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Basement Impact Assessment Audit

31 Daleham Gardens, London, NW3 5BU

For
London Borough of Camden

Project No.
14006-37

Date
January 2024

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APPENDICES

1.0 NON-TECHNICAL SUMMARY

1.1 CampbellReith was instructed by London Borough of Camden, (LBC) to carry out an audit on the Basement Impact Assessment submitted as part of the Planning Submission documentation for 31 Daleham Gardens (planning reference 2023/4241/P). The basement is considered to fall within Category B as defined by the Terms of Reference.

1.2 The Audit reviewed the Basement Impact Assessment for potential impact on land stability and local ground and surface water conditions arising from basement development in accordance with LBC's policies and technical procedures.

1.3 CampbellReith was able to access LBC's Planning Portal and gain access to the latest revision of submitted documentation and reviewed it against an agreed audit check list.

1.4 The BIA authors hold the qualifications required from the CPG Basement for the impact assessment.

1.5 Screening and scoping assessments are presented and informed by desk study information.

1.6 A ground investigation was undertaken in January and February 2023 revealing the localised presence of Made Ground (which is not considered a suitable founding stratum) at proposed basement formation level.

1.7 The BIA recommends further site investigation to refine the ground and groundwater model and to inform the basement detailed design.

1.8 On the potential presence of spring lines in the area, the BIA has demonstrated that the basement can be constructed without causing any adverse impact to the wider hydrogeological environment.

1.9 A Flood Risk Assessment (FRA) and outline drainage scheme have been presented indicating that surface water attenuation will be provided. Final drainage design to be approved by Thames Water and local lead flood authority.

1.10 A Ground Movement Assessment (GMA) was undertaken to demonstrate damages to neighbouring buildings due to the proposed basement are within the limit set by the Council.

1.11 The BIA confirmed that proposed tree removal will not adversely affect neighbouring properties No. 31a and 33a Daleham Gardens.

1.12 The BIA identifies the Belsize Railway Tunnel passing close to the site and liaison with the asset owner is stated to be ongoing.

1.13 The BIA indicates that suitable movement monitoring will be developed and implemented during construction to assess the performance of the earth retention system and monitor movements occurring at neighbouring properties.

1.14 As some elements of the construction methodology have not been determined at this stage, it is recommended that a Basement Construction Plan (BCP) is provided confirming the details of the design and construction of the basement and the associated impacts to surrounding structures and infrastructure.

1.15 Considering the additional information presented it can be confirmed that the BIA complies with the requirements of Camden Planning Guidance: Basements, subject to the satisfactory completion of a BCP.

2.0 INTRODUCTION

2.1 CampbellReith was instructed by London Borough of Camden (LBC) on 24/10/2023 to carry out a Category B audit on the Basement Impact Assessment (BIA) submitted as part of the Planning Submission documentation for 31 Daleham Gardens, London, NW3 5BU and Planning Reference No. 2023/4241/P.

2.2 The audit was carried out in accordance with the Terms of Reference set by LBC. It reviewed the Basement Impact Assessment for potential impact on land stability and local ground and surface water conditions arising from basement development.

2.3 A BIA is required for all planning applications with basements in Camden in general accordance with policies and technical procedures contained within

- Camden Local Plan 2017 - Policy A5 Basements.
- Camden Planning Guidance (CPG): Basements. January 2021.
- Guidance for Subterranean Development (GSD). Issue 01. November 2010. Ove Arup & Partners.

2.4 The BIA should demonstrate that schemes:

a) maintain the structural stability of the building and neighbouring properties;

b) avoid adversely affecting drainage and run off or causing other damage to the water environment;

c) avoid cumulative impacts upon structural stability or the water environment in the local area;

and evaluate the impacts of the proposed basement considering the issues of hydrology, hydrogeology and land stability via the process described by the GSD and to make recommendations for the detailed design.

2.5 LBC's Audit Instruction described the planning proposal as *"Erection of six-storey building providing 14 flats and associated works (for consultation 5 x 1 beds, 4 x 2 beds, 5 x 3 beds)."*

2.6 The Audit Instruction confirmed the applicant's building and neighbouring properties are not listed buildings.

2.7 CampbellReith accessed LBC's Planning Portal on 16/11/2023 and gained access to the following relevant documents for audit purposes:

- Basement Impact Assessment by Geofirma Consultants, Ref 2023-002-SIM-DAL Rep.003, dated April 2023.
- Stage 3 Report by Simple Works, Ref RP-001, Rev 00, dated May 2023.
- Flood Risk Assessment and Drainage Strategy by Subteno Engineering Consultants Ltd, Ref S221215-SUB-99-XX-FRA-C-00001, dated April 2023.

- Preliminary Arboricultural Report by Sharon Hosegood Associates, Ref SHA 1198, dated September 2021.
- Planning Application Drawings by Mole Architects:
  - Existing Site Plan and Sections (Dwg No PL_E_201 and PL_E_010, dated October 2023)
  - Proposed Plans (Dwg PL_A_999 to 1001 dated October 2023), Section (Dwg PL_A_2000 and 2001 dated October 2023) and Elevations (Dwg PL_E_3000 to 3010 dated October 2023)

2.8 CampbellReith issued the D1 revision of this audit in November 2023. A Technical Memorandum from Geofirma (ref.: 2023-002-SIM-RAL Rev0 TM001dated 05/01/24) has been received in response to the queries raised in the D1 audit. The document was further discussed via email and the relevant emails are presented in Appendix 3.

3.0 BASEMENT IMPACT ASSESSMENT AUDIT CHECK LIST

Item	Yes/No/NA	Comment
Are BIA Author(s) credentials satisfactory?	Yes	
Is data required by Cl.233 of the GSD presented?	Yes	
Does the description of the proposed development include all aspects of temporary and permanent works which might impact upon geology, hydrogeology and hydrology?	No	Details of the temporary works are to be confirmed in a BCP.
Are suitable plan/maps included?	Yes	BIA, architectural drawings, structural report.
Do the plans/maps show the whole of the relevant area of study and do they show it in sufficient detail?	Yes	
Land Stability Screening: Have appropriate data sources been consulted? Is justification provided for 'No' answers?	Yes	Section 4.2 of BIA.
Hydrogeology Screening: Have appropriate data sources been consulted? Is justification provided for 'No' answers?	Yes	Section 4.1 of BIA.
Hydrology Screening: Have appropriate data sources been consulted? Is justification provided for 'No' answers?	Yes	Section 4.3 of BIA.
Is a conceptual model presented?	Yes	Section 3 of the BIA and factual site investigation report.
Land Stability Scoping Provided? Is scoping consistent with screening outcome?	Yes	Further consideration of the impacts due to tree removal is presented.

Item	Yes/No/NA	Comment
Hydrogeology Scoping Provided? Is scoping consistent with screening outcome?	Yes	Clarification of the impact on the wider hydrogeological environment is provided.
Hydrology Scoping Provided? Is scoping consistent with screening outcome?	Yes	
Is factual ground investigation data provided?	Yes	Ground investigation factual report (Appendix 3 of the BIA).
Is monitoring data presented?	Yes	Section 3.3 of the GI report.
Is the ground investigation informed by a desk study?	Yes	Section 2 of the GI report.
Has a site walkover been undertaken?	Yes	Section 2.2 of the BIA.
Is the presence/absence of adjacent or nearby basements confirmed?	Yes	The neighbouring buildings are considered to not have basements (Section 2.3 of the BIA).
Is a geotechnical interpretation presented?	Yes	Section 4 and 5 of the GI report.
Does the geotechnical interpretation include information on retaining wall design?	Yes	As above.
Are reports/information on other investigations required by screening and scoping presented?	Yes	Ground investigation, structural report, FRA, arboricultural assessment.
Are the baseline conditions described, based on the GSD?	Yes	
Do the base line conditions consider adjacent or nearby basements?	Yes	The neighbouring buildings are considered to not have basements (Section 2.3 of the BIA).

Item	Yes/No/NA	Comment
Is an Impact Assessment provided?	Yes	Section 5 and 6 of BIA. However, it will need to be confirmed in a BCP.
Are estimates of ground movement and structural impact presented?	Yes	A ground movement assessment has been presented in Appendix 5 of the BIA.
Is the Impact Assessment appropriate to the matters identified by screening and scoping?	Yes	Impact due to tree removal on neighbouring properties has been presented. Impact on wider hydrogeological environment has been presented.
Has the need for mitigation been considered and are appropriate mitigation methods incorporated in the scheme?	Yes	Section 8.2 of the BIA.
Has the need for monitoring during construction been considered?	Yes	Control of construction works (Section 7.5 of the BIA) and further groundwater monitoring are recommended (Section 5.3).
Have the residual (after mitigation) impacts been clearly identified?	Yes	Residual impact considered to be negligible. However, this is subject to further revision as part of a BCP.
Has the scheme demonstrated that the structural stability of the building and neighbouring properties and infrastructure will be maintained?	Yes	Further clarification on the GMA has been provided. However, outcome to be confirmed in a BCP.
Has the scheme avoided adversely affecting drainage and run-off or causing other damage to the water environment?	Yes	Further consideration of the impact to the hydrogeology of the area is provided.
Has the scheme avoided cumulative impacts upon structural stability or the water environment in the local area?	Yes	As above.

Item	Yes/No/NA	Comment
Does report state that damage to surrounding buildings will be no worse than Burland Category 1?	Yes	However, this will need confirmation in a BCP.
Are non-technical summaries provided?	Yes	Section 1 of the BIA.

4.0 DISCUSSION

4.1 The Basement Impact Assessment (BIA) has been prepared by Geofirma Consultants and the authors hold the qualifications required from the CPG Basement.

4.2 The site is currently vacant as the previous building on site suffered extensive damage in a fire in 2017 and was demolished. The site area is approximately 0.07 ha and slopes down from west to east with a maximum gradient of c. 6°.

4.3 The site is bounded by No. 31a Daleham Gardens (a 3-4 storey brick work building) to the south, No. 33a Daleham Gardens (a single storey prefabricated building) to the north, rear gardens of Fitzjohn's Avenue houses to the west and the road of Daleham Gardens to the east. The neighbouring buildings are considered to not have basements.

4.4 The proposed development comprises the construction of a multi-storey apartment block, consisting of approximately 14 new units over 5 levels. The project will involve the construction of a lower ground level, which will be partially a basement due to the sloping profile of the site. The lower level slab will be approximately 5m below existing ground level (c.81.6m AOD) in the west, while it will be close to the existing ground level (c. 77m AOD) in the east.

4.5 The basement excavation will be facilitated by the installation of a sheet piled wall along the perimeter. Two different options are proposed for the building foundation, raft foundations and piled foundations, with the former being preferred due to the presence of an underground tunnel in the vicinity of the proposed development.

4.6 Screening and scoping assessments are presented and informed by desk study information. Most relevant figures/maps from the ARUP GSD and other guidance documents are referenced within the BIA to support responses to screening questions.

4.7 A ground investigation was undertaken in January and February 2023 and identified the site to be underlain by Made Ground to a maximum depth of 3.60m bgl. Below the Made Ground, the Claygate Member was encountered to a depth of 5.50 – 6.50m below ground level (bgl) and it was underlain by the London Clay to the maximum depth of the exploratory holes, 25.50m bgl. The BIA indicates the raft to be constructed into the Claygate Beds, however due to the local presence of deeper Made Ground, Geofirma recommends ground improvement to be undertaken in those areas. The BIA also recommends further site investigation to inform ground improvement design and structural detailed design.

4.8 Groundwater was encountered during drilling at a depth of c. 1.8m bgl, and it was interpreted as perched water. Subsequent groundwater monitoring indicates ground water level to be between 3.20 and 5.49m bgl. The BIA acknowledges that groundwater may be present above formation level and recommends further groundwater monitoring to inform the decision on whether dewatering will be required during the basement excavation.

4.9 The BIA indicates that the site is close to a stratigraphical boundary and as such there is a risk of spring lines (which may bear groundwater under sub-artesian pressure) affecting the development and vice versa. The installation of a sheet piled wall will help in keeping the excavation stable and dry, and considering the location of the site in respect to those spring lines and the absence of basements close to the proposed development, it is accepted there will not be any adverse impact to the local hydrogeological environment.

4.10 The BIA indicates there will an increase to the impermeable areas from 0 to c. 67% and that the site is within a critical drainage area. A Flood Risk Assessment (FRA) has been presented and concludes that SuDS are to be incorporated as part of the drainage strategy. An outline drainage scheme is also presented indicating a combination of a blue-roof, rain gardens and below ground surface water attenuation system. It is noted final drainage design will require approval from Thames Water and local lead flood risk authority.

4.11 Geotechnical parameters including those for retaining walls are presented in the ground investigation report and are appropriately conservative engineering values.

4.12 It is proposed at this stage to construct the basements using temporary sheet piling to form cast in situ reinforced concrete retaining walls. The sheet piles will be incorporated into the permanent works and the pile length will vary from the west to east in accordance with the varying depth of the basement. A maximum toe depth of 8m below proposed basement level has been assumed at this stage. Additionally temporary works like raking props are proposed to support the adjacent boundary wall with No. 31a Daleham Gardens and limit movements. The basement excavation will be restrained by new cast in situ reinforced concrete walls and temporary sheet pile walls.

4.13 A Ground Movement Assessment (GMA) was undertaken to determine category of damages occurring to neighbouring buildings. The analysis was undertaken using the commercial software Plaxis 2D and following the guidance provided in CIRIA C760 for movements caused by embedded retaining wall.

4.14 The GMA states that ground movements occurring at No. 31a and 33a Daleham Gardens due to the excavation (calculated with Plaxis) are anticipated to be between 4mm and 2.5mm, from which a deflection ratio and category of damage has been determined. The BIA has confirmed ground movements due to piled wall installation have been also considered in the category of damage determination. The analysis indicates that anticipated lateral deflection of the boundary wall to No. 31a Daleham Gardens will be in the region of 8mm to 10mm (including ground movements due to embedded piled wall installation).

4.15 The installation of sheet piles can cause vibration that can in turn cause additional ground movements. The BIA recommends the use of sheet piling methods such as pre-boring of the ground and push press installation to reduce vibration and hence unwanted ground movements. It also states that the selection of the sheet piled wall to be used will be responsibility of the specialist contractor. Arcelor AU14 sheet pile section has been used in the analysis and it has been demonstrated that this represents a conservative scenario for the GMA, considering that is a lighter section and more prone to deflection.

4.16 As indicated in paragraph 4.7, Made Ground deeper than proposed formation level may be present. This could require additional excavation in those areas after sheet piled wall installation. The GMA recommends wall support methods such as propping with waler beams or buttress walls as possible mitigation measures in case deeper excavation is required locally.

4.17 The analysis indicates that damages to neighbouring buildings will be within Category 0 of the Burland Scale assuming an unpropped basement retaining wall in the temporary case. However, as discussed above, it is noted that some elements of the construction methodology such as the sheet pile wall section to be used, the proposals to deal with localised deeper Made Ground at formation level and any need for dewatering have not been agreed at this stage. These elements can influence the outcome of the GMA. As such it is recommended that this information be presented within a Basement Construction Plan (BCP) along with an updated GMA and confirmation that the damage to adjacent structures will not exceed Burland Category 1 (Very Slight).

4.18 The arboricultural report recommends the removal of several trees on site to facilitate the development. A qualitative assessment is presented for all the neighbouring houses which indicates trees removal will not have any adverse impact on neighbouring foundations.

4.19 The BIA indicates that suitable movement monitoring will be developed and implemented during construction to assess the performance of the earth retention system and to make sure movements will not exceed the those anticipated and agreed as part of the Party Wall Award.

4.20 The Belsize Railway Tunnel runs beneath the site. The BIA states that consultation with the asset owner is ongoing.

5.0 CONCLUSIONS

5.1 The BIA authors hold qualifications required from the CPG Basement for the impact assessment.

5.2 Screening and scoping assessments are presented and informed by desk study information.

5.3 A ground investigation was undertaken in January and February 2023 indicating that Made Ground can be locally present at proposed formation level.

5.4 Groundwater may be present above formation level. The BIA recommends further site investigation and groundwater monitoring to be undertaken to refine the ground model, and to inform detailed structural and temporary works design.

5.5 An assessment on the proposed sheet piled potentially deviating local spring lines has been presented which confirms the development will not have a significant impact on to the wider hydrogeological environment.

5.6 The site is in a critical drainage area and a significant increase in hardstanding areas is proposed. A Flood Risk Assessment (FRA) and outline drainage scheme is presented in the BIA indicating that surface water attenuation will be provided.

5.7 The Ground Movement Assessment (GMA) indicates damages to neighbouring buildings occurring due to the proposed basement are within the limit set by the council. However, as some elements of the construction methodology are still under development it is recommended that a Basement Construction Plan (BCP) is provided confirming the detailed design and impacts to the surrounding structures and infrastructure.

5.8 An impact assessment due to tree removal has been presented for neighbouring properties indicating no adverse impact.

5.9 The BIA identifies the Belsize Railway Tunnel passing close to the site and liaison with the asset owner is stated to be ongoing.

5.10 The BIA indicates that suitable movement monitoring will be developed and implemented during construction to assess the performance of the earth retention system and monitor movements occurring at neighbouring properties.

5.11 Considering the additional information provided it can be confirmed that the BIA meets with the requirements of CPG: Basements, subject to the satisfactory completion of a BCP.

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Appendix 1

Consultation Responses

None

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Appendix 2

Audit Query Tracker

Audit Query Tracker

Query No	Subject	Query	Status	Date closed out
1	Hydrogeology	As the proposed sheet piled wall can deviate local spring lines, The BIA should assess the impact to the wider hydrogeological environment.	Closed	January 2024
2	Land stability	Clarification on whether ground movements due to sheet piles installation are considered in the determination of the category of damage for neighbouring buildings is required.	Closed	
3	Land Stability	A brief method statement for the sheet piled wall installation should be presented to demonstrate no additional ground movements will be caused by installation operations and vibrations. Consideration of the ground movements caused by other sheet pile section types is requested, to show that the 'worst case' scenario is presented in the BIA.	Closed	
4	Land Stability	The GMA should consider the potential for excavation below proposed formation level due to the presence of localised deep Made Ground.	Closed	
5	Land stability	An impact assessment due to tree removal should be presented for neighbouring properties No. 31a and 33a Daleham Gardens.	Closed	
6	Hydrogeology and Land Stability	The BIA recommends further site investigation and groundwater monitoring to be undertaken to refine ground model and to inform detailed structural and temporary works design.	Note Only	-

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Appendix 3

Supplementary Supporting Documents

Email exchange

Nicola Simonini

From: Nicola Simonini
Sent: 25 January 2024 10:57
To: 'Josh Lawlor'
Cc: CamdenAudit
Subject: RE: 2023/4241/P - 31 Daleham Gardens BIA audit

Hi Josh,

Thanks for this. Yes I confirm that is what was discussed yesterday and we will highlight the need of a BCP at a later stage in our final audit report.

Kind regards

From: Josh Lawlor <Josh.Lawlor@camden.gov.uk>
Sent: Thursday, January 25, 2024 10:19 AM
To: Nicola Simonini <nicolasimonini@campbellreith.com>
Cc: CamdenAudit <CamdenAudit@campbellreith.com>
Subject: RE: 2023/4241/P - 31 Daleham Gardens BIA audit

Forgot to attach this

From: Josh Lawlor
Sent: Thursday, January 25, 2024 10:07 AM
To: 'Nicola Simonini' <nicolasimonini@campbellreith.com>
Cc: CamdenAudit <CamdenAudit@campbellreith.com>
Subject: RE: 2023/4241/P - 31 Daleham Gardens BIA audit

Hi Nicola

The applicants have responded in orange which I believe follows from what you have said about a BCP. Yes, this should be enough for the report. Thanks

On point 3 – Can Geofirma confirm that the pile section mentioned in the memo (Arcelor AZ32) has been considered in the GMA. We understand the original GMA was based on Arcelor AU14. Yes, we assumed a AU14, see excerpt from the report. If a AZ32 is now proposed instead of a AU14, then the GMA should be updated accordingly.

> The sheet pile wall used in this analysis was an Arcelor AU14. Note this may not be the actual wall used for the project, hence the movements provided in this report are indicative, rather than exact. It has also been assumed in the movement assessment that 31a Daleham Gardens is 2 m from the sheet pile retaining wall and 33a Daleham Gardens is 5.5 m from the retaining wall (see Figure 2).

Corrected in attached audit document – AU14 assumed in GMA.

On point 4 – Geofirma recommends a sensitivity check to be undertaken considering the potential presence of locally deeper excavation due to the presence of Made Ground. This however has not been presented and is required at this stage to confirm damages to neighbouring properties will be within Category 1 of the Burland Scale.

Our GMA assumed that we have 3 m of Made Ground at the site. This is a conservative assumption based on the ground investigation information we have. Note that the sheet pile wall will extend far beneath the base of the Made Ground into the Claygate which forms the basis of the GMA assessment. Two Plaxis sections have been presented in the GMA (Section A-A and Section B-B). The GMA indicates that Section A-A is close to the middle of

the site and that the maximum dig in that area is unlikely to exceed 2.5m in front of the sheet piled wall. However, the Made Ground in that area (with reference to BH1A) is proven to be at 3.6m bgl and the BIA recommends Made Ground replacement/ground treatment to allow the construction of a raft foundation at proposed basement level. This may result in the excavation to be locally deeper than modelled in Plaxis Section A-A and, as Geofirma memorandum states, a sensitivity analysis is recommended. This has not been presented and is required at this stage to confirm damages to neighbouring properties will be within Category 1 of the Burland Scale.

We have included 2 additional PLAXIS models which show how propping can be used to reduce wall movements which can be used to keep the damage to below Category 1 on the Burland Scale. If the excavations are required to be locally deepened propping can be applied. The actually propping arrangement can only be designed at design stage when all the relevant information is available. See Figure 10 and Table 9 of the GMA which shows propping reduces the risk of Category 1 being exceeded.

From: Nicola Simonini <nicolasimonini@campbellreith.com>
Sent: Wednesday, January 24, 2024 11:58 AM
To: Josh Lawlor <Josh.Lawlor@camden.gov.uk>
Cc: CamdenAudit <CamdenAudit@campbellreith.com>
Subject: RE: 2023/4241/P - 31 Daleham Gardens BIA audit

Hi Josh,

I have just had a meeting with Geofirma to discuss the outstanding items.

We can now confirm that in the GMA a conservative case was analysed, which confirmed that damages to neighbouring properties will be within the limits set by the CPG for basements. However, we note that some elements of the construction methodology such as the sheet piled wall section to be used and the proposals to deal with localised deeper Made Ground at formation level have not been agreed at this stage yet. Those elements can influence the final outcome of the GMA. As such we will recommend a BCP to be produced at a later stage when the details of the design are known.

Hope this is enough for you to produce your report while we aim to issue our final audit report (including the recommendation for a BCP) next week.

Kind regards

Nicola Simonini
Senior Engineer

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From: Josh Lawlor <Josh.Lawlor@camden.gov.uk>
Sent: Tuesday, January 23, 2024 9:56 AM
To: Nicola Simonini <nicolasimonini@campbellreith.com>
Cc: CamdenAudit <CamdenAudit@campbellreith.com>
Subject: RE: 2023/4241/P - 31 Daleham Gardens BIA audit

Hi Nicola

From the applicant:

On point 3 – Can Geofirma confirm that the pile section mentioned in the memo (Arcelor AZ32) has been considered in the GMA. We understand the original GMA was based on Arcelor AU14. Yes, we assumed a AU14, see excerpt from the report.

> The sheet pile wall used in this analysis was an Arcelor AU14. Note this may not be the actual wall used for the project, hence the movements provided in this report are indicative, rather than exact. It has also been assumed in the movement assessment that 31a Daleham Gardens is 2 m from the sheet pile retaining wall and 33a Daleham Gardens is 5.5 m from the retaining wall (see Figure 2).

On point 4 – Geofirma recommends a sensitivity check to be undertaken considering the potential presence of locally deeper excavation due to the presence of Made Ground. This however has not been presented and is required at this stage to confirm damages to neighbouring properties will be within Category 1 of the Burland Scale.

Our GMA assumed that we have 3 m of Made Ground at the site. This is a conservative assumption based on the ground investigation information we have. Note that the sheet pile wall will extend far beneath the base of the Made Ground into the Claygate which forms the basis of the GMA assessment.

Regards

Josh

From: Nicola Simonini <nicolasimonini@campbellreith.com>
Sent: Monday, January 22, 2024 4:12 PM
To: Josh Lawlor <Josh.Lawlor@camden.gov.uk>
Cc: CamdenAudit <CamdenAudit@campbellreith.com>
Subject: RE: 2023/4241/P - 31 Daleham Gardens BIA audit

Hi Josh,

We have reviewed the technical memo from Geofirma and have the following comments:

On point 3 – Can Geofirma confirm that the pile section mentioned in the memo (Arcelor AZ32) has been considered in the GMA. We understand the original GMA was based on Arcelor AU14.

On point 4 – Geofirma recommends a sensitivity check to be undertaken considering the potential presence of locally deeper excavation due to the presence of Made Ground. This however has not been presented and is required at this stage to confirm damages to neighbouring properties will be within Category 1 of the Burland Scale.

We are happy for the above to be sorted via email as we do not require an updated report from Geofirma.

Kind regards

Nicola Simonini
Senior Engineer

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From: Josh Lawlor <Josh.Lawlor@camden.gov.uk>
Sent: Friday, January 19, 2024 10:56 AM
To: Nicola Simonini <nicolasimonini@campbellreith.com>
Cc: CamdenAudit <CamdenAudit@campbellreith.com>
Subject: RE: 2023/4241/P - 31 Daleham Gardens BIA audit

Hi Nicola

We want the application to go to the February committee, and the report is due 26 of Jan.. Would you be able to prepare the memo I sent in time? Assuming no further changes are needed?

Thanks

Josh

From: Josh Lawlor
Sent: Wednesday, January 10, 2024 1:01 PM
To: 'Nicola Simonini' <nicolasimonini@campbellreith.com>
Cc: CamdenAudit <CamdenAudit@campbellreith.com>
Subject: RE: 2023/4241/P - 31 Daleham Gardens BIA audit

Hi Nicola

I am attaching the memo prepared to address the questions on the Basement Impact Assessment.

Regards

Josh Lawlor
Senior Planning Officer
Supporting Communities

London Borough of Camden

Telephone: 020 7974 2337
Web: camden.gov.uk

5 Pancras Square
London N1C 4AG

Please consider the environment before printing this email.

From: Nicola Simonini <nicolasimonini@campbellreith.com>
Sent: Thursday, November 23, 2023 4:36 PM
To: Josh Lawlor <Josh.Lawlor@camden.gov.uk>
Cc: CamdenAudit <CamdenAudit@campbellreith.com>
Subject: 2023/4241/P - 31 Daleham Gardens BIA audit

Hi Josh,

Please find attached the audit report for 31 Daleham Gardens BIA. There are some queries on land stability and hydrogeology that the applicant should address as discussed in Section 4 and summarised in Appendix 2.

Kind regards

Nicola Simonini
Senior Engineer

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