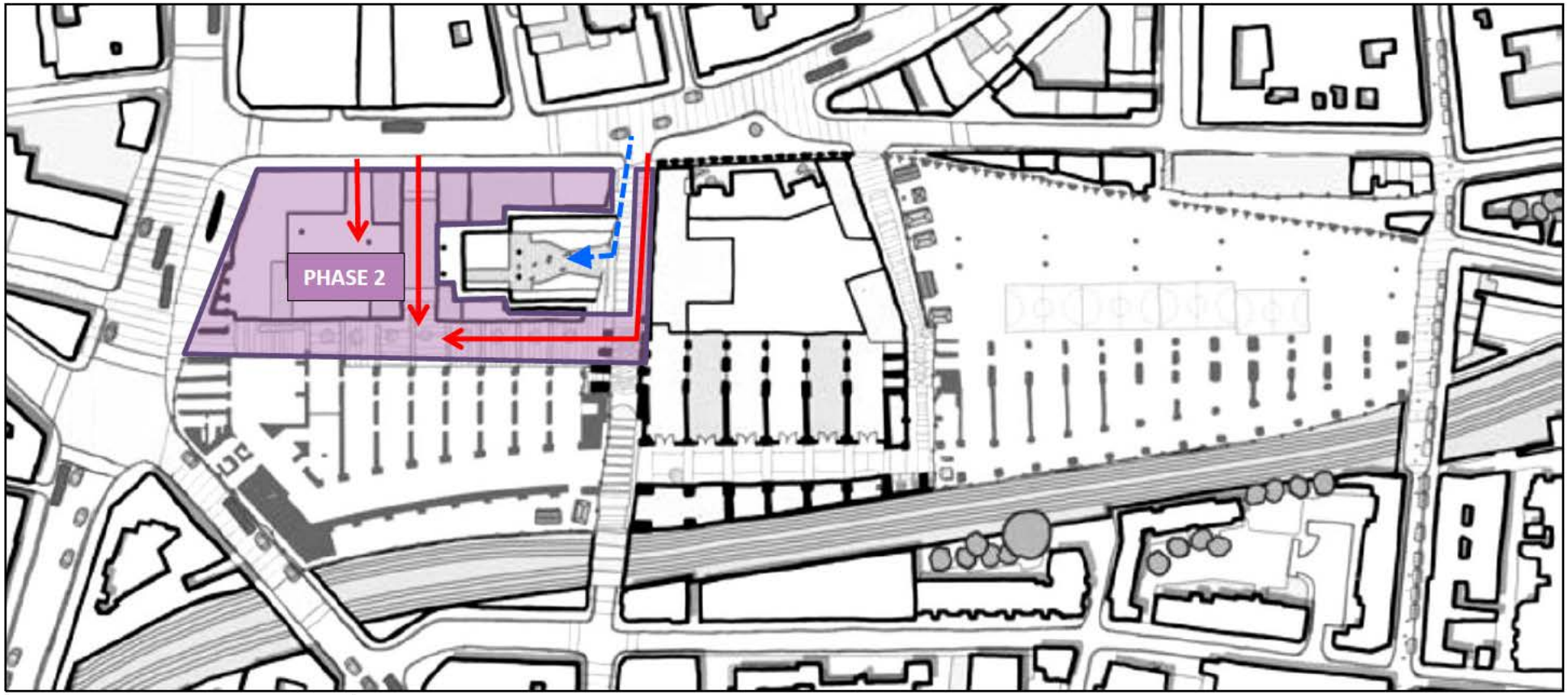
PHASED ACCESS

PROPOSED VEHICLE ACCESS

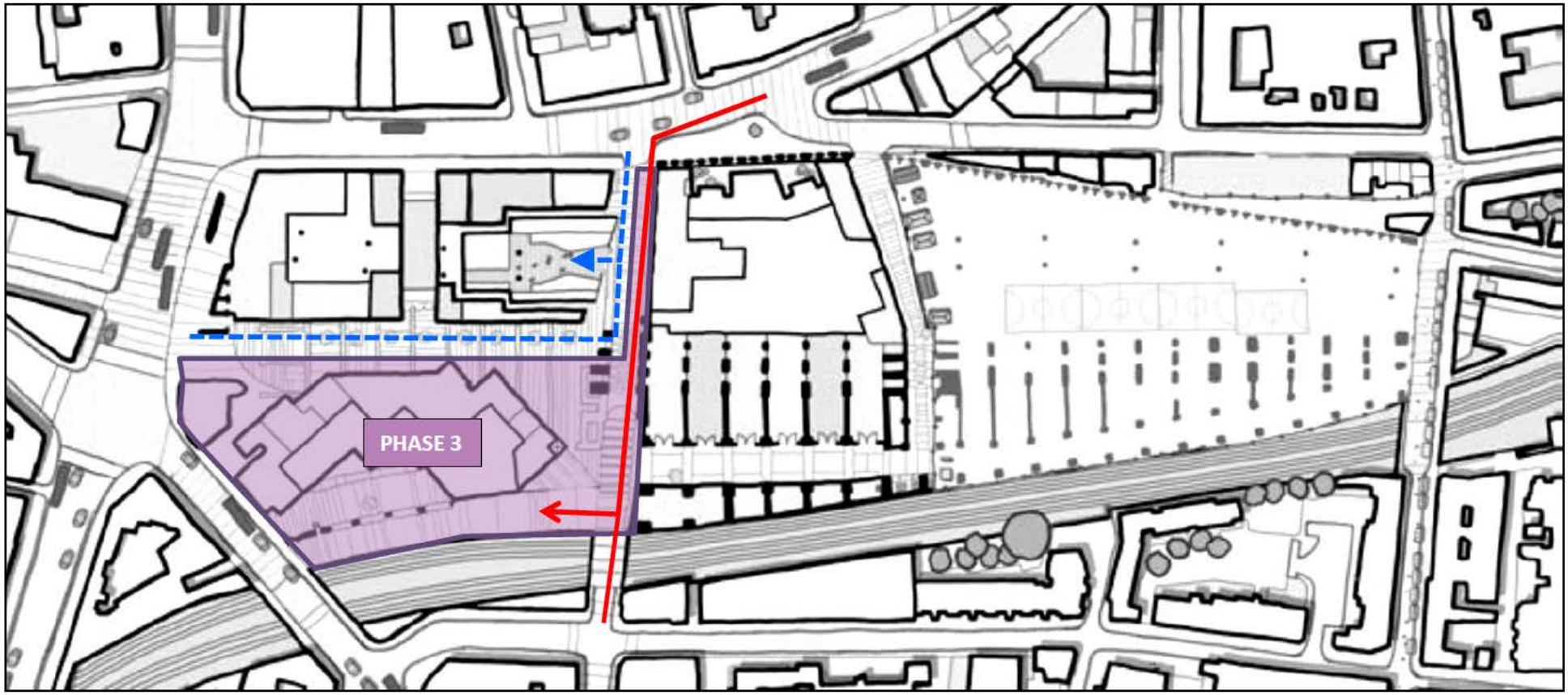
Phase 1



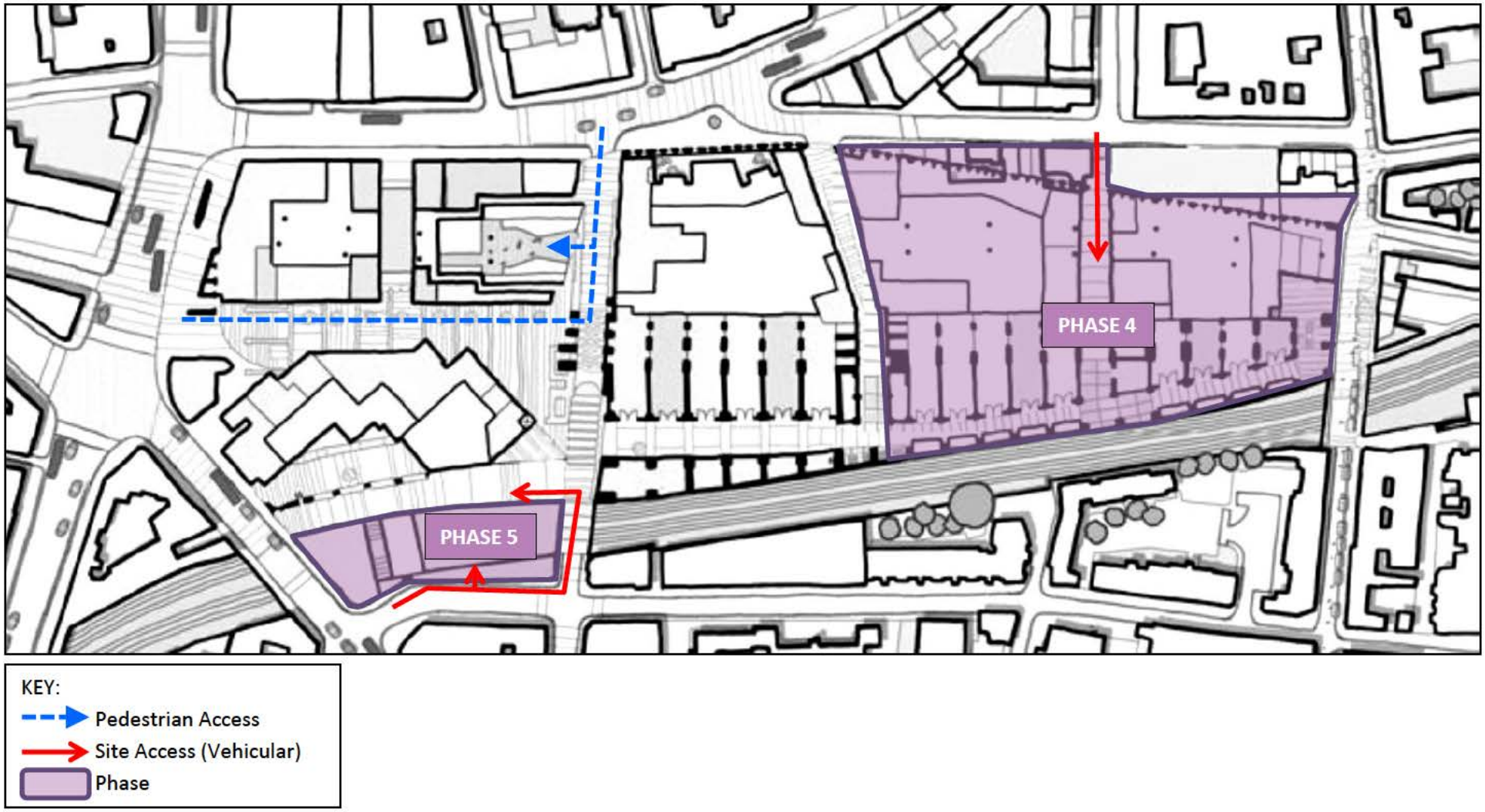
Phase 2



Phase 3



Phases 4 & 5


PHASE 4
PHASE 5
KEY:
Pedestrian Access
Site Access (Vehicular)
Phase

Paul Robinson

From: Matt Christie
Sent: 14 December 2015 11:40
To: [redacted]landuse.co.uk'
Subject: Julian Shirley at DP9

Hi Jon,

Further to your voicemail/ our conversation on Friday. Should you need to contact the applicant's planning consultant direct, his details are as follows:

Julian Shirley
DP9 Limited
100 Pall Mall
London
SW1Y 5NQ

direct: 020 [redacted]
mobile: [redacted]
e-mail: [redacted]dp9.co.uk

Please let me know if you need anything else.

Speak soon

Matt Christie| Senior Strategic Planner and Urban Designer| Development & Projects

Greater London Authority | City Hall, The Queen's Walk, More London Riverside, London SE1 2AA

Tel: 020 7983 [redacted] Email: [redacted]london.gov.uk

Paul Robinson

From: Julian Shirley <[redacted]dp9.co.uk>
Sent: 11 December 2015 15:04
To: Matt Christie
Subject: RE: Goods Yard
Attachments: Masterplan diagrams - 151211_B.PDF

Matt

Another piece of info. Please find the attached PDF from Spacehub explaining routes etc. We are still waiting for them to complete a plan showing how the park will close at night.

Whilst It is shown within slide 4, it is part of the overall strategy rather than a stand along diagram.

Regards

Julian Shirley

direct: 020[redacted]
mobile:[redacted]
e-mail:[redacted]dp9.co.uk

Dp9 Limited
100 Pall Mall
London
SW1Y 5NQ

telephone: 020 7004 1700 facsimile: 020 7004 1790 website: www.dp9.co.uk

-----Original Message-----
From: Julian Shirley
Sent: 11 December 2015 13:54
To: 'Matt Christie' <[redacted]london.gov.uk>
Cc: Jonathon Weston <[redacted]ballymoregroup.com>; COUGHLAN, Tony <[redacted]hammerson.com>
Subject: RE: Goods Yard

Thanks Matt.
GIA report will be with you on Monday morning.

Regards

Julian Shirley

direct: 020[redacted]
mobile:[redacted]
e-mail:[redacted]dp9.co.uk

Dp9 Limited
100 Pall Mall
London
SW1Y 5NQ

telephone: 020 7004 1700 facsimile: 020 7004 1790 website: www.dp9.co.uk

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-----Original Message-----
From: Matt Christie [mailto [redacted]london.gov.uk]
Sent: 11 December 2015 13:22
To: Julian Shirley <[redacted]dp9.co.uk>
Subject: RE: Goods Yard

Hi Julian,

I now have his team looking at your response in advance of that. I'll be sitting down with them in advance and will get straight back when they have availability.

Any news on the GIA report final draft?

Matt

_____

From: Julian Shirley [[redacted]dp9.co.uk]
Sent: 11 December 2015 12:56
To: Matt Christie
Subject: RE: Good Yard

Thanks. Matt.
We will send over a file of the final Reg 22 info on Monday.
Any news on a meeting date with Peter North?

Regards

Julian Shirley

direct: 020 [redacted]
mobile: [redacted]
e-mail: [redacted]dp9.co.uk

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SW1Y 5NQ

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-----Original Message-----
From: Matt Christie [mailto [redacted]london.gov.uk]
Sent: 11 December 2015 09:29
To: Julian Shirley <[redacted]dp9.co.uk>

Subject: RE: Good Yard

Thanks Julian- this is very useful, as was the meeting the other night.

With regard to Reg 22 matters, LUC have agreed to do the review for us and will meet with Aecom to start with just to get things rolling and confirm that everything has been addressed. For the avoidance of doubt, could you possibly put everything that we will be making available during the consultation period in a folder and send me a link? There have been that many iterations floating around I want to be absolutely sure before I proceed with LUC.

Thanks

Matt

_____

From: Julian Shirley [dp9.co.uk]
Sent: 10 December 2015 15:09
To: Matt Christie
Subject: Good Yard

Hi Matt

Further to our meeting earlier this week, just to hopefully help you navigate better through the application docs and drawings, please see attached:

· DAS Contents list

· Application drawing register. Note that the drawings that remain un-highlighted formed part of the July 2014 submission and were not resubmitted under the Amendment, ie demolitions plan plus LBA drawings

· Summary of document (TG) and drawing and (TGD) refs from 2014 and 2015.

Hope this helps.

Regards

Julian Shirley

direct: 020
mobile:
e-mail: dp9.co.uk<mailto dp9.co.uk>

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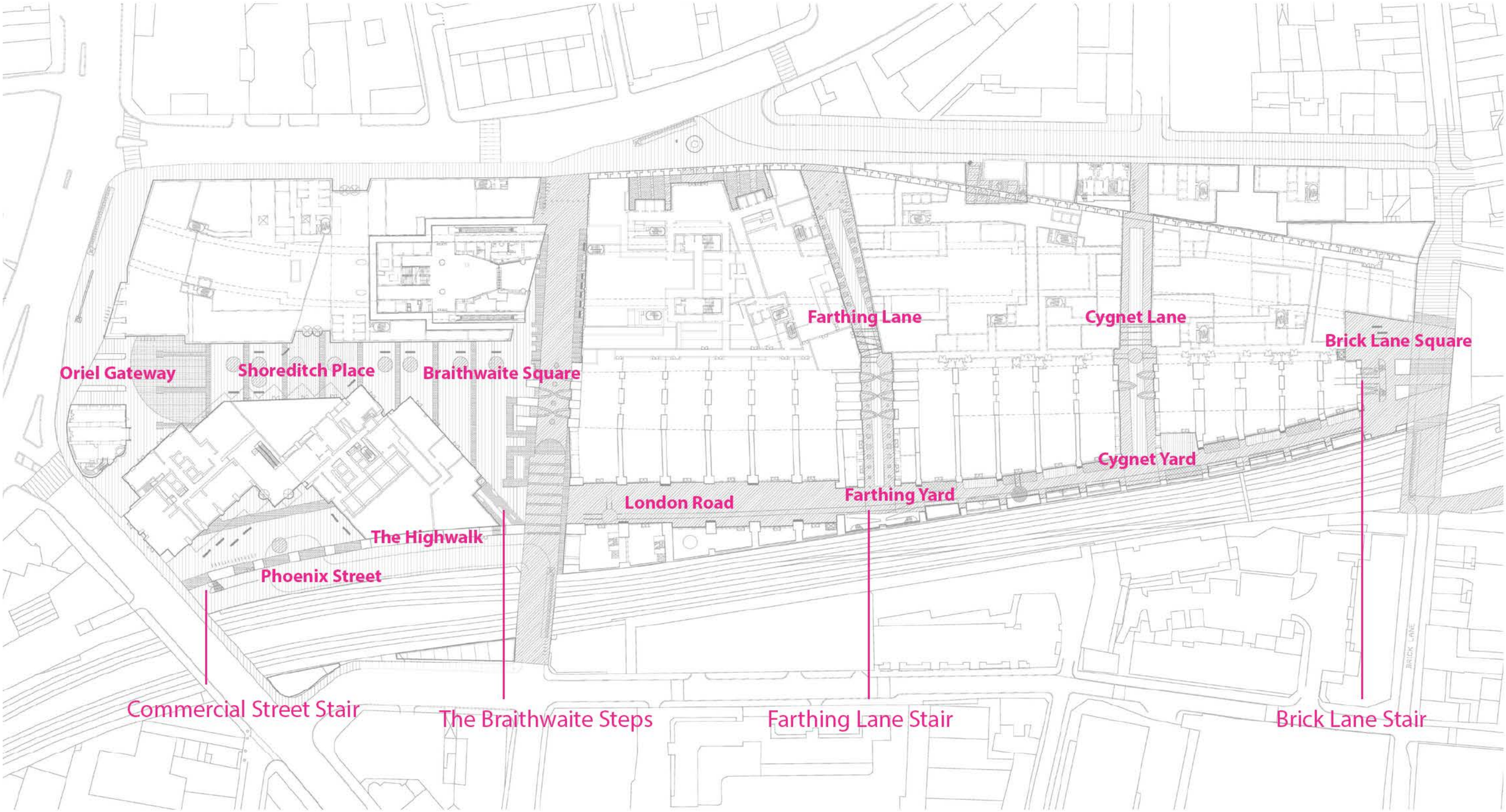
100 Pall Mall
London
SW1Y 5NQ

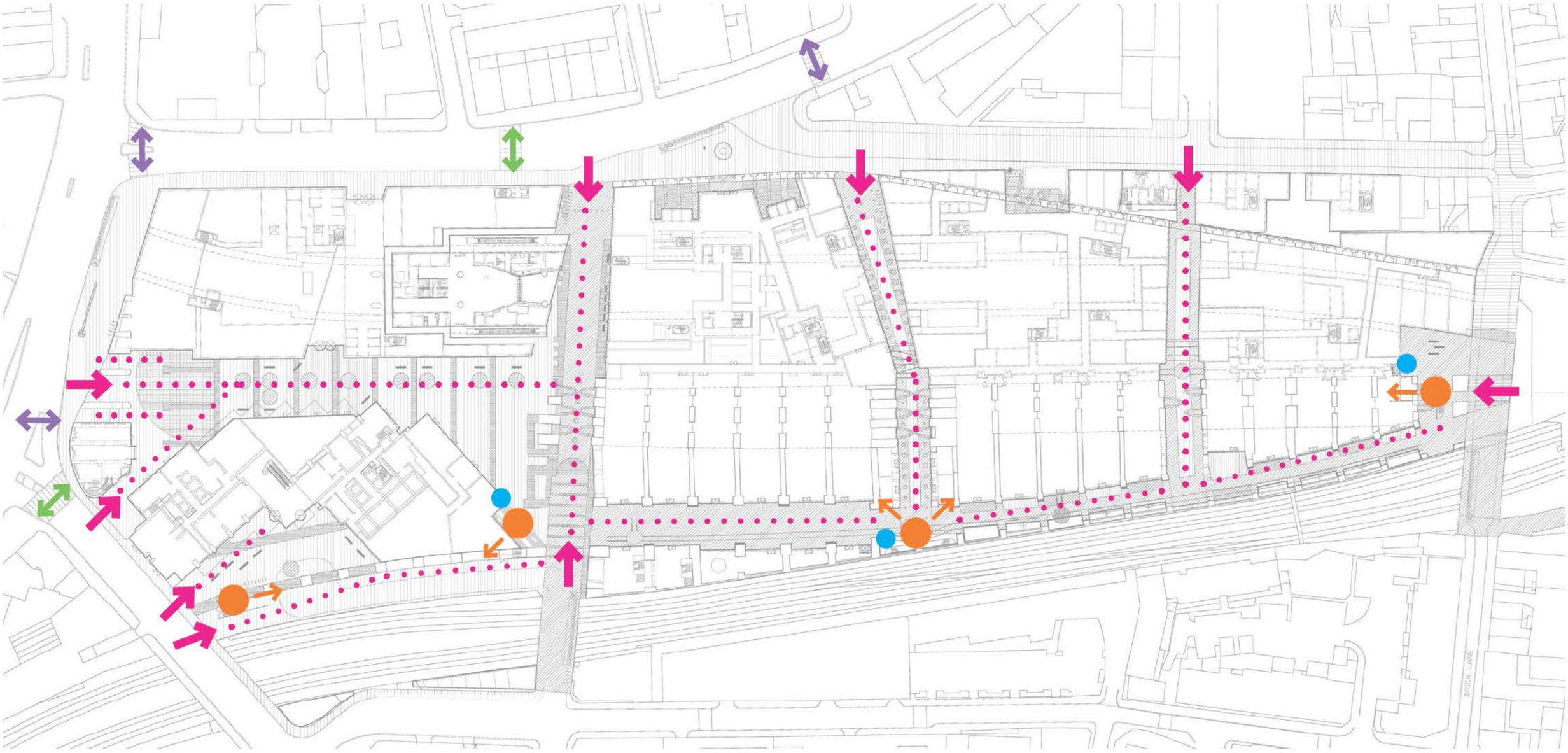
telephone: 020 7004 1700 facsimile: 020 7004 1790 website: www.dp9.co.uk<http://www.dp9.co.uk/>

Place names - ground level



spacehub + friends

Circulation + access - pedestrian



Pedestrian access

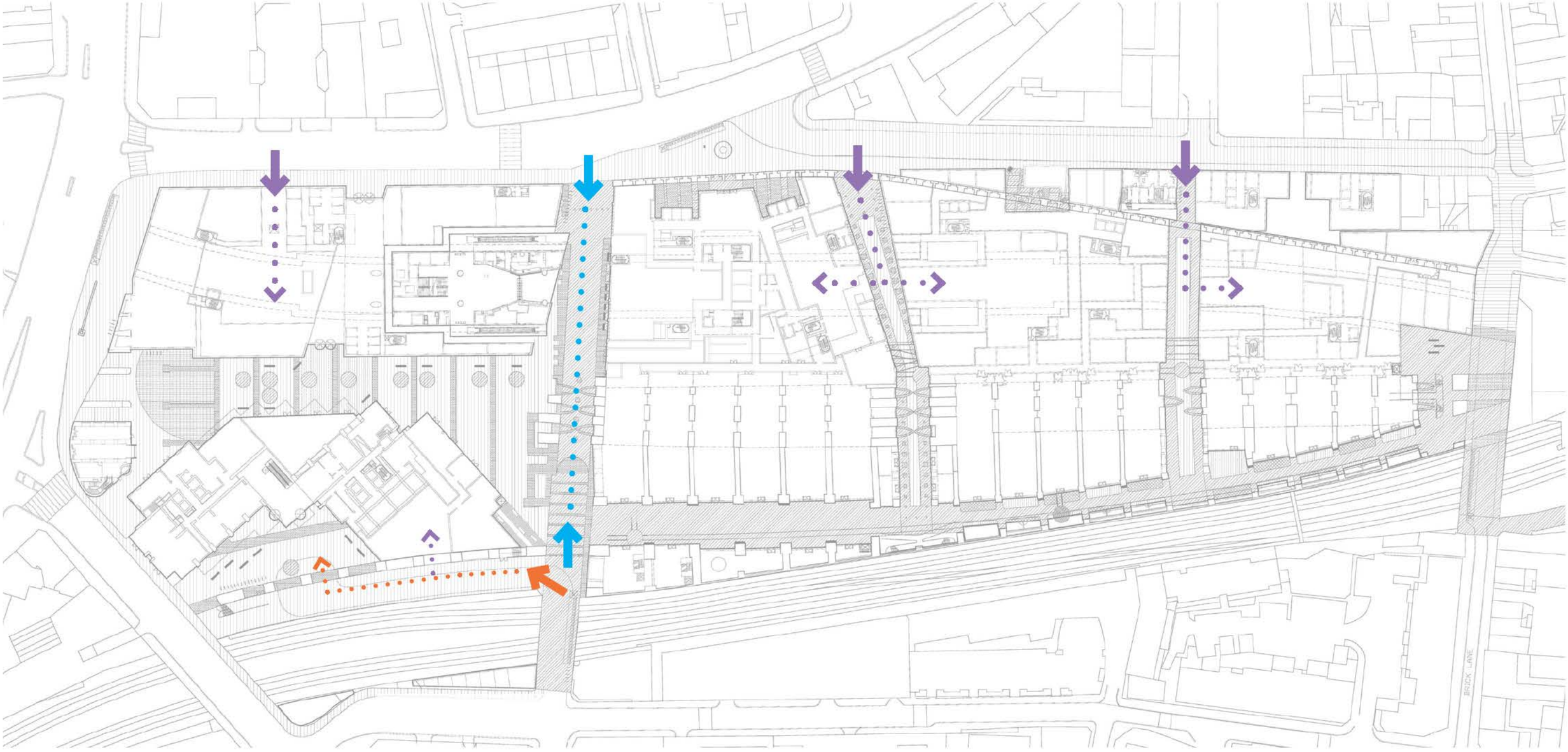
Stair access to park level

Lift access to park level

Existing pedestrian crossing

Proposed / improved pedestrian crossing

Circulation + access - vehicluar

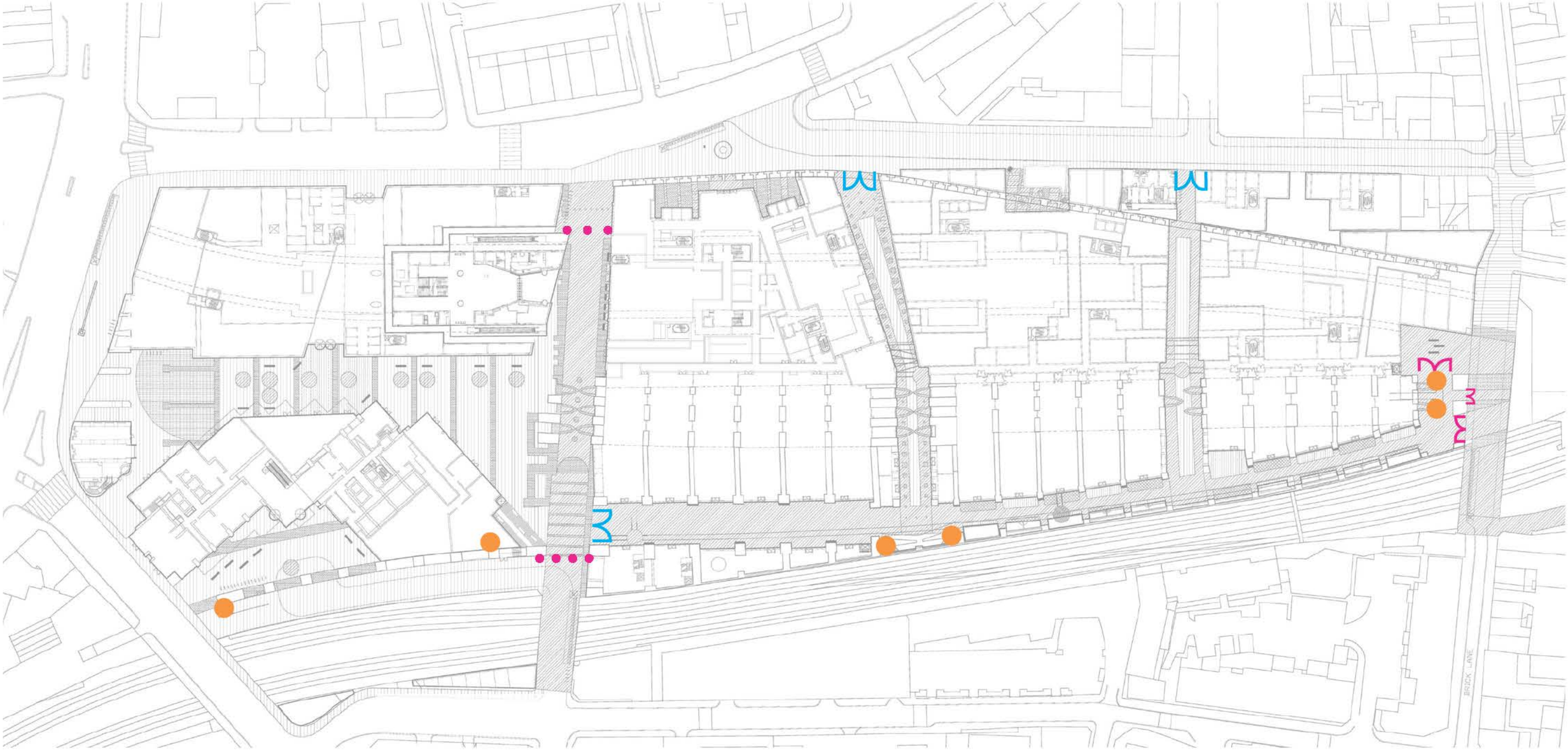


Emargency vehicle access

Service access

Residential access

Access control



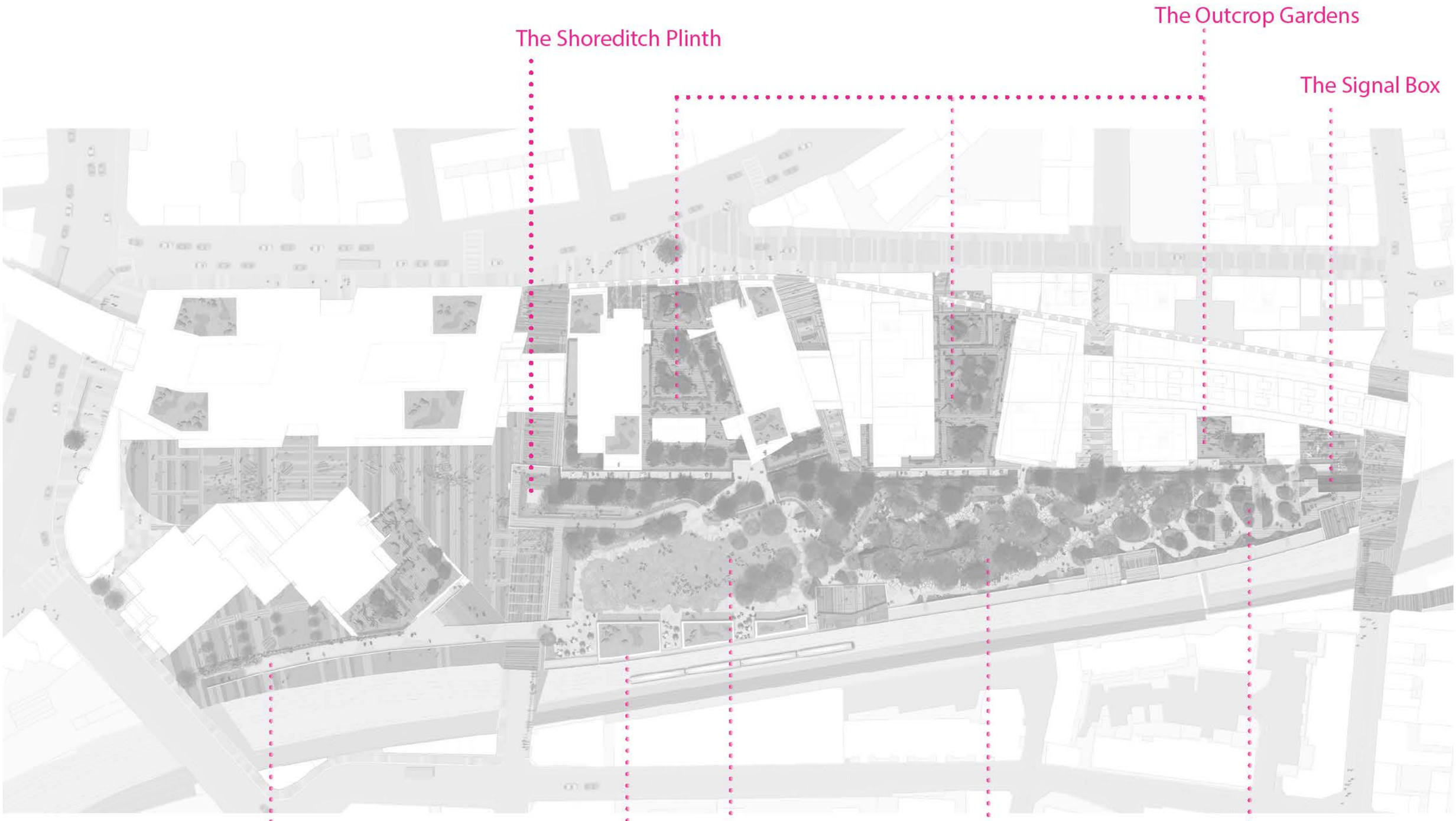
Gates - hinged 3.0m height

Gates - hinged/folding 2.0-3.0m height

Gates - hinged, 1.1m height

Bollards

Place names - upper levels



Park level plan - levels strategy

- Step free access to all areas
- Stair access level set at 21.5 (21.3 at Brick Lane)
- Residential access thresholds set at 21.5 (21.3 at Block E)

- Garden levels vary to provide undulating topography and soil depth for planting
- Levels are lowered at viaduct ends, east + west, to enhance park and public realm interface and reduce visible bulk

Paul Robinson

From: COUGHLAN, Tony <[redacted]hammerson.com>
Sent: 10 December 2015 12:19
To: Matt Christie
Cc: Julian Shirley; 'Jonathon Weston'
Subject: The Goodsyard - CGIs

Matt,

Following our meeting on Tuesday, please find a wetransfer link to gain access to the CGIs.

Files (148 MB total)
151210 Images issued to GLA.zip

Will be deleted on
17 December, 2015

Download link
http://we.tl/KluKo53uIZ

Kind regards,

Tony

Tony Coughlan | Development Manager | Hammerson plc

Hammerson plc | Kings Place | 90 York Way | London | N1 9GE

Tel: +44 (0) 20[redacted] | Mob: +44 (0)[redacted]

Email: [redacted]hammerson.com| Web: www.hammerson.com

Paul Robinson

From: Jonathon Weston <[redacted]ballymoregroup.com>
Sent: 09 December 2015 10:12
To: Matt Christie
Cc: COUGHLAN, Tony; Julian Shirley
Subject: Tthe Goodsyard - Without Prejudice
Attachments: The Goodsyard - financial contributions 091215 - without prejudice.pdf

Importance: High

Matt

Please find attached a breakdown of the proposed financial contributions the Goodsyard will be making to both LBTH and LBH based on the amended planning application(s).

The first section of the table details the proposed s106 and CiL payments that are attributable to both Boroughs and include most of the additional financial contributions detailed in the LBTH committee report. A number of the financial contributions raised in the LBTH report have not previously been reflected in the viability submission. The JV await the proposed Heads of Agreement from LBH.

The second section of the table details the additional benefits and policy considerations for each Borough including the Affordable workspace provision, park and community facilities. Whilst the Park and Ideas store is located in LBTH, they will be delivered for the benefit of the whole scheme and the wider community but the Joint Venture believe it's important to try and set out the proposals on a Borough by Borough split.

As the attached demonstrates, the fundamental difference between the two Boroughs is the impact of the CiL payment which followed the Planning Inspectorate's report published on 24th December 2014 (i.e. following the submission of the original application). The Cil Payment compares to an offsite Payment in Lieu in excess of 10%. To the JV's mind this significant additional payment influences the maximum viable affordable housing contribution the development can deliver and is also a significant factor in the weighting of the offer between the two Boroughs. The Joint Venture would like to understand the GLA's position on this matter.

I look forward to hearing from you and concluding the viability discussions on the project

Regards

Jon Weston

Senior Development Manager
Ballymore Developments (UK)
Pointe North | 3 Greenwich View Place | London E14 9NN
Tel: +44 (0) 20 [redacted]
Mob: +44 (0) [redacted]
email: [redacted]ballymoregroup.com
web: www.ballymoregroup.com

s106 Direct Financial Obligations	LBTH £		LBH £		Notes
Mayoral CIL	£4 947 238		£4 950 138		
S106	£2 624 000		£2 800 002		excludes LBTH employment contribution but includes other contributions listed - Additional LBH S106 outside JV assessment unknown
Borough CIL			£15 494 946		
Cross Rail Top Up			£4 075 777		
Carbon Offset	£1 674 000				not previously included in viability
Total Contributions Exc Affordable Housing		**£9,245,238**		**£27,320,863**	
			Diff LBH to LBTH	*£18 075 625*	

Other Contributions	LBTH Detail	LBTH Cost/Value (£m)	LBH Detail	LBH Cost/Value (£m)	
Affordable Workspace (as LBH Policy)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Public Realm - Cost takenfrom Cost Plan	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Community Facilities	[redacted]	[redacted]			[redacted]
	[redacted]	[redacted]			[redacted]
Total Additional Contributions		[redacted]	[redacted]	[redacted]	

Phasing	Plots	Affordable Element	Other Facilities	Heritage Delivery
Phase 1	C H Park	Intermediate AH	1 acre of park Ideas Store	Boundary Wall Bralthwaite Arches
Phase 2	A B	Affordable Work Space		
Phase 3	F G L (Oriel)	PIL		Boundary Wall Oriel Elevated Walkway
Phase 4	D E I J Park	Intermediate Social AH	[redacted]	Bralthwaite Arches
Phase 5	K	Affordable Work Space		
Review				
Simplified Convoys Wharf Approach - single review - timing to be agreed				

Reg 12 (5) (e)

Paul Robinson

From: Julian Shirley <[redacted]dp9.co.uk>
Sent: 08 December 2015 13:26
To: Matt Christie
Cc: COUGHLAN, Tony; Jonathon Weston
Subject: The Goodsyard - GIA document - DRAFT

Matt

Please see below link to the latest DRAFT GIA report for the GLA which incorporates the response to the DPR letter as well as addressing the overshadowing and daylight to the Boundary estate:

BGY GLA report 01/12/2015

To access the appendices please use the following link below:

BGY GLA Appendices

Please note that this is still in draft and does not pick up any of the legal comments from our side. These will be addressed shortly and the report re-issued later today.

Regards

Julian Shirley

direct: 020 [redacted]
mobile: [redacted]
e-mail: [redacted]dp9.co.uk

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100 Pall Mall
London
SW1Y 5NQ

telephone: 020 7004 1700 facsimile: 020 7004 1790 website: www.dp9.co.uk

Paul Robinson

From: Matt Christie
Sent: 07 December 2015 17:33
To: 'Julian Shirley'
Subject: Tomorrow's meeting

Hi Julian,

With reference to tomorrow's meeting at PLP. The main thing is that I leave with a better understanding of how the scheme works from a public realm/ urban design perspective. This will likely entail a lot of questions and follow-on questions that occur to me once I'm looking at the map, but they main things that jump out at the moment are:

- Access to the park
- Access through the site
- Access to resi units
- Which bits are intended to be 24 hour?
- What are the arrangements for the remainder?
- What are the potential contingency plans and how would that change movement through the scheme?
- How public and private is delineated
- Relationship between the ground floor resi units in C and D and the public realm
- Likely issues and how they have been addressed

Hope that's useful- please give me a call if you want to discuss. I'll see you tomorrow morning anyway so we can chat after the s106 meeting if you like.

Thanks

Matt Christie| Senior Strategic Planner and Urban Designer| Development & Projects

Greater London Authority | City Hall, The Queen's Walk, More London Riverside, London SE1 2AA

Tel: 020 7983 [redacted] Email: [redacted] london.gov.uk

Paul Robinson

From: Julian Shirley <[redacted]dp9.co.uk>
Sent: 03 December 2015 16:56
To: Matt Christie
Subject: RE: MGLA291015-8014 FOI request
Attachments: Hoare Lea Post Application Response (draft).pdf; Block F Part L1A Compliance Reports.pdf; Block G Part L1A Compliance Reports.pdf; Block C Part L1A Compliance Reports.pdf

Matt

Further to below, please see attached a response prepared by Hoare Lea to the Energy comments raised in the Stage 1 update report. It would be useful if you could liaise with Peter North, so that we might be able to arrange to meet.

Regards

Julian Shirley

direct: 020[redacted]
mobile:[redacted]
e-mail:[redacted]dp9.co.uk

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100 Pall Mall
London
SW1Y 5NQ

telephone: 020 7004 1700 facsimile: 020 7004 1790 website: www.dp9.co.uk

-----Original Message-----
From: Matt Christie [mailto[redacted]london.gov.uk]
Sent: 02 December 2015 14:42
To: Julian Shirley <[redacted]dp9.co.uk>
Subject: RE: MGLA291015-8014 FOI request

Julian,

Thanks for turning that around so quickly. I've passed that on to our FOI team and will let you know once they've made a decision.

Also got your voicemail re: Peter North. I think the best course of action is to go through me to ensure that I can co-ordinate with Peter and his team. To that end could you please send me the latest documentation, discussed yesterday, as soon as it is ready so that I can make the necessary arrangements at this end.

Thanks

Matt

From: Julian Shirley [[redacted]dp9.co.uk]

Sent: 02 December 2015 14:07
To: Matt Christie
Cc: Jonathon Weston; COUGHLAN, Tony
Subject: RE: MGLA291015-8014 FOI request

Matt

Further to your email below, we accept that the documents can be disclosed, except for the email string dated 15th, 29th and 30th July 2015 in relation to the viability review (second pdf file on the list from the top).

The reasons why we do not consider that this email exchange should be disclosed is that it contains commercially confidential information. We are, therefore, firmly of the view that the exemptions in Regulations 12(e) and (f) of the Environmental Information Regulations 2004 are engaged. If such viability information is disclosed, Bishopsgate Goodsyard Regeneration Limited's legitimate economic interests would be seriously prejudiced and such disclosure would not be in the public interest.

As you may be aware, FOI requests have previously been made to both boroughs and have been resisted by both boroughs on the basis of the exemptions in Regulation 12.5(e) and (f). Therefore, the arguments have been rehearsed at length on the issue of harm to the applicant's economic interests in the past and accepted by the boroughs. There is an extant appeal with the Information Commissioner's Office which is currently determining whether such viability information should be disclosed. The ICO has not yet made a decision on the appeal. For your information, please see the attached correspondence.

We trust that you will take the above comments into consideration.

Regards

Julian Shirley

direct: 020 [redacted]
mobile: [redacted]
e-mail: [redacted] dp9.co.uk<mailto [redacted] dp9.co.uk>

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From: Matt Christie [mailto [redacted] london.gov.uk]
Sent: 30 November 2015 14:38
To: Julian Shirley <[redacted] dp9.co.uk>
Subject: MGLA291015-8014 FOI request

Dear Julian,

I am writing to you in connection with a request for information received by the GLA which is being considered under the Freedom of Information Act.

The request asks for the release of a number of documents relating to correspondence between the Mayor/ the GLA and Hammerson/ Ballymore regarding the Bishopsgate Goodsyard planning application. Much of the information requested was supplied by you and copies are attached for your information.

The Freedom of Information Act carries a presumption in favour of disclosure and the GLA is obliged to disclose the information that holds.

However, the Act does contain a limited number of exemptions which can be used to withhold information in certain circumstances, taking into consideration of any necessary public interest arguments for and against release.

More information about these provisions can be found on the website of the Information Commissioner – https://ico.org.uk/for-organisations/guide-to-freedom-of-information/refusing-a-request/#10

If you consider that the information attached should not be disclosed, please let me know in writing how, in your view, disclosure of the information would be harmful.

The final decision on whether the information should be withheld rests with the GLA, but we will take into account your views. While the GLA is committed to presumption in favour of disclosure, we will not disclose information where there are legitimate reasons, in the public interest, for not doing so.

Your response must reach me within five working days of the date on this email to enable the GLA to take your views into account. If you do not make any representation by that date, the GLA will assume you have no objections to the information being disclosed.

If you have any further questions relating to this matter, please contact me, quoting the reference at the top of this letter.

Yours sincerely

Matt Christie| Senior Strategic Planner and Urban Designer| Development & Projects Greater London Authority | City Hall, The Queen's Walk, More London Riverside, London SE1 2AA
Tel: 020 7983 [redacted] Email: [redacted]london.gov.uk<mailto [redacted]london.gov.uk>

The way that you register to vote has now changed. It's important that you are on the register to vote in the elections for London's Mayor and Assembly next May.

Read our blog post and find out what you need to do. http://londonelects.org.uk/news-centre/news-listing/way-you-register-vote-changing

BISHOPSGATE GOODS YARD

POST-APPLICATION RESPONSE

6th OCTOBER 2015

Introduction

Hoare Lea were responsible for the Mechanical, Electrical & Public Health design for the Bishopsgate Goods Yard scheme. We were also appointed for Sustainability, Fire, Acoustics and Vertical Transportation advice.

This note has been written in response to the GLA letter dated 9th September 2015, ref D&P/1200B&C/JPC.

Appended to the letter was planning report D&P/1200B&C/02, which gives a number of conditions against planning applications 2014/2425 & PA/14/02011. Paragraphs 51 to 56 relate to Energy and in our position as the MEP and Suitability designers, our post-application responses are below.

Paragraph 51

> *Since the initial Stage 1 report, the applicant has made a number of amendments to the energy strategy. The applicant has updated the modelling using Part L 2013 compliant software. The estimated emission saving for the energy efficiency is 14% from a Part L 2013 baseline which is welcomed.*

Noted

Paragraph 52

> *The applicant has provided the SAP compliance sheets demonstrate that there is a slight risk of overheating. This is under the assumption that the windows can be opened at all times and that if this is not the case then the units would be comfort cooled. The applicant should follow the cooling hierarchy with the overheating analysis demonstrating that there is no significant risk of overheating without reliance on mechanical cooling. The applicant should therefore provide Part L compliance sheets of the sample dwellings with ventilation restrictions (due to noise, security etc.) to demonstrate that there is only a slight risk of overheating. As outlined above dynamic thermal modelling, including for future climate projections is recommended to demonstrate compliance with the cooling hierarchy.*

The comment is inconsistent and stipulates that two differing levels of compliance with Part L criterion 3 must be achieved – 'not significant' and 'slight' likelihood of overheating. Compliance with Part L criterion 3 is set at a higher level of 'medium' likelihood

There is no requirement within Policy 5.9 (overheating and cooling) of the London Plan referred to which sets out a standard upon which a development must achieve compliance. The Energy Planning Guidance 2013 published by the GLA indicates that cooling is an acceptable strategy if other measures are not sufficient to provide the required level of occupant comfort (refer to extract below)

> *"Where design measures and the use of natural and/or mechanical ventilation are not enough to guarantee the occupant's comfort, in line with the cooling hierarchy set out in London Plan policy 5.9, the development's cooling strategy must include details of the active cooling plant being proposed"*

The current strategy provides the ability to naturally ventilate the private residential units or utilise the cooling provided. With the external impacts such as noise this strategy provides options for limiting the risk of overheating without doubling up on installed mechanical systems (i.e. multiple ventilation units plus cooling fan coil units) whilst enabling glazing areas which satisfy the daylighting requirements

The apartments will achieve compliance with Part L Criterion 3 via natural ventilation. The use of natural ventilation will however result in elevated noise levels within the residences (the extent of impact will vary throughout the site)

Where the use of natural ventilation may be constrained due to external impacts such as noise ingress all residential units, with the exception of the penthouses and townhouses, could achieve compliance with two mechanical ventilation heat recovery systems (or equivalent) within each unit. This would also require the solar transmission performance of the glazing (g value) to be reduced to 0.34. The implications, if any, for daylight levels will need to be appraised. This strategy shall be used on the affordable and intermediate apartments, where comfort cooling will not be provided. The secondary ventilation system may need a NO_x filter to remove airborne pollutants.

The recommendation to undertake dynamic modelling is a common request; however it is not supported in policy and therefore goes beyond the standard provisions for planning submission. The approach is recognised as being more appropriate for assessing the likelihood of overheating and is best used to inform the design of residences where no cooling will be provided.

Paragraph 53

> *The applicant has provided plans of the energy centres including the potential future connection point, however, the drawings were not clear as to what provisions have been made internally in the energy centres for a future connection. The applicant should provide drawings demonstrating the provisions made for a future connection (e.g. space for heat exchangers)*

Plans can be made available upon request showing the location of each of the future interface rooms. Each interface room will have sufficient space for a plate heat exchanger to connect to the district heating network, meters, secondary circulating pumps and the necessary ancillaries. Provision will be left in the BMS for this future equipment.

Paragraph 54

> *Confirmation should also be provided that all apartments and non-domestic building uses would be connected to the network*

We can confirm that the strategy has all apartments and non-domestic building uses connected to the site-wide heat network.

Basic schematic drawings can be made available, showing all blocks and buildings connected to the site-wide heat network.

Paragraph 55

> *The applicant has not provided any further information to demonstrate that the potential for Energy Centre 2 becoming the main single centre has been investigated. The further information on this basis requested in the Stage 1 report remains outstanding and should be provided*

Considerable time was spent by the design team developing the scheme issued to the planners. The solution presented was co-ordinated with the structure and architecture

As part of our works we considered numerous options for the energy centre. These included single energy centres, located under Blocks E or F/G. Sketches of these energy centres can be made available upon request.

Paragraph 56

> *In relation to the overall carbon savings, the applicant has reassessed the site wide carbon emissions using the Part L 2013 methodology. The reduction is estimated to be a 27% savings from a Part L baseline. The further information outlined above should be addressed before officers can confirm the final position in relation to energy.*

Noted

L1A 2013 - Regulations Compliance Report
Design - Draft

This design draft submission provides evidence towards compliance with Part L of the Building Regulations, in accordance with Appendix C of AD L1A. It has been carried out using Approved SAP software. It has been prepared from plans and specifications and may not reflect the 'as built' property. This report covers only items included within the SAP and is not a complete report of regulations compliance.

Assessor name	Hoare Lea	Assessor number	7740
Client		Last modified	06/10/2015
Address	F02 The Goodsyard 1, London		

Check	Evidence	Produced by	OK?
Criterion 1: predicted carbon dioxide emission from proposed dwelling does not exceed the target			
TER (kg $CO_2/m^2.a$)	Fuel = N/A Fuel factor = 1.00 TER = 14.20	Authorised SAP Assessor	
DER for dwelling as designed (kg $CO_2/m^2.a$)	DER = 13.31	Authorised SAP Assessor	
Are emissions from dwelling as designed less than or equal to the target?	DER 13.31 < TER 14.20	Authorised SAP Assessor	Passed
Is the fabric energy efficiency of the dwellling as designed less than or equal to the target?	DFEE 23.14 < TFEE 25.36	Authorised SAP Assessor	Passed
Criterion 2: the performance of the building fabric and the heating, hot water and fixed lighting systems should be no worse than the design limits			
Fabric U-values			
Are all U-values better than the design limits in Table 2?	**Element** / **Weighted average** / **Highest** Wall: 0.30 (max 0.30) / 0.30 (max 0.70) Party wall: 0.00 (max 0.20) / N/A Floor: (no floor) Roof: (no roof) Openings and curtain wall: 1.20 (max 2.00) / 1.20 (max 3.30)	Authorised SAP Assessor	Passed
Thermal bridging			
How has the loss from thermal bridges been calculated?	Thermal bridging calculated using default y-value of 0.15	Authorised SAP Assessor	
Heating and hot water systems			
Does the efficiency of the heating systems meet the minimum value set out in the Domestic Heating Compliance Guide?	Community heating scheme Secondary heating system: None	Authorised SAP Assessor	N/A
Does the insulation of the hot water cylinder meet the standards set out in the Domestic Heating Compliance Guide?	No hot water cylinder in the dwelling	Authorised SAP Assessor	
Do controls meet the minimum controls provision set out in the Domestic Heating Compliance Guide?	Space heating control: Charging system linked to use, programmer and TRVs No hot water cylinder in the dwelling	Authorised SAP Assessor	Passed
Fixed internal lighting			

Check	Evidence	Produced by	OK?
Does fixed internal lighting comply with paragraphs 42 to 44?	Schedule of installed fixed internal lighting Standard lights = 0 Low energy lights = 1 Percentage of low energy lights = 100% Minimum = 75 %	Authorised SAP Assessor	Passed
Criterion 3: the dwelling has appropriate passive control measures to limit solar gains			
Does the dwelling have a strong tendency to high summertime temperatures?	Overheating risk (June) = Not significant (20.12°) Overheating risk (July) = Slight (21.91°) Overheating risk (August) = Slight (21.77°) Region = Thames Thermal mass parameter = 100.00 Ventilation rate in hot weather = 4.00 ach Blinds/curtains = Dark-coloured curtain or roller blind	Authorised SAP Assessor	Passed
Criterion 4: the performance of the dwelling, as designed, is consistent with the DER			
Design air permeability ($m^3/(h.m^2)$ at 50Pa)	Design air permeability = 3.00 Max air permeability = 10.00	Authorised SAP Assessor	Passed
Mechanical ventilation system Specific fan power (SFP)	Mechanical ventilation with heat recovery: SFP = 0.60 W/(litre/sec) Max SFP = 1.5 W/(litre/sec) Heat recovery efficiency = 89.00 % Min heat recovery efficiency = 70.00 %	Authorised SAP Assessor	Passed
Have the key features of the design been included (or bettered) in practice?	The following party walls have a U-value less than $0.2W/m^2K$: • Party Wall (0.00) Design air permeability of 3 $m^3/(h.m^2)$ is less than 4 $m^3/(h.m^2)$ at 50 Pa Space cooling is specified	Authorised SAP Assessor	

L1A 2013 - Regulations Compliance Report
Design - Draft

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Assessor name	Hoare Lea	Assessor number	7740
Client		Last modified	06/10/2015
Address	F03 The Goodsyard 1, London		

Check	Evidence	Produced by	OK?
Criterion 1: predicted carbon dioxide emission from proposed dwelling does not exceed the target			
TER (kg $CO_2/m^2.a$)	Fuel = N/A Fuel factor = 1.00 TER = 12.23	Authorised SAP Assessor	
DER for dwelling as designed (kg $CO_2/m^2.a$)	DER = 11.74	Authorised SAP Assessor	
Are emissions from dwelling as designed less than or equal to the target?	DER 11.74 < TER 12.23	Authorised SAP Assessor	Passed
Is the fabric energy efficiency of the dwellling as designed less than or equal to the target?	DFEE 25.29 < TFEE 28.07	Authorised SAP Assessor	Passed
Criterion 2: the performance of the building fabric and the heating, hot water and fixed lighting systems should be no worse than the design limits			
Fabric U-values			
Are all U-values better than the design limits in Table 2?	**Element** — **Weighted average** — **Highest** Wall — 0.30 (max 0.30) — 0.30 (max 0.70) Party wall — 0.00 (max 0.20) — N/A Floor — (no floor) Roof — (no roof) Openings and curtain wall — 1.20 (max 2.00) — 1.20 (max 3.30)	Authorised SAP Assessor	Passed
Thermal bridging			
How has the loss from thermal bridges been calculated?	Thermal bridging calculated using default y-value of 0.15	Authorised SAP Assessor	
Heating and hot water systems			
Does the efficiency of the heating systems meet the minimum value set out in the Domestic Heating Compliance Guide?	Community heating scheme Secondary heating system: None	Authorised SAP Assessor	N/A
Does the insulation of the hot water cylinder meet the standards set out in the Domestic Heating Compliance Guide?	No hot water cylinder in the dwelling	Authorised SAP Assessor	
Do controls meet the minimum controls provision set out in the Domestic Heating Compliance Guide?	Space heating control: Charging system linked to use, programmer and TRVs No hot water cylinder in the dwelling	Authorised SAP Assessor	Passed
Fixed internal lighting			

Check	Evidence	Produced by	OK?
Does fixed internal lighting comply with paragraphs 42 to 44?	Schedule of installed fixed internal lighting Standard lights = 0 Low energy lights = 1 Percentage of low energy lights = 100% Minimum = 75 %	Authorised SAP Assessor	Passed
Criterion 3: the dwelling has appropriate passive control measures to limit solar gains			
Does the dwelling have a strong tendency to high summertime temperatures?	Overheating risk (June) = Not significant (20.37°) Overheating risk (July) = Medium (22.14°) Overheating risk (August) = Slight (21.96°) Region = Thames Thermal mass parameter = 100.00 Ventilation rate in hot weather = 4.00 ach Blinds/curtains = Dark-coloured curtain or roller blind	Authorised SAP Assessor	Passed
Criterion 4: the performance of the dwelling, as designed, is consistent with the DER			
Design air permeability ($m^3/(h.m^2)$ at 50Pa)	Design air permeability = 3.00 Max air permeability = 10.00	Authorised SAP Assessor	Passed
Mechanical ventilation system Specific fan power (SFP)	Mechanical ventilation with heat recovery: SFP = 0.61 W/(litre/sec) Max SFP = 1.5 W/(litre/sec) Heat recovery efficiency = 88.00 % Min heat recovery efficiency = 70.00 %	Authorised SAP Assessor	Passed
Have the key features of the design been included (or bettered) in practice?	The following party walls have a U-value less than $0.2W/m^2K$: • Party Wall (0.00) Design air permeability of 3 $m^3/(h.m^2)$ is less than 4 $m^3/(h.m^2)$ at 50 Pa Space cooling is specified	Authorised SAP Assessor	

L1A 2013 - Regulations Compliance Report
Design - Draft

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Assessor name	Hoare Lea	Assessor number	7740
Client		Last modified	06/10/2015
Address	F04 The Goodsyard 1, London		

Check	Evidence	Produced by	OK?
Criterion 1: predicted carbon dioxide emission from proposed dwelling does not exceed the target			
TER (kg $CO_2/m^2.a$)	Fuel = N/A Fuel factor = 1.00 TER = 14.65	Authorised SAP Assessor	
DER for dwelling as designed (kg $CO_2/m^2.a$)	DER = 14.65	Authorised SAP Assessor	
Are emissions from dwelling as designed less than or equal to the target?	DER 14.65 = TER 14.65	Authorised SAP Assessor	Passed
Is the fabric energy efficiency of the dwellling as designed less than or equal to the target?	DFEE 40.10 < TFEE 41.08	Authorised SAP Assessor	Passed
Criterion 2: the performance of the building fabric and the heating, hot water and fixed lighting systems should be no worse than the design limits			
Fabric U-values			
Are all U-values better than the design limits in Table 2?	**Element** — **Weighted average** — **Highest** Wall — 0.27 (max 0.30) — 0.30 (max 0.70) Party wall — 0.00 (max 0.20) — N/A Floor — (no floor) Roof — (no roof) Openings — 1.10 (max 2.00) — 1.10 (max 3.30)	Authorised SAP Assessor	Passed
Thermal bridging			
How has the loss from thermal bridges been calculated?	Thermal bridging calculated using default y-value of 0.15	Authorised SAP Assessor	
Heating and hot water systems			
Does the efficiency of the heating systems meet the minimum value set out in the Domestic Heating Compliance Guide?	Community heating scheme Secondary heating system: None	Authorised SAP Assessor	N/A
Does the insulation of the hot water cylinder meet the standards set out in the Domestic Heating Compliance Guide?	No hot water cylinder in the dwelling	Authorised SAP Assessor	
Do controls meet the minimum controls provision set out in the Domestic Heating Compliance Guide?	Space heating control: Charging system linked to use, programmer and TRVs No hot water cylinder in the dwelling	Authorised SAP Assessor	Passed
Fixed internal lighting			

Check	Evidence	Produced by	OK?
Does fixed internal lighting comply with paragraphs 42 to 44?	Schedule of installed fixed internal lighting Standard lights = 0 Low energy lights = 1 Percentage of low energy lights = 100% Minimum = 75 %	Authorised SAP Assessor	**Passed**
Criterion 3: the dwelling has appropriate passive control measures to limit solar gains			
Does the dwelling have a strong tendency to high summertime temperatures?	Overheating risk (June) = Slight (20.73°) Overheating risk (July) = Medium (22.44°) Overheating risk (August) = Medium (22.06°) Region = Thames Thermal mass parameter = 100.00 Ventilation rate in hot weather = 4.00 ach Blinds/curtains = Dark-coloured curtain or roller blind	Authorised SAP Assessor	**Passed**
Criterion 4: the performance of the dwelling, as designed, is consistent with the DER			
Design air permeability ($m^3/(h.m^2)$ at 50Pa)	Design air permeability = 3.00 Max air permeability = 10.00	Authorised SAP Assessor	**Passed**
Mechanical ventilation system Specific fan power (SFP)	Mechanical ventilation with heat recovery: SFP = 0.61 W/(litre/sec) Max SFP = 1.5 W/(litre/sec) Heat recovery efficiency = 88.00 % Min heat recovery efficiency = 70.00 %	Authorised SAP Assessor	**Passed**
Have the key features of the design been included (or bettered) in practice?	The following party walls have a U-value less than $0.2W/m^2K$: • Party Wall (0.00) The following openings have a U-value less than $1.2W/m^2K$: • Window reference 1 (1.10) • Window reference 2 (1.10) Design air permeability of 3 $m^3/(h.m^2)$ is less than 4 $m^3/(h.m^2)$ at 50 Pa Space cooling is specified	Authorised SAP Assessor	

L1A 2013 - Regulations Compliance Report
Design - Draft

This design draft submission provides evidence towards compliance with Part L of the Building Regulations, in accordance with Appendix C of AD L1A. It has been carried out using Approved SAP software. It has been prepared from plans and specifications and may not reflect the 'as built' property. This report covers only items included within the SAP and is not a complete report of regulations compliance.

Assessor name	Hoare Lea	Assessor number	7740
Client		Last modified	06/10/2015
Address	F05 The Goodsyard, London		

Check	Evidence	Produced by	OK?
Criterion 1: predicted carbon dioxide emission from proposed dwelling does not exceed the target			
TER (kg $CO_2/m^2.a$)	Fuel = N/A Fuel factor = 1.00 TER = 16.01	Authorised SAP Assessor	
DER for dwelling as designed (kg $CO_2/m^2.a$)	DER = 16.57	Authorised SAP Assessor	
Are emissions from dwelling as designed less than or equal to the target?	DER 16.57 > TER 16.01 Excess emissions = 0.56 kg/m² (3.50%)	Authorised SAP Assessor	Failed
Is the fabric energy efficiency of the dwellling as designed less than or equal to the target?	DFEE 40.44 > TFEE 37.97 Variance = 2.47 kWh/m² (6.51%)	Authorised SAP Assessor	Failed
Criterion 2: the performance of the building fabric and the heating, hot water and fixed lighting systems should be no worse than the design limits			
Fabric U-values			
Are all U-values better than the design limits in Table 2?	**Element** — **Weighted average** — **Highest** Wall — 0.30 (max 0.30) — 0.30 (max 0.70) Party wall — 0.00 (max 0.20) — N/A Floor — (no floor) Roof — (no roof) Openings and curtain wall — 1.16 (max 2.00) — 1.20 (max 3.30)	Authorised SAP Assessor	Passed
Thermal bridging			
How has the loss from thermal bridges been calculated?	Thermal bridging calculated using default y-value of 0.15	Authorised SAP Assessor	
Heating and hot water systems			
Does the efficiency of the heating systems meet the minimum value set out in the Domestic Heating Compliance Guide?	Community heating scheme Secondary heating system: None	Authorised SAP Assessor	N/A
Does the insulation of the hot water cylinder meet the standards set out in the Domestic Heating Compliance Guide?	No hot water cylinder in the dwelling	Authorised SAP Assessor	
Do controls meet the minimum controls provision set out in the Domestic Heating Compliance Guide?	Space heating control: Charging system linked to use, programmer and TRVs No hot water cylinder in the dwelling	Authorised SAP Assessor	Passed
Fixed internal lighting			

Check	Evidence	Produced by	OK?
Does fixed internal lighting comply with paragraphs 42 to 44?	Schedule of installed fixed internal lighting Standard lights = 0 Low energy lights = 1 Percentage of low energy lights = 100% Minimum = 75 %	Authorised SAP Assessor	**Passed**
Criterion 3: the dwelling has appropriate passive control measures to limit solar gains			
Does the dwelling have a strong tendency to high summertime temperatures?	Overheating risk (June) = Slight (21.33°) Overheating risk (July) = Medium (23.02°) Overheating risk (August) = Medium (22.66°) Region = Thames Thermal mass parameter = 100.00 Ventilation rate in hot weather = 4.00 ach Blinds/curtains = Dark-coloured curtain or roller blind	Authorised SAP Assessor	**Passed**
Criterion 4: the performance of the dwelling, as designed, is consistent with the DER			
Design air permeability ($m^3/(h.m^2)$ at 50Pa)	Design air permeability = 3.00 Max air permeability = 10.00	Authorised SAP Assessor	**Passed**
Mechanical ventilation system Specific fan power (SFP)	Mechanical ventilation with heat recovery: SFP = 0.60 W/(litre/sec) Max SFP = 1.5 W/(litre/sec) Heat recovery efficiency = 89.00 % Min heat recovery efficiency = 70.00 %	Authorised SAP Assessor	**Passed**
Have the key features of the design been included (or bettered) in practice?	The following party walls have a U-value less than $0.2W/m^2K$: • Party Wall (0.00) The following openings have a U-value less than $1.2W/m^2K$: • Window reference 1 (1.10) Design air permeability of 3 $m^3/(h.m^2)$ is less than 4 $m^3/(h.m^2)$ at 50 Pa Space cooling is specified	Authorised SAP Assessor	

L1A 2013 - Regulations Compliance Report
Design - Draft

This design draft submission provides evidence towards compliance with Part L of the Building Regulations, in accordance with Appendix C of AD L1A. It has been carried out using Approved SAP software. It has been prepared from plans and specifications and may not reflect the 'as built' property. This report covers only items included within the SAP and is not a complete report of regulations compliance.

Assessor name	Hoare Lea	Assessor number	7740
Client		Last modified	06/10/2015
Address	F06 The Goodsyard 1, London		

Check	Evidence	Produced by	OK?
Criterion 1: predicted carbon dioxide emission from proposed dwelling does not exceed the target			
TER (kg $CO_2/m^2.a$)	Fuel = N/A Fuel factor = 1.00 TER = 17.50	Authorised SAP Assessor	
DER for dwelling as designed (kg $CO_2/m^2.a$)	DER = 16.88	Authorised SAP Assessor	
Are emissions from dwelling as designed less than or equal to the target?	DER 16.88 < TER 17.50	Authorised SAP Assessor	Passed
Is the fabric energy efficiency of the dwellling as designed less than or equal to the target?	DFEE 39.84 < TFEE 41.53	Authorised SAP Assessor	Passed
Criterion 2: the performance of the building fabric and the heating, hot water and fixed lighting systems should be no worse than the design limits			
Fabric U-values			
Are all U-values better than the design limits in Table 2?	**Element** — **Weighted average** — **Highest** Wall — 0.27 (max 0.30) — 0.30 (max 0.70) Party wall — 0.00 (max 0.20) — N/A Floor — (no floor) Roof — (no roof) Openings — 1.10 (max 2.00) — 1.10 (max 3.30)	Authorised SAP Assessor	Passed
Thermal bridging			
How has the loss from thermal bridges been calculated?	Thermal bridging calculated using default y-value of 0.15	Authorised SAP Assessor	
Heating and hot water systems			
Does the efficiency of the heating systems meet the minimum value set out in the Domestic Heating Compliance Guide?	Community heating scheme Secondary heating system: None	Authorised SAP Assessor	N/A
Does the insulation of the hot water cylinder meet the standards set out in the Domestic Heating Compliance Guide?	No hot water cylinder in the dwelling	Authorised SAP Assessor	
Do controls meet the minimum controls provision set out in the Domestic Heating Compliance Guide?	Space heating control: Charging system linked to use, programmer and TRVs No hot water cylinder in the dwelling	Authorised SAP Assessor	Passed
Fixed internal lighting			

Check	Evidence	Produced by	OK?
Does fixed internal lighting comply with paragraphs 42 to 44?	Schedule of installed fixed internal lighting Standard lights = 0 Low energy lights = 1 Percentage of low energy lights = 100% Minimum = 75 %	Authorised SAP Assessor	**Passed**
Criterion 3: the dwelling has appropriate passive control measures to limit solar gains			
Does the dwelling have a strong tendency to high summertime temperatures?	Overheating risk (June) = Not significant (20.23°) Overheating risk (July) = Slight (21.97°) Overheating risk (August) = Slight (21.7°) Region = Thames Thermal mass parameter = 100.00 Ventilation rate in hot weather = 4.00 ach Blinds/curtains = Dark-coloured curtain or roller blind	Authorised SAP Assessor	**Passed**
Criterion 4: the performance of the dwelling, as designed, is consistent with the DER			
Design air permeability ($m^3/(h.m^2)$ at 50Pa)	Design air permeability = 3.00 Max air permeability = 10.00	Authorised SAP Assessor	**Passed**
Mechanical ventilation system Specific fan power (SFP)	Mechanical ventilation with heat recovery: SFP = 0.60 W/(litre/sec) Max SFP = 1.5 W/(litre/sec) Heat recovery efficiency = 89.00 % Min heat recovery efficiency = 70.00 %	Authorised SAP Assessor	**Passed**
Have the key features of the design been included (or bettered) in practice?	The following party walls have a U-value less than $0.2W/m^2K$: • Party Wall (0.00) The following openings have a U-value less than $1.2W/m^2K$: • Window reference 1 (1.10) Design air permeability of 3 $m^3/(h.m^2)$ is less than 4 $m^3/(h.m^2)$ at 50 Pa Space cooling is specified	Authorised SAP Assessor	

L1A 2013 - Regulations Compliance Report
Design - Draft

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Assessor name	Hoare Lea	Assessor number	7740
Client		Last modified	06/10/2015
Address	F07 The Goodsyard 1, London		

Check	Evidence	Produced by	OK?
Criterion 1: predicted carbon dioxide emission from proposed dwelling does not exceed the target			
TER (kg $CO_2/m^2.a$)	Fuel = N/A Fuel factor = 1.00 TER = 12.42	Authorised SAP Assessor	
DER for dwelling as designed (kg $CO_2/m^2.a$)	DER = 12.05	Authorised SAP Assessor	
Are emissions from dwelling as designed less than or equal to the target?	DER 12.05 < TER 12.42	Authorised SAP Assessor	Passed
Is the fabric energy efficiency of the dwellling as designed less than or equal to the target?	DFEE 31.90 < TFEE 33.97	Authorised SAP Assessor	Passed
Criterion 2: the performance of the building fabric and the heating, hot water and fixed lighting systems should be no worse than the design limits			
Fabric U-values			
Are all U-values better than the design limits in Table 2?	**Element** / **Weighted average** / **Highest** Wall: (no wall) Party wall: 0.00 (max 0.20) / N/A Floor: (no floor) Roof: (no roof) Openings and curtain wall: 0.72 (max 2.00) / 1.20 (max 3.30)	Authorised SAP Assessor	Passed
Thermal bridging			
How has the loss from thermal bridges been calculated?	Thermal bridging calculated using default y-value of 0.15	Authorised SAP Assessor	
Heating and hot water systems			
Does the efficiency of the heating systems meet the minimum value set out in the Domestic Heating Compliance Guide?	Community heating scheme Secondary heating system: None	Authorised SAP Assessor	N/A
Does the insulation of the hot water cylinder meet the standards set out in the Domestic Heating Compliance Guide?	Cylinder volume = 175.00 litres Nominal cylinder loss = 1.59kWh/day Maximum permitted cylinder loss = 2.06kWh/day Primary hot water pipes are (assumed) insulated	Authorised SAP Assessor	Passed
Do controls meet the minimum controls provision set out in the Domestic Heating Compliance Guide?	Space heating control: Charging system linked to use, programmer and TRVs Hot water control: Cylinder thermostat	Authorised SAP Assessor	Passed

Check	Evidence	Produced by	OK?
Fixed internal lighting			
Does fixed internal lighting comply with paragraphs 42 to 44?	Schedule of installed fixed internal lighting Standard lights = 0 Low energy lights = 1 Percentage of low energy lights = 100% Minimum = 75 %	Authorised SAP Assessor	Passed
Criterion 3: the dwelling has appropriate passive control measures to limit solar gains			
Does the dwelling have a strong tendency to high summertime temperatures?	Overheating risk (June) = Not significant (20.13°) Overheating risk (July) = Slight (21.91°) Overheating risk (August) = Slight (21.73°) Region = Thames Thermal mass parameter = 100.00 Ventilation rate in hot weather = 4.00 ach Blinds/curtains = Dark-coloured curtain or roller blind	Authorised SAP Assessor	Passed
Criterion 4: the performance of the dwelling, as designed, is consistent with the DER			
Design air permeability ($m^3/(h.m^2)$ at 50Pa)	Design air permeability = 3.00 Max air permeability = 10.00	Authorised SAP Assessor	Passed
Mechanical ventilation system Specific fan power (SFP)	Mechanical ventilation with heat recovery: SFP = 0.61 W/(litre/sec) Max SFP = 1.5 W/(litre/sec) Heat recovery efficiency = 88.00 % Min heat recovery efficiency = 70.00 %	Authorised SAP Assessor	Passed
Have the key features of the design been included (or bettered) in practice?	The following party walls have a U-value less than $0.2W/m^2K$: • Party Wall (0.00) The following openings have a U-value less than $1.2W/m^2K$: • Window reference 3 (1.10) Design air permeability of 3 $m^3/(h.m^2)$ is less than 4 $m^3/(h.m^2)$ at 50 Pa Space cooling is specified	Authorised SAP Assessor	

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Assessor name	Hoare Lea	Assessor number	7740
Client		Last modified	06/10/2015
Address	F08 The Goodsyard 1, London		

Check	Evidence	Produced by	OK?
Criterion 1: predicted carbon dioxide emission from proposed dwelling does not exceed the target			
TER (kg $CO_2/m^2.a$)	Fuel = N/A Fuel factor = 1.00 TER = 11.92	Authorised SAP Assessor	
DER for dwelling as designed (kg $CO_2/m^2.a$)	DER = 12.98	Authorised SAP Assessor	
Are emissions from dwelling as designed less than or equal to the target?	DER 12.98 > TER 11.92 Excess emissions = 1.06 kg/m² (8.89%)	Authorised SAP Assessor	Failed
Is the fabric energy efficiency of the dwellling as designed less than or equal to the target?	DFEE 48.13 > TFEE 47.82 Variance = 0.31 kWh/m² (0.65%)	Authorised SAP Assessor	Failed
Criterion 2: the performance of the building fabric and the heating, hot water and fixed lighting systems should be no worse than the design limits			
Fabric U-values			
Are all U-values better than the design limits in Table 2?	**Element** — **Weighted average** — **Highest** Wall — 0.23 (max 0.30) — 0.23 (max 0.70) Party wall — 0.00 (max 0.20) — N/A Floor — (no floor) Roof — 0.15 (max 0.20) — 0.15 (max 0.35) Openings and curtain wall — 0.86 (max 2.00) — 1.20 (max 3.30)	Authorised SAP Assessor	Passed
Thermal bridging			
How has the loss from thermal bridges been calculated?	Thermal bridging calculated using default y-value of 0.15	Authorised SAP Assessor	
Heating and hot water systems			
Does the efficiency of the heating systems meet the minimum value set out in the Domestic Heating Compliance Guide?	Community heating scheme Secondary heating system: None	Authorised SAP Assessor	N/A
Does the insulation of the hot water cylinder meet the standards set out in the Domestic Heating Compliance Guide?	Cylinder volume = 175.00 litres Nominal cylinder loss = 1.59kWh/day Maximum permitted cylinder loss = 2.06kWh/day Primary hot water pipes are (assumed) insulated	Authorised SAP Assessor	Passed
Do controls meet the minimum controls provision set out in the Domestic Heating Compliance Guide?	Space heating control: Charging system linked to use, programmer and TRVs Hot water control: Cylinder thermostat	Authorised SAP Assessor	Passed

Check	Evidence	Produced by	OK?
Fixed internal lighting			
Does fixed internal lighting comply with paragraphs 42 to 44?	Schedule of installed fixed internal lighting Standard lights = 0 Low energy lights = 1 Percentage of low energy lights = 100% Minimum = 75 %	Authorised SAP Assessor	Passed
Criterion 3: the dwelling has appropriate passive control measures to limit solar gains			
Does the dwelling have a strong tendency to high summertime temperatures?	Overheating risk (June) = Slight (20.75°) Overheating risk (July) = Medium (22.49°) Overheating risk (August) = Medium (22.21°) Region = Thames Thermal mass parameter = 100.00 Ventilation rate in hot weather = 5.00 ach Blinds/curtains = Dark-coloured curtain or roller blind	Authorised SAP Assessor	Passed
Criterion 4: the performance of the dwelling, as designed, is consistent with the DER			
Design air permeability ($m^3/(h.m^2)$ at 50Pa)	Design air permeability = 3.00 Max air permeability = 10.00	Authorised SAP Assessor	Passed
Mechanical ventilation system Specific fan power (SFP)	Mechanical ventilation with heat recovery: SFP = 0.79 W/(litre/sec) Max SFP = 1.5 W/(litre/sec) Heat recovery efficiency = 87.00 % Min heat recovery efficiency = 70.00 %	Authorised SAP Assessor	Passed
Have the key features of the design been included (or bettered) in practice?	The following party walls have a U-value less than $0.2W/m^2K$: • Party Wall (0.00) The following openings have a U-value less than $1.2W/m^2K$: • Window reference 3 (1.10) • Window reference 4 (1.10) • Window reference 5 (1.10) Design air permeability of 3 $m^3/(h.m^2)$ is less than 4 $m^3/(h.m^2)$ at 50 Pa Space cooling is specified	Authorised SAP Assessor	

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Assessor name	Hoare Lea	Assessor number	7740
Client		Last modified	06/10/2015
Address	F01 The Goodsyard 1, London		

Check	Evidence	Produced by	OK?
Criterion 1: predicted carbon dioxide emission from proposed dwelling does not exceed the target			
TER (kg $CO_2/m^2.a$)	Fuel = N/A Fuel factor = 1.00 TER = 16.72	Authorised SAP Assessor	
DER for dwelling as designed (kg $CO_2/m^2.a$)	DER = 17.26	Authorised SAP Assessor	
Are emissions from dwelling as designed less than or equal to the target?	DER 17.26 > TER 16.72 Excess emissions = 0.54 kg/m² (3.23%)	Authorised SAP Assessor	Failed
Is the fabric energy efficiency of the dwellling as designed less than or equal to the target?	DFEE 38.70 > TFEE 35.06 Variance = 3.64 kWh/m² (10.38%)	Authorised SAP Assessor	Failed
Criterion 2: the performance of the building fabric and the heating, hot water and fixed lighting systems should be no worse than the design limits			
Fabric U-values			
Are all U-values better than the design limits in Table 2?	**Element** — **Weighted average** — **Highest** Wall — (no wall) Party wall — 0.00 (max 0.20) — N/A Floor — (no floor) Roof — (no roof) Openings and curtain wall — 0.73 (max 2.00) — 1.20 (max 3.30)	Authorised SAP Assessor	Passed
Thermal bridging			
How has the loss from thermal bridges been calculated?	Thermal bridging calculated using default y-value of 0.15	Authorised SAP Assessor	
Heating and hot water systems			
Does the efficiency of the heating systems meet the minimum value set out in the Domestic Heating Compliance Guide?	Community heating scheme Secondary heating system: None	Authorised SAP Assessor	N/A
Does the insulation of the hot water cylinder meet the standards set out in the Domestic Heating Compliance Guide?	No hot water cylinder in the dwelling	Authorised SAP Assessor	
Do controls meet the minimum controls provision set out in the Domestic Heating Compliance Guide?	Space heating control: Charging system linked to use, programmer and TRVs No hot water cylinder in the dwelling	Authorised SAP Assessor	Passed
Fixed internal lighting			

Check	Evidence	Produced by	OK?
Does fixed internal lighting comply with paragraphs 42 to 44?	Schedule of installed fixed internal lighting Standard lights = 0 Low energy lights = 1 Percentage of low energy lights = 100% Minimum = 75 %	Authorised SAP Assessor	Passed
Criterion 3: the dwelling has appropriate passive control measures to limit solar gains			
Does the dwelling have a strong tendency to high summertime temperatures?	Overheating risk (June) = Slight (21.53°) Overheating risk (July) = Medium (23.25°) Overheating risk (August) = Medium (23.02°) Region = Thames Thermal mass parameter = 100.00 Ventilation rate in hot weather = 4.00 ach Blinds/curtains = Dark-coloured curtain or roller blind	Authorised SAP Assessor	Passed
Criterion 4: the performance of the dwelling, as designed, is consistent with the DER			
Design air permeability ($m^3/(h.m^2)$ at 50Pa)	Design air permeability = 3.00 Max air permeability = 10.00	Authorised SAP Assessor	Passed
Mechanical ventilation system Specific fan power (SFP)	Mechanical ventilation with heat recovery: SFP = 0.60 W/(litre/sec) Max SFP = 1.5 W/(litre/sec) Heat recovery efficiency = 89.00 % Min heat recovery efficiency = 70.00 %	Authorised SAP Assessor	Passed
Have the key features of the design been included (or bettered) in practice?	The following party walls have a U-value less than $0.2W/m^2K$: • Party Wall (0.00) • Sheltered Wall (0.00) The following openings have a U-value less than $1.2W/m^2K$: • Window reference 2 (1.10) Design air permeability of 3 $m^3/(h.m^2)$ is less than 4 $m^3/(h.m^2)$ at 50 Pa Space cooling is specified	Authorised SAP Assessor	

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Assessor name	Hoare Lea	Assessor number	7740
Client		Last modified	06/10/2015
Address	G02 The Goodsyard 1, London		

Check	Evidence	Produced by	OK?
Criterion 1: predicted carbon dioxide emission from proposed dwelling does not exceed the target			
TER (kg $CO_2/m^2.a$)	Fuel = N/A Fuel factor = 1.00 TER = 15.58	Authorised SAP Assessor	
DER for dwelling as designed (kg $CO_2/m^2.a$)	DER = 13.93	Authorised SAP Assessor	
Are emissions from dwelling as designed less than or equal to the target?	DER 13.93 < TER 15.58	Authorised SAP Assessor	Passed
Is the fabric energy efficiency of the dwellling as designed less than or equal to the target?	DFEE 27.58 < TFEE 32.57	Authorised SAP Assessor	Passed
Criterion 2: the performance of the building fabric and the heating, hot water and fixed lighting systems should be no worse than the design limits			
Fabric U-values			
Are all U-values better than the design limits in Table 2?	**Element** — **Weighted average** — **Highest** Wall — 0.30 (max 0.30) — 0.30 (max 0.70) Party wall — 0.00 (max 0.20) — N/A Floor — (no floor) Roof — (no roof) Openings and curtain wall — 1.20 (max 2.00) — 1.20 (max 3.30)	Authorised SAP Assessor	Passed
Thermal bridging			
How has the loss from thermal bridges been calculated?	Thermal bridging calculated using default y-value of 0.15	Authorised SAP Assessor	
Heating and hot water systems			
Does the efficiency of the heating systems meet the minimum value set out in the Domestic Heating Compliance Guide?	Community heating scheme Secondary heating system: None	Authorised SAP Assessor	N/A
Does the insulation of the hot water cylinder meet the standards set out in the Domestic Heating Compliance Guide?	No hot water cylinder in the dwelling	Authorised SAP Assessor	
Do controls meet the minimum controls provision set out in the Domestic Heating Compliance Guide?	Space heating control: Charging system linked to use, programmer and TRVs No hot water cylinder in the dwelling	Authorised SAP Assessor	Passed
Fixed internal lighting			

Check	Evidence	Produced by	OK?
Does fixed internal lighting comply with paragraphs 42 to 44?	Schedule of installed fixed internal lighting Standard lights = 0 Low energy lights = 1 Percentage of low energy lights = 100% Minimum = 75 %	Authorised SAP Assessor	Passed
Criterion 3: the dwelling has appropriate passive control measures to limit solar gains			
Does the dwelling have a strong tendency to high summertime temperatures?	Overheating risk (June) = Not significant (20.29°) Overheating risk (July) = Medium (22.04°) Overheating risk (August) = Slight (21.76°) Region = Thames Thermal mass parameter = 100.00 Ventilation rate in hot weather = 4.00 ach Blinds/curtains = Dark-coloured curtain or roller blind	Authorised SAP Assessor	Passed
Criterion 4: the performance of the dwelling, as designed, is consistent with the DER			
Design air permeability ($m^3/(h.m^2)$ at 50Pa)	Design air permeability = 3.00 Max air permeability = 10.00	Authorised SAP Assessor	Passed
Mechanical ventilation system Specific fan power (SFP)	Mechanical ventilation with heat recovery: SFP = 0.60 W/(litre/sec) Max SFP = 1.5 W/(litre/sec) Heat recovery efficiency = 89.00 % Min heat recovery efficiency = 70.00 %	Authorised SAP Assessor	Passed
Have the key features of the design been included (or bettered) in practice?	The following party walls have a U-value less than $0.2W/m^2K$: • Party Wall (0.00) Design air permeability of 3 $m^3/(h.m^2)$ is less than 4 $m^3/(h.m^2)$ at 50 Pa Space cooling is specified	Authorised SAP Assessor	

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Assessor name	Hoare Lea	Assessor number	7740
Client		Last modified	06/10/2015
Address	G01 The Goodsyard 1, London		

Check	Evidence	Produced by	OK?
Criterion 1: predicted carbon dioxide emission from proposed dwelling does not exceed the target			
TER (kg $CO_2/m^2.a$)	Fuel = N/A Fuel factor = 1.00 TER = 18.69	Authorised SAP Assessor	
DER for dwelling as designed (kg $CO_2/m^2.a$)	DER = 18.94	Authorised SAP Assessor	
Are emissions from dwelling as designed less than or equal to the target?	DER 18.94 > TER 18.69 Excess emissions = 0.25 kg/m² (1.34%)	Authorised SAP Assessor	Failed
Is the fabric energy efficiency of the dwellling as designed less than or equal to the target?	DFEE 46.87 > TFEE 45.04 Variance = 1.83 kWh/m² (4.06%)	Authorised SAP Assessor	Failed
Criterion 2: the performance of the building fabric and the heating, hot water and fixed lighting systems should be no worse than the design limits			
Fabric U-values			
Are all U-values better than the design limits in Table 2?	**Element** / **Weighted average** / **Highest** Wall: (no wall) Party wall: 0.00 (max 0.20) / N/A Floor: (no floor) Roof: (no roof) Openings and curtain wall: 0.73 (max 2.00) / 1.20 (max 3.30)	Authorised SAP Assessor	Passed
Thermal bridging			
How has the loss from thermal bridges been calculated?	Thermal bridging calculated using default y-value of 0.15	Authorised SAP Assessor	
Heating and hot water systems			
Does the efficiency of the heating systems meet the minimum value set out in the Domestic Heating Compliance Guide?	Community heating scheme Secondary heating system: None	Authorised SAP Assessor	N/A
Does the insulation of the hot water cylinder meet the standards set out in the Domestic Heating Compliance Guide?	No hot water cylinder in the dwelling	Authorised SAP Assessor	
Do controls meet the minimum controls provision set out in the Domestic Heating Compliance Guide?	Space heating control: Charging system linked to use, programmer and TRVs No hot water cylinder in the dwelling	Authorised SAP Assessor	Passed
Fixed internal lighting			

Check	Evidence	Produced by	OK?
Does fixed internal lighting comply with paragraphs 42 to 44?	Schedule of installed fixed internal lighting Standard lights = 0 Low energy lights = 1 Percentage of low energy lights = 100% Minimum = 75 %	Authorised SAP Assessor	Passed
Criterion 3: the dwelling has appropriate passive control measures to limit solar gains			
Does the dwelling have a strong tendency to high summertime temperatures?	Overheating risk (June) = Slight (21.63°) Overheating risk (July) = Medium (23.27°) Overheating risk (August) = Medium (22.76°) Region = Thames Thermal mass parameter = 100.00 Ventilation rate in hot weather = 4.00 ach Blinds/curtains = Dark-coloured curtain or roller blind	Authorised SAP Assessor	Passed
Criterion 4: the performance of the dwelling, as designed, is consistent with the DER			
Design air permeability ($m^3/(h.m^2)$ at 50Pa)	Design air permeability = 3.00 Max air permeability = 10.00	Authorised SAP Assessor	Passed
Mechanical ventilation system Specific fan power (SFP)	Mechanical ventilation with heat recovery: SFP = 0.60 W/(litre/sec) Max SFP = 1.5 W/(litre/sec) Heat recovery efficiency = 89.00 % Min heat recovery efficiency = 70.00 %	Authorised SAP Assessor	Passed
Have the key features of the design been included (or bettered) in practice?	The following party walls have a U-value less than $0.2W/m^2K$: • Party Wall (0.00) • Sheltered Wall (0.00) The following openings have a U-value less than $1.2W/m^2K$: • Window reference 2 (1.10) Design air permeability of 3 $m^3/(h.m^2)$ is less than 4 $m^3/(h.m^2)$ at 50 Pa Space cooling is specified	Authorised SAP Assessor	

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Design - Draft

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Assessor name	Hoare Lea	Assessor number	7740
Client		Last modified	06/10/2015
Address	G03 The Goodsyard 1, London		

Check	Evidence	Produced by	OK?
Criterion 1: predicted carbon dioxide emission from proposed dwelling does not exceed the target			
TER (kg $CO_2/m^2.a$)	Fuel = N/A Fuel factor = 1.00 TER = 14.20	Authorised SAP Assessor	
DER for dwelling as designed (kg $CO_2/m^2.a$)	DER = 12.80	Authorised SAP Assessor	
Are emissions from dwelling as designed less than or equal to the target?	DER 12.80 < TER 14.20	Authorised SAP Assessor	Passed
Is the fabric energy efficiency of the dwellling as designed less than or equal to the target?	DFEE 31.61 < TFEE 37.74	Authorised SAP Assessor	Passed
Criterion 2: the performance of the building fabric and the heating, hot water and fixed lighting systems should be no worse than the design limits			
Fabric U-values			
Are all U-values better than the design limits in Table 2?	**Element** — **Weighted average** — **Highest** Wall — 0.30 (max 0.30) — 0.30 (max 0.70) Party wall — 0.00 (max 0.20) — N/A Floor — (no floor) Roof — (no roof) Openings and curtain wall — 1.20 (max 2.00) — 1.20 (max 3.30)	Authorised SAP Assessor	Passed
Thermal bridging			
How has the loss from thermal bridges been calculated?	Thermal bridging calculated using default y-value of 0.15	Authorised SAP Assessor	
Heating and hot water systems			
Does the efficiency of the heating systems meet the minimum value set out in the Domestic Heating Compliance Guide?	Community heating scheme Secondary heating system: None	Authorised SAP Assessor	N/A
Does the insulation of the hot water cylinder meet the standards set out in the Domestic Heating Compliance Guide?	No hot water cylinder in the dwelling	Authorised SAP Assessor	
Do controls meet the minimum controls provision set out in the Domestic Heating Compliance Guide?	Space heating control: Charging system linked to use, programmer and TRVs No hot water cylinder in the dwelling	Authorised SAP Assessor	Passed
Fixed internal lighting			

Check	Evidence	Produced by	OK?
Does fixed internal lighting comply with paragraphs 42 to 44?	Schedule of installed fixed internal lighting Standard lights = 0 Low energy lights = 1 Percentage of low energy lights = 100% Minimum = 75 %	Authorised SAP Assessor	Passed
Criterion 3: the dwelling has appropriate passive control measures to limit solar gains			
Does the dwelling have a strong tendency to high summertime temperatures?	Overheating risk (June) = Slight (20.64°) Overheating risk (July) = Medium (22.35°) Overheating risk (August) = Slight (21.95°) Region = Thames Thermal mass parameter = 100.00 Ventilation rate in hot weather = 4.00 ach Blinds/curtains = Dark-coloured curtain or roller blind	Authorised SAP Assessor	Passed
Criterion 4: the performance of the dwelling, as designed, is consistent with the DER			
Design air permeability ($m^3/(h.m^2)$ at 50Pa)	Design air permeability = 3.00 Max air permeability = 10.00	Authorised SAP Assessor	Passed
Mechanical ventilation system Specific fan power (SFP)	Mechanical ventilation with heat recovery: SFP = 0.61 W/(litre/sec) Max SFP = 1.5 W/(litre/sec) Heat recovery efficiency = 88.00 % Min heat recovery efficiency = 70.00 %	Authorised SAP Assessor	Passed
Have the key features of the design been included (or bettered) in practice?	The following party walls have a U-value less than $0.2W/m^2K$: • Party Wall (0.00) Design air permeability of 3 $m^3/(h.m^2)$ is less than 4 $m^3/(h.m^2)$ at 50 Pa Space cooling is specified	Authorised SAP Assessor	

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Assessor name	Hoare Lea	Assessor number	7740
Client		Last modified	06/10/2015
Address	G04 The Goodsyard 1, London		

Check	Evidence	Produced by	OK?
Criterion 1: predicted carbon dioxide emission from proposed dwelling does not exceed the target			
TER (kg $CO_2/m^2.a$)	Fuel = N/A Fuel factor = 1.00 TER = 13.97	Authorised SAP Assessor	
DER for dwelling as designed (kg $CO_2/m^2.a$)	DER = 14.17	Authorised SAP Assessor	
Are emissions from dwelling as designed less than or equal to the target?	DER 14.17 > TER 13.97 Excess emissions = 0.20 kg/m² (1.43%)	Authorised SAP Assessor	Failed
Is the fabric energy efficiency of the dwellling as designed less than or equal to the target?	DFEE 37.77 > TFEE 37.76 Variance = 0.01 kWh/m² (0.03%)	Authorised SAP Assessor	Passed
Criterion 2: the performance of the building fabric and the heating, hot water and fixed lighting systems should be no worse than the design limits			
Fabric U-values			
Are all U-values better than the design limits in Table 2?	**Element** — **Weighted average** — **Highest** Wall — 0.27 (max 0.30) — 0.30 (max 0.70) Party wall — 0.00 (max 0.20) — N/A Floor — (no floor) Roof — (no roof) Openings — 1.10 (max 2.00) — 1.10 (max 3.30)	Authorised SAP Assessor	Passed
Thermal bridging			
How has the loss from thermal bridges been calculated?	Thermal bridging calculated using default y-value of 0.15	Authorised SAP Assessor	
Heating and hot water systems			
Does the efficiency of the heating systems meet the minimum value set out in the Domestic Heating Compliance Guide?	Community heating scheme Secondary heating system: None	Authorised SAP Assessor	N/A
Does the insulation of the hot water cylinder meet the standards set out in the Domestic Heating Compliance Guide?	No hot water cylinder in the dwelling	Authorised SAP Assessor	
Do controls meet the minimum controls provision set out in the Domestic Heating Compliance Guide?	Space heating control: Charging system linked to use, programmer and TRVs No hot water cylinder in the dwelling	Authorised SAP Assessor	Passed
Fixed internal lighting			

Check	Evidence	Produced by	OK?
Does fixed internal lighting comply with paragraphs 42 to 44?	Schedule of installed fixed internal lighting Standard lights = 0 Low energy lights = 1 Percentage of low energy lights = 100% Minimum = 75 %	Authorised SAP Assessor	Passed
Criterion 3: the dwelling has appropriate passive control measures to limit solar gains			
Does the dwelling have a strong tendency to high summertime temperatures?	Overheating risk (June) = Slight (21.14°) Overheating risk (July) = Medium (22.86°) Overheating risk (August) = Medium (22.55°) Region = Thames Thermal mass parameter = 100.00 Ventilation rate in hot weather = 4.00 ach Blinds/curtains = Dark-coloured curtain or roller blind	Authorised SAP Assessor	Passed
Criterion 4: the performance of the dwelling, as designed, is consistent with the DER			
Design air permeability ($m^3/(h.m^2)$ at 50Pa)	Design air permeability = 3.00 Max air permeability = 10.00	Authorised SAP Assessor	Passed
Mechanical ventilation system Specific fan power (SFP)	Mechanical ventilation with heat recovery: SFP = 0.61 W/(litre/sec) Max SFP = 1.5 W/(litre/sec) Heat recovery efficiency = 88.00 % Min heat recovery efficiency = 70.00 %	Authorised SAP Assessor	Passed
Have the key features of the design been included (or bettered) in practice?	The following party walls have a U-value less than $0.2W/m^2K$: • Party Wall (0.00) The following openings have a U-value less than $1.2W/m^2K$: • Window reference 1 (1.10) • Window reference 2 (1.10) Design air permeability of 3 $m^3/(h.m^2)$ is less than 4 $m^3/(h.m^2)$ at 50 Pa Space cooling is specified	Authorised SAP Assessor	

L1A 2013 - Regulations Compliance Report
Design - Draft

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Assessor name	Hoare Lea	Assessor number	7740
Client		Last modified	06/10/2015
Address	G05 The Goodsyard, London		

Check	Evidence	Produced by	OK?
Criterion 1: predicted carbon dioxide emission from proposed dwelling does not exceed the target			
TER (kg $CO_2/m^2.a$)	Fuel = N/A Fuel factor = 1.00 TER = 16.26	Authorised SAP Assessor	
DER for dwelling as designed (kg $CO_2/m^2.a$)	DER = 16.87	Authorised SAP Assessor	
Are emissions from dwelling as designed less than or equal to the target?	DER 16.87 > TER 16.26 Excess emissions = 0.61 kg/m² (3.75%)	Authorised SAP Assessor	Failed
Is the fabric energy efficiency of the dwellling as designed less than or equal to the target?	DFEE 41.89 > TFEE 39.25 Variance = 2.64 kWh/m² (6.73%)	Authorised SAP Assessor	Failed
Criterion 2: the performance of the building fabric and the heating, hot water and fixed lighting systems should be no worse than the design limits			
Fabric U-values			
Are all U-values better than the design limits in Table 2?	**Element** — **Weighted average** — **Highest** Wall — 0.30 (max 0.30) — 0.30 (max 0.70) Party wall — 0.00 (max 0.20) — N/A Floor — (no floor) Roof — (no roof) Openings and curtain wall — 1.16 (max 2.00) — 1.20 (max 3.30)	Authorised SAP Assessor	Passed
Thermal bridging			
How has the loss from thermal bridges been calculated?	Thermal bridging calculated using default y-value of 0.15	Authorised SAP Assessor	
Heating and hot water systems			
Does the efficiency of the heating systems meet the minimum value set out in the Domestic Heating Compliance Guide?	Community heating scheme Secondary heating system: None	Authorised SAP Assessor	N/A
Does the insulation of the hot water cylinder meet the standards set out in the Domestic Heating Compliance Guide?	No hot water cylinder in the dwelling	Authorised SAP Assessor	
Do controls meet the minimum controls provision set out in the Domestic Heating Compliance Guide?	Space heating control: Charging system linked to use, programmer and TRVs No hot water cylinder in the dwelling	Authorised SAP Assessor	Passed
Fixed internal lighting			

Check	Evidence	Produced by	OK?
Does fixed internal lighting comply with paragraphs 42 to 44?	Schedule of installed fixed internal lighting Standard lights = 0 Low energy lights = 1 Percentage of low energy lights = 100% Minimum = 75 %	Authorised SAP Assessor	Passed
Criterion 3: the dwelling has appropriate passive control measures to limit solar gains			
Does the dwelling have a strong tendency to high summertime temperatures?	Overheating risk (June) = Slight (21.76°) Overheating risk (July) = Medium (23.43°) Overheating risk (August) = Medium (23.02°) Region = Thames Thermal mass parameter = 100.00 Ventilation rate in hot weather = 4.00 ach Blinds/curtains = Dark-coloured curtain or roller blind	Authorised SAP Assessor	Passed
Criterion 4: the performance of the dwelling, as designed, is consistent with the DER			
Design air permeability ($m^3/(h.m^2)$ at 50Pa)	Design air permeability = 3.00 Max air permeability = 10.00	Authorised SAP Assessor	Passed
Mechanical ventilation system Specific fan power (SFP)	Mechanical ventilation with heat recovery: SFP = 0.60 W/(litre/sec) Max SFP = 1.5 W/(litre/sec) Heat recovery efficiency = 89.00 % Min heat recovery efficiency = 70.00 %	Authorised SAP Assessor	Passed
Have the key features of the design been included (or bettered) in practice?	The following party walls have a U-value less than $0.2W/m^2K$: • Party Wall (0.00) The following openings have a U-value less than $1.2W/m^2K$: • Window reference 1 (1.10) Design air permeability of 3 $m^3/(h.m^2)$ is less than 4 $m^3/(h.m^2)$ at 50 Pa Space cooling is specified	Authorised SAP Assessor	

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Assessor name	Hoare Lea	Assessor number	7740
Client		Last modified	06/10/2015
Address	G07 The Goodsyard 1, London		

Check	Evidence	Produced by	OK?
Criterion 1: predicted carbon dioxide emission from proposed dwelling does not exceed the target			
TER (kg $CO_2/m^2.a$)	Fuel = N/A Fuel factor = 1.00 TER = 15.77	Authorised SAP Assessor	
DER for dwelling as designed (kg $CO_2/m^2.a$)	DER = 15.88	Authorised SAP Assessor	
Are emissions from dwelling as designed less than or equal to the target?	DER 15.88 > TER 15.77 Excess emissions = 0.11 kg/m² (0.70%)	Authorised SAP Assessor	Failed
Is the fabric energy efficiency of the dwellling as designed less than or equal to the target?	DFEE 34.61 > TFEE 32.68 Variance = 1.93 kWh/m² (5.91%)	Authorised SAP Assessor	Failed
Criterion 2: the performance of the building fabric and the heating, hot water and fixed lighting systems should be no worse than the design limits			
Fabric U-values			
Are all U-values better than the design limits in Table 2?	**Element** — **Weighted average** — **Highest** Wall — 0.27 (max 0.30) — 0.30 (max 0.70) Party wall — 0.00 (max 0.20) — N/A Floor — (no floor) Roof — (no roof) Openings — 1.10 (max 2.00) — 1.10 (max 3.30)	Authorised SAP Assessor	Passed
Thermal bridging			
How has the loss from thermal bridges been calculated?	Thermal bridging calculated using default y-value of 0.15	Authorised SAP Assessor	
Heating and hot water systems			
Does the efficiency of the heating systems meet the minimum value set out in the Domestic Heating Compliance Guide?	Community heating scheme Secondary heating system: None	Authorised SAP Assessor	N/A
Does the insulation of the hot water cylinder meet the standards set out in the Domestic Heating Compliance Guide?	No hot water cylinder in the dwelling	Authorised SAP Assessor	
Do controls meet the minimum controls provision set out in the Domestic Heating Compliance Guide?	Space heating control: Charging system linked to use, programmer and TRVs No hot water cylinder in the dwelling	Authorised SAP Assessor	Passed
Fixed internal lighting			

Check	Evidence	Produced by	OK?
Does fixed internal lighting comply with paragraphs 42 to 44?	Schedule of installed fixed internal lighting Standard lights = 0 Low energy lights = 1 Percentage of low energy lights = 100% Minimum = 75 %	Authorised SAP Assessor	**Passed**
Criterion 3: the dwelling has appropriate passive control measures to limit solar gains			
Does the dwelling have a strong tendency to high summertime temperatures?	Overheating risk (June) = Not significant (20.04°) Overheating risk (July) = Slight (21.83°) Overheating risk (August) = Slight (21.69°) Region = Thames Thermal mass parameter = 100.00 Ventilation rate in hot weather = 4.00 ach Blinds/curtains = Dark-coloured curtain or roller blind	Authorised SAP Assessor	**Passed**
Criterion 4: the performance of the dwelling, as designed, is consistent with the DER			
Design air permeability ($m^3/(h.m^2)$ at 50Pa)	Design air permeability = 3.00 Max air permeability = 10.00	Authorised SAP Assessor	**Passed**
Mechanical ventilation system Specific fan power (SFP)	Mechanical ventilation with heat recovery: SFP = 0.60 W/(litre/sec) Max SFP = 1.5 W/(litre/sec) Heat recovery efficiency = 89.00 % Min heat recovery efficiency = 70.00 %	Authorised SAP Assessor	**Passed**
Have the key features of the design been included (or bettered) in practice?	The following party walls have a U-value less than $0.2W/m^2K$: • Party Wall (0.00) The following openings have a U-value less than $1.2W/m^2K$: • Window reference 1 (1.10) Design air permeability of 3 $m^3/(h.m^2)$ is less than 4 $m^3/(h.m^2)$ at 50 Pa Space cooling is specified	Authorised SAP Assessor	

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Assessor name	Hoare Lea	Assessor number	7740
Client		Last modified	06/10/2015
Address	G07 The Goodsyard 1, London		

Check	Evidence	Produced by	OK?
Criterion 1: predicted carbon dioxide emission from proposed dwelling does not exceed the target			
TER (kg $CO_2/m^2.a$)	Fuel = N/A Fuel factor = 1.00 TER = 14.59	Authorised SAP Assessor	
DER for dwelling as designed (kg $CO_2/m^2.a$)	DER = 13.48	Authorised SAP Assessor	
Are emissions from dwelling as designed less than or equal to the target?	DER 13.48 < TER 14.59	Authorised SAP Assessor	Passed
Is the fabric energy efficiency of the dwellling as designed less than or equal to the target?	DFEE 39.08 < TFEE 44.56	Authorised SAP Assessor	Passed
Criterion 2: the performance of the building fabric and the heating, hot water and fixed lighting systems should be no worse than the design limits			
Fabric U-values			
Are all U-values better than the design limits in Table 2?	**Element** / **Weighted average** / **Highest** Wall: (no wall) Party wall: 0.00 (max 0.20) / N/A Floor: (no floor) Roof: (no roof) Openings and curtain wall: 0.72 (max 2.00) / 1.20 (max 3.30)	Authorised SAP Assessor	Passed
Thermal bridging			
How has the loss from thermal bridges been calculated?	Thermal bridging calculated using default y-value of 0.15	Authorised SAP Assessor	
Heating and hot water systems			
Does the efficiency of the heating systems meet the minimum value set out in the Domestic Heating Compliance Guide?	Community heating scheme Secondary heating system: None	Authorised SAP Assessor	N/A
Does the insulation of the hot water cylinder meet the standards set out in the Domestic Heating Compliance Guide?	Cylinder volume = 175.00 litres Nominal cylinder loss = 1.59kWh/day Maximum permitted cylinder loss = 2.06kWh/day Primary hot water pipes are (assumed) insulated	Authorised SAP Assessor	Passed
Do controls meet the minimum controls provision set out in the Domestic Heating Compliance Guide?	Space heating control: Charging system linked to use, programmer and TRVs Hot water control: Cylinder thermostat	Authorised SAP Assessor	Passed

Check	Evidence	Produced by	OK?
Fixed internal lighting			
Does fixed internal lighting comply with paragraphs 42 to 44?	Schedule of installed fixed internal lighting Standard lights = 0 Low energy lights = 1 Percentage of low energy lights = 100% Minimum = 75 %	Authorised SAP Assessor	Passed
Criterion 3: the dwelling has appropriate passive control measures to limit solar gains			
Does the dwelling have a strong tendency to high summertime temperatures?	Overheating risk (June) = Not significant (20.38°) Overheating risk (July) = Medium (22.1°) Overheating risk (August) = Slight (21.7°) Region = Thames Thermal mass parameter = 100.00 Ventilation rate in hot weather = 4.00 ach Blinds/curtains = Dark-coloured curtain or roller blind	Authorised SAP Assessor	Passed
Criterion 4: the performance of the dwelling, as designed, is consistent with the DER			
Design air permeability ($m^3/(h.m^2)$ at 50Pa)	Design air permeability = 3.00 Max air permeability = 10.00	Authorised SAP Assessor	Passed
Mechanical ventilation system Specific fan power (SFP)	Mechanical ventilation with heat recovery: SFP = 0.61 W/(litre/sec) Max SFP = 1.5 W/(litre/sec) Heat recovery efficiency = 88.00 % Min heat recovery efficiency = 70.00 %	Authorised SAP Assessor	Passed
Have the key features of the design been included (or bettered) in practice?	The following party walls have a U-value less than $0.2W/m^2K$: • Party Wall (0.00) The following openings have a U-value less than $1.2W/m^2K$: • Window reference 3 (1.10) Design air permeability of 3 $m^3/(h.m^2)$ is less than 4 $m^3/(h.m^2)$ at 50 Pa Space cooling is specified	Authorised SAP Assessor	

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Assessor name	Hoare Lea	Assessor number	7740
Client		Last modified	06/10/2015
Address	G08 The Goodsyard 1, London		

Check	Evidence	Produced by	OK?
Criterion 1: predicted carbon dioxide emission from proposed dwelling does not exceed the target			
TER (kg $CO_2/m^2.a$)	Fuel = N/A Fuel factor = 1.00 TER = 14.46	Authorised SAP Assessor	
DER for dwelling as designed (kg $CO_2/m^2.a$)	DER = 15.45	Authorised SAP Assessor	
Are emissions from dwelling as designed less than or equal to the target?	DER 15.45 > TER 14.46 Excess emissions = 0.99 kg/m² (6.85%)	Authorised SAP Assessor	Failed
Is the fabric energy efficiency of the dwellling as designed less than or equal to the target?	DFEE 59.12 < TFEE 60.05	Authorised SAP Assessor	Passed
Criterion 2: the performance of the building fabric and the heating, hot water and fixed lighting systems should be no worse than the design limits			
Fabric U-values			
Are all U-values better than the design limits in Table 2?	**Element** / **Weighted average** / **Highest** Wall: 0.23 (max 0.30) / 0.23 (max 0.70) Party wall: 0.00 (max 0.20) / N/A Floor: (no floor) Roof: 0.15 (max 0.20) / 0.15 (max 0.35) Openings and curtain wall: 0.86 (max 2.00) / 1.20 (max 3.30)	Authorised SAP Assessor	Passed
Thermal bridging			
How has the loss from thermal bridges been calculated?	Thermal bridging calculated using default y-value of 0.15	Authorised SAP Assessor	
Heating and hot water systems			
Does the efficiency of the heating systems meet the minimum value set out in the Domestic Heating Compliance Guide?	Community heating scheme Secondary heating system: None	Authorised SAP Assessor	N/A
Does the insulation of the hot water cylinder meet the standards set out in the Domestic Heating Compliance Guide?	Cylinder volume = 175.00 litres Nominal cylinder loss = 1.59kWh/day Maximum permitted cylinder loss = 2.06kWh/day Primary hot water pipes are (assumed) insulated	Authorised SAP Assessor	Passed
Do controls meet the minimum controls provision set out in the Domestic Heating Compliance Guide?	Space heating control: Charging system linked to use, programmer and TRVs Hot water control: Cylinder thermostat	Authorised SAP Assessor	Passed

Check	Evidence	Produced by	OK?
Fixed internal lighting			
Does fixed internal lighting comply with paragraphs 42 to 44?	Schedule of installed fixed internal lighting Standard lights = 0 Low energy lights = 1 Percentage of low energy lights = 100% Minimum = 75 %	Authorised SAP Assessor	Passed
Criterion 3: the dwelling has appropriate passive control measures to limit solar gains			
Does the dwelling have a strong tendency to high summertime temperatures?	Overheating risk (June) = Not significant (20.44°) Overheating risk (July) = Medium (22.12°) Overheating risk (August) = Slight (21.59°) Region = Thames Thermal mass parameter = 100.00 Ventilation rate in hot weather = 5.00 ach Blinds/curtains = Dark-coloured curtain or roller blind	Authorised SAP Assessor	Passed
Criterion 4: the performance of the dwelling, as designed, is consistent with the DER			
Design air permeability ($m^3/(h.m^2)$ at 50Pa)	Design air permeability = 3.00 Max air permeability = 10.00	Authorised SAP Assessor	Passed
Mechanical ventilation system Specific fan power (SFP)	Mechanical ventilation with heat recovery: SFP = 0.79 W/(litre/sec) Max SFP = 1.5 W/(litre/sec) Heat recovery efficiency = 87.00 % Min heat recovery efficiency = 70.00 %	Authorised SAP Assessor	Passed
Have the key features of the design been included (or bettered) in practice?	The following party walls have a U-value less than $0.2W/m^2K$: • Party Wall (0.00) The following openings have a U-value less than $1.2W/m^2K$: • Window reference 3 (1.10) • Window reference 4 (1.10) • Window reference 5 (1.10) Design air permeability of 3 $m^3/(h.m^2)$ is less than 4 $m^3/(h.m^2)$ at 50 Pa Space cooling is specified	Authorised SAP Assessor	

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Assessor name	Mr Hoare Lea	Assessor number	1
Client		Last modified	06/10/2015
Address	C1.6.C.2 THE GOODSYARD C, LONDON		

Check	Evidence	Produced by	OK?
Criterion 1: predicted carbon dioxide emission from proposed dwelling does not exceed the target			
TER (kg $CO_2/m^2.a$)	Fuel = N/A Fuel factor = 1.00 TER = 14.41	Authorised SAP Assessor	
DER for dwelling as designed (kg $CO_2/m^2.a$)	DER = 13.63	Authorised SAP Assessor	
Are emissions from dwelling as designed less than or equal to the target?	DER 13.63 < TER 14.41	Authorised SAP Assessor	Passed
Is the fabric energy efficiency of the dwellling as designed less than or equal to the target?	DFEE 34.01 < TFEE 37.27	Authorised SAP Assessor	Passed
Criterion 2: the performance of the building fabric and the heating, hot water and fixed lighting systems should be no worse than the design limits			
Fabric U-values			
Are all U-values better than the design limits in Table 2?	**Element** — **Weighted average** — **Highest** Wall — 0.30 (max 0.30) — 0.30 (max 0.70) Party wall — 0.00 (max 0.20) — N/A Floor — (no floor) Roof — (no roof) Openings — 1.10 (max 2.00) — 1.10 (max 3.30)	Authorised SAP Assessor	Passed
Thermal bridging			
How has the loss from thermal bridges been calculated?	Thermal bridging calculated using default y-value of 0.15	Authorised SAP Assessor	
Heating and hot water systems			
Does the efficiency of the heating systems meet the minimum value set out in the Domestic Heating Compliance Guide?	Community heating scheme Secondary heating system: None	Authorised SAP Assessor	N/A
Does the insulation of the hot water cylinder meet the standards set out in the Domestic Heating Compliance Guide?	No hot water cylinder in the dwelling	Authorised SAP Assessor	
Do controls meet the minimum controls provision set out in the Domestic Heating Compliance Guide?	Space heating control: Charging system linked to use, programmer and TRVs No hot water cylinder in the dwelling	Authorised SAP Assessor	Passed
Fixed internal lighting			

Check	Evidence	Produced by	OK?
Does fixed internal lighting comply with paragraphs 42 to 44?	Schedule of installed fixed internal lighting Standard lights = 0 Low energy lights = 1 Percentage of low energy lights = 100% Minimum = 75 %	Authorised SAP Assessor	Passed
Criterion 3: the dwelling has appropriate passive control measures to limit solar gains			
Does the dwelling have a strong tendency to high summertime temperatures?	Overheating risk (June) = Not significant (20.29°) Overheating risk (July) = Medium (22.03°) Overheating risk (August) = Slight (21.76°) Region = Thames Thermal mass parameter = 100.00 Ventilation rate in hot weather = 4.00 ach Blinds/curtains = Dark-coloured curtain or roller blind	Authorised SAP Assessor	Passed
Criterion 4: the performance of the dwelling, as designed, is consistent with the DER			
Design air permeability ($m^3/(h.m^2)$ at 50Pa)	Design air permeability = 3.00 Max air permeability = 10.00	Authorised SAP Assessor	Passed
Mechanical ventilation system Specific fan power (SFP)	Mechanical ventilation with heat recovery: SFP = 0.60 W/(litre/sec) Max SFP = 1.5 W/(litre/sec) Heat recovery efficiency = 89.00 % Min heat recovery efficiency = 70.00 %	Authorised SAP Assessor	Passed
Have the key features of the design been included (or bettered) in practice?	The following party walls have a U-value less than $0.2W/m^2K$: • Party (0.00) The following openings have a U-value less than $1.2W/m^2K$: • Window reference 1 (1.10) • Window reference 2 (1.10) • Window reference 3 (1.10) • Window reference 4 (1.10) • Window reference 5 (1.10) • Window reference 6 (1.10) Design air permeability of 3 $m^3/(h.m^2)$ is less than 4 $m^3/(h.m^2)$ at 50 Pa Space cooling is specified	Authorised SAP Assessor	

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Assessor name	Mr Hoare Lea	Assessor number	1
Client		Last modified	06/10/2015
Address	C1-31E-4D THE GOODSYARD C, LONDON		

Check	Evidence	Produced by	OK?
Criterion 1: predicted carbon dioxide emission from proposed dwelling does not exceed the target			
TER (kg $CO_2/m^2.a$)	Fuel = N/A Fuel factor = 1.00 TER = 15.07	Authorised SAP Assessor	
DER for dwelling as designed (kg $CO_2/m^2.a$)	DER = 16.11	Authorised SAP Assessor	
Are emissions from dwelling as designed less than or equal to the target?	DER 16.11 > TER 15.07 Excess emissions = 1.04 kg/m² (6.90%)	Authorised SAP Assessor	Failed
Is the fabric energy efficiency of the dwellling as designed less than or equal to the target?	DFEE 58.23 < TFEE 58.47	Authorised SAP Assessor	Passed
Criterion 2: the performance of the building fabric and the heating, hot water and fixed lighting systems should be no worse than the design limits			
Fabric U-values			
Are all U-values better than the design limits in Table 2?	**Element** — **Weighted average** — **Highest** Wall — 0.27 (max 0.30) — 0.30 (max 0.70) Party wall — 0.00 (max 0.20) — N/A Floor — (no floor) Roof — (no roof) Openings — 1.10 (max 2.00) — 1.10 (max 3.30)	Authorised SAP Assessor	Passed
Thermal bridging			
How has the loss from thermal bridges been calculated?	Thermal bridging calculated using default y-value of 0.15	Authorised SAP Assessor	
Heating and hot water systems			
Does the efficiency of the heating systems meet the minimum value set out in the Domestic Heating Compliance Guide?	Community heating scheme Secondary heating system: None	Authorised SAP Assessor	N/A
Does the insulation of the hot water cylinder meet the standards set out in the Domestic Heating Compliance Guide?	Cylinder volume = 175.00 litres Nominal cylinder loss = 1.59kWh/day Maximum permitted cylinder loss = 2.06kWh/day Primary hot water pipes are (assumed) insulated	Authorised SAP Assessor	Passed
Do controls meet the minimum controls provision set out in the Domestic Heating Compliance Guide?	Space heating control: Charging system linked to use, programmer and TRVs Hot water control: Cylinder thermostat	Authorised SAP Assessor	Passed

Check	Evidence	Produced by	OK?
Fixed internal lighting			
Does fixed internal lighting comply with paragraphs 42 to 44?	Schedule of installed fixed internal lighting Standard lights = 0 Low energy lights = 1 Percentage of low energy lights = 100% Minimum = 75 %	Authorised SAP Assessor	Passed
Criterion 3: the dwelling has appropriate passive control measures to limit solar gains			
Does the dwelling have a strong tendency to high summertime temperatures?	Overheating risk (June) = Not significant Overheating risk (July) = Medium Overheating risk (August) = Slight Region = Thames Thermal mass parameter = 100.00 Ventilation rate in hot weather = 5.00 ach Blinds/curtains = Dark-coloured curtain or roller blind	Authorised SAP Assessor	Passed
Criterion 4: the performance of the dwelling, as designed, is consistent with the DER			
Design air permeability ($m^3/(h.m^2)$ at 50Pa)	Design air permeability = 3.00 Max air permeability = 10.00	Authorised SAP Assessor	Passed
Mechanical ventilation system Specific fan power (SFP)	Mechanical ventilation with heat recovery: SFP = 0.79 W/(litre/sec) Max SFP = 1.5 W/(litre/sec) Heat recovery efficiency = 87.00 % Min heat recovery efficiency = 70.00 %	Authorised SAP Assessor	Passed

Check	Evidence	Produced by	OK?
Have the key features of the design been included (or bettered) in practice?	The following party walls have a U-value less than 0.2W/m²K: • Party (0.00) • Party upper (0.00) The following openings have a U-value less than 1.2W/m²K: • Window reference 2 (1.10) • Window reference 3 (1.10) • Window reference 4 (1.10) • Window reference 5 (1.10) • Window reference 6 (1.10) • Window reference 7 (1.10) • Window reference 8 (1.10) • Window reference 9 (1.10) • Window reference 10 (1.10) • Window reference 11 (1.10) • Window reference 12 (1.10) • Window reference 13 (1.10) • Window reference 14 (1.10) • Window reference 15 (1.10) • Window reference 16 (1.10) • Window reference 1 (1.10) • Window reference 17 (1.10) • Window reference 18 (1.10) • Window reference 19 (1.10) • Window reference 20 (1.10) • Window reference 21 (1.10) • Window reference 22 (1.10) • Window reference 23 (1.10) • Window reference 24 (1.10) • Window reference 25 (1.10) • Window reference 26 (1.10) • Window reference 27 (1.10) • Window reference 28 (1.10) • Window reference 29 (1.10) • Window reference 30 (1.10) • Window reference 31 (1.10) • Window reference 32 (1.10) • Window reference 33 (1.10) • Window reference 34 (1.10) • Window reference 35 (1.10) • Window reference 36 (1.10) • Window reference 37 (1.10) • Window reference 38 (1.10) • Window reference 39 (1.10) • Window reference 40 (1.10) • Window reference 41 (1.10) Design air permeability of 3 m³/(h.m²) is less than 4 m³/(h.m²) at 50 Pa Space cooling is specified	Authorised SAP Assessor	

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Assessor name	Mr Hoare Lea	Assessor number	1
Client		Last modified	06/10/2015
Address	C1.7.A.3 THE GOODSYARD C, LONDON		

Check	Evidence	Produced by	OK?
Criterion 1: predicted carbon dioxide emission from proposed dwelling does not exceed the target			
TER (kg $CO_2/m^2.a$)	Fuel = N/A Fuel factor = 1.00 TER = 12.00	Authorised SAP Assessor	
DER for dwelling as designed (kg $CO_2/m^2.a$)	DER = 11.45	Authorised SAP Assessor	
Are emissions from dwelling as designed less than or equal to the target?	DER 11.45 < TER 12.00	Authorised SAP Assessor	Passed
Is the fabric energy efficiency of the dwellling as designed less than or equal to the target?	DFEE 31.18 < TFEE 33.93	Authorised SAP Assessor	Passed
Criterion 2: the performance of the building fabric and the heating, hot water and fixed lighting systems should be no worse than the design limits			
Fabric U-values			
Are all U-values better than the design limits in Table 2?	**Element** — **Weighted average** — **Highest** Wall — 0.30 (max 0.30) — 0.30 (max 0.70) Party wall — 0.00 (max 0.20) — N/A Floor — (no floor) Roof — (no roof) Openings — 1.10 (max 2.00) — 1.10 (max 3.30)	Authorised SAP Assessor	Passed
Thermal bridging			
How has the loss from thermal bridges been calculated?	Thermal bridging calculated using default y-value of 0.15	Authorised SAP Assessor	
Heating and hot water systems			
Does the efficiency of the heating systems meet the minimum value set out in the Domestic Heating Compliance Guide?	Community heating scheme Secondary heating system: None	Authorised SAP Assessor	N/A
Does the insulation of the hot water cylinder meet the standards set out in the Domestic Heating Compliance Guide?	Cylinder volume = 175.00 litres Nominal cylinder loss = 1.59kWh/day Maximum permitted cylinder loss = 2.06kWh/day Primary hot water pipes are (assumed) insulated	Authorised SAP Assessor	Passed
Do controls meet the minimum controls provision set out in the Domestic Heating Compliance Guide?	Space heating control: Charging system linked to use, programmer and TRVs Hot water control: Cylinder thermostat	Authorised SAP Assessor	Passed

Check	Evidence	Produced by	OK?
Fixed internal lighting			
Does fixed internal lighting comply with paragraphs 42 to 44?	Schedule of installed fixed internal lighting Standard lights = 0 Low energy lights = 1 Percentage of low energy lights = 100% Minimum = 75 %	Authorised SAP Assessor	Passed
Criterion 3: the dwelling has appropriate passive control measures to limit solar gains			
Does the dwelling have a strong tendency to high summertime temperatures?	Overheating risk (June) = Not significant (20.11°) Overheating risk (July) = Slight (21.88°) Overheating risk (August) = Slight (21.64°) Region = Thames Thermal mass parameter = 100.00 Ventilation rate in hot weather = 4.00 ach Blinds/curtains = Dark-coloured curtain or roller blind	Authorised SAP Assessor	Passed
Criterion 4: the performance of the dwelling, as designed, is consistent with the DER			
Design air permeability ($m^3/(h.m^2)$ at 50Pa)	Design air permeability = 3.00 Max air permeability = 10.00	Authorised SAP Assessor	Passed
Mechanical ventilation system Specific fan power (SFP)	Mechanical ventilation with heat recovery: SFP = 0.61 W/(litre/sec) Max SFP = 1.5 W/(litre/sec) Heat recovery efficiency = 88.00 % Min heat recovery efficiency = 70.00 %	Authorised SAP Assessor	Passed
Have the key features of the design been included (or bettered) in practice?	The following party walls have a U-value less than $0.2W/m^2K$: • Party (0.00) The following openings have a U-value less than $1.2W/m^2K$: • Window reference 2 (1.10) • Window reference 3 (1.10) • Window reference 4 (1.10) • Window reference 5 (1.10) • Window reference 1 (1.10) • Window reference 6 (1.10) • Window reference 7 (1.10) • Window reference 8 (1.10) • Window reference 9 (1.10) • Window reference 10 (1.10) • Window reference 11 (1.10) • Window reference 12 (1.10) • Window reference 13 (1.10) Design air permeability of 3 $m^3/(h.m^2)$ is less than 4 $m^3/(h.m^2)$ at 50 Pa Space cooling is specified	Authorised SAP Assessor	

L1A 2013 - Regulations Compliance Report
Design - Draft

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Assessor name	Mr Hoare Lea	Assessor number	1
Client		Last modified	06/10/2015
Address	C2.6.K.S THE GOODSYARD C, LONDON		

Check	Evidence	Produced by	OK?
Criterion 1: predicted carbon dioxide emission from proposed dwelling does not exceed the target			
TER (kg $CO_2/m^2.a$)	Fuel = N/A Fuel factor = 1.00 TER = 16.31	Authorised SAP Assessor	
DER for dwelling as designed (kg $CO_2/m^2.a$)	DER = 14.54	Authorised SAP Assessor	
Are emissions from dwelling as designed less than or equal to the target?	DER 14.54 < TER 16.31	Authorised SAP Assessor	Passed
Is the fabric energy efficiency of the dwellling as designed less than or equal to the target?	DFEE 27.92 < TFEE 33.12	Authorised SAP Assessor	Passed
Criterion 2: the performance of the building fabric and the heating, hot water and fixed lighting systems should be no worse than the design limits			
Fabric U-values			
Are all U-values better than the design limits in Table 2?	**Element** — **Weighted average** — **Highest** Wall — 0.30 (max 0.30) — 0.30 (max 0.70) Party wall — 0.00 (max 0.20) — N/A Floor — (no floor) Roof — (no roof) Openings — 1.10 (max 2.00) — 1.10 (max 3.30)	Authorised SAP Assessor	Passed
Thermal bridging			
How has the loss from thermal bridges been calculated?	Thermal bridging calculated using default y-value of 0.15	Authorised SAP Assessor	
Heating and hot water systems			
Does the efficiency of the heating systems meet the minimum value set out in the Domestic Heating Compliance Guide?	Community heating scheme Secondary heating system: None	Authorised SAP Assessor	N/A
Does the insulation of the hot water cylinder meet the standards set out in the Domestic Heating Compliance Guide?	No hot water cylinder in the dwelling	Authorised SAP Assessor	
Do controls meet the minimum controls provision set out in the Domestic Heating Compliance Guide?	Space heating control: Charging system linked to use, programmer and TRVs No hot water cylinder in the dwelling	Authorised SAP Assessor	Passed
Fixed internal lighting			

Check	Evidence	Produced by	OK?
Does fixed internal lighting comply with paragraphs 42 to 44?	Schedule of installed fixed internal lighting Standard lights = 0 Low energy lights = 1 Percentage of low energy lights = 100% Minimum = 75 %	Authorised SAP Assessor	Passed
Criterion 3: the dwelling has appropriate passive control measures to limit solar gains			
Does the dwelling have a strong tendency to high summertime temperatures?	Overheating risk (June) = Not significant (20.33°) Overheating risk (July) = Medium (22.08°) Overheating risk (August) = Slight (21.81°) Region = Thames Thermal mass parameter = 100.00 Ventilation rate in hot weather = 4.00 ach Blinds/curtains = Dark-coloured curtain or roller blind	Authorised SAP Assessor	Passed
Criterion 4: the performance of the dwelling, as designed, is consistent with the DER			
Design air permeability ($m^3/(h.m^2)$ at 50Pa)	Design air permeability = 3.00 Max air permeability = 10.00	Authorised SAP Assessor	Passed
Mechanical ventilation system Specific fan power (SFP)	Mechanical ventilation with heat recovery: SFP = 0.60 W/(litre/sec) Max SFP = 1.5 W/(litre/sec) Heat recovery efficiency = 89.00 % Min heat recovery efficiency = 70.00 %	Authorised SAP Assessor	Passed
Have the key features of the design been included (or bettered) in practice?	The following party walls have a U-value less than $0.2W/m^2K$: • Party (0.00) The following openings have a U-value less than $1.2W/m^2K$: • Window reference 1 (1.10) • Window reference 2 (1.10) Design air permeability of 3 $m^3/(h.m^2)$ is less than 4 $m^3/(h.m^2)$ at 50 Pa Space cooling is specified	Authorised SAP Assessor	

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Assessor name	Mr Hoare Lea	Assessor number	1
Client		Last modified	06/10/2015
Address	C2.29.G.3D THE GOODSYARD C, LONDON		

Check	Evidence	Produced by	OK?
Criterion 1: predicted carbon dioxide emission from proposed dwelling does not exceed the target			
TER (kg $CO_2/m^2.a$)	Fuel = N/A Fuel factor = 1.00 TER = 16.32	Authorised SAP Assessor	
DER for dwelling as designed (kg $CO_2/m^2.a$)	DER = 17.38	Authorised SAP Assessor	
Are emissions from dwelling as designed less than or equal to the target?	DER 17.38 > TER 16.32 Excess emissions = 1.06 kg/m² (6.50%)	Authorised SAP Assessor	Failed
Is the fabric energy efficiency of the dwellling as designed less than or equal to the target?	DFEE 65.30 < TFEE 66.09	Authorised SAP Assessor	Passed
Criterion 2: the performance of the building fabric and the heating, hot water and fixed lighting systems should be no worse than the design limits			
Fabric U-values			
Are all U-values better than the design limits in Table 2?	**Element** — **Weighted average** — **Highest** Wall — 0.28 (max 0.30) — 0.30 (max 0.70) Party wall — 0.00 (max 0.20) — N/A Floor — (no floor) Roof — 0.15 (max 0.20) — 0.15 (max 0.35) Openings — 1.10 (max 2.00) — 1.10 (max 3.30)	Authorised SAP Assessor	Passed
Thermal bridging			
How has the loss from thermal bridges been calculated?	Thermal bridging calculated using default y-value of 0.15	Authorised SAP Assessor	
Heating and hot water systems			
Does the efficiency of the heating systems meet the minimum value set out in the Domestic Heating Compliance Guide?	Community heating scheme Secondary heating system: None	Authorised SAP Assessor	N/A
Does the insulation of the hot water cylinder meet the standards set out in the Domestic Heating Compliance Guide?	Cylinder volume = 175.00 litres Nominal cylinder loss = 1.59kWh/day Maximum permitted cylinder loss = 2.06kWh/day Primary hot water pipes are (assumed) insulated	Authorised SAP Assessor	Passed
Do controls meet the minimum controls provision set out in the Domestic Heating Compliance Guide?	Space heating control: Charging system linked to use, programmer and TRVs Hot water control: Cylinder thermostat	Authorised SAP Assessor	Passed

Check	Evidence	Produced by	OK?
Fixed internal lighting			
Does fixed internal lighting comply with paragraphs 42 to 44?	Schedule of installed fixed internal lighting Standard lights = 0 Low energy lights = 1 Percentage of low energy lights = 100% Minimum = 75 %	Authorised SAP Assessor	Passed
Criterion 3: the dwelling has appropriate passive control measures to limit solar gains			
Does the dwelling have a strong tendency to high summertime temperatures?	Overheating risk (June) = Not significant (19.67°) Overheating risk (July) = Slight (21.45°) Overheating risk (August) = Slight (21.2°) Region = Thames Thermal mass parameter = 100.00 Ventilation rate in hot weather = 5.00 ach Blinds/curtains = Dark-coloured curtain or roller blind	Authorised SAP Assessor	Passed
Criterion 4: the performance of the dwelling, as designed, is consistent with the DER			
Design air permeability ($m^3/(h.m^2)$ at 50Pa)	Design air permeability = 3.00 Max air permeability = 10.00	Authorised SAP Assessor	Passed
Mechanical ventilation system Specific fan power (SFP)	Mechanical ventilation with heat recovery: SFP = 0.68 W/(litre/sec) Max SFP = 1.5 W/(litre/sec) Heat recovery efficiency = 88.00 % Min heat recovery efficiency = 70.00 %	Authorised SAP Assessor	Passed
Have the key features of the design been included (or bettered) in practice?	The following party walls have a U-value less than 0.2W/m^2K: • Party (0.00) The following openings have a U-value less than 1.2W/m^2K: • Window reference 1 (1.10) • Window reference 2 (1.10) • Window reference 3 (1.10) • Window reference 4 (1.10) • Window reference 5 (1.10) • Window reference 6 (1.10) • Window reference 7 (1.10) • Window reference 8 (1.10) • Window reference 9 (1.10) • Window reference 10 (1.10) • Window reference 11 (1.10) • Window reference 12 (1.10) • Window reference 13 (1.10) • Window reference 14 (1.10) • Window reference 15 (1.10) • Window reference 16 (1.10) • Window reference 17 (1.10) • Window reference 18 (1.10) • Window reference 19 (1.10) • Window reference 20 (1.10) • Window reference 21 (1.10) • Window reference 22 (1.10) • Window reference 23 (1.10) • Window reference 24 (1.10) • Window reference 25 (1.10) • Window reference 26 (1.10) • Window reference 27 (1.10) • Window reference 28 (1.10) • Window reference 29 (1.10) • Window reference 30 (1.10) • Window reference 31 (1.10) • Window reference 32 (1.10) • Window reference 33 (1.10) • Window reference 34 (1.10) Design air permeability of 3 $m^3/(h.m^2)$ is less than 4 $m^3/(h.m^2)$ at 50 Pa Space cooling is specified	Authorised SAP Assessor	

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Assessor name	Mr Hoare Lea	Assessor number	1
Client		Last modified	06/10/2015
Address	C1.8.C.2 THE GOODSYARD C, LONDON		

Check	Evidence	Produced by	OK?
Criterion 1: predicted carbon dioxide emission from proposed dwelling does not exceed the target			
TER (kg $CO_2/m^2.a$)	Fuel = N/A Fuel factor = 1.00 TER = 13.79	Authorised SAP Assessor	
DER for dwelling as designed (kg $CO_2/m^2.a$)	DER = 14.08	Authorised SAP Assessor	
Are emissions from dwelling as designed less than or equal to the target?	DER 14.08 > TER 13.79 Excess emissions = 0.29 kg/m² (2.10%)	Authorised SAP Assessor	Failed
Is the fabric energy efficiency of the dwellling as designed less than or equal to the target?	DFEE 39.79 > TFEE 39.50 Variance = 0.29 kWh/m² (0.73%)	Authorised SAP Assessor	Failed
Criterion 2: the performance of the building fabric and the heating, hot water and fixed lighting systems should be no worse than the design limits			
Fabric U-values			
Are all U-values better than the design limits in Table 2?	**Element** — **Weighted average** — **Highest** Wall — 0.27 (max 0.30) — 0.30 (max 0.70) Party wall — 0.00 (max 0.20) — N/A Floor — (no floor) Roof — (no roof) Openings — 1.10 (max 2.00) — 1.10 (max 3.30)	Authorised SAP Assessor	Passed
Thermal bridging			
How has the loss from thermal bridges been calculated?	Thermal bridging calculated using default y-value of 0.15	Authorised SAP Assessor	
Heating and hot water systems			
Does the efficiency of the heating systems meet the minimum value set out in the Domestic Heating Compliance Guide?	Community heating scheme Secondary heating system: None	Authorised SAP Assessor	N/A
Does the insulation of the hot water cylinder meet the standards set out in the Domestic Heating Compliance Guide?	No hot water cylinder in the dwelling	Authorised SAP Assessor	
Do controls meet the minimum controls provision set out in the Domestic Heating Compliance Guide?	Space heating control: Charging system linked to use, programmer and TRVs No hot water cylinder in the dwelling	Authorised SAP Assessor	Passed
Fixed internal lighting			

Check	Evidence	Produced by	OK?
Does fixed internal lighting comply with paragraphs 42 to 44?	Schedule of installed fixed internal lighting Standard lights = 0 Low energy lights = 1 Percentage of low energy lights = 100% Minimum = 75 %	Authorised SAP Assessor	Passed
Criterion 3: the dwelling has appropriate passive control measures to limit solar gains			
Does the dwelling have a strong tendency to high summertime temperatures?	Overheating risk (June) = Not significant (20.27°) Overheating risk (July) = Medium (22.03°) Overheating risk (August) = Slight (21.78°) Region = Thames Thermal mass parameter = 100.00 Ventilation rate in hot weather = 4.00 ach Blinds/curtains = Dark-coloured curtain or roller blind	Authorised SAP Assessor	Passed
Criterion 4: the performance of the dwelling, as designed, is consistent with the DER			
Design air permeability ($m^3/(h.m^2)$ at 50Pa)	Design air permeability = 3.00 Max air permeability = 10.00	Authorised SAP Assessor	Passed
Mechanical ventilation system Specific fan power (SFP)	Mechanical ventilation with heat recovery: SFP = 0.61 W/(litre/sec) Max SFP = 1.5 W/(litre/sec) Heat recovery efficiency = 88.00 % Min heat recovery efficiency = 70.00 %	Authorised SAP Assessor	Passed
Have the key features of the design been included (or bettered) in practice?	The following party walls have a U-value less than $0.2W/m^2K$: • Party (0.00) The following openings have a U-value less than $1.2W/m^2K$: • Window reference 1 (1.10) • Window reference 2 (1.10) • Window reference 3 (1.10) • Window reference 4 (1.10) • Window reference 5 (1.10) • Window reference 6 (1.10) • Window reference 7 (1.10) • Window reference 8 (1.10) • Window reference 9 (1.10) • Window reference 10 (1.10) • Window reference 11 (1.10) Design air permeability of 3 $m^3/(h.m^2)$ is less than 4 $m^3/(h.m^2)$ at 50 Pa Space cooling is specified	Authorised SAP Assessor	

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Assessor name	Mr Hoare Lea	Assessor number	1
Client		Last modified	06/10/2015
Address	CP.1.A.3.T THE GOODSYARD C, LONDON		

Check	Evidence	Produced by	OK?
Criterion 1: predicted carbon dioxide emission from proposed dwelling does not exceed the target			
TER (kg $CO_2/m^2.a$)	Fuel = N/A Fuel factor = 1.00 TER = 12.46	Authorised SAP Assessor	
DER for dwelling as designed (kg $CO_2/m^2.a$)	DER = 12.51	Authorised SAP Assessor	
Are emissions from dwelling as designed less than or equal to the target?	DER 12.51 > TER 12.46 Excess emissions = 0.05 kg/m² (0.40%)	Authorised SAP Assessor	Failed
Is the fabric energy efficiency of the dwellling as designed less than or equal to the target?	DFEE 39.57 < TFEE 40.95	Authorised SAP Assessor	Passed
Criterion 2: the performance of the building fabric and the heating, hot water and fixed lighting systems should be no worse than the design limits			
Fabric U-values			
Are all U-values better than the design limits in Table 2?	**Element** — **Weighted average** — **Highest** Wall — 0.30 (max 0.30) — 0.30 (max 0.70) Party wall — 0.00 (max 0.20) — N/A Floor — (no floor) Roof — (no roof) Openings — 1.10 (max 2.00) — 1.10 (max 3.30)	Authorised SAP Assessor	Passed
Thermal bridging			
How has the loss from thermal bridges been calculated?	Thermal bridging calculated using default y-value of 0.15	Authorised SAP Assessor	
Heating and hot water systems			
Does the efficiency of the heating systems meet the minimum value set out in the Domestic Heating Compliance Guide?	Community heating scheme Secondary heating system: None	Authorised SAP Assessor	N/A
Does the insulation of the hot water cylinder meet the standards set out in the Domestic Heating Compliance Guide?	Cylinder volume = 175.00 litres Nominal cylinder loss = 1.59kWh/day Maximum permitted cylinder loss = 2.06kWh/day Primary hot water pipes are (assumed) insulated	Authorised SAP Assessor	Passed
Do controls meet the minimum controls provision set out in the Domestic Heating Compliance Guide?	Space heating control: Charging system linked to use, programmer and TRVs Hot water control: Cylinder thermostat	Authorised SAP Assessor	Passed

Check	Evidence	Produced by	OK?
Fixed internal lighting			
Does fixed internal lighting comply with paragraphs 42 to 44?	Schedule of installed fixed internal lighting Standard lights = 0 Low energy lights = 1 Percentage of low energy lights = 100% Minimum = 75 %	Authorised SAP Assessor	Passed
Criterion 3: the dwelling has appropriate passive control measures to limit solar gains			
Does the dwelling have a strong tendency to high summertime temperatures?	Overheating risk (June) = Not significant (19.71°) Overheating risk (July) = Slight (21.5°) Overheating risk (August) = Slight (21.28°) Region = Thames Thermal mass parameter = 100.00 Ventilation rate in hot weather = 5.00 ach Blinds/curtains = Dark-coloured curtain or roller blind	Authorised SAP Assessor	Passed
Criterion 4: the performance of the dwelling, as designed, is consistent with the DER			
Design air permeability ($m^3/(h.m^2)$ at 50Pa)	Design air permeability = 3.00 Max air permeability = 10.00	Authorised SAP Assessor	Passed
Mechanical ventilation system Specific fan power (SFP)	Mechanical ventilation with heat recovery: SFP = 0.68 W/(litre/sec) Max SFP = 1.5 W/(litre/sec) Heat recovery efficiency = 88.00 % Min heat recovery efficiency = 70.00 %	Authorised SAP Assessor	Passed
Have the key features of the design been included (or bettered) in practice?	The following party walls have a U-value less than $0.2W/m^2K$: • Party (0.00) • Party upper (0.00) The following openings have a U-value less than $1.2W/m^2K$: • Window reference 1 (1.10) • Window reference 2 (1.10) • Window reference 3 (1.10) • Window reference 4 (1.10) • Window reference 5 (1.10) • Window reference 6 (1.10) • Window reference 7 (1.10) • Window reference 8 (1.10) • Window reference 9 (1.10) • Window reference 10 (1.10) • Window reference 11 (1.10) • Window reference 12 (1.10) • Window reference 13 (1.10) • Window reference 14 (1.10) • Window reference 15 (1.10) • Window reference 16 (1.10) • Window reference 17 (1.10) • Window reference 18 (1.10) • Window reference 19 (1.10) • Window reference 20 (1.10) Design air permeability of 3 $m^3/(h.m^2)$ is less than 4 $m^3/(h.m^2)$ at 50 Pa Space cooling is specified	Authorised SAP Assessor	

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Assessor name	Mr Hoare Lea	Assessor number	1
Client		Last modified	06/10/2015
Address	CP.1.F.2TH THE GOODSYARD C, LONDON		

Check	Evidence	Produced by	OK?
Criterion 1: predicted carbon dioxide emission from proposed dwelling does not exceed the target			
TER (kg $CO_2/m^2.a$)	Fuel = N/A Fuel factor = 1.00 TER = 10.85	Authorised SAP Assessor	
DER for dwelling as designed (kg $CO_2/m^2.a$)	DER = 10.21	Authorised SAP Assessor	
Are emissions from dwelling as designed less than or equal to the target?	DER 10.21 < TER 10.85	Authorised SAP Assessor	Passed
Is the fabric energy efficiency of the dwellling as designed less than or equal to the target?	DFEE 26.00 < TFEE 28.36	Authorised SAP Assessor	Passed
Criterion 2: the performance of the building fabric and the heating, hot water and fixed lighting systems should be no worse than the design limits			
Fabric U-values			
Are all U-values better than the design limits in Table 2?	**Element** — **Weighted average** — **Highest** Wall — 0.26 (max 0.30) — 0.30 (max 0.70) Party wall — 0.00 (max 0.20) — N/A Floor — (no floor) Roof — (no roof) Openings — 1.10 (max 2.00) — 1.10 (max 3.30)	Authorised SAP Assessor	Passed
Thermal bridging			
How has the loss from thermal bridges been calculated?	Thermal bridging calculated using default y-value of 0.15	Authorised SAP Assessor	
Heating and hot water systems			
Does the efficiency of the heating systems meet the minimum value set out in the Domestic Heating Compliance Guide?	Community heating scheme Secondary heating system: None	Authorised SAP Assessor	N/A
Does the insulation of the hot water cylinder meet the standards set out in the Domestic Heating Compliance Guide?	No hot water cylinder in the dwelling	Authorised SAP Assessor	
Do controls meet the minimum controls provision set out in the Domestic Heating Compliance Guide?	Space heating control: Charging system linked to use, programmer and TRVs No hot water cylinder in the dwelling	Authorised SAP Assessor	Passed
Fixed internal lighting			

Check	Evidence	Produced by	OK?
Does fixed internal lighting comply with paragraphs 42 to 44?	Schedule of installed fixed internal lighting Standard lights = 0 Low energy lights = 1 Percentage of low energy lights = 100% Minimum = 75 %	Authorised SAP Assessor	**Passed**
Criterion 3: the dwelling has appropriate passive control measures to limit solar gains			
Does the dwelling have a strong tendency to high summertime temperatures?	Overheating risk (June) = Not significant (18.56°) Overheating risk (July) = Not significant (20.41°) Overheating risk (August) = Not significant (20.32°) Region = Thames Thermal mass parameter = 100.00 Ventilation rate in hot weather = 5.00 ach Blinds/curtains = Dark-coloured curtain or roller blind	Authorised SAP Assessor	**Passed**
Criterion 4: the performance of the dwelling, as designed, is consistent with the DER			
Design air permeability ($m^3/(h.m^2)$ at 50Pa)	Design air permeability = 3.00 Max air permeability = 10.00	Authorised SAP Assessor	**Passed**
Mechanical ventilation system Specific fan power (SFP)	Mechanical ventilation with heat recovery: SFP = 0.68 W/(litre/sec) Max SFP = 1.5 W/(litre/sec) Heat recovery efficiency = 88.00 % Min heat recovery efficiency = 70.00 %	Authorised SAP Assessor	**Passed**
Have the key features of the design been included (or bettered) in practice?	The following party walls have a U-value less than $0.2W/m^2K$: • Party (0.00) • Party upper (0.00) The following openings have a U-value less than $1.2W/m^2K$: • Window reference 1 (1.10) • Window reference 2 (1.10) • Window reference 3 (1.10) • Window reference 4 (1.10) • Window reference 5 (1.10) • Window reference 6 (1.10) • Window reference 7 (1.10) • Window reference 8 (1.10) Design air permeability of 3 $m^3/(h.m^2)$ is less than 4 $m^3/(h.m^2)$ at 50 Pa Space cooling is specified	Authorised SAP Assessor	

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Design - Draft

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Assessor name	Mr Hoare Lea	Assessor number	1
Client		Last modified	06/10/2015
Address	CP.2.I.I THE GOODSYARD C, LONDON		

Check	Evidence	Produced by	OK?
Criterion 1: predicted carbon dioxide emission from proposed dwelling does not exceed the target			
TER (kg $CO_2/m^2.a$)	Fuel = N/A Fuel factor = 1.00 TER = 14.14	Authorised SAP Assessor	
DER for dwelling as designed (kg $CO_2/m^2.a$)	DER = 13.49	Authorised SAP Assessor	
Are emissions from dwelling as designed less than or equal to the target?	DER 13.49 < TER 14.14	Authorised SAP Assessor	Passed
Is the fabric energy efficiency of the dwellling as designed less than or equal to the target?	DFEE 23.22 < TFEE 25.50	Authorised SAP Assessor	Passed
Criterion 2: the performance of the building fabric and the heating, hot water and fixed lighting systems should be no worse than the design limits			
Fabric U-values			
Are all U-values better than the design limits in Table 2?	**Element** — **Weighted average** — **Highest** Wall — 0.30 (max 0.30) — 0.30 (max 0.70) Party wall — 0.00 (max 0.20) — N/A Floor — (no floor) Roof — (no roof) Openings — 1.10 (max 2.00) — 1.10 (max 3.30)	Authorised SAP Assessor	Passed
Thermal bridging			
How has the loss from thermal bridges been calculated?	Thermal bridging calculated using default y-value of 0.15	Authorised SAP Assessor	
Heating and hot water systems			
Does the efficiency of the heating systems meet the minimum value set out in the Domestic Heating Compliance Guide?	Community heating scheme Secondary heating system: None	Authorised SAP Assessor	N/A
Does the insulation of the hot water cylinder meet the standards set out in the Domestic Heating Compliance Guide?	No hot water cylinder in the dwelling	Authorised SAP Assessor	
Do controls meet the minimum controls provision set out in the Domestic Heating Compliance Guide?	Space heating control: Charging system linked to use, programmer and TRVs No hot water cylinder in the dwelling	Authorised SAP Assessor	Passed
Fixed internal lighting			

Check	Evidence	Produced by	OK?
Does fixed internal lighting comply with paragraphs 42 to 44?	Schedule of installed fixed internal lighting Standard lights = 0 Low energy lights = 1 Percentage of low energy lights = 100% Minimum = 75 %	Authorised SAP Assessor	Passed
Criterion 3: the dwelling has appropriate passive control measures to limit solar gains			
Does the dwelling have a strong tendency to high summertime temperatures?	Overheating risk (June) = Not significant (20.02°) Overheating risk (July) = Slight (21.81°) Overheating risk (August) = Slight (21.68°) Region = Thames Thermal mass parameter = 100.00 Ventilation rate in hot weather = 4.00 ach Blinds/curtains = Dark-coloured curtain or roller blind	Authorised SAP Assessor	Passed
Criterion 4: the performance of the dwelling, as designed, is consistent with the DER			
Design air permeability ($m^3/(h.m^2)$ at 50Pa)	Design air permeability = 3.00 Max air permeability = 10.00	Authorised SAP Assessor	Passed
Mechanical ventilation system Specific fan power (SFP)	Mechanical ventilation with heat recovery: SFP = 0.60 W/(litre/sec) Max SFP = 1.5 W/(litre/sec) Heat recovery efficiency = 89.00 % Min heat recovery efficiency = 70.00 %	Authorised SAP Assessor	Passed
Have the key features of the design been included (or bettered) in practice?	The following party walls have a U-value less than $0.2W/m^2K$: • Party (0.00) The following openings have a U-value less than $1.2W/m^2K$: • Window reference 2 (1.10) • Window reference 3 (1.10) • Window reference 4 (1.10) • Window reference 1 (1.10) Design air permeability of 3 $m^3/(h.m^2)$ is less than 4 $m^3/(h.m^2)$ at 50 Pa Space cooling is specified	Authorised SAP Assessor	

L1A 2013 - Regulations Compliance Report
Design - Draft

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Assessor name	Mr Hoare Lea	Assessor number	1
Client		Last modified	06/10/2015
Address	CP.2.J.3 THE GOODSYARD C, LONDON		

Check	Evidence	Produced by	OK?
Criterion 1: predicted carbon dioxide emission from proposed dwelling does not exceed the target			
TER (kg $CO_2/m^2.a$)	Fuel = N/A Fuel factor = 1.00 TER = 11.89	Authorised SAP Assessor	
DER for dwelling as designed (kg $CO_2/m^2.a$)	DER = 11.21	Authorised SAP Assessor	
Are emissions from dwelling as designed less than or equal to the target?	DER 11.21 < TER 11.89	Authorised SAP Assessor	Passed
Is the fabric energy efficiency of the dwellling as designed less than or equal to the target?	DFEE 35.18 < TFEE 38.84	Authorised SAP Assessor	Passed
Criterion 2: the performance of the building fabric and the heating, hot water and fixed lighting systems should be no worse than the design limits			
Fabric U-values			
Are all U-values better than the design limits in Table 2?	**Element** — **Weighted average** — **Highest** Wall — 0.30 (max 0.30) — 0.30 (max 0.70) Party wall — 0.00 (max 0.20) — N/A Floor — (no floor) Roof — (no roof) Openings — 1.10 (max 2.00) — 1.10 (max 3.30)	Authorised SAP Assessor	Passed
Thermal bridging			
How has the loss from thermal bridges been calculated?	Thermal bridging calculated using default y-value of 0.15	Authorised SAP Assessor	
Heating and hot water systems			
Does the efficiency of the heating systems meet the minimum value set out in the Domestic Heating Compliance Guide?	Community heating scheme Secondary heating system: None	Authorised SAP Assessor	N/A
Does the insulation of the hot water cylinder meet the standards set out in the Domestic Heating Compliance Guide?	Cylinder volume = 175.00 litres Nominal cylinder loss = 1.59kWh/day Maximum permitted cylinder loss = 2.06kWh/day Primary hot water pipes are (assumed) insulated	Authorised SAP Assessor	Passed
Do controls meet the minimum controls provision set out in the Domestic Heating Compliance Guide?	Space heating control: Charging system linked to use, programmer and TRVs Hot water control: Cylinder thermostat	Authorised SAP Assessor	Passed

Check	Evidence	Produced by	OK?
Fixed internal lighting			
Does fixed internal lighting comply with paragraphs 42 to 44?	Schedule of installed fixed internal lighting Standard lights = 0 Low energy lights = 1 Percentage of low energy lights = 100% Minimum = 75 %	Authorised SAP Assessor	Passed
Criterion 3: the dwelling has appropriate passive control measures to limit solar gains			
Does the dwelling have a strong tendency to high summertime temperatures?	Overheating risk (June) = Not significant (19.59°) Overheating risk (July) = Slight (21.37°) Overheating risk (August) = Slight (21.12°) Region = Thames Thermal mass parameter = 100.00 Ventilation rate in hot weather = 4.00 ach Blinds/curtains = Dark-coloured curtain or roller blind	Authorised SAP Assessor	Passed
Criterion 4: the performance of the dwelling, as designed, is consistent with the DER			
Design air permeability ($m^3/(h.m^2)$ at 50Pa)	Design air permeability = 3.00 Max air permeability = 10.00	Authorised SAP Assessor	Passed
Mechanical ventilation system Specific fan power (SFP)	Mechanical ventilation with heat recovery: SFP = 0.61 W/(litre/sec) Max SFP = 1.5 W/(litre/sec) Heat recovery efficiency = 88.00 % Min heat recovery efficiency = 70.00 %	Authorised SAP Assessor	Passed
Have the key features of the design been included (or bettered) in practice?	The following party walls have a U-value less than 0.2W/m^2K: • Party (0.00) The following openings have a U-value less than 1.2W/m^2K: • Window reference 2 (1.10) • Window reference 3 (1.10) • Window reference 4 (1.10) • Window reference 5 (1.10) • Window reference 6 (1.10) • Window reference 7 (1.10) • Window reference 8 (1.10) • Window reference 9 (1.10) • Window reference 10 (1.10) • Window reference 11 (1.10) • Window reference 12 (1.10) • Window reference 13 (1.10) • Window reference 1 (1.10) Design air permeability of 3 $m^3/(h.m^2)$ is less than 4 $m^3/(h.m^2)$ at 50 Pa Space cooling is specified	Authorised SAP Assessor	

L1A 2013 - Regulations Compliance Report
Design - Draft

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Assessor name	Mr Hoare Lea	Assessor number	1
Client		Last modified	06/10/2015
Address	1 THE GOODSYARD C, LONDON		

Check	Evidence	Produced by	OK?
Criterion 1: predicted carbon dioxide emission from proposed dwelling does not exceed the target			
TER (kg $CO_2/m^2.a$)	Fuel = N/A Fuel factor = 1.00 TER = 15.77	Authorised SAP Assessor	
DER for dwelling as designed (kg $CO_2/m^2.a$)	DER = 14.86	Authorised SAP Assessor	
Are emissions from dwelling as designed less than or equal to the target?	DER 14.86 < TER 15.77	Authorised SAP Assessor	Passed
Is the fabric energy efficiency of the dwellling as designed less than or equal to the target?	DFEE 42.10 < TFEE 46.84	Authorised SAP Assessor	Passed
Criterion 2: the performance of the building fabric and the heating, hot water and fixed lighting systems should be no worse than the design limits			
Fabric U-values			
Are all U-values better than the design limits in Table 2?	**Element** — **Weighted average** — **Highest** Wall — 0.26 (max 0.30) — 0.30 (max 0.70) Party wall — 0.00 (max 0.20) — N/A Floor — (no floor) Roof — (no roof) Openings — 1.10 (max 2.00) — 1.10 (max 3.30)	Authorised SAP Assessor	Passed
Thermal bridging			
How has the loss from thermal bridges been calculated?	Thermal bridging calculated using default y-value of 0.15	Authorised SAP Assessor	
Heating and hot water systems			
Does the efficiency of the heating systems meet the minimum value set out in the Domestic Heating Compliance Guide?	Community heating scheme Secondary heating system: None	Authorised SAP Assessor	N/A
Does the insulation of the hot water cylinder meet the standards set out in the Domestic Heating Compliance Guide?	No hot water cylinder in the dwelling	Authorised SAP Assessor	
Do controls meet the minimum controls provision set out in the Domestic Heating Compliance Guide?	Space heating control: Charging system linked to use, programmer and TRVs No hot water cylinder in the dwelling	Authorised SAP Assessor	Passed
Fixed internal lighting			

Check	Evidence	Produced by	OK?
Does fixed internal lighting comply with paragraphs 42 to 44?	Schedule of installed fixed internal lighting Standard lights = 0 Low energy lights = 1 Percentage of low energy lights = 100% Minimum = 75 %	Authorised SAP Assessor	**Passed**
Criterion 3: the dwelling has appropriate passive control measures to limit solar gains			
Does the dwelling have a strong tendency to high summertime temperatures?	Overheating risk (June) = Not significant (20.06°) Overheating risk (July) = Slight (21.8°) Overheating risk (August) = Slight (21.48°) Region = Thames Thermal mass parameter = 100.00 Ventilation rate in hot weather = 4.00 ach Blinds/curtains = Dark-coloured curtain or roller blind	Authorised SAP Assessor	**Passed**
Criterion 4: the performance of the dwelling, as designed, is consistent with the DER			
Design air permeability ($m^3/(h.m^2)$ at 50Pa)	Design air permeability = 3.00 Max air permeability = 10.00	Authorised SAP Assessor	**Passed**
Mechanical ventilation system Specific fan power (SFP)	Mechanical ventilation with heat recovery: SFP = 0.60 W/(litre/sec) Max SFP = 1.5 W/(litre/sec) Heat recovery efficiency = 89.00 % Min heat recovery efficiency = 70.00 %	Authorised SAP Assessor	**Passed**
Have the key features of the design been included (or bettered) in practice?	The following party walls have a U-value less than 0.2W/m^2K: • Party Wall (0.00) The following openings have a U-value less than 1.2W/m^2K: • Window reference 2 (1.10) • Window reference 3 (1.10) • Window reference 4 (1.10) • Window reference 5 (1.10) • Window reference 6 (1.10) • Window reference 7 (1.10) • Window reference 1 (1.10) Design air permeability of 3 $m^3/(h.m^2)$ is less than 4 $m^3/(h.m^2)$ at 50 Pa Space cooling is specified	Authorised SAP Assessor	

L1A 2013 - Regulations Compliance Report
Design - Draft

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Assessor name	Mr Hoare Lea	Assessor number	1
Client		Last modified	06/10/2015
Address	CP.3.A.3 THE GOODSYARD C, LONDON		

Check	Evidence	Produced by	OK?
Criterion 1: predicted carbon dioxide emission from proposed dwelling does not exceed the target			
TER (kg $CO_2/m^2.a$)	Fuel = N/A Fuel factor = 1.00 TER = 15.77	Authorised SAP Assessor	
DER for dwelling as designed (kg $CO_2/m^2.a$)	DER = 16.65	Authorised SAP Assessor	
Are emissions from dwelling as designed less than or equal to the target?	DER 16.65 > TER 15.77 Excess emissions = 0.88 kg/m² (5.58%)	Authorised SAP Assessor	Failed
Is the fabric energy efficiency of the dwellling as designed less than or equal to the target?	DFEE 58.61 > TFEE 58.37 Variance = 0.24 kWh/m² (0.41%)	Authorised SAP Assessor	Failed
Criterion 2: the performance of the building fabric and the heating, hot water and fixed lighting systems should be no worse than the design limits			
Fabric U-values			
Are all U-values better than the design limits in Table 2?	**Element** — **Weighted average** — **Highest** Wall — 0.28 (max 0.30) — 0.30 (max 0.70) Party wall — 0.00 (max 0.20) — N/A Floor — (no floor) Roof — 0.15 (max 0.20) — 0.15 (max 0.35) Openings — 1.10 (max 2.00) — 1.10 (max 3.30)	Authorised SAP Assessor	Passed
Thermal bridging			
How has the loss from thermal bridges been calculated?	Thermal bridging calculated using default y-value of 0.15	Authorised SAP Assessor	
Heating and hot water systems			
Does the efficiency of the heating systems meet the minimum value set out in the Domestic Heating Compliance Guide?	Community heating scheme Secondary heating system: None	Authorised SAP Assessor	N/A
Does the insulation of the hot water cylinder meet the standards set out in the Domestic Heating Compliance Guide?	Cylinder volume = 175.00 litres Nominal cylinder loss = 1.59kWh/day Maximum permitted cylinder loss = 2.06kWh/day Primary hot water pipes are (assumed) insulated	Authorised SAP Assessor	Passed
Do controls meet the minimum controls provision set out in the Domestic Heating Compliance Guide?	Space heating control: Charging system linked to use, programmer and TRVs Hot water control: Cylinder thermostat	Authorised SAP Assessor	Passed

Check	Evidence	Produced by	OK?
Fixed internal lighting			
Does fixed internal lighting comply with paragraphs 42 to 44?	Schedule of installed fixed internal lighting Standard lights = 0 Low energy lights = 1 Percentage of low energy lights = 100% Minimum = 75 %	Authorised SAP Assessor	Passed
Criterion 3: the dwelling has appropriate passive control measures to limit solar gains			
Does the dwelling have a strong tendency to high summertime temperatures?	Overheating risk (June) = Not significant (20.42°) Overheating risk (July) = Medium (22.14°) Overheating risk (August) = Slight (21.76°) Region = Thames Thermal mass parameter = 100.00 Ventilation rate in hot weather = 4.00 ach Blinds/curtains = Dark-coloured curtain or roller blind	Authorised SAP Assessor	Passed
Criterion 4: the performance of the dwelling, as designed, is consistent with the DER			
Design air permeability ($m^3/(h.m^2)$ at 50Pa)	Design air permeability = 3.00 Max air permeability = 10.00	Authorised SAP Assessor	Passed
Mechanical ventilation system Specific fan power (SFP)	Mechanical ventilation with heat recovery: SFP = 0.61 W/(litre/sec) Max SFP = 1.5 W/(litre/sec) Heat recovery efficiency = 88.00 % Min heat recovery efficiency = 70.00 %	Authorised SAP Assessor	Passed
Have the key features of the design been included (or bettered) in practice?	The following party walls have a U-value less than $0.2W/m^2K$: • Party (0.00) The following openings have a U-value less than $1.2W/m^2K$: • Window reference 8 (1.10) • Window reference 9 (1.10) • Window reference 10 (1.10) • Window reference 11 (1.10) • Window reference 12 (1.10) • Window reference 13 (1.10) • Window reference 14 (1.10) • Window reference 2 (1.10) • Window reference 3 (1.10) • Window reference 4 (1.10) • Window reference 5 (1.10) • Window reference 6 (1.10) • Window reference 7 (1.10) • Window reference 1 (1.10) Design air permeability of 3 $m^3/(h.m^2)$ is less than 4 $m^3/(h.m^2)$ at 50 Pa Space cooling is specified	Authorised SAP Assessor	

Paul Robinson

From: Matt Christie
Sent: 01 December 2015 15:34
To: 'Julian Shirley'
Subject: RE: BGY- Design meeting

Great- see you there.

Matt

From: Julian Shirley [mailto:[redacted]dp9.co.uk]
Sent: 01 December 2015 15:29
To: Matt Christie
Subject: Re: BGY- Design meeting

Yes, sorry, 3pm on 8 December at PLP.

On 1 Dec 2015, at 14:54, Matt Christie <[redacted]london.gov.uk> wrote:

> Julian- do you mean the 3pm slot?
>
> Matt
>
> ---
>
> **From:** Julian Shirley [mailto:[redacted]dp9.co.uk]
> **Sent:** 01 December 2015 14:34
> **To:** Matt Christie
> **Subject:** Re: BGY- Design meeting
>
> Matt
>
> Let's go for the 2pm slot on Tuesday 8 December at PLP's office.
>
> Regards
> Julian
>
> On 30 Nov 2015, at 13:59, Matt Christie <[redacted]london.gov.uk> wrote:
>
> > Julian,
> >
> > Following on from our telephone conversation this afternoon. I would like it if we could organise a meeting with the architects to go through the scheme design, layout etc. Myself and Euan are available for the following slots:
> >
> > Thu 3 Dec 1400-1600
> > Tues 8 Dec 1500-1700
> >
> > Could you please let me know if either slot works.
> >
> > Thanks
> >
> > **Matt Christie| Senior Strategic Planner and Urban Designer| Development & Projects**

Paul Robinson

From: [redacted]hoganlovells.com
Sent: 30 November 2015 15:21
To: [redacted]ashurst.com
Cc: [redacted]ashurst.com; [redacted]ashurst.com; [redacted]ashurst.com; [redacted]hoganlovells.com
Subject: RE: Update following meeting with the GLA [ASH-LON.FID3242583]

Charlie,

Many thanks for this.

We would like a meeting room from 9 if that is possible.

On the structure point, you indicate that no decision will be made until the views of the boroughs have been obtained. As discussed, they are unlikely to engage on this until after their committee meetings, which means it will be two weeks before we hear anything from them at all. At best that will give us two Tuesdays before Christmas to resolve these issues with them. We are concerned that this will leave us with very little time before Christmas to finalise the structure, especially if, as indicated last week, you don't propose to advance the remainder of the drafting until the structure is in place.

Perhaps we can discuss this again tomorrow.

Kind regards,

Hannah

Hannah Quarterman
Senior Associate

Hogan Lovells International LLP
Atlantic House
Holborn Viaduct
London EC1A 2FG
Tel: +44 20 7296 2000
Direct: +44 20 [redacted]
Fax: +44 20 [redacted]
Email: [redacted]hoganlovells.com
www.hoganlovells.com

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http://twitter.com/#!/HLPlanning

From: [redacted]ashurst.com [mailto:[redacted]ashurst.com]
Sent: 30 November 2015 14:43
To: Quarterman, Hannah
Cc: [redacted]ashurst.com; [redacted]ashurst.com; [redacted]ashurst.com; Dutch, Claire
Subject: RE: Update following meeting with the GLA [ASH-LON.FID3242583]

Hannah

Please find attached an agenda for tomorrow's meeting plus an draft list of indicative S106 heads of terms.

Please note that the agenda will be sent to the boroughs albeit that we do not expect either borough to attend tomorrow. However, the draft HoTs are not being sent the boroughs yet (the preference is to await the publication

of their committee reports on 3 December). Other than to your client, please do not circulate or disclose the attached HoTs which are being provided to solely aide discussion tomorrow (and please make your client aware of the same).

Our meeting with the GLA last week was positive. In terms of cross-boundary matters and structure, the preference is to further consider the protocol option we have previously discussed but a conclusion as to approach and agreement structure will only be reached once the views of the boroughs have been obtained.

We look forward to seeing you at 10:00 tomorrow. If you and your client need access to a meeting room in advance of the main meeting starting then please let me know plus when you are likely to arrive and this can be arranged.

Kind regards,

Charlie

From: Quarterman, Hannah [mailto:[redacted]hoganlovells.com]
Sent: 30 November 2015 09:15
To: Reid, Charlie
Cc: Goode, Trevor; Rowberry, Tom; Cheung, Brian; Dutch, Claire
Subject: RE: Update following meeting with the GLA

Charlie,

Is there any update on this?

Kind regards,

Hannah

Hannah Quarterman
Senior Associate

Hogan Lovells International LLP
Atlantic House
Holborn Viaduct
London EC1A 2FG
Tel: +44 20 7296 2000
Direct: +44 20 [redacted]
Fax: +44 20 [redacted]
Email: [redacted]hoganlovells.com
www.hoganlovells.com

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From: Quarterman, Hannah
Sent: 26 November 2015 09:23
To: [redacted]ashurst.com'
Cc: [redacted]ashurst.com; [redacted]ashurst.com; [redacted]ashurst.com; Dutch, Claire
Subject: BGY: Update following meeting with the GLA

Charlie,

It was good to meet with you on Tuesday.

I am mindful that you have your meeting with the GLA today and had said that we would be able to have an update on HOTs etc. following that. We have a standing con call with our internal team every Monday morning. It would,

therefore, be really useful if you could send through the update by mid-afternoon tomorrow at the latest so that we can circulate it in time for the team to consider the details before our call. That way we are likely to be in the best position to move things forward on Tuesday.

As a general point, going forward if we are able to have revised drafts or other points raised before lunch time on Friday that would help us a lot, so that each time we can ensure the team have been able to discuss things as necessary on the Monday, so that we can respond as fully as possible each Tuesday.

Kind regards,

Hannah

Hannah Quarterman
Senior Associate

Hogan Lovells International LLP
Atlantic House
Holborn Viaduct
London EC1A 2FG
Tel: +44 20 7296 2000
Direct: +44 20 [redacted]
Fax: +44 20 [redacted]
Email: [redacted]hoganlovells.com
www.hoganlovells.com

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http://twitter.com/#!/HLPlanning

Paul Robinson

From: Julian Shirley <[redacted]dp9.co.uk>
Sent: 30 November 2015 14:40
To: Matt Christie
Subject: Re: BGY- Design meeting

Yes, that'll be fine.

Thanks

Julian Shirley

DP9 Ltd
100 Pall Mall
London
SW1Y 5NQ

Tel. 020[redacted]
Facsimile 020 7004 1790

On 30 Nov 2015, at 14:05, Matt Christie <[redacted]london.gov.uk> wrote:

> Julian,
>
> With regards to the affordable housing meeting on Friday, I can only get a room for 1100 to 1230. Does that work for you?
>
> Matt
>
> ---
>
> **From:** Matt Christie
> **Sent:** 30 November 2015 13:59
> **To:** 'Julian Shirley'
> **Subject:** BGY- Design meeting
>
> Julian,
>
> Following on from our telephone conversation this afternoon. I would like it if we could organise a meeting with the architects to go through the scheme design, layout etc. Myself and Euan are available for the following slots:
>
> Thu 3 Dec 1400-1600
> Tues 8 Dec 1500-1700
>
> Could you please let me know if either slot works.
>
> Thanks
>
> **Matt Christie| Senior Strategic Planner and Urban Designer| Development & Projects**
>
> Greater London Authority | City Hall, The Queen's Walk, More London Riverside, London SE1 2AA
>
> Tel: 020 7983[redacted] Email:[redacted]london.gov.uk

Paul Robinson

From: Julian Shirley <[redacted]dp9.co.uk>
Sent: 25 November 2015 09:17
To: Matt Christie
Cc: Dean Jordan
Subject: RE: BGY- ES Addendum

Matt

Further to your email below, please see a link below to the revised ES documents addressing the comments raised by LUC.

http://we.tl/q13SVX7jM1

For ease of reference, the further LUC responses are listed below which have incorporated into the ES NTS and main documents, as applicable.

LUC Comment:
Not acceptable
The Applicant has confirmed "that the masterplan is indicative and has not been assessed. The parameters of the outline element of the Proposed Development and the application drawings for the detailed element of the Proposed Development have been assessed. However, the masterplan has been used to provide context for the assessments providing an example of how the public realm, and landscaping could work around the site. This has been used to provide indicative figures for areas of green space both public and private and play space areas which have been taken into account when considering the socio economic and ecological impacts of the scheme" (the provision of this space will be secured through a condition.) However, the Heritage Assessment states "The outline component of the Proposed Development is assessed using parameter plans and an indicative masterplan in addition to detailed plans, elevations and other materials". This contradicts the above statement.
It is also unclear how the wind assessment was undertaken if the indicative masterplan was not assessed as paragraph 10.80 states the locations of entrances to the outline plots (A, B, D and E) are not yet fixed. Further information is required.

AECOM Response: Included in Table 8 of the main addendum in section 5: Chapter 4: The Proposed Development
The Masterplan is indicative as permission is being sought for outline consent. For the purposes of the assessments the indicative masterplan has been used to provide context for the assessments providing an example of how the public realm, and landscaping could work around the site. This has been used to provide indicative figures for areas of green space both public and private and play space areas which have been taken into account when considering the socio economic and ecological impacts of the scheme (the provision of this space will be secured through a condition.) The indicative masterplan has been used in the heritage assessment to provide context, though the detailed plans and elevations associated with the FULL element of the application are principal sources for assessment. The wind assessment also uses the indicative masterplan to provide context especially for the outline plots of the scheme, which has been assessed though, as with the outline plots will be subject to further testing at reserved matter stages once the final details of the design have been established.

LUC Comment:
The applicant has not updated the NTS to revise the number of configurations tested in the wind tunnel model. The reference to residual minor adverse impact at the London Overground thoroughfare has not been removed.
Further information under Regulation 22 of the EIA Regulations is sought.
The Applicant has confirmed that the correct number of configurations were stated in the NTS, as five configurations. Configuration 5 is described in Appendix H.
The Applicant notes that with mitigation applied, the residual effect for the London Overground thoroughfare was reduced to negligible, which has not been explicitly stated within the NTS.
This information will be presented within an ES Addendum document to follow.

AECOM Response: A section has been added into the Addendum NTS to explicitly state this:
When the Proposed Development is complete and operational, the wind environment at most areas of the site will be suitable for their intended uses, including the passageways under the London Overground line; the northwest corner of Plot A; and several balcony and terrace areas. Mitigation measures have been developed as part of an interactive wind mitigation workshop, which demonstrate ways in which the windier areas can be sheltered. Overhead porous baffles suspended from the underside of the London Overground Viaduct will reduce the impact to **negligible significance** at pedestrian thoroughfares. A combination of balustrades, screens and soft landscaping will provide beneficial shelter to roof terraces the detail of these will be reassessed during the detailed design phase.

LUC Comment:
Text on page 23 of NTS remains the same. "no reptiles or invertebrate species were recorded within the site during the survey". Para 17.129 of the ecology chapter lists some of the invertebrates species of interest recorded within the site, therefore wording in the NTS is incorrect, should perhaps read no invertebrates of conservation concern were recorded?
Further clarification is sought.

Not Acceptable
No amendment to the NTS has been made, and the Applicant has not provided a response to this clarification.
This information should be presented within an ES Addendum document to follow.

AECOM Response: The whole ecology section has been repeated in the Addendum NTS for information including the revised sentence below:
"No reptiles or invertebrate species of conservation concern were recorded within the site during the surveys "

LUC Comment:
Confirmation of how the building in Plot K which spans the London Overground will be constructed and provision of updated topic assessments to cover the additional information.
Not Acceptable
The Applicant has confirmed that detailed design information including the methods associated with the construction of Plot K will be provided as part of a reserved matters application, which is acceptable.
The Applicant has provided additional details of the likely approach to construction of the deck above the railway line and confirmed that construction of Plot K was considered in the relevant topic assessments, which is considered acceptable. However, this request was considered originally to be a Regulation 22 because the demolition and construction chapter (which is used to describe the scheme that all of the assessments were based on) did not seem to contain enough information to assess the effects consistently.
Nevertheless, as the Applicant states that further information is being provided within an ES Addendum prior to a reserved matters application.

AECOM Response: The following section has been included in Table 8 with the demolition and construction Section additionally the paragraphs 4.17 – 4.23 have been added to the main addendum repeated below.
Additional piling will be required for the construction of Plot K. The detailed design information including the methods associated with its construction will be provided as part of a reserved matters application. For the purposes of the assessments it was assumed that piling would take place either side of the Main line railway within the area of the site boundary. It was assumed that rotary piling would be used. The assessment undertaken within the demolition and construction sections of each of the relevant assessment topics throughout the ES have taken the construction PLOT K into consideration when assessing the likely significant effects of the construction of the development and the residual effects presented have reflected this.

The Construction of Plot K

The mainline tracks from Liverpool Street station pass through the site from east to west, in a cutting approximately twenty-two metres wide, adjacent to Quaker Street. To the north of the mainline tracks,

separated by an existing ramp structure, the twin tracks of the Suburban lines pass through the site from west to east. These are enclosed by a two storey brick and jack arch structure with further non-listed brick arches extending at the upper level.

Bishopsgate Goodsyard Regeneration Ltd has air rights to build over the section of the railway cutting which runs between Commercial Road and Wheler Street.

The proposed works comprise the construction of a permanent deck over the cutting from which the building will be constructed. Either side of the cutting will be rotary piled to provide the foundations for the structural grid that will span the railway. This has been considered within the relevant assessment chapters throughout the June 2015 ES (revised) and this ES addendum where appropriate. Only non-listed elements of the existing site features will be removed. Listed elements will be clearly marked and protection barriers erected. A tower crane will be located to the north of the cutting once the permanent deck is in place, this will be used to erect the frame and place the cladding to the building in position.

A component lead approach will be taken to the design and construction of the building to facilitate accurate construction and minimise rework in this sensitive location.

The appropriate asset protection process will be followed with Network Rail.

This form of air-rights development is carried out through-out London, it is a familiar process to Network Rail who are safeguarded by their asset protection process and development agreements.

Further assessment associated with the construction of Plot K will be provided at reserved matters stage once detailed design has been undertaken.

LUC Comment:
Confirmation of whether additional piling is required and provision of additional relevant topic assessments. Not acceptable
The Applicant has confirmed that details of the piling methods have been considered in the noise and vibration chapter. While it would be recommended that this information is included in the demolition and construction chapter – so that it is clear that it has been information considered by all the relevant chapters – given that the piling method is most relevant to noise and vibration, this is considered acceptable. However, the Applicant has not and should confirm whether additional piling is required.
Further information is required.

AECOM Response: The following section has been included in Table 8 with the demolition and construction Section
Additional piling will be required for the construction of Plot K. The detailed design information including the methods associated with its construction will be provided as part of a reserved matters application. For the purposes of the assessments it was assumed that piling would take place either side of the Main line railway within the area of the site boundary. It was assumed that rotary piling would be used. The assessment undertaken within the demolition and construction sections of each of the relevant assessment topics throughout the ES have taken the construction PLOT K into consideration when assessing the likely significant effects of the construction of the development and the residual effects presented have reflected this.

If you have any comments, please let me know.

Regards

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From: Matt Christie [mailto:[redacted]london.gov.uk]
Sent: 20 November 2015 15:15
To: Julian Shirley <[redacted]dp9.co.uk>
Cc: Dean Jordan <dean.jordan@dp9.co.uk>
Subject: BGY- ES Addendum

Julian/ Dean,

Thanks for coming over with the Draft ES addendum. Harriet at LBTH has provided me with LUCs last review which I have attached- please share with Aecom if they don't already have it. I've just quickly gone through it and it still looks to me like there are potentially a few points outstanding. These are summarised in Table 23.1, specifically:

- Wind tunnelling. Information relating to the residual effect for the LO thoroughfare, and it's explicit mention in the NTS
- Wind tunnelling. Assessment of impacts of proposals and cumulative schemes ON the cumulative schemes
- Demolition and construction. Info relating to the detail of Plot K- I'm assuming that LUC are agreeing here that is it OK to provide this as an ES addendum prior to reserved matters?
- Demolition and construction and/ or Noise and vibration. Confirmation of piling methods/ whether additional piling required

I appreciate they may not have seen the LUC response but could you please go back to Aecom and ask them for a view on the points raised in the attached. I'd like to be clear on exactly where we are with regards to outstanding Reg 22 info.

Also, would it be possible to get an e-copy of the ES addendum and NTS?

Thanks

Matt Christie| Senior Strategic Planner and Urban Designer| Development & Projects

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Review of the Environmental Statement and Revised ES for The Goodsyard, Bishopsgate

Final Review Report

Prepared by LUC in association with Cascade Consulting and Delva Patman Redler
November 2015

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Project Title: 5815 Tower Hamlets ES Reviews

Client: London Borough of Tower Hamlets

Version	Date	Version Details	Prepared by	Checked by	Approved by Principal
V1.0	20.08.2014	Compiled	Jonny Hill	Emma Deen	Jon Grantham
V2.0	03.12.2014	IRR	Jonny Hill	Emma Deen	Emma Deen
V2.1	06.07.2015	FRR (draft)	Jonny Hill	Jo Cottin	Jon Grantham
V2.2	12.08.2015	FRR (final)	Shontelle Williams / Helen Kent	Helen Kent	Jon Grantham
V3	05.11.2015	FRR (assessment of Applicant's response to clarifications and potential Regulation 22s)	LUC and Cascade Consulting	Helen Kent	Jon Grantham

Contents

1 Introduction

1.1 LUC in association with Cascade Consulting and Delva Patman Redler have been commissioned by London Borough Tower Hamlets (LBTH) and London Borough of Hackney (LBH) to provide a critical review of the Environmental Statement (ES) for The Goodsyard, Bishopsgate development. The ES has been prepared to support a planning application by Bishopsgate Goodsyard Regeneration Limited (Application Ref. LBTH PA/14/2011; LBH Ref. 2014/2425).

1.2 In 2011, planning permission was granted for the siting of six shipping containers for A1 use (in connection with an approved temporary shopping facility on the adjacent site in Hackney) for a period of up to five years (PA/11/01679).

1.3 Also in 2011, planning permission was granted for the use of part of the site as a marketing suite and Arts Hub unit for public consultation/ exhibition purposes (Class D1) for a maximum period of five years including car parking and an access ramp (PA/11/02341 and PA/11/02246).

1.4 In 2012, planning permission was granted for the temporary use of vacant unused land for a football centre (Class D2) comprising eight five-a-side and two seven-a-side floodlit all-weather pitches and supporting ancillary facilities (PA/12/02014).

1.5 The current proposals are described as follows:

"An outline application for the comprehensive mixed use redevelopment of the site with all matters reserved for the following uses:

- *Residential (Class C3);*
- *Business Use (Class B1);*
- *Retail, financial and professional services, restaurants and cafes (Class A1, A2 and A3);*
- *Non-residential Institutions (Class D1);*
- *Assembly and Leisure (Class D2);*
- *Public Conveniences (sui generis);*
- *Energy centres, storage, car and cycle parking;*
- *Formation of new pedestrian and vehicular access and means of access and circulation within the site;*
- *Provision of new public open space and landscaping.*

Full details are submitted for alterations to and the partial removal of existing structures on the site and the erection of three buildings for residential (Class C3) and retail and food and drink uses (A1, A2, A3, A5); and use of the ground and basement levels of the Braithwaite Viaduct for retail and food and drink uses (A1, A2, A3, A5). Works to and use of the Oriel and adjoining structures for retail and food and drink uses (A1, A2, A3, A5)."

"For that part of the site within LB Tower Hamlets, the proposed development comprises the following mix of uses;

- *Up to 95,619m^2 (GIA of residential use (Class C3);*
- *Up to 20,118m^2 (GIA) of Business Use (Class B1);*
- *Up to 2,998m^2 (GIA) of Retail Use (Class A1, A2, A3);*
- *Up to 9,398m^2 (GIA) of Retail Use (Class A1, A2, A3, A5);*
- *Up to 108m^2 (GIA) of Non-residential Institution Use (Class D1);*
- *Up to 661m^2 (GIA) of Assembly and Leisure Use (Class D2);*
- *Up to 36m^2 (GIA) of sui generis use;*

- *Up to 8,026m^2 (GIA) of ancillary and plant space;*
- *Up to 5,068m^2 (GIA) of basement."*

"For that part of the site within LB Hackney, the proposed development comprises the following mix of uses:

- *Up to 64,193 m² (GIA) of Residential use (Class C3);*
- *Up to 32,873 m² (GIA) of Business Use (Class B1);*
- *Up to 3,359 m² (GIA) of Retail Use (Class A1, A2, A3);*
- *Up to 2,474 m² (GIA) of Retail Use (Class A1, A2, A3, A5);*
- *Up to 3,269 m² (GIA) of ancillary and plant space;*
- *Up to 3,336 m^2 (GIA) of basement."*

1.6 Following the review of consultation representations the Applicant has amended the proposed development. In broad terms, the Applicant has made the following changes to the original application:

- *"a change to the planning application site boundary to incorporate the open cut railway;*
- *a change to Parameter Plans for Plots A and B;*
- *a reduction in height and change to architectural expression of Plot C;*
- *a reduction in height to the proposed building in Plot F;*
- *a reduction in height to the proposed in Plot G;*
- *alteration to the architectural expression and materiality to both proposed buildings in Plots F and G;*
- *a new building spanning the open cut railway in Plot K;*
- *a change to the overall mix of residential units across the site;*
- *a change to the mix of uses across the site;*
- *a change to the proposed phasing of development".*

1.7 As a result of the aforementioned amendments, the description of the development has been revised and is as follows:

"An OUTLINE application for the comprehensive mixed use redevelopment of the site comprising:

- *Residential (Class C3) comprising up to 1,356 residential units;*
- *Business Use (Class B1) – up to 65, 859sqm (GIA);*
- *Retail, financial and professional services, restaurants and cafes and hot food takeaways (Class A1, A2, A3 and A5) – up to 17,499sqm (GIA) of which only 2,184SQM (GIA) can be used as Class A5;*
- *Non-residential Institutions (Class D1) – up to 495sqm (GIA);*
- *Assembly and Leisure (Class D2) – up to 661sqm (GIA);*
- *Public conveniences (sui generis) – up to 36sqm (GIA);*
- *Ancillary and plant space – up to 30,896sqm (GIA);*
- *Basement – up to 8,629sqm (GIA);*
- *Formation of new pedestrian and vehicular access and means of access and circulation within the site; and*
- *Provision of 22,642sqm of new public open space and landscaping.*

The application proposed a total of 12 buildings that range in height, with the highest being 177.6m AOD and the lowest being 23.6m AOD.

With all matters reserved save that FULL DETAILS are submitted for alterations to and the partial removal of existing structures on the site and the erection of three buildings for residential (Class C3), namely Plot C (ground level, plus 26-30 storeys, plus plant); Plot F (ground level, plus 46 storeys, plus plant); Plot G (ground level, plus 38 storeys, plus plant) comprising up to 940 of the total residential units; and retail and food and drink uses (A1, A2, A3, A5); and use of the ground and basement levels of the Braithwaite Viaduct for retail and food and drink/ community uses (A1, A2, A3, A5/D1). Works to and use of the Oriel and adjoining structures for retail and food and drink uses (A1, A2, A3, A5).

For that part of the site within LB Tower Hamlets, the proposed development comprises the following mix of uses:

- *Up to 91,469sqm (GIA) of residential use (Class C3);*
- *Up to 16,670sqm (GIA) of business use (Class B1);*
- *Up to 10,984sqm (GIA) of retail use (Class A1, A2, A3, A4 of which only 1,960sqm (GIA) can be used for hot food takeaways (Class A5);*
- *Up to 495sqm (GIA) of non-residential institution use (Class D1);*
- *Up to 661sqm (GIA) of assembly and leisure use (Class D2);*
- *Up to 36sqm (GIA) of sui generis use;*
- *Up to 18,147sqm (GIA) of ancillary and plant space;*
- *Up to 5,224sqm (GIA of basement).*

Review Report

1.8 This Report sets out the review of The Goodsyard ES and Revised ES. The structure of the report is as follows: Section 2 checks for Regulatory Compliance; Section 3 details review findings on the EIA Context and Influence (Scoping, Alternatives and Consultation) [1]; Section 4 provides commentary on the presentation of the ES and Non-Technical Summary[2]; Sections 5-19 are topic specific reviews relating to each topic covered in the ES and Appendix K – the assessment of the Limited Development Scenario (LDS)[3]; Section 20 provides a summary of the residual impact assessment[4]; Section 21 reviews the cumulative impact assessment[5] and Section 22 provides a review of the summary of impacts of the LDS[6].

1.9 A criteria-based approach, developed by the Institute of Environmental Management and Assessment (IEMA) hereafter referred to as 'the IEMA criteria', was used to undertake the review[7]. The criteria include general criteria looking at the information contained in the ES, including the presentation of the results and the non-technical summary. Issue-specific criteria address:

- the baseline conditions;
- assessment of impacts; and
- mitigation measures and management.

1.10 The review includes an assessment of the scope of the Environmental Impact Assessment (EIA) in relation to requirements set out in the LBTH and London Borough of Hackney (LBH) EIA Scoping Opinion issued on 19th March 2014, hereafter referred to as 'the EIA Scoping Opinion'.

[1] IEMA EIA Quality Mark - ES Review Criteria, COM4: Context and Influence.
[2] IEMA EIA Quality Mark – ES Review Criteria, COM6: EIA Presentation.
[3] IEMA EIA Quality Mark – ES Review Criteria, COM5: EIA Content.
[4] IEMA EIA Quality Mark – ES Review Criteria, COM5: EIA Content.
[5] IEMA EIA Quality Mark – ES Review Criteria, COM5: EIA Content.
[6] IEMA EIA Quality Mark – ES Review Criteria, COM5: EIA Content.
[7] This review is based on the IEMA criteria which were updated as part of the new IEMA 'Quality Mark' launched in April 2011.

1.11 Each section of this report provides a list of clarifications required from the applicant and a summary of any potential Regulation 22[8] information requests to be made to the applicant, as appropriate.

1.12 Once the applicant has received the clarifications and potential Regulation 22 requests from LBTH and LBH they are invited to submit further information to address the points raised.

1.13 Any further information received is reviewed by LUC and conclusions drawn as to whether the additional information is satisfactory. These conclusions are then included in Section 23 of this report, and the document completed as the Final Review Report (FRR).

[8] Under Regulation 22 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2011.

2 Regulatory Compliance

2.1 This section checks for the presence or absence of each item below, to assess the Regulatory Compliance of the ES[9]. Further detail is provided in the following sections in relation to the way each aspect of the EIA has been undertaken and is presented in the ES.

Criteria		Y/N
A	Does the ES contain a clear section, or sections, providing a description of the development comprising information on the site, design and size of the development during construction and operation?	Yes (ES Chapter 4)
B	Does the ES contain a section, or sections, that outline the main alternatives studied by the developer and an indication of the main reasons for his choice, taking into account the environmental effects?	Yes (ES Chapter 3)
C	Does the ES contain a clear section, or sections, that provides the data required to identify and assess the main effects which the development is likely to have on the environment?	Yes (ES Chapters 5-18 and ES Volume II)
D	In the light of the development being assessed has the ES identified, described and assessed effects on: - Population - Fauna & Flora - Soil - Water - Air - Climatic factors - Landscape - Cultural Heritage - Material Assets - Other	Yes (ES Chapters 5-18 and ES Volume II)
E	Does the ES attempt to set out the interaction between the factors set out in COM3 D) above?	Yes (ES Chapters 5-18 and 20)
F	Does the ES contain a section, or sections, that describe the likely significant effects of the proposed development on the environment, including as reasonably required: direct, indirect, secondary, cumulative, short, medium, long-term, permanent and temporary, positive and negative effects?	Yes (ES Chapters 5-18 and ES Volume II)

[9] IEMA EIA Quality Mark – ES Review Criteria, COM3: EIA Regulatory Compliance

Criteria		Y/N
G	Does the ES contain a clear section, or sections, that provides a description of the measures envisaged in order to avoid, reduce and, if possible, remedy significant adverse effects?	Yes (ES Chapters 5-18 and ES Volume II)
H	Has a Non-Technical Summary been produced containing an outline of the information mentioned in COM3 A) to G)?	Yes
I	Does the ES contain a section, or sections, that outline any difficulties encountered by the developer in compiling the information presented in the ES?	Yes (ES Chapter 2)

Summary of Clarifications Required from Applicant
None – subject to the reviews set out in sections 5-22 of this Report.
Summary of Potential Regulation 22 Information Requests to be made to Applicant
None – subject to the reviews set out in sections 5-22 of this Report.

3 EIA Context and Influence (Chapters 1, 2, 3 & 4)

General Assessment

3.1 The unit sizes, tenure and assumptions regarding the number of habitable rooms for the detailed element of the proposed development should be provided.

3.2 Information on what assumptions have been made with respect to the outline element of the proposed development is required. This is particularly important for assessments that have relied upon an indicative mix (unit sizes, tenure and assumptions regarding the number of habitable rooms), to ensure the worst case scenario permitted has been assessed.

3.3 An indicative masterplan has been submitted with the planning application – an explanation should be provided as how this has been used as part of the EIA, and explanation provided as to how the worst case scenario has been assessed.

Scoping

3.4 A formal EIA Scoping Report was submitted to LBTH and LBH as a request for an EIA Scoping Opinion on the 20th January 2014. The EIA Scoping Report and Scoping Opinion (received 20th March 2014) are provided in Volume III: Appendix A of the ES.

3.5 Paragraph 2.31 sets out the topic chapters which have been scoped out as a result of the EIA scoping process. These are health and wellbeing and aviation. The reasons setting out why they have been scoped out are considered acceptable.

Assessment Methodology

3.6 The assessment methodology is set out in paragraphs 2.9-2.17 which identify the impacts considered as part of the EIA: beneficial and adverse, short and long-term (temporary and permanent), direct, indirect and cumulative.

3.7 The assessment methodology applied to undertake this EIA is considered acceptable.

Alternatives including Iterative Design

3.8 Chapter 3 of the ES sets out a comprehensive description of the alternatives and design evolution of the proposed development. The chapter sets out details of the development brief provided in the Bishopsgate Goodsyard Interim Planning Guidance and an analysis of the site and its context.

3.9 The chapter also provides discussion on the no development scenario and alternative sites.

3.10 Paragraphs 3.73-3.102 set out how the public consultation events influenced the evolution of the proposed development.

3.11 The description of alternatives and the design evolution is otherwise considered acceptable.

Description of Development

3.12 Within chapter 4 of the ES, there is a comprehensive description of the proposed development including an overview of the existing site and the proposed development. The chapter also provides a breakdown of the key land uses and a detailed description of the proposed development by plots submitted in outline and those submitted in detail.

3.13 Details for the outline components include: parameters of plots; indicative massing strategy; indicative façade; indicative materials and indicative access and servicing strategy.

3.14 Information on the detailed components includes: detailed description of plots; internal organisation; massing strategy; façade; materials, layout and use.

3.15 The chapter also provides a description of the indicative public realm and landscape, as well as pedestrian access and routes; basements; and sustainability (including the energy strategy, water strategy, waste management and materials and other resources).

3.16 Paragraph 4.19 states that the *"proposed affordable housing on-site (LBTH) has been calculated based on 10% of the habitable rooms within LBTH only, based on a 35/65 split of social rent and intermediate respectively, in line with LBTH guidance"*. LBTH guidance is however for a 30:70 split, and therefore this is not in line with LBTH policy.

3.17 The description of the proposed development is considered acceptable.

Consultation

3.18 Consultation is set out in paragraphs 2.18-2.23 and provides details on the consultees involved in the design and preliminary assessment of the development as well as the public consultation that was undertaken up until submission of the EIA.

3.19 Table 2.1 provides a summary of the consultees responses received with the EIA Scoping Opinion and where responses are addressed within the ES.

3.20 This is considered acceptable.

Limited Development Scenario

3.21 The consideration of a LDS is sensible given the sites position straddling two boroughs. There is no clear explanation of what the LDS entails with respect to uses and floorspace etc., and therefore it would be helpful if an explanation could be provided for clarity.

3.22 The comments with respect to the mix of the development should also be provided for the LDS.

Summary of Clarifications Required from Applicant
Explanation of what the LDS entails, with respect to uses and floorspace etc.
Summary of Potential Regulation 22 Information Requests to be made to Applicant
The mix for the detailed element of the proposed development should be provided (and the LDS). The mix for the outline element of the proposed development should be provided including how the worst case scenario has been assessed (and the LDS). An explanation should be provided as to how the indicative masterplan has been used as part of the assessment.

Review of Revised ES

3.23 Chapter 1 of the Revised ES details the amended proposed development and provides revised figures illustrating the amended application boundary.

3.24 The planning policy context section of the chapter has also been revised to reflect the publication of the Further Alterations to the London Plan in March 2015 and the publication for consultation of the Minor alterations to the London Plan in May 2015 (made to bring the London Plan in line with new national housing standards and car parking policy).

3.25 Chapter 2 of the Revised ES details the additional consultation events that have taken place since the Original ES. It also sets out the revised construction phases and additional schemes which have been considered within the cumulative impact assessment.

3.26 Chapter 3 of the Revised ES sets out the design evolution of the amended scheme and how the scheme has been revised to take into account comments received during consultation undertaken post-submission of the application.

3.27 Chapter 4 of the Revised ES sets out the planning description of the amended scheme and a description of the height of each plot and its land use.

3.28 The chapter also sets out amended descriptions of the following: indicative massing strategy, indicative façade, and indicative materials of development plots A and B; parameter plans, indicative massing strategy, indicative façade, indicative materials and indicative access and servicing of development plot K; description of development plot C, residential unit mix of development plot C and massing strategy of development plot C; description of development plots F and G, residential unit mix of development plots F and G and massing strategy, façade and materials of development plots F and G.

3.29 Text has also been amended with regard to the ground floor public realm, use of safety barriers at the boundary of the park, commercial gardens and cycle docking stations.

3.30 Minor amendments have also been made to the text on the sustainability of the scheme.

3.31 It should be noted that LBH's Development Management Local Plan has now been adopted, which should be acknowledged/reflected in future submissions when referencing policy.

3.32 The context of the Revised ES is considered acceptable subject to the outstanding clarifications set out in section 23 of this Report.

Limited Development Scenario

3.33 The amended LDS included within Appendix K includes an overview of the scenario and a breakdown of its key land uses. It has also been revised to reflect the amended demolition and construction programme including revisions to materials and resource use and demolition and construction vehicle movements.

3.34 The context of the revised Appendix K – LDS is considered acceptable.

Summary of Clarifications Required from Applicant
None.
Summary of Potential Regulation 22 Information Requests to be made to Applicant
Reflect the adoption of LBH's Development Management Local Plan in future submissions when referencing policy.

4 EIA Presentation

Overall Presentation (ES Quality)

4.1 The ES makes good use of figures, diagrams and tables. Chapters 1, 2, 3, 4 and 5 provide a number of figures which illustrate the: site's location; the site; local sensitivities and constraints; cumulative schemes to be considered; design evolution; the proposed development; construction phases and proposed construction traffic routes.

4.2 Chapters 6-21 also make use of figures, diagrams and tables where appropriate and a glossary has been provided at chapter 22.

4.3 The presentation of the ES is considered acceptable subject to any comments in the sections below.

Non-Technical Summary

4.4 The Non-Technical Summary (NTS) is a stand-alone document. The document is concise, written clearly and provides a number of figures and illustrations.

4.5 The presentation of the NTS is considered acceptable.

Summary of Clarifications Required from Applicant
None.
Summary of Potential Regulation 22 Information Requests to be made to Applicant
None.

Review of Revised ES

4.6 The presentation of the Revised ES is consistent with the Original ES. As such, it is considered acceptable subject to any comments in the sections below.

Summary of Clarifications Required from Applicant
None.
Summary of Potential Regulation 22 Information Requests to be made to Applicant
None.

5 Review of Chapter 5: Demolition and Construction

General Comments

5.1 The demolition and construction programme is estimated to last for up to 12 years, commencing in the first quarter of 2016, and therefore twelve timeslices have been identified in the programme in Figure 5.1. The development will be progressed in four phases; Phase 1 plots C and H, Phase 2 plots F, G, K and L, Phase 3 plots A and B, and Phase 4 plots D, E, I and J. This is set out in the Phasing Plan, which is one of the plans submitted for approval.

5.2 An indicative demolition and construction phasing programme has been developed in relation to the Phasing Plan (to be approved). However, there appears to be overlap between phase 2 and 3, rather than the phases running consecutively as would be expected. Based on this, the phasing plan therefore does not provide any certainty on how the development would be progressed, and therefore the ES may not be assessing the worst case scenario. For example, all phases being developed simultaneously could generate more noise. Further information is required on how the worst case scenario has been assessed with respect to the phasing of the demolition/construction works, and how any deviations from the phasing programme will be captured.

5.3 Summaries of the different work activities are provided, and it is noted that these will be subject to refinement at the reserved matters stages and on appointment of the contractor, although specialist contractor input from GVA Second London Wall has been provided to inform the ES. Figures 5.2-5.13 provide a visual summary of each timeslice, and relevant phase, and the key activities being undertaken.

5.4 Clarification is sought over the distance of the protection zone around the London Overground and the Central Line. Clarification is also sought as to the difference between category A and B fit outs.

5.5 Estimates of waste material arising during demolition, excavation and construction have been provided (Tables 5.1, 5.2 and 5.3). Similarly, estimates of construction materials to be used are provided in Table 5.4.

5.6 The type of plant to be used on site during the key activities is summarised in Table 5.5, and where necessary details have been included in the overall description of the work activities.

5.7 Hours of work have been confirmed as being 08:00-18:00 weekdays, and 08:00-13:00 on Saturdays, with no working undertaken on Sundays and Bank Holidays. Works outside these hours will require permission from LBTH and LBH.

5.8 Traffic management, and access and egress to the site is detailed, with Figure 5.14 showing the access point available for Phases 1, 2 and 3, and Figure 5.5 showing the access point for Phase 4. Figure 5.17 provides indicative construction traffic routes with separate ingress and egress routes. The Applicant is committed to producing a Construction Logistics Plan (CLP) for the site prior to the development and this should be secured through an appropriately worded planning condition. Further information is required as to how the indicative construction traffic routes have been identified (e.g. advice from transport consultants) to ensure a worst case scenario has been assessed.

5.9 Estimated numbers of vehicle movements per day for each of the four phases is provided in Table 5.6. A profile of deliveries to site per month over the 12 year construction programme is shown in Figure 5.20.

5.10 The majority of the ES states that the demolition/construction phase will be over a period of 12 years, however paragraph 2.87 refers to a demolition/construction phase of 156 months, which would be 13 years. This should be clarified.

Mitigation and Management

5.11 The Applicant has committed to producing a Demolition and Construction Method Statement (DCMS), a Construction Environmental Management Plan (CEMP) and a Construction Logistics Plan (CLP). All documents should be submitted to LBTH for approval prior to commencement on site.

5.12 A non-statutory Site Waste Management Plan (SWMP) will be produced; it should be noted that the SWMP Regulations 2008 have been repealed, and therefore the production of a SWMP should be conditioned.

5.13 A summary of best practice mitigation measures for environmental impacts likely to arise during demolition and construction is provided e.g. noise and vibration, dust, protection of water resources and ecology.

5.14 In preparing the CEMP, reference should be made to LBTH's Code of Construction Practice, and other relevant guidance.

Limited Development Scenario

5.15 The demolition and construction programme has been developed for a LDS i.e. if only LBTH was to be granted planning permission. If only the LBTH application was to be consented, only Phases 1 and 4 would come forward (plots C, D, E, H, I and J). This would reduce the programme to approximately 6.75 years.

5.16 The amount of demolition and construction waste arising from the LDS, construction materials to be used, and prediction of monthly deliveries and labour resource levels should be provided, as the main ES chapter does not break these down into phases, so the associated impact purely for LBTH cannot be determined.

Summary of Clarifications Required from Applicant
Clarification is sought over the distance of the protection zone around the London Overground and the Central Line. Clarification is sought as to the difference between category A and B fit outs. Confirm that the demolition/ construction phase will take place over a period of 12 years (not 13).
Summary of Potential Regulation 22 Information Requests to be made to Applicant
Further information is required on how the worst case scenario has been assessed with respect to the phasing of the demolition/construction works, and how any deviations from the phasing programme will be captured (this also applies to the LDS). Further information is required as to how the indicative routes for demolition and construction traffic have been identified (e.g. advice from transport consultants), and therefore ensure the worst case scenario has been assessed. Provide estimates of the amount of demolition and construction waste arisings and construction materials to be used in the LDS. Provide a profile of the monthly deliveries during demolition and construction works and labour resource levels in the LDS.
Potential Planning Conditions
As per current practice, including conditioning the production, submission and approval of a CLP, CEMP, DCMS and SWMP prior to commencement of works on site.

Review of Revised ES

5.1 Chapter 5 of the Revised ES has been amended to take account of the new development proposals and includes information on how the new plans have affected demolition and construction. However, the text does not address most of the clarifications and Regulation 22 requests presented in Sections 5.1 to 5.16 of this report, with the exception of those identified for the LDS. The applicant should be asked to provide a response to these requirements or to confirm whether they are superseded as a result of the amendments.

5.2 Amended text is presented highlighted in green, with Appendix O of the ES providing details of the amendments within each chapter. Appendix O is however quite brief, and it would have been helpful for a comparison table to be provided so that the reader could understand where figures have increased (e.g. more non-residential (D1) floorspace) and decreased (e.g. less residential units).

5.3 There are a number of changes to the text of Chapter 5 that have not been highlighted in green (as stipulated in the Preface) and could therefore be missed, some of which have the potential to affect the evaluation of significance presented within the ES – such as an increase in the length of the construction programme (Chapter 5 - paragraph 5.5). Confirmation from the applicant should therefore be sought on what text has been updated within the Revised ES as a result of the amendments, and that all the additional information (not just text highlighted in green) has been reviewed for each topic and the relevant assessments updated.

5.4 The revised construction programme will begin in the third quarter of 2016 and take up to 16 years to complete, ending in approximately June 2032. This results in 17 'timeslices' of demolition and construction work presented in Figures 5-2 to 5-18 of the ES.

5.5 The applicant acknowledges that given the long construction duration, some information is not yet available on potential construction methods and that this information will be supplied by a contractor on appointment. However, in the absence of such information, the ES should therefore confirm the assumptions that have been made to ensure a worst case has been assessed – for example, the type of piling method (such as percussive or rotary) that will be used. The applicant was therefore asked to provide additional information to confirm such assumptions used in the absence of detailed information from a contractor, and this remains outstanding.

5.6 The development will be constructed in 5 phases; Phase 1 plots C and H, Phase 2 plots A and B, Phase 3 plots D, E, I and J, Phase 4 plots F,G and L and Phase 5 Plot K. However, Phase 2 and Phase 4 appear to overlap substantially which would indicate that these are in fact all one Phase. Clarification was previously sought on the phasing plan and to confirm that the worst case scenario could be assessed. Clarification was previously requested but has not been provided as to how these phases have been assessed in the amended ES to ensure a worst case scenario has been covered – see summary table above.

5.7 The development now includes Plot K, development of a building for commercial use over the London Overground. However, very little additional detail has been provided about how this building will be constructed, other than in paragraph 5.20. Given the constraints of working over the operational railway and its location adjacent to protected heritage assets associated with the railway, further construction information specific to the additional building in Plot K is required to determine the potential effects of constructing the new building, including the deck over the railway. Provision of this information, along with updated topic assessments taking the information into account is considered to be a Regulation 22 request.

5.8 Figures 5-2 to 5-18 have been updated to explain the new phasing plan for the development with a description of the various activities undertaken at each stage. However, it is not clear for the later phases what activities are included in tasks such as '*commencement of substructure and superstructure works*' and in particular whether this includes piling. For example, piling is only specifically mentioned as being required for Plots C and G but paragraph 5.32 of the ES confirms that '*substructure construction for all plots'* is required. Clarification should therefore be sought from the applicant as to whether the changes to the development proposals have also led to a change in the construction methods, and specifically, whether piling is required within other plots where it is not specifically mentioned. If additional piling is required and has not been assessed, this assessment should also be provided as a Regulation 22 request.

5.9 Sections 5.25 to 5.34 of the ES include updated information and estimates of construction waste and materials required. This is considered further in Chapter 6 of this report.

5.10 Table 5.5 includes details of the plant and equipment to be used. Confirmation is sought to confirm whether the assessment has assumed a percussive or rotary piling method is likely to be used.

5.11 Paragraphs 5.53 to 5.61 consider traffic movements and this is considered to be acceptable. However, it is noted that paragraph 5.55 refers to peak vehicle movements of 102 vehicles per day in 2022/2023 when Plots A, B, F and G are in construction. This is inconsistent with paragraph 9.112 of ES Chapter 9: Traffic and Transport which refers to a peak of 100 movements per day in 2023 when plots A, B, F and G are in construction. This should be clarified.

5.12 No changes are made to the sections of the ES relating to Environmental Management on site.

Limited Development Scenario

5.13 Appendix K sets out the changes to the LDS. This confirms that for the LDS, the changes to the development will result in an increase in the length of the construction programme to 9.25 years from the previous 6.25 years.

5.14 Appendix K now provides details of the demolition and construction materials and waste arisings, as well as monthly delivery and labour resource levels as requested. This is considered to be sufficient.

Summary of Clarifications Required from Applicant
NB - Applicant needs to provide responses to clarifications and potential Regulation 22 requests made on the original ES – see above and Section 23, which identifies where further information is still required. Clarification of the number of peak vehicles movements per day and the year that these will occur.
Summary of Potential Regulation 22 Information Requests to be made to Applicant
Confirm what text has been updated within the Revised ES as a result of the amendments (where not already highlighted in green), and that that all changes within the ES have been assessed in each topic area. Confirmation of how the building in Plot K which spans the London Overground will be constructed and provision of updated topic assessments to cover the additional information. Confirmation of whether additional piling is required and provision of additional relevant topic assessments.
Potential Planning Conditions
As per above.

6 Review of Chapter 6: Waste and Recycling

Scope of EIA

6.1 The scope of the EIA is comprehensive. It includes demolition and construction and operational phases of the development. For the operational phase details of waste storage and collection are provided, together with layout drawings showing the location of waste storage and collection facilities.

Baseline

6.2 Current waste arisings from the site are considered to be minimal, based on current uses. Existing waste storage and collection arrangements are unknown. Therefore, no estimates of waste arisings for the existing site are provided. This is considered acceptable in the context of the size and scale of the proposed development.

6.3 As part of the baseline assessment, current waste arisings on a local and regional scale for each type of waste produced are provided as a basis for assessing the impact of wastes from the proposed development on local and regional waste management facilities and infrastructure.

Assessment

6.4 Demolition and construction waste arisings estimates are based on information in Chapter 5. The Applicant notes that estimates are made on the same basis for both detailed and outline components of the proposed development and that there will be some flexibility in terms of how these waste are handled.

6.5 A bespoke methodology for estimating future quantities of residential and commercial waste was agreed between the Applicant and LBH and LBTH. There appear to be no issues with this methodology.

6.6 The Applicant notes that maximum parameters for all outline elements of the proposed development have been assumed so that the assessment represents a worst case.

6.7 It is queried why the operational assessment only focuses on the residential uses. Consideration should also be given to waste arising from the other uses on site (e.g. D1/ D2 etc.)

6.8 The Applicant notes that specific waste composition and estimated quantities will change as design evolves and that details will be provided at a later stage. However, it is not clear how these changes will be communicated in the context of the planning application and ES. This should be clarified.

Secondary, Cumulative, and Combined Impacts

6.9 Cumulative impacts of waste arisings from all 37 cumulative schemes identified are assessed. The worst case residual cumulative environmental impacts for both construction and operational effects are rated of moderate adverse significance after mitigation despite the fact that the significance of the impacts of the development itself is negligible.

Mitigation and Management

6.10 The main focus of the chapter is the management of wastes. Management procedures are set out in some detail and there are no issues with what is proposed.

6.11 For demolition and construction waste the Applicant proposes to implement a SWMP despite the repeal of the relevant regulations. This could therefore be secured through a pre-commencement planning condition.

Worst Case Scenario

Detailed

6.12 As identified earlier in the IRR, information is further information is required on the mix for the detailed element of the proposed development.

Outline

6.13 Paragraph 6.40 states *"With regards to the outline components, both minimum and maximum parameters have been considered. However, for the purpose of the waste and recycling assessment maximum parameters have been used for both the residential and commercial land uses of the operational phase of the outline components, so as to provide a worst case approach. This approach also allows for greater flexibility within the Proposed Development to accommodate any changes in design sensitivity between maximum and minimum parameters".*

6.14 It is acknowledged that the assessment of the maximum parameters for both the residential and commercial is the correct approach. That said, additional information is required to understand how the maximum parameter has been determined for the residential waste generation i.e. how has the number of units, tenure and habitable rooms be established to ensure that a worst case scenario has been assessed.

6.15 Further information is required as to how commercial waste floorspace relates back to the components in the Development Specification and how this has been used in the calculations. For example, for plot A the retail element (A1) is calculated to generate 1,750 L of waste, however the Development Specification only provides the retail for plot A combined as A1, A2 and A3 (i.e. 3,180 GEA m2).

Non-Technical Summary

6.16 This is a fair reflection of the main assessment.

Limited Development Scenario

6.17 Waste quantities and therefore the magnitude of impacts will be reduced compared to the full development scenario. However, the assessment, findings and significance of impacts for the LDS are essentially the same as those for the full development in all aspects except that they are on a reduced scale.

6.18 Chapter 21 very briefly summarises the LDS assessment and indicates that impacts will be slightly reduced but that the significance of impacts remains the same for both phases of the development as well as for cumulative developments.

Summary of Clarifications Required from Applicant
Clarify why the operational assessment is only based on the residential land uses, and if necessary, update the assessment to consider waste arisings from the other uses (e.g. D1/D2 etc.).

By what means does the applicant propose to update the waste composition and estimated quantities as the design develops.
Summary of Potential Regulation 22 Information Requests to be made to Applicant
Additional information is required to understand how the maximum parameter has been determined for the residential waste generation (this also applies to the LDS). Further information is required as to how commercial waste floorspace relates back to the components in the Development Specification and how this has been used in the calculations(this also applies to the LDS).
Potential Planning Conditions
A SWMP to be produced and agreed with LBTH and LBH prior to commencement of works.

Review of Revised ES

6.19 The Waste chapter in the Revised ES has been updated to reflect recent policy changes. It also includes revised baseline waste estimates on national, regional and local scales. The assessment itself has been revised and updated. The conclusions of the assessment in terms of significance of effects are unchanged.

6.20 For the outline elements of the scheme illustrative parameters have been used. However, for estimates of waste arisings from the retail elements of the scheme it has been assumed that the retail elements are all A3 which generates a worst case waste arisings figure.

6.21 As in the previous ES, there is no current on-site waste arisings estimate, although this is assumed to be minimal (paragraph 6.79). However, paragraph 6.135 states that operational waste '*equates to 5,729 tonnes per year, which represents an increase from baseline conditions in the order of 1,000 tonnes*'. These two statements appear contradictory and should be clarified.

6.22 The Applicant notes that meeting LBTH and LBH planning standards for waste servicing results in an overprovision which in turn provides flexibility in the event of further design evolution.

Limited Development Scenario

6.23 The conclusions drawn in respect of the LDS in the original assessment remain unchanged in the Revised ES.

Summary of Clarifications Required from Applicant
Clarify apparent inconsistency between paragraphs 6.79 and 6.135.
Summary of Potential Regulation 22 Information Requests to be made to Applicant
NB - Applicant needs to provide responses to clarifications and potential Regulation 22 requests made on the original ES – see above and Section 23, which identifies where further information is still required.
Potential Planning Conditions
A SWMP to be produced and agreed with LBTH and LBH prior to commencement of works.

7 Review of Chapter 7: Socio-Economics

Scope of EIA

7.1 ES Chapter 7: Socio-Economics has utilised the EIA Scoping Opinion (March 2014) to establish the scope of the EIA. In accordance with LBTH Scoping Guidance, this assessment includes an assessment of direct impacts upon the local and regional economy as well as impacts that the development may have upon the existing local community.

7.2 In accordance with the EIA Scoping Opinion (March 2014), Chapter 7 draws upon 2011 Census data. However the Applicant has not drawn upon the range of geographic data including ward, super output areas and postcode. Clarification is requested as to why the Applicant has excluded this information.

7.3 Clarification is requested as to why the baseline information on education includes data relating to school provision in the London Borough of Islington. Applicant to provide revised information on the availability of surplus school places.

7.4 Paragraphs 7.42 to 7.54 refer to 'LBTH Saved and Retained UDP Policies (2007)', which is incorrect as the UDP was superseded by the MDD.

Baseline

7.5 The 'Baseline Conditions' section in paragraphs 7.72-7.116 provides a comprehensive overview of the site context and summarises the socio-economic characteristics of LBH and LBTH as well as the wider London region. Information is provided on population size and age profile, economic profile, labour market profile, housing, health infrastructure, deprivation, education, open space and recreation and crime and public safety.

7.6 Paragraphs 7.106-7.108 outline baseline information on healthcare provision in the boroughs. Paragraph 7.108 only assesses the number of GPs against the list size to give an approximate number of patients per GP. This is incorrect as it overplays the number of GPs available, as many GPs in LBTH work part time. This assessment will need to be updated using whole time equivalent GP numbers, as stipulated in the EIA Scoping Opinion.

7.7 This is considered acceptable subject to the clarifications above.

Assessment

7.8 The methodology for determining the baseline conditions and sensitive receptors is set out in paragraphs 7.60-7.67.

7.9 The assessment of the socio-economic impacts of the development set out in chapter 7 is based on the maximum development scenario (or worst case scenario); with the exception of the assessment of operational employment and local spend which is based on a calculation of the minimum development scenario. The Applicant states that their approach to the assessment of operational employment and local spend will *"generate a lower outcome than using the maximum scenario; hence presenting a 'worst case scenario' with lower levels of employment and local spending."*

7.10 The method for determining the significance of effects is set out in paragraphs 7.68—7.71. Demolition and construction effects are set out in paragraphs 7.119-7.131 and consider the employment generated during demolition and construction. Operational effects are set out in paragraphs 7.132-7.207 which include employment generated during the operational phase,

additional local spending and the impact on housing, education, health, open space provision, play space and crime and safety.

7.11 In accordance with the EIA Scoping Opinion request, paragraph 7.121 sets out how the estimated construction employment has been calculated.

7.12 Paragraph 7.138 states that the site is currently vacant – this is not correct as the site is currently in use e.g. 'Box Park' and sports facilities. No assessment has been provided on the effect of the loss of the current, temporary land uses. This is not consistent with other chapters of the ES, which have included them within their assessment. The loss of the existing facilities should therefore be assessed.

7.13 In paragraph 7.134 it is noted that there is some flexibility in the proposed end uses of a small number of units and as such there is the potential for the estimated level of employment to vary. The applicant adds that "*Despite this flexibility however, the overall magnitude of effect significance will not change regardless of specific floorspace uses."*

7.14 It is unclear how buildings B and G have been split with respect to the boroughs. For example, Building G will provide 1,192 m^2 GEA of retail – how much will be within LBH and how much will be in LBTH? Whilst some comparison can be made back to page 9 and 10 of the Development Specification, these figures are in GIA and therefore do not directly relate to the ES. The applicant needs to provide an explanation of how B and G will be split between LBTH and LBH.

7.15 Paragraphs 7.157-7.161 provide an assessment of the development upon the provision of affordable housing. In total 59 residential units or 10% (based on habitable rooms) will be affordable and provided within LBTH and a contribution to offsite affordable housing provision in LBH. Based on the figures provided in this chapter for plots C, D and E, there will be 844 residential units providing 1,559 residents. Additional information is required to establish how 59 units will provide the required 10% affordable housing.

7.16 The Applicant acknowledges that this is below LBTH's target, but states that "*the Proposed Development represents an increase in the availability of affordable housing in the area compared with existing baseline conditions (where no affordable housing is offered currently) and this can be seen as an improvement to the existing baseline situation".* Whilst this is acknowledged, it cannot be considered to be a minor beneficial effect when the Council's policy requirement if for between 35 and 50%.

7.17 The Applicant should confirm whether they will be seeking to meet the LBTH affordable housing target offsite if the proposed development is implemented and provide information on the phasing of affordable housing provision.

7.18 LBTH publishes an annual Planning for School Places Report, which has not been referred to in the ES.

7.19 Within the Proposed Development Scenario there will be "*floor space to accommodate a healthcare facility with the capacity for two GPs. This provision will serve residents at the proposed development and is unlikely to have further capacity to offer healthcare services to residents within the surrounding area"*, bringing the total combined number of FTE GPs within 1 km of the site to 19 with a combined practice list size of 41,060. However in assessing the impact, the Applicant has used the assumption that only one additional FTE GP will occupy the new healthcare facility, bringing the total number of GPs within 1 km to 18 and creating an average list size of 2,281 patients per GP. This would be above the target for England, which is a maximum of 1,800 patients per GP. While the Applicant acknowledges this, they state that this provision "*would reduce the additional demand for GP services that the Proposed Development would place on local services surrounding the site and provide a new GP service where there is no current provision"*. In concluding the assessment the Applicant states that "*this would give rise to a long term temporary impact of negligible significance*".

7.20 Clarification is requested as to why the Applicant has not proposed mitigation of the effects on healthcare through the provision of offsite provision or financial contribution.

7.21 Clarification is requested as to why the Applicant has used only one FTE GP to calculate the average list size for GPs for the assessment of effects on health during the operation.

7.22 Clarification is also requested as to why the Applicant has considered the impact on health to be a "*long term temporary impact of negligible significance"* when it is more likely to be 'long term permanent impact of minor significance' without mitigation.

7.23 It is not considered appropriate to conclude that the effect on open space will be minor beneficial when the amount is under the amount required by LBTH and LBH policy.

7.24 Child playspace for LBTH should be calculated using the Council's Planning Obligations SPD instead of the GLA's. For playspace calculations, reference should be made to policy DM4.2 which states "apply LBTH Child Yields". These are not presented in the Planning Obligations SPD, but are published in the 'Planning for Population Change and Growth Baseline Report' which is publically available.

Secondary, Cumulative, and Combined Impacts

7.25 The Applicant states that *"there is no interaction between socio-economics and other individual impacts in relation to the construction and operational phases of the Proposed Development. No interactions with other aspects are anticipated to occur and so no combined cumulative impacts would arise"*. However column 3 of Table 20-2 Combined Effects of Individual Impacts – Completed and Operational Development states that the sensitive receptor group 'Future Users of the site' are likely to experience impact interaction of combined effects in relation to transport, air quality and socio-economics.

7.26 Clarification is therefore requested for the Applicant to confirm whether the proposed development is likely to produce Type 1 cumulative effects in relation to socio-economic impacts.

7.27 Type 2 effects assessment is set out in paragraphs 7.211-7.223. The assessment is considered acceptable.

Mitigation and Management

7.28 Mitigation measures are set out within paragraphs 7.202- 7.203.

7.29 The Applicant is not providing any direct mitigation measures for the demolition and construction phase impacts.

7.30 In relation to the completed development, the Applicant states that *"s106 contributions towards the provision of additional early year's education places will be agreed with the boroughs, in order to mitigate any adverse impacts on the demand for and supply of places as a result of the Proposed Development".*

Worst Case Scenario

7.31 This chapter states *"the socio-economic assessment has been based on the maximum development scenario in the majority of instances, however for calculations regarding employment and local spend the minimum development scenario has been used in order to present a 'worst case'".*

7.32 It is acknowledged that the assessment of the maximum parameters for child playspace, education, health and open space is the correct approach. That said, housing and affordable housing should have been based on the minimum development to assess the worst case scenario i.e. the least number of new homes.

7.33 It is unclear how the number of residential units has been calculated, as only the overall number of units have been provided in the Development Specification. The maximum number of units per borough, and plot should also be provided (this also applies to the LDS).

7.34 Further information is also required on how the unit sizes, tenure and assumptions regarding the number of habitable rooms have been established, for both the detailed and outline, and LBH and

LBTH elements. LBTH and LBH need to ensure that a worst case scenario has been assessed (this also applies to the LDS).

7.35 It is acknowledged that the assessment of the minimum parameters for employment and local spend is the correct approach. That said, further information is required as to how operational employment floorspace has been calculated and how it relates back to the Development Specification for both the outline and detailed element, and LBTH and LBH, as it is unclear how the figures have been generated. For example, the assessment of employment also refers to NIA – which does not directly relate to the Development Specification which uses GEA/GIA. It is also unclear how Plots B and G have been split between LBTH and LBH (this also applies to the LDS).

Detailed

7.36 As identified earlier in the IRR, information is further information is required on the mix for the detailed element of the proposed development.

Outline

7.37 Paragraph 7.163 states "*the outline components of the Proposed Development have been based on the maximum development scenario to represent a worst case".* It should be noted that the number of units, the size and tenure can affect the child yield and therefore have implications on education and playspace e.g. the highest child yield would be based on the maximum number of units, with the most family units within affordable housing. It will also affect local spend, housing (including affordable) and open space. Additional information is therefore required to understand how the maximum parameter has been determined for the residential element i.e. how has the number of units, tenure and habitable rooms be established to ensure that a worst case scenario has been assessed.

Non-Technical Summary

7.38 The NTS is a fair reflection of the main assessment.

Limited Development Scenario

7.39 The assessment methodology, effect significance criteria and baseline conditions applied to this scenario remain as per chapter 7 of the ES.

7.40 With reference to the assessment of potential impacts during demolition and construction and operation, the applicant considers the magnitude of impacts to remain the same as the proposed development in the ES Volume 1: Chapter 7: Socio-economics. Clarification is requested as to how this conclusion is reached, given the differences between the proposed development and the LDS. The implications for both LBTH and LBH should be clearly defined.

7.41 The LDS will deliver the same number of affordable housing units and healthcare facilities as set out in the proposed development scenario. Subsequently the assessment of effects of this is the same as those presented in the proposed development scenario. Therefore the clarification requests for further information set out above regarding the housing and health impacts are also applicable to the LDS.

7.42 With regard to Chapter 21: LDS, the Applicant states that *"all residual impacts for the Limited Development Scenario have been assessed as being the same as those for the Proposed Development."*

7.43 For completeness the applicant should have included Table 7-45 'Summary of Residual Impacts-Differences between minimum and maximum development scenarios' within Chapter 21 of the ES as this provides a clearer and more concise summary of the differences between the two schemes and why the impact of both the proposed and LDSs are the same.

Summary of Clarifications Required from Applicant

Applicant to confirm why the range of geographic data including ward, super output areas and postcode has been excluded from the baseline information.

Applicant to confirm why the baseline information on education includes data relating to school provision in the London Borough of Islington.

Applicant to provide revised information on the availability of surplus school places.

The Applicant to confirm whether they will be seeking to meet the LBTH affordable housing target offsite if either the proposed or LDS options are implemented.

Applicant to confirm their approach to phasing of social housing provision for both the Proposed and LDSs.

The Applicant is to confirm why mitigation of the effects on healthcare through the provision of offsite provision or financial contribution has not been provided for both the Proposed and LDSs.

The Applicant is to confirm why their assessment of effects on health during the operation of the LDS is only based on the provision of one additional GP when provision within the Proposed and LDSs includes floorspace for two GPs.

Applicant to reconsider the impact on health for the Proposed and LDSs without the implementation of mitigation.

Clarification should be provided on where these figures in Paragraph 7.134 have been taken from.

Additional information is required as to how the figures used in the ES have been calculated (in relation to the development specification).

Additional information is required to establish how 59 units will provide the required 10% affordable housing.

The applicant needs to provide an explanation of how B and G will be split between LBTH and LBH.

Clarification is requested on how the applicant has reached the conclusion that the impacts from the proposed development and the LDS are broadly the same.

Child playspace for LBTH should be recalculated using the Council's Planning Obligations SPD.

Summary of Potential Regulation 22 Information Requests to be made to Applicant

Applicant to update the assessment of baseline information for healthcare using whole time equivalent GP numbers.

The loss of the existing facilities should be assessed.

The maximum number of units per borough, and plot should also be provided.

Further information is required on how the unit sizes, tenure and assumptions regarding the number of habitable rooms have been established for both boroughs, to ensure that a worst case scenario has been assessed(this also applies to the LDS).

Further information is also required on how the number of units, size and tenure have been established, for both the detailed and outline, and LBH and LBTH elements (this also applies to the LDS).

Further information is required as to how operational employment floorspace has been calculated and how it relates back to the Development Specification for both the outline and detailed element, and LBTH and LBH (this also applies to the LDS).

Potential Planning Conditions

As per current practice.

Review of Revised ES

7.44 The baseline information has been updated to include new information on office and housing market profiles and local education provision. Owing to changes in the design, the assessment of effects has also been updated with revised information on employment, population, open space and spend.

7.45 Paragraph 7.134, provides new information on the size of the retail and office spaces. However, these are given in Net Internal Area (NIA) as opposed to Gross Internal Area (GIA), which is inconsistent with early chapters of the ES. As requested as part of the review of the original ES, clarification is sought as to how these figures relate back to the Development Specifications.

7.46 Tables 7.21-7.26 and 7.29-7.31 have been revised to present new information on the accommodation schedules and population. Tables 7.22 and 7.23 represent the minimum development scenario, while Tables 7.30 and 7.31 present the maximum development scenarios.

7.47 Under the minimum development scenario, the Applicant has calculated that there will be 1,267 people within LBTH and 2,162 people in the overall proposed development. Under the maximum development scenario there will be 1,455 people within LBTH and 2,351 overall in the proposed development.

7.48 The section on affordable housing has been updated. The percentage of affordable housing remains unchanged from the figures presented in the original ES. The Revised ES does not address the original clarifications regarding information on the additional provision of affordable housing and phasing of affordable housing. Therefore requests for further information on these issues remain as set out in the review of the original ES.

7.49 The assessment of effects upon health has been updated with revised population figures. However, the Applicant has not taken into account the clarifications requested against the original information set out in the ES. Therefore further information as stated above in paragraphs 7.19-7.21 is sought.

7.50 The assessment of open space has been updated with revised population information. A total of 80,214m^2 of open space is required to meet residential and employment needs. The proposed development will provide a total of 22,642m^2 of open space, 11,040m^2 of private realm and 4,053 m^2 commercial private space. Paragraph 7.184 provides information on the components which will make up the open and private spaces and their sizes. Clarification is sought to confirm the correct size for the components making up the private space provision as they do not total the overall figure of 11,040m^2.

7.51 Similarly, and as with the original ES, the Applicant has stated that '*the space is likely to be sufficient for the specific types of users who will access the area at various times during the day*' and as such, the conclusion to the original ES remains unchanged. Therefore, similarly to the original ES, the conclusion of the assessment of effects of the proposed development upon open space is considered inappropriate as the open space provision is under the required amount to meet LBTH and LBH policy requirements.

7.52 The child playspace assessment has been revised with new figures presented in Tables 7.41-7.43. The required 10m^2 has been used in the calculations, however it should be noted by the Applicant that the Council's Planning Obligations SPD should be used in determining need instead of the GLA's SPG guidance.

7.53 Under the maximum development scenario, there will be 131 children requiring 1,310m^2 play space. The development will deliver 228m^2 of formal play space. The Applicant considers the shortfall to be made up from *"several considerably larger areas of payable space within the Goodsyard Gardens, including 'natural play' spaces…integrated play spaces… and educational play spaces"*.

Worst Case Scenario

7.54 Similar to the original ES, it is considered that the assessment of housing and affordable housing should have been based on the minimum development to assess the worst case scenario i.e. the least number of new homes.

Limited Development Scenario

7.55 Similar to the original ES the Applicant considers the magnitude of impacts to remain the same during both phases of the development as set out in the Revised ES Volume 1: Chapter 7: Socio-economics. It is not clear how this conclusion has been reached. Clarification is sought to confirm how the effects have been deemed to be the same given the differences between the proposed development and the LDS.

7.56 In line with the original, ES, the Applicant states that "*all residual impacts for the Limited Development Scenario have been assessed as being the same as those for the Proposed Development*." In Table 17 of Appendix K, the residual effects for health have been identified as being of minor beneficial long term permanent effect at the local level. However, this does not correlate with Table 7-44 in the Revised ES, where they are reported as being negligible beneficial long term temporary effect at the local level. Clarification is sought to confirm the correct conclusion to the effects to the proposed and LDS upon health.

Summary of Clarifications Required from Applicant
NB - Applicant needs to provide responses to clarifications and potential Regulation 22 requests made on the original ES – see above and Section 23, which identifies where further information is still required. Clarification is sought to confirm the correct size for the components making up the private space provision. Applicant to confirm the correct conclusion on the effects of the maximum and LDS upon health.
Summary of Potential Regulation 22 Information Requests to be made to Applicant
None
Potential Planning Conditions
None.

8 Review of Chapter 8: Ground Conditions

Scope of EIA

8.1 The scope of the EIA is adequate and reflects the EIA Scoping Opinion.

Baseline

8.2 The baseline is established by reference to a Landmark Envirocheck report and desk study and the results of previous investigations. However, the Applicant proposes to undertake further investigations in areas not previously covered due to access problems and the results of the new investigation should be combined with the earlier data into an updated quantitative risk assessment.

Assessment

8.3 The approach to the assessment, the methodology adopted, significance criteria and the conceptual model are all in line with current good practice.

8.4 Previous investigations have shown that there were a number of exceedances of the guideline value for lead. The applicants should clarify whether the guideline value used was that in effect at the time of the previous investigations (2008) or is a newly established or re-established value.

8.5 Paragraph 8.131 states *"Future site users are considered to have a moderate sensitivity due to the primarily commercial/residential end use without gardens"*. Table 8-8 however states that 'Human Health – Proposed Development End Users' are high sensitivity receptors. An explanation should be provided as to why the future site users are not high sensitivity.

Secondary, Cumulative, and Combined Impacts

8.6 These are considered to an appropriate extent.

Mitigation and Management

8.7 A reasonably comprehensive set of mitigation measures is proposed for inclusion in an environmental management plan. However, further intrusive investigations are planned. Furthermore, the previous ground investigations and remedial strategy are now some six years old. While it is acceptable to use the data they should be incorporated into an updated risk assessment report and used to inform an up to date remedial strategy for the site. These should be secured through planning conditions.

8.8 The previous investigations found that the risk from ground gases was low and therefore did not specify particular mitigation measures. The current ES states that mitigation will be incorporated where required (8.146). The Applicant should clarify what criteria will be used to establish whether mitigation will be required (presumably CIRIA C665) and set this out in the remedial strategy.

Worst Case Scenario

8.9 Paragraph 8.158 states *"The approach to the ground conditions assessment focuses on the site area and does not differentiate between the outline and detailed components or consider the scale or layout of the massing. Therefore the ground conditions assessment does not apply either the maximum or minimum building envelope as it does not have any relevance to the assessment"*.

8.10 The Development Specification does not stipulate the depth of the basement, but plan BGY11-PA-03-010 maximum development basement levels. Confirmation is required that the maximum development basement levels have been assessed with respect to ground conditions.

8.11 The maximum building envelope is also likely to require deeper building foundations e.g. deeper piling. Confirmation should be provided that the worst case scenario has been assessed.

Non-Technical Summary

8.12 This is a reasonable reflection of the main assessment.

Limited Development Scenario

8.13 The baseline conditions and the assessment of impacts for the LDS are as for the full development. The significance of effects pre- and post-mitigation are the same and the mitigation measures required would be broadly the same for both development scenarios.

8.14 The overall findings of the LDS do not differ from the main development scenario.

8.15 Chapter 21 is an accurate summary of the more detailed assessment in Appendix K insofar as impacts on ground conditions are concerned.

Summary of Clarifications Required from Applicant
The origin of the guideline value used for lead, with an updated value to be provided if appropriate. The criteria to be used for assessing the need for remedial measures for gas in the ground. An explanation should be provided as to why the future site users are not high sensitivity.
Summary of Potential Regulation 22 Information Requests to be made to Applicant
Confirmation is required that the maximum development basement levels have been assessed with respect to ground conditions. Confirmation should be provided that the worst case scenario has been assessed with respect to building foundations.
Potential Planning Conditions
An updated quantitative risk assessment report to be submitted for approval by LBTH prior to commencement of works. An updated detailed remedial strategy to be submitted for approval by LBTH prior to commencement of works. Verification reports should also be required, but due to the scale of development, these can be submitted individually for each phase of the works.

Review of Revised ES

8.16 The ground conditions chapter is predominantly unchanged apart from some minor amendments to reflect design changes from the original ES.

8.17 The conclusions of the assessment remain unchanged.

8.18 Specific requests for clarification and further information on the original ES chapter do not appear to have been addressed in this chapter and therefore remain as above.

Limited Development Scenario

8.19 The conclusions drawn in respect of the LDS in the original assessment remain unchanged in the Revised ES.

Summary of Clarifications Required from Applicant
NB - Applicant needs to provide responses to clarifications and potential Regulation 22 requests made on the original ES – see above and Section 23, which identifies where further information is still required.
Summary of Potential Regulation 22 Information Requests to be made to Applicant
As above.
Potential Planning Conditions
As above.

9 Review of Chapter 9: Traffic and Transport

Scope of EIA

9.1 The LBTH and LBH EIA Scoping Opinion states the chapter should assess the effect the development will have on accidents and safety (paragraph 4.70). Although the Applicant has provided a baseline of road safety, they have not provided an assessment of the proposed development on this topic. This should be provided.

9.2 Paragraph 4.73 of the EIA Scoping Opinion states that the *"impacts of trip generation movements on the road network should be shown as a percentage increase in trips over the baseline, and the impact on junction capacity"*. Although the chapter provides an assessment of construction movements as a percentage over the baseline, it does not provide an assessment of the construction impact on junction capacity. The chapter also does not show the impact of operational trip movements as a percentage increase over the baseline or the impact on junction capacity. The Applicant should provide: an assessment of the impact of construction trips on junction capacity; impact of operational trips as shown as a percentage increase over the baseline; and operational trips impact on junction capacity.

9.3 Paragraph 4.74 of the EIA Scoping Opinion states that the construction traffic assessment should consider construction staff movements. This has not been provided. The Applicant should provide this assessment.

9.4 Paragraph 4.77 of the EIA Scoping Opinion states that water transport should be considered as part of the assessment. Although the chapter provides text scoping out water transport during construction, an assessment or text scoping out water transport during the operational phase of the development has not been provided. The Applicant should provide an assessment of the operational impact on water transport, or confirm that it has been scoped out.

9.5 The scope of the assessment is otherwise considered acceptable.

Baseline

9.6 The method for establishing the baseline is set out in paragraph 9.63 and the baseline itself is set out in paragraphs 9.123-9.180 which includes: existing site use; pedestrian network and facilities; cycle network and facilities; public transport services (including bus, overground, underground and public transport accessibility level (PTAL)) and the local road network.

9.7 The baseline is considered acceptable.

Assessment

9.8 The assessment area is set out in paragraphs 9.64-9.74 and the method for determining trip generation is set out in paragraphs 9.75-9.101. The methodology for determining demolition and construction impacts is set out in paragraphs 9.102-9.111 and the significance criteria are set out in paragraphs 9.112-9.120.

9.9 Paragraph 9.208 provides the significance of effect of HGV movements on Bethnal Green Road, Commercial Street and Shoreditch High Street. However, it does not provide the significance of the effect on Sclater Street. This should be provided.

9.10 Paragraph 9.237 refers to tables 3.8 and 3.9. The paragraph should refer to tables 9.38 and 9.39.

Secondary, Cumulative, and Combined Impacts

9.11 The Type 2 effects assessment is set out in paragraphs 9.272-9.288. The assessment is considered acceptable.

Mitigation and Management

9.12 Reference is made to the implementation of a Construction Method Statement (CMS). However, there is no reference to the implementation of any operational mitigation/ management measures such as a Travel Plan or a Delivery and Servicing Plan. Clarification is required to confirm if any mitigation/ management measures are proposed for the operational phase of the development.

Worst Case Scenario

9.13 As stipulated earlier in this document, the assumptions used to generate the population yield should be confirmed to ensure that the worst case scenario has been assessed with respect to traffic generation.

Non-Technical Summary

9.14 The NTS states that some pedestrian links close to the site will see moderate adverse permanent impacts. However, the ES states that some links will see major and moderate adverse impacts. The NTS should be revised to accurately reflect the impacts predicted in the ES.

Limited Development Scenario

9.15 The assessment methodology, effect significance criteria and baseline conditions applied to this Scenario remain as per chapter 9 of the ES.

9.16 As the assessment of the scenario follows the same format as chapter 9 the following clarifications are required for the LDS:

- provide an assessment of the development's impact on accidents and safety;
- provide an assessment of construction traffic impacts on junction capacity;
- provide the impact of operational trips as a percentage increase over the baseline and an assessment of operational traffic impacts on junction capacity;
- provide an assessment of construction staff movements;
- provide an assessment of the operational development's impacts on water transport;
- provide the significance of effect of HGV movements on Sclater Street; and
- clarify if there any mitigation/ management measures proposed for the operational phase of the development.

9.17 In addition to the above, Figure 1 has been omitted from the assessment (see paragraph 130). This should be provided.

9.18 Paragraph 131 states *"the assessment prepared for the outline and detailed components of the Limited Development Scenario demonstrate…". This should state "maximum build out scenario"* not "*Limited Development Scenario*" as plots A, B F and G are not part of the Limited Development Scenario.

9.19 Paragraph 132 refers to figure 9.14 of the ES. This should state figure 9.5.

9.20 Paragraph 144 states *"some pedestrian links close to the site will see moderate adverse permanent impacts…"*. However, paragraph 138 states some links will experience major or moderate increases in pedestrian flows. Clarification is required to confirm if major and moderate increases in pedestrian flows are considered to be moderate adverse impacts or should they be recorded as major and moderate adverse impacts.

9.21 Paragraph 154 sets out the assessment on rail services but refers to *"a reduction by 57 two-way bus trips compared to the maximum build out scenario"*. Clarification is required to confirm if this should state *"rail"*.

9.22 Paragraph 920 of Appendix K states the Scenario provides an improvement for pedestrian movement and capacity and pedestrian delay from minor adverse impacts to minor beneficial impacts. However, paragraphs 144 and 146 states these impacts are minor adverse. Clarification is required to confirm the Scenario's impact on pedestrian movement and capacity and pedestrian delay.

9.23 Paragraph 21.23 of Chapter 21 of the ES states the *"difference between the two development scenarios (i.e. Proposed Development and Limited Development Scenario is as follows"*. However, paragraphs 21.24-21.25 do not state the difference between the scenarios, only the effects of the LDS.

9.24 The chapter should be revised to provide the difference between the two scenarios as per paragraph 21.23.

Summary of Clarifications Required from Applicant
Clarify if there are any mitigation/ management measures proposed for the operational phase of the development.
The NTS should be revised to accurately reflect the impacts on pedestrian movement and capacity as predicted in the ES.
Clarify the LDS's impacts on pedestrian movement and capacity and pedestrian delay.
Provide Figure 1 of Appendix K.
Paragraph 131 of Appendix K should be revised to state *"the assessment prepared for the outline and detailed components of the maximum build out scenario…"*
Paragraph 132 of Appendix K should state figure 9.5, not 9.14.
Clarify if the impact recorded in paragraph 144 of Appendix K should be *"major and moderate"*.
Clarify if paragraph 154 of Appendix K should state *"a reduction by 57 two-way rail trips compared with the maximum build out scenario"*.
Chapter 21 should be revised to detail the difference between the proposed development and the LDS as per paragraph 21.23.
Summary of Potential Regulation 22 Information Requests to be made to Applicant
Provide an assessment of the development's impact on accidents and safety.
Provide an assessment of construction traffic impacts on junction capacity.
Provide the impact of operational trips as a percentage increase over the baseline and an assessment of operational traffic impacts on junction capacity.
Provide an assessment of construction staff movements.
Provide an assessment of the operational development's impacts on water transport.
Provide the significance of effect of HGV movements on Sclater Street.
The assumptions used to generate the population yield should be confirmed to ensure that the worst case scenario has been assessed with respect to traffic generation.
The LDS should provide the information requested as set out in paragraph 9.15 of this Report.

Potential Planning Conditions
As per current practice.

Review of Revised ES

9.25 The Revised ES incorporates the publication of the Further Alterations to the London Plan which was published in March 2015 and the Minor Alterations to the London Plan which was published for consultation in May 2015. This is considered acceptable.

9.26 Paragraphs 9.61 and 9.189 set out the revised maximum build out. Below is a comparison between paragraph 9.61 and paragraph 4.10 of The Proposed Development Chapter:

Use Class	Paragraph 9.61 and 9.189	Paragraph 4.10
Residential (C3)	1,356 units	1,356 units
Business (B1)	81,127 sqm	65,859 sqm
Retail Use (A1, A2, A4 and A5)	20,937 sqm	17,499 sqm
Non-residential institutions (D1)	112 sqm	495 sqm
Assembly and Leisure (D2)	689 sqm	661 sqm
Sui Generis	37 sqm	36 sqm

9.27 It is unclear why the above two paragraphs differ. Confirmation is sought on which is the correct figure, and that these have been used where required in the assessment.

9.28 The Revised ES has assessed the amendments to the scheme and the effects recorded have not changed since the submission of the Original ES. It is therefore considered that the effects of the Original ES remain valid.

9.29 As noted above, paragraph 5.55 of ES Chapter 5: Demolition and Construction refers to peak vehicle movements of 102 vehicles per day in 2022/2023 when Plots A, B, F and G are in construction. This is inconsistent with paragraph 9.112 of the Traffic and Transport chapter which refers to a peak of 100 movements per day in 2023 when plots A, B, F and G are in construction. This is noted as a new clarification under Chapter 5 above.

Limited Development Scenario

9.30 Paragraph 132 of Appendix K states the LDS comprises the following quantums: residential (C3) – 774 units; business (B1) – 593sqm; retail use (A1, A2, A3 and A5) – 12,434sqm; non-residential institutions (D1) – 112sqm; assembly and leisure (D2) – 689sqm and sui generis – 37sqm. However, the quantums set out in paragraph 11 and table 2 are as follows: residential (C3) – 774 units; business (B1) – 16,670sqm; retail use (A1, A2, A3 and A5) – 10,984sqm; non-residential institution use (D1) – 495sqm; assembly and leisure (D2) – 661sqm and sui generis – 36sqm. Clarification is required to confirm why the quantums set out in paragraph 132 of Appendix K differ from paragraph 11 and table 2 of Appendix K.

9.31 The LDS has assessed the amendments to the scheme and the effects recorded have not changed since the submission of the original assessment of the LDS. It is there considered that the effects recorded in the original Appendix K remain valid.

Summary of Clarifications Required from Applicant
NB - Applicant needs to provide responses to clarifications and potential Regulation 22 requests made on the original ES – see above and Section 23, which identifies where further information is still required. Clarification is required to confirm why the quantums set out in paragraph 9.61 and 9.189 differ from paragraph 4.10.
Summary of Potential Regulation 22 Information Requests to be made to Applicant
None.
Potential Planning Conditions
As above.

10 Review of Chapter 10: Wind Microclimate

Scope of EIA

10.1 In accordance with best practice guidance and the EIA Scoping Opinion, wind tunnel modelling has been completed for the proposed development as it is over 10 storeys. Four scenarios were tested; configuration 1 baseline, configuration 2 demolition and construction, configuration 3 baseline + proposed development, and configuration 4 baseline + proposed development + cumulatives. The configurations were tested without planting and landscaping and were based on the maximum parameters. A qualitative assessment of the minimum parameters development has also been completed.

Baseline

10.2 A summary of relevant planning policies and guidance is provided.

10.3 Configuration 1 provides the modelled baseline conditions simulated in the wind tunnel, with meteorological data obtained from the UK Met Office for Heathrow, Gatwick and Stansted airports.

Assessment

10.4 The wind tunnel tests have been conducted on a model devoid of trees or landscape detail in order to obtain conservative results, which is considered the correct approach.

10.5 The widely accepted Lawson Comfort Criteria have been used to assess the impacts. The method used to determine the significance of the impacts is set out from paragraph 10.43 and in Table 10.3 i.e. a moderate adverse impact is one where wind conditions are two-steps windier than desired.

10.6 The target wind conditions for various uses e.g. private balconies and terraces have been described.

10.7 The baseline conditions are relatively calm, with most areas suitable for sitting and standing/entrance across the majority of the site, with the exception of four locations at the junction of Sclater Street and Cygnet Street which are suitable for leisure walking in the windiest season.

10.8 Configuration 2, was considered to be a suitable timeslice to test for the demolition and construction phase, as the number of plots built out (C and H) provided a scenario sufficiently different to the final build to assess the impacts. The frontage onto Sclater Street experiences windier conditions with a number of locations suitable for leisure walking during the windiest season. The wind conditions at locations 150 and 160 are considered to be moderate adverse as these terrace/rooftop locations experience leisure walking conditions in the summer season. During the summer season, locations elsewhere are suitable for sitting or standing/entrance.

10.9 Professional judgement has been used to assess the impacts during construction of the remaining phases.

10.10 With the completed development in place, a number of locations experience adverse impacts. Thoroughfare locations 60 and 80 are suitable for business walking and location 25 is suitable for car-parking (minor adverse and moderate adverse respectively). Entrance location 7 is windier than desired with leisure walking conditions, and locations 160 (terrace) and 150 (balcony) are only suitable for leisure walking during the summer season. The rooftop locations 163-165 are

similarly only suitable for leisure walking during the summer season, and therefore a moderate adverse impact.

10.11 The minimum parameters scenario would result in a reduction in heights and massing of some of the buildings. With the same mitigation measures implemented as for the maximum parameter development, the residual effects are considered to be the same.

Secondary, Cumulative, and Combined Impacts

10.12 The fourth configuration includes cumulative developments. The cumulative schemes selected were based on their proximity to the site, and therefore ability to influence conditions. The wind conditions in the cumulative scenario are similar to those with the proposed development, however a number of locations become calmer, and a number of locations become 1-category windier (the majority from sitting to standing/entrance). However, no additional mitigation measures to those required for the proposed development itself, have been identified.

Mitigation and Management

10.13 A number of mitigation measures are proposed, and paragraph 10.90 states that these has been tested in the wind tunnel for their effectiveness against 'windier than desired' conditions. However, the results of these tests are not presented in the ES chapter or the technical appendix. Paragraph 10.90 also states that the mitigation measures for the outline component of the scheme will be further defined at the detailed design stage and provided in the reserved matters applications. To allow the residual impacts to be verified, the results of the wind tunnel tests with the mitigation measures in place should be provided.

10.14 The windiest balcony locations (Plot C west - facing) will have full-height side screens on both sides to shelter. A 2 m glazed screen will be installed on the south edge of the podium level of Plot C. The balustrade heights will be increased to 1.8 m on the roof terraces of Plot C.

10.15 Two rows of vertical porous screens will be placed north of Plots F and G, and overhead porous baffle will be suspended at location 60 at the London Overground, vertical side screens will provide shelter at entrance location 7, entrances to Plots A and B will be recessed or vertical side-screens provided, balconies on the southwest side of Plots F and G will have full-height screens where necessary, and landscaping and soft planting are considered sufficient for all other locations.

Worst Case Scenario

Detailed

10.16 The detailed element has fixed entrances etc. which have been assessed as appropriate.

Outline

10.17 Paragraph 10.110 states *"The assessment has been based on the maximum parameters for the outline components of the Proposed Development as these present the worst case scenario with regards to likely significant effects"*. Paragraph 10.135 then goes on to state *"locations of entrances to the outline plots (A, B, D and E) are not yet fixed…The local wind conditions around the currently outline plots will be reassessed at detail design".*

10.18 Further information should be provided on how the 'potential entrances' and other locations for the outline element have been determined to ensure the worst case scenario has been assessed.

Non-Technical Summary

10.19 The NTS is generally acceptable, however it alludes to five tests having been undertaken in the wind tunnel model, whereas only four were. Two construction tests were not completed; only one and then further assessment using professional judgement. It is also unclear as to why the NTS reports that a minor adverse effect will remain at the London Overground thoroughfare, whilst the Residual Impacts summary in the main ES chapter does not report this.

Limited Development Scenario

10.20 A further two configurations have been tested in the wind tunnel model; configuration 5 baseline + LDS (Plots C, D, E, H, I and J) and configuration 6 baseline + LDS + cumulatives. A minor adverse impact is identified at thoroughfare location 80 which is suitable for business walking, and terrace and balcony locations 160 and 150 which are suitable for leisure walking (moderate adverse). Rooftop locations 163 and 164 also experience moderate adverse impacts being only suitable for leisure walking.

10.21 The same mitigation measures as detailed for the main assessment, remain applicable for the necessary plots in the LDS.

10.22 Configuration 6 presents the LDS and cumulative scenario, with the majority of locations becoming calmer, and only location 106 becoming 1-category windier (although still suitable for intended use). No additional mitigation measures are required for the LDS.

Summary of Clarifications Required from Applicant
Provide a figure showing the location of surrounding receptors.
Summary of Potential Regulation 22 Information Requests to be made to Applicant
Provide model results for configuration with mitigation measures in place so that residual impacts can be verified. Update NTS to revise number of configurations tested in wind tunnel model and remove reference to residual minor adverse impact at London Overground thoroughfare. Further information should be provided on how the 'potential entrances' and other locations for the outline element have been determined to ensure the worst case scenario has been assessed.
Potential Planning Conditions
Complete further wind tunnel model runs as part of reserved matters applications, including a configuration with the mitigation measures in place.

Review of Revised ES

10.23 The Wind chapter in the Revised ES has been updated to reflect recent policy changes. Configurations 2, 3 and 4 have been retested in the wind tunnel, with effects on wind conditions identified.

10.24 Under Configuration 2, Plot C's rooftop terraces at receptors 141 and 160 are suitable for leisure walking, and represent a moderate adverse effect on wind conditions. Receptors 138, 141, 153 and 160 experiences strong winds, and are identified as requiring mitigation.

10.25 Under Configuration 3, thoroughfare receptors 52 and 80 are suitable for business walking, and represent a minor adverse effect on wind conditions. Rooftop terrace receptor 141 is suitable for leisure walking, and represents a moderate adverse effect. Balcony receptors 186, 176, 178 and 179 areas suitable for standing, and are classified as having potential minor adverse effects.

Rooftop areas receptors 163-165 and 167 are suitable for leisure walking during the summer, and so represent a moderate adverse effect at terrace level. Receptors 134, 140 and 166 are located on terraces and experience strong winds (exceed B6 threshold) – mitigation has been advised here. Receptors 52 and 80 (thoroughfares), and receptors 135, 141, 160, 163, 165 and 167 (terraces) exceed the B7 and B8 threshold, and would benefit from mitigation.

10.26 Under Configuration 4, additional cumulative buildings have been included in the wind tunnel testing. Thoroughfare receptor 80 is suitable for business walking, and represent an impact of minor adverse significance during the windiest season. Locations of entrances to the outline plots (A, B, D, E and K) may experience leisure walking conditions, and so represent a minor adverse effect on wind conditions. Rooftop terrace receptor 141, is suitable for leisure walking, and so signifies a moderate adverse effect. Balcony receptor 176 is suitable for standing, and so is classified as having a minor adverse impact on wind conditions. Receptors 134, 140, 144, 160, 174 and 176 experience conditions which exceed B6, and will require mitigation. B7 is exceeded at receptor 80 (thoroughfare) and receptor 141, 163 (which also exceeded B8), 164, 165 and 167 (amenity spaces on terraces), and would require mitigation.

10.27 Additional mitigation measures have been suggested. Mitigation at balconies at receptors 176, 178 and 179 has been suggested in the form of full-height side screens on the "open" east side of the balconies. Additional localised screening or an increase in balustrade height to 1.8m at rooftop receptors 174 and 182.

10.28 Some specific requests for clarification and further information on the original ES chapter do not appear to have been addressed in this chapter as noted below.

Limited Development Scenario

10.29 An additional Configuration was assessed in the wind tunnel: Configuration 5 – Limited Development Scenario Plots C, D, E, H, I, J (Limited Development Scenario) with existing surrounding buildings. Potential cumulative effects were assessed using professional judgement, informed by results from Configuration 4.

10.30 Receptor 80 (thoroughfare) is suitable for business walking, and so represents a minor adverse effect during the windiest season. Plot C rooftop terrace receptor 141 and 160 are suitable for leisure walking during the summer, and so signify a moderate adverse effect. Plot D and E rooftop terrace receptors 163, 164, 165 and 167 are suitable for leisure walking, and so represent a moderate adverse effect at terrace level.

10.31 Receptors 138, 140 and 144 are located within amenity areas at terrace level and experience wind conditions in exceedance of the B6 threshold. Mitigation will be required. B7 is exceeded at receptor 80 (thoroughfare), receptors 141, 160 and 163 (which also exceeded B8), 164, 165 and 167 (amenity spaces of terraces), would also require mitigation.

10.32 A description of suitable mitigation measures has not been provided, and this should be provided.

10.33 Paragraph 208 of the Limited Development Scenario, describes results from Configuration 6 – clarification is required as to whether this is an additional configuration tested in the wind tunnel.

Summary of Clarifications Required from Applicant
NB - Applicant needs to provide responses to clarifications and potential Regulation 22 requests made on the original ES – see above and Section 23, which identifies where further information is still required. Provide a description of the mitigation measures to be implemented under Configuration 5. Confirm whether a Configuration 6 was tested in the wind tunnel, and the nature/results of this assessment.
Summary of Potential Regulation 22 Information Requests to be made to Applicant

As above.
Potential Planning Conditions
As above.

11 Review of Chapter 11: Daylight, Sunlight, Overshadowing, Solar Glare and Light Pollution

Scope of EIA

11.1 The scope of the EIA is generally in accordance with the EIA Scoping Opinion in that it includes assessment of impacts on daylight and sunlight at existing residential receptors, internal daylighting, sun on the ground and overshadowing, light impacts and solar glare. Cumulative impacts of relevant schemes are also included. However, the impacts of the proposed development on its own and in combination with cumulative schemes on the cumulative schemes themselves have not been assessed, which is not in accordance with the requirements of paragraph 4.87 of the EIA Scoping Opinion, although the completed Telford Homes and 7 Brick Lane schemes are included as existing receptors (and therefore as part of the baseline) because they were under construction at the time of the assessment.

11.2 Construction phase impacts are considered qualitatively only. This is considered acceptable as during construction, impacts will gradually increase until the proposed development is fully built out.

Baseline

11.3 The assessment of daylight and sunlight for existing residential receptors is made against existing baseline conditions, which are those of a largely cleared site. The Applicant notes that existing levels of daylight and sunlight are therefore much higher than would otherwise be the case for dense urban development. Despite this, some properties/windows do not currently meet VSC and NSL criteria, notably some buildings in Sclater Street, Brick Lane and Redchurch Street.

Assessment

11.4 There are no issues with the methodology used for the assessment, which is in line with BRE guidance and current good practice. The significance criteria adopted are clearly set out and in line with current practice.

11.5 An alternative set of significance criteria based on expected VSC levels for each building based on an average value and using the IPG massing for the site are provided.

11.6 The tables summarising the impacts of the proposed development on VSC and NSL levels helpfully highlight negligible and minor adverse impacts (i.e. those where one or more windows/rooms experience a reduction of less than 20%). The Applicant notes that minor adverse impacts are to be expected in a dense urban context and are not discussed further. Where impacts are moderate adverse or worse, the daylight levels for each property are discussed in detail.

11.7 Some of significance ratings for properties overall seem unduly conservative. For example, at 104 – 106 Sclater Street, 2 of 6 windows lose less than 20% of VSC, but all comply with NSL criteria and half of the habitable rooms comply with an alternative VSC target of 15%. On the basis of the VSC criteria, the impacts would be moderate adverse. However, on the basis of the NSL criteria, they would be negligible. It is often the case that where there is compliance with the NSL criteria when the test is applied in sequence with the VSC test the effects of the proposed development on daylight levels are considered acceptable even where there is a low level of compliance with the VSC criteria. Nevertheless, the overall daylight impact significance for these

rooms/windows is rated moderate adverse. However, the assessment of significance appears to be applied consistently across all receptors assessed.

11.8 Impacts on daylight levels at a number of properties equating to 14% of the total are rated moderate to major and major adverse.

11.9 There are also a number of areas which will experience a major adverse impact in terms of sun on the ground and overshadowing.

11.10 Internal daylighting levels are good, with over 86% of rooms in respect of detailed elements of the scheme meeting ADF criteria and good potential for the outline elements. External areas within the development also have good sun or ground potential.

Secondary, Cumulative, and Combined Impacts

11.11 Cumulative impacts have been assessed, although the cumulative schemes themselves are not assessed as receptors (as stated above).

11.12 Of those properties assessed, 25% would experience major adverse impacts in terms of VSC, 21% in terms of NSL and 43% in terms of sunlight levels (APSH).

Mitigation and Management

11.13 No additional mitigation of daylight, sunlight, sun on ground or overshadowing impacts is available over and above that inherent in the design.

Worst Case Scenario

Detailed

11.14 The detailed element has fixed heights which have been assessed as appropriate. The internal room layouts are fixed and therefore have been assed as appropriate.

Outline

11.15 Paragraph 11.836 states "*The assessment has been based on the maximum parameters for the outline development as these present the worst case scenario with regards to likely significant impacts". This is considered to be the appropriate approach.*

11.16 The internal daylight and sunlight assessment for the outline element is provided in Appendix 7, Section 3 acknowledges *"Since this is an outline application, the façade details, window locations and room layouts are not yet defined".* The methodology adopted establishes how to optimise the potential for good daylight and sunlight, and is considered acceptable. Further testing will be required at the reserved matters stage when detailed information is available on the internal room layout etc.

Non-Technical Summary

11.17 The NTS is a reasonable summary of the assessment.

Limited Development Scenario

11.18 The Appendix to the ES which presents the assessment of the LDS includes a full assessment of the daylight and sunlight impacts of the LDS which parallels that of the full development. Although impacts would be somewhat reduced in the LDS, the overall significance remains the

same with significant numbers of properties experiencing major adverse impacts in terms of daylight and sunlight and open spaces experiencing major adverse impacts in terms of sun on the ground and overshadowing.

11.19 Only the scale of the impacts reduces. The number of properties experiencing a moderate to major or major impact in terms of daylight levels reduces from 14% of the total assessed to 6% in the LDS scenario.

11.20 Chapter 21 provides only a brief summary of the LDS impacts.

Summary of Clarifications Required from Applicant
The reference to four scenarios in paragraph 11.33 should be clarified. The reference to three baselines in paragraph 11.36 should be clarified.
Summary of Potential Regulation 22 Information Requests to be made to Applicant
An assessment of the impacts of the proposed development on its own and in combination with cumulative schemes on the cumulative schemes is required, in accordance with the requirements of paragraph 4.87 of the EIA Scoping Opinion.
Potential Planning Conditions
Further testing will be required at the reserved matters stage when detailed information is available on the internal room layout etc.

Review of Revised ES

11.21 The Revised ES has been amended to reflect scheme design changes and all daylight sunlight and overshadowing data have been re-modelled and the results set out. The residual impacts are summarised in Table 11.8 on page 11-54.

11.22 Although very broadly the conclusions of the assessment are similar, there are some changes. The number of receptors experiencing a moderate to major or major effect in terms of daylight reduction reduces from 14% in the original assessment to 10% in the Revised ES.

11.23 Although some of the issues with the original ES have been addressed, not all of them have. This relates to the absence of an assessment of the impact of the proposed development on cumulative schemes.

Limited Development Scenario

11.24 The conclusions drawn in respect of the LDS in the original assessment remain unchanged in the Revised ES.

Summary of Clarifications Required from Applicant
NB - Applicant needs to provide responses to clarifications and potential Regulation 22 requests made on the original ES – see above and Section 23, which identifies where further information is still required.
Summary of Potential Regulation 22 Information Requests to be made to Applicant

As above.
Potential Planning Conditions
None.

12 Review of Chapter 12: Air Quality

Scope of EIA

12.1 The scope of the assessment is comprehensive, and generally in accordance with the EIA Scoping Opinion, with the exception of the clarifications and potential Regulation 22s requested below. It considers demolition, construction and operational phases. The latter involves prediction of air quality impacts in 2028, the completion year for the development.

Baseline

12.2 The baseline is established by reference to Defra background air quality data, LBTH and LBH monitoring data and a diffusion tube survey undertaken in 2013 by the applicant in the vicinity of the site itself to supplement the two boroughs' data sets. This is considered robust. The current baseline is then modelled using standard methodology.

12.3 The "future baseline" ("do-nothing" scenario) modelling is based on a number of assumptions, including the following: "Conservative improvements in vehicle emissions have been assumed; Conservative year to year improvements in background pollutant concentrations have never assumed". This is unclear. More explanation of the assumptions is requested.

Assessment

12.4 There are no issues with the methodology used for the assessment nor the significance criteria, which are in accordance with established good practice.

12.5 Although there is no assessment of impacts on designated ecological receptors (paragraph 12.3), the assessment should indicate whether there are any local sites of ecological interest that could be affected by emissions.

12.6 Paragraph 12.209 states *"Minimum parameters for the outline component of the Proposed Development would result in marginally different (higher) heights for the exhaust flues for the proposed energy centre on Plot E"*. It is unclear how the flue would be higher if the building needs to remain within the minimum parameters – further explanation is required.

12.7 In view of the fact that the proposed development will contribute more than negligible concentrations of nitrogen dioxide to the ambient air quality and that the air quality objective for nitrogen dioxide is likely to be exceeded, the Applicant should undertake an "air quality neutral" assessment in line with the GLA's Supplementary Planning Guidance.

Secondary, Cumulative, and Combined Impacts

12.8 Cumulative impacts have been considered to an appropriate extent. They are inherent in the operational phase assessment.

Mitigation and Management

12.9 Paragraph 12.195 which addresses construction phase impacts states that "No further measures are suggested beyond which those best practice methods described in BRE (Ref. 12-41) and Mayor of London (Ref. 12-19) guidance." However, this appears to ignore the GLA guidance on

control of dust and emissions and the LBTH guidance on construction, both of which are referenced elsewhere in the chapter. Confirmation is sought that the latest GLA guidance will be followed.

Worst Case Scenario

12.10 As stipulated earlier in this document, the assumptions used to generate the population yield should be confirmed to ensure that the worst case scenario has been assessed with respect to air quality emissions from traffic.

12.11 Paragraph 13.58 states that the *"Proposed Development includes for the installation of the permanent energy centres in Plot C, Plot E and Plot F and G"*. The energy centres in the detailed elements of the proposed development (i.e. C, F and G) are fixed, and therefore have been appropriately assessed. Further information is required on how the location of the energy centre in the outline element (i.e. Plot E - 3 boilers and 1 CHP) has been determined to ensure that the worst case scenario has been assessed.

Non-Technical Summary

12.12 The non-technical summary is a reasonable reflection of the main assessment.

Limited Development Scenario

12.13 The Appendix on the LDS includes a re-assessment of the air quality impacts undertaken on the same basis as for the full development. The results of the assessment in terms of significance of impacts are unchanged for both construction and operational phases.

12.14 The contribution of the development to future nitrogen dioxide levels may vary very slightly, but there would still be exceedances of the Air Quality Objectives resulting in minor adverse effects. That being the case, the comments regarding air quality neutrality for the whole development would also apply to the LDS.

12.15 Chapter 21 summarises the findings that the LDS impacts would be more or less the same as those for the full development.

Summary of Clarifications Required from Applicant
Clarify whether there are any local sites of ecological interest that might be affected by dust emissions. Assumptions used for future baseline ("do-nothing" scenario) background air quality. Confirmation that GLA's 2013 guidance on dust control will be adopted as part of mitigation of construction phase impacts. Further explanation is required as to how the flue would be higher for the minimum parameters.
Summary of Potential Regulation 22 Information Requests to be made to Applicant

"Air Quality Neutral" assessment The assumptions used to generate the population yield should be confirmed to ensure that the worst case scenario has been assessed with respect to air quality emissions from traffic. Further information is required on how the location of the energy centre in the outline element (i.e. Plot E - 3 boilers and 1 CHP) has been determined to ensure that the worst case scenario has been assessed.
Potential Planning Conditions
As per current practice.

Review of Revised ES

12.16 The Air Quality chapter has been updated to reflect new policy developments. In particular, the requirement for an "Air Quality Neutral" (AQN) assessment has been incorporated and the demolition and construction phase assessment now reflects the new IAQM guidance, which is based on the GLA SPG.

12.17 The AQN results for transport are in compliance with guideline values. However, the AQN results for building emissions are marginal. Further information regarding what emissions controls could be adopted to bring them in line with AQN requirements is sought.

12.18 The modelling of emissions from traffic and building sources for the operational phase has been re-done and a new set of results provided. The assumptions regarding future baseline (do-nothing scenario) are conservative in that the 2032 background air quality is assumed to be that predicted for 2020 from the Defra database. This is likely to overstate air pollutant concentrations to some degree, but is considered to present a worst case scenario.

12.19 The new results show that increases in NO_2 are all imperceptible and therefore the effects are negligible with the exception of one receptor (R25) which is a committed development, where the increase is 0.5 µg/m^3 and the effect is minor adverse. The Applicant states that "*There is a strong presumption that committed development in locations of exceedances of the annual mean objective would have embedded mitigation measured incorporated into building design and layout to minimise the exposure of future occupants. Although the Proposed Development is predicted to increase NO_2 concentrations at this location by 0.5 µg/m^3, which represents a minor adverse change, the short term objective level is not breached. Therefore, the proposed mitigation measures at Receptor R25 should be sufficient to minimise exposure of occupants to the predicted increase in concentrations.*"

12.20 One clarification/information request relating to the previous ES appears not to have been addressed in relation to potential effects of dust emissions on sites of ecological interest.

Limited Development Scenario

12.21 The conclusions drawn in respect of the LDS in the original assessment remain unchanged in the Revised ES.

Summary of Clarifications Required from Applicant
NB - Applicant needs to provide responses to clarifications and potential Regulation 22 requests made on the original ES – see above and Section 23, which identifies where further information is still required.
Summary of Potential Regulation 22 Information Requests to be made to Applicant

Indicate what additional emissions controls would or could be adopted to bring building emissions in line with Air Quality Neutral Criteria.
Potential Planning Conditions
Agreement to be reached with LBTH regarding mitigation of building emissions to comply with AQN criteria.

13 Review of Chapter 13: Noise and Vibration

Scope of EIA

13.1 The assessment conforms to the LBTH Scoping Guidance on noise and vibration, and comments made in the EIA Scoping Opinion including ground-borne vibration.

Baseline

13.2 The baseline noise and vibration assessment was carried out at appropriate locations and over relevant time periods following the method required by LBTH's Environmental Health Department and baseline noise levels have been assigned to sensitive receptors.

Assessment

13.3 The assessment clearly establishes the magnitude and significance of the noise and vibration effects of the scheme during construction and operation. Consistent descriptions are used for impact assessment and all relevant national and local standards have been taken into account. The impact assessment has fully considered baseline levels.

13.4 Guidance on noise levels in external places is referred to in 13.70 but there seems to be no further assessment of the potential impacts.

Secondary, Cumulative, and Combined Impacts

13.5 Cumulative impacts of noise and vibration from developments at Silvwex House and 32 Bethnal Green Road have been considered but no significant effects are identified due to distance and screening separation and high ambient noise levels.

Mitigation and Management

13.6 Mitigation of ambient noise to meet internal noise standards in the proposed buildings is adequately described, giving details of acoustic insulation measures. Measures to control construction noise and vibration are described in some detail and should ensure minimal residual effect.

Worst Case Scenario

13.7 Paragraph 13.58 states that the "*assessment has been based on the maximum parameters for the outline components of the Proposed Development as these present the worst case scenario with regards to likely significant impacts"*. This is because this would generate less traffic and buildings would be located closer to noise sources.

13.8 As stipulated earlier in this document, the assumptions used to generate the population yield should be confirmed to ensure that the worst case scenario has been assessed with respect to noise from traffic.

13.9 Further information is required on how the location of the fixed plant in the outline element has been determined to ensure that the worst case scenario has been assessed.

Non-Technical Summary

13.10 The noise and vibration summary accurately reflects the findings of the assessment although there is no mention of the proposed acoustic insulation measures for the new buildings.

Limited Development Scenario

13.11 The noise and vibration assessment of the Limited Development Scenario is consistent with the assessment of the complete development with similar impacts identified.

Summary of Clarifications Required from Applicant
None.
Summary of Potential Regulation 22 Information Requests to be made to Applicant
Assessment of noise in external amenity areas for the Proposed Development and the Limited Development Scenario. The assumptions used to generate the population yield should be confirmed to ensure that the worst case scenario has been assessed with respect to noise from traffic.
Potential Planning Conditions
The piling method must be in line with Table 13-18. The operation of the proposed development must accord with Table 13-21. To achieve the internal noise levels specified above, external noise ingress must be controlled by the building facade.

Review of Revised ES

13.12 The main consideration in the Revised ES material relates to updated planning guidance and more detailed calculations of noise and vibration levels during construction and operation resulting from the scheme amendments.

13.13 The assessment of impacts is consistent with that provided in the original ES and results in the same conclusions on residual impacts.

13.14 There seems to be a difference in the impact descriptions in Table 13.11, referring to 'low medium and high' when compared to the descriptions in Table 13.10. This should be clarified.

13.15 Although criteria are described in 13.79, no further consideration of noise in amenity areas is given. This should be provided.

Limited Development Scenario

13.16 The LDS shows similar construction noise and vibration impacts to those described for the proposed development, therefore residual impacts would remain the same.

13.17 Operational traffic generation would be lower, implying reduced noise levels, however, the impact of the full development was negligible thus the same impact would apply to the limited scenario.

13.18 As for the proposed development, no assessment of noise in amenity areas is given.

Summary of Clarifications Required from Applicant
NB - Applicant needs to provide responses to clarifications and potential Regulation 22 requests made on the original ES – see above and Section 23, which identifies where further information is still required. Reasons for the impact descriptions in Table 13-11.
Summary of Potential Regulation 22 Information Requests to be made to Applicant
Assessment of noise in external amenity areas for the Proposed Development and the Limited Development Scenario.
Potential Planning Conditions
None.

14 Review of Chapter 14: Water Resources, Drainage and Flood Risk

Scope of EIA

14.1 The ES was preceded by a scoping exercise which involved consultation with the relevant authorities and stakeholders. The scoping exercise scoped in Water Resources Flood Risk and Drainage. The Water Resources Flood Risk and Drainage chapter of the ES reviews relevant Legislation and Planning Policy Context. The chapter identifies the main sensitive receptors and their locations with an explanation of the risks from development.

14.2 The scope of the assessment is comprehensive and encompasses all topics as required by the LBTH Scoping Guidance and the EIA Scoping Opinion.

Baseline

14.3 The ES describes the condition of those aspects of the environment that are likely to be significantly affected by the development and clearly evaluates the sensitivity.

14.4 Relevant planning policy documents have been reviewed including the National Planning Policy Framework (NPPF), Water Framework Directive and the Level 2 Strategic Flood Risk Assessment for LBTH (2012). The LBTH Preliminary Flood Risk Assessment (2011) and Surface Water Management Plan (2011) completed for the borough as part of the GLA Drain London Project are referenced in the Flood Risk Assessment (Appendix D) only.

Assessment

14.5 Chapter 2 of the ES clearly describes the generic assessment methodology. The approach to establishing 'magnitude' of impacts, and for estimating significance of effect (as a function of magnitude and receptor importance) is explained in Chapter 14. The approach gives appropriate prominence to both beneficial and adverse effects relative to their significance and considers interactions between related beneficial and adverse effects (e.g. that relating to the outline drainage strategy, provision of attenuation storage tanks under some development plots and residual benefit to flood risk). The assessment is separated according to feature, stage of development and pre- and post-mitigation.

14.6 Paragraphs 14.200 to 14.205 of the ES discuss effects of the Proposed Development on water demand. There is no indication that Thames Water has been consulted on the effects of the Proposed Development on water network supply capacity. Clarification is required to confirm that Thames Water has been consulted regarding the development's effects on water supply network capacity. Paragraph 14.210 confirms that Thames Water was consulted at the pre-consultation stage regarding the wastewater network capacity. Clarification is required to confirm that Thames Water has been consulted during the consultation stage.

14.7 The ES mentions the inclusion of water efficient fixtures and fittings which will be implemented as mitigation within the Proposed Development in order to adhere to CfSH level 4 and the requirement for water consumption of 105 l/person/day for residential users. The ES also identifies that the Outline Drainage Strategy aspires to reduce discharge surface water runoff discharge rate through the inclusion of storage tanks in the design. However, the ES does not include any water reuse/recycling or rainwater harvesting for the completed operational development (noting that rainwater harvesting is included in the demolition and construction phase and is a recommendation made in the Flood Risk Assessment).

Secondary, Cumulative, and Combined Impacts

14.8 The cumulative effects assessment considers the combined effects of individual effects on a single receptor (Type 1), and the combined effects of several development schemes which may, on an individual basis be insignificant but, cumulatively, have a significant effect (Type 2). The developments assessed include recent up to date schemes which are mapped for reference in Chapter 2 of the ES.

Mitigation and Management

14.9 The ES describes mitigation measures and provides an assessment of pre-mitigation and post mitigation (residual) effects. Mitigation measures for construction impacts are specified with reference to LBTH's Code of Construction Practice (CIRIA Guidance C532 Control of Water Pollution from Construction Sites[10] and the Environment Agency Pollution Prevention Guidelines[11] are referenced in the policy review section). The ES confirms that mitigation measures will be managed through the Construction Environmental Management Plans (CEMP), Site Waste Management Plans (SWMP), Emergency Response Plans (ERP), and Health and Safely Plans (H&SP).

Worst Case Scenario

14.10 Paragraph 14.216 states "*The approach to the water resources assessment focuses on the site area as a whole and does not differentiate between the outline and detailed components or consider the scale or layout of the massing*".

14.11 The Development Specification does not stipulate the depth of the basement, but plan BGY11-PA-03-010 maximum development basement levels. Confirmation is required that the maximum development basement levels have been assessed with respect to ground conditions.

14.12 The maximum building envelope is also likely to require deeper building foundations e.g. deeper piling. Confirmation should be provided that the worst case scenario has been assessed.

14.13 Paragraph 14.217 states *"However part of the assessment considers the impacts of the Proposed Development on water demand and sewerage demand. This is estimated from the predicted population of the development which is derived from the unit mix and tenure of the development. The minimum parameters give rise to a lower estimated population and therefore a reduction in water demand and sewerage capacity demand"*. As stipulated earlier in this document, the assumptions used to generate the population yield should be confirmed to ensure that the worst case scenario has been assessed with respect to water demand and sewerage demand.

Non-Technical Summary

14.14 The NTS provides an acceptable summary of the main assessment documented in the ES.

Limited Development Scenario

14.15 The assessment of the Limited Development Scenario is considered appropriate. It identifies that the majority of the impacts will remain unchanged from the Proposed Development, as described in ES Volume I – Chapter 14 Water Resources, Drainage and Flood Risk. It clearly separates out impacts that could change and how they could be different. Water demand, wastewater generation and flood risk are identified as likely to have slightly less effect (non-significant

[10] *CIRIA, 2001 Control of water pollution from construction sites: guidance for consultants and contractors*
[11] *Environment Agency, Pollution Prevention Guidance: http://www environment-agency gov uk/business/topics/pollution/39083 aspx*

difference) on the completed and occupied stages of the Limited Development Scenario due to a decrease in water demand and wastewater generation from fewer residential and commercial units.

Summary of Clarifications Required from Applicant
Provide detailed regarding proposed water reuse/recycling or rainwater harvesting.
Summary of Potential Regulation 22 Information Requests to be made to Applicant
Confirmation is required that the maximum development basement levels have been assessed with respect to water resources, drainage and flood risk. Confirmation should be provided that the worst case scenario has been assessed with respect to building foundations. The assumptions used to generate the population yield should be confirmed to ensure that the worst case scenario has been assessed with respect to water demand and sewerage demand. Confirm that Thames Water has been consulted regarding the water supply network capacity and the wastewater network capacity.
Potential Planning Conditions
Adherence to the Outline Drainage Strategy.

Review of Revised ES

14.16 The Water Resources, Drainage and Flood Risk chapter in the Revised ES has been updated to reflect recent policy changes. It also includes additional information relating to the Outline Drainage Strategy and aims to alleviate pressure on the Thames Water sewer network through the provision of three attenuation storage tanks. Further detail has also been provided regarding water demand estimations both pre and post mitigation measures.

14.17 The conclusions of the assessment remain unchanged.

14.18 Specific requests for clarification and further information on the original ES chapter do not appear to have been addressed in this chapter as indicated below.

Limited Development Scenario

14.19 The conclusions drawn in respect of the LDS in the original assessment remain unchanged in the Revised ES.

Summary of Clarifications Required from Applicant
NB - Applicant needs to provide responses to clarifications and potential Regulation 22 requests made on the original ES – see above and Section 23, which identifies where further information is still required.
Summary of Potential Regulation 22 Information Requests to be made to Applicant

As above.
Potential Planning Conditions
None.

15 Review of Chapter 15: Archaeology

Scope of EIA

15.1 LBTH and LBH's detailed EIA Scoping Opinion (March 2014), has been followed in order to establish the scope of the EIA (ES Volume III Appendix A), and this is acceptable.

15.2 Paragraphs 15.1-15.6 detail the scope of the assessment which is acceptable

15.3 Paragraph 15.5 states that operational impacts have been scoped out of the assessment and provides a clear justification for this.

Baseline

15.4 The 'Baseline' section of the chapter briefly discusses the existing archaeological conditions on the site which have been identified through previous investigations or desk studies. A Technical Appendix is provided in ES Volume III (Appendix I: Archaeology) and supplements the 'Baseline' section of the chapter. Chapter 8 of the Appendix provides a comprehensive list of known buried historical environment assets which have been identified through previous investigation or desk based study in accordance with standards produced by key stakeholders i.e. English Heritage and Greater London Archaeological Advisory Service (GLAAS). Known buried heritage assets are detailed further on Figure 2 in the Appendix.

15.5 In the 'Significance Criteria' section, Table 15-1 (page 15-3) provides the sensitivity ratings of designated and non-designated heritage assets. It is noted however, that the heading of this table could be changed to 'Sensitivity of Heritage Assets', and that the second column of the table, currently 'Significance' should read, 'Sensitivity'. This would help to avoid any confusion with how the significance criteria, as identified in Table 15-3 has been derived i.e. sensitivity (not significance) + magnitude = significance of impact.

Assessment

15.6 The 'Assessment Methodology' section describes the methodology employed to determine baseline conditions, assess heritage significance, and demolition and construction impacts. These sections provide a robust explanation on how baseline conditions and the assessment of impacts have been derived.

15.7 The approach employed in ascribing sensitivity to heritage assets (Table 15-1) and the criteria for determining magnitude of change (Tables 15-2) and the resulting significance of environmental impacts (Table 15-3) is explained clearly. However, clarification is required with regards to the use of mixed impacts e.g. major/ moderate.. Paragraph 15.38 explains that prominence to adverse (negative) and or beneficial (positive) has been assigned to the impact significance criteria.

15.8 The significance criteria, as identified in paragraph 15.38 and Table 15-3 have been applied consistently throughout the assessment for the detailed components and outline components. With the exception of 'negligible' impacts, all other impacts on archaeological assets are considered to be significant (paragraph 15.38).

15.9 Overall, the approach to the assessment of archaeological impacts and its conclusions are sound and appropriate.

Secondary, Cumulative, and Combined Impacts

15.10 The archaeology assessment has included Type 1 (combined individual impacts) and Type 2 (impacts of the development with other developments) cumulative assessments. The findings of the Type 1 assessment are summarised in Chapter 20: Impacts Interactions and Cumulative Impacts Assessment of the ES, and these are considered to be acceptable. The findings of the Type 2 assessment are included in Table 15-17, and again the findings are considered to be well justified. Paragraph 15.102 states that the Type 2 assessment, "*…has been determined with reference to archaeological assessment reports attached to the planning applications available through the online planning application databases of LBH and LBTH*", and this approach is deemed to be appropriate.

Mitigation and Management

15.11 Paragraphs 15.91 and 15.92 detail the mitigation measures that are necessary during the demolition and construction of the detailed and outline components of the development. Residual impacts of the detailed and outline components are presented in Tables 15-14 and 15-15. Table 15-16 provides a summary of the residual impacts of the development as a whole. The residual impact criteria has been followed as per Table 15-4. It is not clear why Table 15-15 (outline component residual impacts) includes a summary of the residual impacts on plots C, F, G, H, I, J and L, as these plots are within the detailed component of the development. Paragraph 15.85 states, "*the outline component of the proposed development comprises Plots A, B, D, E and K*".

15.12 Although the proposed mitigation measures are discussed, information in relation to whom the responsibility resides for implementing such measures should be provided for completeness.

Worst Case Scenario

15.13 Paragraph 15.99 states "*The approach to the archaeology assessment focuses on the site area and does not differentiate between the outline and detailed components or consider the scale or layout of the massing. Therefore the archaeology assessment does not apply either the maximum or minimum building envelope as it does not have any relevance to the assessment".*

15.14 The Development Specification does not stipulate the depth of the basement, but plan BGY11-PA-03-010 maximum development basement levels. Confirmation is required that the maximum development basement levels have been assessed with respect to ground conditions.

15.15 The maximum building envelope is also likely to require deeper building foundations e.g. deeper piling. Confirmation should be provided that the worst case scenario has been assessed.

Non-Technical Summary

15.16 The archaeology section of the NTS effectively and simply describes the scope and findings of the assessment, including proposed mitigation and residual effects during demolition and construction of the development.

Limited Development Scenario

15.17 Paragraph 802 of ES Volume III Appendix K states that, "*The conclusions [of the limited development scenario assessment] do not differ from those in the Proposed Development, as described in ES Volume I –Chapter 15: Archaeology*". The assessment of impacts during demolition and construction, the proposed mitigation measures, residual impacts and cumulative

assessment for the limited development scenario are identical to the findings of the Proposed Development in Chapter 15: Archaeology.

15.18 The archaeology section of Chapter 21: Limited Development Scenario accurately summarises the findings of the Limited Development Scenario assessment on archaeology as included in ES Volume III Appendix K.

Summary of Clarifications Required from Applicant
The introductory paragraphs in Chapter 15: Archaeology should make it clear that the assessment of impacts extends only to impacts on buried archaeological assets during the demolition and construction phase of the Proposed Development. Table 15-1 heading could be amended to 'Sensitivity of Heritage Assets' as referring to 'significance' may create confusion. Column 2 of Table 15-1 could also be changed to 'sensitivity'. Clarification required to determine if Table 15-5 should include a summary of residual impacts on plots C, F, G, H, I, J and L. Information in relation to who will implement the proposed mitigation measures should be provided for completeness. Clarification required as to the use of mixed impact ratings as per Table 15-3.
Summary of Potential Regulation 22 Information Requests to be made to Applicant
Confirmation is required that the maximum development basement levels have been assessed with respect to ground conditions. Confirmation should be provided that the worst case scenario has been assessed with respect to building foundations.
Potential Planning Conditions
As per current practice.

Review of Revised ES

15.19 Revised text in relation to regional planning policies has been added to Revised ES Chapter 15 to bring this section up to date.

15.20 An assessment of the potential effects of Plot K on buried heritage assets during construction and demolition has been undertaken in response to the change of development proposed here. The assessment should assess the likely effects of Plot K on previously unrecorded remains dating from the prehistoric to early medieval periods in keeping with the assessment of the other plots.

15.21 An updated Type 2 cumulative assessment has been undertaken and has included the updated list of schemes in Table 2-4 of Revised ES Chapter 2: EIA Methodology.

Limited Development Scenario

15.22 The assessment of impacts of the proposed changes to the development during demolition and construction, the proposed mitigation measures, residual impacts and cumulative assessment for the Limited Development Scenario remain unchanged.

15.23 The archaeology section of Chapter 21: Limited Development Scenario accurately summarises the findings of the Limited Development Scenario assessment on archaeology as included in Appendix K.

Summary of Clarifications Required from Applicant
NB - All clarifications and potential Regulation 22 requests made on the original ES have been addressed – see Section 23.
Summary of Potential Regulation 22 Information Requests to be made to Applicant
Assessment should include the likely effects of Plot K on previously unrecorded remains dating from the prehistoric to early medieval periods.
Potential Planning Conditions
As per current practice.

16 Review of Chapter 16: Built Heritage

Scope of EIA

16.1 LBTH's detailed EIA Scoping Opinion (March 2014), has generally been followed in order to establish the scope of the EIA (ES Volume III Appendix A), and this is acceptable.

16.2 The Townscape and Visual Impact Assessment also includes an assessment of impacts on heritage assets. There appear to be inconsistencies between the findings of Chapter 16: Built Heritage and the Townscape and Visual Impact Assessment however (See Section 19, below).

16.3 Paragraphs 16.1-16-6 detail the scope of the assessment. Whilst this is generally acceptable, it should be made clear from the outset that the built heritage assessment has considered the direct (physical impacts) and indirect (setting impacts) on built heritage during demolition and construction and operation of the proposed development. In addition, referring to the 'Heritage Statement' in paragraph 16.3 and thereafter as 'ES Volume III Appendix J' would also aid reader understanding of where the supporting information can be found.

Baseline

16.4 The 'Baseline Conditions' section of the chapter briefly discusses the existing archaeological conditions on the site and wider area which have been documented using relevant sources of information and walkover surveys. A comprehensive list of assets considered in the assessment supplements the information within the 'Baseline Conditions' section and is included in Appendices A and B of the Heritage Assessment in ES Volume III Appendix J.

16.5 The criteria for determining the sensitivity of heritage receptors is discussed in paragraphs 16.57 and 16.58. It would be useful however, if this information was provided in tabular form in the same way as Table 15-1 in Chapter 15: Archaeology. This would aid reader understanding of the sensitivity of different heritage assets.

16.6 Paragraph 16.65 acknowledges the limitations and assumptions that have been made in assessing the impacts on built heritage assets from the outline components of the Proposed Development.

Assessment

16.7 The 'Assessment Methodology' section describes the methodology employed to determine baseline conditions, demolition and construction impacts, operational impacts and outline component impacts, and these appear to be appropriate and robust. A more detailed explanation of how the assessment has considered the outline and detailed elements of the development is required.

16.8 English Heritage has recently advised that there should be no distinction between Grade I, II* and II buildings. The degree of protection afforded to listed buildings by the legislation does not distinguish between grades and as a national designation all grades should regarded as high importance. English Heritage has also advised that there should be no distinction in importance between Conservation Areas – as a national designation they are heritage assets of high importance. It is unclear how the heritage values and significance of the heritage assets has influenced the assessment of sensitivity to development (set out in paragraphs 16.57-16.58). Clarification is required to confirm how the heritage values and significance of the heritage assets has influenced their interpretation of sensitivity to development and whether English Heritage was consulted on the assessment methodology of the chapter.

16.9 The approach employed in ascribing sensitivity to heritage assets is set out in paragraph 16.57-16.58 and the criteria for determining magnitude of change is set out in paragraph 16.59. The

resulting significance of environmental impacts is set out in Table 16-1 and paragraph 16.60. Clarification is required to determine if Table 16-1 should include a 'negligible' sensitivity column, as per paragraph 16.57 which states, "*the sensitivity of heritage assets identified during the assessment has been assessed as high, medium, low or negligible*". Paragraphs 16.61 and 16.62 also make it clear that impacts have been classified as direct or indirect, as well as temporary and permanent.

16.10 There seems to be some discrepancies between the resulting impacts and Table 16-1. For example, paragraphs 16.74, 16.75 and 16.81 should state moderate adverse not minor adverse (high sensitivity and moderate impact). Clarification and a thorough check throughout the assessment is required.

16.11 The assessment does not seem to have followed English Heritage's advice in the EIA scoping opinion with regards to sensitivity of Grade I and II listed buildings.

16.12 It would be helpful if the chapter clearly distinguished between those impacts which have been mitigated through design, and those which are the subject of additional mitigation measures.

16.13 The presentation of the assessment of Indirect Impacts on Heritage Assets (paragraphs 16.77 and 16.78) should be consistent with the rest of the chapter i.e. a description of sensitivity and magnitude of change and the resulting impact.

16.14 As per paragraph 16.85 – assessment of impacts on The Boundary Estate, Table 16-3 should read 'minor adverse' impact, not 'beneficial'.

Secondary, Cumulative, and Combined Impacts

16.15 The built heritage assessment has included Type 1 (combined individual impacts) and Type 2 (impacts of the development with other developments) cumulative assessments. The findings of the Type 1 assessment are summarised in Chapter 20: Impacts Interactions and Cumulative Impacts Assessment of the ES, and these are considered to be acceptable. The findings of the Type 2 assessment are included in paragraphs 16.119 – 16.124 are also considered to be appropriate.

Mitigation and Management

16.16 It would be helpful if the chapter clearly distinguished between those impacts which have been mitigated through design, and those which are the subject of additional mitigation measures.

Worst Case Scenario

16.17 Paragraph 16.114 states *"The assessment has been based on the maximum parameters for the outline parts of the development as these present the worst case scenario with regards to likely significant effects"*. This is considered to be the appropriate approach.

Non-Technical Summary

16.18 The built heritage section of the NTS should make it clear that the assessment has considered both direct (physical) and indirect (setting) impacts on cultural heritage assets. The last paragraph of this section should read, "*While there are heritage assets that experience more beneficial impacts than others, overall the Proposed Development results in residual impacts ranging from minor adverse to moderate beneficial".*

Limited Development Scenario

16.19 The findings of the Limited Development Scenario assessment for built heritage presented in ES Volume III Appendix K are acceptable.

16.20 Clarification is required, however, to determine if paragraph 831 should read, "*the proposed mitigation once the Proposed Development is complete and operational would not change from the Proposed Development. This is detailed in ES Volume I – Chapter 16: Built Heritage*", instead of "*The proposed mitigation during demolition and construction would not change from the Proposed Development this is detailed in ES Volume I – Chapter 16: Built Heritage*".

16.21 The built heritage section of Chapter 21: Limited Development Scenario accurately summarises the findings of the Limited Development Scenario assessment on built heritage as included in ES Volume III Appendix K.

Summary of Clarifications Required from Applicant
It should be made clear from the outset of Chapter 16: Built Heritage that the assessment has considered both the direct (physical impacts) and indirect (setting impacts) on built heritage assets during demolition and construction and operation of the proposed development. 'Heritage Assessment' should be referred to as ES Volume III Appendix J. It would be useful if the sensitivity criteria discussed in paragraphs 16.57-16.58 was provided in tabular form in the same way as Table 15-1 in Chapter 15: Archaeology. This would aid reader understanding of the sensitivity of different heritage assets. Table 16-1 to include a 'negligible' sensitivity column as per paragraph 16.57. A more detailed explanation of how the assessment has considered the outline and detailed elements of the development is required. There seems to be some discrepancies between the resulting impacts in the assessment and those described in Table 16-1 and paragraph 16.60. The assessment does not seem to have followed English Heritage's advice in the Scoping Opinion with regards to sensitivity of Grade I and II listed buildings. It would be helpful if the chapter clearly distinguished between those impacts which have been mitigated through design, and those which are the subject of additional mitigation measures. The assessment of Indirect Impacts on Heritage Assets (paragraphs 16.77 and 16.78) during demolition and construction should be presented in a way that is consistent with the other assessments within the chapter. Clarification is required to determine if paragraph 831 in the LDS should read, "*the proposed mitigation once the Proposed Development is complete and operational would not change from the Proposed Development. This is detailed in ES Volume I – Chapter 16: Built Heritage*".
Summary of Potential Regulation 22 Information Requests to be made to Applicant
Clarify how the heritage values and significance of the heritage assets has influenced the applicant's interpretation of sensitivity to development and whether English Heritage was consulted on the assessment methodology of the chapter. If English Heritage has not been consulted, this should be carried out to confirm the adopted method is acceptable.
Potential Planning Conditions
As per current practice.

Review of Revised ES

16.22 Revised text in relation to regional planning policies has been added to the Revised ES Chapter 16 to bring this section up to date.

16.23 A revised assessment of the proposed changes to Plots F and G on the Tower of London World Heritage Site (WHS) once the development is complete and operational has been undertaken. Clarification is required in relation to the significance of impact predicted as a minor impact as this is not consistent with Table 16.1 which indicates that a moderate effect would be predicted as the WHS is of high sensitivity, and the magnitude of the effect will be moderate.

Limited Development Scenario

16.24 The assessment of impacts of the proposed changes to the development during demolition and construction, the proposed mitigation measures, residual impacts and cumulative assessment for the limited development scenario remain unchanged.

Summary of Clarifications Required from Applicant
NB - Applicant needs to provide responses to clarifications and potential Regulation 22 requests made on the original ES – see above and Section 23, which identifies where further information is still required.
Summary of Potential Regulation 22 Information Requests to be made to Applicant
Clarification required in relation to the 'minor adverse' effect predicted on Tower of London World Heritage Site once the development is complete and operational (see para. 16.23 above).
Potential Planning Conditions
As per current practice.

17 Review of Chapter 17: Ecology

Scope of EIA

17.1 The ES identifies all salient nature conservation legislation and planning policies relevant to the proposals, including local policies relating to both the LBTH and the LBH.

17.1 The Ecology Chapter covers all ecological issues raised in the EIA Scoping Opinion.

Baseline

17.2 The method for establishing the baseline is set out in paragraph 17.49 – 17.51. Baseline data was collected for the site using appropriate methods which included:

- Phase 1 Habitat survey;
- protected species scoping survey;
- desk study utilising ecological data provided by Greenspace Information for Greater London (GiGL) and The London Bat Group; and
- detailed protected species surveys.

17.3 A commentary on the habitats present on site is provided and an assessment of the potential of these habitats, including man-made structures, to support protected or notable species is provided. The scoping survey identified the need for further protected species surveys including for bats, reptiles, black redstart and invertebrates. These we all undertaken at the optimal time of year and detailed survey findings provided for each.

Assessment

17.4 In general the ES is considered to provide an objective assessment in respect of ecology. It is acknowledged within the chapter that there will be temporary significant adverse effects during the construction and demolition phases relating to loss of habitat (including the priority habitat Open Mosaic on Previously Developed Land). This will in turn result in the short-term loss of suitable nesting and foraging habitat for birds, foraging habitat for bats and sheltering habitat for invertebrates. However, to mitigate for this, removal of habitats will be done through a phased working approach, with the inclusion of landscaping features (e.g. native tree planting, species rich grassland and areas of open mosaic habitat) within the early phased components.

17.5 Paragraph 17.71 of the ES states that the demolition and construction phase is likely to span four years. However, paragraph 5.5 states that demolition and construction phase is likely to span 12 years. This needs to be clarified as it will have implications for the phasing of mitigation. It has been acknowledged that the habitats and species associated with both the later components of the Proposed Development and those created as part of the early phases would need to be protected during the demolition and construction in accordance with best practice standards and highlighted within general control measures section of the chapter.

17.6 The chapter concluded that impacts on non-statutory designated sites would be of negligible significance assuming the CEMP and impact avoidance measures detailed in paragraph 17.160 of the Ecology Chapter are adhered to during construction and demolition. This conclusion appears valid.

17.7 The Council's biodiversity's officer has some concerns on the assessments that, following habitat creation in the landscaping, there would be minor beneficial long-term impacts for habitats

(paragraph 17.202), black redstart (17.204), other birds (17.209), invertebrates (17.212) and bats (17.213). This depends very much on the final detailed design of the landscaping, and how successfully the new habitats establish. Nevertheless, if all the mitigation and habitat creation referred to in the application documents is carried out, it is agreed that minor long-term benefits for these receptors are a realistic possibility.

17.8 Paragraph 17.170 states that 8,600 square metres of habitat, including scrub, ephemeral, grassland and bare ground, would be lost. It would be helpful if a figure could be provided for how much of this area is considered to be Open Mosaic Habitat (OMH). It is noted that this is not straightforward, as the JNCC definition of OMH allows for the inclusion of small areas of a wide range of habitats, including scrub. However, if the larger blocks of solid scrub could reasonably be excluded, and a figure provided which covers the early successional habitats and any smaller patched of scrub which are integrated into the mosaic.

17.9 The residual impacts of the Proposed Development are expected to be non-significant for both demolition and construction phases and once the Proposed Development is completed and occupied. The conclusions appear valid.

Secondary, Cumulative, and Combined Impacts

17.10 Chapter 20 of the ES reviews the potential cumulative effects. Paragraphs 17.234 – 17.238 of the Ecology Chapter specifically deal with the potential effects on the ecological interest at the site and in the surrounding area. The conclusions made are considered acceptable.

Mitigation and Management

17.11 Paragraph 17.157 details the features that have been incorporated into the final scheme design to mitigate for the loss of habitat as a result of the Proposed Development and provide habitat to support protected and notable species that already occur, or have the potential to occur, within or adjacent to the site.

17.12 General Control Measures to protect biodiversity during demolition and construction are briefly discussed within paragraphs 17.160 – 17. 165. These measure will be detailed in, and implemented through the CEMP which will be secured by planning conditions. Additional mitigation measures above those designed into the scheme that should be provided during demolition, construction and on completion of the development are discussed in paragraphs 17.218 – 17.225.

17.13 The proposed mitigation measures are considered appropriate.

Worst Case Scenario

17.14 Paragraph 17.230 states the "*approach to the ecology assessment focuses on the site area as a whole and does not differentiate between the outline and detailed components or consider the scale or layout of the massing. Therefore the ecology assessment does not apply either the maximum or minimum building envelope as it does not have any relevance to the assessment*".

17.15 The ecology assessment relies on the landscape strategy, however this is not an approved document and therefore there is no certainty that the development will be progressed in this manner. A condition will need to be attached to the planning permission (if approved) that ensures that the mitigation measures relied upon in the ES are implemented.

Non-technical Summary

17.16 Typo on page 22 of the NTS. "No reptiles or invertebrate species were recorded within the site during the survey", assume this should state no reptiles or amphibians were recorded within the

site during the survey. An additional bullet point relating to black redstart surveys should be included for the baseline data collected at the site.

Limited Development Scenario

17.17 The assessment methodology, effect significance criteria and baseline conditions applied to this scenario remain as per chapter 17 of the ES.

17.18 With reference to the assessment of potential impacts during demolition and construction and operation, the applicant considers the magnitude of impacts to remain the same as the proposed development in the ES Volume 1: Chapter 17: Ecology.

17.19 The information in Chapter 21 is consistent with the information provided in the Limited Development Scenario.

Summary of Clarifications Required from Applicant
Typo on page 22 of the NTS. "No reptiles or invertebrate species were recorded within the site during the survey", assume this should state no reptiles or amphibians were recorded within the site during the survey. An additional bullet point relating to black redstart surveys should be included for the baseline data collected at the site. Provided a figure for how much of the site is considered to be OMH. Clarification on exact timescales of the demolition and construction phase.
Summary of Potential Regulation 22 Information Requests to be made to Applicant
None.
Potential Planning Conditions
A condition will need to be attached to the planning permission (if approved) that ensures that the mitigation measures relied upon in the ES are implemented. Condition ecological and landscaping strategy to ensure a) the stated ecological mitigation and enhancement measures are incorporated into the design and b) to demonstrate how mitigation will be phased throughout the development.

Review of Revised ES

17.20 Revised text in relation to regional planning policies has been added to Revised ES Chapter 17 to bring this section up to date.

17.21 An updated extended phase 1 survey and bat survey were undertaken in April 2015, which is welcomed. The findings of the updated surveys indicated only minor changes to the habitat extents and structures previously surveyed and as such the results and recommendations of the 2013 surveys are considered to remain valid.

17.22 The Impact Interactions and Cumulative Impact Assessment (para 17.234) has been revised; two schemes have been removed and two additional schemes have been added. The assessment (minor beneficial) remains the same.

17.23 Text within para 17.240 has been updated (not highlighted in green): *"Due to the size of the site and number of 'outline' plots, a number of temporary uses will come forward on the site during the 16 year demolition and construction programme"*. The ecology chapter previously referred to a 12 year demolition period (para 17.236, ES Volume 1, 2014). Paragraph 17.175 of the Revised ES chapter states that *"This impact would be over the short-term with demolition and*

construction scheduled to span approximately four years". As noted previously (para 17.5 above) timing of demolition and construction will need to be clarified as it will have implications for the phasing of mitigation.

17.24 According to Appendix O: Table of Amendments, the Assessment of Impacts and Significance section had been revised, but it is not clear what revisions have been made in this section (no text highlighted).

Limited Development Scenario

17.25 The assessment methodology, effect significance criteria and baseline conditions applied to this scenario remain unchanged.

Summary of Clarifications Required from Applicant
NB - Applicant needs to provide responses to clarifications and potential Regulation 22 requests made on the original ES – see above and Section 23, which identifies where further information is still required. According to Appendix O: Table of Amendments, the Assessment of Impacts and Significance section had been revised, but it is not clear what revisions have been made in this section (no text highlighted). Clarification is sought on revisions made.
Summary of Potential Regulation 22 Information Requests to be made to Applicant
As above.
Potential Planning Conditions
As above.

18 Review of Chapter 18: TV and Radio (Electronic) Interference

Scope of EIA

18.1 The LBTH and LBH EIA Scoping Opinion states where effects on telecommunications have been predicted reference should be made to the supporting guidance of PPG8 Telecommunications (paragraph 4.181). There is no reference to this document within the chapter. Clarification is required to confirm if this guidance has been taken into account during the assessment.

18.2 The scope of the assessment is otherwise considered acceptable.

Baseline

18.3 The methodology for determining the baseline conditions is set out in paragraphs 18.20-18.27 and the baseline conditions are set out in paragraphs 18.42-18.47.

18.4 The baseline is considered acceptable.

Assessment

18.5 The methodology for determining demolition and construction and operation impacts is detailed in paragraphs 18.28-18.33 and the significance criteria are set out in paragraph 18.34. The consultation to inform the assessment is summarised in paragraphs 18.36-18.38. The assessment of construction impacts is set out in paragraphs 18.48-18.66.

18.6 Tables 18.1 and 18.2 state potential impacts prior to mitigation on satellite TV reception due to shadowing is minor adverse. However, paragraphs 18.56, 18.61, 18.63 and 18.65 state this impact is permanent negligible adverse. Clarification is required to confirm the detailed and outlined components impacts on satellite TV prior to mitigation.

Secondary, Cumulative, and Combined Impacts

18.7 Paragraph 18.67 considers combined impacts and paragraphs 18.71-18.79 consider cumulative impacts.

18.8 The cumulative assessment is considered acceptable.

Mitigation and Management

18.9 The Applicant proposes a number of measures which will ensure that no properties will be adversely affected as a result of the development. These measures include:

- upgrading aerials by increasing their height and/or gain; and
- supplying a non-subscription satellite service such as Freesat or the 'Sky' equivalent.

18.10 The measures are considered acceptable.

Worst Case Scenario

18.11 Paragraph 18.68 states "*The assessment has been based on the maximum parameters for the outline parts of the Proposed Development as these present the worst case scenario with regards to likely significant effects*". This is considered to be the appropriate approach.

Non-technical Summary

18.12 The NTS provides an accurate reflection of the ES.

Limited Development Scenario

18.13 Paragraphs 18.876 and 18.887 state the impact on satellite TV reception due to shadowing prior to mitigation is permanent negligible adverse. However, Table 45 and paragraph 900 state this impact is minor adverse. Clarification is required to confirm the detailed components impact on satellite TV prior to mitigation.

18.14 The assessment of the Limited Development Scenario is otherwise considered acceptable.

18.15 Chapter 21 is otherwise considered acceptable.

Summary of Clarifications Required from Applicant
Clarify if the supporting guidance of PPG8 Telecommunications has been taken into account during the assessment. Clarify the detailed and outlined components impacts on satellite TV prior to mitigation. Clarify the detailed and outlined components impacts on satellite TV prior to mitigation in Appendix K.
Summary of Potential Regulation 22 Information Requests to be made to Applicant
None.
Potential Planning Conditions
As per current practice.

Review of Revised ES

18.16 The Revised ES provides an update to the regional planning policy context referencing the publication of the Further Alterations to the London Plan in March 2015.

18.17 A revised Figure 18.1 has been provided to reflect the amended scheme.

18.18 The effects recorded within the Revised ES remain consistent within the Original ES.

Limited Development Scenario

18.19 The effects predicted within the amended Limited Development Scenario are consistent with the effects predicted within the Original Limited Development Scenario, therefore, the latter remain valid.

Summary of Clarifications Required from Applicant

NB - Applicant needs to provide responses to clarification requests made on the original ES – see above and Section 23, which identifies where further information is still required.
Summary of Potential Regulation 22 Information Requests to be made to Applicant
None.
Potential Planning Conditions
As per current practice.

19 Review of ES Volume 2: Townscape and Visual Impact Assessment

Scope of EIA

19.1 This Volume contains the townscape and visual impact assessment. Although there is a separate chapter on Built Heritage, there is some overlap as effects on heritage assets are also covered in this chapter.

19.2 LBTH and LBH's detailed EIA Scoping Opinion (March 2014), has been followed in order to establish the scope of the TVIA, and the scope of the assessment is considered to be acceptable.

Baseline

19.3 This Volume includes a planning policy context, describes the site and its surrounds, reviews the historic development of the area, and presents townscape character areas, heritage assets and 62 views.

19.4 The baseline description strays into the topic of cultural heritage by identifying listed buildings/structure as receptors and commenting on the sensitivity of the setting of listed buildings/ structures which should be the domain of the cultural or built heritage assessment.

19.5 62 viewpoints have been selected in consultation with the LBH, LBTH, English Heritage and Historic Royal Palaces. This is a large number of viewpoints and appears to cover all key areas (no site visit was undertaken to check viewpoints). Ideally photographs including vegetation should be taken when leaves are not on trees to show the 'worst case' situation (see comments on the section on 'Views' below).

19.6 The method for assessing sensitivity is set out in paras. 2.14-2.18. Although it states that this method applies to townscape and views, only visual criteria are included here.

Assessment

19.7 This Volume assesses the Proposed Development against the seven objectives of urban design set out in 'By Design' (section 5) and includes a detailed assessment of effects on views (section 6). It then uses this to summarise the effects of the development on townscape character areas, heritage assets and views in section 10.

19.8 The method for assessing magnitude of change and significance is set out in section 2. Moderate, moderate to major and major effects are considered to be likely significant effects for the purposes of The Town and County Planning (Environmental Impact Assessment) Regulations 2011.

Townscape character

19.9 In relation to townscape character, the assessment concludes that there will be a moderate effect on the townscape of the site, a moderate effect on TCA 6 Boundary Estate and a moderate to major effect on TCAs 2 Shoreditch, 3 Bethnal Green Road and 4 Spitalfields. These are all considered to be beneficial changes except for the impact on Boundary Estate (which is considered to be neutral).

Heritage assets

19.10 This Volume also includes an assessment of effects on heritage assets. The assessment strays into the realm of built heritage by assessing effect on heritage assets, which appears to lead to some double counting and inconsistencies between the built heritage and townscape chapters of the ES. For example, the Built Heritage Chapter concludes a minor adverse effect on The Boundary Estate Conservation Area while the townscape assessment concludes a minor to moderate neutral effect. Para 10.3.4. states that "*The visual and townscape effects on heritage assets and their significance are considered below. Effects on heritage significance are considered in the Built Heritage Chapter 16 of Volume 1 of the ES*". The applicant should confirm which assessment should be relied upon.

Views

19.11 Views where trees obscure some of the development are 27, 41, 48 and 57. For view 27 there is another view nearby that is not obscured by trees and therefore an understanding of the impact of the development can be gained from this. For view 41 the trees in front of the Development appear to be evergreen and therefore a winter view would not show any more of the development than the summer view. In view 48 the development is partially obscured due to the foreground tree – but the applicant has confirmed that although more of the towers will be visible when the trees are not in leaf but this will not change the significance of effect on the view. Since there are many views in different conditions the obscuring effect of trees in view 48 is not a major cause for concern. For view 57 the assessment says the proposed development is not visible – the applicant should clarify if it is not visible because it is screened by the foreground trees, or if it will not be visible in winter either.

19.12 The visualisations showing the indicative within the maximum parameter jelly mould are very helpful.

19.13 The assessment of effects on the LVMF protected views concludes that identified strategically important landmark will remain prominent in each view and the Proposed Development will comply with the LVMF guidance in each case. Although the towers break the skyline of the White Tower when viewed from the south bastion of Tower Bridge, they do not when viewed from the north bastion or from the Queen's Walk (which are the LVMF viewpoints). The effect on the view from the south bastion is recorded as a moderate neutral effect on this view. The objectivity of this assessment could be questioned as this effect would be assumed by some to be adverse as a result of the proposed development affecting the silhouette of the White Tower.

19.14 Overall, the assessment identifies significant effects on 39 of the 62 views and of these 21 are deemed to be beneficial, 16 neutral and only one impact on one viewpoint, VP49, is considered to be adverse. The assessment states this is because "*the effect on this view is likely to generate strong differences of opinion given the contrast in scale. In light of this and the cohesive nature of the existing view along this street, and the uniform townscape derived from the common elevation details, it is considered that on balance the effect will be adverse*" (para. 6.403). Could this be said for other viewpoints e.g. VP32 and 34?

19.15 Some of the views are long distance views and can be difficult to read at the scale at which the images are printed. This should be borne in mind when using the images.

Secondary, Cumulative, and Combined Impacts

19.16 Cumulative schemes are shown in the visualisations, which is helpful, and an assessment is provided for each viewpoint. It appears that the applicant has reported 'combined' cumulative effects of the proposed development and the other consented developments as even where the proposed development is not visible, there are reported cumulative effects. There is no specific guidance on methods for assessment cumulative effects, so this approach is reasonable. All effects are considered to be beneficial or neutral, except for VP49.

19.17 In viewpoint 55, where only the proposed development is visible, the report concludes a lesser cumulative effect than the effect from the proposed development alone. It would be helpful if the applicant could clarify why this is.

Mitigation and Management

19.18 Mitigation is set out in Section 9. This states consideration of LVMF views in particular has informed the shape and location of the two tallest towers so that they do not appear in the background wider setting consultation area of LVMF views 8 and 9.

19.19 The design of the new buildings and public realm will be managed through the design guidelines which address spaces and buildings and this will be subject to consideration by the respective local planning authority during the reserved detailed applications.

Worst Case Scenario

19.20 A number of the plots of the Proposed Development are not yet designed in detail. Parameter Plans submitted as part of the planning application illustrate the minimum and maximum footprints and minimum and maximum height of each plot (or part of a plot), and critical minimum dimensions between plots. This Volume of the ES assesses the 'maximum parameters' scenario i.e. every outline plot would be built out to the maximum height and footprint possible. The illustrative scheme drawn up by Farrell and Partners shows one way in which the outline part of the Proposed Development could be built out in line with the Design Guidelines under the planning application and it is provided for information only, and therefore cannot be relied upon.

19.21 The Proposed Development is shown in three ways in the 'as proposed' images:

- with all elements of the Proposed Development in the image in outline 'wireline' form (orange outline for the detailed elements and a yellow outline for the maximum parameters);
- with the outline element as a yellow wireline form identifying the maximum volume, and with the illustrative scheme as an articulated shaded volume and detailed elements as a photorealistic 'rendered' image; and
- in some close views, with the outline element as a yellow wireline form identifying the maximum volume and with the illustrative scheme as an articulated shaded volume, and the detailed elements shown as an orange wireline outline. The assessment of each view has considered whether there would be a difference at the minimum parameters.

19.22 This assessment is considered to be appropriate.

Non-technical Summary

19.23 The NTS identifies the three adverse effects reported in Volume 2 of the ES (the adverse impact to view 49 along Elder Street (day and night) and on the townscape setting of the group of listed buildings in the same street). It states that all other receptors will experience beneficial or neutral effects.

Limited Development Scenario

19.24 Volume 2 of the ES includes an assessment of effect of the limited development scenario on townscape character areas, heritage assets and views in Appendix A5.

19.25 Para A.5.3.1 of Appendix A5 of the TVIA states "*For the purpose of this assessment the Limited Development Scenario excludes blocks A, B, F, G, I, K and L*" whereas paragraph 2 of Appendix K states "*The Limited Development Scenario was assessed in the event that only the LBTH planning permission is approved which could result in the entirety of Development Plots of C, D, E, H, I and J to come forward independently of the remaining plots*". The applicant should clarify whether plot I is part of the LDS or not and how this affects the assessments in as presented in the ES.

19.26 Block C is 34 storeys up to 144m, D is 24 storeys up to 103.4m, E is 9 storeys up to 50m, H is 1 storey and J is 1 storey.

Townscape character

19.27 In relation to townscape character, the assessment concludes that there will be a moderate beneficial effect on the townscape of the site (same as for the Proposed Development), but a reduced effects on effect on TCA 3 Bethnal Green Road (moderate beneficial), TCA 4 Spitalfields (minor-moderate) and TCA 2 Shoreditch(minor beneficial) and TCA 6 Boundary Estate (minor-moderate neutral).

Heritage assets

19.28 As with the assessment of the Proposed Development, the assessment of the Limited Development Scenario strays into the realm of cultural heritage by assessing effect on heritage assets. Precedence should be given to the Built Heritage chapter for assessment of effects on heritage assets.

Views

19.29 The visual assessment helpfully summarises where views will be changed compared to the full proposed development. Views where the Proposed Development will be visible but the Limited Development Scenario will not be visible include the north bastion of Tower Bridge, the views of the Tower of London from the three viewpoints on the Queen's Walk at City Hall, Folgate Street on axis of Elder Street (recorded as the only adverse impact in the assessment of the Proposed Development) and another 25 more views. There will be a reduction in effect compared to the full Proposed Development for 16 views, no change in judgement to 25 views.

Summary of Clarifications Required from Applicant
Although the method for assessing sensitivity (paras. 2.14-2.18) states that this method applies to townscape and views, only visual criteria are included here. Can the applicant clarify how townscape sensitivity has been assessed? The applicant should confirm which of the assessments of impact on heritage assets should be relied upon – the assessment in the Built Heritage chapter or the assessment in the TVIA? The adverse impact on VP49 is explained to be because "*the effect on this view is likely to generate strong differences of opinion given the contrast in scale. In light of this and the cohesive nature of the existing view along this street, and the uniform townscape derived from the common elevation details, it is considered that on balance the effect will be adverse*" (para. 6.403). Could this be said for other VPs e.g. VP32 and 34? In viewpoint 55, where only the proposed development is visible, the report concludes a lesser cumulative effect than the effect from the proposed development alone. It would be helpful if the applicant could clarify why this is. For view 57 the assessment says the proposed development is not visible – the applicant should clarify if it is not visible because it is screened by the foreground trees, or if it will not be visible in winter either. Clarify which blocks the Limited Development Scenario includes and excludes (ref. to discrepancy in wording between Para A.5.3.1 of Appendix A5 and Para 2 of Appendix K).
Summary of Potential Regulation 22 Information Requests to be made to Applicant

None.
Potential Planning Conditions
As per current practice.

Review of Revised ES

19.30 The amended Volume II of the ES (June 2015) responds to the requested clarifications as follows:

- additional text has been provided at para 2.23 to explain how townscape sensitivity is assessed;
- additional text at para 2.20 confirms that the built heritage chapter should be relied upon for the assessment of impact on heritage assets and their significance;
- the cumulative effect on viewpoint 55 has been amended to be the same as the effect from the proposed development alone;
- text has been update for view 57 to indicate that the foreground development screens the development; and
- wording in appendix A5 has been amended to be in line with appendix K.

19.31 The applicant does not appear to have responded to the following clarification and this therefore remains:

- the adverse impact on VP49 is explained to be because "*the effect on this view is likely to generate strong differences of opinion given the contrast in scale. In light of this and the cohesive nature of the existing view along this street, and the uniform townscape derived from the common elevation details, it is considered that on balance the effect will be adverse*" (para. 6.403). Could this be said for other VPs e.g. VP32 and 34?

19.32 In addition, there are some other amendments to the text, for example the changes in the scheme have changed some of the details of what is visible in some views, but there are no changes to overall levels of effect reported.

19.33 The cumulative assessment has been updated to include 100 Liverpool Street, Huntingdon Estate, Fleet Street Hill and Blossom Street. Amended text at para 8.5 states that Blossom Street would be in the foreground to view 60 and would result in a greater cumulative effect than the proposed development.

19.34 Two new views have been added to show how the scheme will look from Commercial Street/ Shoreditch High Street and Commercial Street/Fleur De Lis Street.

Limited Development Scenario

19.35 There is no additional reference to townscape and visual impacts in Appendix K (i.e. there is no green text relating to this subject area).

Summary of Clarifications Required from Applicant
NB - Applicant needs to provide responses to clarification requests made on the original ES – see above and Section 23, which identifies where further information is still required.
Summary of Potential Regulation 22 Information Requests to be made to Applicant

None.
Potential Planning Conditions
As per current practice.

20 Review of Chapter 19: Residual Impact Assessment and Conclusions

General Comments

20.1 Table 19.1 sets out the residual impacts of the proposed development during demolition and construction.

20.2 The table states that the construction dust and short-term concentrations of PM_{10} generated through abrasive forces of material is negligible to major adverse. However, table 12.32 states the effect is negligible to minor. The table should be revised to detail the correct residual impact.

20.3 Table 19.1 also sets out the impact on the South Shoreditch, Boundary Street and Elder Street conservations area. However, it does not set out the impact on the Redchurch Street and Fournier Street Conservation Areas. The table should be revised to illustrate the residual impact on the omitted conservation areas.

20.4 Table 19.2 sets out the residual impacts of the proposed development during operation.

20.5 The table states there will be a minor beneficial impact on pedestrian movement and capacity. However, table 9.52 states the impact will be minor adverse. The table also states that there will be a minor beneficial impact on pedestrian delay. However, table 9.52 states this will be minor adverse. Table 19.2 should be revised to detail the correct residual impacts.

20.6 Table 19.2 also sets out the impact on the South Shoreditch, Boundary Street and Elder Street Conservations Areas. However, it does not set out the impact on the Redchurch Street and Fournier Street Conservation Areas. The table should be revised to illustrate the residual impact on the omitted conservation areas.

20.7 Table 19.3 sets out set out the residual townscape, conservation and visual impacts which states that there will be a major and beneficial impact on View 43n. However, Volume II of the ES states the impact is moderate to major and beneficial. Table 19.3 should be revised to detail the correct residual impact on View 43n.

Non-Technical Summary

20.8 The NTS provides an acceptable summary of the ES.

Summary of Clarifications Required from Applicant
Table 19.1 should be revised to detail the correct 'construction dust and short-term concentrations of PM_{10} generated through abrasive forces on materials' residual impact.
Table 19.1 should be revised to detail the residual impact on the Redchurch Street and Fournier Street conservation areas.
Table 19.2 should be revised to detail the correct residual impacts on pedestrian movement and capacity and pedestrian delay.
Table 19.2 should be revised to detail the residual impact on the Redchurch Street and Fournier Street conservation areas.
Table 19.3 should be revised to detail the correct residual impact on View 43n.

Summary of Potential Regulation 22 Information Requests to be made to Applicant
None.
Potential Planning Conditions
None.

Review of Revised ES

20.9 Tables 19.1 and 19.2 reflect the residual effects set out in the topic chapters of the Revised ES. No new significant effects have been recorded since the Original ES.

20.10 Table 19.3 sets out the residual effects of the TVIA. The table is consistent with Revised ES Volume 2. The table includes two new significant effects with regard to Viewpoints 63 and 64 – moderate beneficial impacts.

20.11 The chapter is considered acceptable subject to addressing the outstanding clarifications set out in section 23 of this Report.

Summary of Clarifications Required from Applicant
NB - Applicant needs to provide responses to clarification requests made on the original ES – see above and Section 23, which identifies where further information is still required.
Summary of Potential Regulation 22 Information Requests to be made to Applicant
None.
Potential Planning Conditions
None.

21 Review of Chapter 20: Impact Interactions and Cumulative Impact Assessment

General Comments

21.1 Chapter 20 assesses the likely Type 1 cumulative impacts, i.e. combined effects of individual impacts during the demolition and construction and operational phases of the proposed development. The methodology for assessing the Type 1 effects is set out in paragraphs 20.9-20.16.

21.2 Table 20.1 sets out the combined effects of individual impacts during the demolition and construction stage and Table 20.2 sets out the combined effects of individual impacts during the operation of the development.

21.3 Table 20.2 states that there will be a minor beneficial impact on pedestrian movement and capacity and pedestrian delay. However, chapter 9 states that these impacts will be minor adverse. Table 20.2 should be revised to reflect the correct predicted impacts on pedestrian movement and capacity and pedestrian delay.

21.4 Paragraph 20.4 states type 2 cumulative effects, i.e. combined effects of several schemes during the demolition and construction and operational phases of the development are considered in the topic chapters. A review of these assessments can be found in sections 6-19 of this Report.

Non-Technical Summary

21.5 The NTS provides a reasonable summary of the ES.

Limited Development Scenario

21.6 Appendix K sets out the Type 1 and Type 2 effects of the Limited Development Scenario. The Type 2 effects of the Scenario have been reviewed in sections 6-19 of this Report.

21.7 Table 47 sets out the combined effects of individual impacts during the demolition and construction stage and Table 48 sets out the combined effects of individual impacts during the operation of the Limited Development Scenario.

21.8 Table 48 states that there will be a minor beneficial impact on pedestrian movement and capacity and pedestrian delay. However, paragraphs 144 and 146 state that these impacts will be minor adverse. Table 48 should be revised to reflect the correct predicted impacts on pedestrian movement and capacity and pedestrian delay.

Summary of Clarifications Required from Applicant
Table 20.2 should be revised to reflect to the correct predicted impacts on pedestrian movement and capacity and pedestrian delay. Table 48 of Appendix K should be revised to reflect to the correct predicted impacts on pedestrian movement and capacity and pedestrian delay.
Summary of Potential Regulation 22 Information Requests to be made to Applicant

None.
Potential Planning Conditions
None.

Review of Revised ES

21.9 Table 20.1 has been amended to reflect the correct impact recorded against construction dust and short term concentrations of PM_{10} – negligible to minor adverse. The table is otherwise the same as that provided in Original ES.

21.10 Table 20.2 has been amended to reflect the correct impact recorded against pedestrian movement and capacity and pedestrian delay – minor adverse. The table is otherwise the same as that provided in Original ES.

21.11 The impacts recorded in the Original ES therefore remain valid.

Limited Development Scenario

21.12 The effects recorded in Table 53 and 54 are the same as set out in Tables 47 and 48 of the original Appendix K. This is considered acceptable subject to Table 53 being amended to reflect the correct impact recorded against construction dust and short term concentrations of PM_{10} – negligible to minor adverse and Table 54 being amended to reflect the correct impact recorded against pedestrian movement and capacity and pedestrian delay – minor adverse as per table 20.1 and 20.1.

21.13 The assessment is otherwise considered acceptable.

Summary of Clarifications Required from Applicant
Table 53 should be amended to reflect the correct impact recorded against construction dust and short term concentrations of PM_{10} – negligible to minor adverse. Table 54 should be amended to reflect the correct impact recorded against pedestrian movement and capacity and pedestrian delay – minor adverse.
Summary of Potential Regulation 22 Information Requests to be made to Applicant
None.
Potential Planning Conditions
None.

22 Review of Chapter 21: Summary Impacts of the Limited Development Scenario

General Comments

22.1 Sections 5-19 of this Report review this chapter of the ES.

Non-Technical Summary

22.2 The NTS provides a reasonable summary of the ES.

Summary of Clarifications Required from Applicant
None – subject to the reviews set out in sections 5-19 of this Report.
Summary of Potential Regulation 22 Information Requests to be made to Applicant
None – subject to the reviews set out in sections 5-19 of this Report.

Review of Revised ES

22.3 Sections 5-19 of this Report review this chapter of the Revised ES.

Summary of Clarifications Required from Applicant
None – subject to the reviews set out in sections 5-19 of this Report.
Summary of Potential Regulation 22 Information Requests to be made to Applicant
None – subject to the reviews set out in sections 5-19 of this Report.

23 Assessment of Submitted Regulation 22/ Clarification Information

23.1 The Applicant submitted a Revised ES to support amendments to the planning application, as well as the points raised in the IRR. An additional document was submitted in October 2015 which responded to the outstanding clarifications and potential Regulation 22 requests in relation to the Original ES, and also the additional clarifications and potential Regulation 22 requests made regarding the Revised ES. Both these documents will be advertised as 'further information' under Regulation 22 of the EIA Regulations.

23.2 **Tables 23.1** and **23.2** set out the Applicant's responses to clarifications and potential Regulation 22s (set out in the two documents referenced above), including a judgement as to the acceptability of the information provided.

Table 23.1: Assessment of Submitted Regulation 22 / Clarification Information with regard to the Original ES

Request Type	Original Request	Reassessment based on Revised ES	Reassessment based on Aecom's October 2015 Response to Draft FRR
EIA Context and Influence			
Clarification	Explanation of what the limited development scenario entails, with respect to uses and floorspace etc.	**Acceptable** The Applicant has provided an overview of the LDS including key land uses within the revised Appendix K. No further clarification is sought.	N/A
Potential Regulation 22	The mix for the detailed element of the proposed development should be provided (and the LDS).	**Not Acceptable** Although the Applicant has provided a section on the detailed components of the proposed development, including the mix of residential units, it does not	**Acceptable** The Applicant has confirmed Appendix M of the Revised ES sets out the quanta of the proposed land uses. The Applicant has also confirmed

Request Type	Original Request	Reassessment based on Revised ES	Reassessment based on Aecom's October 2015 Response to Draft FRR
		clearly set out the mix and quantums of land uses for the other detailed components of the proposed development. This should be provided. Further information under Regulation 22 of the EIA Regulations is sought.	that this information will be presented in an ES Addendum to follow this submission. No further information under Regulation 22 of the EIA Regulations is sought.
Potential Regulation 22	The mix for the outline element of the proposed development should be provided including how the worst case scenario has been assessed (and the LDS).	**Acceptable** The Applicant has provided the mix of uses for the outline element of the proposed development as set out in the development description. Paragraphs of 2.44-2.46 of the Revised ES set out how the worst case scenario has been assessed. No further information under Regulation 22 of the EIA Regulations is sought.	N/A
Potential Regulation 22	An explanation should be provided as to how the indicative masterplan has been used as part of the assessment.	**Not Acceptable** The Applicant has not provided an explanation of how the indicative masterplan has been used as part of the assessment. Further information under Regulation 22 of the EIA Regulations is sought.	**Not acceptable** The Applicant has confirmed *"that the masterplan is indicative and has not been assessed. The parameters of the outline element of the Proposed Development and the application drawings for the detailed element of the Proposed Development have been assessed.*

Request Type	Original Request	Reassessment based on Revised ES	Reassessment based on Aecom's October 2015 Response to Draft FRR
			*However, the masterplan has been used to provide context for the assessments providing an example of how the public realm, and landscaping could work around the site. This has been used to provide indicative figures for areas of green space both public and private and play space areas which have been taken into account when considering the socio economic and ecological impacts of the scheme" (*the provision of this space will be secured through a condition.) However, the Heritage Assessment states "*The outline component of the Proposed Development is assessed using parameter plans and an indicative masterplan in addition to detailed plans, elevations and other materials".* This contradicts the above statement. It is also unclear how the wind assessment was undertaken if the indicative masterplan was not assessed as paragraph 10.80 states the locations of entrances to the outline plots (A, B, D and E) are not yet fixed.

Request Type	Original Request	Reassessment based on Revised ES	Reassessment based on Aecom's October 2015 Response to Draft FRR
			Further information is required.
Demolition and Construction			
Clarification	Clarification is sought over the distance of the protection zone around the London Overground and the Central Line.	**Not Acceptable** No additional information has been supplied. Further clarification is sought.	**Acceptable** A response to this clarification has been provided. No further clarification is sought.
Clarification	Clarification is sought as to the difference between category A and B fit outs.	**Not Acceptable** No additional information has been supplied. Further clarification is sought.	**Acceptable** A response to this clarification has been provided. No further clarification is sought.
Clarification	Confirm that the demolition/ construction phase will take place over a period of 12 years (not 13).	**Acceptable** Construction phase has been extended to 16 years so this clarification is no longer applicable. No further clarification is sought.	N/A
Potential Regulation 22	Further information is required on how the worst case scenario has been assessed with respect to the phasing of the demolition/construction works, and how any deviations from the phasing programme will be captured (this also applies to the	**Not Acceptable** No additional information has been supplied. Further information under Regulation 22 of the EIA Regulations is sought.	**Acceptable** The response states *"The phasing plan for the development has been compiled with the most realistic approach to the construction of the Proposed Development'* and *'Any deviation to the phasing program would not alter the*

Request Type	Original Request	Reassessment based on Revised ES	Reassessment based on Aecom's October 2015 Response to Draft FRR
	LDS).		*worst-case scenario as presented and as assessed within the main ES and the LDS".* This is noted. It is also noted that Table 4-3 confirms that the phasing plan is for approval (BGY11_PA_03_39), and therefore will be 'tied' to the planning permission. This assessment is therefore considered to be robust. No further information under Regulation 22 of the EIA Regulations is sought.
Potential Regulation 22	Further information is required as to how the indicative routes for demolition and construction traffic have been identified (e.g. advice from transport consultants), and therefore ensure the worst case scenario has been assessed.	**Not Acceptable** No additional information has been supplied, other than advice that WSP prepared the information. Further information under Regulation 22 of the EIA Regulations is sought.	**Acceptable** The Applicant has confirmed the worst case assumptions and identified that they are presented within a technical appendix to the Traffic Assessment. No further information under Regulation 22 of the EIA Regulations is sought.
Potential Regulation 22	Provide estimates of the amount of demolition and construction waste arisings and construction materials to be used in the LDS.	**Acceptable** Provided in the amended Appendix K. No further information under Regulation 22 of the EIA Regulations is sought.	N/A

Request Type	Original Request	Reassessment based on Revised ES	Reassessment based on Aecom's October 2015 Response to Draft FRR
Potential Regulation 22	Provide a profile of the monthly deliveries during demolition and construction works and labour resource levels in the LDS.	**Acceptable** Provided in the amended Appendix K. No further information under Regulation 22 of the EIA Regulations is sought.	N/A
Waste and Recycling			
Clarification	Clarify why the operational assessment is only based on the residential land uses, and if necessary, update the assessment to consider waste arisings from the other uses (e.g. D1/D2 etc.).	**Acceptable** The Revised ES addresses wastes from other sources. No further clarification is sought.	N/A
Clarification	By what means does the Applicant propose to update the waste composition and estimated quantities as the design develops.	**Acceptable** The Revised ES includes updated arisings and also indicates that meeting planning standards for waste servicing will result in an overprovision and therefore provide some flexibility in terms of future changes. No further clarification is sought.	N/A
Potential Regulation 22	Additional information is required to understand how the maximum parameter has been determined for the residential waste	**Not Acceptable** The Revised ES does not appear to have specifically addressed this	**Acceptable** An explanation for the basis of the assessment in relation to the maximum and minimum

Request Type	Original Request	Reassessment based on Revised ES	Reassessment based on Aecom's October 2015 Response to Draft FRR
	generation (this also applies to the LDS).	point. Further information under Regulation 22 of the EIA Regulations is sought.	parameters has been provided, with confirmation that estimates of arisings are based on the worst case. The response confirms that a bespoke methodology was agreed with the LBH and the LBTH Waste Officers. No further information under Regulation 22 of the EIA Regulations is sought.
Potential Regulation 22	Further information is required as to how commercial waste floorspace relates back to the components in the Development Specification and how this has been used in the calculations (this also applies to the LDS).	**Not Acceptable** The Revised ES does not appear to have specifically addressed this point. Further information under Regulation 22 of the EIA Regulations is sought.	**Acceptable** The derivation of waste figures based on assumptions regarding the commercial element of the scheme is fully explained, together with a confirmation that the assumptions used represent a worst case. No further information under Regulation 22 of the EIA Regulations is sought.
Socio-Economics			
Clarification	Applicant to confirm why the range of geographic data including ward, super output areas and postcode has been excluded from the baseline information.	**Not Acceptable** The Applicant has not responded to this clarification request. Further clarification is sought.	**Acceptable** The Applicant has confirmed that a complete set of data for each component of the baseline assessment was not available at ward, super output, or postcode

Request Type	Original Request	Reassessment based on Revised ES	Reassessment based on Aecom's October 2015 Response to Draft FRR
			level, and therefore the use of these statistics would not have been consistent with the collection and presentation of data at a borough, Greater London, and England level. No further clarification is sought.
Clarification	Applicant to confirm why the baseline information on education includes data relating to school provision in the London Borough of Islington.	**Acceptable** Paragraph 7.91 -7.92 states that according to the National Travel Survey 2012, the average distance travelled to school by primary school children in London is 2.7 km and 5.1 for secondary school children. These distances cover LBTH, LBH, the City of London (CoL) and the London Borough of Islington (LBI). The Applicants research has shown that less than 1% of primary school children living in either the LBH or the LBTH travelled to the CoL to attend primary school. Furthermore, in relation to secondary schools, transport links and Information from the DfCSF indicates that the only significant cross-border flow from the LBTH and the LBH, besides flows between the two Boroughs, was to the LBI. Therefore, the baseline	N/A

Request Type	Original Request	Reassessment based on Revised ES	Reassessment based on Aecom's October 2015 Response to Draft FRR
		for primary schools is presented for schools within 2.7km of the site covering LBH, LBTH and LBI only. No further clarification is sought.	
Clarification	Applicant to provide revised information on the availability of surplus school places.	**Acceptable** The Applicant has updated table 7-6 and 7-7, to include additional information on the capacity of ten schools in LBTH, LBH and LBI as well as the total surplus number of places. No further clarification is sought.	N/A
Clarification	The Applicant to confirm whether they will be seeking to meet the LBTH affordable housing target offsite if either the proposed or limited development scenario options are implemented.	**No further clarification sought** Paragraph 7.159 provides updated information of the number of affordable housing units which is 68 units or 188 habitable rooms. However, this remains at 10% and the applicant has not responded on whether they will be seeking to meet the LBTH affordable housing target offsite if either the proposed or limited development scenario options are implemented. It is however understood that the deficit will be offset through financial contributions.	N/A

Request Type	Original Request	Reassessment based on Revised ES	Reassessment based on Aecom's October 2015 Response to Draft FRR
		No further clarification is sought.	
Clarification	Applicant to confirm their approach to phasing of social housing provision for both the Proposed and Limited Development scenarios.	**Acceptable** Further information presented in paragraph 5.7 in Chapter 5: Demolition and construction shows that the residential blocks containing social housing provision in LBTH will be developed in phases 1 and 3. No further clarification sought.	N/A
Clarification	The Applicant is to confirm why mitigation of the effects on healthcare through the provision of offsite provision or financial contribution has not been provided for both the Proposed and Limited Development Scenarios.	**Not Acceptable** The Applicant has not responded to this clarification. Further clarification is sought.	**Acceptable** The Proposed Development will include floorspace to accommodate two GPs in a new healthcare facility. However, the service has a planned staffing level of 1FTE GP, with the potential for a further GP to be accommodated in the future. While the Applicant states that they will *"work with the Clinical Commissioning Group (CCG) to ensure that 1FTE GP is staffing the facility"*, they consider that it is the CCG's responsibility to recruit additional GPs at the facility. No further clarification is sought.

Request Type	Original Request	Reassessment based on Revised ES	Reassessment based on Aecom's October 2015 Response to Draft FRR
Clarification	The Applicant is to confirm why their assessment of effects on health during the operation of the Limited Development Scenario is only based on the provision of one additional GP when provision within the Proposed and Limited Development Scenarios includes floorspace for two GPs.	**Not Acceptable** The Applicant has not responded to this clarification. If this has been assessed as the 'worst case' this should be confirmed. Further clarification is sought.	**Acceptable** The Applicant's response states that they will *"work with the Clinical Commissioning Group (CCG) to ensure that 1FTE GP is staffing the facility"*, however it is the CCG's responsibility to recruit additional GPs at the facility. No further clarification is sought.
Clarification	Applicant to reconsider the impact on health for the Proposed and Limited Development Scenarios without the implementation of mitigation.	**Not Acceptable** The Applicant has not responded to this clarification. Further clarification is sought.	**Acceptable** The Applicant's response states that the provision of a new healthcare facility with the provision of 1FTE GP to serve the inhabitants on site will help to ensure that there are no adverse impacts on existing GP surgeries within the local area, and therefore the original assessment remains correct. This is an inherent aspect of the scheme and therefore the assessment has not been considered without it (i.e. mitigation is built in). However, in the Revised ES the Proposed Development is expected to result in an additional 2,351 residents. The Applicant acknowledges that even in the best case scenario the average

Request Type	Original Request	Reassessment based on Revised ES	Reassessment based on Aecom's October 2015 Response to Draft FRR
			local list size for GPs within 1 km of the site would be 1:2,272 and in the worst case scenario, if all new residents registered with the GP, then the GP/patient ratio would be 1: 2,351. In both cases, this is above the average provision target for England of 1:1,800. Mitigation, if required, could be secured through financial payments.. This will need to be considered when determining the application. No further clarification is sought.
Clarification	Clarification should be provided on where these figures in Paragraph 7.134 have been taken from.	**Not Acceptable** The Applicant has provided updated information for the size of the retail and office spaces. However, these are given in Net Internal Area (NIA) as opposed to Gross Internal Area (GIA), which is inconsistent with the approach provided in ES Chapter 1: Introduction and Chapter 4: Proposed Development. The Applicant should amend these figures so that they are consistent with the approach taken in other	**Acceptable** The Applicant has used NIA figures to perform calculations for operational employment generation. Both GIA and NIA figures for the Proposed Development are presented in ES Chapter 4: The Proposed Development and the Applicant has assumed that readers should cross reference this chapter for the GIA figures. No further clarification is sought.

Request Type	Original Request	Reassessment based on Revised ES	Reassessment based on Aecom's October 2015 Response to Draft FRR
		chapters of the ES. Further clarification is sought.	
Clarification	Additional information is required as to how the figures used in the ES have been calculated (in relation to the Development Specification).	**Not Acceptable** The Applicant has not responded to this clarification. Further clarification is sought.	**Acceptable** The Applicant has confirmed that the figures have been sourced from the Applicant's accommodation schedule and ES Chapter 4: The Proposed Development. No further clarification is sought.
Clarification	Additional information is required to establish how 59 units will provide the required 10% affordable housing.	**Acceptable** Paragraph 7.159 provides updated information of the number of affordable housing units which is now set at 68 units or 188 habitable rooms. No further clarification is sought.	N/A
Clarification	The applicant needs to provide an explanation of how B and G will be split between LBTH and LBH.	**Not acceptable** The Applicant has revised tables 7-16 and Table 7-18 to provide updated total gross and net employment figures for blocks B and G. However, no further information has been provided as to how this will be split between the two local authorities. This	**Acceptable** When calculating employment associated with retail and office space for Buildings B, G and K the Applicant has applied the GLA method to the whole plot. However in relation to s106 payments, ES Volume III: Technical Appendices - Appendix

Request Type	Original Request	Reassessment based on Revised ES	Reassessment based on Aecom's October 2015 Response to Draft FRR
		should be clarified.	M– Development Specification provides floorspace figures for each borough calculated using the borough boundary line. The Applicant assumes that this will be used to calculate any financial contributions to the individual boroughs, but in the case of non-financial obligations, proposals are still being considered by each Borough. No further clarification is sought.
Clarification	Clarification is requested on how the applicant has reached the conclusion that the impacts from the proposed development and the LDS are broadly the same.	**Not Acceptable** The Applicant has not responded to this clarification. Further clarification is sought.	**Acceptable** The Applicant states that while the LDS will deliver a smaller quantum of housing, employment and open space, the beneficial effects in relation to these factors remains the same as the proposed development. No further clarification is sought.
Clarification	Child playspace for LBTH should be recalculated using the Council's Planning Obligations SPD.	**Acceptable** The section on Child and Young People's Play Space has been revised to meet LBTH methodology on calculating child play spaces. Paragraphs 7.195-7.196 confirm that there is a requirement for 1,310m^2 of play	N/A

Request Type	Original Request	Reassessment based on Revised ES	Reassessment based on Aecom's October 2015 Response to Draft FRR
		space to serve the 131 children estimated to reside within the maximum development scenario and that the Proposed Development will bring forward 228m^2 of formal play space. No further information is sought.	
Clarification	Clarification is sought to confirm the correct size for the components making up the private space provision.	**Not Acceptable.** Further clarification is sought.	**Acceptable** The Applicant has confirmed that information on this was provided in paragraph 7.184. No further clarification is sought.
Potential Regulation 22	Applicant to update the assessment of baseline information for healthcare using whole time equivalent GP numbers.	**Not Acceptable** The Applicant has not responded to this request. Further information under Regulation 22 of the EIA Regulations is sought.	**Acceptable** The Applicant has confirmed that the use of the terms whole time equivalent (WTE) and full time equivalent (FTE) are used interchangeably. However, the numbers provided and stated in the chapter are identical to those referring to WTE GPs. No further information under Regulation 22 of the EIA Regulations is sought.
Potential Regulation 22	The loss of the existing facilities should be assessed.	**Acceptable** Paragraph 7.138 provides an update on the assessment of job	N/A

Request Type	Original Request	Reassessment based on Revised ES	Reassessment based on Aecom's October 2015 Response to Draft FRR
		losses. The Applicant estimates that there are 50 jobs onsite/64 net jobs that will be lost as a result of the Proposed Development. Taking this into account, 6,031 employees/4,731 gross permanent employment would be generated in the Proposed Development. No further information under Regulation 22 of the EIA Regulations is sought.	
Potential Regulation 22	The maximum number of units per borough, and plot should also be provided.	**Acceptable** Tables 7.21, 7.22 and 7.23 set out the accommodation schedule for each of the plots within LBTH and LBH. No further information under Regulation 22 of the EIA Regulations is sought.	N/A
Potential Regulation 22	Further information is required on how the unit sizes, tenure and assumptions regarding the number of habitable rooms have been established for both boroughs, to ensure that a worst case scenario has been assessed (this also applies to the LDS).	**Acceptable** Paragraph 7.144 confirms that the accommodation for LBTH plots has been calculated using the LBTH Planning Obligations SPG. Table 7.25 shows the breakdown of total residents within LBTH according to the accommodation	N/A

Request Type	Original Request	Reassessment based on Revised ES	Reassessment based on Aecom's October 2015 Response to Draft FRR
		schedule. No further information under Regulation 22 of the EIA Regulations is sought.	
Potential Regulation 22	Further information is also required on how the number of units, size and tenure have been established, for both the detailed and outline, and LBH and LBTH elements (this also applies to the LDS).	**Acceptable** Paragraph 7.144 confirms that the accommodation for LBTH plots has been calculated using the LBTH Planning Obligations SPG. Table 7.25 shows the breakdown of residents within LBTH according to the accommodation schedule. No further information under Regulation 22 of the EIA Regulations is sought.	N/A
Potential Regulation 22	Further information is required as to how operational employment floorspace has been calculated and how it relates back to the Development Specification for both the outline and detailed element, and LBTH and LBH (this also applies to the LDS).	**Acceptable** Paragraph 7.135 sets out the methodology used to determine the operational employment floorspace for retail and office employment density. Tables 7.14 and 7.15 have been updated to reflect this methodology. No further information under Regulation 22 of the EIA Regulations is sought.	N/A
Ground Conditions			

Request Type	Original Request	Reassessment based on Revised ES	Reassessment based on Aecom's October 2015 Response to Draft FRR
Clarification	The origin of the guideline value used for lead, with an updated value to be provided if appropriate.	**Not Acceptable** The Revised ES does not appear to have specifically addressed this point; clarification is requested on the source of the 750 mg/kg referred to in the chapter. Further clarification is sought.	**Acceptable** The source of the guideline value has been provided. No further clarification is sought.
Clarification	The criteria to be used for assessing the need for remedial measures for gas in the ground.	**Not Acceptable** The Revised ES does not appear to have specifically addressed this point. Further clarification is sought.	**Acceptable** The guidance in CIRIA C665 is to be used. This is consistent with current good practice. No further clarification is sought.
Clarification	An explanation should be provided as to why the future site users are not high sensitivity.	**Not Acceptable** The Revised ES does not appear to have specifically addressed this point. Further clarification is sought.	**Acceptable** While it is arguable that the sensitivity of receptors is an inherent quality independent of the circumstances, for practical purposes the explanation that the form of development limits the potential exposure and therefore the risk to receptors in the completed development is acceptable. No further clarification is sought.
Potential Regulation 22	Confirmation is required that the maximum development basement	**Not Acceptable** The Revised ES does not appear	**Acceptable** The Applicant has confirmed that

Request Type	Original Request	Reassessment based on Revised ES	Reassessment based on Aecom's October 2015 Response to Draft FRR
	levels have been assessed with respect to ground conditions.	to have specifically addressed this point. Further information under Regulation 22 of the EIA Regulations is sought.	the maximum dimensions and depth have been used for the assessment. No further information under Regulation 22 of the EIA Regulations is sought.
Potential Regulation 22	Confirmation should be provided that the worst case scenario has been assessed with respect to building foundations.	**Not Acceptable** The Revised ES does not appear to have specifically addressed this point. Further information under Regulation 22 of the EIA Regulations is sought.	**Acceptable** The Applicant has confirmed that the foundation design assumed is a worst case. No further information under Regulation 22 of the EIA Regulations is sought.
Traffic and Transport			
Clarification	Clarify if there are any mitigation/ management measures proposed for the operational phase of the development.	**Acceptable** The Revised ES refers to the production of a site-wide Delivery and Servicing Plan which will be secured through a S106 agreement. Detailed Plans will be submitted for individual plots/phases subject to approval by LBTH, LBH and TfL. No further clarification is sought.	N/A
Clarification	The NTS should be revised to accurately reflect the impacts on	**Acceptable** The NTS has been revised to	N/A

Request Type	Original Request	Reassessment based on Revised ES	Reassessment based on Aecom's October 2015 Response to Draft FRR
	pedestrian movement and capacity as predicted in the ES.	reflect the effects predicted in the ES. No further clarification is sought.	
Clarification	Clarify the Limited Development Scenario's impacts on pedestrian movement and capacity and pedestrian delay.	**Not Acceptable** Although the Applicant has provided the significance of the Limited Development Scenario's impact on pedestrian delay, the Limited Development Scenario's impacts on pedestrian movement and capacity have not been provided (i.e. their significance). This should be provided. Further clarification is sought.	**Acceptable** The Applicant has confirmed that the LDS' effect on pedestrian movement and capacity is minor adverse. No further clarification is sought.
Clarification	Provide Figure 1 of Appendix K.	**Acceptable** The reference to Figure 1 has been removed. Instead, the LDS refers to the indicative demolition and construction programme included as part of the Chapter 5 of the ES. This is considered acceptable. No further clarification is sought.	N/A
Clarification	Paragraph 131 of Appendix K should be revised to state *"the assessment prepared for the outline and detailed components*	**Not Acceptable** Paragraph 151 (previously 131) has not been amended as	**Acceptable** The Applicant agrees that paragraph 151 should be revised

Request Type	Original Request	Reassessment based on Revised ES	Reassessment based on Aecom's October 2015 Response to Draft FRR
	of the maximum build out scenario…"	requested. The Applicant should confirm if paragraph should refer to the 'limited development scenario' or the 'maximum build out scenario'. Further clarification is sought.	to state *"the assessment prepared for the outline and detailed components of the maximum build out scenario…".* No further clarification is sought.
Clarification	Paragraph 132 of Appendix K should state figure 9.5, not 9.14.	**Not Acceptable** Paragraph 152 (previously 132) has not been amended to refer to figure 9.5. The Applicant should confirm if paragraph 152 should refer to figure 9.14 or figure 9.5. Further clarification is sought.	**Acceptable** The Applicant has confirmed that paragraph 152 should state figure 9.5. No further clarification is sought.
Clarification	Clarify if the impact recorded in paragraph 144 of Appendix K should be *"major and moderate"*.	**Not Acceptable** Paragraph 164 (previously 144) has not been amended to state 'a major or moderate adverse effect'. The Applicant should confirm whether the first line of the paragraph 164 should refer to a 'moderate adverse' or 'major or moderate' effect as it currently appears to be inconsistent with paragraph 158 of the LDS. Further clarification is sought.	**Acceptable** The Applicant has confirmed that paragraph 164 is accurate and paragraph 158 should read moderate adverse. No further clarification is sought.
Clarification	Clarify if paragraph 154 of Appendix K should state *"a*	**Not Acceptable** Although paragraph 174	**Acceptable** The Applicant has confirmed this

Request Type	Original Request	Reassessment based on Revised ES	Reassessment based on Aecom's October 2015 Response to Draft FRR
	reduction by 57 two-way rail trips compared with the maximum build out scenario".	(previously 154) has been amended to reflect the revised scheme it still states a reduction in 'two-way bus trips'. The Applicant should confirm whether the final sentence of paragraph 174 should state 'two-way bus trips' or two-way rail trips'. Further clarification is sought.	was a typographical error and should state 'two way rail trips'. No further clarification is sought.
Clarification	Chapter 21 should be revised to detail the difference between the proposed development and the Limited Development Scenario as per paragraph 21.23.	**Not Acceptable** Chapter 21 has not been revised to reflect this clarification. The Applicant should revise the chapter so that it is consistent with paragraph 21.23 or provide reasons for not doing so. Further clarification is sought.	**Acceptable** The Applicant has confirmed that paragraph 21.25 should state the impact is moderate adverse reduced to minor adverse significance. No further clarification is sought.
Potential Regulation 22	Provide an assessment of the development's impact on accidents and safety.	**Acceptable** The Applicant has provided an assessment of the operational development's impact on accidents and safety which is considered to be negligible. No further information under Regulation 22 of the EIA Regulations is sought.	N/A
Potential Regulation 22	Provide an assessment of	**Acceptable**	N/A

Request Type	Original Request	Reassessment based on Revised ES	Reassessment based on Aecom's October 2015 Response to Draft FRR
	construction traffic impacts on junction capacity.	The Applicant has confirmed that an assessment of junction capacity is not considered necessary as only additional 10 HGV movements are predicted for the AM and PM peaks during construction. No further information under Regulation 22 of the EIA Regulations is sought.	
Potential Regulation 22	Provide the impact of operational trips as a percentage increase over the baseline and an assessment of operational traffic impacts on junction capacity.	**Not Acceptable** Although the Applicant has provided the impact of operational vehicular trips as percentage increase over the baseline (i.e. difference in traffic flows), they have not provided an assessment of operational traffic impacts on junction capacity or provided reasons for scoping it out. Further information under Regulation 22 of the EIA Regulations is sought.	**Acceptable** The Applicant has confirmed that for the purposes of the Transport Assessment agreed with TfL, LBH and LBTH, junction capacity assessments were not required. The Applicant has also confirmed due to the negligible impact construction and operational vehicles will have on traffic flow, the impact on junction capacity will also be negligible. No further information under Regulation 22 of the EIA Regulations is sought.
Potential Regulation 22	Provide an assessment of construction staff movements.	**Acceptable** The Applicant has provided an assessment of construction staff movements which is considered to	N/A

Request Type	Original Request	Reassessment based on Revised ES	Reassessment based on Aecom's October 2015 Response to Draft FRR
		be negligible. Furthermore, as part of the Construction Method Statement a Travel Plan will be included to encourage sustainable modes of travel. No further information under Regulation 22 of the EIA Regulations is sought.	
Potential Regulation 22	Provide an assessment of the operational development's impacts on water transport.	**Not Acceptable** The Applicant has not provided an assessment of the operational development's impacts on water transport or reasons for why the assessment has been scoped out. Further information under Regulation 22 of the EIA Regulations is sought.	**Acceptable** The Applicant has confirmed there is no practical opportunity for futures residents, staff and visitors of the development to use the River Thames which is approximately 2 km away. As such, the assessment of the operational development's impact on water transport was scoped out. No further information under Regulation 22 of the EIA Regulations is sought.
Potential Regulation 22	Provide the significance of effect of HGV movements on Sclater Street.	**Not Acceptable** The Applicant has not provided this. Further information under Regulation 22 of the EIA Regulations is sought.	**Acceptable** The Applicant has confirmed that HGV movements on Sclater Street would be negligible. No further information under Regulation 22 of the EIA

Request Type	Original Request	Reassessment based on Revised ES	Reassessment based on Aecom's October 2015 Response to Draft FRR
			Regulations is sought.
Potential Regulation 22	The assumptions used to generate the population yield should be confirmed to ensure that the worst case scenario has been assessed with respect to traffic generation.	**Not Acceptable** The Applicant has not confirmed how the population yield was generated. Further information under Regulation 22 of the EIA Regulations is sought.	**Acceptable** The Applicant has confirmed that the trip generation assessment has been forecast using the TRICS and TRAVL databases, supplemented by surveys. This follows best practice in line with TfL's guidance. No further information under Regulation 22 of the EIA Regulations is sought.
Potential Regulation 22	The Limited Development Scenario should provide the information requested as set out in paragraph 9.15 of this Report.	**Not Acceptable** The Applicant has not addressed the points set out in paragraph 9.15 of this Report. The Applicant should provide this information or provide reasons for not doing so. Further information under Regulation 22 of the EIA Regulations is sought.	**Acceptable** The Applicant has confirmed that the assessment methodology, effect significance criteria and baseline conditions applied to the LDS remain as per the main ES. No further information under Regulation 22 of the EIA Regulations is sought.
Wind Microclimate			
Clarification	Provide a figure showing the location of surrounding receptors.	**Acceptable** The applicant has provided additional figures of the proposed development with existing	N/A

Request Type	Original Request	Reassessment based on Revised ES	Reassessment based on Aecom's October 2015 Response to Draft FRR
		surrounding buildings and receptors. No further clarification is sought.	
Potential Regulation 22	Provide model results for configuration with mitigation measures in place so that residual impacts can be verified.	**Not Acceptable** The applicant has not provided model results for configuration with mitigation measures in place. Further information under Regulation 22 of the EIA Regulations is sought.	**Acceptable** The Applicant has clarified the presentation of the mitigation results. No further information under Regulation 22 of the EIA Regulations is sought.
Potential Regulation 22	Update NTS to revise number of configurations tested in wind tunnel model and remove reference to residual minor adverse impact at London Overground thoroughfare.	**Not Acceptable** The applicant has not updated the NTS to revise the number of configurations tested in the wind tunnel model. The reference to residual minor adverse impact at the London Overground thoroughfare has not been removed. Further information under Regulation 22 of the EIA Regulations is sought.	**Not Acceptable** The Applicant has confirmed that the correct number of configurations were stated in the NTS, as five configurations. Configuration 5 is described in Appendix H. The Applicant notes that with mitigation applied, the residual effect for the London Overground thoroughfare was reduced to negligible, which has not been explicitly stated within the NTS. This information will be presented within an ES Addendum document to follow.

Request Type	Original Request	Reassessment based on Revised ES	Reassessment based on Aecom's October 2015 Response to Draft FRR
Potential Regulation 22	Further information should be provided on how the 'potential entrances' and other locations for the outline element have been determined to ensure the worst case scenario has been assessed.	**Not Acceptable** Further information on how the 'potential entrances' and other locations for the outline element have been determined, has not been provided. Further information under Regulation 22 of the EIA Regulations is sought.	**Acceptable** The Applicant has clarified that the potential entrance locations were identified as the most likely and practical for the outline design. The locations were not chosen on the basis of the worst case scenario for Wind Microclimate, as this would be unrealistic. The assessment assessed the 'Likely Significant' effects at these locations. The locations will be subject to change at reserved matters stage, at which point the scheme will be reassessed if necessary. A planning condition would be required to ensure the reassessment of wind impacts for the detailed design at reserved matters stage. No further information under Regulation 22 of the EIA Regulations is sought.
Daylight, Sunlight, Overshadowing, Solar Glare and Light Pollution			
Clarification	The reference to four scenarios in paragraph 11.33 should be clarified.	**Acceptable** The Revised ES clearly states which scenarios have been	N/A

Request Type	Original Request	Reassessment based on Revised ES	Reassessment based on Aecom's October 2015 Response to Draft FRR
		assessed. No further clarification is sought.	
Clarification	The reference to three baselines in paragraph 11.36 should be clarified.	**Acceptable** The Revised ES clearly states which scenarios have been assessed. No further clarification is sought.	N/A
Potential Regulation 22	An assessment of the impacts of the proposed development on its own and in combination with cumulative schemes on the cumulative schemes is required, in accordance with the requirements of paragraph 4.87 of the EIA Scoping Opinion.	**Not Acceptable** The Revised ES does not appear to have specifically addressed this point. Further information under Regulation 22 of the EIA Regulations is sought.	**Not Acceptable** A further response is awaited from GIA. Further information is required.
Air Quality			
Clarification	Clarify whether there are any local sites of ecological interest that might be affected by dust emissions.	**Not Acceptable** The Revised ES does not appear to have specifically addressed this point. Further clarification is sought.	**Acceptable.** The Applicant has provided additional information regarding the impact of dust deposition on sites with ecological interest in the vicinity of the development site (addressed under the applicant's Ecology section). No further clarification is sought.

Request Type	Original Request	Reassessment based on Revised ES	Reassessment based on Aecom's October 2015 Response to Draft FRR
Clarification	Assumptions used for future baseline ("do-nothing" scenario) background air quality.	**Acceptable** The Revised ES clearly states what assumptions have been used. No further clarification is sought.	N/A
Clarification	Confirmation that GLA's 2013 guidance on dust control will be adopted as part of mitigation of construction phase impacts.	**Acceptable** The Revised ES clearly states that the 2014 IAQM guidance is followed. This is based on the 2013 GLA SPG. No further clarification is sought.	N/A
Clarification	Further explanation is required as to how the flue would be higher for the minimum parameters.	**Acceptable** The Revised ES has remodelled all emissions based on new data. No further clarification is sought.	N/A
Potential Regulation 22	"Air Quality Neutral" assessment.	**Not Acceptable** The Revised ES now includes an Air Quality Neutral Assessment. However, the applicant should indicate what additional emissions controls would or could be adopted to bring building emissions in line with Air Quality Neutral Criteria. Further clarification is sought.	**Acceptable** The Applicant has pointed out that the difference between the actual emissions and the benchmark figure is less than 2%. Since this is probably within the margin of error of the emissions estimates the Applicant states that no specific mitigation is required. The guidance provides for developers to make a compensatory payment in such

Request Type	Original Request	Reassessment based on Revised ES	Reassessment based on Aecom's October 2015 Response to Draft FRR
			cases. No further information under Regulation 22 of the EIA Regulations is sought.
Potential Regulation 22	The assumptions used to generate the population yield should be confirmed to ensure that the worst case scenario has been assessed with respect to air quality emissions from traffic.	**Acceptable** The Revised ES clearly states the source of traffic data used. No further clarification is sought.	N/A
Potential Regulation 22	Further information is required on how the location of the energy centre in the outline element (i.e. Plot E - 3 boilers and 1 CHP) has been determined to ensure that the worst case scenario has been assessed.	**Acceptable** The Revised ES has remodelled all energy centre emissions. No further clarification is sought beyond the requirement to meet "Air Quality Neutrality".	N/A
Noise and Vibration			
Potential Regulation 22	Assessment of noise in external amenity areas for the Proposed Development and the Limited Development Scenario.	**Not Acceptable** Although criteria are set in 13.79, an assessment of noise in amenity areas has not been carried out. Further information under Regulation 22 of the EIA Regulations is sought.	**Acceptable** Reference made to the guideline values of BS8233 and the qualification relating to amenity areas located in high noise environments also in BS8233. A planning condition should be used to secure (and approve in writing) details of building design /

Request Type	Original Request	Reassessment based on Revised ES	Reassessment based on Aecom's October 2015 Response to Draft FRR
			screening for noise attenuation in external amenity areas. No further information under Regulation 22 of the EIA Regulations is sought.
Potential Regulation 22	The assumptions used to generate the population yield should be confirmed to ensure that the worst case scenario has been assessed with respect to noise from traffic.	**Not Acceptable** Further clarification as to whether these assumptions have been included in the traffic noise assessment is required. Further information under Regulation 22 of the EIA Regulations is sought.	Refer to socio-economic potential Regulation 22 above.
Water Resources, Drainage and Flood Risk			
Clarification	Provide detail regarding proposed water reuse/recycling or rainwater harvesting.	**Not Acceptable** The Revised ES does not appear to have specifically addressed this point. Further clarification is sought.	**Acceptable** Broad outline of proposed water reuse/recycling and rainwater harvesting has been provided (rain water harvesting tanks under all blocks and installation of grey water system to the private blocks (C, D, F & G)). It is identified that specific details for water harvesting systems will be developed at the next design phase. This should be conditioned. No further clarification is sought.

Request Type	Original Request	Reassessment based on Revised ES	Reassessment based on Aecom's October 2015 Response to Draft FRR
Potential Regulation 22	Confirmation is required that the maximum development basement levels have been assessed with respect to water resources, drainage and flood risk.	**Not Acceptable** The Revised ES does not appear to have specifically addressed this point. Further information under Regulation 22 of the EIA Regulations is sought.	**Acceptable** The applicant has confirmed that the maximum development basement levels have been assessed. No further information under Regulation 22 of the EIA Regulations is sought.
Potential Regulation 22	Confirmation should be provided that the worst case scenario has been assessed with respect to building foundations.	**Not Acceptable** The Revised ES does not appear to have specifically addressed this point. Further information under Regulation 22 of the EIA Regulations is sought.	**Acceptable** The applicant has confirmed that the worst case scenario has been assessed. No further information under Regulation 22 of the EIA Regulations is sought.
Potential Regulation 22	The assumptions used to generate the population yield should be confirmed to ensure that the worst case scenario has been assessed with respect to water demand and sewerage demand.	**Not Acceptable** The Revised ES does not appear to have specifically addressed this point. Further information under Regulation 22 of the EIA Regulations is sought.	Refer to socio-economic potential Regulation 22 above.
Potential Regulation 22	Confirm that Thames Water has been consulted regarding the water supply network capacity and the wastewater network capacity.	**Not Acceptable** The Revised ES does not appear to have specifically addressed this	**Acceptable** It has been confirmed that Thames Water has been

Request Type	Original Request	Reassessment based on Revised ES	Reassessment based on Aecom's October 2015 Response to Draft FRR
		point. Further information under Regulation 22 of the EIA Regulations is sought.	consulted. The Applicant should continue to consult with Thames Water in order to ensure that the development's demand for water supply and associated infrastructure both on and off site can be met. This should also be conditioned. No further information under Regulation 22 of the EIA Regulations is sought.
Archaeology			
Clarification	The introductory paragraphs in Chapter 15: Archaeology should make it clear that the assessment of impacts extends only to impacts on buried archaeological assets during the demolition and construction phase of the Proposed Development.	**Acceptable** Paragraph 15.1 makes this clear. No further clarification is sought.	N/A
Clarification	Table 15-1 heading could be amended to 'Sensitivity of Heritage Assets' as referring to 'significance' may create confusion. Column 2 of Table 15-1 could also be changed to 'sensitivity'.	**Acceptable** Table 15.1 has been amended. No further clarification is sought.	N/A

Request Type	Original Request	Reassessment based on Revised ES	Reassessment based on Aecom's October 2015 Response to Draft FRR
Clarification	Clarification required to determine if Table 15-5 should include a summary of residual impacts on plots C, F, G, H, I, J and L.	**Acceptable** Tables 15.14 and 15.15 replaced with a single table (Table 15.5) in Chapter 15 of the Revised ES. No further clarification is sought.	N/A
Clarification	Information in relation to who will implement the proposed mitigation measures should be provided for completeness.	**Acceptable** Text has been added at paragraph 15.91. No further clarification is sought.	N/A
Clarification	Clarification required as to the use of mixed impact ratings as per Table 15-3.	**Acceptable** The meaning of mixed effects has been clarified in paragraph 15.40. No further clarification is sought.	N/A
Potential Regulation 22	Confirmation is required that the maximum development basement levels have been assessed with respect to ground conditions.	**Acceptable** Text added at paragraph 15.97 which confirms that the maximum basement levels have been assessed. No further information under Regulation 22 of the EIA Regulations is sought.	N/A
Potential Regulation 22	Confirmation should be provided that the worst case scenario has been assessed with respect to	**Acceptable** Text added at paragraph 15.97 to confirm that the worst case	N/A

Request Type	Original Request	Reassessment based on Revised ES	Reassessment based on Aecom's October 2015 Response to Draft FRR
	building foundations.	scenario has been assessed. No further information under Regulation 22 of the EIA Regulations is sought.	
Built Heritage			
Clarification	It should be made clear from the outset of Chapter 16: Built Heritage that the assessment has considered both the direct (physical impacts) and indirect (setting impacts) on built heritage assets during demolition and construction and operation of the proposed development.	**Acceptable** This is made clear in paragraph 16.4 No further clarification is sought.	N/A
Clarification	'Heritage Assessment' should be referred to as ES Volume III Appendix J.	**Acceptable** Although not referenced in paragraph 16.3, the reference has been made throughout the rest of the document. No further clarification is sought.	N/A
Clarification	It would be useful if the sensitivity criteria discussed in paragraphs 16.57-16.58 was provided in tabular form in the same way as Table 15-1 in Chapter 15: Archaeology. This would aid reader understanding of the	**Acceptable** This has not been provided in the Chapter 16 of the Revised ES however it is considered that the text is clear. No further clarification is sought.	N/A

Request Type	Original Request	Reassessment based on Revised ES	Reassessment based on Aecom's October 2015 Response to Draft FRR
	sensitivity of different heritage assets.		
Clarification	Table 16-1 to include a 'negligible' sensitivity column as per paragraph 16.57.	**Acceptable** Table 16-1 does not include the 'negligible' sensitivity criteria as per paragraph 16.55 of Chapter 16 of the Revised ES however it is assumed that any assets of negligible sensitivity would, inherently, be unaffected by any impacts, irrespective of magnitude. Furthermore, there appear to be no assets of negligible sensitivity considered in the assessment. No further clarification is sought.	N/A
Clarification	A more detailed explanation of how the assessment has considered the outline and detailed elements of the development is required.	**Acceptable** This has been explained in Revised ES paragraphs 16.52 and 16.68. No further clarification is sought.	N/A
Clarification	There seems to be some discrepancies between the resulting impacts in the assessment and those described in Table 16-1 and paragraph 16.60.	**Not Acceptable** This does not appear to have been addressed in Chapter 16 of the Revised ES as the impacts predicted in the construction and operational assessment are not	**Acceptable** The Applicant has confirmed that paragraphs 16.74, 16.75 and 16.81 should conclude an impact concerning the heritage assets in question that is moderate

Request Type	Original Request	Reassessment based on Revised ES	Reassessment based on Aecom's October 2015 Response to Draft FRR
		consistent with the significance criteria set out in Table 16.1 and paragraph 16.58 (previously 16.60). Further clarification is sought.	adverse, not minor adverse. No further clarification is sought.
Clarification	The assessment does not seem to have followed English Heritage's advice in the Scoping Opinion with regards to sensitivity of Grade I and II listed buildings.	**Not Acceptable** A general explanation in terms of level of sensitivity has been provided. Paragraph 16.54 states "*The matter of the impact of change upon built heritage assets is generally one of interpretation and professional judgement. There is also no system of measurement of the sensitivity of receptors to change and the magnitude of that change.*" Whilst this is noted, however the sensitivity of each assets is not consistent i.e. some Grade II listed buildings are high sensitivity and some are moderate, with no clear explanation given for this. Further clarification is therefore required.	**Acceptable** The Applicant has confirmed that the assessment methodology considers all listed buildngs to be of high importance as per the Historic England guidance set out in the EIA Scoping Opinion. The level of sensitivity has been assessed through an understanding of the significance of a heritage asset and then other considerations such as distance from the site, its relationship to the site, the heritage asset's setting etc. No further clarification is sought.
Clarification	It would be helpful if the chapter clearly distinguished between those impacts which have been mitigated through design, and	**Acceptable** Paragraphs 16.107-16.110 briefly explain where mitigation is required and where it has been	N/A

Request Type	Original Request	Reassessment based on Revised ES	Reassessment based on Aecom's October 2015 Response to Draft FRR
	those which are the subject of additional mitigation measures.	built into the design. No further clarification is sought.	
Clarification	The assessment of Indirect Impacts on Heritage Assets (paragraphs 16.77 and 16.78) during demolition and construction should be presented in a way that is consistent with the other assessments within the chapter.	**Acceptable** Whilst the text has not been updated to reflect the rest of the assessments within the chapter, it is considered to be clear and understandable. No further clarification is sought.	N/A
Clarification	Clarification is required to determine if paragraph 831 in the LDS should read, "*the proposed mitigation once the Proposed Development is complete and operational would not change from the Proposed Development. This is detailed in ES Volume I – Chapter 16: Built Heritage*".	**Not Acceptable** This does not seem to have been addressed in Revised ES Appendix K paragraph 794 (previously paragraph 831). Further clarification is sought.	**Acceptable** The Applicant has confirmed that paragraph 794 should read *"the proposed mitigation once the Proposed Development is complete and operational would not change from the Original Scheme. This is detailed in ES Volume 1: Chapter 16: Built Heritage"*. No further clarification is sought.
Potential Regulation 22	Clarify how the heritage values and significance of the heritage assets has influenced the applicant's interpretation of sensitivity to development and whether English Heritage was consulted on the assessment	**Not Acceptable** This has not been provided within Chapter 16 of the Revised ES. Further clarification is sought.	**Acceptable** The Applicant has set out how the sensitivity of the considered heritage assets was calculated. No further information under Regulation 22 of the EIA

Request Type	Original Request	Reassessment based on Revised ES	Reassessment based on Aecom's October 2015 Response to Draft FRR
	methodology of the chapter. If English Heritage has not been consulted, this should be carried out to confirm the adopted method is acceptable.		Regulations is sought.
Ecology			
Clarification	Typo on page 22 of the NTS. *"No reptiles or invertebrate species were recorded within the site during the survey"*, assume this should state no reptiles or amphibians were recorded within the site during the survey.	**Not Acceptable** Text on page 23 of NTS remains the same. *"no reptiles or invertebrate species were recorded within the site during the survey".* Para 17.129 of the ecology chapter lists some of the invertebrates species of interest recorded within the site, therefore wording in the NTS is incorrect, should perhaps read no invertebrates of conservation concern were recorded? Further clarification is sought.	**Not Acceptable** No amendment to the NTS has been made, and the Applicant has not provided a response to this clarification. This information should be presented within an ES Addendum document to follow.
Clarification	An additional bullet point relating to black redstart surveys should be included for the baseline data collected at the site.	**Acceptable** Additional information has been added. No further clarification is sought.	N/A
Clarification	Provided a figure for how much of the site is considered to be OMH.	**Not Acceptable** Para 17.174 states *"This will result*	**Acceptable** The Applicant has confirmed that

Request Type	Original Request	Reassessment based on Revised ES	Reassessment based on Aecom's October 2015 Response to Draft FRR
		in an initial temporary loss of a small part of sub optimal quality Open Mosaic on Previously Developed Land located to the west of the site". Despite being previously required, no figure provided on how much of the site is considered to be OMH. Further clarification is sought.	the amount of OMH habitat within the site totals 1,000 m^2, whilst the amount of landscaping designed to replicate this habitat totals 2,116 m^2. No further clarification required.
Clarification	Clarification on exact timescales of the demolition and construction phase.	**Not Acceptable** There is still a discrepancy in relation to the duration of the demolition and construction phase. Paragraph 17.175 of the ES states that the demolition and construction phase is likely to span four years while paragraph 17.240 states *"16 year demolition and construction programme".* The duration of the demolition and construction phase will have implications for the phasing of mitigation. Further clarification is sought.	**Acceptable** The Applicant has confirmed that Paragraph 17.175 of the ES should read *"the demolition and construction phase is likely to span 16 years".* No further clarification required.
TV and Radio (Electronic) Interference			
Clarification	Clarify if the supporting guidance of PPG8 Telecommunications has been taken into account during	**Not Acceptable** The Applicant has not provided a	**Acceptable** The Applicant has confirmed that PPG8 Telecommunications was

Request Type	Original Request	Reassessment based on Revised ES	Reassessment based on Aecom's October 2015 Response to Draft FRR
	the assessment.	response to this clarification. Further clarification is sought.	considered during the assessment. No further clarification is sought.
Clarification	Clarify the detailed and outlined components impacts on satellite TV prior to mitigation.	**Not Acceptable** The Applicant has amended the structure of the chapter so that is assesses the whole development together, not the individual outline and detailed components. There is still a discrepancy between the impact stated in paragraphs 18.55 and 18.58 and the impact set out in Table 18-1. The Applicant should confirm which effects are correct. Further clarification is sought.	**Acceptable** The Applicant has confirmed that paragraph 18.58 should read minor adverse impact as stated in table 18.1. No further clarification is sought.
Clarification	Clarify the detailed and outlined components impacts on satellite TV prior to mitigation in Appendix K.	**Not Acceptable** The Applicant has amended the text of this assessment. Paragraphs 8.36 and 8.41 appear to be assessing the impact on terrestrial TV broadcast from the Crystal Palace transmitter. However, the paragraphs quote different figures for the number of properties which will be affected by the development. The Applicant should confirm which paragraph is correct. Table 56 which summarises the	**Acceptable** The Applicant has confirmed the number of properties that may be affected by the detailed and outlined components of the application. The effects are considered to be negligible post mitigation. No further clarification is sought.

Request Type	Original Request	Reassessment based on Revised ES	Reassessment based on Aecom's October 2015 Response to Draft FRR
		predicted impacts is not consistent with the effects outlined in paragraphs 8.38 and 8.47. Further clarification is sought.	
Townscape and Visual Impact Assessment			
Clarification	Although the method for assessing sensitivity (paras. 2.14-2.18) states that this method applies to townscape and views, only visual criteria are included here. Can the applicant clarify how townscape sensitivity has been assessed?	**Acceptable** Additional text has been provided at para 2.23 to explain how townscape sensitivity is assessed. No further clarification is sought.	N/A
Clarification	The applicant should confirm which of the assessments of impact on heritage assets should be relied upon – the assessment in the Built Heritage chapter or the assessment in the TVIA?	**Acceptable** Additional text at para 2.20 confirms that the Built Heritage Chapter should be relied upon for the assessment of impact on heritage assets and their significance. No further clarification is sought.	N/A
Clarification	The adverse impact on VP49 is explained to be because "*the effect on this view is likely to generate strong differences of opinion given the contrast in scale. In light of this and the cohesive nature of the existing*	**Not Acceptable** The applicant has not responded to this clarification. Further clarification is sought.	**Acceptable** The Applicant has confirmed that in their opinion there will be no adverse effect on views 32 and 34 (although they acknowledge that assessment of effect on each view is a matter of professional

Request Type	Original Request	Reassessment based on Revised ES	Reassessment based on Aecom's October 2015 Response to Draft FRR
	view along this street, and the uniform townscape derived from the common elevation details, it is considered that on balance the effect will be adverse" (para. 6.403). Could this be said for other VPs e.g. VP32 and 34?		judgment). No further clarification is sought.
Clarification	In viewpoint 55, where only the proposed development is visible, the report concludes a lesser cumulative effect than the effect from the proposed development alone. It would be helpful if the applicant could clarify why this is.	**Acceptable** The cumulative effect on viewpoint 55 has been amended to be the same as the effect from the proposed development alone. No further clarification is sought.	N/A
Clarification	For view 57 the assessment says the proposed development is not visible – the applicant should clarify if it is not visible because it is screened by the foreground trees, or if it will not be visible in winter either.	**Acceptable** Text has been update for view 57 to indicate that the foreground development screens the development. No further clarification is sought.	N/A
Clarification	Clarify which blocks the Limited Development Scenario includes and excludes (ref. to discrepancy in wording between Para A.5.3.1 of Appendix A5 and Para 2 of Appendix K).	**Acceptable** Wording in Appendix A5 has been amended to be in line with Appendix K. No further clarification is sought.	N/A
Residual Impact Assessment and Conclusions			

Request Type	Original Request	Reassessment based on Revised ES	Reassessment based on Aecom's October 2015 Response to Draft FRR
Clarification	Table 19.1 should be revised to detail the correct 'construction dust and short-term concentrations of PM_{10} generated through abrasive forces on materials' residual impact.	**Acceptable** Table 19.1 has been amended to reflect the correct residual impact. No further clarification is sought.	N/A
Clarification	Table 19.1 should be revised to detail the residual impact on the Redchurch Street and Fournier Street conservation areas.	**Not Acceptable** Table 19.1 has not been revised to include the residual impact on the Redchurch Street and Fournier Street Conservation Areas. Further clarification is sought.	**Acceptable** The Applicant has confirmed that the impacts on Redchurch Street and Fournier Street Conservation Areas are provided in Table 19.3. No further clarification is sought.
Clarification	Table 19.2 should be revised to detail the correct residual impacts on pedestrian movement and capacity and pedestrian delay.	**Acceptable** Table 19.2 has been revised to reflect the correct residual impacts on pedestrian movement and capacity and pedestrian delay. No further clarification is sought.	N/A
Clarification	Table 19.2 should be revised to detail the residual impact on the Redchurch Street and Fournier Street conservation areas.	**Not Acceptable** Table 19.2 has not been revised to include the residual impact on the Redchurch Street and Fournier Street Conservation Areas. Further clarification is sought.	**Acceptable** The Applicant has confirmed that the impacts on Redchurch Street and Fournier Street Conservation Areas are provided in Table 19.3. No further clarification is sought.
Clarification	Table 19.3 should be revised to	**Acceptable**	N/A

Request Type	Original Request	Reassessment based on Revised ES	Reassessment based on Aecom's October 2015 Response to Draft FRR
	detail the correct residual impact on View 43n.	Table 19.3 has been revised to reflect the correct residual impact on View 43n. No further clarification is sought.	
Impact Interactions and Cumulative Impact Assessment			
Clarification	Table 20.2 should be revised to reflect to the correct predicted impacts on pedestrian movement and capacity and pedestrian delay.	**Acceptable** The Applicant has revised Table 20.2. No further clarification is sought.	N/A
Clarification	Table 48 of Appendix K should be revised to reflect to the correct predicted impacts on pedestrian movement and capacity and pedestrian delay.	**Not Acceptable** The Applicant has not updated Table 54 (previously 48) of Appendix K to reflect to the correct predicted impacts on pedestrian movement and capacity and pedestrian delay. The table should be updated to ensure the effects recorded in the submitted documents are consistent. Further clarification is sought.	**Acceptable** The Applicant has confirmed that the impact on pedestrian movement and capacity recorded in table 54 should read minor adverse. The Applicant also confirmed that the correct impact was used within the assessment. No further clarification is sought.

Table 23.2: Assessment of Submitted Regulation 22 / Clarification Information with regard to the Revised ES

Request Type	Original Request	Reassessment based on Aecom's October 2015 Response to the Interim Review of the ES for the Goodsyard
EIA Context and Influence		
Clarification[12]	Reflect the adoption of LBH's Development Management Local Plan in future submissions when referencing policy.	**No further clarification is sought** The Applicant has not provided a response to this. However, as the clarification did not request a response this is considered acceptable. This should be picked up in the forthcoming ES Addendum.
Demolition and Construction		
Clarification	Clarification of the number of peak vehicles movements per day and the year that these will occur.	**Acceptable** The Applicant has confirmed that the peak vehicle movements will be 100 / day occurring in 2022 - 2023. No further clarification is sought
Potential Regulation 22	Confirm what text has been updated within the Revised ES as a result of the amendments (where not already highlighted in green), and that that all changes within the ES have been assessed in each topic area.	**Acceptable** The Applicant has provided more information with regard to the changes that have been made within the ES. No further information under Regulation 22 of the EIA Regulations is sought.
Potential Regulation 22	Confirmation of how the building in Plot K which spans the London Overground will be	**Not Acceptable** The Applicant has confirmed that detailed

[12] It is noted that this was originally recorded as a potential Regulation 22. This was an error and has been corrected to a clarification accordingly.

	constructed and provision of updated topic assessments to cover the additional information.	design information including the methods associated with the construction of Plot K will be provided as part of a reserved matters application, which is acceptable. The Applicant has provided additional details of the likely approach to construction of the deck above the railway line and confirmed that construction of Plot K was considered in the relevant topic assessments, which is considered acceptable. However, this request was considered originally to be a Regulation 22 because the demolition and construction chapter (which is used to describe the scheme that all of the assessments were based on) did not seem to contain enough information to assess the effects consistently. Nevertheless, as the Applicant states that further information is being provided within an ES Addendum prior to a reserved matters application.
Potential Regulation 22	Confirmation of whether additional piling is required and provision of additional relevant topic assessments.	**Not acceptable** The Applicant has confirmed that details of the piling methods have been considered in the noise and vibration chapter. While it would be recommended that this information is included in the demolition and construction chapter – so that it is clear that it has been information considered by all the relevant chapters – given that the piling method is most relevant to noise and vibration, this is considered acceptable. However, the Applicant has not and should confirm whether additional piling is required.

		Further information is required.
Waste and Recycling		
Clarification	Clarify apparent inconsistency between paragraphs 6.79 and 6.135.	**Acceptable** This has now been clarified. No further clarification is sought.
Socio-Economics		
Clarification	Clarification is sought to confirm the correct size for the components making up the private space provision.	**Acceptable** The Applicant has confirmed that information on this was provided in paragraph 7.184. No further clarification is sought.
Traffic and Transport		
Clarification	Clarification is required to confirm why the quantums set out in paragraph 9.61 and 9.189 differ from paragraph 4.10.	**Acceptable** The Applicant has confirmed that paragraphs 9.61 and 9.189 set out the Gross External Area of the development whilst paragraph 4.10 sets out the Gross Internal Area. No further clarification is sought.
Wind Microclimate		
Clarification	Provide a description of the mitigation measures to be implemented under Configuration 5.	**Acceptable** The Applicant has stated that the mitigation discussed for the Detailed and Outline Components of the Limited Development Scenario, will remain appropriate for the completed and operational Limited Development Scenario.

		No further clarification is sought.
Clarification	Confirm whether a Configuration 6 was tested in the wind tunnel, and the nature/results of this assessment.	**Acceptable** The Applicant has confirmed that five configurations were tested in the wind tunnel. Paragraph 208 should read: *"For Configuration 5 there are fourteen locations where the wind speed exceeds B6, B7 or B8 on occasion (refer to ES Volume III: Technical Appendices - Appendix H: Wind Microclimate (Table 4))."* No further clarification is sought.
Noise and Vibration		
Clarification	Reasons for the impact descriptions in Table 13-11.	**Acceptable** The table supplied clarifies the impact descriptors by cross referencing those from DMRB Vol 11 with the defined standard descriptors. No further clarification is sought.
Archaeology		
Potential Regulation 22	Assessment should include the likely effects of Plot K on previously unrecorded remains dating from the prehistoric to early medieval periods.	**Acceptable** The Applicant has confirmed that this was scoped out *"due to the proposed construction of Plot K deck above the existing railway line and piled foundation between the railway and Quaker Street coupled with low potential for prehistoric remains and the low sensitivity"*. The other plots have deeper foundations/ basements which is why prehistoric remains

		were considered as part of their assessments. No further information under Regulation 22 of the EIA Regulations is sought.
Built Heritage		
Potential Regulation 22	Clarification required in relation to the 'minor adverse' effect predicted on Tower of London World Heritage Site once the development is complete and operational (see para. 16.23 above).	**Acceptable** The Applicant has confirmed that the effect on the Tower of London should be moderate adverse, not minor adverse. The effect is therefore now significant. This document has been advertised as 'further information' under the EIA regulations.
Ecology		
Clarification	According to Appendix O: Table of Amendments, the Assessment of Impacts and Significance section had been revised, but it is not clear what revisions have been made in this section (no text highlighted). Clarification is sought on revisions made.	**Acceptable** The Applicant has confirmed that paragraph 17.205 was amended *"to incorporate the biodiverse garden and additional private gardens to be included within the Proposed Development."* No further clarification is sought.
Impact Interactions and Cumulative Impact Assessment		
Clarification	Table 53 should be amended to reflect the correct impact recorded against construction dust and short term concentrations of PM_{10} – negligible to minor adverse.	**Acceptable** The Applicant has confirmed that the impact from construction dust and short-term concentrations of PM_{10} recorded in table 53 should read minor adverse. No further clarification is sought.

Clarification	Table 54 should be amended to reflect the correct impact recorded against pedestrian movement and capacity and pedestrian delay – minor adverse.	**Acceptable** The Applicant has confirmed that the impact on pedestrian movement and capacity recorded in table 54 should read minor adverse. No further clarification is sought.