Date: 14th April 2023

Charlotte Meynell,
Camden Town Hall Extension,
Argyle Street,
London,
WC1H 8EQ

2023/0282/P & 2023/0650/L

Dear Charlotte,

Further to the queries raised in your email of 30th March 2023 regarding the above applications, please find the responses below.

In addition to your queries we have reviewed the planning comments that have been provided in response to the applications.

This letter aims to provide London Borough of Camden with a clear understanding of the decision making process and to answer the queries raised. This should be read in conjunction with the reports from BNP Paribas, Hurst Peirce and Malcolm LLP (HPM), Alan Baxter Associates and Ramboll plus new drawings 24509-81 and 24509-82 attached (see page 5 for full list of enclosed documentation).

Existing Structure

The existing balustrade is not original. It is made of precast concrete and is a post-war re-construction.

The original retaining wall would have been a brick stem with brick footings. Generally, the wall construction is a mixture of a concrete stem with a brick footing, a concrete stem on concrete footing and a brickwork stem on concrete footing. Concrete footings and concrete for retaining walls were not used when the terrace was originally constructed in the 1820's. The wall is therefore not contemporaneous with the original houses in Chester Terrace.

Scheme Selection

The schemes that were reviewed in detail and discounted are mentioned in the reports produced by HPM, Ramboll and Alan Baxter Associates. The latter two reports were commissioned by the client to complete a third-party independent review of HPMs work and suggested approaches to the balustrade and wall/foundations.

Please refer to 'HPM DOC 24509-211213 (REV07)' and 'HPM DOC 24509-210301 (REV05)' which provide details of alternative schemes reviewed and lists the positives and negatives associated with each scheme.

The scheme selected deals with the ongoing movement of the wall/foundations in the long-term. With one exception, the others do not achieve that. The other scheme that does, involving traditional underpinning, requires as much excavation in the garden as the selected scheme, thus meaning the loss of the same amount of trees, and also requires the use of more concrete. The selected scheme was chosen as it uses less concrete and is more efficient.

Unless the underlying causes of the wall's movement are addressed a balustrade (new or existing) on the existing retaining wall would still be at risk of developing defects. The existing retaining wall has no movement joints hence resulting in any movement (or thermal stresses) to be relieved in cracking/defects.

A summary of the key alternatives and their reason for being discounted are as follows:

- Retention of Existing Wall using Landscaping - In order to retain the existing wall, the retained height of the ground could be reduced by ramping soil up against the garden side elevation. The use of gabions or terracing in the gardens were also considered. These options would impact the appearance of the garden and garden layout which are not considered appropriate in heritage terms. This would only eliminate the lateral movement of the wall. It would not resolve the vertical movement that arises from the made ground and underlying clay, which moves seasonally and is exacerbated by the presence of nearby vegetation.

- Ground Anchors - Ground anchors fixed through the existing retaining wall into the ground under the carriageway were considered. This was analysed but due to the positioning of the coal vaults and services under the carriageway it was not deemed to be feasible. The use of ground anchors does not deal with the vertical movement, so further underpinning measures would have been needed in conjunction to eliminate all relevant movement. In 2022, HPM and the client successfully used ground anchors on a retaining wall at Cumberland Place to mitigate horizontal movement – this was possible because there were no obstructions behind the wall.

- Mass Concrete Underpinning – Mass concrete underpinning would need to extend down to the clay at 2-2.5m depth and be wide enough to resist the overturning forces. Underpinning was discounted because it was an inefficient use of concrete and required the same amount of excavation within the garden meaning there was no benefit in saving any trees when compared with the selected scheme.

- Underpinning with Piles - Underpinning with screw piles or mini piles at close regular centres to ensure the existing wall could span between them was considered. However, this would need to be used in tandem with a means of eliminating lateral movement, which if the existing wall is retained means ground anchors or landscaping (as noted in Rambolls report section 6.6.2 "Angled/Raked Mini-Piles"). Such approaches were eliminated for the reasons described above. Underpinning with piles also requires excavation to the base of the foundations causing disruption and de-stabilisation of adjacent trees.

The proposal submitted was selected on the basis that:

- The proposal will take the foundation loading down to the London clay '*a suitable bearing stratum*'.
- A new retaining wall and foundations will eliminate both lateral and vertical movement, hence providing a long-term solution for the wall/foundations and balustrade (if the balustrade is also replaced as proposed).
- The depth of the base of the retaining wall is governed by the need to provide planting and soil cover at the front of the wall. With a new wall, there is the opportunity to provide an attractive garden with the flower beds and footpath at one level (as seen at Cumberland Terrace).
- A new precast concrete balustrade that is of higher quality finish than the existing will provide an enhancement to the special interest of the group of buildings and communal space (as seen at Cumberland Terrace).

The client, the Crown Estate Paving Commission, as an organisation which has been managing these communal areas for nearly 200 years, takes in to account the long-term implications of approaches to maintaining these areas. The scheme selected resolves the movement issues in the long-term. Other viable options do not and risk being inefficient and more disruptive in comparison, when looked at over the long-term.

Having spent three years reviewing the schemes, the client's brief is to "*eliminate the issues of ongoing movement to the wall/foundations and balustrade in the most economic and efficient manner and in a style appropriate to the high heritage value of the area.*"

The submitted scheme was chosen as it met this aim.

Specific Queries Raised by London Borough of Camden

Please include justification for the use of a 21 tonne excavator:

- HPM have been advised by the specialist piling supplier and designer (also the UK's largest geotechnical and ground engineering contractor) that: "*The 21T excavator is necessary to give the adequate power to install the piles, we use also a 13T excavator or the Mini Excavator for smaller pile sizes (that can achieve lower loads), but they would be too small for this specific project. To achieve a reasonable load capacity you need an excavator. In general, all our piles with similar size and length of the Chester Terrace project have been installed with a 21T excavator. Using a smaller machine would not give enough torque to the piles to reach the design depth.*"
- The 21 tonne excavator is not the sole cause of the tree removal. The trees need to be removed due to their proximity to the retaining wall and the proposed excavation. If a different piling installation mechanism could be utilised, the excavation would still need to occur – hence requiring the same number of trees to be removed.

Clarification in regards to the Listed Lamp Posts and Gates:

- The listed gates and lamp columns will be repaired, restored and reinstated within 4 weeks of completion of the works.
- The gates will be carefully removed, stored by the client and repaired/repainted.
- The 14 listed lamp columns are proposed to be removed, carefully stored by the client, repaired and reinstated with gilded royal ciphers. The existing Nico lanterns are modern replacements with polycarbonate material rather than glass and modern electrical housings beneath the lanterns. All the columns will be reinstated with frogs beneath the lanterns in line with their original form and the recommendations set out in the Regent's Park Streetscape document. The replacement lanterns will be square Winsor lanterns, manufactured by the clients' specialist electrical contractor, as illustrated on the front cover of the Streetscape document and used throughout the estate including at the northern end of Chester Terrace and Chester Gate.
- Drawing 81 has been included to highlight the locations of the lamp posts and gates.

Clarification in regards to the Granite Kerbs:

- There is no intention to replace the kerbs with cement kerbs. This is a misunderstanding. All existing granite kerbs will be retained and re-laid on completion of the works. Where sections have been replaced with post-war granolithic material (i.e. artificial granite chip finishes) they will be replaced with authentic traditional granite kerbs to match the existing original finishes.
- Drawing 81 has been included to show the granite kerbs.

Clarification in regards to the Yorkstone Footpath:

- We believe the existing sections of paving alongside the balustrade are substantially finished in York stone. All surviving stone will be carefully set aside, stored and re-laid with matching natural York stone where sections are damaged or missing. The natural yorkstone will be sourced from the clients stock.
- Drawing 81 has been included to show the footpath and relevant lifting and relaying notes.

Clarification in regards to the Tree Removal:

- HPM have produced a plan highlighting the tree protection and removal plan (in line with TMA AIA drawings). This has been included in this submission – please refer to drawing 24509-82.
- If the retaining wall was to be retained and wall movement mitigated, trees (and much other vegetation) directly adjacent to the wall would need to be removed and those within a zone of influence would need pollarding and managing at reduced height. The need for significant tree works is highlighted by all reports commissioned by the client since 2020. See paragraph 8 of the Ramboll report which suggests, when considering a targeted approach to the wall, '*Tree management'* along with other interventions at the '*Middle/South inset bay'* and '*Middle Section'*. See page 3 of the Alan Baxter Associates report which suggests exploring '*Removal of the trees and shrubs that are close to the wall and introduce root barriers to reduce the risk of roots affecting the wall in the future'* within the context of '*low-key measures to mitigate the magnitude of future movements.'*
- We draw your attention to the following quote from TMA Arboricultural Impact Assessment: '*This Report observes the position that the Client maintains an exemption as per The Town and Country Planning (Tree Preservation) (England) Regulations 2012 specifically, with regard to Regulation 14(1) (a). Particularly, the Client has statutory powers of control over the garden, roadway and footway each at Chester Terrace and the footway of the Outer Circle, which encompasses the entire Site'.*

We have produced a tender package for works on this project which are ready to be sent out to contractors. Our client has asked that we pause sending out the request for tenders pending the outcome of these applications. Bearing in mind the time since submission of the applications, our client has asked for confirmation when London Borough of Camden expect a decision will be reached and would appreciate your comments in that regard.

As discussed at our previous meeting on site, we re-iterate the offer to meet on site with the London Borough of Camden Tree Officer or any other officer to discuss any aspect of the application. Please let us know if you wish to take up that offer or have any other queries regarding the applications.

Yours Sincerely,

[redacted]

Jack R. Harrold MEng (Hons), CEng, M.I.StructE, M.I.C.E.

On behalf of Hurst, Peirce & Malcolm LLP.

Please refer to the following page for the list of additional documentation enclosed with this letter. All reports have been publically available for viewing on the CEPC website since the date of their original publication.

Enclosed:

Alan Baxter Associates: Summary of ABA Initial Review (1942/200/DB) – July 2021

BNP Paribas: Chester Terrace Forecourt Balustrade Wall Condition Report – July 2017

Hurst, Peirce & Malcolm: Chester Terrace Balustrade Addendum Report Issue 01 – November 2020

Hurst, Peirce & Malcolm: DOC245609-210301 (REV05) - Chester Terrace Retaining Wall - Scheme Proposals and Pricing Document - March 2021

Hurst, Peirce & Malcolm: DOC 24509-211213 (REV07) - Chester Terrace Retaining Wall - Scheme Proposals and Pricing Document - Dec 2021

Hurst, Peirce & Malcolm: CEPC Chester Terrace – HPM Drawing Pack 3 (Drawings 24509-81 and 82) – April 2023

Ramboll: Chester Terrace Retaining Wall Remediation Structural Review – August 2021