chapmanbdsp

New City Court GLA Stage 1 response

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55287 - New City Court GLA Stage 1 response

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chapmanbdsp Address: 40 Gracechurch Street, London EC3V 0BT T: 020 7816 4800 E: info@chapmanbdsp.com

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1 GLA general responses

Ref	GLA comment	CBDSP response
	21_AP_1361- GREATER_LONDON_AUTHORITY- 1177519.pdf	
125	The applicant should also review the Be seen' energy monitoring guidance to ensure that they are fully aware of the relevant requirements to comply with the 'be seen' policy (available here2).	Noted. We have included the Applicant's commitment to the 'Be Seen' policy in section 9.1 of the updated Energy Statement.
127	Applicants must also be conditioned to submit a post-construction assessment to report on the development's actual WLC emissions.	Noted.
129	A Circular Economy Statement has accordingly been submitted, however, this should be revised to address the detailed comments that have been sent under separate cover to the Council and applicant.	Noted.

2 Energy statement responses

Ref	GLA comment	CBDSP response
	20210545 New City Court GLA Consultation - Energy Memo 2021.xlsx	
5	The applicant has carried out an investigation and there are no existing or planned district heating networks within the vicinity of the proposed development. They should contact relevant stakeholders including the borough energy officer, local heat network operators and nearby developers and ask whether they know of any local heat network connection opportunities. Evidence of the correspondence should be submitted.	Appendix 11.5 of the Energy Statement includes evidence of the communication with Guy's and St. Thomas' Hospital NHS trust and their subsidiary Essentia in August 2017 and in October 2018, with regards to investigating whether a connection to the NHS Trust heating and/or cooling system close to the site may be feasible.
6	The applicant is proposing communal heat network supplied by a centralised energy centre. It should be confirmed that all non- domestic building uses will be connected to the heat network. A drawing showing the route of the heat network linking all buildings/uses on the site should be provided alongside a drawing indicating the floor area, internal layout and location of the energy centre. The applicant has provided a commitment that the development is designed to allow future connection to a district heating network. Drawings demonstrating how the site is to be future-proofed for a connection to a district heating network should be provided, including a drawing of the energy centre demonstrating space for plate heat exchangers. This should include a single point of connection to the district heating network.	The Georgian Houses, Keats House and main building are all served of the same hydraulic system from the central energy plantroom in the basement. As the building is treated in terms of services as one building the distribution of services is not a linked solution merely internal distribution of pipework to different areas of the building. Therefore, there is no drawing showing the heat network route. Figure 5 of Section 7 within the Energy Statement identifies the space allocation for the plate heat exchangers, with a single point of connection for a potential district heating network.
7	The applicant proposes 197m2 of PV, which will generate 26MWh / annum. They should confirm the capacity (kWp). They propose E-W facing PV to maximise renewable energy generation; this is welcomed. A detailed roof layout has been provided demonstrating that the roof's potential for a PV installation has been maximised."	The addendum now includes the addition of BIPVs on the south façade, increasing the proposed PV panel area to over 500 m2. Section 8.1 of the Energy Statement has been updated to include the revised figures and the total capacity of the system (77.9 kWp).
8	Heat pumps are being proposed in the form of a (centralised) ASHP system. The ASHPs will have a SCOP of 2.9/3 and 5 for showers (topped up by a WSHP), and a SEER of 4. The applicant should clarify why the domestic hot water SCOP is higher than the space heating SCOP; this is not typically expected.	It is higher because the profile of the charging WSHP is done during the daytime when the outside temperatures are higher. Therefore, the SCOP will be higher over the season compared to the ASHP that have to provide heating during the night as well as daytime when temperatures are lower.

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	Further information on the heat pumps should be provided including: a. An estimate of the heating and/or cooling energy (MWh/annum) the heat pumps would provide to the development and the percentage of contribution to the site's heat loads. They should demonstrate how the heat fraction from heat pump technologies has been maximised. b. Details of the Seasonal Coefficient of Performance (SCOP) and/or Seasonal Energy Efficiency ratio (SEER) and how these have been calculated. This should incorporate the expected heat source and heat distribution temperatures (for space heat and hot water).	An estimate of the heating and cooling energy the heat pumps would provide to the development is given in Table 21 of the Energy statement. It is estimated the ASHP will provide the Proposed Development with 184.9 MWh of cooling energy and 98.6 MWh of heating energy annually. The ASHP contributes to 100% of the site's heat load, demonstrating that the heat fraction from heat pump technologies has been fully maximised. Please find attached indicative products that will be used on site. The final SCOPs and SEERs will be dictated through detailed design, and at planning stage conservative values have been used in the assessment.
9	The applicant has submitted a WLC assessment which will be reviewed separately; comments will be provided. The WLC assessment should be presented separately in excel using the GLA's WLC assessment template and should follow the GLA WLC guidance. The template and guidance are available here: https://consult.london.gov.uk/whole-life- cycle-carbon-assessments. Applicants will also be conditioned to submit a post- construction assessment to report on the development's actual WLC emissions.	The completed GLA WLC assessment template has been provided as a separate Excel spreadsheet to the report, following the GLA WLC guidance.
10	The applicant should review the 'Be seen' energy monitoring guidance to ensure that they are fully aware of the relevant requirements to comply with the 'be seen' policy. The guidance is available here: https://consult.london.gov.uk/be-seen- energy-monitoring. A commitment should be provided that the development will be designed to enable post construction monitoring and that the information set out in the 'be seen' guidance is submitted to the GLA's portal at the appropriate reporting stages. This will be secured through suitable legal wording. The first submission of the planning stage data should be provided to the GLA through the be seen planning stage webform (https://www.london.gov.uk/what-we- do/planning/implementing-london- plan/london-plan-guidance-and-spgs/be- seen-energy-monitoring-guidance) at the planning submission stage, alongside the energy statement, or within eight weeks of planning approval. The be seen reporting spreadsheet has been developed to enable development teams to capture all data	Noted. We have included the Applicant's commitment to the 'Be Seen' policy in section 9.1 of the updated Energy Statement.

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	offline before this is submitted via the webform.	
11	The applicant has confirmed the carbon shortfall in tonnes CO2 and the associated carbon offset payment that will be made to the borough. The draft s106 agreement should be submitted when available to evidence the agreement with the borough.	Noted.

3 Whole Life Carbon responses

Ref	GLA comment	CBDSP response
	20210545 - New City Court - Stage 1 WLC comments.xlsx	
11	The applicant has complete the assessment 1 template table completely but could the applicant update the assessment and/or clarify the following: -Sequestered carbon should be reported as a negative number against each building element category that is applicable -A1-A3 results seem too low - please check and update or provide a reason for this. -why there are no results for external works (including hard landscaping?) -Could any FFE have been included, even if based on high level assumptions? -There are not A5 results against the windows and external doors or internal doors categories -Could B2/B3 emissions have been estimated/included? -For MEP, please add in line to the table of material quantities to show the refrigerant and any further breakdown of material types and quantities that is possible to help understand what MEP is included please? It is noted the B1 emissions are likely from refrigerants, but what type of refrigerant and how much is assumed?	 Sequestered carbon Sequestered carbon is reported as a negative number under the GLA WLC assessment excel spreadsheet for both Assessment 1 and Assessment 2. Column C of the 'Detailed planning stage' workbook gives a detailed breakdown of the sequestered carbon for each applicable building element component, as well as a summary for the whole building. A1-A3 results An updated material quantities report has been produced by the cost consultant to increase the reliability of the results. The GLA WLC assessment has been updated accordingly to calculate a more accurate A1-A3 result. The A1-A3 results have increased from 349 kgC02e/m² to 453 kgC02e/m² with the adoption of the updated materials information. It is expected that material quantities will increase as the design develops, as current information is very high-level. External works Updated quantities have been provided by the cost consultants to give an early-stage approximation of external works required. This has now been included in the WLC assessment under RICS category 8. FFE We are currently unable to assume any further detail on internal FFE due to the early design stage of the project. However, we will continuously update the WLC calculations throughout the design process as more reliable information becomes available. Please let us know if you are aware of any high level benchmarks that can be applied to the project moving forward. A5 emissions for windows/doors are prefabricated off-site, there are negligible emissions relating to the installation into the building at stage A5, as the construction process has already occurred off-site. This is in line with the recommendations received from One Click LCA.

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		 As per advice given by One Click LCA, the methodology for calculating A5 emissions has been updated to improve the accuracy of the calculation at an early-stage design. The site-wide A5 emissions are now calculated using a post-construction project value scenario, whereby the average site impact is calculated based on the project value per £1 million for each RICS category.
		 B2/B3 emissions After a thorough search of existing literature, we are unable to identify any relevant assumptions or estimations for the B2/B3 emissions at this time. We have also enquired through One Click LCA if they are able to provide any high level assumptions on B2/B3 emissions, however they were also unable to provide such resources. Please could you advise on any industry guidance or benchmarks we can apply to projects moving forward? MEP refrigerant Refrigerant R513A is assumed with a quantity of 1200 kg for the ASHP, and 550 kg for the chillers. An annual leakage rate of 2% and an end-of-life leakage rate of 1% is assumed for both components based on CIBSE TM65 Table 4.4. Total carbon emissions of 1,390 tonnes CO₂e under stage B1 are the result of refrigerant is classified under the B1 life cycle stage, not stage A.
12	All comments from assessment 1 are applicable (i.e. comment 11 above), and the applicant should provide results for assessment 2 which account for decarbonisation of embodied carbon emissions (not including module A1-A5 or B1) as well as operational carbon (B6) which has already been included. Please refer to the GLA Whole Life-Cycle Carbon Assessment guidance document and 'RICS Professional Statement and guidance, Whole Life carbon assessment for the built environment' for guidance on how this can be completed. We accept the methodology for this is not completely accurate but as embodied carbon factors for materials will not	An electricity grid decarbonisation scenario has been applied for Assessment 2 of the GLA WLC assessment, in line with the recommendations from the GLA WLC guidance. Electricity impact changes are calculated based on FES 2020 Report (Steady Progression scenario). The scenario will adjust impacts for relevant stages, as per GLA requirements.

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	remain the same over the next 60 years, we ask applicants to use decarbonisation factors from the National Grids, Future Energy Scenarios (Steady Progression Scenario) and apply these to the replacements and module D emissions (as per the RICS PS). These same decarbonisation factors can be applied to all materials that will likely have lower carbon factors in the future if a more accurate assessment is not possible. Whilst the origin and energy types for all materials may not be known, this at least provides a representation of lower carbon factors into the future.	
13	The applicant should provide details of site opportunities.	 An extensive whole life carbon study was conducted by chapmanbdsp last year to understand what opportunities the site had for maximising the potential reduction in WLC. Some of the opportunities which have already been adopted within the Proposed Development as part of the baseline design include: Optimised grid dimensions Use of PT slab instead of composite deck Replacing steel columns with concrete columns Using high proportions of cement replacement in concrete
15	The applicant should complete the material quantity and end of life scenarios table in full	See GLA WLC assessment workbook, sheet 'Appendix 1 - Material Qty & EOL'.
16	All material types and quantities have been provided as a mass for all the applicable building element categories but could a further breakdown for MEP be provided is possible, including refrigerant type and mass? Could 'windows' also please state the frame material assumed and the layers of glazing.	 MEP components Current MEP WLC are based on high level assumptions, therefore a more detailed breakdown is not possible at this stage of the design process. Refrigerant Refrigerant R513A is assumed with a quantity of 1200 kg for the ASHP, and 550 kg for the chillers. Refrigerants have not been included within the material quantities table, as refrigerant is classified under the B1 life cycle stage, not stage A. Windows Building element category 2.6 refers to windows excluding curtain wall glazing, i.e. Georgian terrace and Keats House windows. Keats House = Double glazed windows with wooden frame Georgian terrace = A combination of single-glazed secondary windows with aluminium frames, and double-glazed top-hung casement windows with wooden frames.

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		 For this stage, generic windows have been assumed in the WLC model. Therefore, it is not possible to split the materials any further.
17	Assumptions made with respect to maintenance, repair and replacement cycles (Module B) should be stated - i.e. the lifespan of each material	The RICS technical service life is assumed for all components as per the GLA WLC guidance. Sheet 'Appendix 1 - Material Qty & EOL' within the GLA WLC assessment workbook now includes the lifespan of each material.
18	Material 'end of life' scenarios (Module C) have been filled out for all applicable significant materials and should align with the projects separate Circular Economy Statement.	Noted.
19	The applicant has provided an estimated mass (kg) of reusable and recyclable materials for each building element category, however could this be provided for each material rather than a total figure for each building element category please?	A more detailed material breakdown has been provided for the estimated mass of reusable and recyclable materials. Please see sheet 'Appendix 1 – Material Qty & EOL' within the GLA WLC assessment excel workbook for this breakdown.

4 Circular economy responses

Ref	GLA comment	CBDSP response
	2. New City Court_GLA CE Memo_Stage 1_ 28.05.21.xlsx	
2	The applicant has summarised the Strategic Approach to the project in Table 1 and has provided a supporting narrative in the statement. Please make it more clear in the narrative which building elements are to be retained/reused and which are not.	 Refer to section 3.1 of the <i>Circular Economy</i> <i>Statement</i> for expanded narrative on retained/reused elements of the development: Georgian terraces Keats house Existing piles Reuse of other areas
3	The applicant has summarised the Key Circular Economy Commitments in Table 2 and has provided a supporting narrative in the Statement. Please provide in the narrative details on the disassembly approach.	Narrative in section 3.2.3 Approach to disassembly of the <i>Circular Economy Statement</i>
4	The applicant has not provided a Bill of Materials including kg/m2 for the proposed new development and has partially confirmed that reused or recycled content will be 20 per cent. The Bill of Materials should be provided as per the GLA's Guidance in kg/m2 . Confirm that as a minimum 20% of the total value of the selected products and materials will include recycled and/or reused content as per the GLA's Guidance.	Bill of materials provided in section 4.2 of the <i>Circular Economy Statement</i> . We currently do not have information the percentage of total value that have recycled and/or reused content. We will endeavour to ensure we meet the 20% requirement.
5	The applicant has not completed the Recycling and Waste Reporting table and has not committed to achieving the policy targets of reusing/ recycling/ recovering 95 per cent of construction and demolition waste, and putting 95 per cent of excavation waste to beneficial use. The Recycling and Waste Reporting Table should be provided as per the GLA's guidance and commitments to the policy targets should be provided. (i.e provide total estimate for excavation, demolition, construction and municipal waste in t/m2 and consistency in the 95 per cent targets)	The Recycling and Waste Reporting table is now provided in section 4.2 of the <i>Circular Economy</i> <i>Statement</i> with the information we have currently. We will endeavour to update the table prior to construction.
5	The applicant has undertaken a Pre- Demolition Audit to identify components of the building that can be retained / reused.	Pre-demolition audit provided in Appendix 5 of the <i>Circular Economy Statement</i> .

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	An independent pre-Demoliton audit is required. It is reported that a demolition contractor has carried out a pre-demolition audit to identify the percentage of demolition and strip out waste which can be reused or recycled on site or offsite. Please provide the relevant document.	
6	The Applicant has not stated that waste will be managed in accordance with the waste hierarchy. Include commitment to waste hierarchy for operational waste.	Paragraph 8.3.1 of the <i>Delivery, Servicing &</i> <i>Waste Management Plan</i> confirms that the waste generated will be managed in accordance with the waste hierarchy to minimise unnecessary items being transported to landfill. This document is included in Appendix 6 of the <i>Circular Economy Statement</i> .
6	The development is not designed with adequate, flexible, and easily accessible storage space. Provide the floor plans to demonstrate adequate, accessible, storage space.	The layout of the bin store and collection facilities are flexible and will allow the number and type of bins to be altered to meet the development's requirements. As there is currently an over provision of bins, there is already spare capacity incorporated into the design. The bin store is located next to the goods lift to provide easy access. Section 8.2 of the <i>Delivery, Servicing & Waste</i> <i>Management Plan</i> details the waste storage arrangement. Drawings are provided in Appendix 4 of the <i>Circular Economy Statement</i> .
6	The development does not support the separate collection of food waste. Provide evidence to demonstrate separate collection of food waste.	Paragraph 8.2.1 of the <i>Delivery, Servicing & Waste Management Plan</i> confirms that bins will be provided for food waste generated by the office and commercial units. This document is included in Appendix 6 of the <i>Circular Economy Statement</i> .
6	The Applicant does not show how [operational waste] performance will be monitored and reported. Inclusion in Statement.	Paragraph 8.4.1 of the <i>Delivery, Servicing &</i> <i>Waste Management Plan</i> states that the quantities of waste and recyclables will be monitored monthly by the contracted waste specialist, and the results collated by site management. This document is included in Appendix 6 of the <i>Circular Economy Statement</i> .
6	The Applicant has not included a commitment to meet or exceed the municipal waste recycling target of 65 per cent by 2030.	The waste calculations within the <i>Delivery,</i> <i>Servicing & Waste Management Plan</i> are based on 70% of waste being recycled. The developer does not have control over the quantum of recycling undertaken by the end user, but the

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	Inclusion in Statement.	proposed arrangements will encourage the tenants to meet or exceed the municipal waste recycling target of 65% by 2030. This will be reviewed and enforced where possible as part of the waste monitoring. Appropriate signage will be placed adjacent to
		the recycling and waste receptacles within the offices to encourage correct segregation of recyclables and organic waste to minimise general waste as far as possible.
6	The applicant has not explored measures such as consolidated, smart logistics and community-led waste minimisation schemes.	Paragraph 8.3.1 of the <i>Delivery, Servicing &</i> <i>Waste Management Plan</i> sets out community led possibilities. As deliveries to the site will be consolidated the applicant will explore whether the same vehicles
		can be used to remove the cardboard to further reduce vehicle trips.
7	The applicant has not provided Plans for Implementation including specific plans for achieving short- and medium-term targets and commitments; and the programme / method for achieving longer-term targets. Provide Plans for Implementation as per the GLA's Guidance.	Please refer to section 4.3 of the <i>Circular</i> <i>Economy Statement</i> for the implementation strategy.
8	The applicant has provided a brief End-of- Life Strategy for how the building materials, components and products will be disassembled and reused at the end of their useful life. The information is welcomed but please provide details on the disassembly approach.	Narrative provided in section 3.2.3 Approach to disassembly of the <i>Circular Economy Statement</i> .
9	 Provide an appendix or as a cross reference the following required supporting information: Independent pre-demolition audit Site Waste / Resource Management Plan Municipal / Operational Waste Management Plan Cut and fill calculations and/or Excavated - Materials Options Assessment Building weight calculation (load take- down) Scenario modelling demonstrating adaptability Circular Economy workshop/ meeting notes Lean design options appraisal 	 Independent pre-demolition audit - Included in Appendix 5. Site Waste / Resource Management Plan - Will be provided by the contractor prior to construction. Municipal / Operational Waste Management Plan - Included in Appendix 6. Cut and fill calculations and/or Excavated - Materials Options Assessment - Will be provided by the contractor prior to construction. Building weight calculation (load take-down) - Included in Appendix 7. Scenario modelling demonstrating adaptability - Included in Appendix 9 Lean design options appraisal - Included in Appendix 8.

Ref	GLA comment	CBDSP response
	Reused or recycled content calculations	 Reused or recycled content calculations – Included in section 4.2 of the Circular Economy Statement.
10	The applicant is required to submit a Post Completion Report to the relevant local authority and the GLA at ce&wastestatement@london.gov.uk. It is required that the Post Completion Report sets out the predicted and actual performance against all numerical targets, and provides updated versions of Tables 1 and 2, the Recycling and Waste Reporting form and Bill of Materials. Confirm that you agree to a condition to produce a Post Completion Report and set out an indicative timetable for the production of the report.	The applicant confirms agreement to the condition.