INDEPENDENT REVIEW

Retention & Redevelopment Options Study

SELKIRK HOUSE

LONDON BOROUGH OF CAMDEN

8 September 2023

34006-HML-XX-XX-RP-V-790003

Issue 01

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01	8/9/2023	INITIAL REVIEW OF OPTIONEERING STUDY

Contents

1. Introduction

Hilson Moran have been instructed by the **London Borough of Camden** to undertake an independent review of the 'Retention & Redevelopment Options Review & WLC Comparison' report (here in after also referenced as 'optioneering study' or 'optioneering report') for the extensive redevelopment of the site at **Selkirk House (also known as One Museum Street).**

The optioneering study has been produced by DSDHA architects on behalf of the applicant **Lab Selkirk House Ltd** and submitted to Camden Council as part of the planning application n. 2023/2510/P.

The optioneering study has been reviewed against Camden Planning Sustainability Policies and GLA requirements (where applicable) for Whole Life Carbon Assessments, with the aim of identifying any critical areas or potential conflicts with the planning requirements.

The key policy reference documents are:

- Camden Local Plan 2017 – Policy CC1 Climate Change Mitigation
- Camden Planning Guidance (CPG) Energy efficiency and adaptation - January 2021
- London Plan Guidance – Whole Life Carbon Assessments – GLA, March 2022
- London Plan 2021, Greater London Authority, March 2021

The aim of this review is to support the **London Borough of Camden** to ascertain whether the optioneering study submitted by the applicant responds to the sustainability planning requirements, with a focus on the assessment of the whole life carbon emissions.

This report does not intend to provide considerations on aspects covered in the optioneering study that are not strictly related to the policy sustainability requirements.

It is not the purpose of this report to provide a third-party opinion on what the best use of the site might be (e.g. which option maximises the site opportunities), judge the proposed design or suggest engineering solutions to improve the proposed scheme.

In addition to the above, Hilson Moran have been instructed to complete a technical review of the report 'The Carbon Case for Retention and Retrofit' issued by Targeting Zero on 15/03/2023 against the demolition of 1 Museum Street. The report has been prepared on behalf of '**Save Museum Street'**, a cross community coalition of organisations and major land holders. It should be noted the report by Targeting Zero was based on a previous application for the site (2021/2954/P).

1.1. Objectives

The key objectives of this independent review have been agreed with Camden as follows:

1. Review the carbon estimates (for both embodied and operational carbon emissions) provided by the applicant for each development option to ensure that **WLC emissions have been calculated and evaluated realistically and consistently**.

2. Ascertain if the optioneering study includes sufficient details on the **conditions/feasibility studies required by Camden to understand the potential reuse of the existing buildings**, in line with Camden's Guidance on Energy and Adaptation (CPG).

3. Comment on the **evidence provided by the applicant to justify the proposed demolitions** against Camden's Policy CC1 and the Guidance on Energy and Adaptation (CPG) requirements. This involves a review of assessment criteria established by the applicant to evaluate the different options considered.

4. Review the report issued by Targeting Zero against the demolition of 1 Museum Street on behalf of '**Save Museum Street'** and produce a short commentary response.

In line with the objectives above, we have reviewed the optioneering study submitted for planning against Camden's planning policies, the latest GLA requirements for WLCAs and the London Plan 2021, specifically policy SI2, minimising greenhouse gas emissions; our findings are outlined in section 5.

The arguments provided by the local community against demolition of 1 Museum Street have been reviewed; a commentary response is provided in Appendix A.

2. Documents reviewed

This independent review is limited to the following documents from Camden's planning portal:

Table 1 – List of planning documents within the scope of this review

Document	Revision	Date
Retention & Redevelopment Options Review & WLC Comparison	A	July 2023

In addition to the above, the '*Whole Life Carbon Assessment*' report and related '*GLA WLCA templates*' issued by the applicant in June 2023 have been read and thoroughly reviewed. A technical and independent commentary against Camden's planning policies and GLA WLCA requirements has been provided by Hilson Moran in a separate report (34006-HML-XX-XX-RP-V-790002).

Other planning reports have also been read to understand the project context and the wider sustainability brief; however these have not been commented on as they are not part of the agreed scope of appointment. This includes:

- Design & Access Statement issued for planning (June 2023)
- Sustainability Statement (Rev. 09 – June 2023)
- Energy Assessment (Rev. 11 – June 2023) and GLA Carbon Emissions Reporting Spreadsheets
- Circular Economy Statement (Rev. 10 – June 2023) and corresponding GLA template
- Internal Daylight, Sunlight and Overshadowing Report (May 2023)

Finally, we have completed a technical review and commented on the report issued by Targeting Zero, *The Carbon Case for Retention and Retrofit, March 2023* against the demolition of 1 Museum Street on behalf of '**Save Museum Street'**. It should be noted the report by Targeting Zero was based on a previous application for the site (2021/2954/P).

3. Independent reviewers

The independent review of the 'Retention & Redevelopment Options Review & WLC Comparison' study of Selkirk House has been carried out by **Andrew Moore** and **Samuele Rando**.

Andrew Moore is an Associate Director and experienced Sustainability Consultant / LCA reviewer. He has over 13 years' experience in the industry. Areas of expertise include embodied carbon and materials impacts, energy management in use, and climate change risk.

Andrew is a leading industry figure, most notably for developing and co-authoring the City of London policy advice note on WLC optioneering, for early-stage carbon related decision making.

Samuele Rando is a Principal Sustainability Consultant who has extensive experience undertaking lifecycle assessments and supporting design teams in the implementation of Circular Economy principles over the last 7 years.

Samuele recently supported Camden Council as an independent sustainability reviewer of other strategic applications in the London Borough of Camden, having gained in-depth knowledge of Camden's planning policies.

4. Project overview

Table 2 – Project information

Project name	Selkirk House
Application no.	2023/2510/P
GLA referable scheme	The project is GLA referable
Address	166 High Holborn and 1 Museum Street, 10-12 Museum Street, 35-41 New Oxford Street and 16A-18 West Central Street, London, WC1A 1JR
Property type	Mixed-Use – Office, Residential and Retail / Flexible Use
Gross Internal Area	30,980 m^2 (wide site)
Project description	The existing site comprises of 0.52 hectares and is bounded by High Holborn to the south, Museum Street to the east and New Oxford Street to the north, with the rear of the properties fronting Grape Street forming the western boundary. The proposed scheme comprises of redevelopment and extension to provide a mixed-use scheme of affordable housing, town centre uses and office floor space within the new 19 storey building on Museum Street. The proposed development comprises of the following components: • **1 Museum Street** - A single new building rising to 19 storeys, providing office accommodation on upper levels and a range of flexible town centre uses (Class E) at ground level. • **High Holborn** - A single new building rising to 6 storeys, providing residential (Class C3) accommodation on upper levels and a flexible town centre use (Class E) at ground level. • **Vine Lane** - A single new building rising to 5 storeys, providing market residential units with a flexible town centre use (Class E) at ground level (co-working offer). • **West Central Street** - A series of new and refurbished buildings rising to 6 storeys, providing residential accommodation (market, LCR and Intermediate) on upper levels (Class C3) and flexible town centre uses (Class E) at ground level. This block includes 2 no. listed buildings: 35-37 New Oxford Street and 10-12 Museum Street.
Developer	Lab Selkirk House Ltd
Planning Consultant	Iceni Projects
Architect	DSDHA
Structural Engineer	Heyne Tillett Steel
Sustainability and MEP	Scotch Partners
Project Manager / QS	Gardiner and Theobald (G&T)

5. Findings

5.1. Whole Life Carbon emissions

The 'Retention & Redevelopment Options Review & WLC Comparison' report submitted by the applicant includes an estimate of the Whole Life Carbon emissions associated with each development option. The carbon performance of the various options is presented as one of assessment criteria (alongside other nine) that have informed the whole decision-making process.

In line with the first objective of this independent review, we've scrutinised the carbon estimates provided in the optioneering study to ensure that **WLC emissions have been calculated and evaluated realistically and consistently** across the various development options.

The scope of this review is limited to a documentary review of the information submitted for planning. The carbon model in OneClick LCA and the energy modelling that form the basis of the WLC results reported in the optioneering study have not been interrogated.

Hilson Moran have also undertaken a detailed review of the WLCA submitted for planning for the preferred option (Option 4) against RICS and GLA's requirements; comments on the detailed WLCA were provided in a separate report (34006-HML-XX-XX-RP-V-790002).

The optioneering study submitted for planning contains a significant amount of useful information on the Whole Life Carbon impacts of the various development options. Methodology, data sources and relevant assumptions/limitations are well outlined in chapter 5.10 of the 'Retention & Redevelopment Options Review & WLC Comparison' report.

The overall embodied carbon results appear sensible and consistently evaluated across the different options. There are however a few aspects that require attention, as summarised below.

Table 3 – Whole Life Carbon emissions - Findings

ID	Finding description
1	**Pre-construction demolition impacts** The optioneering study produced by the applicant states (paragraph): *Pre-construction demolition has not been included as part of this assessment, as per RICS Guidelines.* The first edition of the RICS PS on Whole Life Carbon assessments does not require an evaluation of the carbon impacts associated with the demolition of the existing buildings, but the latest GLA guidance for WLCA does. Regardless of what RICS or GLA might require (the purpose of the optioneering study is not to produce a carbon output that is RICS/GLA compliant) pre-construction demolition impacts are deemed to be a useful element for the comparison. This is particularly valid for projects like Selkirk House where the considered development options involve significantly different extents of retention/demolition and the carbon emissions associated with the works. We recommend amending the optioneering report with the inclusion of the carbon impacts arising from pre-construction demolition in the relevant clause "5.10 Carbon Assessment". We note that the same recommendation was raised to the applicant as part of our independent review of the previous planning application (2021/2954/P) for the same site.

ID	Finding description
2	**Operational carbon emissions (B6-B7)** All development options included in the optioneering study show very similar levels of operational carbon emissions associated with energy (B6) and water (B7) use. Options with higher retention of existing structure (1-3) stand at 485 $kgCO_2e/m^2GIA$, while Option 4 and 5 are slightly better performing, achieving 478 $kgCO_2e/m^2GIA$. The overall figures seem sensible and the minimal difference between the results of the various options (around 1.5%) is justified by the fact that all options involve either a recladding of the existing building or a new façade, and a full MEP services renewal. It is therefore reasonable that the various options are able achieve very similar energy performance. For the reasons above, we suggest reviewing the representation of the results in the table in the executive summary of the optioneering study (page 11). The use of different colours (green for options 4-5, and amber for options 1-3) without accompanying results can be misleading and convey the message that the energy performance of options 4-5 is considerably better than others, when the numbers actually demonstrate that all the options are comparable. We also suggest reporting the estimated Energy Use Intensities ($kWh/m^2/year$) and Water Use Intensities ($m^3/m^2/year$) for each option to enable further transparency.
3	**Operational carbon emissions (B6) - Assumptions and key inputs** The performance seems reasonable in most cases, however there are some clarifications that should be provided. Section 5.1 states '*This study has followed the RICS professional statement: Whole Life Carbon Assessment (WLCA) for the Built Environment, released in 2017.'* It should be noted that RICS WLC PS does require that B6 carbon emissions are based on Part L plus unregulated loads, such as lifts, safety, security and communication installations, ICT equipment, cooking appliances, specialist equipment, etc. Have these additional loads been considered? The emissions presented for the options comparison are based on Part L compliance methodology which would promote optimistic performance and lower carbon emissions than reality, but a consistent approach has been adopted for all options which could be deemed reasonable. However elsewhere in the report there seems to be conflicting messages about the data and sources of it *(see Key Variations between report versions 1 (Feb 2023) and version 2 (this version).* The text in section 5.10 does not seem to match the information provided in table 2.1. The text alludes to the fact there are changes to services and fabric with a different solution for options 1-3 however table 2.1 shows VRF for Option 1 and ambient loop with fan coil units of options 2-5. It is also not clear why options 2-5 do not have the same operational emissions ($kgCO_2e/m^2_{GIA}$) given the report is stating the inputs are the same. It is recommended the applicant clarifies this and expands on the reason for different services strategies and consistency in reporting and the methodology used for each option to enable fair comparison.

ID	Finding description
4	**Operational carbon emissions (B6) - Fabric** In terms of fabric performance presented, a bit more detail relating to the differences and reasons should be provided. All options require recladding of existing structures, further reasoning for differentiation in performance values across options is therefore needed (e.g. u-value, g-value and air tightness). As noted in previous finding 3, the narrative around the option parameters and performance is also confusing. It is also noted in option 1 the residential units would be new build. Clarification in relation to the differential of performance should be provided.
5	**Operational carbon emissions (B6) – Lighting** Lighting efficacy in option 1 is presented at 110 lm/w and in the other options as 140 lm/w; these are above the average set out in Part L for non-domestic buildings of 95 lm/w, however there is no clear reason for the difference in efficiency between the option presented. Providing W/m^2 and lux levels in spaces would be a better metric for evaluation. Reasons for the different lighting assumptions should be provided.
6	**Operational carbon emissions (B6) – HVAC Systems** For HVAC systems the text in section 5.10 does not seem to match with the data in table 2.1 making it difficult to evaluate consistency in results in terms of carbon output. There is no clear data on which system option is best, but this is challenging to undertake in stage 2. A detailed evaluation of energy performance and systems has not been undertaken. Further clarifications should be provided to enable consistency checks.
7	**Operational carbon emissions (B6) – Standards / Targets** Specific energy in use targets or estimated energy use intensities have not been provided. NABERS 5* is mentioned for the selected scheme; it is not clear if this is landlord energy or whole building. Section 5.8 seems to dismiss NABERS for options 1-3 saying *'it would be extremely challenging to meet'* without clear justification. Whilst a full review would not be required for all options at this stage, achievable targets and level of performance should be stated. Please clarify why NABERS or BREEAM could not be achieved for options 1-3? There is no evidence to back up this statement.

ID	Finding description
8	**Additional scenarios (future extensive refurbishments and tenancy Cat B fit out)** The optioneering study includes an estimate of the carbon impacts arising from future extensive refurbishments and tenant's fit out (pages 85-86) for each option. As transparently outlined in the report, Camden officers should acknowledge that data sources to inform such estimates and existing guidance for assessment are very limited at present. As such, the carbon estimates shown at pages 85-86 of the 'Retention & Redevelopment Options Review & WLC Comparison' report are characterised by a high level of subjectivity. The applicant assumed a predicted tenancy of 5 years for options 1-3 compared to an average tenancy of 10 years for options 4 and 5. In essence, the report assumes that the quality of the space delivered with the new-build options can double the average duration of the tenancy lease. It is understood and accepted that a better quality of space and associated facilities can encourage future tenants to stay longer, but the quality of the rented space is just one of the possible factors that can influence the average length of a lease. The assumptions made by the applicant seem too advantageous for the new-build scenarios and they currently supported by poor evidence.

5.2. Potential reuse of existing buildings

Camden's Guidance on Energy and Adaptation (CPG), paragraph 9.4, states: '**In assessing the opportunities for retention and refurbishment developers should assess the condition of the existing building and explore future potential of the site'**.

The policy outlines a list of conditions to assess and feasibility studies to undertake to investigate the potential reuse of the existing buildings, as shown in Figure 1.

Condition and feasibility studies (to understand the reuse potential of the existing building/s)	
Existing building uses	• How well does the building function? Identify operational positives/negatives. • Existing user surveys (if occupied) to understand what works / or doesn't work • If the building is not occupied have other options for reuse been explored?
Servicing	• Summary of MEP (Mechanical, Electrical, Plumbing) servicing, thermal performance and efficiency for each building component. • Identify remaining lifespan of plant and discuss pros/cons of plant upgrade.
Technical: review, with evidence and photos, of existing building, based on intrusive survey.	• Upgrades required to comply with current legislation • A material inventory audit, including an estimate of embodied carbon • Scaled section drawings showing slab depths, floor to ceiling dimensions etc. • Loading capacity of structural frame, materials strength, pile testing • Energy performance of the façade • SBEM (Simplified Building Energy Model) energy modelling • Details of Air Tightness, thermal bridge modelling and condensation analysis in exploration of limits to fabric upgrade in existing building • Future projections for carbon content of electric load should incorporate latest BEIS carbon factors
Site capacity	• What is the best use of the site? And can optimal site capacity be achieved?

Figure 1 – Extract from CPG planning guidance (page 45)

The optioneering study submitted by the applicant includes an extensive review of existing site conditions (Chapter 4). There are two constituent parts within the site boundaries: Selkirk House and West Central Street buildings.

The optioneering study focuses on the conditions of Selkirk House, the larger of the two blocks for which a full demolition is proposed (with retention of the existing basement).

West Central Street buildings do not form part of optioneering study as the proposal for this part of the site involves minimal demolitions (the proposal for West Central Street combines sensitive retention and refurbishment with extension). This approach seems sensible.

The 'Retention & Redevelopment Options Review & WLC Comparison' report has been reviewed for its completeness in meeting the conditions/feasibility studies required by policy to understand the potential reuse of Selkirk House. Our findings are summarised below.

Table 4 – Potential reuse of existing buildings - Findings

ID	Finding description
9	**Alternative uses for the site** Camden's CPG guidance suggests exploring different uses to maximise reuse opportunities for existing buildings. This recommendation does not appear to have been implemented. The optioneering study includes only options for a commercially led development of Selkirk House. In this respect, the report states: *earlier proposals for the site - while in previous ownership - have explored alternative uses, such as a hotel. However residential or hotel in Selkirk House did not meet the wider brief requirements*. It is not clear which brief requirements are being referred to. Either those from the Client or those dictated by Camden? Clarification is required on this issue. The report also adds: *the issues affecting the existing building and their implications (chapter 4.0) and analysis (chapter 5.0) apply equally, though in different degrees, to any alternative repurposing of the building for residential or hotel use.* This last statement is not accompanied by sufficient supporting arguments. Theoretically, an existing hotel could have a greater chance of being reused if maintained in its current use. A possible conversion into residential use could help resolve, or at least mitigate, some of the issues that prevent a successful transformation of the existing building into a modern office building (e.g. low floor-to-ceiling heights, existing upper floor's structural grid). It is understood and accepted that some of the issues of the existing site, as outlined in the optioneering study (4.2 and 4.3) will require substantial interventions, regardless of the proposed use at the upper floors. In other words, an alternative use won't solve all existing site issues.

ID	Finding description
10	**Existing building services, thermal performance and energy efficiency** Camden's CPG guidance require applicants to examine the condition of existing building services, estimate their remaining lifespan and weigh the pros/cons of upgrading. The assessment should also include an examination of the existing thermal performance and energy efficiency. The optioneering study do not respond to the above requirements. All options presented assume a full MEP renewal, albeit with differing solutions . Whilst this could be a sensible approach, appropriate supporting arguments should be provided. A description of existing building services is not provided, except for the configuration of existing lift provision (described as not suitable to meet current commercial standards). Information relating to the thermal performance and energy efficiency of the existing Selkirk House is not provided. Further clarity should be provided by the applicant.
11	**Material inventory and embodied carbon of existing buildings** In assessing the condition of the existing building, the applicant should include a quantification of existing materials (material inventory) and an estimate of the associated embodied carbon, in accordance with Camden's CPG policy requirements. A Pre-Demolition Audit (PDA) has been undertaken by ARUP. A draft of the PDA report is attached to the Circular Economy Statement submitted for planning (Appendix A). The PDA report is not dated but the revision history of the Circular Economy Statement suggests that ARUP's investigations were conducted before April 2021. The report by ARUP does not provide a quantification of existing materials, nor an estimate of the associated embodied carbon. Further investigations were conducted by HTS structural engineers, with their findings being summarised in the Pre-Reclamation Audit report attached to the Circular Economy Statement (Appendix D). Once again, the report is not dated, it is therefore not possible to place the activities conducted by HTS precisely in time. The reclamation audit report includes useful information on the quantity and on the embodied carbon of existing materials, but the scope of the report is limited to some structural elements (not the entire building). In addition, the GLA Circular Economy guidance stipulates that pre-demolition audits should be conducted by third-party independent specialists. This requirement is not satisfied, being HTS the structural engineers appointed on the project.
12	**Use of intrusive surveys to determine the technical conditions of existing buildings** To assess potential reuse of existing buildings, Camden's CPG guidance require applicants to conduct a series of technical studies, also based on intrusive surveys. This requirement does not appear to be met at present. Both investigation activities conducted by ARUP (pre-demolition audit) and HTS (pre-reclamation audit) are based on visual inspections and other non-intrusive forms of investigation. We understand that the former occupant Travelodge ceased all operation in June 2020 and the existing Selkirk House building is vacant since then. The applicant should clarify the reasons why it was not possible to conduct intrusive investigations in this period of time. The use of intrusive surveys can provide essential information to establish the potential reuse (either onsite or offsite) of existing materials, as well as being an element of support for the decision-making process relating to possible development options.

5.3. Justifications for demolition

This section of the report includes a commentary on the evidence provided by the applicant in the optioneering study to justify the proposed demolitions against Camden's Policy CC1 and the Guidance on Energy and Adaptation (CPG) requirements.

→ Policy context:

- Camden's Local Plan 2017, Policy CC1 Climate Change Mitigation (page 250), states: '**We will require all proposals that involve substantial demolition to demonstrate that it is not possible to retain and improve the existing building**'.
- The same CC1 Policy (page 253) requires: '**All proposals for substantial demolition and reconstruction should be fully justified in terms of the optimisation of resources and energy use, in comparison with the existing building**'.
- The same requirements are reiterated, with the same exact wording, in the Camden's Guidance on Energy and Adaptation (CPG), paragraph 9.7.

The 'Retention & Redevelopment Options Review & WLC Comparison' report includes an assessment of 5 no. development options characterised by different retention/demolition extents. The preferred option (Option 4), for which the applicant is seeking planning consent, involves a full demolition of the existing buildings above ground with retention of existing basement.

A detailed description of the options investigated is available in chapter 2.0 of the optioneering report. Below is a graphic representation of the options taken from the report produced by the applicant which is particularly useful for understanding the massing and the extent of the required works (demolition, retention and retrofit, new construction) for the various options.

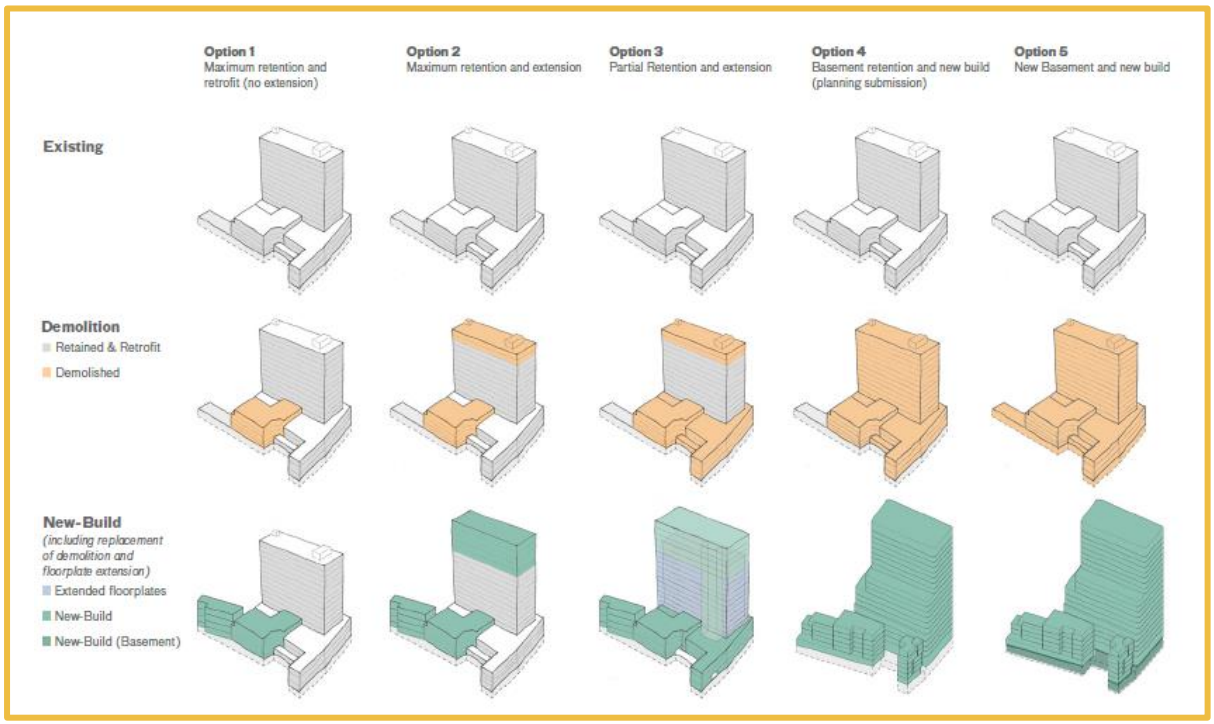


Figure 2 – Extract from optioneering study (page 27)

The optioneering study submitted by the applicant sets out 10 no. assessment criteria used to evaluate constraints and opportunities of each option. The proposed criteria primarily focus on the sustainability credentials of the development options, but they also cover wider aspects such as space quality, ground floor activation, public realm enhancements and housing offer.

Qualitative considerations and estimated performance are provided for each criterion in chapter 5.0 of the 'Retention & Redevelopment Options Review & WLC Comparison' report. A traffic light colour system is proposed to rank the various options against the established criteria.

In line with the objectives of our independent review, the options appraisal developed by the applicant has been scrutinised to ascertain if the extent of the proposed demolition (Option 4) is justified in terms of optimisation of resources and energy use, in comparison with the existing building and other development options. Our findings are summarised in Table 5.

Table 5 – Justification for demolition - Findings

ID	Finding description
13	**Existing structure constraints / limitations** We note that there is no statement in the optioneering report claiming that it is not possible to retain and upgrade the existing structure. Conversely, the optioneering report provides a description of the structural limitations of the existing building and of the potential interventions required to upgrade the existing structure to modern standards (e.g. strengthening works to increase loading capacity, temporary works to support the tower while demolishing the car park structure, etc). As such, retain and improve the existing building doesn't seem beyond the realms of possibility.
14	**Energy performance** The optioneering study does not provide information on the energy use of the existing building; this should be reported in line with policy requirements. With the information currently provided, it's not possible to compare the energy performance of the different development options against the existing Selkirk House. *This comparison would however have little value, as the existing building was used as a hotel before being vacant, while all development options included in the optioneering report are for a commercial scheme.* In this case, it would be perhaps more appropriate to compare the energy performance of the preferred option (Option 4) with the other 3 options with higher retention rates (Options 1-3), to understand if the proposed level of demolition is justified by energy efficiency benefits. Camden's policy does not dictate the use of a specific metric for comparison, the most common metrics to describe energy performance are then analysed and commented on: • Energy Use Intensity (kWh/m^2/year) – Information not provided • Operational Carbon B6 ($kgCO_2e/m^2_{GIA}$ over 60 years) – *Option 4 performs marginally better than Options 1-3 as better outlined in previous finding no. 2* The optioneering report also includes an estimate of the annual carbon emissions per employee ($kgCO_2e$/employee/year) – The report shows Option 4 outperforming Options 1-3; this is mainly due the lower occupancy rate assumed for Option 1 (1:20) and the poor floorspace efficiencies (NIA:GIA) assumed for Option 2 (60%) and Option 3 (62%). Camden should acknowledge that this metric gives a very theoretical indication of the achievable performance, and the actual results could be significantly different if the actual occupancy rates will be lower than those assumed as design criteria (this is the current situation of the commercial real estate).

ID	Finding description
15	**Optimisation of resources** Camden's policies require applicants to justify the proposed demolition in terms of optimisation of resources. However, as with the energy aspects described above, there are several appropriate metrics and indicators that can be used to assess resource optimisation, and existing policy do not dictate the use of a specific metric for comparison. In absence of more detailed guidance by policy, it's difficult to establish if the preferred option (Option 4), which involves a full demolition of existing buildings above ground is justified in terms of optimisation of resources. Below are some considerations that can support Camden in evaluating the current proposal: • Upfront material intensity (kg/m^2_{GIA}) - *This is a common metric used to measure the quantity of materials needed to complete the construction of a building. The current proposal (Option 4) stands at 2,496 kg/m^2_{GIA} in line with results submitted in the Circular Economy Statement CES GLA template.* *Figures for the other options are not available but Options 1-3 will clearly perform significantly better thanks to a higher retention of the existing structure.* • Efficient use of land (GIA), efficient use of space (NIA:GIA), occupancy rates (occupants:NIA) and site capacity (occupants) – *These interrelated metrics provide a comprehensive representation of how a given proposal optimises the potential of a site and its financial viability.* *The optioneering report shows that Option 4 maximises the site over Options 1-3, delivering more lettable space (NIA) and enhancing site capacity.*

6. Conclusions

An independent review has been carried out by Hilson Moran on behalf of the London Borough of Camden of the 'Retention & Redevelopment Options Review & WLC Comparison' report for the extensive redevelopment of the site at Selkirk House (also known as One Museum Street).

The optioneering study has been reviewed against Camden's Planning Sustainability Policies and GLA requirements (where applicable) for Whole Life Carbon Assessments.

The conclusions are outlined below in line with the key objectives of the third-party review:

Table 6 – Conclusions

Objective	Conclusions
1. Review the whole life carbon estimates provided by the applicant for each development option to ensure that WLC emissions have been calculated and evaluated realistically and consistently.	• The upfront and lifecycle embodied carbon results appear reasonable and consistently evaluated across the different options at this stage of the project. • Further clarifications should be provided with regard to energy performance to enable consistency checks on the operational carbon emissions. • Pre-construction demolition impacts should also be considered and included in the optioneering study. *Additional information is provided in Table 3.*
2. Ascertain if the optioneering study includes sufficient evidence on the feasibility studies required by Camden to understand the potential reuse of the existing buildings.	• The optioneering study submitted by the applicant includes an extensive review of existing site conditions (Chapter 4) but some investigations required by policy have not been included or referenced for in the optioneering report. • Camden's CPG guidance suggests exploring different uses to maximise reuse opportunities for existing buildings; evaluation of alternative uses is not provided in the optioneering report. *Additional information is provided in Table 4.*
3. Comment on the evidence provided by the applicant to justify the proposed demolitions against Camden's Policy CC1 and the Guidance on Energy and Adaptation (CPG) requirements.	• There is no statement in the optioneering report claiming that it is not possible to retain and upgrade the existing structure. As such, retain and improve the existing building doesn't seem beyond the realms of possibility. • In terms of optimisation of resources and energy performance, the proposed scheme (Option 4) does not outperform other options with higher retention rates. *Additional information is provided in Table 5.*
4. Review the report issued by Targeting Zero against the demolition of 1 Museum Street on behalf of 'Save Museum Street' and produce a short commentary response.	• The report has been reviewed in relation to the updated results and design information included in the new planning application (2023/2510/P). • The arguments provided by the local community against demolition of 1 Museum Street have been reviewed; a commentary response is provided in Appendix A.

Appendix A

Independent commentary of the report issued by Targeting Zero on 15/03/2023 against the proposed demolition of 1 Museum Street on behalf of '**Save Museum Street'**.

Selkirk House, 1 Museum Street

Planning Submission Ref: 2021/2954/P

The Carbon Case for Retention and Retrofit

on behalf of

Save Museum Street
Climate Emergency Camden

15 March 2023

Hilson Moran's commentary

The report examines the Whole Life Carbon impacts and wider aspects of the project sustainability for the previous planning application of the site (2021/2954/P). All arguments raised in the report are commented on in relation to the updated results and design information included in the new planning application submitted by the applicant in June 2023 (2023/2510/P).

Here in after also referred as 'SMS report'

Save Museum Street is a cross community coalition of the following amenity and community organisations:

The Bedford Estates
The Bloomsbury Association
The Covent Garden Community Association
The Covent Garden Area Trust
The Seven Dials Trust
Save Bloomsbury
The Soho Society
Leicester Square Association
South Bloomsbury Tenants' and Residents' Association
Dudley Court Tenants' Association
Tavistock Chambers Residents' Association
Grape Street Residents
Drury Lane Residents
Willoughby Residents' Association
Climate Emergency Camden

This Report is prepared by Targeting Zero LLP

Hilson Moran's commentary

Hilson Moran's commentary

Contents:

1. **Report Summary:**

1.1. This report examines the Whole Life Carbon impacts of the proposed demolition of the existing Selkirk House, 1 Museum Street, and its replacement with a new and significantly larger tower development.

1.2. It is this report's contention that:

1.2.1. That the proposed demolition is, in carbon terms, against UK National Policy, GLA Policy and intentions, and Camden's declared climate and ecological emergency and its resulting policies and intentions. *(see Sections 3, 4 and 5 for details)*

1.2.2. That there is ample policy at a national, GLA and local level to justify Camden rejecting this application. *(see Sections 3, 4 and 5 for details)*

1.2.3. Camden must decide what they believe in. Do they decide in favour of achieving net zero at a faster pace than the UK Government as they claim, or do they decide in favour of the developers whose proposal is to optimise site value with no serious regard for climatic or carbon impacts?

1.3. This report specifically highlights several basic errors and inaccuracies described as 'Problems' with this submission which include:

1.3.1. Failure to meet Camden's own sustainability commitments.
1.3.2. Incorrect assumptions leading to incorrect and misleading carbon assessments.
1.3.3. Errors in the Carbon assessments.
1.3.4. Inaccurate retrofit/new build comparisons
1.3.5. Inaccurate claims about the circular economy.

Please note that various acronyms are used within this document:
DAS = Design and Access Statement
ESG = Environmental and Social Governance
GLA = Greater London Authority
GIA = Gross Internal Area
LETI = London Energy Transformation Initiative
PRI = Principles for Responsible Investment
RIBA = Royal Institute of British Architects
TCFD = Task Force for Climate Related Financial Disclosures
WLC = Whole Life Carbon
WLCA = Whole Life Carbon Assessment

Principle Documents Examined in the Preparation of this Report for 1 Museum St – Selkirk House:
- Design and Access Statement – September 2022
- Retention and redevelopment Options Review and WLC Comparison - February 2023
- Whole Life Carbon Assessment Report 2022
- 1 Museum Street GLA Spreadsheet V5.
- Circular Economy Statement – September 2022
- Policy Documents as indicated.

Hilson Moran's commentary

In carbon terms, the WLCA undertaken for the proposed scheme (application n. 2023/2510/P) demonstrates that **the current level of performance is in line with the GLA, LETI and RIBA business as usual benchmarks**. Further details on the estimated carbon performance has been made on the following pages.

The optioneering report submitted by the applicant shows a certain trade-off between site value and carbon.

The proposed scheme maximises the site value delivering more lettable space and enhancing site capacity. This is in addition to other wider benefits, such as public realm enhancements, ground floor activation and high-quality office space (e.g. higher floor to ceiling heights).

The associated carbon impact is a factor that requires consideration from Camden's planning officers.

The 'problems' identified in the SMS report are expanded further in the next chapter of the report.

2. Key Problems with the Planning Application:

Problem 1: Failure to meet Camden Sustainability Commitments:

Point 1: NET ZERO: Camden Context.

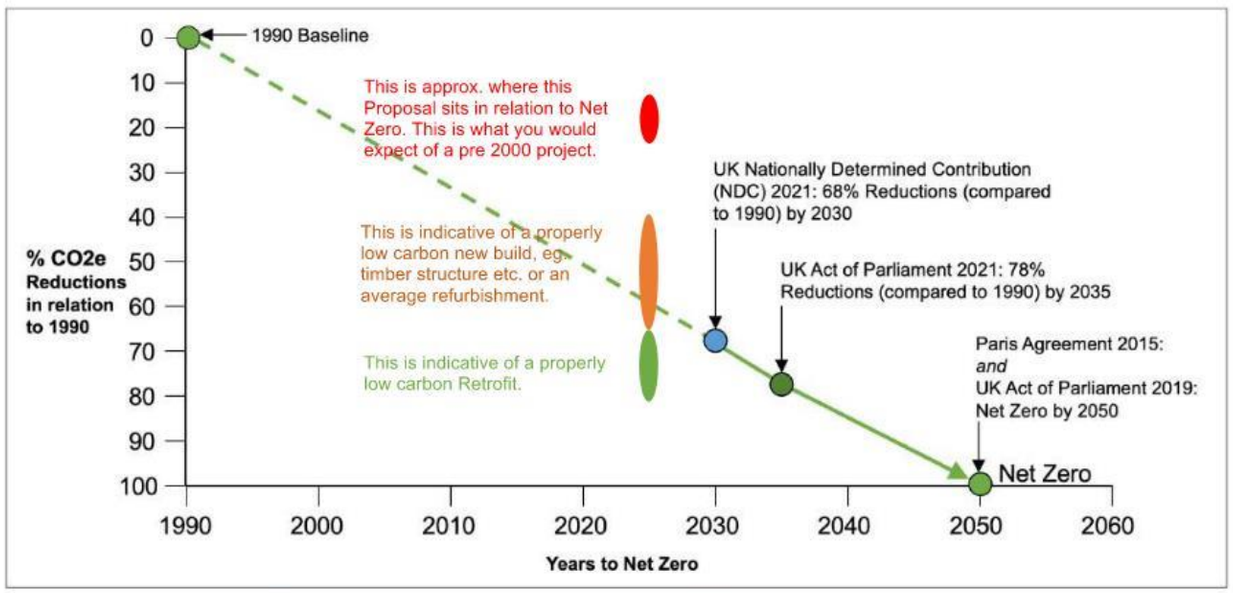
Camden Aspirations & Sustainability Commitments

Acknowledge the need to **act now** on the **climate and ecological emergency** → If Camden is *'acting now'* on the *'climate and ecological emergency'*, then it should not be approving this scheme. As it is not consistent with this aspiration. (See diagram below Net Zero, UK Context).

Achieve a **Net Zero Carbon Borough** by **2030** → This scheme is not contributing to the achievement of Net Zero, quite the reverse, it is actively maximising the carbon emissions for this site.

Points 2: NET ZERO: UK Legislative Context.

This diagram illustrates where the proposed new Museum St development sits in relation to the Governments 1990-2050 trajectory to Net Zero. Above the line is **BAD**, as you are performing worse than the trajectory, below the line is **GOOD**.



The proposed scheme exceeds UK legislative targets.

Hilson Moran's commentary

The concerns raised in this page of the SMS report are reasonable concerns and Camden should take them into consideration.

Retrofit and refurbishment of existing assets must be prioritised over demolition and new construction to achieve the Camden's sustainability aspirations.

The UK and Camden Net Zero targets can only be achieved through an appropriate mix of retrofitted and low-carbon new-build projects.

It is unrealistic (and perhaps not beneficial from a long-term perspective) to assume that all existing buildings can be efficiently maintained and upgraded to modern quality and sustainability standards.

Problem 2: Major Discrepancies in Carbon Assessments.

This is an examination of the discrepancies between the original **'Old Scheme'** 2021 Carbon Assessment and the **'New Scheme'** 2023 Carbon Assessment.
The following is a summary of the key areas, and carbon figures from the GLA matrices for both 2021 and 2023:

	Old Scheme 2021	New Scheme 2023	
Total m2:	30,267	34,943	m2
Construction Carbon: Modules A1-A5	19,850,427	28,211,210	kgCO2e
Embodied Carbon: Modules A-C	29,639,125	45,230,617	kgCO2e
Operational Carbon: Modules B6-B7	76,251,829	18,199,010	kgCO2e
Total Whole Life Carbon	105,890,954	63,429,627	kgCO2e
Embodied Carbon per m2	979	1294	kgCO2e/m2

Issues of Note:

1. The Area of the **New Scheme is 15% larger than the Old Scheme.**
2. The Construction Carbon of the **New Scheme has increased by 42%** compared to the Old Scheme. This is much more that the rise in area and is very high for a building of this type.
3. The Embodied Carbon (life-time material/transport related emissions) of the **New Scheme have increased by 52%** compared to the Old Scheme. This vastly more than the area increase, and points to a very poor embodied carbon scheme.
4. The Operational Carbon in Use (energy and water) for the **New Scheme** has **reduced by 76%.** This may seem impressive, but how is this huge reduction achieved given that the new scheme is now **15% larger**? This figure does not seem credible and undermines the reliability of the figures in general. There is no statement to suggest that this difference can be partially explained by grid decarbonisation. This figure really needs to be third party verified.
5. The carbon cost per m2 of the **New Scheme** has gone up by **32%** compared to the Old Scheme. The new figure is exceptionally high and **outside LETI / RIBA / GLA Aspirational Targets**.

By every measure this scheme performs **significantly worse** in embodied and 'upfront' or construction emissions than the original scheme. The operational emissions do show a **76%** improvement in energy use related emissions, but this is not credible given that this is essentially the same scheme and is **15% larger**.

These figures are very poor in relation to similar schemes and the operational energy reduction of 76% needs detailed third party verification.

Hilson Moran's commentary

Comparing the carbon figures of the current planning application (2023/2510/P) with the results of the previous submissions doesn't ascertain the quality, the robustness and the reliability of the current set of WLCA results.

Deviations from previous WLCA figures might be due to a number of different reasons including: design changes, material specifications, different LCA software, use of different carbon contingency rates, etc.

It is therefore difficult to compare and comment on the differences between the current WLCA results and previous submissions that have not been developed.

With regard to the accuracy and reliability of the WLCA results submitted for the current planning application (2023/2510/P), the following should be noted:

1) The WLCA model in OneClick LCA has been third-party verified by Greengage Environmental before submission – The third-party verification statement is included in the latest issue of the WLCA report (Appendix A)

2) Hilson Moran have completed a detailed review of the WLCA report submitted for planning. Our findings are summarised in a separate report (34006-HML-XX-XX-RP-V-790002). A number of clarifications and updates need to be addressed by the applicant to improve the quality and enhance transparency.

3) The embodied carbon results appear reasonable at this stage of design.

Problem 3: Failure to meet LETI, RIBA, and GLA Carbon Targets.

The proposed scheme **FAILS** against **LETI, RIBA and GLA Whole Life Carbon Benchmarks.** NB: LETI recommend prioritising Retrofit over New Build

Benchmark	Embodied Carbon (Modules A1-A5)	Modules A-C (excluding B6 & B7)
LETI Baseline	1000 $kgCO_2e/m^2$	n/a
LETI 2020	<600 $kgCO_2e/m^2$	n/a
LETI 2030	<350 $kgCO_2e/m^2$	n/a
RIBA Business as usual	n/a	1400 $kgCO_2e/m^2$
RIBA 2025	n/a	<970 $kgCO_2e/m^2$
RIBA 2030	n/a	<750 $kgCO_2e/m^2$

Table 4- Additional Benchmarks
From WLC Report Sept 2022 Rev01

FAIL: Proposal Modules A1-A5 figure exceeds **LETI** and **GLA** aspirational Targets

FAIL: Proposal Modules A-C figure exceeds **RIBA** and **GLA** Targets

	GLA Target	Proposal
Indicator	Aspiration	Achieved
Embodied Carbon (Modules A1-A5)	<600 $kgCO_2e/m^2$	**807.3** $kgCO_2e/m^2$
Modules B-C (exc. B6 & B7) (Office)	<370 $kgCO_2e/m^2$	**502.4** $kgCO_2e/m^2$
Modules A-C (exc. B6 & B7; inc. sequestered carbon)	<970 $kgCO_2e/m^2$	**1294.4** $kgCO_2e/m^2$

From WLC Report Sept 2022 Rev01. Diagram shows GLA Aspirational levels which equate to:
- *LETI: 2020 Modules A1-A5*
- *RIBA: 2025 Modules A-C*

This diagram shows the achieved figures for the Proposal for Modules A1-A5, and Modules A-C, in relation to LETI, RIBA and aspirational GLA Targets.

This Proposal exceeds all these carbon targets to a significant degree.

In addition, there is a totally inaccurate claim in the GLA Reporting matrix as follows:
"Roughly 75% of development by GIA is refurbishment and existing elements….."

This is incorrect, as the New Build is approx. 66% of the development by GIA.

Hilson Moran's commentary

All carbon figures in the SMS report are now superseded.
The table below shows where the project (wide site) currently stands against industry benchmarks for office buildings (predominant use)

GLA Benchmarks

Benchmark	Threshold $kgCO_2e/m^2$ GIA	Project Performance $kgCO_2e/m^2$ GIA	Target achieved?
A1-A5 Upfront Embodied Carbon STANDARD	950	747	✓
A1-A5 Upfront Embodied Carbon ASPIRATIONAL	600	747	✗
B1-B5, C1-C4 In-Use and EoL Embodied Carbon STANDARD	450	453	✗
B1-B5, C1-C4 In-Use and EoL Embodied Carbon ASPIRATIONAL	370	453	✗
A1-A5, B1-B5, C1-C4 Lifecycle Embodied Carbon STANDARD	1,400	1,173	✓
A1-A5, B1-B5, C1-C4 Lifecycle Embodied Carbon ASPIRATIONAL	970	1,173	✗

Continued on next page…

Problem 3: Failure to meet LETI, RIBA, and GLA Carbon Targets.

The proposed scheme **FAILS** against **LETI, RIBA and GLA Whole Life Carbon Benchmarks.** NB: LETI recommend prioritising Retrofit over New Build

Benchmark	Embodied Carbon (Modules A1-A5)	Modules A-C (excluding B6 & B7)
LETI Baseline	1000 $kgCO_2e/m^2$	n/a
LETI 2020	<600 $kgCO_2e/m^2$	n/a
LETI 2030	<350 $kgCO_2e/m^2$	n/a
RIBA Business as usual	n/a	1400 $kgCO_2e/m^2$
RIBA 2025	n/a	<970 $kgCO_2e/m^2$
RIBA 2030	n/a	<750 $kgCO_2e/m^2$

Table 4- Additional Benchmarks
From WLC Report Sept 2022 Rev01

FAIL: Proposal Modules A1-A5 figure exceeds **LETI** and **GLA** aspirational Targets

FAIL: Proposal Modules A-C figure exceeds **RIBA** and **GLA** Targets

	GLA Target	Proposal
Indicator	Aspiration	Achieved
Embodied Carbon (Modules A1-A5)	<600 $kgCO_2e/m^2$	**807.3** $kgCO_2e/m^2$
Modules B-C (exc. B6 & B7) (Office)	<370 $kgCO_2e/m^2$	**502.4** $kgCO_2e/m^2$
Modules A-C (exc. B6 & B7; inc. sequestered carbon)	<970 $kgCO_2e/m^2$	**1294.4** $kgCO_2e/m^2$

From WLC Report Sept 2022 Rev01. Diagram shows GLA Aspirational levels which equate to:
- *LETI: 2020 Modules A1-A5*
- *RIBA: 2025 Modules A-C*

This diagram shows the achieved figures for the Proposal for Modules A1-A5, and Modules A-C, in relation to LETI, RIBA and aspirational GLA Targets.

This Proposal exceeds all these carbon targets to a significant degree.

In addition, there is a totally inaccurate claim in the GLA Reporting matrix as follows:
"Roughly 75% of development by GIA is refurbishment and existing elements….."

This is incorrect, as the New Build is approx. 66% of the development by GIA.

Hilson Moran's commentary

LETI Benchmarks

Benchmark	Threshold $kgCO_2e/m^2$ GIA	Project Performance $kgCO_2e/m^2$ GIA	Target achieved?
A1-A5 Upfront Embodied Carbon AVERAGE DESIGN / BUSINESS AS USUAL	950	747	✓
A1-A5 Upfront Embodied Carbon 2020 DESIGN TARGET	600	747	✗
A1-A5 Upfront Embodied Carbon 2030 DESIGN TARGET	350	747	✗
A1-A5, B1-B5, C1-C4 Lifecycle Embodied Carbon AVERAGE DESIGN / BUSINESS AS USUAL	1,400	1,173	✓
A1-A5, B1-B5, C1-C4 Lifecycle Embodied Carbon 2020 DESIGN TARGET	970	1,173	✗
A1-A5, B1-B5, C1-C4 Lifecycle Embodied Carbon 2030 DESIGN TARGET	530	1,173	✗

RIBA Benchmarks

Benchmark	Threshold $kgCO_2e/m^2$ GIA	Project Performance $kgCO_2e/m^2$ GIA	Target achieved?
A1-A5, B1-B5, C1-C4 Lifecycle Embodied Carbon BUSINESS AS USUAL	1,400	1,173	✓
A1-A5, B1-B5, C1-C4 Lifecycle Embodied Carbon 2025 TARGET	970	1,173	✗
A1-A5, B1-B5, C1-C4 Lifecycle Embodied Carbon 2030 TARGET	750	1,173	✗

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Problem 4: Inaccurate comparison Retrofit and New Build.

Point 1: Inaccurate comparisons

Refurb. Option

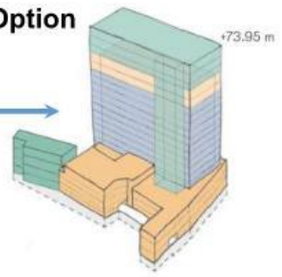
Option 3 is shown as the most carbon efficient option /m2. The Whole Life Carbon figure for this option is approx.1020kgCO2e/m2

This is the level of figure you would expect of a typical new build, not a major refurbishment, because a large proportion of the structure is being retained and reused.

The orange area (ramps, hotel) does not need to be fully demolished. Selective demolition would achieve a much lower carbon outcome. 3rd Party Verification.

Why isn't **Option 2** a lot less in both tCO2e, and kgCO2e/m2 compared to **Option 3**?

Option 2 is a less extensive and less complex scheme yet is higher in terms of carbon efficiency compared to **Option 3**. This needs 3rd party verification.

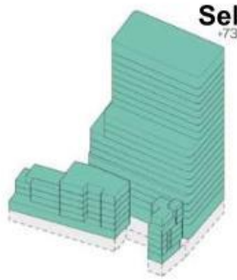


Option 3
Partial Retention and extension

Retain existing building structure to level 13 and extend these existing floor plates by 800mm; demolition of two top floors and replacement with 5-storey new build extension

- Demolish two storeys above level 14
- Add 5no. new storeys
- Extend typical slab edge by 800mm
- Adjust existing cores as needed / potential to introduce new stair core (external)
- Demolish car park area and build new structure
- Demolish lower levels along High Holborn and build new incorporating a new passageway (Vine Lane)
- Recladding the existing facade
- Renew all MEP services
- New residential building along West Central Street

Selected New Build



Option 4
Basement retention and new build (planning submission)

New build above ground to replace existing Selkirk House and NCP car park to deliver office, class E and residential accommodation alongside public realm improvements

- Retain Selkirk House basement structure as much as practicable possible
- Demolish existing Selkirk House and NCP car park
- New set of buildings - One Museum Street, High Holborn and Vine Lane Buildings providing office and residential accommodation - alongside public realm improvements

Diagrams from Retention Options Review p27

The Whole Life Carbon figure is 1294kgCO2e/m2.

This is a very high figure for a new commercial office building and suggests inefficient resource and carbon choices.

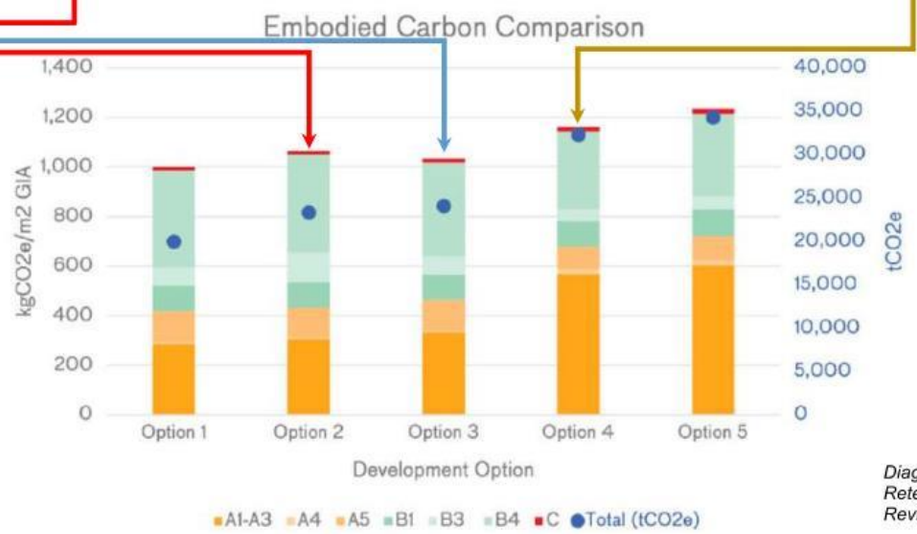


Diagram from Retention Options Review p10

Retention and Redevelopment Options Review and WLC Comparison Feb 2023

Hilson Moran's commentary

All carbon figures in the SMS report are now superseded.
The updated WLCA figures for the development options are shown below.

	Option 1 Maximum Retention	Option 2 Medium Retention and Extension	Option 3 Maximum Retrofit and Extension	Option 4 New Build	Option 5 New Build & Basement
Upfront Embodied Carbon (Module A) (kgCO2e/m2 GIA)	420	431	455	716	788
Overall Embodied Carbon (Modules A-C exc. B6&B7) (kgCO2e/m2 GIA)	865	862	904	1,112	1,184
Operational Energy and Water (Modules B6 & B7) (kgCO2e/m2)	485	485	485	478	478
Whole Life Carbon (Modules A-C) (kgCO2e/m2 GIA)	1,351	1,347	1,389	1,590	1,662

Figures in this table exclude carbon contingency

The optioneering study submitted for planning contains a significant amount of useful information on the Whole Life Carbon impacts of the various development options. Methodology, data sources and relevant assumptions/limitations are outlined in chapter 5.10 of the 'Retention & Redevelopment Options Review & WLC Comparison' report.

The overall WLC results appear sensible and consistently evaluated across the different options.

However, there are a few aspects that require attention, as summarised in Table 5 of our report n. 34006-HML-XX-XX-RP-V-790003.

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Point 2: Subjective use of Criteria

This table purports to show rankings in terms of a list of criteria. The first 9 criteria are ranked entirely subjectively, no doubt to provide support for demolition. The last three criteria are based on numbers and tell the true story, although the last item is based on incorrect assumptions, see notes below:

Table from Retention Options Review p38	Option 1 Maximum retention and retrofit (no extension)	Option 2 Maximum retention and extension	Option 3 Partial Retention and extension	Option 4 Basement retention and new build (planning submission)	Option 5 New Basement and new build
Efficient Use of Land	5	4	3	2	1
Construction Impacts	1	2	3	4	5
Space Quality	3	5	4	1	1
Ground floor activation	5	4	3	1	1
Employment capacity uplift	5	4	3	1	1
Public realm enhancements	5	4	3	1	1
Housing offer	5	4	3	1	1
Future flexibility	5	4	3	2	1
Long Term Economic Sustainability and Planning Benefits	4	5	3	2	1
Whole Life Carbon per m2	2	3	1	4	5
Total Embodied Carbon per m2 (RICS methodology)	1	3	2	4	5
Operational Carbon per m2	5	3	3	1	1

The top nine criteria are entirely subjective and should be treated with a great of suspicion. They are intended to show the new build in the best possible light in relation to the refurbishment options, and also to overshadow the bottom 3 items.

The numerical assessments show the true picture, ie that **Option 3** is the best option in terms of **'Whole Life Carbon /m2'**. Whole Life Carbon includes all carbon emissions. The only reason Option 3 is not also '1' for 'Total Embodied Carbon per m2' is because the 'light touch' (ie 'lick of paint') Option 1 is lower but can probably be discounted as very inefficient in both environmental and investment terms.

The **Option 3** figures are only 2.5% more than the **Option 4** (and 5) figures. This is well within the margin of error for this type of assessment and therefore they are effectively the same. Therefore the '3' ranking is misleading and should also be a '1'

Hilson Moran's commentary

Our scope as a third party reviewer primarily focuses on carbon, however, we understand that the optioneering prepared by the applicant cannot be limited to a carbon analysis for the various options, but must include a comprehensive assessment of several aspects of development.

The applicant sets out 10 no. assessment criteria used to evaluate constraints and opportunities of each option. The proposed criteria primarily focus on the sustainability credentials of the development options, but they also cover wider aspects such as space quality, ground floor activation, public realm enhancements and housing offer.

We agree that there is a certain degree of subjectivity in criteria selection, but this is inevitable given that the Camden policies do not provide precise guidance on how to carry out comparative studies for different development options.

In absence of specific guidance on this matter, the approach adopted by the applicant appears sensible.

Traffic light ranking system

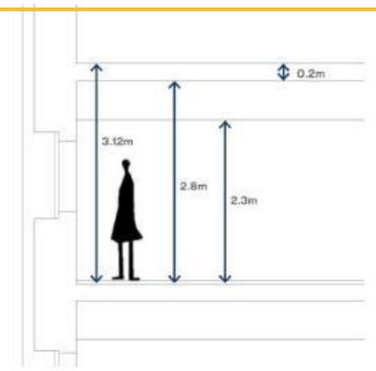
Qualitative considerations and estimated performance are provided for each criterion in chapter 5.0 of the 'Retention & Redevelopment Options Review & WLC Comparison' report. A traffic light color system is proposed to rank the various options against the established criteria.

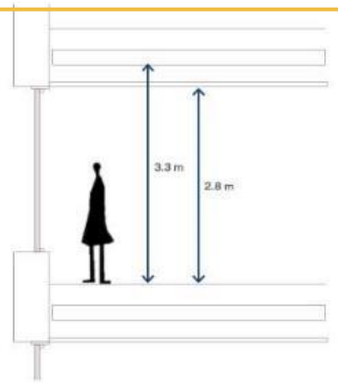
The traffic light color system is a simple and intuitive way to compare the results of the various options, but we agree that in some circumstances it is a subjective matter.

Camden should acknowledge this and give greater attention to the contents outlined in chapter 5.0 of the optioneering study.

We agree. See finding n. 2 in our report 34006-HML-XX-XX-RP-V-790003.

Point 3: Floor to Ceiling heights:





Diagrams from Retention Options Review p53

Existing Building – Typical Section

Market Expectations – Typical Section (BCO Guidelines)

- These show local sections through the existing building (on the left) and through the proposed new build (on the right).
- The existing section shows a finished floor/ceiling height of 2.3m. This assumes a ceiling plus void of 500mm. This is excessive for offices, which today usually avoid ceilings and have exposed services. The BCO Guide allows for refurbishment floor to ceiling heights to be between 2.45m and 2.8m. This could meet this requirement with the right design solution. Therefore, this is misleading.
- The existing section overall floor to ceiling height of 2.8m, originally designed for office use (Trusthouse Forte) and then converted for hotel use, could now be residential or other use, particularly for Option 3 where the new floors/facade could include balconies. The existing Floor to ceiling heights would be fine.

Point 4: The Car Park:

1. Selkirk House - Structural Elements

The existing Selkirk House building is formed of five constituent parts each with a different structural approach to framing.

1: Basement
2: Car Park
3: Hotel: Podium
4: Hotel: Typical Floors
5: Hotel: Upper Floors

The Post Tunnels (6) run below the site.

Much is made of the car park ramps (blue) as being a major reason for demolition. However as can be seen they do not cover the whole site, and therefore could have a limited impact even if demolition is required. What is required is positive and creative design intent for the use of these car park areas.

The car park is therefore not a determining factor for demolition.

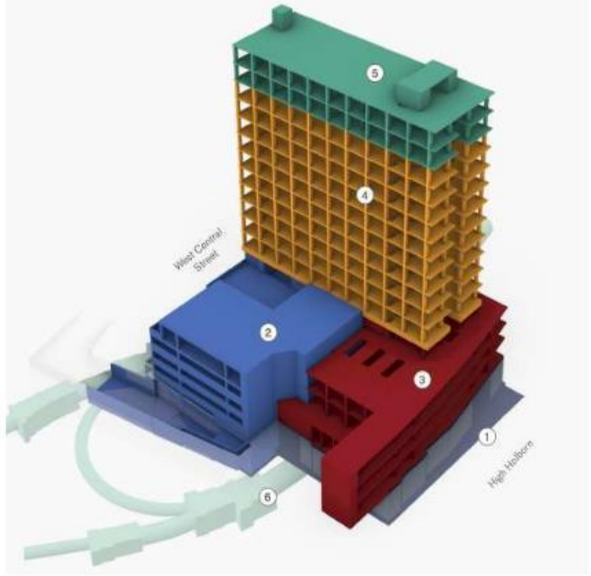


Diagram from Retention Options Review p45

Hilson Moran's commentary

This has been updated in the last version of the optioneering report.

Section 4.2 of the updated optioneering report states: *A perimeter servicing strategy could be used in order to reduce the ceiling zone to 200mm, and raise the resultant floor to ceiling height to 2.55m (although this would reduce the flexibility on how the space could be used).*

This is line with the BCO's recommended floor to ceiling heights for refurbished offices.

We note that there is no statement in the latest optioneering report claiming that the inadequacy of the car park structure constitutes itself a sufficient reason for demolishing the existing Selkirk House tower.

As indicated in the optioneering report, the car park forms part of the supporting structure for the tower, and substantial temporary works would be required to support the Selkirk House tower while redevelopment is carried out.

The inflexibility of the car park structure therefore appears to be an issue that can potentially be overcome, without demolishing the Selkirk House tower.

targeting zero

Problem 5: The Circular Economy – inaccurate claims.

The Circular Economy Statement (Sept 2022 Rev 01) makes a number of claims (extract below). The design is very standard with NO evidence of special design measures to ensure a circular outcome. Ironically the most 'circular' action that could be taken to '*design out waste*', '*minimise materials used*' and to '*reuse where possible*' would be **to retain and reuse the existing building**.

Circular Economy

The site will aim to consider the full life cycle of the buildings in its approach by following the six circular economy (CE) principles throughout the design and construction process. The six fundamental principles, as outlined in the GLA guidance document, support and underpin the structure and content of the Circular Economy Statement that accompanies the application.

The aim is for the following to be achieved by the Site:

- The development will apply the six CE principles, including designing for disassembly and adaptability.
- The design will aim to minimise materials used on site, through designing out waste and reuse where possible. Material reuse on site and/or recycling will be maximised.
- The development will aim to reduce and minimise the use of energy and natural resources where possible.
- Procurement of materials and other resources will be done responsibly and sustainably, with local products prioritised where possible to reduce transport to and from site.
- The development will be designed to maximise its life cycle where possible. The development will also be designed to be as adaptable or flexible as possible and optimise the chances of reusability and recoverability.
- The Site will aim to minimise all construction, demolition, excavation, and municipal waste throughout the development.

Too early to tell, Camden should condition details of designing for disassembly and adaptability as the project progresses.

This misses the obvious point that the best way to '*design out waste*', '*minimise materials used*' and to '*reuse where possible*' would be by NOT demolishing, and by reusing the existing building. Aluminium curtain walling (as designed) is a relatively short life facade, leading to multiple replacements over the buildings service life. This is highly wasteful. Anodizing inhibits recycling.

This reference to energy is not really relevant to the circular economy.
Are they proposing to '*reduce and minimise… .natural resources where possible*'? This is what has been said!

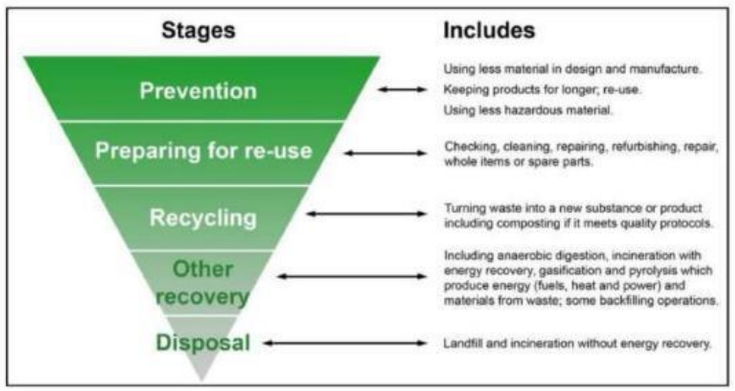
Aluminium, the majority facade material is NOT a local material, it is NOT responsibly or sustainably sourced, and will NOT reduce transport emissions.

There is no evidence for example to ensure that special measures have been taken with respect to the facade design to: '*optimise the chances of reusability and recoverability'*, or to *'maximise life cycle'*, or to *'ensure that it is as adaptable or flexible'* as possible. What has been designed is a routine aluminium curtain walling facade solution. These claims should be conditioned.

This is obviously an absurd claim as the design solution actually maximises *'construction, and demolition'* waste.

This diagram is from The Circular Economy Statement (Sept 2022 Rev 01)

The Prevention Stage has been ignored.



Hilson Moran's commentary

The Circular Economy Statement (CES) for the site has been updated and re-submitted (rev. 10) as part of the new planning application (2023/2510/P), but most of the concerns raised in the SMS report are still valid points.

The SMS report states: *there is no evidence of special design measures to ensure a circular outcome*. We agree with this statement.

The updated CES (rev. 10) is not substantially different from the one presented as part of the previous planning application (rev. 05). A useful addition is the pre-reclamation audit report produced by HTS's structural engineers (Appendix D of the CES), which explores possible solutions for reuse of existing structural elements.

Everything in the CES is still presented as a possibility, there is no clear commitment towards specific circular economy measures / actions.

A full pre-demolition audit in line with GLA requirements has not been undertaken.
See finding no. 11 of our report 34006-HML-XX-XX-RP-V-790003 for further details.

3. UK Political Context

3.1. The UK national political context is to achieve a 'Net Zero' carbon economy by 2050. This was passed by parliament in 2019 as a legally binding amendment to the Climate Change Act of 2008. This commitment was further updated in April 2021 by creating an interim commitment of achieving 78% carbon reductions by 2035 and a commitment by the UK to achieve 68% Reductions by 2030.

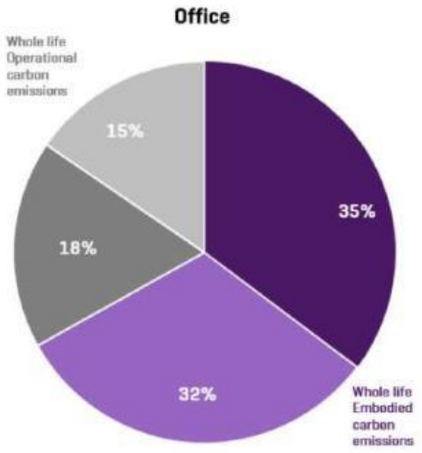
3.2. The built environment sector is generally held to be responsible for some 40% (*World Green Building Council*) of global CO_2 and other Greenhouse Gas (GHG's) emissions and therefore there is particular pressure on the built environment to significantly and rapidly reduce carbon emissions. To achieve 78% of reductions by 2035 means that schemes under consideration today already need to be making significant reductions in their overall whole life carbon footprint. The RIBA's 2030 Climate Challenge sets out interim targets for this. Avoiding demolition, and encouraging retrofitting is however a priority.

3.3. Under the UN's Greenhouse Gas Protocol 'operational' ie energy use emissions are covered under Scope 1 emissions ('*direct emissions' as in the use of petrol)* and Scope 2 emissions ('*energy indirect' as in bought electricity*) with 'embodied' emissions covered under Scope 3 emissions (*purchased goods and services, which includes construction*). 'Embodied' carbon emissions (Scope 3) include the carbon emissions from the sourcing of materials, the fabrication into products and systems, the installation and construction processes, and then after completion, the maintenance, repair, and replacement of components, and finally emissions from demolition and disposal. The UK Government's objectives are to reduce Scopes 1, 2 and 3 emissions as far as possible through positive action before the inclusion of offsetting to achieve 'net zero'.

3.4. The GLA's Policy SI2 Defines WLC as follows: "*WLC emissions are the total carbon emissions resulting from the construction and the use of a building over its entire life, including its demolition and disposal. They capture a building's operational carbon emissions from both regulated and unregulated energy use, as well as its embodied carbon emissions - that is, emissions associated with raw material extraction, the manufacture and transport of building materials, and construction; and the emissions associated with maintenance, repair and replacement, as well as dismantling, demolition and eventual material disposal. A WLC assessment also includes an assessment of the potential savings from the reuse or recycling of components after the end of a building's useful life. It provides a true picture of a building's carbon impact on the environment.*"

Hilson Moran's commentary

Chapter 3 and Chapter 4 of the SMS report include a series of national and GLA policy clauses and requirements. All references made are relevant and only a few comment have been made in this section



This diagram shows the relationship between embodied and operational emissions for a typical new office building over 60 years.

Dark Purple – Embodied emissions from Construction
Light Purple – Embodied emissions in use
Dark Grey – Operational Emissions – Regulated: Heating/lighting/cooling
Light Grey – Operational Emissions – Unregulated: Small power

Extract from RICS Professional Statement – Whole Life Carbon Assessment for the Built Environment – 2017, page 3. Diagram assumes grid decarbonisation.

Speculative office building with Cat A fit out; central London

3.5. In December 2020 the Committee on Climate Change (CCC) published the 6th Carbon Budget which requires a 68% reduction in all carbon emissions compared to 1990 by 2030, 78% reduction by 2035, and 100% reduction by 2050.

3.6. HM Government has backed up its intentions with the following guidance, 'The Construction Playbook', published in December 2020 which says that its use will create the right environment to:

3.6.1. *"Take strides towards our 2050 net zero commitment and focus on a whole life carbon approach to fight climate change and deliver greener facilities designed for the future".*

3.6.2. And that: *"contracting authorities should adopt the use of whole life carbon assessments to understand and minimise the GHG emissions footprint of projects and programmes throughout their lifecycle."*

3.7. Many Local Authorities, including Camden, have declared a Climate Emergency with some now actively pursuing low/zero 'whole life carbon' policies. For example, the Greater London Authority is, in the new London Plan, requiring all referable schemes to undertake a full 'whole life carbon' (i.e., operational and embodied emissions over the buildings entire life cycle) assessment at planning submission, and with an 'as built' update post completion.

3.8. The National Planning Policy Framework (NPPF) 2021, Chapter 14, 'Meeting the challenge of climate change, flooding and coastal change' Para 152,

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states that: "*The planning system should support the transition to a low carbon future in a changing climate.....*". Further; "*It should help to: shape places in ways that contribute to radical reductions in greenhouse gas emissions, minimise vulnerability and improve resilience; encourage the reuse of existing resources, including the conversion of existing buildings."*

The proposal for this site clearly does not "*contribute to radical reductions in greenhouse gas emissions"* nor does it *"encourage the reuse of existing resources, including the conversion of existing buildings".* (See Problem 2 above)

3.9. In June 2021, the Committee on Climate Change published their Joint Recommendations Report to Parliament which calls for: "*Setting out a plan for phasing in mandatory whole-life reporting followed by minimum whole-life standards for all buildings, roads and infrastructure by 2025*".

3.10. The UK Government's **'Net Zero Strategy: Build Back Greener',** by the **Department for Business, Energy and Industrial Strategy (BEIS) 2021** includes:

3.10.1. "*Government is committed to moving to a more circular economy. This means keeping built assets, products, and materials in use for longer, including through repair and reuse, and making greater use of secondary materials, thus reducing waste arising.*"

3.10.2. "*Resource efficiency measures reduce emissions from industrial processes by keeping products and materials in circulation for longer by way of reuse, repair, remanufacture and recycling as well as reducing material usage. These activities enable the retention of value, and in some cases the creation of new value for both the producer and customer, at a much-reduced environmental impact.*"

3.11. In May 2022 **the Environmental Audit Select Committee (EAC)** produced the Report: 'Building to Net Zero: Costing Carbon in Construction'. In this Report it states:

3.11.1. "*The written evidence we received presented a broad consensus that retrofit and reuse of existing properties was substantially more effective at conserving carbon than demolition and new build, even when the new construction used lower carbon materials".*

3.11.2. "*Considerable emissions are involved in demolition and rebuilding of properties, especially when measured under a whole-life carbon approach: under this approach, it becomes more debatable whether the replacement of properties is a sustainable approach to take.*"

Hilson Moran's commentary

3.11.3. *"The evidence we received consistently recommended that retrofit and reuse be prioritised over new build in order to conserve resources, reduce waste, minimise embodied carbon emissions...."*

3.11.4. *"The Chartered Institute of Buildings (CIOB) noted that even when using lower carbon materials to construct new building, this approach was less effective at conserving energy than reusing or repurposing existing buildings".*

4. The GLA London Plan:

4.1. The GLA's London Plan, published in 2021 includes several policies specific to the Circular Economy and Whole Life Carbon emissions as outlined below that have not been complied with in the submission for 1 Museum Street.

4.2. In April 2020 in: 'The Climate Emergency: Extreme Weather and Emissions', The London Assembly; states: "*The Mayor declared a climate emergency shortly after the Assembly and in early 2020, set a target for London to be net zero- carbon by 2030*". This requirement is significantly more demanding than the Government's net zero target of 2050. This therefore puts greater pressure on developers to reduce emissions at a faster rate than the UK legal commitments. The Proposal for 1 Museum Street is in fact worse than the UK's trajectory to Net Zero by 2050. (see Problem 1)

4.3. London Plan Policy SI2; Principles for reducing WLC emissions Table 2: *"Before embarking on the design of a new structure or building, the retrofit or reuse of any existing built structures, in part or as a whole, should be a priority consideration as this is typically the lowest carbon option. Significant retention and reuse of structures also reduces construction costs and can contribute to a smoother planning process."*

4.4. Policy SI7 London Plan Guidance: Circular Economy Statements: Item 1.1 What is a circular economy? Item 1.1.3, P5: The guidance explains how to prepare a Circular Economy Statement and *"also includes guidance on how the design of new buildings, and prioritising the reuse and retrofit of existing structures, can promote CE outcomes. Further, London Plan Policy D3 requires all development to aim for high sustainability standards, and to take into account the principles of the circular economy*".

4.5. Policy SI7 London Plan Guidance: Circular Economy Statements: Item 2.4.2, page 12, states the following: "*retaining existing built structures totally or partially should be prioritised before considering substantial demolition, as this is typically the lowest- carbon option*".

4.6. London Plan: Chapter 1, Planning London's Future - Good Growth; GG6, Increasing Efficiency and Resilience, Item 1.6.2, p25: "*Creating a low carbon circular economy, in which the greatest possible value is extracted from resources before they become waste, is not only socially and environmentally responsible, but will save money and limit the likelihood of environmental threats affecting London's future*."

4.7. The London Plan Policy SI2 London Plan Guidance – Whole Life Cycle Carbon Assessments, Item 1.2.3, p3: "*Designing a development that follows a WLC approach will: achieve resource efficiency and cost savings, by encouraging refurbishment, and the retention and reuse of existing materials and structures, instead of new construction*".
This recognizes that the best way to reduce carbon emissions in the built environment is to retrofit rather than to build new.

4.8. The existing Selkirk House is a substantial and robust structure that in the context of the climate crisis should not be seen as beyond economic reuse. The West End of London has some of the highest real estate values on the planet, it must therefore be possible to find an environmentally effective solution to this site that is also economically viable. This may not produce the maximum profit that the demolition/new build might produce, but it will be more appropriate in respect of UK, GLA and Camden policies.

The existing Selkirk House, 1 Museum Street. A robust and substantial structure capable of beneficial reuse and repurposing, thus avoiding the demolition that would contribute to the climate crisis.

4.9. GLA London Plan Policy SI7 Reducing Waste and the Circular Economy has at its core, 'reuse' and 'waste reduction'. The demolition of Selkirk House avoids reuse and produces significant waste to be transported (with associated CO_2e emissions) from the site and is therefore entirely at odds with Policy SI7.

Hilson Moran's commentary

We are unable to comment on the financial viability of the site.
This is not part of our scope for review.

The total demolition waste estimated by the project team is 19,420 tonnes, corresponding to approx. 0.627 tonnes per square meter of GIA.

The above figures are based on HTS's estimates.

It should be noted a full pre-demolition audit in line with GLA requirements has not been undertaken.
See finding no. 11 of our report 34006-HML-XX-XX-RP-V-790003 for further details.

5. London Borough of Camden Carbon Policies:

5.1. In 2019, Camden declared a climate and ecological emergency and held the UK's first Citizens' Assembly on the Climate crisis. This democratic exercise agreed the requirement that: *"Developers to fund energy efficient retrofits of old buildings"* supported by 86% of the Assembly. Whilst this is not a direct instruction for schemes of this type, it does demonstrate a clear democratic support for retrofit.

5.2. As detailed in the original Targeting Zero document dated Autumn 2021, reference was made to Camden's Declaration of a Climate Emergency and numerous other policy statements that prioritise retrofit over new build (*these are detailed in Sections 5.3 - 5.6*) eg:

5.2.1. Camden Local Plan 2017
5.2.2. Camden Policy CC1 Climate Change Mitigation
5.2.3. Camden's Climate Action Plan
5.2.4. Camden Planning Guidance – Energy Efficiency and Adaptation Jan 2021:
5.2.5. And the Design Review Panel 22nd November 2019:

There is no explanation from either the developer or Camden as to why Camden's climate declarations and associated policies have been so comprehensively abandoned in this submission.

Do the voters of Camden understand that the Planning Committee is prioritising development over climate change?

5.3. **Camden Local Plan 2017** States:

5.3.1. Item 8.3:

> *"Any new development in Camden has the potential to increase carbon dioxide emissions in the borough. If we are to achieve local, and support national, carbon dioxide reduction targets, it is crucial that planning policy*

Hilson Moran's commentary

Please refer to our report n. 34006-HML-XX-XX-RP-V-790003 for our commentary against Camden Planning Sustainability Policies

limits carbon dioxide emissions from new development wherever possible and supports sensitive energy efficiency improvements to existing buildings."

5.4. **Camden Policy CC1 Climate Change Mitigation** states, we will:

- *"support and encourage sensitive energy efficiency improvements to existing buildings"*
- *"require all proposals that involve substantial demolition to demonstrate that it is not possible to retain and improve the existing building"* As noted above this has not been demonstrated.
- *"expect all developments to optimise resource efficiency"* This is not the case with this proposal as demolition and rebuild clearly does not *"optimise resource efficiency"*. Quite the reverse, as for this site, the demolition proposal maximises waste, and the new build absorbs significant new resources.

5.5. **Camden's Climate Action Plan** States:

5.5.1. "*In 2020, deliver a Retrofit Summit for residents, businesses and community groups to develop our understanding of the retrofit challenge*".

This demonstrates the seriousness with which Camden is taking Retrofit as a standard approach.

5.5.2. *"By 2021, introduce a new requirement for all future Community Investment Programme development to include a lifecycle carbon impact assessment (retrofit versus new-build) as part of the pre-feasibility appraisal."*

If this is a requirement for 'Community Investment Programme development', surely the same should apply to external developers. This should be specifically required for this site.

5.6. **Camden Planning Guidance – Energy Efficiency and Adaptation Jan 2021:** Under 'Reuse and Optimising resource Efficiency' the 'Key Messages' include:

5.6.1. *"We will expect creative and innovative solutions to repurposing existing buildings and avoiding demolition"*. This has not been demonstrated.

Hilson Moran's commentary

Hilson Moran's commentary

5.6.2. *"All development should seek to optimise resource efficiency and use circular economy principles".* This has not been demonstrated.

5.6.3. Item 9.1 states:

"Retaining the resource value embedded in structures is one of the most significant actions you can take to reduce waste and material consumption" (Green Construction Board, Top Tips for Embedding Circular Economy Principles in the Construction Industry). This has not been acted on.

5.6.4. Item 9.3 states:

"Reusing buildings helps developers and the wider community to understand the environmental, social, and heritage value of a site. Benefits of retaining and refurbishing buildings:

- *Reduces the requirement for virgin materials and therefore reduces its embodied carbon impact;*
- *keeps products and materials at their highest value for as long as possible;*
- *maintains heritage value;*
- *minimises demolition waste;"*

5.6.5. Item 9.4 states:

"In assessing the opportunities for retention and refurbishment developers should assess the condition of the existing building and explore future potential of the site. The New London Plan highlights the importance of retaining the value of existing buildings with the least preferable development option of recycling through demolition".

5.6.6. Item 9.6 states:

"All options should achieve maximum possible reductions for carbon dioxide emissions and include adaptation measures, in accordance with the Council's Development Plan and this CPG.

- *Refit*
- *Refurbish*
- *Substantial refurbishment and extension*
- *Reclaim and recycle"*

5.6.7. Item 9.6 also includes:

- Refurbish:

"*Refurbishment should seek to significantly improve the service life of the existing building. This option provides an opportunity to retrofit the building to reduce carbon emissions and include sustainable adaptation measures.*"

- Substantial Refurbishment and Extension:

  "This option is similar to the above, but takes into consideration the need to optimise site capacity and alter the existing structure to meet future needs. This may involve significant changes to the façade (façade replacement) but should seek to retain as much of the existing building as possible reducing the need to use new materials and reduce the loss of embodied carbon in the existing structure." As noted above this has not been positively explored.

5.6.8. Item 9.7 states:

"This approach is justified through Local Plan policy CC1 which requires all proposals that involve substantial demolition to demonstrate that it is not possible to retain and improve the existing building." Not demonstrated.

5.6.9. Item 9.8 states:

"It is important to connect all development options to resource efficiency and circular economy principles, outlined in Local Plan policy CC1".

5.6.10. Item 9.9 states*:*

"As noted above the construction process and new materials employed in developing buildings are major consumers of resources and can produce large quantities of waste and carbon emissions."

5.6.11. Item 9.10 states:

"Reducing embodied carbon impacts can result in other additional benefits including: less waste to landfill from efficient construction methods, or improved air quality benefits from reduced transportation and lower costs of development, operation, and maintenance."

This all applies positively to the Retrofit approach.

Hilson Moran's commentary

5.7. Design Review Panel 22nd November 2019:

5.7.1. The Summary, first paragraph, states:

"At a strategic level, the panel asks for justification as to why little of the existing buildings are retained – and highlights the 'carbon cost' of removing one concrete frame and replacing it with another."

5.7.2. This comment is repeated under the Sustainability section, but as noted above has not been comprehensively and positively explored.

6. The Project Team

6.1.1. International Investment organisations such as the TCFD, PRI (see p4) and the Bank of England are all prioritising the requirement that 'Climate Risk' should be included within any investment strategy. Investments that are not 'climate clean' will be seen as high-risk investments. Buildings or Projects that are climate clean will therefore have the advantage in value terms over those that are not. Occupiers will start to shy away from buildings that are not climate clean. Climate related obsolescence will become a significant investment concern. The demolition and new build epitomise these concerns.

6.1.2. The **developer** of this site **Simten** has no sustainability policy evident on their website. This is unusual as the major UK developers have specific and detailed sustainability policies that are in many cases ahead of national or local requirements. The assumption therefore must be that sustainability and carbon reduction are not a priority issue for them, and it is therefore likely that they would prefer to do the absolute minimum required by Camden in this regard, and potentially to find ways to avoid meeting Camden's policies and intentions in this area.

6.1.3. **The Investor BC + Partners** claim on their website to subscribe to PRI and TCFD above, and state the following in their ESG Policy:

- *"In the light of anthropogenic climate change, which presents the greatest long term risk of any ESG factor we will review climate risk (physical and transitional) in every transaction. Further we will disclose these risks within the TCFD framework".*

- *"We will be prudent in the use of scares resources, including energy and water, and maintain circular economy goals in waste management".*

- *"We will attempt to minimise the impact of our operations on the natural world, specifically considering ecosystem disruption and pollution".*

Hilson Moran's commentary

It is not the purpose of our review to provide comments on the sustainability policies of the relevant member of the project team.

They also state that their ESG Committee will:

- "*Ensure both Environmental and social considerations are incorporated at every stage of the life cycle of developments."*

It is not possible to reconcile these warm words with what is being proposed on this site. They are not "*being prudent with scares resources*", nor are they "*minimising the impact of our operations on the natural world, specifically considering ecosystem disruption and pollution."*

6.1.4. The development team (BC + Partners with Simten) approach appears fundamentally short term i.e. to deliver a profit without concerns about 'collateral' environmental damage.

6.2. **The Architect: DSDHA:** DSDHA are signatories to 'Architects Declare' which recognises that architects need to change how they design to meet the Climate Emergency. Three of the eleven commitments are:

- *"Evaluate all new projects against the aspiration to contribute positively to mitigating climate breakdown, and encourage our clients to adopt this approach"*

- "*Upgrade existing buildings for extended use as a more carbon efficient alternative to demolition and new build whenever there is a viable choice."*

- *"Minimise wasteful use of resources in architecture and urban planning, both in quantum and in detail."*

6.2.1. The questions for DSDHA are, have they really understood these commitments? How has this changed their approach for this project?

6.2.2. DSDHA have, with their scheme for the Economist Plaza, demonstrated that they are fully able to retrofit buildings of a similar type and vintage to Selkirk House. As Selkirk House is not Listed, surely there is the opportunity to demonstrate a creative reuse of the existing building that would be compatible with the GLA's and Camden's Policies on prioritising Retrofit, and their own commitments to Architects Declare.

7. The Submission Documents: (See also Section 2 'Problems').

7.1. Design and Access Statement; Rev 01 Sept 2022, 2.11 Retention vs Replacement: The submission states the following:

7.1.1. The submission states*: "These studies were led by hotel use for typical floors in combination with commercial floors at lower levels".* In other words a limited approach to reuse was adopted. Potential residential use

Hilson Moran's commentary

is mentioned but dismissed without any evidence of a comprehensive or creative approach to this and other alternative use types such as recreational or uses suitable to nearby Covent Garden.

7.1.2. The new façade for 1 Museum Street is shown as being in 'Light/dark anodized aluminium" with double glazed units. The double-glazed units have a life expectancy of some 30-40 years, and when these are replaced, it is very probable that the entire aluminium system will need also to be replaced. Anodizing can have a longer life than the D/G units, but it depends on the specification and quality.

Bauxite Mine for producing Aluminium

Proposed Scheme

7.1.3. Anodizing as a coating for an aluminium façade means that to achieve a uniform colour you need to use 100% virgin aluminium rather than using recycled aluminium which tends to give colour variations to the substrate. This means that the carbon cost of such a façade is at its highest and typically cannot be mitigated using recycled content. Has this been reflected in the GLA WLC assessment figures?

7.1.4. For a building of this size and bearing in mind the substantial resources necessary to build it, you would expect it to have a significant life expectancy, in excess of 100 years (as opposed to the 60 year assessment life). As the façade design is given in the GLA assessment as 30 years, this means that over the course of a century the façade, like for like, will have to be replaced 3 times. Is this a sensible architectural approach, and an appropriate environmental legacy for the future?

7.2. Retention Options Review:

Hilson Moran's commentary

We agree with this point.
Camden's CPG guidance suggests exploring different uses to maximise reuse opportunities for existing buildings. This recommendation does not appear to have been implemented.

These points of the SMS report critique the proposed design.

As outlined in the introductive chapter of our report n. 34006-HML-XX-XX-RP-V-790003, judging the proposed design it not part of our scope for review.

7.2.1. As has been noted in Section 2, 'Problems' the *objective* of the options studies appears to be to demonstrate that the building can't be reused so as to ensure maximum demolition rather than adopting a creative approach to reusing and adapting the building with alternative use types (including office use, floor/ceiling heights are within BCO guidlines).

7.2.2. The submission claims that '95%' of demolition waste will be reused/recycled. There is a difference as 'recycled' for example means that waste rubble diverted to motorway hardcore is technically 'recycled' but it is at the lowest level and therefore this is not a claim with any real substance, and not 'reused' in the same way as a steel beam can be directly 'reused'.

7.3. Demolition:

7.3.1. The new build proposal includes significant new structural works below ground level, including basements, new retaining structures, new foundations, etc. The existing substrate is heavily congested with transport and utility tunnels. Despite the provision of the 'Basement Impact and Structural Impact assessment' of 2021, it is probable that this area will need further significant design development and is also therefore likely to have increased carbon costs compared with what has been assumed in the current GLA WLC Reporting Matrix. This will make the reported figures worse.

8. Conclusions:

8.1. There are a number of serious 'Problems' with the new submission for the new build scheme. These are outlined in Section 2 above and call into question the reliability of the WLC assessments and the figures used.

8.2. One of the most obvious 'Problems' is that energy use is claimed to have reduced by 76% between the 2021 submission and the 2023 revision. This is reduction just not credible and casts serious doubt over the submission's figures in general.

8.3. The developer has gone out of their way to demonstrate that the existing group of buildings will not work under a range of options, although refurbishment Options 2 and 3 show possibilities. These two options are however compromised by assessment anomalies and misleading presentation of information, and the comparative review that 'proves' that they are inadequate. The 'issue' of storey heights is exaggerated as the existing building meets BCO office refurbishment guidelines and could also be residential use.

8.4. The comparison of refurbishment options is inadequate and flawed in its methodology. It describes in general terms the conditions and restrictions of

Hilson Moran's commentary

See our previous comments.

A number of clarifications on the energy estimates for the submitted scheme are required, as better outlined in Table 3 of our report n. 34006-HML-XX-XX-RP-V-790003.

the existing building without fully examining possible solutions. No objective low-carbon retrofit scheme has therefore been developed. This could involve looking at re-use of the car-park and hotel structures, as well as use of the tower for residential use. The options offered contain flaws (intentional?) that undermine their credibility.

8.5. There is sufficient UK national, GLA, and local Camden policy to enable Camden to reject this submission in favour of a major retrofit. This approach would be lower in carbon emissions, result in significantly less waste, and be quicker to market. There are grounds for refusal, but this is a choice for Camden.

8.6. The design Review Panel of the 22 November 2019 asked: *"At a strategic level, the panel asks for justification as to why little of the existing buildings are retained – and highlights the 'carbon cost' of removing one concrete frame and replacing it with another."* This seems to have been completely ignored.

8.7. The London Borough of Camden should require a positive, forward looking architectural proposal and whole life carbon assessment to be produced showing how the existing Selkirk House, 1 Museum Street, can be reused, repurposed, and retrofitted with an open mind on use types to achieve a retrofit option with improved public realm. The central premise should be to retain most of the existing structure and add to or adapt this creatively. This may not produce the level of profit that the submitted proposal will produce, but it will be produced at far less environmental cost.

9. References:

- Application Documents 2021, 2022, 2023.
- Camden Planning Guidance – Energy Efficiency and Adaptation Jan 2021.
- Camden Local Plan 2017.
- Camden Climate Action Plan 2020-2025
- Camden approves ambitious five year Climate Action Plan 11 June 2020.
- London Borough of Camden's Carbon Footprint update for 2019/20
- Camden Citizen's Assembly on the Climate Crisis Sept 2019
- Environmental Audit Select Committee Report – "Building to net zero, cost carbon in construction", May 2022.
- GLA London Plan – Whole Life Carbon Guidance for Policy SI2
- GLA London Plan – Circular Economy Guidance for Policy SI7
- CCC 2021 Report to Parliament
- CCC 6th Carbon Budget December 2020.
- RICS Professional Statement – Whole Life Carbon Assessment for the Built Environment 2017

- ‘End of Life Challenges in Façade Design’ – Rebecca Hartwell
- LETI Climate Emergency Design Guide.
- LETI Embodied Carbon Primer

Report by Targeting Zero LLP - Update: March 2023.

Hilson Moran’s commentary

Hilson Moran

People. Places. Planet.