

13 Blackburn Road

London

NW6 1RZ

Basement Impact Assessment

Audit

For

London Borough of Camden

Project Number: 13398-52

Revision: F1

February 2021

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Document History and Status

Revision	Date	Purpose/Status	File Ref	Author	Check	Review
D1	October 2020	Comment	NSjap13398-52-141020-13 Blackburn Road-D1.docx	N Simonini	C Botsialas	C Botsialas
F1	February 2021	Planning	NSjap13398-52-040221-13 Blackburn Road-F1.docx	N Simonini	C Botsialas	C Botsialas

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Document Details

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Project Number	13398-52
Project Name	13 Blackburn Road
Planning Reference	2020/2940/P

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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 13 Blackburn Road, NW6 1RZ (planning reference 2020/2940/P). The basement is considered to fall within Category C as defined by the Terms of Reference.
- 1.2. The Audit reviewed the Basement Impact Assessment (BIA) 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 checklist.
- 1.4. Brief descriptions of the site layout and proposed development are given in paragraphs 4.2 to 4.5 of this audit.
- 1.5. The qualifications of the individuals involved in the BIA meet the CPG requirements.
- 1.6. A site walkover and a site investigation have been undertaken. The BIA confirms that there will be no adverse impact on the hydrogeological environment.
- 1.7. It is proposed by the BIA to implement a sustainable urban drainage system (SuDS) to ensure the surface water rates will decrease post development. The applicant confirms that consultation with Thames Water regarding the drainage proposal is ongoing.
- 1.8. It is accepted that the site is at low risk from flooding from rivers, seas and reservoirs and from surface water flooding.
- 1.9. Geotechnical parameters have been presented in the BIA and are considered reasonably conservative.
- 1.10. A Ground Movement Assessment (GMA) has been presented and the analysis method has been revised according to CampbellReith previous audit queries.
- 1.11. It is accepted that there will be no slope stability concerns regarding the proposed development.
- 1.12. A non-technical summary is included in the BIA.
- 1.13. Queries and requests for information are summarised in Appendix 2. Considering the additional information presented, the BIA meets the requirements of Camden Planning Guidance: Basements.

2.0 INTRODUCTION

- 2.1. CampbellReith was instructed by London Borough of Camden (LBC) on 30 September 2020 to carry out a Category C Audit on the Basement Impact Assessment (BIA) submitted as part of the Planning Submission documentation for 13 Blackburn Road, London NW6 1RZ, Camden Reference 2020/2940/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: Basements. March 2018.
 - Guidance for Subterranean Development (GSD). Issue 01. Nov 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 "*Demolition of existing building and construction of three buildings between 1 and 9 storeys (plus basement) in height comprising 53 residential dwellings, 4,797sqm of commercial floorspace, publically accessible space, landscaping and resident's facilities including cycle and refuse facilities*".
- 2.6. The Audit Instruction confirmed the applicant's property and neighbouring properties are not listed.
- 2.7. CampbellReith accessed LBC's Planning Portal on 14th October 2020 and gained access to the following relevant documents for audit purposes:
- Ground Investigation and Basement Impact Assessment Report (ref.: J19295), dated May 2020, by GEA Ltd;
 - Construction Method Statement (ref.:2190511-EWP-ZZ-XX-RP-S-0001), dated May 2020, by ElliottWood Partnership Ltd;
 - Drainage Strategy (ref.: 2190511), dated June 2020, by ElliottWood Partnership Ltd;
 - Existing and proposed plans, elevations and sections, dated June 2020, by Stiff + Trevillion Architects Ltd.

- 2.8. CampbellReith issued on 22/10/2020 an initial audit report (NSjap13398-52-211020-13 Blackburn Road-D1) with comments on the above BIA documents.
- 2.9. In response to the initial audit report CampbellReith received on 06/11/2020 an email from the application planner, which is presented in Appendix 3 along with subsequent email correspondence, and the updated GMA calculations (sensitivity analysis rev. 6), by GEA Ltd, dated January 2021.

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?	Yes	See Sections 2 and 3 of the BIA.
Are suitable plan/maps included?	Yes	The assessment is supported by suitable plan/maps. Architect's drawings, OS maps, Envirocheck report and utilities map are presented in the 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 3 of the BIA.
Hydrogeology Screening: Have appropriate data sources been consulted? Is justification provided for 'No' answers?	Yes	Section 3 of the BIA.
Hydrology Screening: Have appropriate data sources been consulted? Is justification provided for 'No' answers?	Yes	Section 3 of the BIA.
Is a conceptual model presented?	Yes	Sections 5 and 7 of the BIA.
Land Stability Scoping Provided? Is scoping consistent with screening outcome?	Yes	Section 4 of the BIA.

Item	Yes/No/NA	Comment
Hydrogeology Scoping Provided? Is scoping consistent with screening outcome?	Yes	Section 4 of the BIA.
Hydrology Scoping Provided? Is scoping consistent with screening outcome?	Yes	Section 4 of the BIA.
Is factual ground investigation data provided?	Yes	Section 5 of the BIA and Appendix 1B.
Is monitoring data presented?	Yes	Section 5 of the BIA.
Is the ground investigation informed by a desk study?	Yes	Information presented in Section 2 of the BIA.
Has a site walkover been undertaken?	Yes	
Is the presence/absence of adjacent or nearby basements confirmed?	Yes	A nearby independent student living block is reported to have a basement.
Is a geotechnical interpretation presented?	Yes	Section 7 of the BIA.
Does the geotechnical interpretation include information on retaining wall design?	Yes	Section 8 of the BIA.
Are reports on other investigations required by screening and scoping presented?	Yes	Drainage Strategy.
Are the baseline conditions described, based on the GSD?	Yes	
Do the base line conditions consider adjacent or nearby basements?	Yes	
Is an Impact Assessment provided?	Yes	Parts 3 and 4 of the BIA.

Item	Yes/No/NA	Comment
Are estimates of ground movement and structural impact presented?	Yes	Section 10 of the BIA.
Is the Impact Assessment appropriate to the matters identified by screening and scoping?	Yes	All the items from the scoping have been addressed in the BIA.
Has the need for mitigation been considered and are appropriate mitigation methods incorporated in the scheme?	Yes	Parts 3 and 4 of the BIA.
Has the need for monitoring during construction been considered?	Yes	Section 11.2 of the BIA.
Have the residual (after mitigation) impacts been clearly identified?	Yes	The BIA considers the residual impacts to be negligible.
Has the scheme demonstrated that the structural stability of the building and neighbouring properties and infrastructure will be maintained?	Yes	
Has the scheme avoided adversely affecting drainage and run-off or causing other damage to the water environment?	Yes	See Drainage Assessment.
Has the scheme avoided cumulative impacts upon structural stability or the water environment in the local area?	Yes	As above.
Does report state that damage to surrounding buildings will be no worse than Burland Category 1?	Yes	Section 11 of the BIA.
Are non-technical summaries provided?	Yes	

4.0 DISCUSSION

- 4.1. The BIA was undertaken by GEA Ltd. The authors' qualifications are reported and are in accordance with LBC guidance.
- 4.2. The application site is situated at 13 Blackburn Road, and comprises a former office building and a warehouse. The former office is a 4 storey building and is fronting Blackburn Road. The warehouse is a single storey building, it is located to the rear of the site and provides 445m² of floorspace. It is understood that both buildings are currently vacant.
- 4.3. To the north two workshop buildings are present (No.11 Blackburn Road) and beyond the boundary wall a TfL overground line exists. To the east is the 'Nido' student accommodation, a 9 storey building that provides student accommodation. To the south, across Blackburn Road, a depot is present. To the west a residential terrace exists (5 to 9 Blackburn Road). It is understood that the student accommodation has a basement.
- 4.4. The LBC Instruction to proceed with the audit identified that the applicant's property is not listed and that the basement proposal does not neighbour any listed buildings.
- 4.5. The proposed development comprises the demolition of the existing buildings and redevelopment to provide two 6 and 7 storey residential towers and one 9 storey office tower. A single storey basement is proposed below the two residential towers. Clarification on the maximum excavation depth has been provided as required in the previous audit. The BIA confirmed that the majority of the basement will be formed by a c. 4m deep excavation or less (refer to email in Appendix 3 for further details).
- 4.6. The BIA confirmed that a site walkover was undertaken in November 2019 and at a later stage during the time of the field works. A site investigation undertaken by GEA in November 2019 is presented in Appendix 1 of the BIA. The ground investigation indicates Made Ground to a depth of 0.60 to 0.90m bgl underlain by the London Clay Formation to a level of c. 35.00m bgl.
- 4.7. Groundwater seepages were encountered in one of the boreholes likely associated with a claystone layer within the London Clay at a depth of c. 9.00m bgl, and within the foundation pits between 0.75 and 1.10m bgl. Groundwater was monitored both above and below the proposed basement level between 1.30 and 4.80m bgl. The BIA states that the London Clay cannot support a water table as it is classified as unproductive stratum and states that localised grouting/pumping may be required to deal with localised perched water inflows. It is accepted that the basement construction will not have any impact on the wider hydrogeological environment.
- 4.8. It is accepted that impermeable areas on site will be the same as existing. A drainage strategy has been presented in the BIA. The report states that it is proposed to implement a sustainable

urban drainage system (SuDS) and estimates a reduction of the proposed flow rates compared to the existing flow rates. It is noted that the final drainage design should be approved by Thames Water and by the Lead Local Flood Authority.

- 4.9. It is accepted that the site is at low risk of flooding from rivers, seas and reservoirs, and surface water flooding. Thames Water submitted a response requiring further clarification on the drainage proposal. The applicant has confirmed that consultation with Thames Water is ongoing. Thames Water response is appended in Appendix 3.
- 4.10. According to the Construction Method Statement (CMS), it is proposed to support the basement excavation using either a contiguous or a secant piled wall. According to the CMS, at this stage the contiguous piled wall is the preferred option, in conjunction with a RC lining wall to create a barrier to water. The CMS states that typical piles of the wall will be 7m deep, while piles under columns will take some structural load and are expected to be c. 25m deep. The BIA adopted a 8m long pile in the ground movement assessment and this is considered reasonably conservative.
- 4.11. During construction, the piles will require temporary propping. An option to design the contiguous piled wall as cantilevered was mentioned in the original CMS. However such an option has been discounted as part of the response to the queries of the previous version of the audit (see Appendix 3).
- 4.12. Geotechnical parameters to inform settlement, retaining wall calculations and foundation design have been presented in the BIA and Ground Movement Assessment (GMA). The parameters are considered reasonably conservative.
- 4.13. A preliminary Ground Movement Assessment (GMA) has been undertaken to demonstrate that ground movements and consequential damage to neighbouring properties will be within LBC's policy requirements. Analysis of horizontal and vertical ground movements has been undertaken utilising industry standard software (PDisp and XDisp) and analysed basement construction in both the short and long term. The assumptions made in the analysis regarding the depth of neighbouring properties' foundations are conservative.
- 4.14. In the original GMA, ground movements due to pile installation curves presented in CIRIA C760 have been halved as suggested by a paper from Ball et al. It was noted that the paper relates to very particular conditions with stringent controls. As such, the GMA was reviewed to include a sensitivity analysis by adopting the ground movement curves suggested by CIRIA C760. The analysis confirms that damage category occurring to neighbouring properties within the zone of influence of the basement will be within Category 1 of the Burland Scale.
- 4.15. As discussed in paragraph 4.5 clarification on the maximum excavation depth has been provided and assumptions made in the GMA in this regard are considered reasonable.

- 4.16. The site sits in close proximity of the TfL London Overground Lines with a minimum distance of 5m and at a distance of 25m from Jubilee and Metropolitan lines. Consultation with the asset owner is ongoing (see Appendix 3) and it is understood that the owner has currently no objections to the proposal.
- 4.17. The BIA indicates that the predictions of ground movement based on the GMA should be checked by monitoring of adjacent properties and structures and states that a movement monitoring strategy will be developed at a later stage and it will be discussed with the owners of the adjacent properties and structures. It should be noted that asset protection criteria will need to be agreed with each asset owner, as required.
- 4.18. It is accepted that there will be no slope stability concerns regarding the proposed development.
- 4.19. A non-technical summary is now presented in the BIA.

5.0 CONCLUSIONS

- 5.1. The qualifications of the individuals involved in the BIA are presented and meet the CPG Basements requirements.
- 5.2. A site investigation has been undertaken. The BIA confirms that there will be no adverse impact on the hydrogeological environment.
- 5.3. It is proposed to implement a sustainable urban drainage system (SuDS) to ensure the surface water rates will decrease post development. The applicant has confirmed that consultation with Thames Water regarding the drainage proposal is ongoing.
- 5.4. It is accepted that the site is at low risk from flooding from rivers, seas and reservoirs and from surface water flooding.
- 5.5. Geotechnical parameters have been presented in the BIA and are considered reasonably conservative.
- 5.6. The Ground Movement Assessment has been revised according to the queries raised as part of the previous audit.
- 5.7. It is accepted that there will be no slope stability concerns regarding the proposed development.
- 5.8. A non-technical summary has been provided.
- 5.9. Queries and requests for information are summarised in Appendix 2. Considering the additional information presented, the BIA meets the requirements of Camden Planning Guidance: Basements.

Appendix 1: Residents' Consultation Comments

None pertinent

Appendix 2: Audit Query Tracker

Audit Query Tracker

Query No	Subject	Query	Status	Date closed out
1	BIA format	The BIA should state if a site walkover has been undertaken. If not, it should be undertaken as part of the desktop study.	Closed – See paragraph 4.6	6/11/2020
2	BIA format	The BIA should state and analyse the anticipated maximum excavation depth.	Closed - See paragraph 4.5	6/11/2020
3	Land Stability	The GMA should be reviewed and updated in line with the comments in Section 4.	Closed – See paragraphs 4.13-4.15.	25/01/2021
4	BIA format	A non-technical summary is not presented in the BIA and is requested.	Closed – See paragraph 4.19.	6/11/2020
5	BIA format	The applicant should confirm that consultation with Thames Water is ongoing.	Closed – See paragraph 4.9.	22/01/2021

Appendix 3: Supplementary Supporting Documents

Thames Water response
TfL response
Email response from the applicant to D1 revision of CampbellReith's audit

Young, Tony

From: BCTAdmin@thameswater.co.uk
Sent: 21 September 2020 08:50
To: Planning
Subject: 3rd Party Planning Application - 2020/02940/P

[EXTERNAL EMAIL] Beware – This email originated outside Camden Council and may be malicious Please take extra care with any links, attachments, requests to take action or for you to verify your password etc. Please note there have been reports of emails purporting to be about Covid 19 being used as cover for scams so extra vigilance is required.

London Borough of Camden Our DTS Ref: 65100
Camden Town Hall Your Ref: 2020/02940/P
Argyle Street
Euston Road
London
WC1H 8EQ

21 September 2020

Dear Sir/Madam

Re: CLOCKWORK FACTORY APARTMENTS, 13 BLACKBURN ROAD, LONDON, NW6 1RZ

Waste Comments

With the information provided, Thames Water has been unable to determine the waste water infrastructure needs of this application. Thames Water has contacted the developer in an attempt to obtain this information and agree a position for FOUL WATER drainage, but have been unable to do so in the time available and as such, Thames Water request that the following condition be added to any planning permission. “No development shall be occupied until confirmation has been provided that either:- 1. Capacity exists off site to serve the development, or 2. A development and infrastructure phasing plan has been agreed with the Local Authority in consultation with Thames Water. Where a development and infrastructure phasing plan is agreed, no occupation shall take place other than in accordance with the agreed development and infrastructure phasing plan, or 3. All wastewater network upgrades required to accommodate the additional flows from the development have been completed. Reason - Network reinforcement works may be required to accommodate the proposed development. Any reinforcement works identified will be necessary in order to avoid sewage flooding and/or potential pollution incidents. The developer can request information to support the discharge of this condition by visiting the Thames Water website at thameswater.co.uk/preplanning. Should the Local Planning Authority consider the above recommendation inappropriate or are unable to include it in the decision notice, it is important that the Local Planning Authority liaises with Thames Water Development Planning Department (telephone 0203 577 9998) prior to the planning application approval.

With the information provided Thames Water has been unable to determine the waste water infrastructure needs of this application. Thames Water has contacted the developer in an attempt to obtain this information and agree a position for SURFACE WATER drainage, but have been unable to do so in the time available and as such Thames Water request that the following condition be added to any planning permission. “No development shall be occupied until confirmation has been provided that either:- 1. Capacity exists off site to serve the development or 2. A development and infrastructure phasing plan has been agreed with the Local Authority in consultation with Thames Water. Where a development and infrastructure phasing plan

is agreed, no occupation shall take place other than in accordance with the agreed development and infrastructure phasing plan. Or 3. All wastewater network upgrades required to accommodate the additional flows from the development have been completed. Reason - Network reinforcement works may be required to accommodate the proposed development. Any reinforcement works identified will be necessary in order to avoid flooding and/or potential pollution incidents. The developer can request information to support the discharge of this condition by visiting the Thames Water website at thameswater.co.uk/preplanning. Should the Local Planning Authority consider the above recommendation inappropriate or are unable to include it in the decision notice, it is important that the Local Planning Authority liaises with Thames Water Development Planning Department (telephone 0203 577 9998) prior to the planning application approval.

As you are redeveloping a site, there may be public sewers crossing or close to your development. If you discover a sewer, it's important that you minimize the risk of damage. We'll need to check that your development doesn't limit repair or maintenance activities, or inhibit the services we provide in any other way. The applicant is advised to read our guide working near or diverting our pipes.

<https://developers.thameswater.co.uk/Developing-a-large-site/Planning-your-development/Working-near-or-diverting-our-pipes>.

The proposed development is located within 15 metres of our underground waste water assets and as such we would like the following informative attached to any approval granted. "The proposed development is located within 15 metres of Thames Waters underground assets and as such, the development could cause the assets to fail if appropriate measures are not taken. Please read our guide 'working near our assets' to ensure your workings are in line with the necessary processes you need to follow if you're considering working above or near our pipes or other [structures.https://developers.thameswater.co.uk/Developing-a-large-site/Planning-your-development/Working-near-or-diverting-our-pipes](https://developers.thameswater.co.uk/Developing-a-large-site/Planning-your-development/Working-near-or-diverting-our-pipes). Should you require further information please contact Thames Water. Email: developer.services@thameswater.co.uk Phone: 0800 009 3921 (Monday to Friday, 8am to 5pm) Write to: Thames Water Developer Services, Clearwater Court, Vastern Road, Reading, Berkshire RG1 8DB

Water Comments

There are water mains crossing or close to your development. Thames Water do NOT permit the building over or construction within 3m of water mains. If you're planning significant works near our mains (within 3m) we'll need to check that your development doesn't reduce capacity, limit repair or maintenance activities during and after construction, or inhibit the services we provide in any other way. The applicant is advised to read our guide working near or diverting our pipes.

<https://developers.thameswater.co.uk/Developing-a-large-site/Planning-your-development/Working-near-or-diverting-our-pipes>

If you are planning on using mains water for construction purposes, it's important you let Thames Water know before you start using it, to avoid potential fines for improper usage. More information and how to apply can be found online at thameswater.co.uk/buildingwater.

On the basis of information provided, Thames Water would advise that with regard to water network and water treatment infrastructure capacity, we would not have any objection to the above planning application. Thames Water recommends the following informative be attached to this planning permission. Thames Water will aim to provide customers with a minimum pressure of 10m head (approx 1 bar) and a flow rate of 9 litres/minute at the point where it leaves Thames Waters pipes. The developer should take account of this minimum pressure in the design of the proposed development.

Supplementary Comments

No drainage strategy has been provided. Can this be provided for both foul and surface water.

Yours faithfully
Development Planning Department

Development Planning,
Thames Water,
Maple Lodge STW,
Denham Way,
Rickmansworth,
WD3 9SQ
Tel:020 3577 9998
Email: devcon.team@thameswater.co.uk

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RE: 2020/2940/P

Fowler, David to: 'NicolaSimonini@campbellreith.com'

09/10/2020 14:30

Hi Nicola,

Please see attached.

Thanks,

David

David Fowler
Principal Planner

Telephone: 0207 974 2123



The majority of Council staff are now working at home through remote, secure access to our systems.

Where possible please now communicate with us by telephone or email. We have limited staff in our offices to deal with post, but as most staff are homeworking due to the current situation with COVID-19, electronic communications will mean we can respond quickly.

From: NicolaSimonini@campbellreith.com <NicolaSimonini@campbellreith.com>

Sent: 08 October 2020 16:39

To: Fowler, David <David.Fowler@camden.gov.uk>

Subject: 2020/2940/P

[EXTERNAL EMAIL] Beware – This email originated outside Camden Council and may be malicious. Please take extra care with any links, attachments, requests to take action or for you to verify your password etc. Please note there have been reports of emails purporting to be about Covid 19 being used as cover for

scams so extra vigilance is required.

Hi David,

I am working on the above BIA. However I cannot download the response from TfL updated on your portal on 5/10/2020 as it seems my PC does not read that format. Could you please try to send it over in another format?

Thanks

Nicola Simonini
Project Engineer

15 Bermondsey Square
London
SE1 3UN

Tel +44 (0)20 7340 1700

www.campbellreith.com

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----- Message from Ewenla Deborah <v_DeborahEwenla@tfl.gov.uk> on Thu, 1 Oct 2020 15:53:17 +0000 -----

To: "Fowler, David" <David.Fowler@camden.gov.uk>

Subject: RE: 13 Blackburn Road NW6 1RZ (Ref: 2020/2940/P)

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Dear David

TfL Spatial Reference number: CMDN/20/48

Borough reference number: 2020/2940/P

Location: Clockwork Factory Apartments 13 Blackburn Road London NW6 1RZ

Proposal: Demolition of existing building and construction of three buildings between 1 and 9 storeys (plus basement) in height comprising 53 residential dwellings, 4,797sqm of commercial floorspace, publicly accessible space, landscaping and resident's facilities including cycle and refuse facilities.

Thank you for consulting Transport for London (TfL) on the development proposal on Blackburn Road. The proposal site is 5m south of TfL London Overground lines, 25m away from Jubilee and Metropolitan lines. Therefore, development in this area are of interest to TfL.

Cycle parking

1. Residential

The proposal offers 86 residential cycle parking spaces, TfL commend the provision exceeding the required emerging London Plan (eLP) amount. We require further details on space allocation for short stay and long stay spaces. The proposal also mentions the provision of 72 two-tier racks and 7 Sheffield stands for parking. TfL require further information on the cycle spaces available for larger bikes, the eLP requires at 5% of cycle parking allocation to made suitable for larger bikes.

1. Office and public realm

The proposal provides 82 two-tier office cycle parking spaces and 15 short stay public realm spaces.

TfL require further clarity on the number of spaces allocated for long and short stay parking for the office provision.

TfL commend the provision of end of journey facilities in line with eLP, TfL will require the details on the design and security of the staff showers and lockers to ensure they are in line with design and safety guidance.

The proposal includes the potential use of e-cargo bikes for deliveries, TfL will further information on this cycle parking provision and design for these bikes. Similarly, to the residential cycle parking provision, the eLP requires 5% of cycle parking to be made accessible for larger bikes.

For cycle parking standards guidance please refer to the London Cycle Design Standards available here:

<http://content.tfl.gov.uk/lcds-chapter8-cycleparking.pdf>

Construction Logistics Plan

The proposal details the largest vehicle which will enter the site (7.5t box van). TfL will require further information on the signage and safety strategy during construction and deliveries. This should show the impact on current and future proposed pedestrian routes and the appropriate mitigation strategy should a road closure be required on Blackburn Road. We accept this information can be provided on appointment of a contractor and completion in collaboration with Camden Council. TfL will require the council to confirm the contact from Network Rail.

For TfL guidance please refer to:

<http://content.tfl.gov.uk/construction-logistics-plan-guidance.pdf>

TfL have no objections to the proposal; however we require further information on the points listed

above.

From: Fowler, David <David.Fowler@camden.gov.uk>
Sent: 25 September 2020 11:55
To: Ewenla Deborah <v_DeborahEwenla@tfl.gov.uk>
Subject: RE: 13 Blackburn Road NW6 1RZ (Ref: 2020/2940/P)

Thanks Deborah.

David

David Fowler
Principal Planner

Telephone: 0207 974 2123



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Where possible please now communicate with us by telephone or email. We have limited staff in our offices to deal with post, but as most staff are homeworking due to the current situation with COVID-19, electronic communications will mean we can respond quickly.

From: Ewenla Deborah <v_DeborahEwenla@tfl.gov.uk>
Sent: 25 September 2020 11:07
To: Fowler, David <David.Fowler@camden.gov.uk>
Subject: 13 Blackburn Road NW6 1RZ (Ref: 2020/2940/P)

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Hi David

I hope you're well.

I have just recently picked up the 13 Blackburn Road application, apologies the response has not been provided yet. I am currently waiting on a response from London Overground Infrastructure Protection about the potential impact (if any) of the substructure construction on West Hampstead Overground station. Once I have the response, I'll be able to send TfL response.

Thank you for your patience.

Kind regards

Deborah Ewenla | Assistant Planner

Spatial Planning | City Planning

T: 020 7027 9383 Auto: 62562 E: v_DeborahEwenla@tfl.gov.uk

A: 9th Floor, 5 Endeavour Square, Westfield Avenue, E20 1JN



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RE: Fw: Blackburn Road

Matthew Penfold to: NicolaSimonini@campbellreith.com

25/01/2021 19:28

"Sam Lambert", "Rachel White",
Cc: "camdenaudit@campbellreith.com" , "Fowler, David" ,
"Steve Branch"

History: This message has been forwarded.

No problem, please see attached.

Regards,

Matt



Geotechnical & Environmental Associates

Widbury Barn | Widbury Hill | Ware | SG12 7QE



tel 01727 824666



mob 07725679945

matt@gea-ltd.co.uk

www.gea-ltd.co.uk

Also in Notts tel 01509 674888
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From: NicolaSimonini@campbellreith.com <NicolaSimonini@campbellreith.com>

Sent: 25 January 2021 17:13

To: Matthew Penfold <Matthew@gea-ltd.co.uk>

Cc: Sam Lambert <s.lambert@elliottwood.co.uk>; Rachel White
<RachelWhite@boyerplanning.co.uk>; camdenaudit@campbellreith.com; Fowler, David
<David.Fowler@camden.gov.uk>; Steve Branch <Steve@gea-ltd.co.uk>

Subject: RE: Fw: Blackburn Road

Hi Matthew,

Thanks for your quick reply. Could you please send us a copy of the updated 'Specific Building Damage Results - Detail' for the sake of completeness?

Kind regards

Nicola Simonini
Project Engineer

15 Bermondsey Square
London
SE1 3UN

Tel +44 (0)20 7340 1700
www.campbellreith.com

From: "Matthew Penfold" <Matthew@gea-ltd.co.uk>
To: "Sam Lambert" <s.lambert@elliottwood.co.uk>, "Rachel White" <RachelWhite@boyerplanning.co.uk>, "Nicola Simonini" <NicolaSimonini@campbellreith.com> <NicolaSimonini@campbellreith.com>
Cc: "camdenaudit@campbellreith.com" <camdenaudit@campbellreith.com>, "Fowler, David" <David.Fowler@camden.gov.uk>, "Steve Branch" <Steve@gea-ltd.co.uk>
Date: 22/01/2021 12:31
Subject: RE: Fw: Blackburn Road

Nicola,

Apologies, and thank you for pointing this out as it had been missed in our last review.

Yes, we confirm that wall No. 11 Blackburn Road - Workshop B (F) does fall into Cat 2, with a max tensile stain of 0.767%, so 0.0017% above the limit for Cat 1. This is short section of wall, which has not been sub-divided into separate segments by the software, so further combined analysis is not possible / applicable for this particular structure.

As per the comments within our report, the results of the analysis provide a conservative estimate of the behaviour of each of the sensitive structures and overestimate the degree of damage, such that in reality the level of damage is likely to be less than predicted and therefore within the Cat 1 limit. However, having gone back into the model to review this, we've noted that there's an error with the coordinates on this structure and a number of the adjoining walls, such that this wall has been modelled as being a lot shorter than it should have been – refer to difference in shape of this part of the building between the plan of sensitive structures in Section 9.1 and the plan in Section 11.0.

We have therefore made some slight amendments to the form of Workshop B, to better reflect the drawing provided by Elliott Wood, and re-run the analysis. Please find an attached plot, showing the adjustment made to Workshop B, and a revised output for the combined segments, which show that the predicted damage to the structure discussed above does not exceed Category 1 (Very Slight).

We trust the above responses and information provided is acceptable, but please do not hesitate to contact us if we can be of any further assistance.

Elliott Wood have confirmed that consultation with Thames Water is in hand and that further information will be provided in respect of this in due course.

Regards,

Matt



Geotechnical & Environmental Associates

Widbury Barn | Widbury Hill | Ware | SG12 7QE



tel 01727 824666



mob 07725679945

matt@gea-ltd.co.uk

www.gea-ltd.co.uk

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From: Sam Lambert <s.lambert@elliottwood.co.uk>

Sent: 22 January 2021 10:19

To: Rachel White <RachelWhite@boyerplanning.co.uk>; NicolaSimonini@campbellreith.com;
Matthew Penfold <Matthew@gea-ltd.co.uk>

Cc: camdenaudit@campbellreith.com; Fowler, David <David.Fowler@camden.gov.uk>; Lee
Frudd <lee.frudd@blackpool.gov.uk>

Subject: RE: Fw: Blackburn Road

Hi Nicola,

Thanks for your comments. I have copied in our Geotechnical engineer [@Matthew Penfold](#) who will be best placed to clarify your query on Workshop B below.

Thanks,

**Sam
Lambert**

MEng

(Hons)

Engineer

elliottwood

[Engineering](#)
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55 Whitfield Street

London W1T
4AH

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From: Rachel White <RachelWhite@boyerplanning.co.uk>

Sent: 20 January 2021 16:03

To: NicolaSimonini@campbellreith.com

Cc: camdenaudit@campbellreith.com; Fowler, David <David.Fowler@camden.gov.uk>; Sam Lambert <s.lambert@elliottwood.co.uk>

Subject: RE: Fw: Blackburn Road

Hi Nicola,

Thanks for the comments below. I have included Sam Lambert from Elliott Wood in the email chain and he will be responding in due course.

Thanks

Rachel

Rachel White

Planner

Boyer

t: 0203 872 9871 **m:** 07546 406 179

From: NicolaSimonini@campbellreith.com <NicolaSimonini@campbellreith.com>

Sent: 20 January 2021 12:18

To: Rachel White <RachelWhite@boyerplanning.co.uk>

Cc: camdenaudit@campbellreith.com; Fowler, David <David.Fowler@camden.gov.uk>

Subject: RE: Fw: Blackburn Road

Hi Rachel,

Thanks for the additional information submitted.

I can see that a sensitivity analysis has been undertaken using the ground movements curves recommended in CIRIA C760. The analysis output from 'Specific Building Damage Results - Detail' indicates that some of the segments of a single wall are in category 2, but the results for most of the combined segments ('Specific Building Damage Results - All Combined Segments' are Category 0 and this is accepted. However, the wall No. 11 Balckburn Road - Workshop B (F) (see attached) is shown to be in Cat. 2 in the 'Detail' analasys, while no damage category is shown for it in the 'All Combined Segments' output . Could you please clarify on that? I reckon it is a bit of a technical detail so I am happy to speak with the engineer on this if needed.

Also we would need confirmation that consultation is ongoing with Thames Water regarding the drainage proposal as discussed in our previous audit and highlighted in query no. 5.

Kind regards

Nicola Simonini

Project Engineer

CampbellReith

15 Bermondsey Square
London
SE1 3UN

Tel +44 (0)20 7340 1700

www.campbellreith.com

From: "Rachel White" <RachelWhite@boyerplanning.co.uk>
To: "Fowler, David" <David.Fowler@camden.gov.uk>
Cc: "camdenaudit@campbellreith.com" <camdenaudit@campbellreith.com>, "NicolaSimonini@campbellreith.com" <NicolaSimonini@campbellreith.com>
Date: 12/01/2021 11:27
Subject: RE: Fw: Blackburn Road

Hi David,

Further to the comments below, please see attached comments from Elliott Wood.

Please let me know if you have any further questions/comments.

Thanks
Rachel

Rachel White

Planner

Boyer

t: 0203 872 9871 **m:** 07546 406 179

From: Fowler, David <David.Fowler@camden.gov.uk>

Sent: 06 January 2021 16:11

To: Rachel White <RachelWhite@boyerplanning.co.uk>

Cc: camdenaudit@campbellreith.com; NicolaSimonini@campbellreith.com

Subject: RE: Fw: Blackburn Road

Hi Rachel,

Apologies – I had Campbell's Reith's comments all along. Please see below.

Please could you respond?

Thanks,

David

David Fowler
Principal Planner

Telephone: 0207 974 2123



The majority of Council staff are continuing to work at home through remote, secure

access to our systems. Where possible please communicate with us by telephone or email.

From: Nicola.Simonini@campbellreith.com <Nicola.Simonini@campbellreith.com>

Sent: 02 December 2020 11:31

To: Fowler, David <David.Fowler@camden.gov.uk>

Cc: camdenaudit@campbellreith.com

Subject: Re: Fw: Blackburn Road

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Hi David,

We have reviewed the agent's reply to our audit queries and have the following comments.

We acknowledge that the excavation will be generally less than 4.00m (especially towards the east) and that in the western area, from existing floor level, from which the proposed basement will be formed, the actual height of the new excavations (when taken from pile cap level to formation level), is equal to, or slightly less than, 4.0 m. However, as requested in the audit, the anticipated maximum excavated depth should be clearly stated and the GMA consider the worst case scenario.

Clarification regarding the site walkover, the anticipated pile length and the temporary works has been provided. We do not have any further comments.

About query 3 and the use of the ground movements curves taken from Ball and Langdon's paper, it is noted that the paper was based on a case study where 300mm bored piles were placed, supporting River Terrace Deposits with good control of construction, use of casing within River Terrace Deposits, stringent monitoring in place and hit & miss construction of the piles. At Blackburn Road's site, 600mm diameter piles at 700mm c/c are proposed supporting London Clay and not River Terrace Deposits.

Double the size piles (600mm vs 300mm) at a tight c/c arrangement are likely expected to result in greater ground movement due to wall installation compared to that noted in the case study. In addition ground conditions are not similar to the case study and as such we cannot accept the GMA assumptions. We recommend that a more cautious approach is followed and that a sensitivity analysis using the full CIRIA C760 curves is undertaken.

Evidence that consultation with Thames Water is on going regarding the Thames Water response/objection has not been presented and is required.

Could you please forward the above to the applicant?

Kind regards

Nicola Simonini
Project Engineer

15 Bermondsey Square
London
SE1 3UN

Tel +44 (0)20 7340 1700
www.campbellreith.com

From: Christos Botsialas/CRH
To: Nicola Simonini/CRH@Campbellreith
Cc: Camden Audit/CRH@campbellreith, Jacqui Parker/CRH@CampbellReith
Date: 17/11/2020 14:58
Subject: Fw: Blackburn Road

Hi Nico

I guess the below was intended for you.

Christo

----- Forwarded by Christos Botsialas/CRH on 17/11/2020 14:57 -----

From: Jacqui Parker/CRH
To: Camden Audit/CRH@campbellreith
Date: 17/11/2020 14:17
Subject: Fw: Blackburn Road

----- Forwarded by Jacqui Parker/CRH on 17/11/2020 14:17 -----

From: "Fowler, David" <David.Fowler@camden.gov.uk>
To: "JacquiParker@campbellreith.com" <JacquiParker@campbellreith.com>
Date: 17/11/2020 14:16
Subject: FW: Blackburn Road

Hi Jacqui,

Hope you're well.

Please see response from the agent to your comments.

Please let me know what you think.

Thanks,

David

David Fowler
Principal Planner

Telephone: 0207 974 2123



The majority of Council staff are now working at home through remote, secure access to our systems.

Where possible please now communicate with us by telephone or email. We have limited staff in our offices to deal with post, but as most staff are homeworking due to the current situation with COVID-19, electronic communications will mean we can respond quickly.

From: Rachel White <RachelWhite@boyerplanning.co.uk>

Sent: 06 November 2020 11:32

To: Fowler, David <David.Fowler@camden.gov.uk>; Grant Leggett <grantleggett@boyerplanning.co.uk>

Cc: Dawson (development), Barry <Barry.Dawson@camden.gov.uk>; Sam Lambert <s.lambert@elliottwood.co.uk>; huw.davies@beadmans.co.uk

Subject: RE: Blackburn Road

Importance: High

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Hi David,

I hope you're well?

We have been reviewing the information from Campbell Reith and Elliott Wood have provided comments below. We would be grateful if you could send these to CR so these points can be

agreed and then we will update the report accordingly.

For ease, I have copied in Sam Lambert from Elliott Wood, please can you ensure he is copied into any correspondence going to Campbell Reith so he can pick up comments in return.

Our comments are as follows;

- **4.5** – *The 4.0 m depth referenced is an approximate value, as specified in our report, representative of the majority of the basement excavations when related to the floor level of the existing building. A review of the drawing set submitted with the BIA, does confirm a variation in depth. However, the majority of the basement excavation fall within this value, and in some cases, well below this value, such that our subsequent analysis is overly conservative in these areas, particularly towards the eastern end of the site, where external ground level is lower and less excavation is required to reach proposed formation level. At the western end of the basement elevation, the depth of proposed formation level relative to ground level beyond the excavation is greater than 4.0 m. However, when measured against existing floor level, from which the proposed basement will be formed, the actual height of the new excavations (when taken from pile cap level to formation level), is equal to, or slightly less than, 4.0 m.*

- **4.6** – *An initial walkover was carried out by one of our geotechnical engineers on 6th November 2019 and again at the time of field work a week later and our report will be updated to make this clear.*

- **4.10** – *Our report was completed in advance of the final CMS, at a time when the proposed pile length had not been finalised, and our estimate for the purpose of the assessment was based on the conservative assumption of an embedment equivalent to the maximum retained height, i.e. more than should be required to achieve stability, to ensure that we were not at risk of underpredicting the potential movements from pile installation. The fact that a pile length of 7 m has then been adopted in the CMS only serves to make our analysis more conservative, leading to a slight over prediction of potential movements as a result of the slightly longer pile length we have used.*

It was understood at the time the GMA was undertaken, that a limited number of wall piles were likely to be taken to greater depth to support localised column loads. However, as discussed in Section 10.0 of our report, the inclusion of a limited number of longer load bearing piles is not sufficient to impact upon the behaviour of the whole wall, which will be determined by the length of the majority of the wall piles, which as above has been modelled as slightly over that specified within the CMS

- **4.11 & 4.15** – *Elliott Wood to revise our report and omit the possibility of exploring a cantilevered contiguous piled wall. There is not therefore any need to revise the GMA to assess this methodology.*

- **4.13** – *Whilst it is correct that the Bell et al paper is based on a specific case study, the assumption that the suggested reduction to the installation curve for a contiguous bored pile wall is similarly specific and limited only to a very small number of sites, is not correct. In terms of ground conditions, those present at the case study site would actually be considered more onerous with respect to the potential for installation movements, than a site*

where London Clay was present from the surface, and the study actually demonstrated that movements of less than 0.01% were recorded. However, a much more conservative value of 0.02 % was recommended (reflective of the majority of the case study data used on which the CIRIA curve was based and an existing reduction already used by many practitioners based on this and their own experience), to allow it to be applied to a wide range of sites and ground conditions.

Furthermore, the suggestion that this value could be considered if further detail on sequencing and propping is available is also incorrect, as these factors would only have an influence on the 'excavation' curves adopted in the analysis and not those used for the pile installation phase.

The adopted reduction is therefore entirely appropriate for this site; provided that good construction control is maintained throughout installation in keeping with modern piling techniques, as highlighted within our BIA and construction techniques specified in the construction method statement.

- **4.19** – A non-technical summary is provided in section 13.3 from page 37 to page 39.

I look forward to hearing from you,

Kind Regards,

Rachel

Rachel White

Planner

Boyer

t: 0203 872 9871 **m:** 07546 406 179

From: Rachel White

Sent: 05 November 2020 15:44

To: 'Fowler, David' <David.Fowler@camden.gov.uk>; Grant Leggett <grantleggett@boyerplanning.co.uk>

Cc: Dawson (development), Barry <Barry.Dawson@camden.gov.uk>

Subject: RE: Blackburn Road

Hi David,

Thanks for this. We will get confirmation from WHIP. Please can you confirm what the audit fee is?

Thanks

Rachel

From: Fowler, David <David.Fowler@camden.gov.uk>

Sent: 04 November 2020 11:22

To: Grant Leggett <grantleggett@boyerplanning.co.uk>; Rachel White <

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