

Flat 1, 15 Lindfield Gardens, NW3
Basement Impact Assessment – Scoping Report

Project No.: 22-1046 | Doc. No.: RP-001
Issue 2: Friday May 19th 2023

Document Revision History:

Issue No.:	Date:	Description:	BY	CHK	APP
1	19/05/2023	First Issue	FWM	COS	FWM
2	19/05/2023	Updated section of proposed foundations	FWM	COS	FWM

Authors:

Author:	Fred Miles MEng (Hons) CEng MIStructE
Checked:	Conor O'Sullivan BEng (Hons) CEng MIEI

Contents:

Section No.:	Title:	Page No.:
1.0	Non-technical Summary	1
2.0	Introduction	2
3.0	Description of Proposals	3
4.0	Desk Study	5
5.0	Screening	7
6.0	Scoping	9
7.0	Scoping Stage Conclusions & Recommendations	10
Appendix A	Trial Pit Investigation Record	

1.0 Non-Technical Summary

This document has been prepared by Float Structures to support the planning application for the development at Flat 1, 15 Lindfield Gardens, London, NW3 6PX, which occupies the lower-ground floor of the building. The report has been prepared with respect to the refurbishment and reconfiguration of the existing property, including the construction of an enlarged single-storey rear extension and lowering of the existing floor slab. The report includes a desk study and assessment in relation to the impact of the development on the surrounding environment to comply with the relevant parts of London Borough of Camden (LBC) Planning Guidance relating to subterranean development, as appropriate for the scale of the development proposals.

The existing site contains a detached late-Victorian or Edwardian four-storey home, of which the lower-ground floor is partially subterranean, with the site sloping downwards from the front to the rear. The front of the site contains a driveway accessed directly from Lindfield Gardens and is bounded by a low-level brickwork garden wall. The existing building is set back approximately 9m from the front of the site boundary.

The building is traditionally built with loadbearing masonry external walls, timber suspended floors and roof, and internal walls in timber and masonry. The foundations are stepped brick footings over crushed brick and clinker, with the masonry front wall of the lower-ground level acting as a retaining wall for the higher external levels to the front of the building. The property was sub-divided into flats in the late twentieth century, a rear extension added to the lower-ground floor flat in 2011 and refurbishment of several upper floor flats carried out over the last year.

The structural interventions within the current development proposals include general reconfiguration of the internal layout to Flat 1, lowering of the existing floor levels generally to create additional headroom and to include new damp-proofing, and demolition of the existing rear extension to be replaced with a new larger rear extension to create a split-level living space.

The existing foundations have been exposed in a trial pit investigation and have been proven to be sufficiently deep such that they will not be undermined by the general lowering of the existing internal floor level by approximately 150mm. The proposed finished floor level of the new extension will partly be 800mm below the existing lower-ground finished floor level. The majority of this level difference will be created by removing the ground-bearing concrete slab and mass concrete strip foundations of the existing extension, and constructing new foundations approximately 1m lower.

This scoping report includes the following:

- Desk Study
- Screening
- Scoping
- Conclusions & Recommendations

Float Structures have been appointed by Liran Talit & Maya Starr to provide structural engineering consultancy services for the design stages pre- and post-planning, with the intention that Float Structures would also be retained to undertake site inspections at regular intervals on behalf of the client during construction of the structural works.

A review of the British Geological Survey maps indicate the majority of the site is underlain directly by the London Clay Formation, with a small area of the Claygate Member towards the front of the site. Both of these formations comprise clay, silt and sand. Nearby record borehole logs have been reviewed and support the map information, as do the findings of the trial pit investigation.

No significant risks have been identified in relation to land or slope stability, nor are there any significant hydrological or hydrogeological impacts. The site has a very low risk of flooding from surface water or reservoirs and a very low

risk of flooding from rivers and sea. Flooding from groundwater is unlikely. The proposed development does not change the flooding characteristics of the site, and therefore these risks remain unchanged.

This report has considered the stability of both this building and the neighbouring structures. Due to the scale of the proposed works, distance from nearby buildings and through the adoption of good construction practice and a suitable temporary works sequence, the impact on neighbouring structures is expected to be 'Negligible' to 'Very slight' in accordance with the Burland Scale.



Rear elevation of 15 Lindfield Gardens, NW3

2.0 Introduction

This document has been prepared by Float Structures to support the planning application for the development at Flat 1, 15 Lindfield Gardens, London, NW3 6PX.

The purpose of this scoping report is to consider the effects of the proposed works on the local hydrology, geology and hydrogeology, as well as the potential impacts to neighbours and the wider environment, and to determine if further investigation or assessment is required in order to safely and responsibly undertake the proposed development.

The site is located at National Grid Reference TQ 26030 85277 and indicated in the following figure.

The approach for this scoping report follows current planning guidance for basements and lightwells adopted by LBC, including:

- Guidance for Subterranean Development (November 2010) – Ove Arup & Partners
- Camden Planning Guidance (CPG): Basements (January 2021)
- Camden Local Plan 2017: Policy A5 Basements and Policy CC3 Water and flooding.

In accordance with the scale and nature of the proposals, and in accordance with advice received from LBC on similar nearby projects, this assessment comprises the following elements:

- Desk Study
- Screening
- Scoping
- Conclusions & Recommendations

The report is not intended for, and should not be relied upon by, any third party, and no responsibility is undertaken to any third party.

2.1 Authors

The directors at Float Structures are experienced chartered structural engineers who have worked on basement projects in the London area for over ten years at several award-winning engineering firms. Past-projects range from multi-storey hotel mega-basements in central London to single-storey residential basements. The firm's structural design ethos is to use creative and considered engineering and analysis alongside rigorous checking and quality assurance to address the challenges of basement construction.

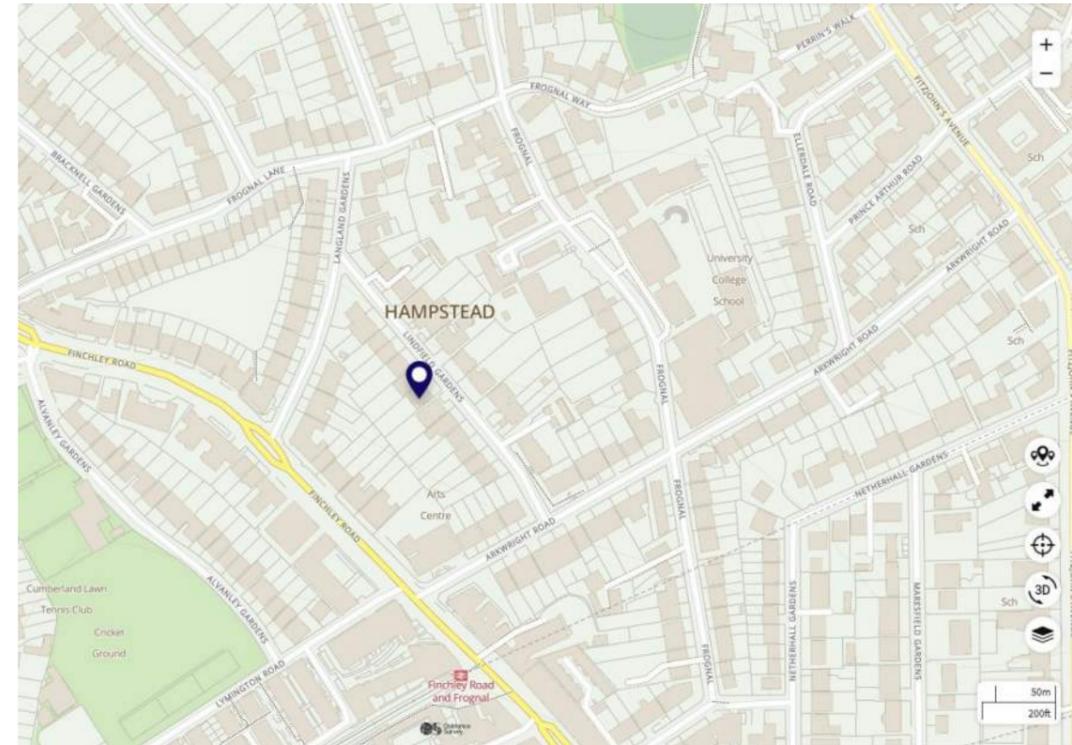
The author of this report is Fred Miles MEng (Hons) CEng MStructE. It has been further reviewed by Conor O'Sullivan BEng (Hons) CEng MIEI. Both are directors of Float Structures Ltd. and are chartered engineers with appropriate experience in the design of basements.

2.2 Sources of Information

The following baseline data has been referenced to complete this assessment in relation to the proposed development:

- Visual site inspection on 19/01/2023 and 11/04/2023, including inspection of trial pits at ground and lower-ground floor. Refer to Section 3.1 and Appendix A.
- Existing and proposed drawings, produced by MATA Architects.
- Historical mapping information was found from the British History at www.british-history.ac.uk
- Geological mapping information from the British Geological Survey at www.bgs.ac.uk
- Floor risk mapping information from www.gov.uk
- Unexploded Ordnance (UXO) maps are from www.bombsight.org

- TFL Property Asset Register Public Web Map
- Camden Geological, Hydrogeological and Hydrological Study (GHHS)



Site location on OS map

3.0 Description of Proposals



Aerial view looking from west (MATA)



Aerial plan view (MATA)

3.1 Description of Existing Building and Site

The site is within a wider hillside setting and lies approximately 82m above sea level. The overall slope angle of the site is less than 7 degrees, and the areas surrounding the building have been terraced as part of the garden landscaping. In general, the site levels are consistent with the adjacent topography rising northeast towards the street level of Lindfield Gardens.

The existing building is a detached late-Victorian or Edwardian four-storey home, of which the lower-ground floor is partially subterranean, with the site sloping downwards from the front to the rear. The building is traditionally built with loadbearing masonry external walls, timber suspended floors and roof, and internal walls in timber and masonry. The foundations are stepped brick footings over crushed brick and clinker, with the masonry front wall of the lower-ground level acting as a retaining wall for the higher external levels to the front of the building. The property was sub-divided into flats in the late twentieth century, with a rear extension added to the lower-ground floor flat in 2011 and refurbishment of several upper floor flats carried out over the last year.

Structural drawings and calculations for the existing rear extension have been obtained which indicate that the rear wall at ground floor and above has been re-supported on steel framing to allow demolition of the original rear wall at lower-ground level. Underpinning of the original building foundations was carried out as part of these works to a depth of approximately 1.15-1.40mbgl in the vicinity of the rear extension.

A trial pit investigation has been undertaken which has confirmed the original building foundations are constructed using traditional corbelled brickwork and corroborated the foundation depths indicated on the previous structural drawings referred to above. The original brick foundations sit on a shallow trench of compacted crushed brick and clinker, below which is undisturbed firm clay at approximately 1.075m below the existing lower-ground internal finished floor levels, while the more recent concrete strip foundations of the rear extension are approximately 1.5m below the existing lower-ground internal finished floor levels. Refer to Appendix A for the trial pit investigation record.

Full details of the existing internal arrangement are shown in the architectural drawings.

The site is bounded by a low-level brick garden wall at the front of the property which returns along each side of the site for approximately 14m. Beyond this the boundaries to the sides and rear comprise a timber fence. All boundaries were generally noted to be in reasonable condition for their age. The existing building is set back approximately 9m from the footpath on Lindfield Gardens to the front of the site.

As identified in the arboricultural report prepared by Landmark Trees, there is a large ash tree to the front of the site, and to the rear a further ash and a sycamore.

3.2 Proposed Works

The structural interventions within the current development proposals include general reconfiguration of the internal layout to Flat 1, lowering of the existing floor levels generally to create additional headroom and to include new damp-proofing, and demolition of the existing rear extension to be replaced with a new larger rear extension to create a split-level living space.

To achieve the lowered floor level throughout the existing flat it is proposed to remove the existing floor finishes and structure (predominantly a suspended timber floor) and undertake a shallow 150mm strip of the existing sub-base. This will create a zone of 525mm to install a new 375mm deep floor build-up and achieve a finished floor level 150mm below the existing level. This will not undermine the original 575mm deep corbelled brick foundations, as measured from existing internal finished floor level.

As noted in Section 3.1, the original foundations adjacent to the rear extension have already been underpinned, as shown on the following page, and the depth of these will be sufficient for the proposed design.

3.0 Description of Proposals

The new extension will have a split-level floor, with the rear floor level 800mm below the existing lower-ground floor level. The change in levels occurs approximately 2.75m away from the primary loadbearing steel framing that supports the original rear wall of the house at ground floor and above. It is proposed to retain the existing foundations within the higher floor area and demolish and re-build new foundations to suit the lower floor levels to the rear, with the underside of the new foundations approximately 1m lower than the existing.

To lower the floor level, it is proposed to undertake excavation works as a simple open excavation. The need to underpin or specifically sequence works has been reviewed, but due to the underpinning that has been carried out previously, the primary loadbearing foundations will not be undermined. The proposals will, however, include a new concrete retaining wall along the step-line to provide robust retention of the ground beneath the suspended higher floor level in the long-term.

3.3 Impact on Adjacent Structures & Services

The site shares party fence walls and boundary fences with 13 and 17 Lindfield Gardens to the sides, and a boundary fence with 2 and 6 Langland Gardens to the rear.

The new foundations for the extension will be 1.85m deep as measured from the existing ground levels, which will be equivalent to a 500mm deep excavation below the rear lawn level. The excavations will be approximately 10m from 13 Lindfield Gardens and 7m from 17 Lindfield Gardens, and do not alter the overall site slope. Therefore, the impact on neighbouring structures is expected to be 'Negligible' to 'Very slight' in accordance with the Burland Scale.

Lowering of the general floor levels is similarly not considered to have a significant impact on neighbouring structures, and the works are only proposed on the basis that no underpinning is required.

We would not expect the works to trigger the Party Wall etc. Act 1996 (PWA).

The TFL register confirmed that the site is not above any infrastructure, or within the exclusion zone of any such infrastructure.

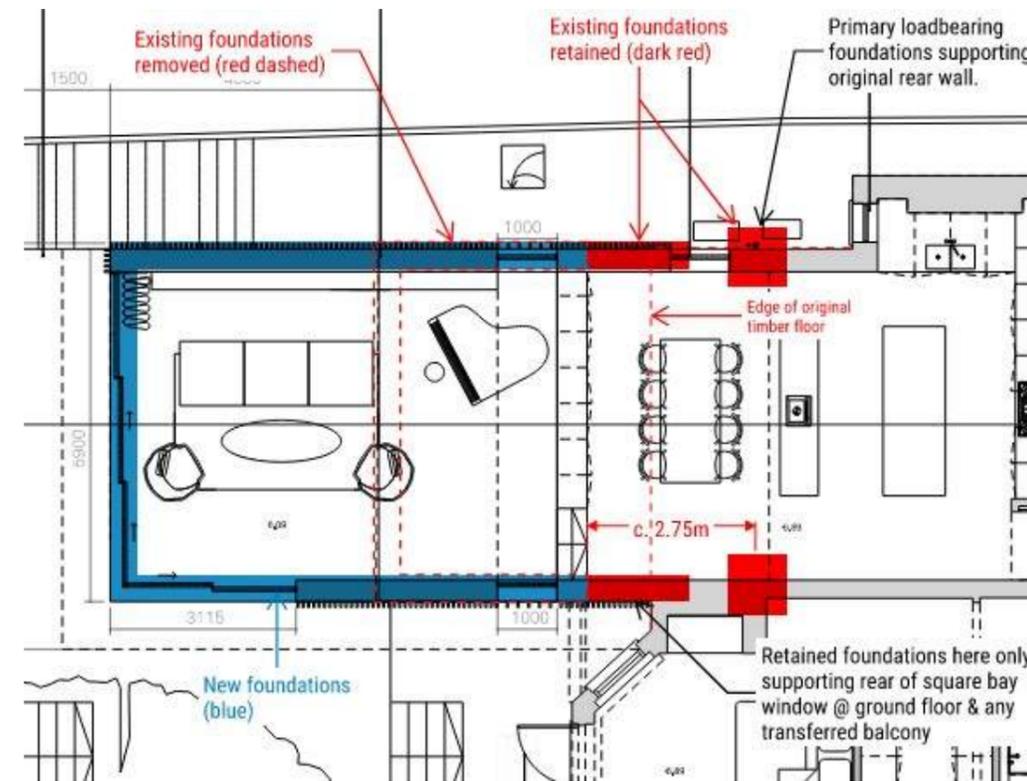
There are no known mains services or utilities within the site boundary. In addition to local asset searches already undertaken, and as per standard good practice for ground works, the contractor will be required to undertake ground penetrating radar scanning prior to commencing any excavations or adopt working methods where excavations can be undertaken carefully and progressively.

3.4 Outline Construction Methods

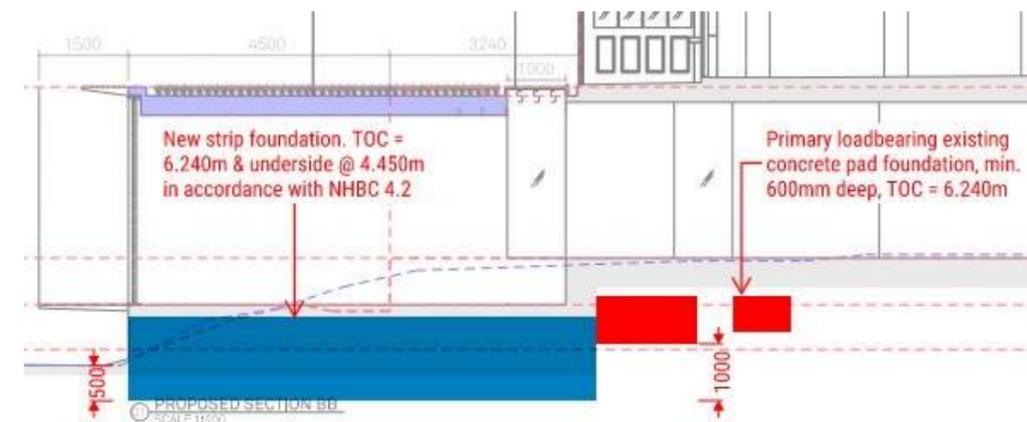
The proposed works will utilise the following construction techniques:

- Demolition of the existing lower-ground floor structure and excavations by hand of sub-base, not to encroach within 50mm of the underside of existing corbelled brick foundations.
- Grubbing out of existing mass concrete foundations for extent indicated on following image. To avoid disturbance to the retained structure, works will be undertaken carefully by hand in area closest to existing building.
- New mass concrete strip foundations to suit enlarged extension at lower floor level. Minimum depth of foundations would be as per existing by inspection within footprint of existing extension, or deeper as required to suit proposed levels and floor build-ups, or as required to suit the nearby trees in accordance with guidance of NHBC Section 4.2.

- The new slab of the lower rear extension will be constructed as a suspended concrete slab, which is dictated by the foundation depths calculated in accordance with guidance of NHBC Section 4.2.
- A new reinforced concrete retaining wall will be constructed to form the change in levels and provide robust support to the ground beneath the upper floor level. Note that this wall will not be required to resist any lateral loads dissipating from the underside of foundations due to a sufficient offset.

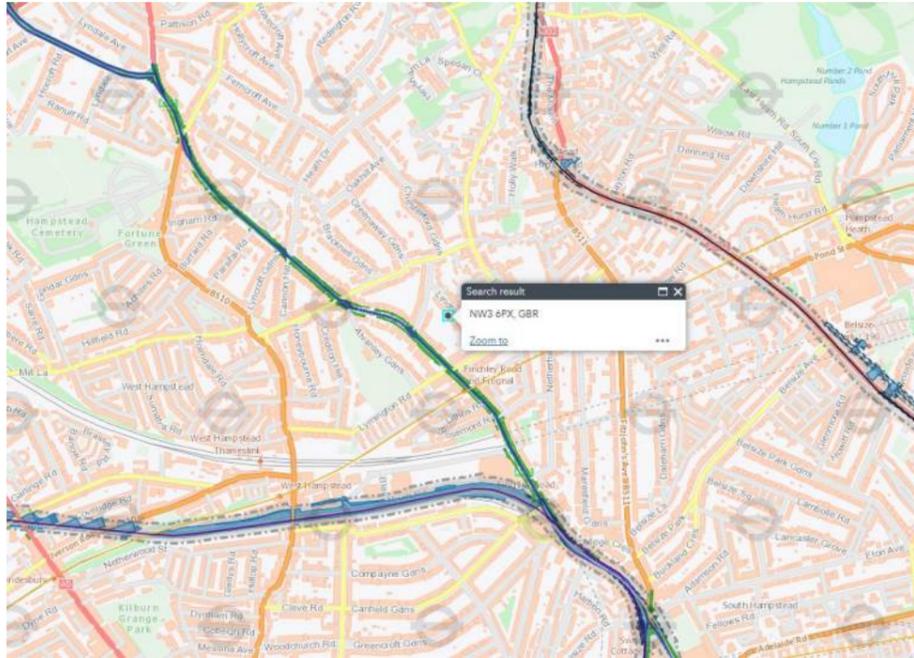


Alterations to foundations of existing extension to suit proposed layout - Plan

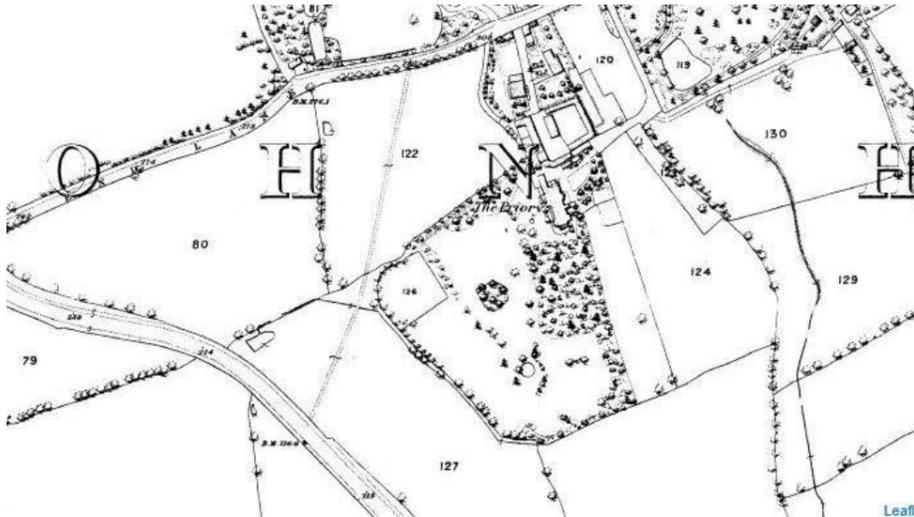


Alterations to foundations of existing extension to suit proposed layout - Section

4.0 Site Desk Study



TFL Asset Map, site approximately 250m from London Overground Line



Ordnance Survey, Southampton, 1869-1880

In preparation for the screening and scoping assessments to be undertaken, a thorough understanding of the existing site and building has been developed to inform development of the design. This section provides a summary of the site information that has been obtained.

4.1 Site Location

The site location is Flat 1, 15 Lindfield Gardens, London, NW3 6PX, within the Frognal Ward of the London Borough of Camden. The site is bounded by Lindfield Gardens to the northeast, from which the site is accessed, and neighbouring properties on Lindfield Gardens to the southeast and northwest, and neighbouring properties on Langland Gardens to the southwest of the site, i.e. the rear of the garden. Although the existing building is not listed, it is within the Redington & Frognal Conservation Area.

According to searches of the TFL Asset Maps, the site is located approximately 250m from the London Overground Line, 550m from the Metropolitan Line and 110m from the A41 Finchley Road.

4.2 Site History

A review of the website www.british-history.ac.uk shows that the location of Lindfield Gardens formed part of the grounds to Frognal Priory from the mid-18th Century until around 1870 when the land to the south of Frognal was developed, with 15 Lindfield Gardens first appearing on historical ordnance survey maps in 1900.

The UXO maps, from www.bombsight.org, indicate that the site is located in a low-moderate UXO risk area and was not impacted by World War II bombing.

4.3 Geology

A review of the British Geological Survey maps indicate the majority of the site is underlain directly by the London Clay Formation, with potential for a small area of the Claygate Member towards the front of the site. Both of these formations comprise clay, silt and sand. Nearby record borehole logs have been reviewed and support the map information, as do the findings of the trial pit investigation.

4.0 Site Desk Study

4.4 Hydrogeology

The site is generally underlain by the London Clay Formation, which is an unproductive strata, so any excavation will have negligible significance for water supply or river base flow. The junction with the Claygate Member is within or adjacent to the front site boundary, and soils of this type are categorised as a Secondary Aquifer A.

The junction of the Claygate Member to the London Clay Formation could result in the presence of spring-lines forming at the ground surface. However, there is no evidence of this occurring on the site.

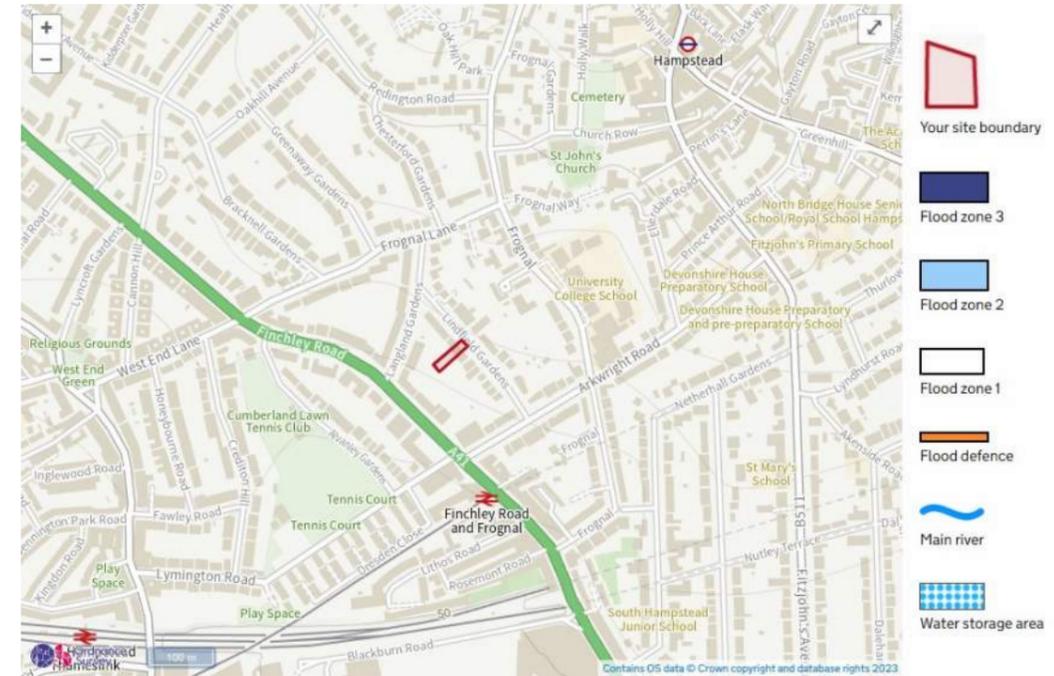
According to maps in the Lost Rivers of London (Barton) the site is approximately 60m from a tributary to the Westbourne underground river.

4.5 Hydrology & Flood Risk

The site location has been checked for risk of flooding using the Environment Agency maps and has been confirmed as an area within Flood Zone 1, which means there is a very low risk of flooding from rivers and the sea.

The site has a very low risk of flooding from surface water, and it outside the catchment of flooding risk from reservoirs. Flooding from groundwater is also unlikely.

The site is located in excess of 1km from the Camden Surface Water Features identified in Figure 12 of the GHHS, and outside the area of Hampstead Heath Surface Water Catchments and Drainage as identified in Figure 14 of the GHHS.



Flood Risk Map – Flood Zoning



Flood Risk Map – Surface Water Flood Risk

5.0 Screening

As per LBC planning guidance, a screening process has been undertaken and the findings are described below.

5.1 Groundwater

Question	Response	Details
1a. Is the site located directly above an aquifer?	No	Although the front of the site is underlain by the Claygate Member, the proposed excavation is located in an area of the London Clay Formation, which as an unproductive strata, and will have negligible significance for water supply or river base flow.
1b. Will the proposed basement extend beneath the water table surface?	No	The proposed excavations (note that no basement is proposed) are not anticipated to extend into the water table based on the findings of the trial pit investigation in conjunction with the site topography.
2. Is the site within 100m of a watercourse, well (used / disused) or potential spring line?	Yes	Approximately 60m to a tributary of Westbourne underground river and potential spring-line to front of site. However, the depth of the proposed excavations is not considered to be significant to site hydrogeology or hydrology.
3. Is the site within the catchment of the pond chains on Hampstead Heath?	No	Site location reviewed on Figures 12-14 of Camden GHHS. Not within catchment area.
4. Will the proposed basement development result in a change in the proportion of hard surfaced / paved areas?	No	New green roof to providing soft landscape & SUDS to offset additional footprint of building. Extent & finishes of external hard landscaping will be replaced similar to existing.
5. As part of site drainage, will more surface water (e.g. rainfall/run-off) than at present be discharged to the ground via soakaways and/or SUDS)?	No	No additional discharge into ground proposed.
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?	Yes	Site location reviewed on Figures 12-14 of Camden GHHS. No local ponds or surface water features in the local area. Potential spring-lines at higher level to front of site boundary, but excavations proposed to rear of building are relatively shallow and will not exceed lower levels of existing rear garden, noting no evidence on site of spring-lines being present.

5.2 Slope Stability

Question	Response	Details
1. Does the existing site include slopes, natural or man-made greater than 7 degrees (approximately 1 in 8)?	No	Global slope angle of the site is less than 7 degrees, with any steeper areas terraced/stepped.
2. Will the proposed re-profiling of landscaping at the site change slopes at the property boundary to more than 7 degrees (approximately 1 in 8)?	No	Refer to architectural proposals.
3. Does the development neighbour land, including railway cuttings and the like, with a slope greater than 7 degrees (approximately 1 in 8)?	No	Adjacent land rises northeast towards the street level of Lindfield Gardens, similar to 15 Lindfield Gardens.
4. Is the site within a wider hillside setting in which the general slope is greater than 7 degrees (approximately 1 in 8)?	No	Site location reviewed on Figure 16 of Camden GHHS.
5. Is the London Clay the shallowest strata at the site?	Yes.	Search undertaken of BGS geological maps indicated London Clay Formation is shallowest in area of proposed development at rear of existing building. This has been corroborated by trial pit investigation.
6. Will any trees be felled as part of the development and/or are any works proposed within any tree protection zones where trees are to be retained?	No.	A small apple tree and some mixed shrubs will be felled as part of the development. All works, including those adjacent to root protection zones have been reviewed by an arboriculturalist. Refer to Arboricultural Report by Landmark Trees.
7. Is there a history of seasonal shrink-swell subsidence in the local area and/or evidence of such effects at the site?	No.	The existing building shows no sign of historic or current defects due to shrinkage effects of the London Clay soils.
8. Is the site within 100m of a watercourse or a potential spring line?	Yes	Approximately 60m to a tributary of Westbourne underground river and potential spring-line to front of site. However, the depth of the proposed excavations is not considered to be significant to site hydrogeology or hydrology.
9. Is the site within an area of previously worked ground?	No	Historical ordnance survey maps suggest that the site was farmland and gardens prior to construction of the existing building.
10. Is the site within an aquifer. If so, will the proposed basement extend beneath the water table	No	Development is proposed in an area of the site underlain by the London Clay Formation,

5.0 Screening

such that dewatering may be required during construction?		which as an unproductive strata, will have negligible significance for water supply or river base flow. Proposed excavations are not expected to be sufficiently deep to encounter groundwater.
11. Is the site within 50m of the Hampstead Heath Ponds?	No	Site location reviewed on Figure 14 of GHHS. Not within 50m.
12. Is the site within 5m of a highway or pedestrian right of way?	No	Proposed works are to the rear of the building, approximately 13.5m from the footpath of Lindfield Gardens.
13. Will the proposed basement significantly increase the differential depth of foundations relative to neighbouring properties?	No	Note there is no basement proposal, but lowering of the existing floor level of the rear extension by approximately 800mm. This is not considered significant relative to the nearest adjoining property approximately 7m away.
14. Is the site over (or within the exclusion zone of) any tunnels, e.g. railway lines?	No	TFL Asset search undertaken. Refer to Section 4.1.

5.3 Surface Water and Flooding

Question	Response	Details
1. Is the site within the catchment of the pond chains on Hampstead Heath?	No	The site is located in excess of 1km from the Camden Surface Water Features identified in Figure 12 of the GHHS, and outside the area of Hampstead Heath Surface Water Catchments and Drainage as identified in Figure 14 of the GHHS.
2. As part of the proposed site drainage, will surface water flows (e.g. volume of rainfall and peak run-off) be materially changed from the existing route?	No	The larger area of the new extension roof will be mitigated by inclusion of a green roof to provide on-site attenuation and reduced discharge rates during rainfall events.
3. Will the proposed basement development result in a change in the proportion of hard surfaced / paved external areas?	No	New green roof to providing soft landscape & SUDS to offset additional footprint of building. Extent & finishes of external hard landscaping will be replaced similar to existing.
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 watercourses?	No	The modest additional foundation excavations will not materially change surface or groundwater flows.

5. Will the proposed basement result in changes to the quality of surface water being received by adjacent properties or downstream watercourses?	No	The modest additional foundation excavations will not materially change surface or groundwater flows.
6. Is the site in an area identified to have surface water flood risk according to either the Local Flood Risk Management Strategy or the Strategic Flood Risk Assessment or is it at risk from flooding, for example because the proposed basement is below the static water level of nearby surface water feature.	No	Refer to Section 4.5.

5.4 Non-Technical Summary of Screening Process

The screening process has confirmed that:

- The site is in the vicinity of a nearby watercourse, potential spring-line or productive aquifers. However, the modest nature of excavation proposed is not considered to pose any risk to them or the general groundwater.
- The proposals will not have a material impact on surface water run-off, nor will it have any material impact on below ground drainage.
- The existing site and neighbouring land slopes downwards from northeast to southwest, and there are no proposed plans to change this. As such, we would not expect any issues with regards slope stability.
- The risk of flooding is very low, or negligible, and the proposals do not materially change the existing site characteristics.
- The proposed works are not likely to affect the neighbouring properties nor any underground services or infrastructure.

All potential concerns considered within the screening process have been demonstrated to be not applicable or not significant when considered in the context of the proposed development.

There are no outstanding risks to be considered in scoping.

6.0 Scoping

The Scoping process addresses any outstanding risks that have been identified as requiring mitigation in the Screening process by developing an assessment methodology for each risk, along with a wider discussion of how any impacts may be mitigated in full or reduced to an acceptable level.

As noted in the preceding section, the screening process has demonstrated that all potential risks due to subterranean development are either not applicable or are not significant for works of the scale and type proposed.

However, as per standard good practice and in acknowledgement that many data sources may not be 100% accurate or representative of site conditions at a micro-scale, there are precautions that can be taken during the works to further minimise any risks to the surrounding environment. These are discussed in the following section.

7.0 Scoping Stage Conclusions & Recommendations

In accordance with London Borough of Camden planning policy, this Basement Impact Assessment – Scoping Report has considered the potential risks to the site and surrounding environment that result from subterranean construction with respect to hydrology, hydrogeology and land stability. The intent of this process is to:

- Maintain the structural stability of the building and neighbouring properties.
- Avoid adversely affecting drainage and run-off or causing other damage to the water environment.
- Avoid cumulative impacts upon structural stability or the water environment in the local area.

Where risks are shown to exist, this scoping report would identify the necessary further assessment or investigation to mitigate the risks to a level appropriate to the scale and context of the project specific proposals.

7.1 Conclusions

The proposed additional excavation for the enlarged rear extension at a lower level represents a relatively modest addition to the existing building foundations, and thus any potential impacts are considered as localised and will not adversely affect the existing building or surrounding environment when constructed in accordance with the principles identified in this report.

Similarly, no significant risk has been identified in relation to lowering of the existing lower-ground floor slab generally, as the existing foundations will not be undermined.

Generally, potential risks identified in the screening process have been discounted or are not considered to be significant. Therefore, no further investigation or assessment is considered necessary prior to construction.

7.2 Recommendations

During construction it is recommended that certain standard precautions are taken to minimise any risks should the site-specific conditions vary from the current understanding, which has been developed through the desk study process and appropriate site investigations.

- Prior to commencing excavations, the contractor should undertake ground penetrating radar scanning to discount the presence of buried services, or alternatively adopt suitable working methods to excavate carefully under a watching brief.
- All excavations should be undertaken progressively with a watching brief to monitor for signs of unexpected ground movement or groundwater strikes.

APPENDIX A

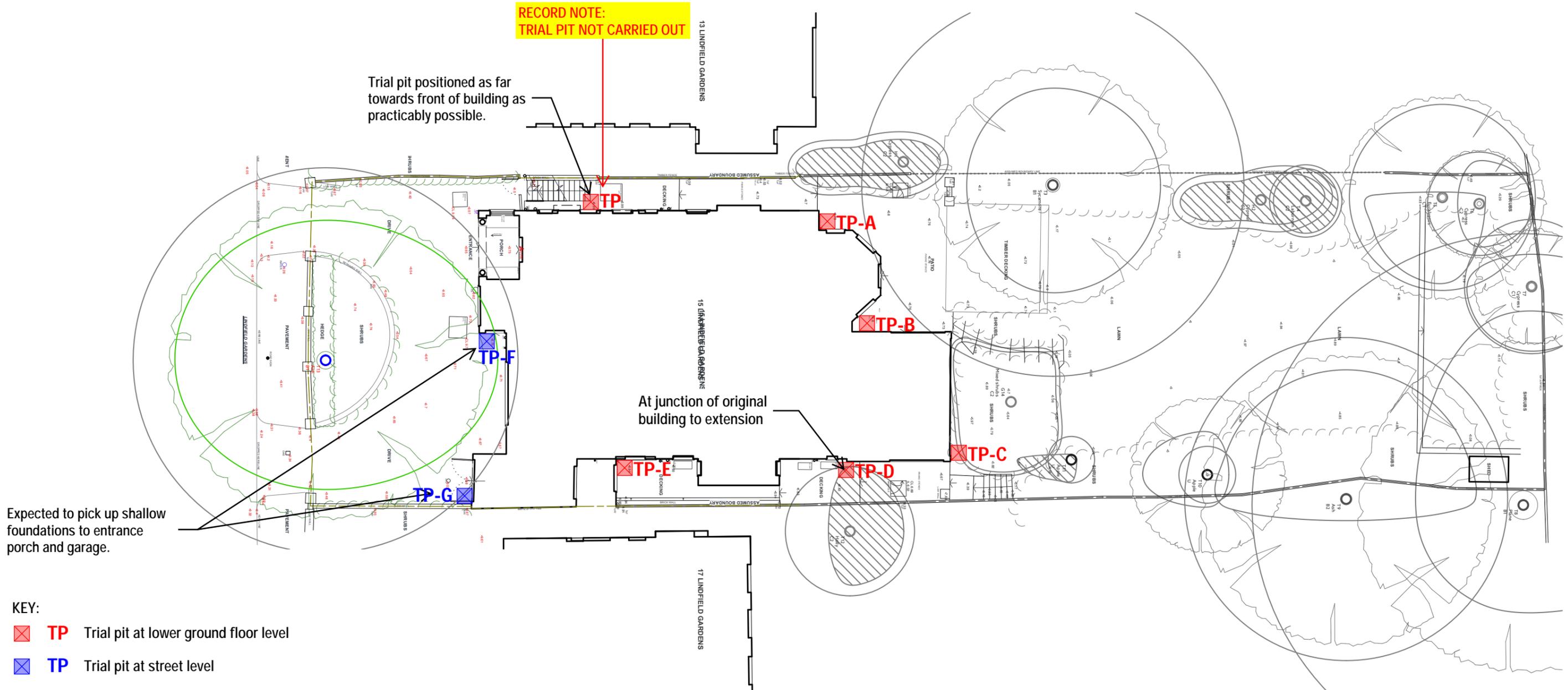
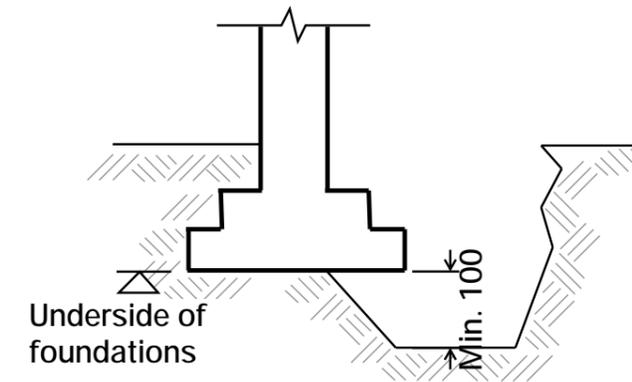
TRIAL PIT NOTES:

1. Trial pits shall be min. 750x750mm on plan. Depth as required to expose existing footings, subject to limits on safe excavations as determined by the contractor.
2. All trial pits are required to investigate existing finish build-ups and to expose foundations of the existing building. Excavations to continue to min. 100mm below underside of existing foundations to prove depth. Exposed faces of existing foundations to be cleaned to assist in determining whether formed or cast against earth. Where digging next to existing structure, care is to be taken to ensure existing structure is not damaged.
3. Contractor is responsible for providing temporary shoring where required to ensure the safety of those working in the trial pits.
4. All pits are to be backfilled with well compacted excavated material and the surface made good, as agreed with the Client.

GENERAL NOTES:

1. Contractor to ensure that existing below ground drainage and utilities are not damaged during the investigations. Contractor to make necessary investigations and take necessary precautions on site. Contractor to use hand-digging as required. If live services prevent any works to be carried out, contact the Engineer to arrange alternative locations
2. Contractor is to ensure that the holes are guarded / covered if left unattended at any point.

TYPICAL TRIAL PIT SECTION:



KEY:

- ☒ TP Trial pit at lower ground floor level
- ☒ TP Trial pit at street level



+44 (0)794 112 4277
 +44 (0)792 666 8311
 hello@floatstructures.com
 www.floatstructures.com

Project Name **15 LINDFIELD GARDENS, NW3**

Project No. **22-1046**

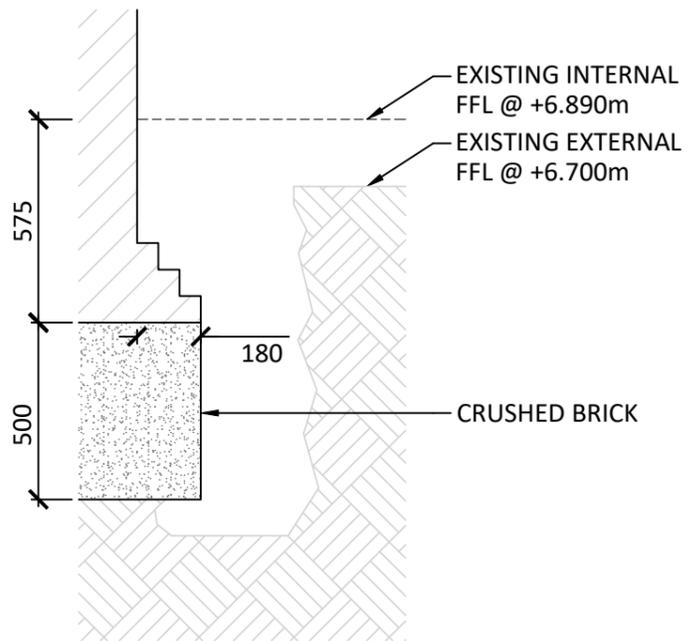
Status **PRELIMINARY**

Sketch Title **SITE INVESTIGATION PLAN**

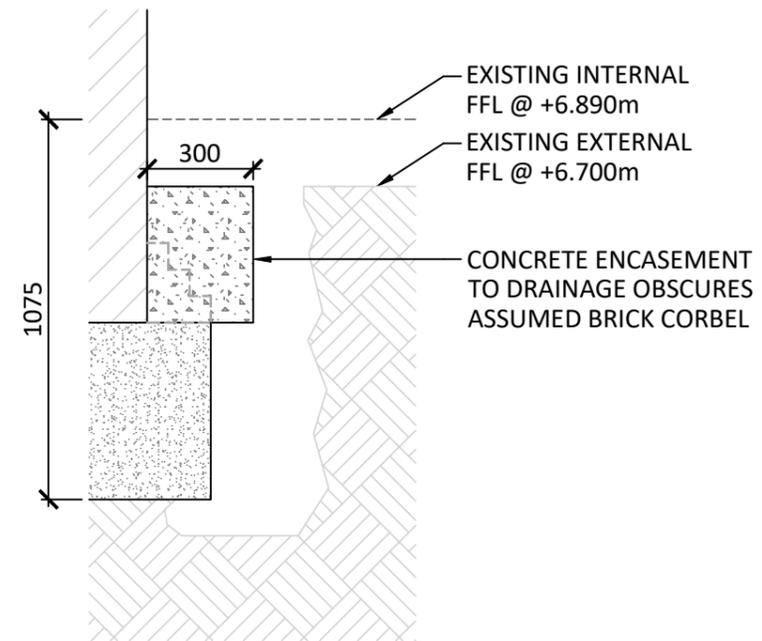
Sketch No. **SK-001 Rev B**

Date **19/05/2023**

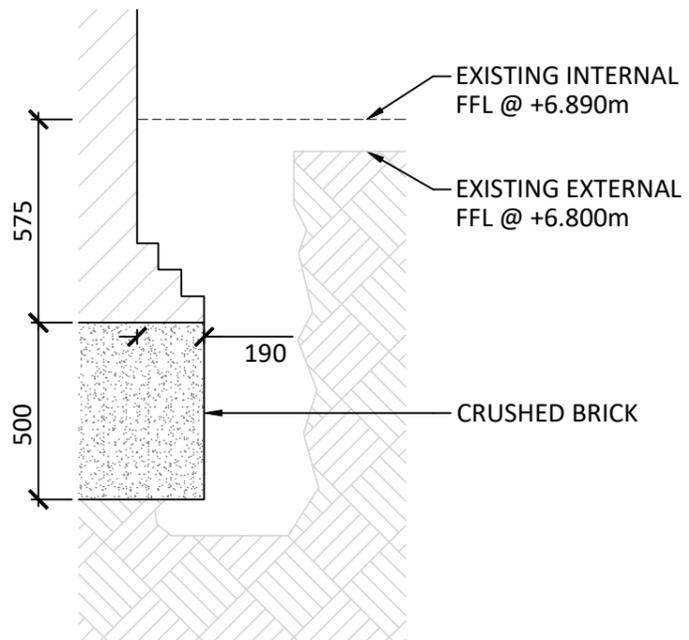
By **FWM**



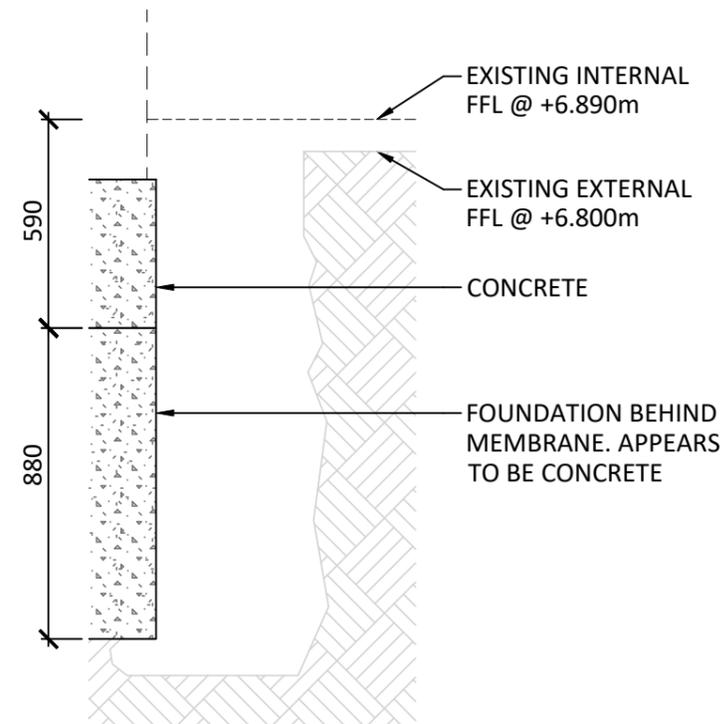
1 TRIAL PIT A - REAR WALL
SK-001 1:20



2 TRIAL PIT A - BAY WINDOW WALL
SK-001 1:20



3 TRIAL PIT B - BAY WINDOW WALL
SK-001 1:20



4 TRIAL PIT B - EXTENSION WALL
SK-001 1:20

NOTES:

1. THIS DRAWING IS COPYRIGHT OF FLOAT STRUCTURES LTD.
2. DO NOT SCALE FROM THIS DRAWING, USE ANNOTATED DIMENSIONS ONLY.
3. THE CONTRACTOR IS TO VERIFY ALL DIMENSIONS ON SITE BEFORE STARTING WORK OR FABRICATION. ERRORS OR OMISSIONS TO BE REPORTED.
4. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DRAWINGS AND SPECIFICATIONS BY ALL DESIGN DISCIPLINES. THE CONTRACTOR SHALL ENSURE COPIES OF ALL SUCH DOCUMENTS ARE OBTAINED.

P1	19/05/2023	PRELIMINARY	FWM
Rev:	Date:	Revision:	By:

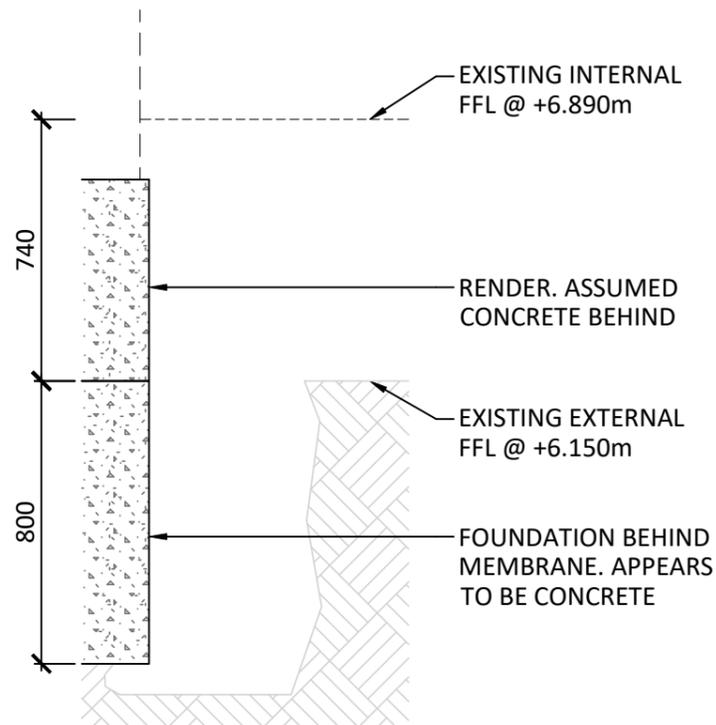


Project: FLAT 1, 15 LINDFIELD GARDENS, NW3

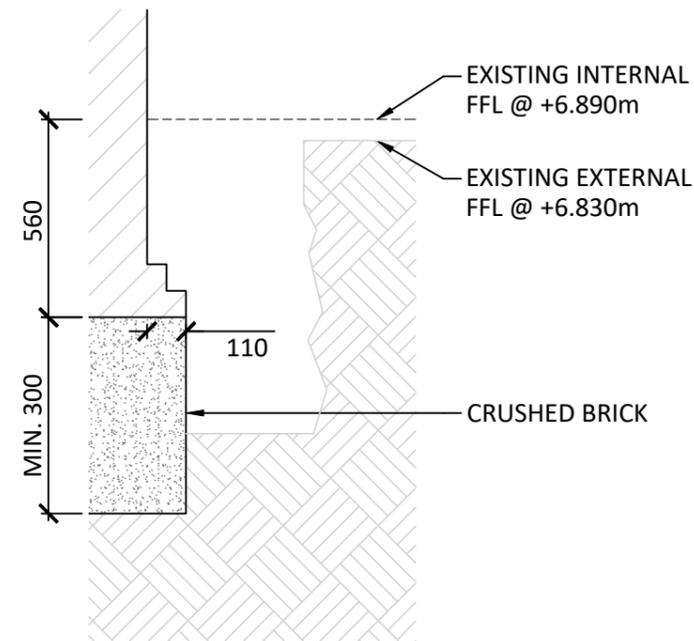
Title: TRIAL PIT RECORD - SHEET 1

Status: PRELIMINARY

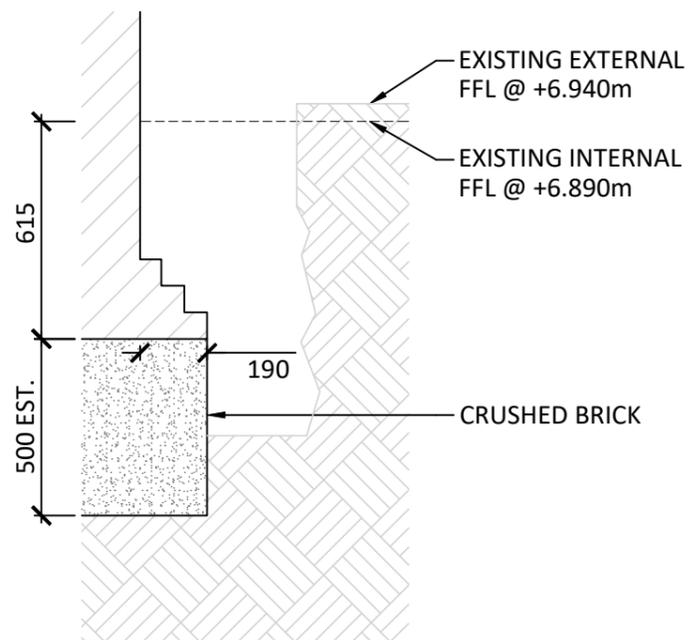
Design:	Scale:	Drawing No.
FWM	1:50 AT A3	S010
Drawn:	Date of First Issue:	Revision
FWM	19/05/2023	P1
Project No:	23-1046	



5 TRIAL PIT C - REAR OF EXTENSION
SK-001 1:20



6 TRIAL PIT D - TERMINATION OF EXTENSION CLADDING
SK-001 1:20



7 TRIAL PIT E - SIDE WALL ADJACENT TO KITCHEN
SK-001 1:20

NOTES:

1. THIS DRAWING IS COPYRIGHT OF FLOAT STRUCTURES LTD.
2. DO NOT SCALE FROM THIS DRAWING, USE ANNOTATED DIMENSIONS ONLY.
3. THE CONTRACTOR IS TO VERIFY ALL DIMENSIONS ON SITE BEFORE STARTING WORK OR FABRICATION. ERRORS OR OMISSIONS TO BE REPORTED.
4. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DRAWINGS AND SPECIFICATIONS BY ALL DESIGN DISCIPLINES. THE CONTRACTOR SHALL ENSURE COPIES OF ALL SUCH DOCUMENTS ARE OBTAINED.

P1	19/05/2023	PRELIMINARY	FWM
Rev:	Date:	Revision:	By:



Project:
FLAT 1, 15 LINDFIELD GARDENS, NW3

Title:
TRIAL PIT RECORD - SHEET 2

Status: PRELIMINARY

Design:	Scale:	Drawing No.
FWM	1:50 AT A3	S011
Drawn:	Date of First Issue:	
FWM	19/05/2023	
Project No:	Revision:	
23-1046	P1	

