soiltechnics

environmental and geotechnical consultants

Basement extensions
239 Camden High Street
London
NW1 7BU.
Basement Impact Assessment Report

(updated 9th June 2015)

Cedar Barn, White Lodge, Walgrave, Northamptonshire NN6 9PY

t: 01604 781877 **e**: mail@soiltechnics.net
f: 01604 781007 **w**: www.soiltechnics.net

soiltechnics
environmental and geotechnical consultants

Basement extensions
239 Camden High Street
London
NW1 7BU

BASEMENT IMPACT ASSESSMENT REPORT

Soiltechnics Ltd. Cedar Barn, White Lodge, Walgrave, Northampton. NN6 9PY.
Tel: (01604) 781877 Fax: (01604) 781007 E-mail: mail@soiltechnics.net

Report originators

Prepared by

Nigel Thornton
B.Sc (Hons)., C.Eng., M.I.C.E., M.I.H.T., F.G.S

nigel.thornton@soiltechnics.net
Director, Soiltechnics Limited

Aerial photograph of property

Approximate property boundaries edged in red.

Report status and format

Report section	Principal coverage	Report status	
		Revision	Comments
1	Introduction and brief		
2	Description of the property and project proposals		
3	Desk study information and site observations		
4	London Underground		
5	Ground investigations		
6	External ground movements around the basement		
7	Hardened areas		
8	Tree removal		
9	Existing damage to adjacent buildings		
10	Subterranean (Groundwater flow) screening		
11	Stability impact identification		
12	Surface flow and flooding impact identification		
13	Summary and Conclusion.		

List of appendices

Appendix	Content
A	Copy of drawings illustrating proposal
B	Copy of CV of Nigel Thornton and examples of Soiltechnics commissions on basement investigations and analysis.
C	Copy of comments on this report by Chartered Geologist.
D	Trial pit records (Updated)
E	Copy of e-mail response from London Underground Limited

1 Introduction and brief

1.1 Objectives

This report presents a Basement Impact Assessment (BIA) for a proposed development at 239 Camden High Street in London.

The principal objective of the assessment is to present evidence to support a planning application for the project as required by Camden Planning Guidance (CPG4) '*Basements and lightwells'*.

1.2 Client instructions and confidentiality

This report has been produced following instructions received from Barack Holdings ltd.

This report has been prepared for the sole benefit of our above named instructing client, but this report, and its contents, remains the property of Soiltechnics Limited until payment in full of our invoices in connection with production of this report.

1.3 Author qualifications

This report has been prepared by a Chartered Civil Engineer, (C.Eng., M.I.C.E) who is also a Fellow of the Geological Society (FGS). The Author is a practising Civil Engineer with specialist experience (34 years) in geotechnical engineering (including basement construction), flood risk and drainage. A copy of my CV and examples of experience in basement construction is presented in Appendix B. This report has been reviewed by John Evans of Chord Environmental who is a Chartered Geologist and expertise in hydrogeology. A copy of his comments are presented in appendix C.

1.4 Guidance used

As described in paragraph 1.1.2 above we have followed Camden Planning Guidance (CPG4) '*Basements and lightwells'*, and Camden geological, hydrogeological and hydrological study report '*Guidance for subterranean development,*' produced by Arup on behalf of the London Borough of Camden. We have also referred to the '*Strategic Flood Risk Assessment Report for North London*' dated August 2008 prepared by Mouchel, as well as other readily available information on websites. This report has considered all four stages of the BIA process as described in CPG4. This report has also been prepared to satisfy the following parts of Camden's policy DP27, on basements and lightwells:

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;

In order to satisfy part a) a construction method statement has been prepared by a Structural Engineer which is separately presented.

1.5 Format of this report in relation to CPG4

Sections 3 to 9 of this report describes project proposals and presents desk study and investigation data, information required to answer flow chart questions posed in figures 1, 2 and 3 of GPG4. Answers for these flow chart questions are provided in sections 10 to 12.

2 Description of the property and project proposals

2.1 Description of the property

The site is currently occupied by a three storey terraced building which within a commercial part of Camden High Street. The ground floor and other parts are used for a food restaurant /takeaway. Based on inspection of old Ordnance Survey maps the building was probably constructed in the 1800s. The building occupies much of the plot of land with no gardens. General ground levels in the area are reasonably uniform (flat). There is an existing single storey deep basement covering the existing building footprint but restricted headroom to varying degrees.

There are basements at a similar level to the existing basement at 239 in neighbouring properties (no 241 and 237) with level shown on the section on our client's Engineer's drawing presented in appendix A.

2.2 Project proposals

Proposals are to deepen the existing basement floor level to make better use of the existing basement. The basement floor levels will be reduced by about 0.46m in the front (north eastern part of the building) and about 1.78m in the rear south western half of the building. This will produce a uniform basement floor level of 24.84m AOD, marginally below adjacent (neighbouring) basement floor levels.

Underpinning will be required to perimeter and load bearing walls to the existing building allowing basement excavation.

Copies of our client's Engineer's drawings showing project proposals are presented in Appendix A. A topographical survey of the basement and neighbouring basements is also included in appendix A.

3 Desk study information and site observations

3.1 Site history

We have reviewed of Ordnance Survey and London town maps dating back to the mid 1800s and the property was first recorded on the 1873 map an extract is presented below with the property edged in red

Extract copy of 1873 map

At this stage is important to note there are no water courses recorded on the 1873 map close to the property, and no evidence of any opencast quarrying activities in the locality.

3.2 Geology and geohydrology of the area

3.2.1 Geology

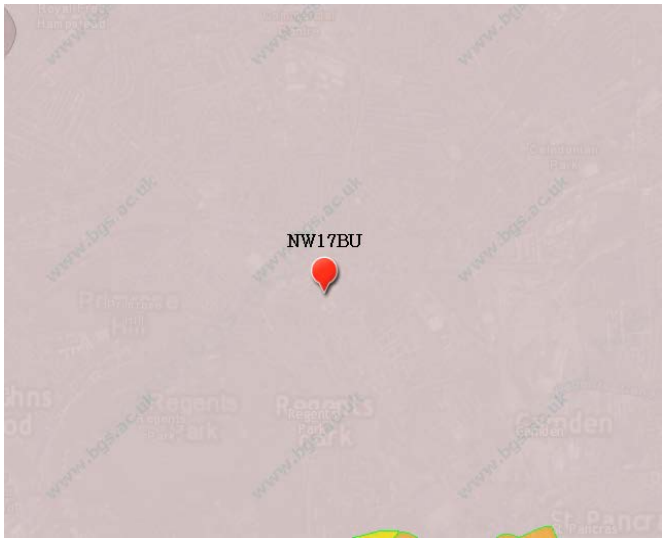
Inspection of the geological map of the area published by the British Geological Survey (BGS) indicates the following sequence of strata. The thickness of the strata has been obtained from a combination borehole record data formed within 500m of the property available on the BGS website, and geological sections shown on the BGS map.

Summary of Geology and likely aquifer containing strata					
Strata	**Bedrock or drift**	**Approximate thickness**	**Typical soil type**	**Likely permeability**	**Likely aquifer designation**
London Clay Formation	Bedrock	40	Clays	Low	Unproductive
Lambeth Group	Bedrock	10	Clays occasionally sandy	Low	Unproductive
Thanet sands	Bedrock	10	Fine sands	Low/moderate	Secondary Aquifer
Chalk	Bedrock	200	Chalk	High	Principal

Table 3.2

Soil types and assessments of permeability are based on geological memoirs, in combination with our experience of investigations in these soil types.

An extract copy of the geological map is presented below, with brown shading representing the outcrop of the London Clay Formation (LC). The property position is shown at the point of the red symbol.



Based on the above any excavations within the property will be located within London Clays.

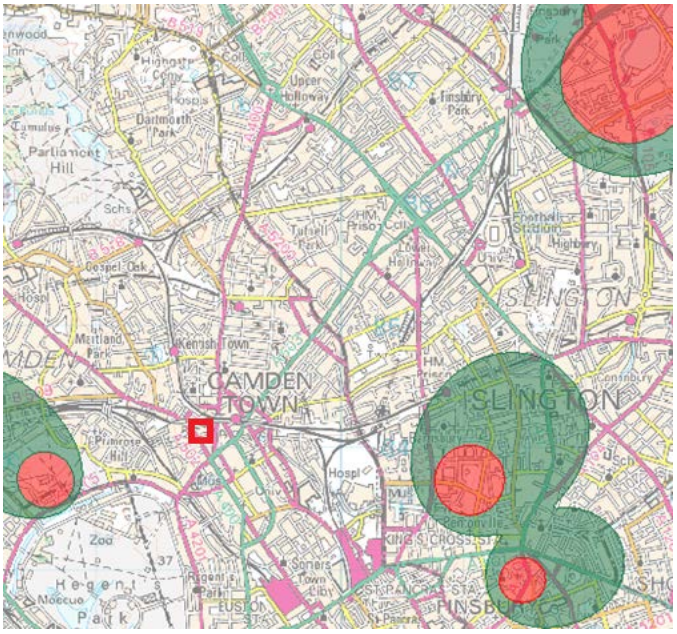
3.2.2 Geohydrology

The London Clay is classified as unproductive and regarded as not containing groundwater in exploitable quantities.

Chalk is classified a Principal Aquifer. Principal aquifers are defined as deposits exhibiting high permeability capable of high levels of groundwater storage. Such deposits are able to support water supply and river base flows on a strategic scale.

3.2.3 Source protection zone

The site is not recorded as being located within or close to a zone protecting a potable water supply abstracting from a principle aquifer (i.e. a source protection zone). An extract of the plan recording source protection zones is presented below, with green shading representing outer protection zones and red inner protection zones. The property is located within the red square and remote from source protection zones.



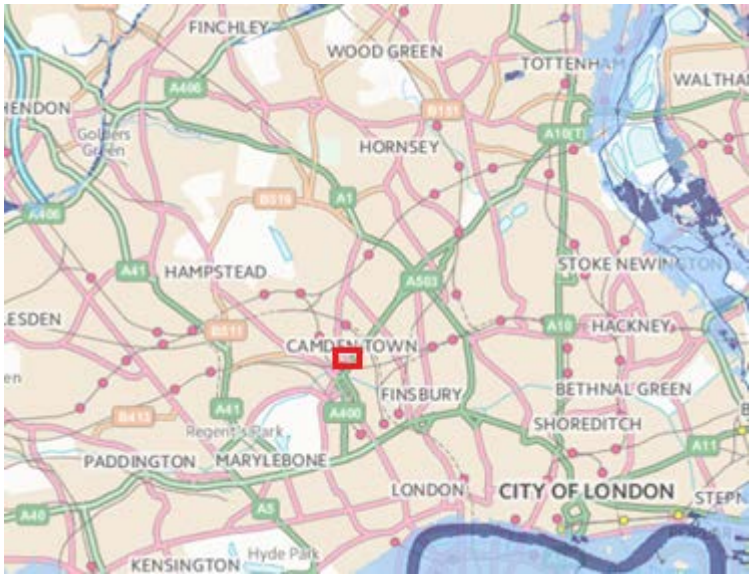
3.3 Quarrying/mining

3.3.1 With reference to the coal mining and brine subsidence claims gazetteer for England and Wales, available on the Coal Authority web site, the area has not been subject to exploitation of coal or brine. Inspection of old Ordnance Survey maps dating back to the first editions (late 1800s) does not record any quarrying activities within 250m of the property.

3.4 Flood risk

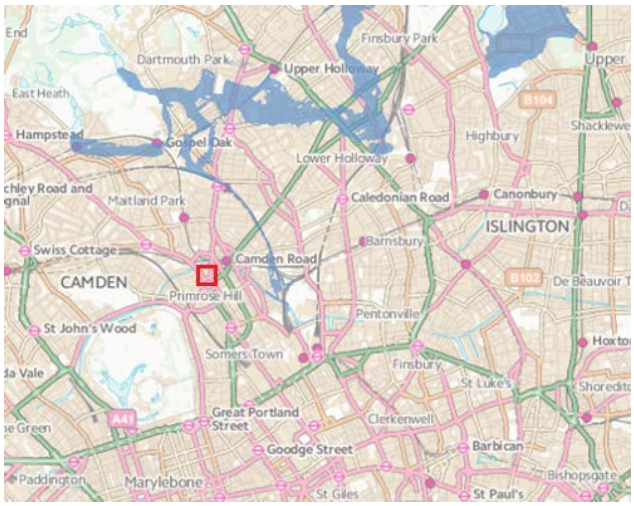
3.4.1 Fluvial/tidal flooding

The Environment Agency website indicates the site is not located within a fluvial or tidal flood plain. An extract copy of the flood risk map is presented below which shows no blue shading representative of flooding. The property is located within the red square.



3.4.2 Flooding from Reservoirs, Canals and other Artificial Sources

The Environment Agency website indicates the site is not located within an area considered at risk of flooding from breach of reservoir containment systems. An extract copy of the flood risk map is presented below which shows no blue shading representative of flooding as a result of failure of containment systems close to the site. The property is located within the red square.

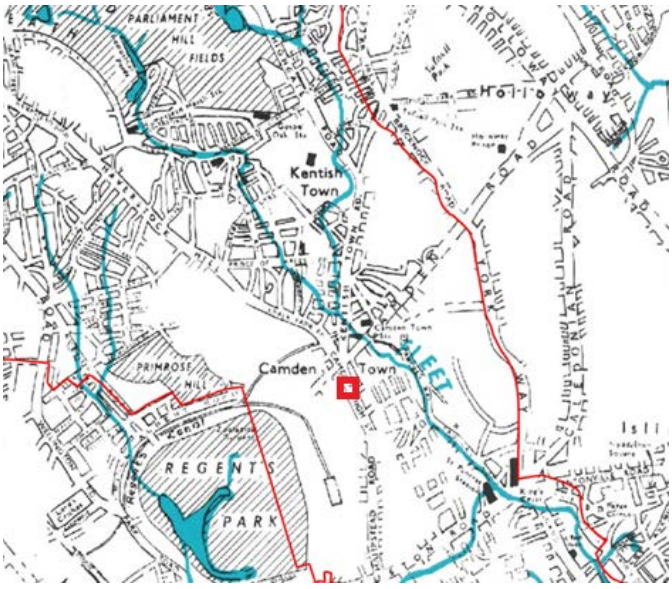


3.4.3 Flooding from Groundwater and surface waters

The site is underlain with a substantial thickness (80m) of relatively impermeable London Clay Formation. On this basis groundwater is not likely to be available at the site and thus is unlikely to present a risk of causing groundwater flooding.

We have viewed the Environment Agency web site which provides maps showing areas a risk of flooding from surface waters. An extract of the map is presented below. The property is located within the red square and blue shading represents areas at risk of surface water flooding. The property is remote from blue shaded areas.

An extract of figure 11 from the Camden Geological, Hydrogeological and Hydrological Study (referenced in Section 1.4) is presented below. The blue lines show the locations of branches of the former River Fleet. The property is located within the red box. The property is remote from former natural drainage watercourses.



With reference to old mapping of the area described in section 3.1 above, the 1873 map (predevelopment) does not record any water courses close to or within the immediate area of the property. The River fleet was a natural stormwater drainage system for this area of London prior to urbanisation. Development of London has resulted in original watercourses being culverted, with culverts following, in the majority of cases, road infrastructure routes.

An extract of figure 15 from the Camden Geological, Hydrogeological and Hydrological Study (referenced in Section 1.4) is presented below (property marked in a red box). The map records the property remote from areas of recorded sewer flooding

Extract copy of figure 15 from the Camden Geological, Hydrogeological and Hydrological Study

There will be below ground water supply pipes operated by Thames Water in public highways around the property. These are generally relatively small diameter pipes. It is considered that the property is unlikely to be at enhanced risk of flooding due to ruptures in the potable water supply system in the area.

3.4.4 Conclusions

Based on the above, in our opinion, the property is considered unlikely to be at enhanced risk of being flooded by exceedences in capacity of foul and stormwater drainage or water supply pipes. Evidence presented above demonstrates the property is not at an enhanced risk of being affected by tidal or fluvial flooding or indeed from artificial sources. The property and indeed proposals will not be affected by groundwater flooding

4 London Underground

The property is located above a station an asset of London Underground limited (LUL). The following plan shows the extent of the station box with the property edged in red.

We have been corresponding with LUL to determine the location of the box relative to the basement at the property. We are advised the top of the box is around 5m depth, thus possibly some 2.5m below existing basement level. We have received an e-mail response from London Underground consenting to progress the project to Planning stage with their e-mail presented in appendix E.

5 Ground investigations

5.1 Scope

Investigations are limited to exposing the foundation arrangement of the existing building within the basement. The investigations were limited due to concrete and need to continually use the basement as part of trading activities.

5.2 Conditions encountered

The trial pit encountered a corbelled brickwork foundation. Records of the trial pit are presented in appendix D.

6 External ground movements around basement

6.1 Construction proposals

Proposals are to deepen the existing basement floor level to make better use of the existing basement. The basement floor levels will be reduced by about 0.46m in the front (north eastern part of the building) and about 1.78m in the rear south western half of the building. This will produce a uniform basement floor level of 24.84m AOD, marginally below adjacent (neighbouring) basement floor levels.

Underpinning will be required to perimeter and load bearing walls to the existing building allowing basement excavation.

Copies of our client's Engineer's drawings showing project proposals are presented in Appendix A

6.2 Settlement around and inward yielding of basement excavations

The following analysis is based on observations of ground movements around basement excavations in clays as reported in Tomlinson '*Foundation design and construction*' (seventh Edition)

It is recognised that some inward yielding of supported sides of strutted excavations and accompanying settlement of the retained ground surface adjacent to the excavation will occur even if structurally very stiff props / strutting is employed. The amount of yielding for any given depth of excavation is a function of the characteristics of the supported soils and not the stiffness of the supports. Based on observations of other excavations in over consolidated clay soils (which is the case at this site) the average maximum yield / excavation depth (%) was 0.16, with a range of 0.06 to 0.3. Assuming a maximum excavation depth of 2m(1.78m + an allowance for floor construction) then the likely inward yield will be in the order of 2 x 0.16/100 x 1000 = 3mm. Taking a worst case upper bound factor (0.3%) then the inward yield would be about 6mm. Importantly where the basement depths are to be lowered by about 0.76m (0.46 m + an allowance for floor construction) inward yielding will be limited to around 1mm.

Coincidental with the inward yield of retaining structures, some settlement of the retained soils around the excavation will occur. Again, based on published observations, the ratio of surface settlement to excavation depth in over consolidated clays is about 0.3% (range 0.1 to 0.6). Adopting the average of 0.3, and a maximum 2m deep excavation, then surface settlement in the order of 2 x 0.3/100 x 1000 = 6mm could occur. Again, taking an upper bound factor of 0.6% then the surface settlement will be 12mm although this is extremely unlikely given the extent of the basement and adjacent basements. . Importantly, whilst some surface settlement will occur around the excavation, this settlement profile will extend for a distance of about 4 times the depth of excavation ie about 8m in a reasonably linear fashion. Importantly where the basement depths are to be lowered by about 0.76m

(0.46 m + an allowance for floor construction) settlement will be limited to around 2mm.

Considering surface settlement of 6mm which diminishes over a horizontal distance of 8m, we estimate the horizontal strain will be about 0.001% on the main rear elevation of adjacent properties. This would suggest damage would fall into category 0 as described in the following table (extract from CIRIA report 580).

Table 2.5 *Classification of visible damage to walls (after Burland et al, 1977, Boscardin and Cording, 1989; and Burland, 2001)*

Category of damage	Description of typical damage (ease of repair is underlined)	Approximate crack width (mm)	Limiting tensile strain ε_{lim} (per cent)
0 Negligible	Hairline cracks of less than about 0.1 mm are classed as negligible.	< 0.1	0.0–0.05
1 Very slight	Fine cracks that can easily be treated during normal decoration. Perhaps isolated slight fracture in building. Cracks in external brickwork visible on inspection.	< 1	0.05–0.075
2 Slight	Cracks easily filled. Redecoration probably required. Several slight fractures showing inside of building. Cracks are visible externally and some repointing may be required externally to ensure weathertightness. Doors and windows may stick slightly.	< 5	0.075–0.15
3 Moderate	The cracks require some opening up and can be patched by a mason. Recurrent cracks can be masked by suitable linings. Repointing of external brickwork and possibly a small amount of brickwork to be replaced. Doors and windows sticking. Service pipes may fracture. Weathertightness often impaired.	5–15 or a number of cracks > 3	0.15–0.3
4 Severe	Extensive repair work involving breaking-out and replacing sections of walls, especially over doors and windows. Windows and frames distorted, floor sloping noticeably. Walls leaning or bulging noticeably, some loss of bearing in beams. Service pipes disrupted.	15–25 but also depends on number of cracks	> 0.3
5 Very severe	This requires a major repair involving partial or complete rebuilding. Beams lose bearings, walls lean badly and require shoring. Windows broken with distortion. Danger of instability.	usually > 25 but depends on number of cracks.	

Notes

1. In assessing the degree of damage, account must be taken of its location in the building or structure.
2. Crack width is only one aspect of damage and should not be used on its own as a direct measure of it.

7 Hardened areas

There will be no increase in hardened and drained areas of the property following completion of the basement deepening scheme.

8 Tree removal

No major vegetation will be removed to accommodate the extension building.

9 Existing damage to adjacent buildings

We are not aware of any subsidence damage to existing buildings.

10 Subterranean (Ground water) flow screening

10.1 General overview.

The property is positioned on locally high ground to the north of central London. The property is outside areas considered to be at risk of being affected by tidal and fluvial flooding associated with the Thames or its tributaries, or artificial water sources (canals/reservoirs). In addition the property is not considered to be at enhanced risk of flooding from sewers or water supply pipes.

Geological records indicate the site is underlain by deposits of London Clay Formation extending to depths of approximately 40m. The property (being underlain with a substantial thickness of London Clay Formation) is not considered to be at risk of flooding from groundwater and the proposals will not affect any groundwater flows.

10.2 Responses to flow chart questions

The following provides site specific responses to questions posed in figure 1 of CPG4

Question and response		Text reference
Question 1a	Is the site located directly above an aquifer?	
Response.	No. The property is directly underlain by over 40m thickness of London Clays which are classified Unproductive Strata (formerly Non Aquifer) by the Environment Agency.	3.2
Question 1b	Will the proposed basement extend beneath the water table surface?	
Response	No. The London Clay Formation comprises reasonably homogenous relatively impermeable clays which are not able to transmit groundwater under normal hydraulic gradients.	3.2
Question 2	Is the site within 100m of a watercourse, well or potential spring line?	
Response.	No. The site is remote (in excess of 100m) of any known watercourse. The geology of the area is not conducive to spring lines or wells for extraction of water. Based on this there are no matters of concern.	3.4.3

Question and response		Text reference
Question 3	Is the site within the catchment of the pond chains on Hampstead Heath?	
Response	No. Based on figure 14 within the Camden geological, hydrogeological and hydrological study report, the property is not within the catchment of the pond chains on Hampstead Heath. The property is located about 1.4km distance from the pond chains on Hampstead Heath	3.4.2
Question 4	Will the proposed basement development result in a change in the proportion of hard surfaced/paved areas?	
Response	No. Deepening of the existing basement will not increase surface water run off	6
Question 5	As part of the site drainage, will more surface water (e.g. rainfall and run off) than present be discharged to the ground (e.g. via soakaways/SUDS)?	
Response	No. Deepening of the existing basement will not increase surface water run off	6
Question 6	Is the lowest point of the proposed excavation (allowing for any drainage and foundation space under the basement floor) close to or lower than the mean water level in any local pond (not just the pond chains on Hampstead Heath) or spring line?	
Response	No. The London Clay Formation comprises reasonably homogenous relatively impermeable clays which are not able to transmit groundwater under normal hydraulic gradient. Basement excavations will be formed in the London Clays. Based on this there are no matters of concern.	3.4.3

11 Stability impact identification

11.1 General overview.

The property is positioned on locally high ground to the north of central London. Ground levels in the area are reasonably uniform

Proposals are to deepen the existing basement floor level to make better use of the existing basement. The basement floor levels will be reduced by about 0.46m in the front (north eastern part of the building) and about 1.78m in the rear south western half of the building. This will produce a uniform basement floor level of 24.84m AOD, marginally below adjacent (neighbouring) basement floor levels.

Underpinning will be required to perimeter and load bearing walls to the existing building allowing basement excavation.

11.2 Responses to flow chart questions

The following provides site specific responses to questions posed in figure 2 of CPG4

Question and response		Text reference
Question 1	Does the existing site include slopes, natural or manmade greater than 7^{o} (approximately 1 in 8).	
Response.	No. The topography of the area is reasonably flat. Based on this there are no matters of concern.	2.1
Question 2	Will the proposed profiling of landscaping at the site change slopes at the property boundary to more than 7^{o}?	2.2
Response	No. The proposed basement will not change the current topographical conditions. Based on this there are no matters of concern.	

Question and response		Text reference
Question 3	Does the development neighbour land including railway cuttings and the like with slopes greater than 7^{o} (approximately 1 in 8)?	
Response.	No. It is acknowledged that the property is located above a station box to London Underground .	4
Question 4	Is the site within a wider hillside setting in which the slope is greater than 7^{O}?	
Response	No. The topography of the area is reasonably uniform. Based on this there are no matters of concern.	2.1
Question 5	Is the London Clay the shallowest strata at the site?	
Response	Yes. The property is underlain with London Clays, extending to depths of around 40m in the area. Given the shallow (natural) slope angles in the area, the property is not considered to be at risk of slope instability. Based on this there are no matters of concern.	2.1
Question 6	Will any trees be felled as part of the development and/or are there any works proposed within any tree protection zones where trees are to be retained?	
Response	No trees will be removed as part of the development.	8

Question and response		Text reference
Question 7	Is there a history of any seasonal shrink swell subsidence in the local area and/or evidence of such effects on site?	
Response	No. We are not aware of any evidence of damage attributable to subsidence either on the subject property or on adjacent properties. Based on this there are no matters of concern.	
Question 8	Is the site within 100m of a watercourse, well or potential spring line.	
Response	No. The site is remote (in excess of 100m) of any known watercourse. The geology of the area is not conducive to spring lines or wells for extraction of water. Based on this there are no matters of concern.	3.4
Question 9	Is the site within an area of previously worked ground?	
Response	No. There is no evidence to indicate the site has been subject to quarrying activities in the area. Based on this there are no matters of concern.	3.1
Question 10	Is the site located above an aquifer? If so will the proposed basement extend beneath the water table such that dewatering may be required during construction?	
Response	No. The property is directly underlain by over 40m thickness of London Clays which are classified Unproductive Strata (formerly Non Aquifer) by the Environment Agency. The London Clay Formation comprises reasonably homogenous relatively impermeable clays which are not able to transmit groundwater under normal hydraulic gradient. New basement excavations will be formed in the London Clays. Based on this there are no matters of concern.	3.2
Question 11	Is the site within 50m of Hampstead Heath ponds?	
Response	No. The property is located about 2.4km to the south of the pond chain on Hampstead Heath. Based on this there are no matters of concern.	3.4.2

Question and response		Text reference
Question 12	Is the site within 5m of a public highway or pedestrian right of way?	
Response.	Yes. The property abuts the back of the footpath to Camden High Street. Surface settlement due to the effects of lowering the basement by some 0.76m will be around 2mm thus have negligible effect on any underground services in the street.	2.2
Question 13	Will the proposed basement significantly increase the differential depth of foundations relative to adjacent properties?	
Response	No. Proposed basement levels will only marginally exceed basement floor levels in adjacent neighbouring properties.	6
Question 14	Is the site over (or within the exclusion zone of) any tunnels e.g. Railway lines.	
Response	Yes The property is located over a station box. We are continuing to Liaise with LUL on this with a view to obtain their consent to the proposed works	

12 Surface flow and flooding impact identification

12.1 General overview.

There will be no increase in hardened and drained areas resulting from the development.

12.2 Responses to flow chart questions

The following provides site specific responses to questions posed in figure 3 of CPG4

Question and response		Text reference
Question 1	Is the site within the catchment of the pond chains on Hampstead Heath?	
Response.	No. The property is not located within the catchment of the pond chains.	3.4.2
Question 2	As part of the site drainage, will surface water flows (e.g. rainfall and run off) be materially changed from the existing route?	
Response	No. Proposals will not impact on surface water flows.	6
Question 3	Will the proposed basement development result in a change in the proportion of hard surfaced/paved areas?	
Response.	No	
Question 4	Will the proposed basement result in changes to the profile of the inflows (instantaneous and long term) of surface water being received by adjacent properties or downstream water courses?	
Response	No. Proposals will have no impact on surface water received by adjacent properties or downstream watercourses.	

Question and response		Text reference
Question 5	Will the proposed basement result in changes to the quality of surface water being received by adjacent properties or downstream water courses?	
Response	No. Proposals will have no impact on surface water flows to adjacent properties or downstream water courses.	

13 Summary and Conclusions

13.1 Proposals are to deepen the existing basement floor level to make better use of the existing basement. The basement floor levels will be reduced by about 0.46m in the front (north eastern part of the building) and about 1.78m in the rear south western half of the building. This will produce a uniform basement floor level of 24.84m AOD, marginally below adjacent (neighbouring) basement floor levels.

Underpinning will be required to perimeter and load bearing walls to the existing building allowing basement excavation.

13.2 Old mapping of the area indicates the property was probably constructed in the 1800s.. There is no evidence of any watercourses or ponds close to the site.

13.3 Published BGS maps of the area record topography local to the property is formed in deposits of London Clays which probably extend to depths in the order of 40m in the area. The London clays are classified as unproductive strata (formerly Non Aquifer) by the Environment Agency. The London Clay Formation comprises reasonably homogenous relatively impermeable clays which are not able to transmit groundwater under normal hydraulic gradient. Basement excavations will be formed in the London Clays and based on the above, not affected by groundwater. Similarly, installation of the proposed basement will not affect any subterranean ground water flows.

13.4 Ground levels in the area are reasonably uniform, and slope instability is not considered to present a risk. Installation of the basement will not induce any slope instability.

13.5 There is no evidence of any subsidence to any adjacent properties or indeed the existing buildings on the site.

13.6 No trees will be removed as part of the development.

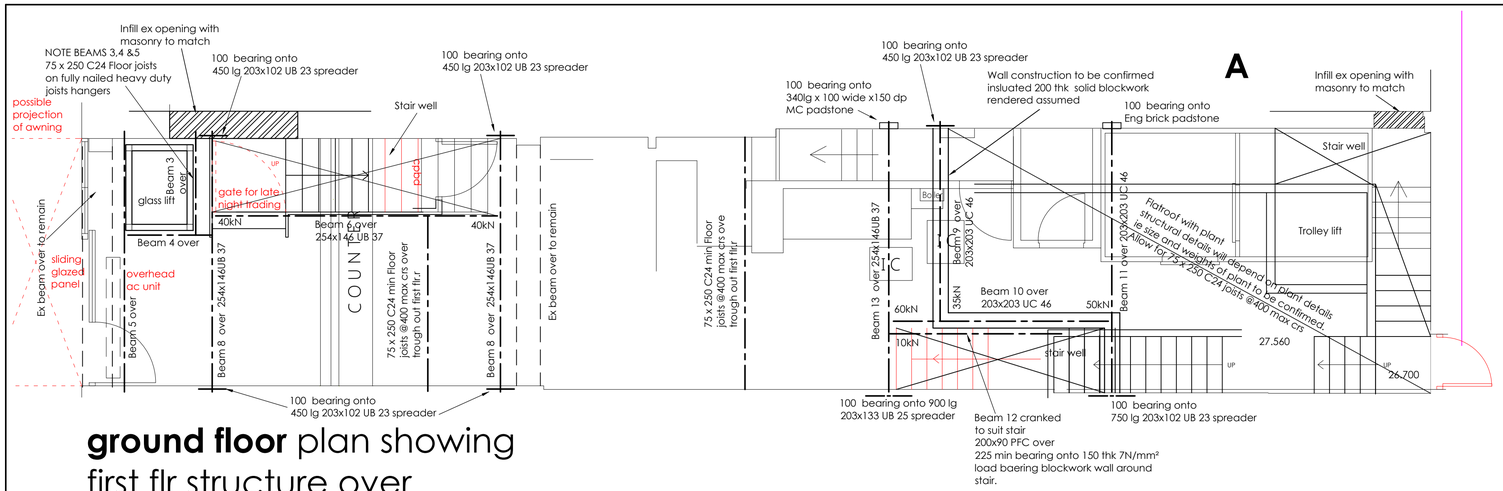
13.7 Installation of the basement will generate some nominal ground movement close to the perimeter of the basement excavation. The amount of movement has been predicted based on records of observed movement in other basements during construction. The amount of movement is relatively small which do not present a matter of concern to adjacent properties.

13.8 The property is considered to be at no enhanced risk of being subject to flooding.

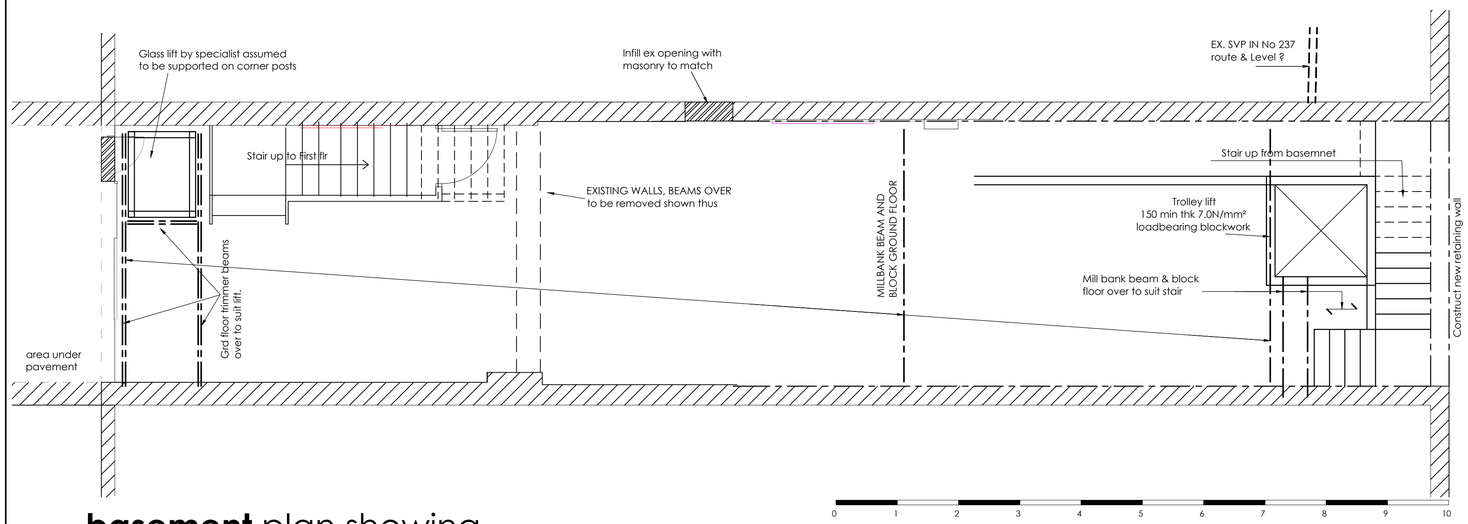
13.9 There will be no increase in hardened and drained areas resulting from the proposals.

13.10 The property is located over a station box. We are continuing to Liaise with LUL on this with a view to obtain their consent to the proposed works

13.11 In overall conclusion there are no outstanding issues of concern (singularly or cumulatively) from a stability, groundwater or surface water perspective.

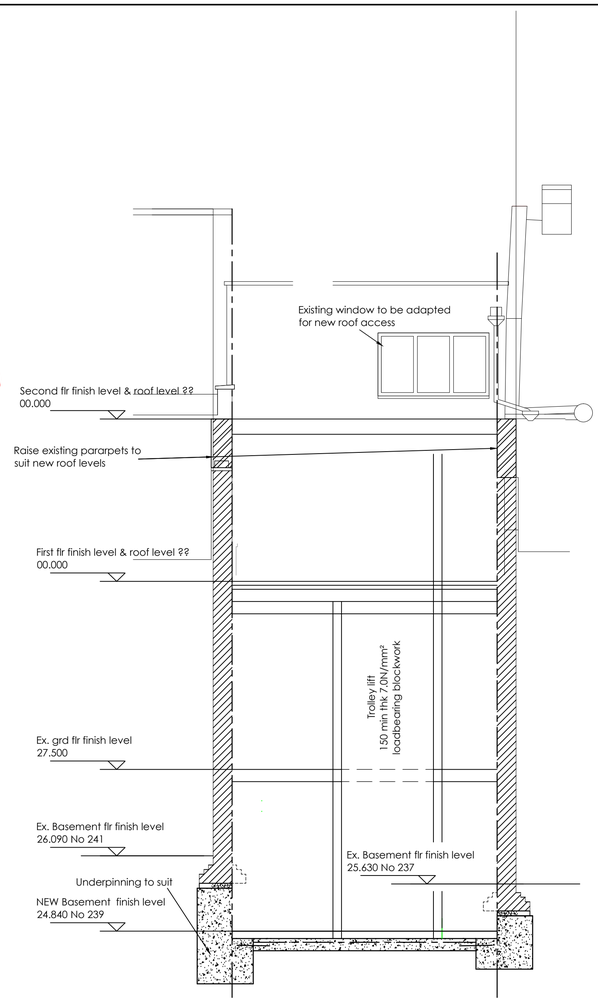


ground floor plan showing first flr structure over



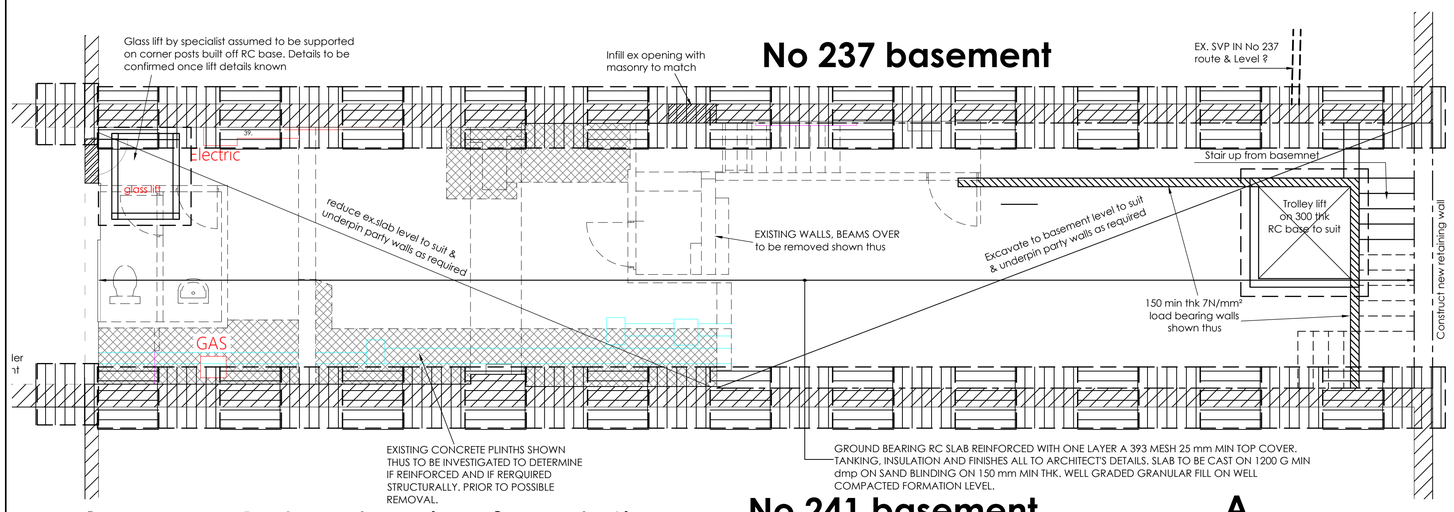
scale -1:50 @A1/ 1:100@A3

basement plan showing grd flr structue over



Section A - A

scale - 1:50 @ A1 / 1:100 @ A3



scale -1:50 @A1/ 1:100@A3

basement plan showing foundations

Notes

1. ALL DIMENSIONS TO BE CHECKED ON SITE AND NOT SCALED FROM THIS OR ANY OTHER DRAWING.
2. THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL ARCHITECT'S DRAWINGS AND OTHER RELATED DOCUMENTATION.
3. ALL WORKS TO BE NOTIFIED TO THE LOCAL AUTHORITY AND BUILDING CONTROL OFFICER'S APPROVALS OBTAINED AS APPROPRIATE DURING THE COURSE OF THE WORKS.
4. ADEQUATE PROPPING TO BE PROVIDED IN ALL TEMPORARY CASES, TO ENSURE THE STABILITY OF THE EXISTING BUILDING AT ALL TIMES.
5. STEEL SECTIONS TO BE USED TO BE MILD STEEL GRADE S275.
6. CONCRETE FOR PADSTONES TO BE 1 : 1½ : 3 NOMINAL MIX BY VOLUME, WITH 10mm AGGREGATE SIZE.
7. MASS CONCRETE TO BE GRADE C30, HAVING A CRUSHING STRENGTH OF 30N/mm² AT 28 DAYS.
8. CONCRETE FOR REINFORCED CONCRETE TO BE GRADE C35, HAVING A CRUSHING STRENGTH OF 35N/mm² AT 28 DAYS.
9. UNLESS NOTED OTHERWISE, GROUND BEARING PRESSURE REQUIRED FOR NEW FOUNDATION WORKS TO BE 100kN/m².
10. ALL STRUCTURAL SOFTWOOD TIMBERS USED ARE TO BE TREATED AND HAVE AN AVERAGE MOISTURE CONTENT NOT EXCEEDING 20% - TIMBER IS TO BE IDENTIFIED AS C16 OR 24 DRY, OR KD AS PART OF THE GRADING MARKING.
11. ALL BLOCKWORK TO BE 4.0 N/mm² IN 1:6 MORTAR ABOVE AND 7N/mm² LAID IN 1:3 MORTAR BELOW DPC UNLESS OTHERWISE SHOWN
12. ALL LENGTHS OF STRUCTURAL STEELWORK ARE TO BE CONFIRMED ON SITE PRIOR TO ORDERING.
    NOTE:-
    CONNECTION DETAILS NOT SHOWN ARE TO BE TO FABRICATORS DESIGN and DETAIL - TO CATER FOR END REACTIONS STATED ON DRAWINGS and SHOWN THUS ??kN (ULT.)
13. ALL INTERNAL STRUCTURAL STEELWORK TO BE PAINTED USING A ZINC RICH PAINT PRIMER PRIOR TO ERECTION AND TOUCHED IN,' AFTER ERECTION AND ALL 'EXTERNAL' STRUCTURAL STEELWORK IS TO BE GALVANISED, PRIOR TO DELIVERY TO SITE
14. ALL WELDS TO BE 6mm FULL PROFILE FILLET, UNLESS OTHERWISE SHOWN. 'HIT and MISS' WELDS TO BE 100 'HIT' AND 75 'MISS' THROUGHOUT.
15. CUT LINE TO NEW OPENINGS TO ALLOW FOR 25mm min. SEMI-DRY 3:1, SAND/CEMENT MORTAR - TO BE WELL PACKED AND CONSOLIDATED BETWEEN CUT FACE OF EXISTING MASONRY AND TOP OF NEW SUPPORTING MEMBER.
16. (TMJ) - TIED MOVEMENT JOINTS - TO COMPRISE OF PROPRIETARY WALL TIE SYSTEM THAT PROVIDES FOR LATERAL MOVEMENT - WITH PLASTER BEADS INTERNALLY AND MASTIC SEALANT FILL EXTERNALLY.
17. ALL PROPRIETARY PRODUCTS ARE TO BE USED AND INSTALLED STRICTLY IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS
    N.B. - WHERE RESIN ANCHORS ARE TO BE FIXED INTO MASONRY THEY MUST BE INTO MASONRY AND NOT MORTAR JOINTS.
    NOTE:-WHERE ALTERNATIVE PRODUCTS ARE USED IN SUBSTITUTION FOR THOSE SPECIFIED HERE, THEN THE SUBSTITUTE PRODUCT MUST BE EQUVALENT TO, OR SUPERIOR THAN THE SPECIFIED PRODUCT.

Rev	Description	Date	By
A	Basement levels & grd floor construction note added	29.04.15	ME

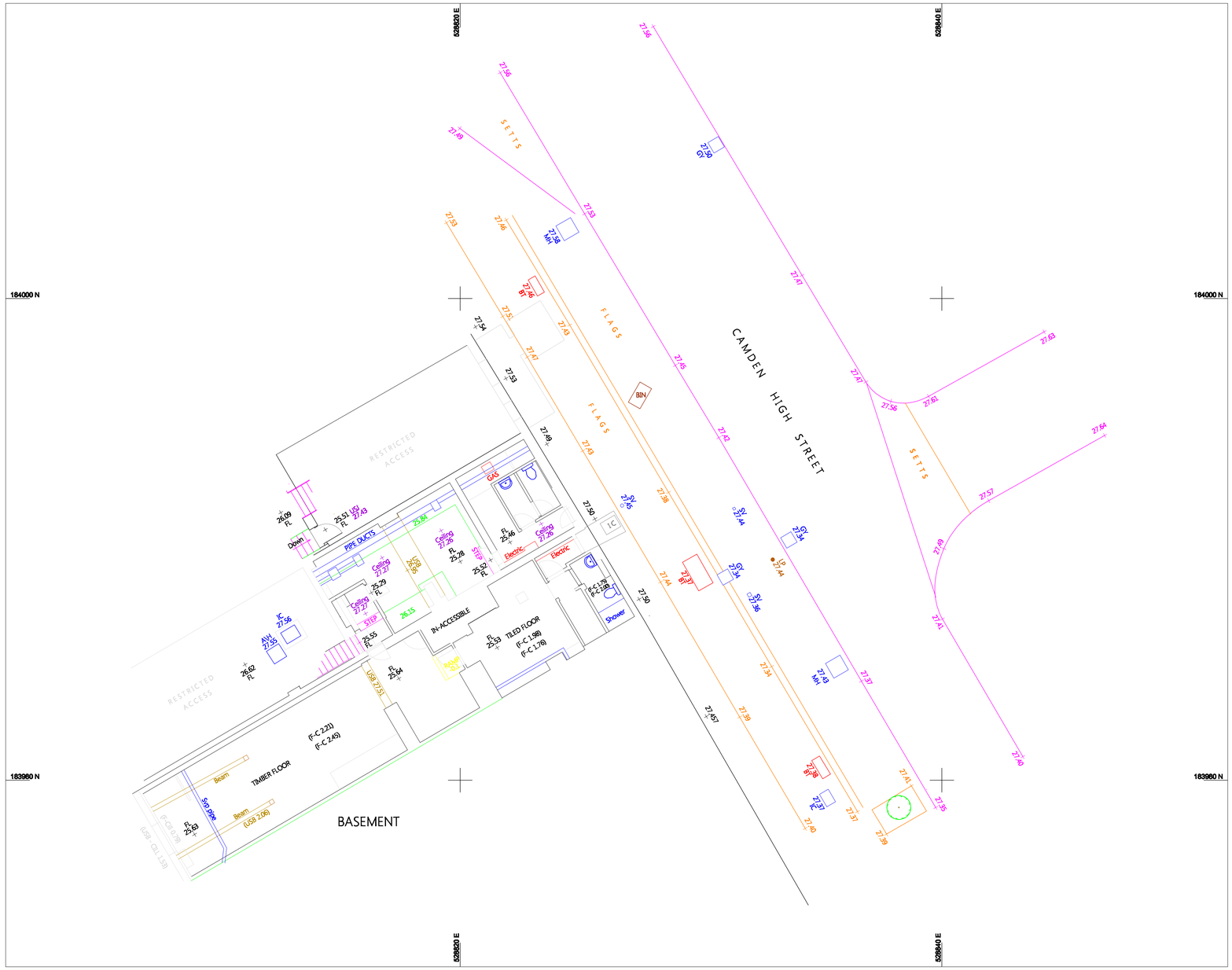
Keith C Thomas Associates
Consulting Structural Engineers
Office 11 Mentmore House
Cray Avenue
Orpington
Kent BR5 3QF
Tel: 01689 875980 Fax: 01689 835220
Email:KTA@structeng.co.uk

Client

Job Title
CAMDEN
239 HIGH STREET
NW1 7BU

Drg. Title
preliminary
STRUCTURAL PROPOSALS
basement ,ground & first floor

Drawn	ME	Scale	1:50 AT A1	Date	APRIL 15
DRAWING No.	14152-P01			Rev	A



NOTES

ALL LEVELS ARE IN METRES RELATED TO ORDNANCE SURVEY LEVEL

ALL CO-ORDINATES ARE IN METRES RELATED TO NATIONAL GRID CO-ORDINATES FIXED BY G P S

ALL SERVICES & MANHOLES SHOWN VISIBLE AT TIME OF SURVEY

BASEMENTS HAD RESTRICTED ACCESS

ALL DIMENSIONS TO BE CHECKED PRIOR TO COMMENCEMENT OF WORK

Topographical Survey Legend

Bol	Bollard	MP	Mile post
Bin	Litter bin	Pt	Post
BL	Bad level	PM	Parking meter
BS	Bus stop	PP	Power point
BT	British Telecom	RE	Rodding eye
Cam	Security Camera	Ridge	Roof/ridge level
CATV	Cable television cover	RS	Road sign
CL	Cover level	Rwp	Rain water pipe
DR	Drain	SL	Soffit level
Elec	Electrical ic	Slab	Slab level
EC	Electric Cable	Stay	Cable stay
EL	Eaves level	Step	Step level
EP	Elec. pole	SV	Stop valve
ER	Earth rod	Svp	Soil pipe
FP	Flagpole	TL	Traffic light
FT	Floodlight	ToB	Top of Building
GY	Gully	ToW	Top of wall level
GP	Gate post	TP	Telegraph pole
GV	Gas valve	TS	Traffic Signal
FH	Hydrant	TT	Tac Tile
FL	Floor level	VP	Vent pipe
IC	Inspection cover	WL	Water level
IL	Invert level	WM	Water meter
LP	Lamp post	UTL	Unable to lift
MH	Manhole	ZCB	Zebra Crossing Beacon
Mkr	Utility marker		

CTES URVEYING
110 SOUTH ROAD, BRETHERTON
Nr PRESTON LANCS PR26 9AH
TEL No 01772 683683
FAX No 01772 683683
MOBILE No 07973 672057
E MAIL ctesurveys @ yahoo.co.uk

CLIENT

BARACK HOLDINGS

JOB TITLE

K F C
CAMDEN TOWN LONDON
BASEMENT

SCALE	DATE	JOB REF
1:100	APRIL 2015	KFC(CAMDEN TOWN)A

REVISIONS

REV A: LEVELS ADJUSTED TO O.S DATUM
ADDITIONAL BASEMENTS ADDED

Statement of experience on basements

Soiltechnics have carried out a large number of investigations for basement constructions throughout the UK and in more recent years outside the UK

The following table provides a limited number examples (for illustration purposes) of investigations carried out for basements which include interpretative reports providing parameters for detailed design such as settlement / heave, ground movements around basements, hydrological effects and in some cases preliminary design of piles.

Location	ground conditions	Basement	Approx size (m)	Date
Northamptonshire	Glacial Till	Single storey archive store for Rolls Royce. Part open excavation for construction of reinforced concrete box subsequently backfilled	10 x 8	Circa 1992
Central London (Kings Road)	Terrace sands and gravels over London Clays	Two storey deep car park with gardens at ground level. Contiguous pile wall with subsequent insitu concrete box	40 x 20	Circa 2000
Central London (Finsbury square)	Terrace sands and gravels over London Clays	Two storey deep basement below multi storey building with adjacent buildings. Contiguous pile wall with subsequent insitu concrete box	30 x 20	Circa 2002
Central London (Union Street)	Terrace sands and gravels over London Clays	Two storey deep basement below multi storey building with adjacent buildings including tube tunnels. Contiguous pile wall with subsequent insitu concrete box	40 x 30	2009
Central London (Blackfriars)	Terrace sands and gravels over London Clays	Two storey deep basement below multi storey building with adjacent buildings including railway viaduct . Contiguous pile wall with subsequent insitu concrete box	40 x 20	2005
Central London (Imperial College)	Terrace sands and gravels over London Clays	Single storey deep basement below multi storey residential block. Sheet pile walls with subsequent insitu concrete box	60 x15	2005
Coventry University	Mercia Mudstones	Single storey deep basement with three storey building over. Part cut and part sheet piled with subsequent insitu concrete box	50 x50	2010
Rabat Grand theatre Bouregrerg Morrocco	Alluvial gravels over sandstone	Single storey deep basement. Open excavations and sheet piles walls with subsequent insitu concrete box. Piled foundation for super structure. Area subject to earthquakes and liquefaction. Outline design of piles, specification for piling and testing.	50 x50	2012
Central London (various locations)	London Clays occasionally overlain with terrace sands and gravels	Various existing terraced semi and detached domestic properties. New single and two storey deep basements under building foot prints and extending into gardens. Construction using traditional underpinning techniques and contiguous / secant piled walls	Various	2000 to date
Central London (Holland Park)	London Clays	Two locally three storey deep basement below new four storey block of flats. Secant piled walls and insitu concrete box	70 x 20	2014

Curriculam Vitae
Nigel Thornton
B.Sc, C.Eng, MICE, MCIHT, FGS.

soiltechnics
environmental and geotechnical consultants

Qualifications

- Awarded degree in Civil Engineering., City University, London in 1980
- Elected Member of the Institution of Civil Engineers in 1983 (Chartered Civil Engineer)
- Member of the Chartered Institution of Highways and Transportation since 1984
- Fellow of the Geological Society since 1986

Employment History

• Northampton Borough Council	1975 - 1980
• Northamptonshire County Council	1980 - 1989
• The John Parkhouse Partnership	1989 - 1989
• Associate Partner	1989 - 1993
• Partner	1993 - 2005
• JPP Consulting (Director)	2005 to date
• Soiltechnics (Director)	1993 to date

Note

- In 2005, the John Parkhouse Partnership was incorporated into JPP Consulting Ltd (current complement 28 staff)
- Founding Director of Soiltechnics Ltd, a company specialising in geotechnical and geo-environmental matters. (Current complement 27 staff)

Relevant Experience

Bridgeworks

General design, contract administration and site supervision of various highway bridges and retaining structures.

Geotechnical and Geo-environmental

As Geotechnical Project Manager for Engineering Services Laboratory at NCC (ESL). (1985 - 1989)

Control of ground investigations for major highway schemes for local authority including implementation of fieldwork, direction of laboratory testing and production of factual and interpretative reports, following and satisfying geotechnical certification procedures for Department of Transport (schemes up to £15m)

Generally, at ESL, Soiltechnics and JPP.

Design and specification of earthworks, including determination of slope stability. Investigation and remediation of unstable slopes.

Control, implementation of fieldwork and production of geotechnical reports for industrial and commercial developments, housing schemes and water authority infrastructure (scheme values up to £80m).

Investigations for outline designs of landfill sites. Investigations for redevelopment of chemically contaminated sites, assessment of the same, design and verification of remediation works. Production of tender and contract documents for ground investigations.

	Investigations into mine workings and assessment of their stability. Specifications for ground improvement works (vibrotreatment) and piling. Investigations and reporting on a wide range of basement constructions for commercial and residential buildings 1 to 4 stories deep. Producing basement impact reports. Lecturing to other professionals on the investigation assessment and remediation of contaminated land, and EPA part IIA Lectures to local ICE branch on geotechnical aspects.
Materials Management	Production of construction material specifications, primarily in concrete, aggregates and bituminous mixtures, but including masonry, timer, steel and protective systems. Control and implementation of investigations into failures of construction materials including scheduling and analysing test data, and production of technical reports providing specifications for appropriate remedial measures.
Building Structures	Structural inspections and surveys on a wide range of commercial, domestic, industrial and military buildings including direction of appropriate investigations and production of details repairs/construction specifications. Design and checking of building structures in timber, steel, concrete and masonry including supervision of works on site. Design works carried out both manually and using computerised systems following current British Standards and other recognised design standards.
Road Pavement Structures	Direction and implementation of condition surveys and investigations of road pavement using falling weight deflectometer, deflectograph bump integrator and coring. Direction of testing regimes for bituminous and cement bound and unbound pavement materials. Production of reports on condition and assessment of load carrying capacity of existing roadways and specification and structural design for new roadways for both highway and industrial use. Design of various road pavement structures (flexible and rigid) using Highways Agency guidelines and British Ports Federation guidelines.
Drainage and Flood Risk Assessments	Design of main (adoptable) and private foul and stormwater infrastructure for housing, commercial and industrial schemes, including detention basins, infiltration systems, pumping stations etc. Production of flood risk assessment reports.
Quality Assurance	Assisting in production of main laboratory procedures to obtain NAMAS accreditation for large spectrum of soils and materials testing. Geotechnical contributions to Quality Assurance Manual for Soiltechnics/JPP and implementation of procedures.
CPD and Health and Safety	Attendance of in house CPD Seminars and production of Health and Safety Plans/files for building works. Author of in house risk assessment and Practice policies.
Litigation	Acting as expert witness on numerous construction related matters.
Publications	Co-author of a book entitles 'Cracking and Building Movement' published by the Royal Institution of Chartered Surveyors, in late 2004.

Chord Environmental Ltd

Nigel Thornton
Soiltechnics Ltd
Cedar Barn
White Lodge
Walgrave
Northampton
NN6 9PY

Your Ref: 239 Camden High Street
Our Ref: 1127/LJE020615

For the attention of: Nigel Thornton

2th June 2015

239 Camden High Street BIA Review

Dear Nigel,

Further to our discussions and the instruction to proceed on behalf your client I have undertaken a review of the Basement Impact Assessment (BIA) prepared by Soiltechnics Ltd for the proposed basement development at 239 Camden High Street.

I have reviewed the design of the proposed basement development, together with the information presented within the above documents, against the requirements of the Camden BIA guidance set out within DP27 and CPG4.

Chord Environmental specialise in the provision of hydrogeological services with extensive experience in the UK supporting both private and public sector clients. I am a geologist and hydrogeologist and have a BSc. in geology from the University of Bristol, a MSc. in hydrogeology from the University of East Anglia and am also a Chartered Geologist and fellow of the Geological Society. I am Managing Director at Chord Environmental and was previously a Technical Director with Paulex Environmental Consulting and managed Hyder Consulting (UK) Ltd's groundwater team.

I have been a hydrogeologist for 17 years. During that time I have advised on over 80 basement developments. Much of my career has been spent assessing the impact of development on the quality and quantity of groundwater resources. I have worked for both promoters and regulators of schemes and have acted as an expert witness for the Highways Agency and on BIA schemes.

Development proposal

The site is occupied by a three storey terraced building which within a commercial part of Camden High Street. There is an existing, single storey deep, basement covering the existing building footprint where headroom is restricted to varying degrees.

I understand the proposal is to deepen the existing basement floor level to make better use of the existing basement. The basement floor levels will be reduced by about 0.46m in the front (north eastern part of the building) and about 1.78m in the rear south western half of the building. This will produce a uniform basement floor level of 24.84m AOD, marginally below adjacent (neighbouring) basement floor levels.

Environmental Site Setting

The BIA screening assessment has identified 239 Camden High Street to be underlain by the Eocene London Clay as shown on the British Geological Survey 1:50,000 scale map (Sheet 256 – North London) to a depth of c.40m. The London Clay is classified as Unproductive Strata by the Environment Agency, strata with low permeability that have negligible significance for water supply or river base flow. The very low permeability of the London Clay results in very low rates of rainfall infiltration and correspondingly, very high rates of rainfall runoff.

The London Clay, together with the clays of the Lambeth Group, acts as an effectively impermeable confining layer over the Chalk which lies at a depth of over 60m beneath the site.

There are no surface water features within 100m of the site. Figure 11 of the "Camden Geological, Hydrogeological and Hydrological Study", shows a headwater tributary of the former river Fleet to have run just over 400m to the northeast of the proposal. The Fleet is now culverted beneath Camden Town and discharges to the Thames. 239 Camden High Street does not lie within an area of flood risk as designated by the Environment Agency nor was it affected by the surface water flooding of the area which occurred during 1975 and 2003.

A London Underground station box construction is understood to lie beneath a majority of 239 Camden High Street site at a depth of approximately 5m.

Surface Flow and Flooding Assessment

The BIA screening, scoping and risk assessments have followed the CPG4 guidance criteria and screening questions. The potential surface flow and flooding issue raised by the screening and scoping exercises have been appropriately addressed by Soiltechnics within the report and no areas of concern relating to the proposed development were identified.

Subterranean (Groundwater) Flow Screening Assessment

The BIA screening, scoping and risk assessments have followed the CPG4 guidance screening questions. I have commented on the answer to each question below.

- **Question 1a: Is the site located directly above an aquifer?**

  As the Site is mapped as being underlain by a significant thickness of London Clay, designated as Unproductive Strata by the Environment Agency, I agree it is not

located above an aquifer. The geology of the areas is well understood and the published geological map is based on extensive borehole data.

- **Question 1b: Will the proposed basement extend beneath the water table surface?**

  No. I agree the London Clay is not capable of transmitting groundwater and therefore cannot support a water table.

- **Question 2: Is the site within 100m of a watercourse, well (used/disused) or potential spring line?**

  No surface water features are present within 100m of the site. The London Clay is not capable of providing groundwater baseflow to watercourses and is classified Unproductive Strata. The proposed basement would therefore not act to prevent groundwater flow to any watercourses, wells or spring lines.

- **Question 3: Is the site within the catchment of the pond chains on Hampstead Heath?**

  No. The Site is located more than 2 km south and is down topographic gradient of the Hampstead Heath ponds. Therefore I agree that the Site lies outside the pond's hydrological catchment area.

- **Question 4: Will the proposed development result in a change in the proportion of hard surfaced / paved area?**

  No. The proposed basement development is entirely within the existing basement footprint.

- **Question 5: As part of the site drainage, will more surface water (e.g. rainfall and run-off) than at present be discharged to ground (e.g. via soakaways and/or SUDS)?**

  No. The proposed basement development is entirely within the footprint of the existing building and the existing drainage will not be affected.

- **Question 6: Is the lowest point of the proposed excavation (allowing for any drainage and foundation space under the basement floor) close to, or lower than, the mean water level in any local pond (not just the pond chains on Hampstead Heath) or spring line?**

  I agree there are no mapped local groundwater dependent ponds or spring lines present within 100m of the Site. This is consistent with the geology and hydrogeology of the area.

Slope Stability Assessment

The BIA screening, scoping and risk assessments have followed the CPG4 guidance criteria and screening questions. The potential slope stability issues raised by the screening and scoping exercises have been appropriately addressed by Nigel Thornton (C.Eng) of Soiltechnics Ltd within the BIA report and no areas of concern relating to the proposed development were identified.

Conclusions

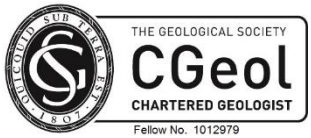
The BIA report has appropriately characterised 239 Camden High Street with respect to its geological and groundwater site setting. As the site is underlain by low permeability London Clay and is sited over a London Underground box station, the geological and hydrogeological setting of 239 Camden High Street is not sensitive with respect to groundwater resources or flow.

The purpose of the Basement Impact subterranean or groundwater flow assessment is to identify the potential for the proposed basement development to cause groundwater impacts and subsequently identify areas which require further investigation. The proposed development is relatively shallow, would be sited within a significant thickness of London Clay and no potential adverse impacts have been established by these assessments.

Yours sincerely,

John Evans BSc MSc CGeol.

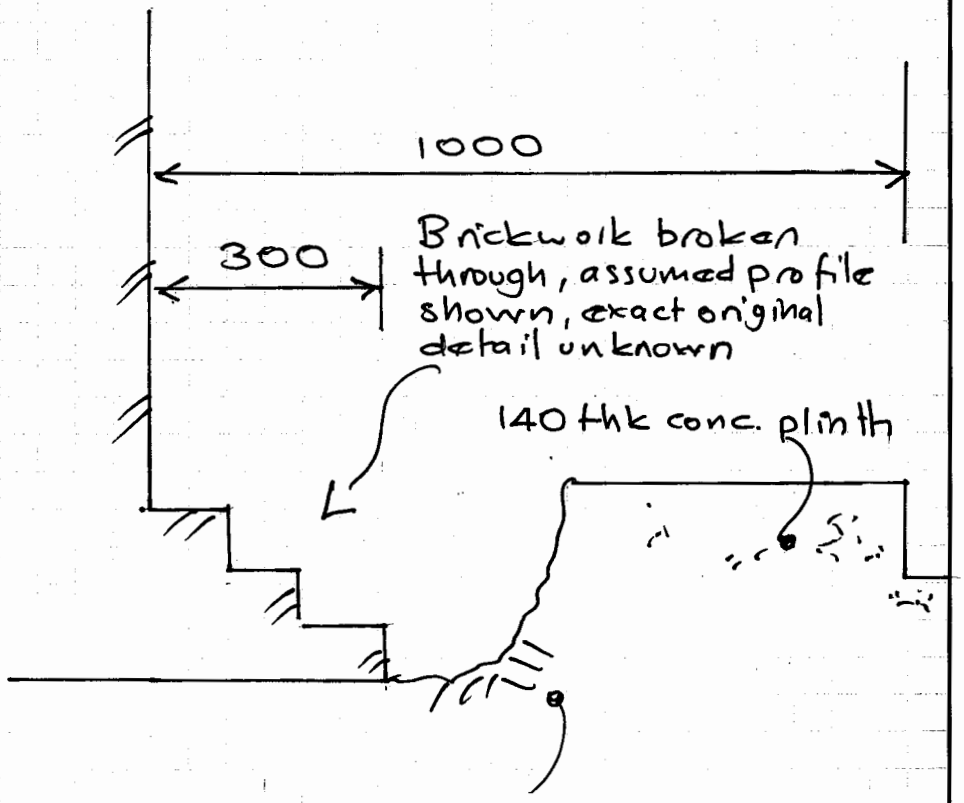
Director



Keith C Thomas Associates
Consulting Structural Engineers
Tel: 01689 875980 Fax: 01689 835220
Email: KTA@structeng.co.uk

Project KFC Camden Project No. 14152

Made by KCT Date April '15 Sheet No. TP1 A



TRIAL PIT DETAIL

(Excavated to forward section of party wall 239/241)

From:	Holland, Stephen
To:	Nigel Thornton
Subject:	RE: Proposed structural alterations at 239 Camden High Street NW1 7BU
Date:	01 June 2015 10:22:12
Attachments:	image001.jpg image002.jpg image003.jpg image004.jpg

---

Nigel based on the review and your proposal I do not object to you moving forward to planning any further information you have please submit based on your email correspondence with Peter Brierley.
Kind regards
Steve

Stephen Holland
Infrastructure Protection Manager
Tube Lines

Tel 0207088 4188
Mobile 07899060254
Email: Stephen.Holland@tubelines.com

From: Nigel Thornton [mailto:nigel.thornton@soiltechnics.net]
Sent: 26 May 2015 5:24 PM
To: Holland, Stephen
Cc: 'kta (kta@structeng.co.uk)'; 'John Edwards (John.Edwards@honeedwards.co.uk)'; 'Hussain (hussain183@aol.com)'; Seb Crolla
Subject: RE: Proposed structural alterations at 239 Camden High Street NW1 7BU

Stephen

Attached e-mail correspondence with Peter which includes our clients approval of fees.

Will this progress matters?

Regards, Nigel

From: Holland, Stephen [mailto:Stephen.Holland@tubelines.com]
Sent: 26 May 2015 17:12
To: Nigel Thornton
Cc: 'kta (kta@structeng.co.uk)'; 'John Edwards (John.Edwards@honeedwards.co.uk)'; 'Hussain (hussain183@aol.com)'; Seb Crolla
Subject: RE: Proposed structural alterations at 239 Camden High Street NW1 7BU

Nigel did Peter Brierley IP engineer come back to you …my understanding was that he responded a few weeks ago??

Stephen Holland
Infrastructure Protection Manager
Tube Lines

Tel 0207088 4188
Mobile 07899060254
Email: Stephen.Holland@tubelines.com

From: Nigel Thornton [mailto:nigel.thornton@soiltechnics.net]
Sent: 26 May 2015 5:09 PM

To: Holland, Stephen
Cc: 'kta (kta@structeng.co.uk)'; 'John Edwards (John.Edwards@honeedwards.co.uk)'; 'Hussain (hussain183@aol.com)'; Seb Crolla
Subject: RE: Proposed structural alterations at 239 Camden High Street NW1 7BU

Stephen

Just wondering if have looked at our clients proposals? (see e-mail of 11th May below)

Our client is anxious to progress matters.

Thank you in anticipation.

Regards, Nigel

From: Nigel Thornton
Sent: 19 May 2015 13:40
To: 'Holland, Stephen'
Cc: 'kta (kta@structeng.co.uk)'; 'John Edwards (John.Edwards@honeedwards.co.uk)'; 'Hussain (hussain183@aol.com)'; Seb Crolla
Subject: RE: Proposed structural alterations at 239 Camden High Street NW1 7BU

Stephen

Just wondering if have looked at our clients proposals?

Our client is anxious to progress matters.

Thank you in anticipation.

Regards, Nigel

From: Nigel Thornton
Sent: 11 May 2015 12:47
To: 'Holland, Stephen'
Cc: 'kta (kta@structeng.co.uk)'; 'John Edwards (John.Edwards@honeedwards.co.uk)'; 'Hussain (hussain183@aol.com)'; Seb Crolla
Subject: Proposed structural alterations at 239 Camden High Street NW1 7BU

Stephen

Attached is our client's Structural Engineer's drawings detailing proposals for the basement extension at the above property.

There are basements in the neighbouring properties, with floor levels shown on the Engineer's drawings and indeed on a topographical survey plan which is also attached.

Could you please review these proposals with a view to gaining your consent?

A planning application will be made to Camden Council shortly.

We look forward to your early advices.

Regards, Nigel

From: Holland, Stephen [mailto:Stephen.Holland@tubelines.com]
Sent: 16 March 2015 10:15
To: Nigel Thornton
Subject: RE: FOR REVIEW - proposed structural alterations at 239 Camden High Street NW1 7BU

Sorry Nigel have you received a letter and a commercial form on this one from Me ??

The property would not be supported off the station box at that depth albeit we are about 5m directly underneath in the ground so any basement activity we need to be involved.

Stephen Holland
Infrastructure Protection Manager
Tube Lines

Tel 0207088 4188
Mobile 07899060254
Email: Stephen.Holland@tubelines.com

From: Nigel Thornton [mailto:nigel.thornton@soiltechnics.net]
Sent: 27 February 2015 10:48 AM
To: Holland, Stephen
Cc: Seb Crolla
Subject: FW: FOR REVIEW - Attn Nicole Gaskin - 20878-NG-N048 - proposed structural alterations at 239 Camden High Street NW1 7BU
Importance: High

Stephen

Thank you for your e-mail.

At this stage we need to know how 239 Camden High Street is supported off the station box and if there is an opportunity to lower existing basement floors (as described in the attached letter) in the building to make these spaces more useable.

We are advised that basement floors have been lowered in adjacent properties.

If there is an opportunity to lower basement floor levels, then we will put together some proposals (method of working etc) and submit them to your good self for comment and hopefully approval.

Could you advise how the property is supported off the box and relative levels from the box to the basement floor level?

Thank you in anticipation.

Any questions please call.

Regards, Nigel

Nigel Thornton BSc (Hons) CEng, MICE, MICHT, FGS
Director for Soiltechnics Limited

-
cid:image001.jpg@01D08435.B6B85050

-

Cedar Barn White Lodge Walgrave Northamptonshire NN6 9PY	t: 01604 781877 f: 01604 781007 e: nigel.thornton@soiltechnics.net w:www.soiltechnics.net	cid:image002.jpg@01D08435.B6B85050

Soiltechnics fully accredited 'integrated management system', covering the requirements of ISO9001:2008 (Quality Management Systems) and ISO 14001:2004 (Environmental Management Systems) has been complemented by the registration to OHSAS 18001:2007 (Occupational Health and Safety Management Systems) standards.

From: Holland, Stephen [mailto:Stephen.Holland@tubelines.com]
Sent: 25 February 2015 17:14
To: Seb Crolla
Subject: FW: FOR REVIEW - Attn Nicole Gaskin - 20878-NG-N048 - proposed structural alterations at 239 Camden High Street NW1 7BU
Importance: High

Seb this has been passed on to be for review so we need to clarify a few things about any vibration etc. and the extent of your basement works as you are over the station box in this location.
Kind regards

Stephen Holland
Infrastructure Protection

Tel 0207088 4188
Mobile 07899060254
Email: Stephen.Holland@tubelines.com

From: Gaskin, Nicole (OneLondon) **On Behalf Of** Location Enquiries
Sent: 20 February 2015 8:03 AM
To: Holland, Stephen
Cc: Lugg, Steven (OneLondon)
Subject: FOR REVIEW - Attn Nicole Gaskin - 20878-NG-N048 - proposed structural alterations at 239

Camden High Street NW1 7BU
Importance: High

Good morning Stephen,

Please find attached, for your review, the above work location with a structural alterations proposal which could become potentially a job.

Kind regards

Nicole Gaskin
Assistant Information Manager
locationenquiries@tube.tfl.gov.uk
Tel: 0207 027 8535

From: Seb Crolla [mailto:Seb.Crolla@soiltechnics.net]
Sent: 18 February 2015 14:37
To: Location Enquiries
Cc: Nigel Thornton
Subject: Attn Nicole Gaskin - 20878-NG-N048 - proposed structural alterations at 239 Camden High Street NW1 7BU

Nicole,

Further to our initial enquiry, please find attached a letter detailing the proposed scheme at 239 Camden High Street. Should you require any further information from us, please do not hesitate to contact the undersigned.

Kind regards,

Seb Crolla B.Sc. (Hons), MIEnvSc., F.G.S.
Senior Geo-environmental Engineer

-
cid:image003.jpg@01D08435.B6B85050

-

Cedar Barn White Lodge Walgrave Northamptonshire NN6 9PY	t: 01604 781877 f: 01604 781007 m: 07795 650987 e: seb.crolla@soiltechnics.net w:www.soiltechnics.net	cid:image004.jpg@01D08435.B6B85050

Soiltechnics fully accredited 'integrated management system', covering the requirements of ISO9001:2008 (Quality Management Systems) and ISO 14001:2004 (Environmental Management Systems) has been complemented by the registration to OHSAS 18001:2007 (Occupational Health and Safety Management Systems) standards.

Click here to report this email as SPAM.

The contents of the e-mail and any transmitted files are confidential and intended solely for the use of the individual or entity to whom they are addressed. Transport for London hereby exclude any warranty and any liability as to the quality or accuracy of the contents of this email and any attached transmitted files. If you are not the intended recipient be advised that you have received this email in error and that any use, dissemination, forwarding, printing or copying of this email is strictly prohibited., If you have received this email in error please notify postmaster@tfl.gov.uk., This email has been sent from Transport for London, or from one of the companies within its control within the meaning of Part V of the Local Government and Housing Act 1989. Further details about TfL and its subsidiary companies can be found at http://www.tfl.gov.uk/ourcompany, This footnote also confirms that this email message has been swept for the presence of computer viruses.

The contents of the e-mail and any transmitted files are confidential and intended solely for the use of the individual or entity to whom they are addressed. Transport for London hereby exclude any warranty and any liability as to the quality or accuracy of the contents of this email and any attached transmitted files. If you are not the intended recipient be advised that you have received this email in error and that any use, dissemination, forwarding, printing or copying of this email is strictly prohibited., If you have received this email in error please notify postmaster@tfl.gov.uk., This email has been sent from Transport for London, or from one of the companies within its control within the meaning of Part V of the Local Government and Housing Act 1989. Further details about TfL and its subsidiary companies can be found at http://www.tfl.gov.uk/ourcompany, This footnote also confirms that this email message has been swept for the presence of computer viruses.

The contents of the e-mail and any transmitted files are confidential and intended solely for the use of the individual or entity to whom they are addressed. Transport for London hereby exclude any warranty and any liability as to the quality or accuracy of the contents of this email and any attached transmitted files. If you are not the intended recipient be advised that you have received this email in error and that any use, dissemination, forwarding, printing or copying of this email is strictly prohibited., If you have received this email in error please notify postmaster@tfl.gov.uk., This email has been sent from Transport for London, or from one of the companies within its control within the meaning of Part V of the Local Government and Housing Act 1989. Further details about TfL and its subsidiary companies can be found at http://www.tfl.gov.uk/ourcompany, This footnote also confirms that this email message has been swept for the presence of computer viruses.