41 Hollycroft Avenue, NW3

Basement Impact Assessment Scoping Report Issue 1



Document Revision History

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1. Non-Technical Summary

This Basement Impact Assessment Scoping Report has been prepared by Float Structures to support the planning application for the development at 41 Hollycroft Avenue, London, NW3 7JQ.

The report has been carried out with respect to the refurbishment and reconfiguration of the existing property, including the lowering of some areas of the existing lower-ground floor slab. While not a conventional basement development, the proposals fall under certain aspects of the relevant planning policies. The single-storey rear extension at lower-ground floor level will be constructed using traditional methods and, as such, is not included within the scope of this BIA. This report includes information required to comply with the relevant parts of London Borough of Camden (LBC) Planning Guidance relating to subterranean development.

The existing site contains an existing three-storey, semidetached period property. The property has had alterations previously; a single-storey extension has been added at the rear. The property has also been split into two flats; a lower-ground and ground floor flat, and first floor flat above.

The proposals involve the replacement of the existing rear extension with a new single-storey extension, a minor side extension at ground and first, as well as minor internal reconfiguration of the internal layouts throughout. At the lower-ground, it's also proposed to lower the floor levels throughout the property.

The British Geological Survey maps for the area suggest the site will be underlain directly by Claygate Member. No groundwater is expected to be encountered at formation level of the new lower-ground floor slabs. No risks have been identified in relation to land or slope stability, nor are there any significant hydrological or hydrogeological impacts.

The site has a risk of flooding from reservoirs in the area, a low risk of flooding from surface water 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.

The impact on the stability of this building, the neighbouring structures and the surrounding environment have been considered. Due to the scale of the proposed works, and given that excavations are limited, the impact on neighbouring structures is expected to be 'Negligible' in accordance with the Burland Scale, provided that the construction is undertaken by a competent contractor in accordance with the structural works specification.

This report includes a desk study of the site, followed by a screening and scoping exercise to consider potential risks and mitigation.

The screening process has generally demonstrated that the potential risks are either not applicable or are not significant for works of the scale and type proposed. Therefore, no further investigations or mitigation are considered necessary, other than to confirm the current understanding that there are no known buried services or utilities located on the site, besides the usual belowground drainage.

Float Structures have been appointed by the client, 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.

2. Introduction

Float Structures have been instructed by the clients, Evelyn Peters and Dino Paparelli, to prepare a Scoping Report to support the planning application for the development of 41 Hollycroft Avenue, London, NW3 7JQ.

The purpose of this document 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. It also considers if further investigation or assessment is required in order to safely and responsibly construct the proposals.

The approach and information used for this document follows current planning guidance for basements and lightwells adopted by LBC,:

- 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, this assessment comprises the following elements:

- Existing Site & History
- Desk Study
- Description of Proposals
- Screening
- Scoping
- Summary & 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 MIStructE. 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 document in relation to the proposed development:

- Existing and proposed drawings, produced by Dominic MacKenzie Architects
- A visual site inspection, as well trial pit records of the ground floor. Refer to Appendix B.
- 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
- Flood risk mapping information from www.gov.uk
- TFL Property Asset Register Public Web Map
- The Lost Rivers of London, N. Barton, 1962



Aerial View of Site - Google

3. Existing Site

The following provides a summary and context of the existing site, the building and its history.

3.1 Site History

The site is situated within the administrative boundaries of the Frognal Ward, part of the London Borough of Camden. The area was historically a rural landscape until the late 19th century, when an increase in construction transformed the land into a residential area.

Hollycroft Road appears to have been developed in the late-19th to early 20th century. OS maps show that the property first appeared in the 1915 OS map.

The property has been altered since, with a new singlestorey rear extension added in the last 50 years, as well as being divided into two flats.

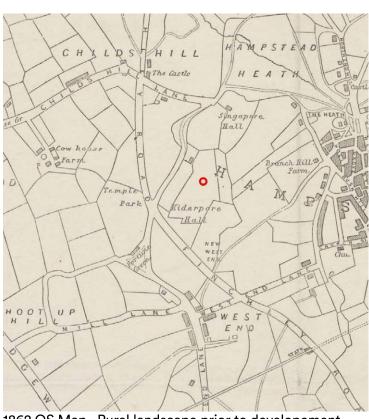
3.2 Existing Site & Building

The site location is 41 Hollycroft Avenue, London, NW3 7QJ, within the Frognal Ward of the London Borough of Camden. The site is bounded by neighbouring properties on Alexandra Park Road to the North and South, and neighbouring the rear of the properties of Redington Road to the East of the site, i.e. the rear of the garden. The site is accessed from Hollycroft Avenue. The existing building is not listed.

The existing building is a semi-detached Victorian, fourstorey home. 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 clinker concrete, founded on clay soil. The property has been altered previously, with the addition of a single-storey extension at the rear. The property has been divided into two flats.

The site is within a wider hillside setting and lies approximately 100m above sea level. The majority of the site is generally level, however there is a general slope upwards from East to West. In general, the site levels are consistent with the surrounding topography rising towards the north-west.

The existing building is set back approximately 15m from the front of the site boundary. The site is partially bounded by a brickwork wall at the front, and a mix of brickwork garden walls and timber fencing at the flank and rear. The boundary walls were generally noted to be in good condition.



1862 OS Map - Rural landscape prior to developement



1895 OS Map - Note nearby water reservoir



1915 OS Map

4. Desk Study

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 information that has been obtained.

4.1 Geology

From a review of the British Geological Survey maps, the underlying soil in the area is understood to be Claygate Member - Clay, Silt and Sand which is quite common for the area.

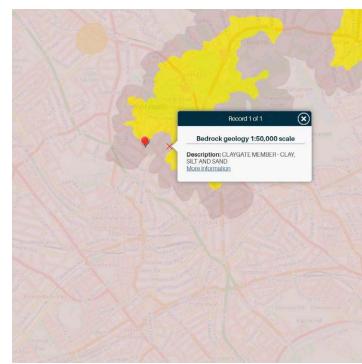
The site is located in an area where there are numerous preceding developments from which an initial understanding of the ground conditions and geology has been developed. These precedents indicate the site is likely to be suitable for the proposed development.

Trial pits undertaken on site have exposed clay directly beneath the existing foundations, which comprise stepped brick footings on a clinker base.

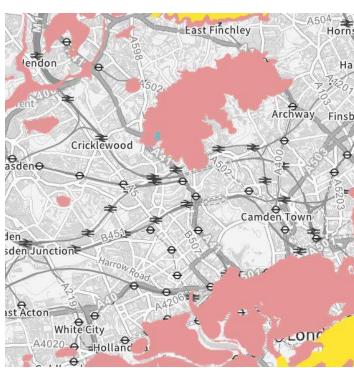
4.2 Hydrogeology

Given the proposed excavations will not extend significantly below the original ground-floor level, and there's no record of any flooding of the ground floor, it's assumed that no groundwater will be encountered during construction works or in the permanent case for this location. Water was struck in 1No. external trial pit, however it was observed below any of the proposed excavations. The water was not observed in other trial pits adjacent.

The Bedrock underlying the site is classified as a "Secondary A" aquifer. Secondary A aquifers consist of permeable layers that can sustain local water supplies, rather than large-scale strategic resources. In some cases, they also contribute significantly to the base flow of rivers. These were previously categorized as minor aquifers.



BGS Maps - Bedrock Geology Record



BGS Maps Datasets - Aquifer designation data

4.3 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 low probability of flooding from rivers and the sea.

The site has a low risk of flooding from surface water and a low risk of flooding from rivers and sea. Flooding from groundwater is unlikely.

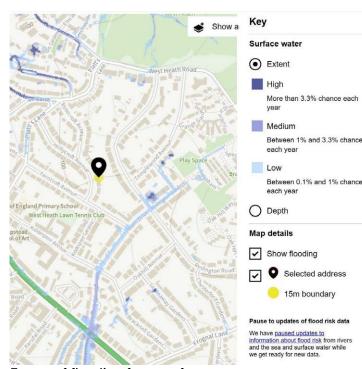
The site is located in excess of 500m from the River Ironstone, and therefore will not influence, or be influenced by, these hydrological features.

The site appears to be located on or near to a tributary to the River Westbourne, according to the Lost Rivers of London (N. Barton, 1962).

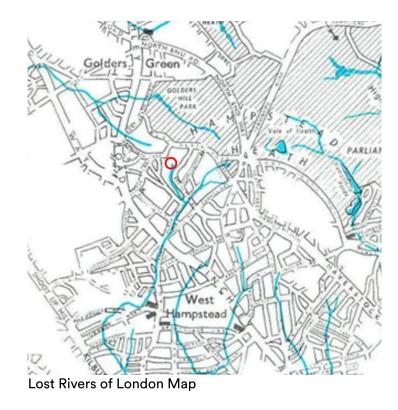
4.4 Neighbouring Basement Structures

The adjacent houses were constructed in a similar manner, as they appear to have been built at the same time as No. 41.

The adjoining property, No. 39, has had it's lowerground floor extended at the front of the property, as well as the addition of a new lightwell.



Extent of flooding from surface water



4.5 Existing Services, Utilities & Tunnels

The site lies approximately 600m to the West of the Northern Line tunnel, outside the designated LUL zone of influence.

A CCTV drainage survey will be undertaken prior to detailed detail.

4.6 Unexploded Ordnance

Available Bomb Maps indicate that the site was not impacted by World War 2 bombing, however a nearby property at Hollycroft Avenue appears to have been damaged.

Given that the excavations are limited to within the existing footprint, it's unlikely to encounter UXO.

West Health St. West H

TFL Asset Map - Northern Line & LUL Zone of Influence

4.7 Listed Buildings

Historic England maps indicate a number of nearby listed buildings, including No. 41 Hollycroft Avenue.

These include:

- 43, 43A & 45 Hollycroft Avenue, Grade II
- 47 & 49 Hollycroft Avenue, Grade II
- 33 & 35 Ferncroft Avenue, Grade II
- 26 & 26A Ferncroft Avenue, Grade II



London Bomb Damage Maps - London Metropolitan Archives

4.8 Nearby Consented Applications

Proposals have been consented in close proximity to the site. These include the construction of new basements under existing and new properties. The scale of the excavations is greater than the current proposals.

• 39 Hollycroft Avenue, London, NW3 7QJ

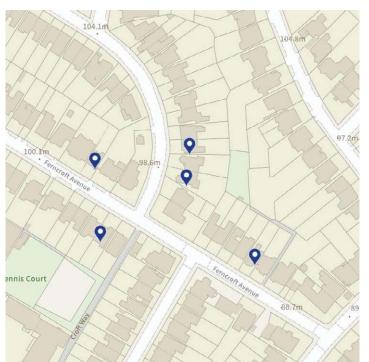
2017/3849/P - Granted

Excavation and extension of existing basement including formation of front lightwell

• 14 Greenaway Gardens London NW3 7DH

2022/5282/P - Granted

Partial demolition of existing dwelling with retention of the front facade and parts of the side and rear facades and the erection of a basement extension, infill rear extension, various minor changes to the fenestration and other associated works.



Historic England Maps - Listed buildings in proximity to No. 30

24 Redington Gardens London NW3 7RX

2021/5801/P - Approved with conditions

Demolition and replacement of dwelling house to increase size of approved basement, installation of AHSP, installation of rooflights, installation of front elevation widow and increase in size of approved chimney

5. Proposals

5.1 Proposed Works

The proposals involve the lowering of the existing lower-ground floor levels throughout. Generally, the proposed level changes are modest, however at the front in the existing utility room, the level change is approximately 0.6m from the existing finish floor level to the proposed FFL. The existing garage doors will be replaced with a new bay-window structure.

At the rear, it's proposed to remove the existing rear conservatory and construct a new single-storey rear extension. As part of the extension, parts of the existing walls will be removed. At the flank, a small extension is proposed at lower-ground and ground level.

At ground floor, the proposals are limited to some minor alterations to existing openings, and the addition of a new roof terrace over the lower-ground floor rear extension.

Externally, some minor landscaping is proposed, with stepped planters proposed at the front of the existing utility.

5.2 Excavations

The level of excavation will be limited throughout. At lower-ground floor, it's proposed to lower the floor levels slightly in order to increase the headroom. Based on trial pit investigations, the proposed slab levels will generally not extend below the level of the existing lower-ground floor walls or foundations.

At the front of the property, in the existing utility room, the proposed levels will extend below the level of the existing utility room footings and so localised underpinning is required to these walls to facilitate these proposals. The works will be taken in an underpin, hit-and-miss sequence, in max 1m long sections, in order to minimise the impact on nearby structures.

At the front, new stepped-planters are proposed in front of the existing utility room, which will be excavated into the ground. As part of these works, the existing retaining walls will be removed and new retaining walls constructed.

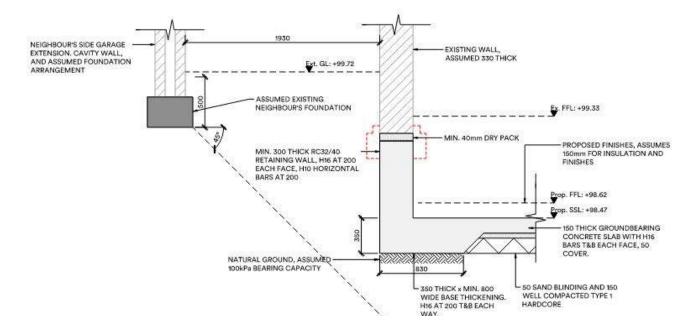
In the short-term during construction, the risk of ground movement will be mitigated by the adoption of sequential construction in an hit-and-miss sequence to control ground movements. Therefore, the impact on neighbouring structures is expected to be 'Negligible' in accordance with the Burland Scale.

The TFL register confirmed that there is no infrastructure adjacent to or below the site. There are no known mains services or utilities within the site boundary, but detailed searches into the locations of any mains services will be carried out in due course. In addition to local asset searches, as per standard good practice for ground works, the contractor will be required to undertake ground penetrating radar scanning prior to commencing any excavations.

Excerpt from initial lower-ground floor structure scheme

At the rear, due to the proximity of nearby high-water demand trees, it's proposed to support the new rear extension on deep trench footings. New reinforced-concrete ground beams will be installed under the perimeter of the new rear extension, and a suspended slab spanning in between. The excavations required for the ground beam and slab are not expected to extend below the level of the existing foundations.

While the foundations of the rear extension will extend below the existing formation level, it should be noted that these works are specific to the rear extension and do not form part of the basement-related proposals considered within this Basement Impact Assessment. The rear extension works will assessed separately and fall outside the scope of this report.



Underpin Retaining Wall at Existing Utility Perimeter Wall

6. Screening

As part of this assessment, a screening process has been undertaken and the findings described below.

6.1 Ground Water:

Question	Response	Details
1a. Is the site located directly above an aquifer?	Yes	The Bedrock underlying the site is classified as a "Secondary A" aquifer, which consist of permeable layers that can sustain local water supplies, rather than large-scale strategic resources. These were previously categorized as minor aquifers.
1b. Will the proposed basement extend beneath the water table surface?	No	No major excavations are proposed below the existing formation of the site, and so it's not anticipated to extend into the water table.
2. Is the site within 100m of a watercourse, well (used / disused) or potential spring line?	Yes.	The site is within 100m to a tributary to the River Westbourne, a culverted small River Thames tributary.
3. Is the site within the catchment of the pond chains on Hampstead Heath?	No	The site is not within the catchment of the pond chains on Hampstead Heath.
4. Will the proposed basement development result in a change in the proportion of hard surfaced / paved areas?	No.	Due to the existing rear-extension, and extensive existing external paving on site, the proposals will not change the proportion of hardstanding on site.
5. As part of site drainage, will more surface water (e.g. rainfall and run-off) than at present be discharged to the ground (e.g. via soakaways and/ or SUDS)?	No	It's not anticipated that SuDS will be adopted as part of the proposals, however this is to be confirmed at detailed design stage.
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?	No	No major excavations are proposed below the existing formation of the site, and so it's not anticipated to extend below the mean water level in any local pond or spring line.

6.2 Slope Stability:

Question	Response	Details
1. Does the existing site include slopes, natural or man-made greater than 7 degrees (approximately 1 in 8)?	Yes	Referring to Figure 16 from Camden CPG 4, the site is within or close to an area of with a slope between 7 and 10 degrees.
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	No re-profiling is proposed as part of the works, and the slope at the boundaries will remain the same as the existing.
3. Does the development neighbour land, including railway cuttings, with a slope greater than 7 degrees (approximately 1 in 8)?	Yes	Referring to Figure 16 from Camden CPG 4, the site is within or close to an area of with a slope between 7 and 10 degrees.
4. Is the site within a wider hillside setting in which the general slope is greater than 7 degrees (approximately1 in 8)?	Yes	Referring to Figure 16 from Camden CPG 4, the site is within or close to an area of with a slope between 7 and 10 degrees.
5. Is the London Clay the shallowest strata at the site?	No	BGS Maps indicate that the site is underlain with a bedrock formation Claygate Member - Clay, Silt and Sand
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	It's understood that no trees will be felled as part of the development.
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 Claygate Member soils. The local area is not considered to have a greater history of such effects than other parts of London in London Clay.
8. Is the site within 100m of a watercourse or a potential spring line?	Yes	The site is within 100m to a tributary to the River Westbourne, a culverted small River Thames tributary.
9. Is the site within an area of previously worked ground?	No	No records indicate that the site within an area of previously worked ground. Trial pit investigations appeared to show clay throughout.

6.2 Slope Stability:

Question	Response	Details
10. Is the site within an aquifer. If so, will the proposed basement extend beneath the water table such that dewatering may be required during construction?	Yes	The Bedrock underlying the site is classified as a "Secondary A" aquifer. No major excavations are proposed below the existing formation of the site, and so it's not anticipated to extend into the water table.
11. Is the site within 50m of the Hampstead Heath Ponds?	No	The site is not within 50m of the ponds on Hampstead Heath.
12. Is the site within 5m of a highway or pedestrian right of way?	Yes	The front boundary of the site adjoins the footpath of Hollycroft Avenue.
13. Will the proposed basement significantly increase the differential depth of foundations relative to neighbouring properties?	No	It's not proposed to extend any new foundations below the depth of the lowest existing foundation, and so any differential depths will remain unchanged.
14. Is the site over (or within the exclusion zone of) any tunnels, e.g. railway lines?	No	The site is not over any tunnel or rail exclusion zone.

6.3 Surface Water & Flooding:

Question	Response	Details
1. Is the site within the catchment of the ponds chains on Hampstead Heath?	No	The site is not within the catchment of the pond chains on Hampstead Heath.
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	Due to the existing rear-extension, and extensive existing external paving on site, the proposals will not change the proportion of hardstanding on site, and therefore the surface water flow will remain unchanged.
3. Will the proposed basement development result in a change in the proportion of hard surfaced / paved external areas?	No	The proposals will not change the proportion of hardstanding on site.

6.3 Surface Water & Flooding:

Question	Response	Details
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 proposals will not change surface water characteristics of the site, and so no material change in surface or groundwater is expected.
5. Will the proposed basement result in changes to the quality of surface water being received by adjacent properties or downstream watercourses?	No	The proposals will not change the proportion of hardstanding on site or surface water characteristics of the site, and so no material change in surface or groundwater is expected.
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	The flood risk on site is very low and the proposals will not change the site characteristics with respect to flooding.

6.4 Summary of Screening Process

The screening process has confirmed that:

- The site does lay in the vicinity of a nearby watercourse and is over a Secondary A aquifer. However, the limited excavations, which do not extend below the existing formation levels, do not pose are not a risk with regards to these features.
- The existing site slopes generally from east to west, and there are no proposed plans to change this. In the context of the existing site-specific topography, ground conditions and proposed works, we would consider there is a low risk with regards to slope stability.
- The proposals will not alter the level of hard standing. As such, the proposed will not have a material impact on surface water run-off or similar, nor will it have any impact on below ground drainage.

Other than those noted below, 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.

Outstanding risks to be considered in scoping:

- Nearby Watercourse & Groundwater
- Below ground services & utilities
- Proximity of highway

7. 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 generally demonstrated that potential risks due to development are either not applicable or are not significant for works of the scale and type proposed. Any outstanding risks are addressed below.

7.1 Nearby Watercourse & Groundwater

While the site does lay in the vicinity of a nearby watercourse and is over a Secondary A aquifer, the limited excavations are not expected to encroach on these features.

Based on trial pit excavations, the existing foundations are generally founded as deep as 97.08m AOD. The trial pits showed that the existing lower-ground floor is built over made-ground, with natural ground (clay) noted at or slightly above foundation level. Given the proposed excavations will only extend as far as 97.92m AOD, most of which will be into the made-ground, it's not expected to encroach on the existing nearby watercourse or Secondary A Aquifer.

Groundwater was noted in one external trial pit at approximately 97.73m AOD. Since no excavations are proposed to these depths, it's not expected to encounter groundwater.

7.2 Below Ground Services & Utilities

Based on surveys carried out to date, there are no known buried services or utilities located on the site, besides the usual below-ground drainage. This will be corroborated during the next design stage by the acquisition of record information from the statutory authorities relevant to the local area.

In addition to these preliminary actions, the contractor will be required to undertake ground penetrating radar scanning prior to commencing any excavations on site.

7.3 Excavations Adjacent to Highway

In order to create the new planting at the front of the site, it's proposed to remove part of the existing retaining wall and replaced with a new reinforced concrete retaining wall.

In the short-term during construction, the risk of ground movement will be mitigated by the adoption of sequential construction in an underpin sequence to control ground movements. Therefore, the impact on neighbouring highway is expected to be negligible.

8. Summary & Recommendations

In accordance with the London Borough of Camden's Planning Guidance, this Scoping Report has considered the potential risks to the site and surrounding environment that result from subterranean construction.

8.1 Executive Summary

Existing & Proposed Development

• 41 Hollycroft Avenue is a traditional period semidetached house with a more recent single-storey rear extension. The proposals involve the creation of a new single-storey rear extension and extensive internal reconfiguration throughout, along with lowering the existing lower-ground floor level.

Geology

• The site is overlain Claygate Formation, on which the existing foundations currently bear.

Hydrogeology

- given that the proposed level changes are at the approximate levels of the existing external levels on site.
- The site is over a Secondary A Aquifer, however the proposed excavations will not extend deeper into the underlying ground more than the existing foundations.

Hydrology

- The site is in the vicinity of a tributary to the Westbourne River, however it's not proposed to excavated deeper than the existing foundations.
- The proposals will not change the level of hard standing on site and there will be no negative impact on the below ground drainage.

Slope Stability & Ground Movement

- It is not proposed to change the levels on site.
- The proposed excavations are relatively minor and will have no impact on any neighbouring or adjacent structures. However, any slight risk of ground movement will be mitigated by the adoption of sequential construction in an underpin sequence to control ground movements.

8.2 Recommendations

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

Based on the site conditions and the scope of the proposed development, no additional site investigations are deemed necessary at this stage, with the exception utilities survey which has been identified by the scoping process. In this case, statutory authority searches should be implemented as soon as practicably possible and the results used to inform design development during the next stage.

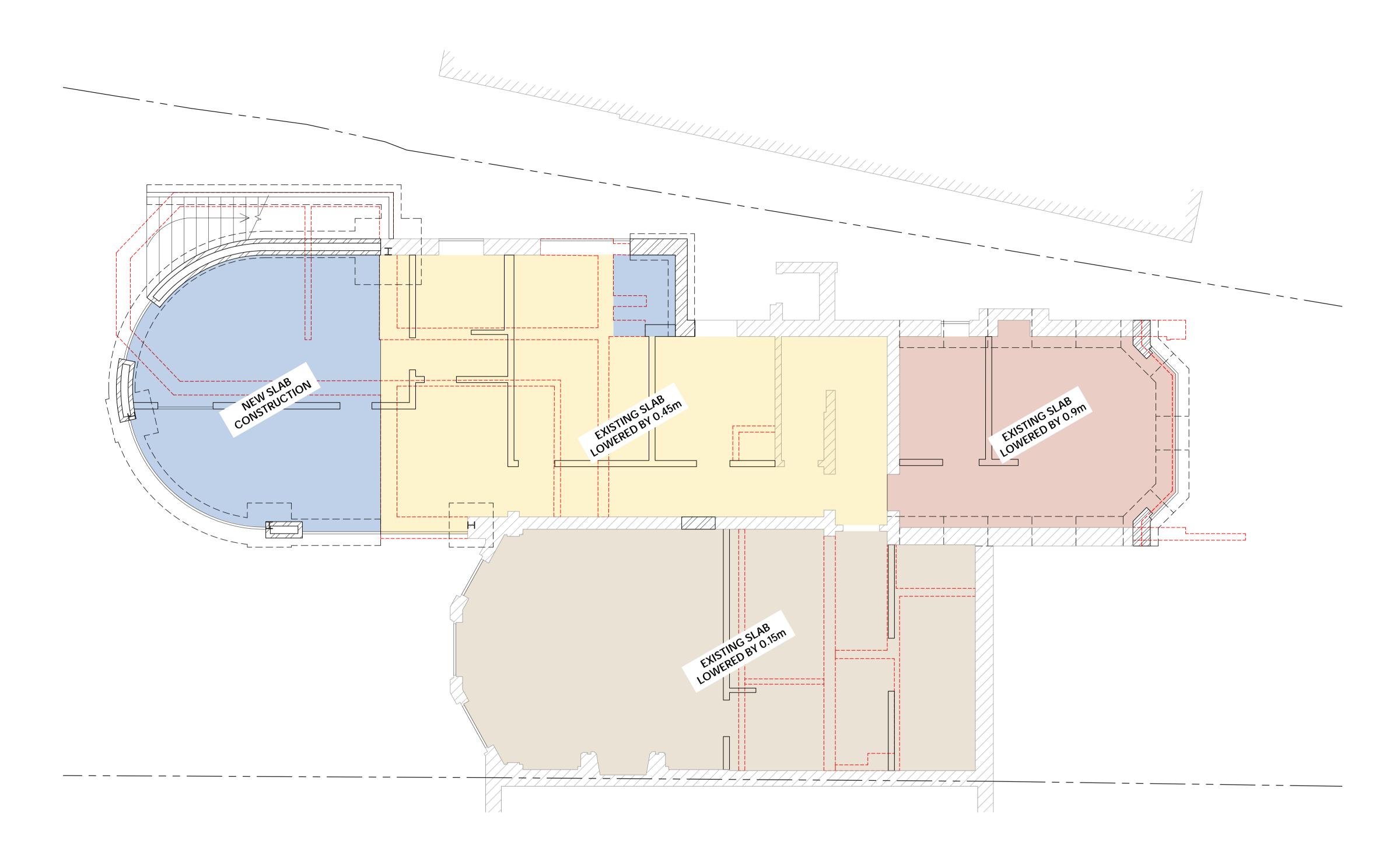
Prepared by: Approved by:

Conor O'Sullivan BEng CEng MIEI Float Structures

Fred Miles MEng CEng MIStructE Float Structures

• Ground water is not anticipated to be encountered,

9. Appendix A



NSTRUCTION

Notes:

- This drawing is copyright of Float Structures Limited.
 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
- starting work or fabrication. Errors or omissions to be reported.

 4. This drawing is to be read in conjunction with all other
- 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.

KEY:

MASONRY:

EXISTING BRICKWORK WALL

NEW BRICKWORK WALL

NEW BLOCKWORK WALL

LOAD BEARING WALL BELOW

EXISTING WALL DEMOLISHED

ALL CAVITY WALLS TIED WITH ANCON STAIFIX ST1 WALL TIES AT 2.5 TIES/m², UNLESS

NON STRUCTURAL PARTITION

NOTED OTHERWISE

TIE NEW WALLS TO EXISTING WALLS WITH ANCON WALL STARTER SYSTEM AT 225

ALL COLUMNS/WINDPOSTS TIED TO MASONRY WITH ANCON SDV FRAME

VERTICAL CENTRES.

MASONRY WITH ANCON SDV FRAME CRAMPS AT MIN. 450 VERTICAL CENTRES.

STEEL:
ALL STEEL TO BE GRADE S355 UNLESS NOTED
OTHERWISE.

ALL BEAMS BEARING INTO EXTERNAL WALLS TO BE PAINTED IN 2NO. COATS OF BITUMINOUS PAINT AND CONCRETED IN

ALL NEW JOISTS GRADE 24 UNLESS NOTED OTHERWISE

12 THICK OSB/3 SCREWED OVER ROOF JOISTS, AT 300 CENTRES. 18 THICK OSB/3 SCREWED OVER FLOORS JOISTS, AT 300 CENTRES.

DJ/TJ: DOUBLED/TRIPLED JOISTS, BOLTED TOGETHER WITH M8 COACH BOLTS AT 500 CENTRES.

GENERAL:

ALL FLOORS/ROOFS TO BE STRAPPED TO PERIMETER WALLS AND INTERNAL LOAD BEARING LINES, INCLUDING BEAMS. SEE GENERAL NOTES, S100, FOR STRAPPING AND BLOCKING REQUIREMENTS.

ANY NOTED EXISTIN CONDITION BASED ON LOCALISED TRIAL PIT AND OPENING INVESTGATIONS. SOME VARIATIONS MAY OCCUR.

ALL NOTED AND ASSUMED CONDITIONS TO BE CONFIRMED BY CONTRACTOR DURING STRIPOUT/DEMOLITION AND PRIOR TO CONSTRUCTION. ANY DISCREPANCIES TO BE NOTIFIED WITH ENGINEER IMMEDIATELY.



CDM RISK ITEM

07/02/25 For Information COS

Mark Date Description By

float

hello@floatstructures.com +44 (0)203 397 0600

Project 41 Hollycroft Avenue, NW3

Slab Lowering Extent

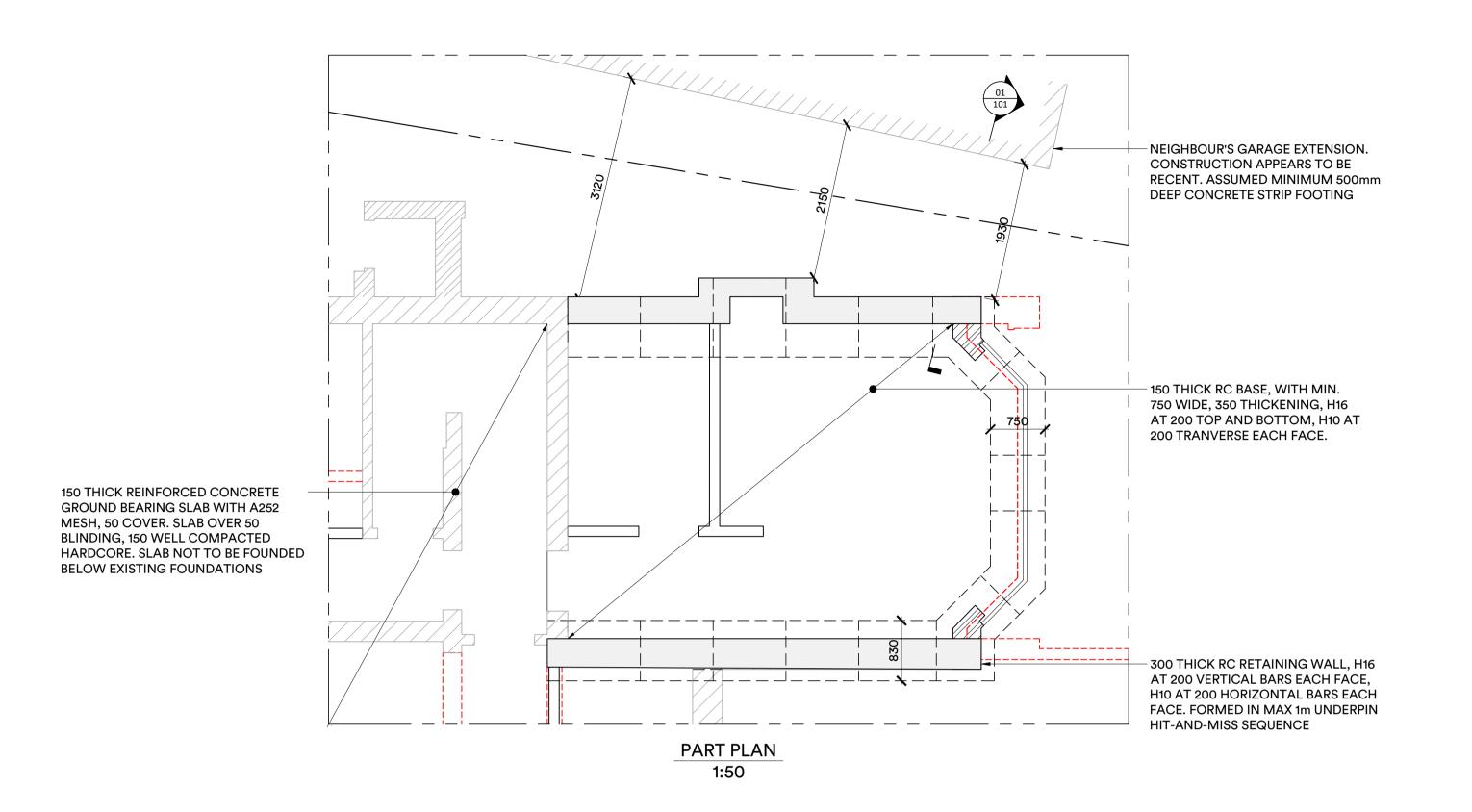
Drawing No. S100

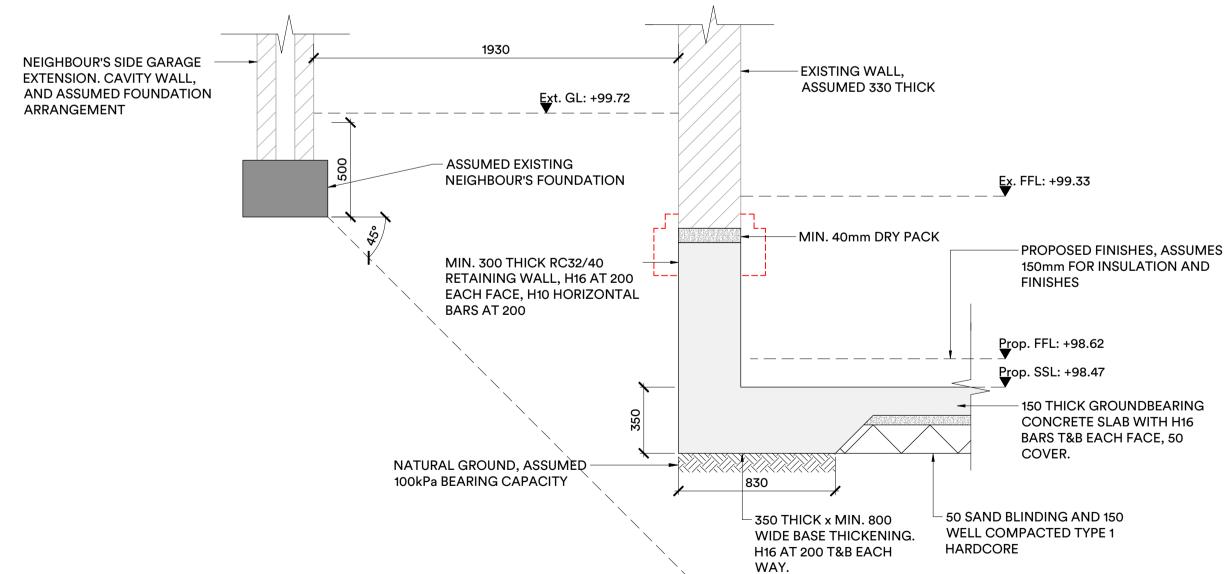
Status For Information

Design COS Scale 1:50@A1

Drawn FWM First Issue 07/02/25

Project No. 24-1058 Revision P1





\UTILITY UNDERPIN FOUNDATION DETAIL

- 1. This drawing is copyright of Float Structures Limited. 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
- 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

KEY:

MASONRY:

EXISTING BRICKWORK WALL

NEW BRICKWORK WALL

NEW BLOCKWORK WALL

documents are obtained.

[_ _] LOAD BEARING WALL BELOW

EXISTING WALL DEMOLISHED

NON STRUCTURAL PARTITION

ALL CAVITY WALLS TIED WITH ANCON STAIFIX ST1 WALL TIES AT 2.5 TIES/m², UNLESS NOTED OTHERWISE

TIE NEW WALLS TO EXISTING WALLS WITH ANCON WALL STARTER SYSTEM AT 225 VERTICAL CENTRES.

ALL COLUMNS/WINDPOSTS TIED TO MASONRY WITH ANCON SDV FRAME

CRAMPS AT MIN. 450 VERTICAL CENTRES.

TO BE PAINTED IN 2NO. COATS OF

ALL STEEL TO BE GRADE \$355 UNLESS NOTED

OTHERWISE. ALL BEAMS BEARING INTO EXTERNAL WALLS

BITUMINOUS PAINT AND CONCRETED IN ALL NEW JOISTS GRADE 24 UNLESS NOTED

OTHERWISE 12 THICK OSB/3 SCREWED OVER ROOF

JOISTS, AT 300 CENTRES. 18 THICK OSB/3 SCREWED OVER FLOORS JOISTS, AT 300 CENTRES.

DJ/TJ: DOUBLED/TRIPLED JOISTS, BOLTED TOGETHER WITH M8 COACH BOLTS AT 500 CENTRES.

GENERAL:

ALL FLOORS/ROOFS TO BE STRAPPED TO PERIMETER WALLS AND INTERNAL LOAD BEARING LINES, INCLUDING BEAMS. SEE GENERAL NOTES, S100, FOR STRAPPING AND BLOCKING REQUIREMENTS.

ANY NOTED EXISTING CONDITION BASED ON LOCALISED TRIAL PIT AND OPENING INVESTGATIONS. SOME VARIATIONS MAY OCCUR.

ALL NOTED AND ASSUMED CONDITIONS TO BE CONFIRMED BY CONTRACTOR DURING STRIPOUT/DEMOLITION AND PRIOR TO CONSTRUCTION. ANY DISCREPANCIES TO BE NOTIFIED WITH ENGINEER IMMEDIATELY.



CDM RISK ITEM

07/02/25 For Information COS

Mark Date Description



hello@floatstructures.com +44 (0)203 397 0600

41 Hollycroft Avenue, NW3

Indicative Boundary Title Excavations

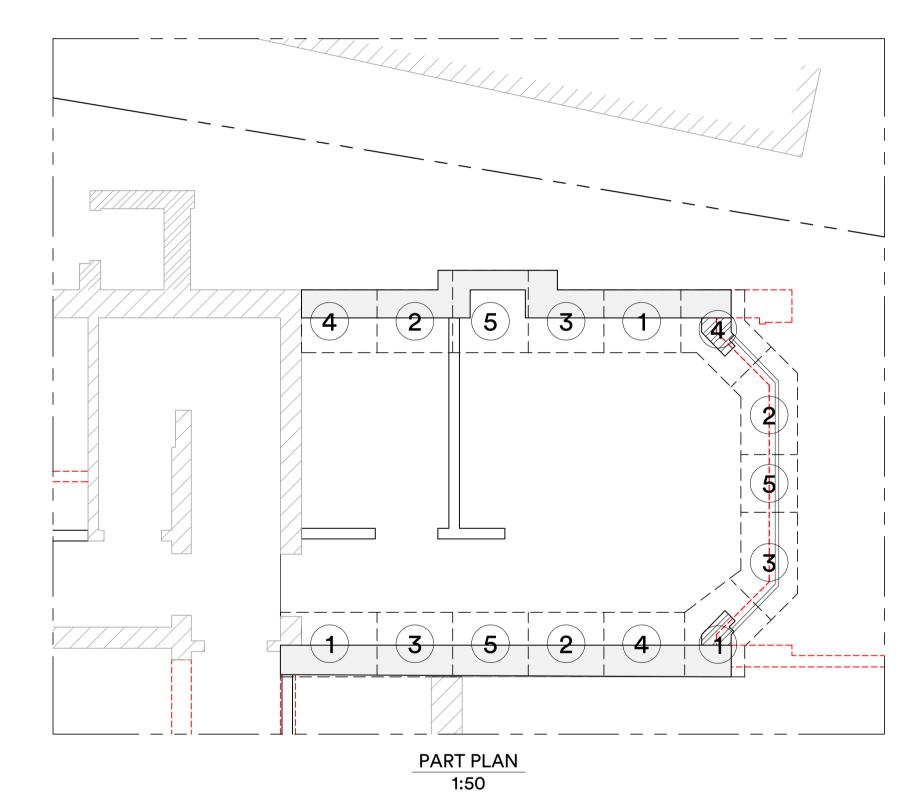
Drawing No. S101

For Information Status

Design COS Scale 1:50/20@A1

Drawn FWM First Issue 07/02/25

Project No. 24-1058 Revision P1



UNDERPINNING NOTES

- BEFORE STARTING THE WORK THE CONTRACTOR IS TO CHECK FOR ANY SERVICES THAT COULD BE DAMAGED BY THE UNDERPINNING WORK.
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT THEIR OPERATIONS DO NOT IN ANY WAY IMPAIR THE SAFETY OR CONDITION OF THE BUILDING BOTH BEFORE AND DURING THE EXECUTION OF THE WORK AND Immediately Inform the Engineer if the Contractor Considers that more STRINGENT PROCEDURES THAN THOSE SPECIFIED ARE NECESSARY.
- 3. UNDERPINNING IS TO BE CARRIED OUT IN SHORT SECTIONS OF ABOUT ONE METRE IN LENGTH. THE BOTTOMS OF THE FOUNDATION SHALL BE INSPECTED AND APPROVED BY THE BUILDING INSPECTOR BEFORE CONCRETE IS POURED. THE UNDERPINNING IS TO BE CARRIED OUT TO THE SATISFACTION OF THE BUILDING INSPECTOR.
- 4. PROJECTING PORTIONS OF THE EXISTING FOOTINGS ARE TO BE CAREFULLY CUT OFF WHERE DIRECTED AND THE UNDERSIDE OF THE FOOTINGS ARE TO BE CLEANED AND HACKED FREE OF DIRT, SOIL OR LOOSE MATERIALS BEFORE UNDERPINNING.
- 5. THE BODY OF THE UNDERPINNING IS TO BE CONSTRUCTED IN 1:2:4 MIX CONCRETE AND IS TO BE CAST TO THE WIDTHS SHOWN UNLESS OTHERWISE DIRECTED BY THE ENGINEER. EXCAVATION AND CONCRETING OF ANY SECTION OF UNDERPINNING SHALL BE CARRIED OUT ON THE SAME DAY.
- 6. THE MASS CONCRETE IS TO BE STOPPED OFF 75mm BELOW THE UNDERSIDE OF THE EXISTING FOOTING AND THE FINAL PINNING UP OVER THE WHOLE OF THE FOOTING IS TO BE CARRIED OUT WITH 1:3 MIX CEMENT TO SHARP SAND DRY PACK MORTAR, WELL RAmmED IN 24 HOURS AFTER THE MASS CONCRETE HAS BEEN POURED.
- 7. EXCAVATION TO ANY SECTION OF UNDERPINNING SHALL NOT BE STARTED UNTIL AT LEAST 48 HOURS AFTER COMPLETION OF ANY ADJACENT SECTIONS OF THE WORK.
- 8. THE SIDES OF THE PREVIOUS UNDERPINNING BAYS ARE TO BE ROUGHENED OR KEYED TO THE SATISFACTION OF THE BUILDING INSPECTOR.
- 9. THE SEQUENCE OF UNDERPINNING TO BE AS SHOWN. ALL SECTIONS MARKED 1 TO BE EXCAVATED, CAST AND DRY PACKED BEFORE STARTING EXCAVATION OF SECTIONS MARKED 2, AND ALL SECTIONS MARKED 2 TO BE COMPLETE BEFORE EXCAVATION FOR SECTIONS MARKED 3 ETC.
- 10. THE CONTRACTOR IS TO KEEP A RECORD OF THE SEQUENCE AND DIMENSIONS OF THE UNDERPINNING ACTUALLY CARRIED OUT, INCLUDING DETAILS OF EXCAVATION, CASTING CONCRETE AND PINNING UP FOR EACH SECTION.
- 11. EXCAVATED MATERIAL INTENDED FOR BACKFILLING IS TO BE KEPT PROTECTED FROM DRYING OUT OR WETTING AND IS TO BE PLACED IN MAXIMUM 150mm LAYERS, CAREFULLY COMPACTED WITH A PNEUMATIC OR ELECTRIC PERCUSSION TOOL WITH COMPACTING PLATE.

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- dimensions only. 3. The contractor is to verify all dimensions on site before starting work or fabrication. Errors or omissions to be
- 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

EXISTING BRICKWORK WALL

NEW BRICKWORK WALL

NEW BLOCKWORK WALL

documents are obtained.

LOAD BEARING WALL BELOW

EXISTING WALL DEMOLISHED

NON STRUCTURAL PARTITION

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ANCON WALL STARTER SYSTEM AT 225 VERTICAL CENTRES.

TIE NEW WALLS TO EXISTING WALLS WITH

ALL COLUMNS/WINDPOSTS TIED TO MASONRY WITH ANCON SDV FRAME CRAMPS AT MIN. 450 VERTICAL CENTRES.

ALL STEEL TO BE GRADE \$355 UNLESS NOTED OTHERWISE.

ALL BEAMS BEARING INTO EXTERNAL WALLS TO BE PAINTED IN 2NO. COATS OF BITUMINOUS PAINT AND CONCRETED IN

ALL NEW JOISTS GRADE 24 UNLESS NOTED OTHERWISE

12 THICK OSB/3 SCREWED OVER ROOF JOISTS, AT 300 CENTRES. 18 THICK OSB/3 SCREWED OVER FLOORS JOISTS, AT 300 CENTRES.

DJ/TJ: DOUBLED/TRIPLED JOISTS, BOLTED TOGETHER WITH M8 COACH BOLTS AT 500 CENTRES.

GENERAL:

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ANY NOTED EXISTING CONDITION BASED ON LOCALISED TRIAL PIT AND OPENING INVESTGATIONS. SOME VARIATIONS MAY OCCUR.

ALL NOTED AND ASSUMED CONDITIONS TO BE CONFIRMED BY CONTRACTOR DURING STRIPOUT/DEMOLITION AND PRIOR TO CONSTRUCTION. ANY DISCREPANCIES TO BE NOTIFIED WITH ENGINEER IMMEDIATELY.



CDM RISK ITEM

07/02/25 For Information COS



hello@floatstructures.com +44 (0)203 397 0600

41 Hollycroft Avenue, NW3

Underpinning

Sequence

Drawing No. \$102

Title

For Information Status

Design COS Scale 1:50@A1

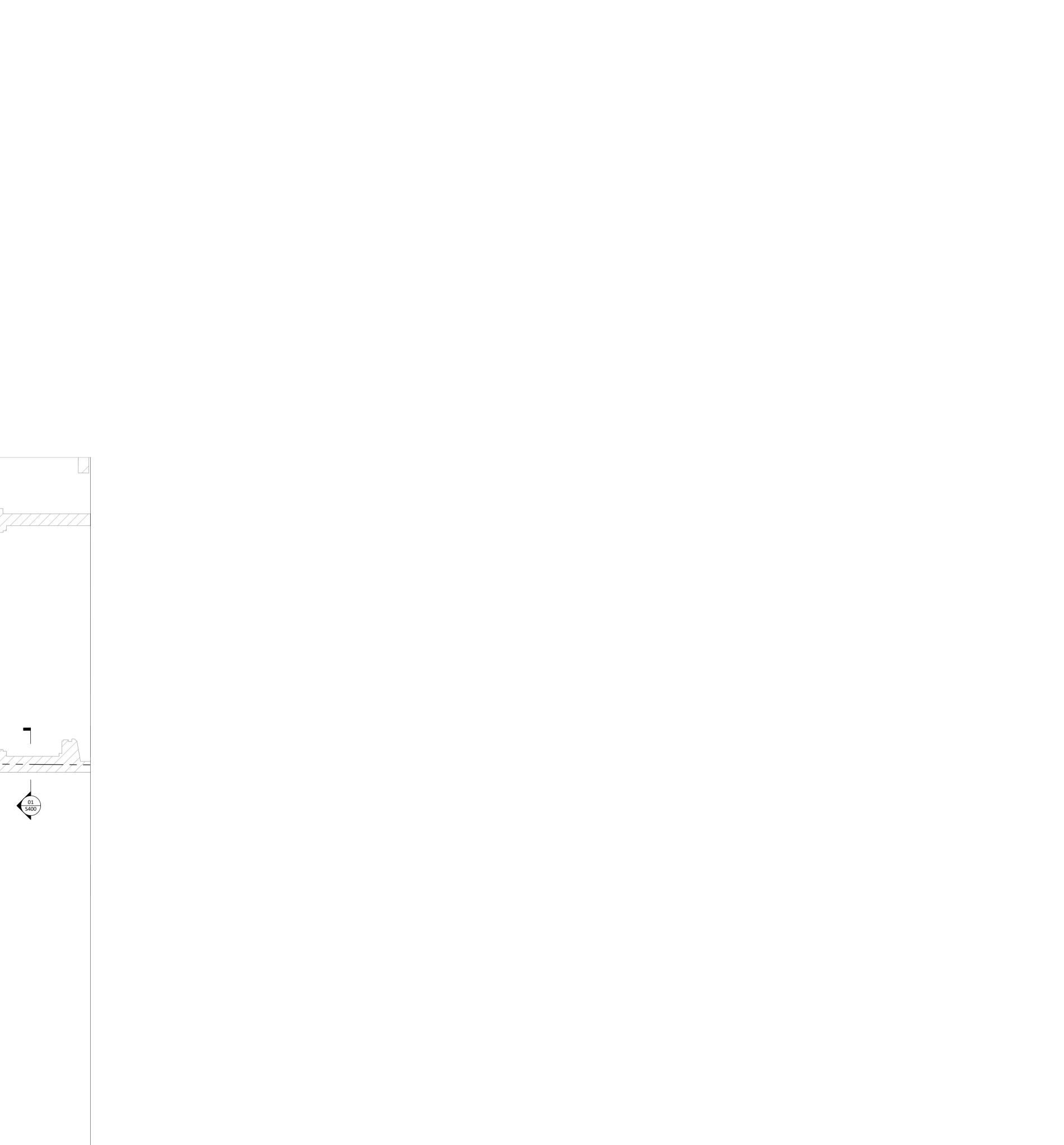
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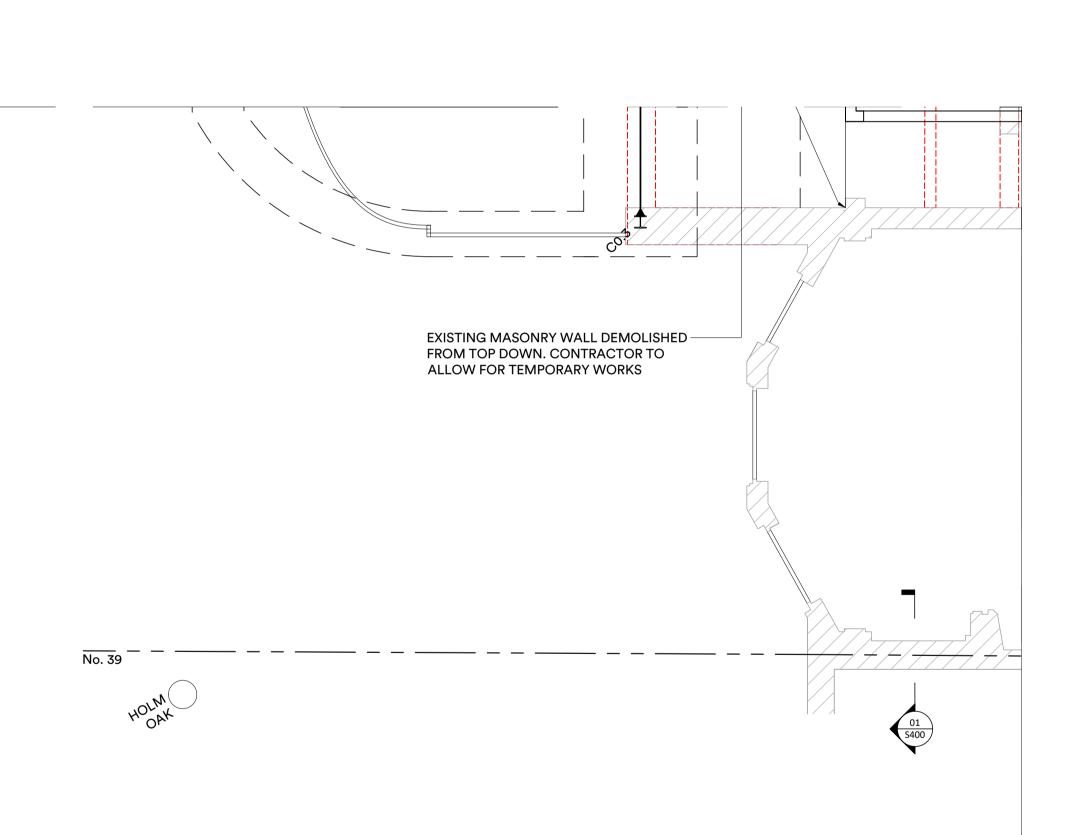
Project No. 24-1058 Revision P1

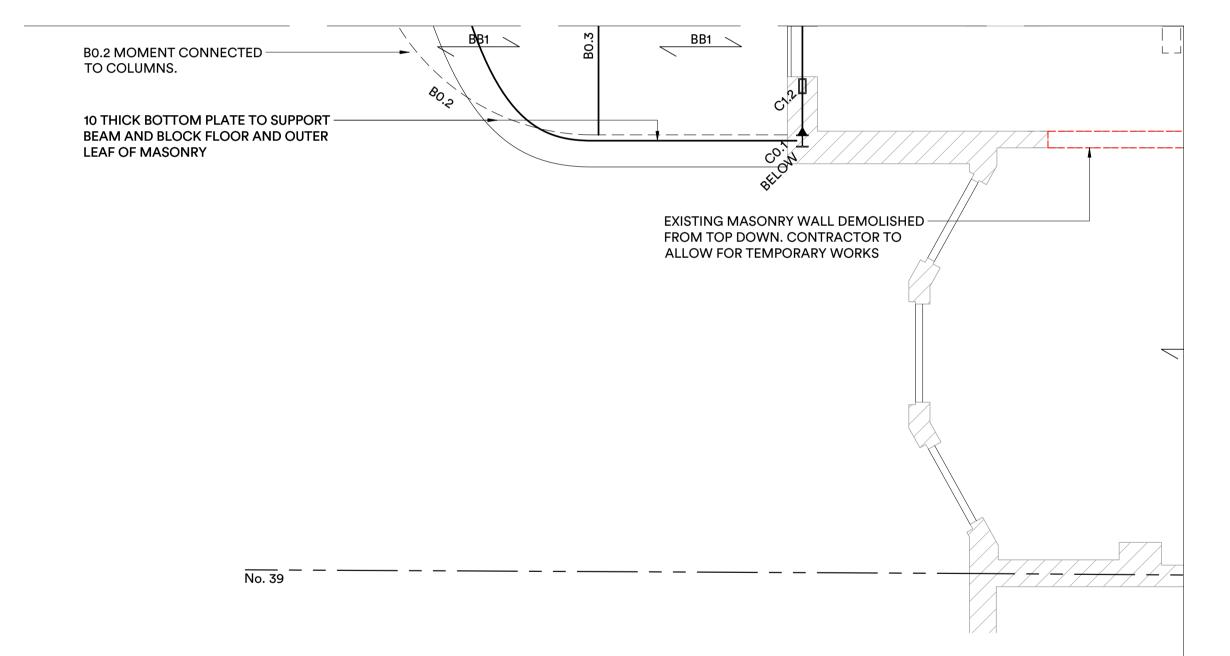
RC CONCRETE PAD FOUNDATIONS,
FOUNDED TO MATCH EXISTING
FOUNDATION DEPTH, APPROXIMATELY
2m BGL. SUBJECT TO FINAL BUILDING
CONTROL APPROVAL.

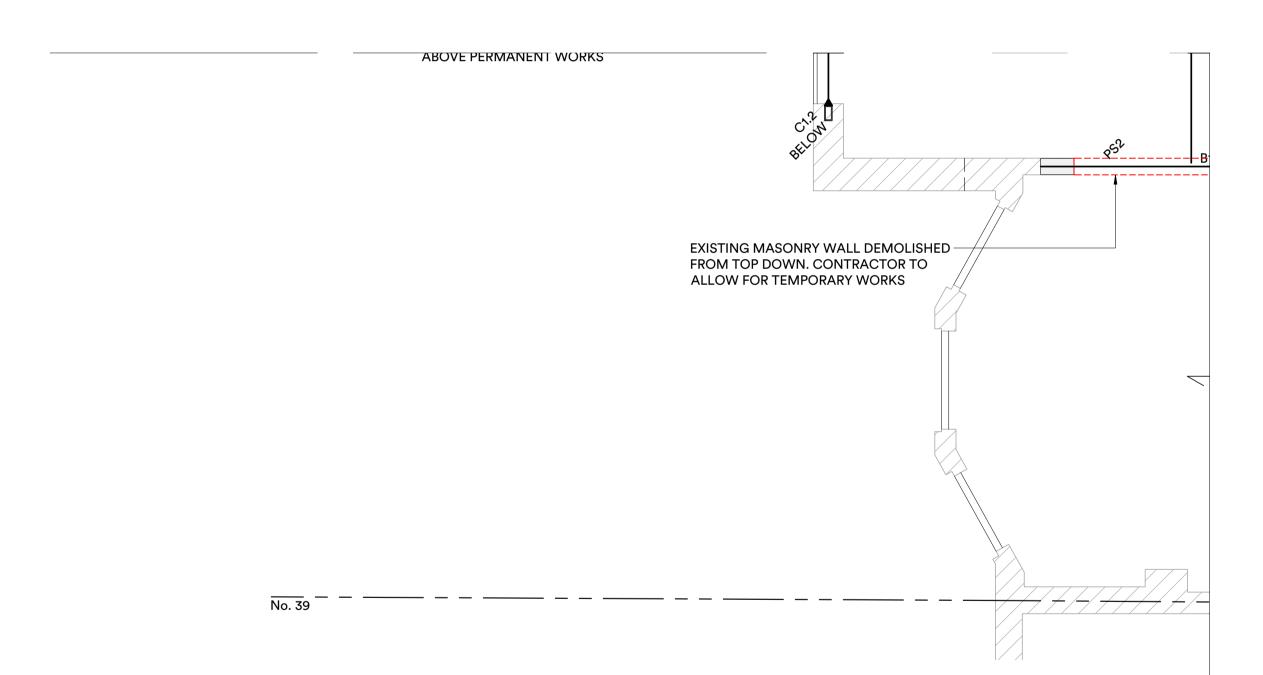
RC GROUND BEAM, 600x600, SPANNING
BETWEEN STRIP FOUNDATIONS, TO
MATCH EXISTING FOUNDATIONS.
SUBJECT TO FINAL BUILDING CONTROL
APPROVAL

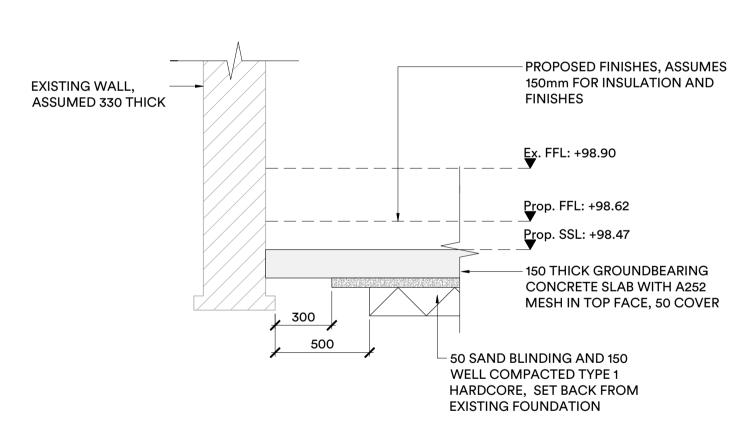
BF0.1 GROUND BEAM WRAPPED IN D49
MESH AND ENCASED IN MIN. 75mm
CONCRETE ALL ROUND. CANTILEVER
OVER PAD FOUNDATION.











O3 INTERNAL EXISTING
S400 FOUNDATION DETAIL
1:20

10. Appendix B

S CHICK INVESTIGATIONS LTD



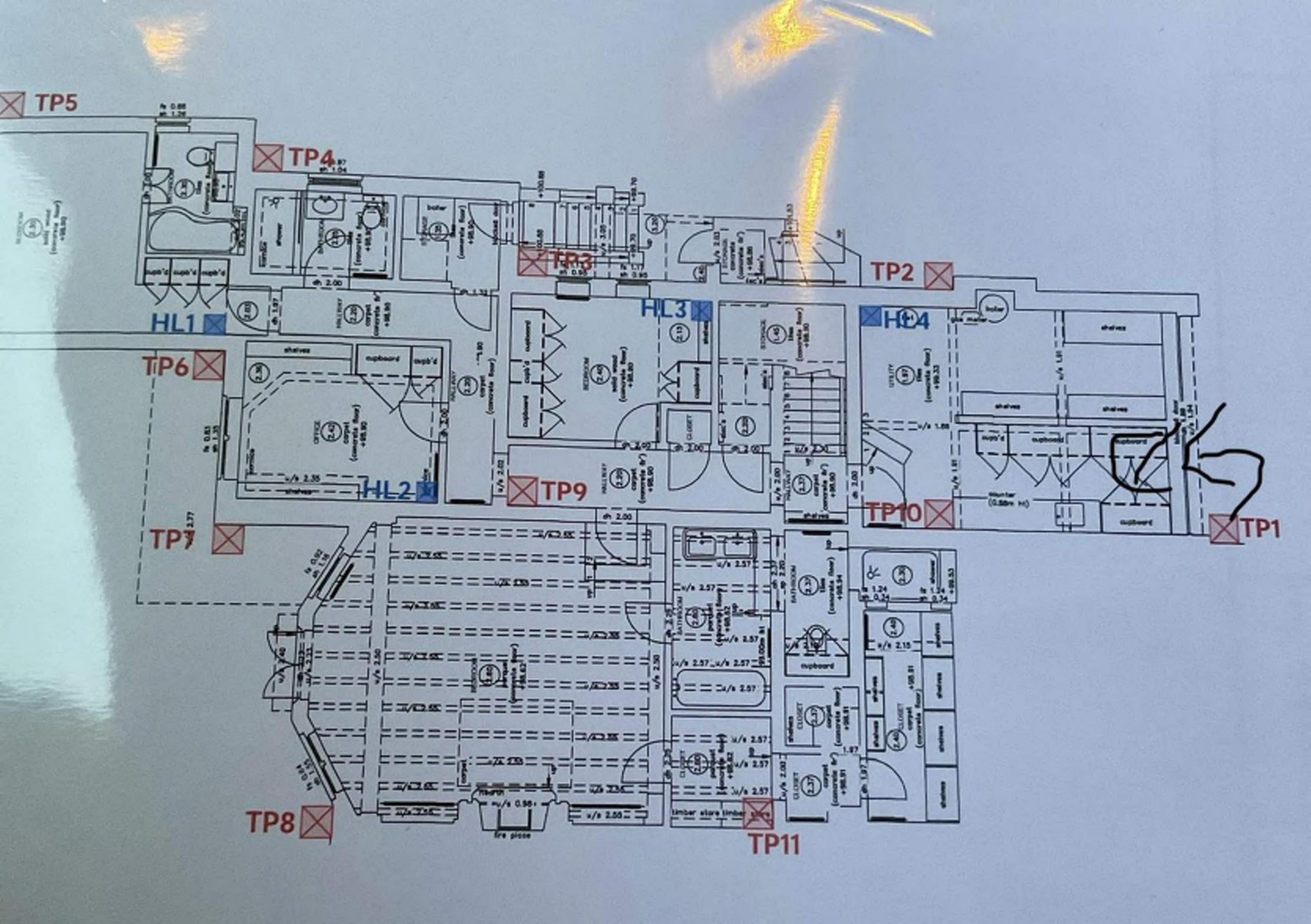
Factual Report of Investigation

AT: 41 Hollycroft Avenue, NW3

ON: 27/09/24

FOR: Float

S CHICK INVESTIGATIONSLTD
26 FERRARO CLOSE
HESTON
TW5 0UL
07508358424



Trial Pit No: 1	Sheet: 1 of 1	SCI		
Client: Float	Date: 27.09.2024	Site: 41 Hollycroft Avenue, NW3		
	INTERN	NAL.		
RENDERED WALL	FLOOR LEVEL			
——————————————————————————————————————	CONCRETE SLAB ⁴ A 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	24		
		350 		
D V 78 84				
	TRIAL PIT END	9S AT 500mm		

Remarks:

Client: Float Da		
	ate: 27.09.2024	Site: 41 Hollycroft Avenue, NW3
BRICK 110 002 4 4 4 4 4 4 4 4 4 4 4 4 4	TRIAL PIT END	GROUND LEVEL SLABS A CONCRETE A A A A A A A A A A A A A A A A A A

BRICK Stiff orange brown grey veined stifty CLAY with partings of orange sitty fine sand.	Trial Pit No: 6	Sheet: 1 of 2	SCI
BRICK SLABS CONCRETE MADE GROUND Involving soldy sing citing with habits Similar than the work soldy sing citing with habits Similar than the sold sold sing citing with habits Similar than the sold sold sing citing with the sold sold sold sing citing with habits Similar than the sold sold sold sold sold sold sold sold	Client: Float	Date: 27.09.2024	Site: 41 Hollycroft Avenue, NW3
TRIAL PIT ENDS AT 1700mm	BRICK BRICK 350 CONCRETE 4 FOUNDATION 4 A A A A A A A A A A A A A A A A A A A	SECTION A	GROUND LEVEL SLABS CONCRETE MAMEGROUND factium vonpoly dark brown saidw sills clay with rubble Stiff orange brown grey veined sity CtAY with partings of orange sity fine sand.

Trial Pit No: 6	Sheet: 2 of 2	SCI
Client: Float	Date: 27.09.2024	Site: 41 Hollycroft Avenue, NW3
BRICK 190	SECTION E	
Remarks:		

Trial Pit No: 7	Sheet: 1 of 1	SCI	
Client: Float	Date: 27.09.2024	Site: 41 Holly	ycroft Avenue, NW3
BRICK 35 CONCRETE FOUNDATION A A A A A A A A A A A A A	%	NDS AT 1700mm	SLABS SLABS MADE GROUND medium compact dark-brown sandy sity clay with puble. Roists observed to 3mmo Stiff orange brown grey veined— sitty CEAY with partings of orange sitt/fine sand. X X X X X X X X X X X X X

Trial Pit No: 8	Sheet: 1 of 1	SCI	
Client: Float	Date: 27.09.2024	Site: 41 Holly	ycroft Avenue, NW3
BRICK 70 21 WELL CEMENTED CLINKER CONCRETE FOUNDATION A A A A A A A A A A A A A A A A A A A	112 116	DS AT 1200mm	GROUND LEVEL YOPSOR MADE GROKIND medium compact mid brown gravelly sifty elay with rubble Roots observed in 12mmo. Stiff orange brown grey veined silty × CLAY with partings of orange silt/fine sand × × Hair and fibrous roots observed.

Trial Pit No: 8	Sheet: 1 of 1	SCI	
Client: Float	Date: 27.09.2024	Site: 41 Holl	ycroft Avenue, NW3
BRICK BRICK 70 21 WELL CEMENTED CLINKER CONCRETE FOUNDATION A A A A A A A A A A A A A A A A A A A	22 028 112 116	DS AT 1200mm	GROUND LEVEL You Solk

Trial Pit No: 9	Sheet: 1 of 1	SCI
Client: Float	Date: 27.09.2024	Site: 41 Hollycroft Avenue, NW3
BRICK 7.2 P	TRIAL PIT EN	FLOOR LEVEL A CONCRETE A A A A A A A A A A A A A A A A A A A

Client: Float Date: 27.09.2024 Site: 41 Hollycroft Avenue, NW3 GROUND LEVEL GROUND LEVEL A CONCRETE Solid Convenience Street Stre	Trial Pit No: 10	Sheet: 1 of 1	SCI
BRICK A CONCRETE	Client: Float	Date: 27.09.2024	Site: 41 Hollycroft Avenue, NW3
TRIAL PIT ENDS AT 700mm	DV112	* 500 * 75 * .	MADE GROUND medium compact dark brown gravelly clayey silt with mable. Stiff orange brown grey veined silty CLAY with partings of orange silt/fine sand. ———————————————————————————————————

Trial Pit No: 11	Sheet: 1 of 1	SCI
Client: Float	Date: 27.09.2024	Site: 41 Hollycroft Avenue, NW3
BRICK BRICK WELL CEMENTED A CLINKER CONCRETE FOUNDATION DV 9	300 275 775 150	FLOOR LEVEL PARQUET CONCRETE MADE GROUND medium compact dark brown gracely clave spirit with public. Stiff orange brown grey vejned silty— CLAY with partings of orange— silt/fine sand.— SIDS AT 1000mm

OPENING UP: 1&2	Sheet: 1 of 1	SCI
Client: Float	Date: 27.09.2024	Site: 41 Hollycroft Avenue, NW3
<u>HL 1</u>		
	CONC	CRETE LINTEL 150 X 90
	PLASTERBOARD	JOISTS ARE 50 X ? @ 280 CENTRES
<u>HL 2</u>	FLOOR	
		JOISTS ARE 170 X 50 @ 280 CENTRES JOISTS RUN FRONT TO BACK
	PLASTERBOARD	
Remarks:		

OPENING UP: 3&4	Sheet: 1 of 1	SCI
Client: Float	Date: 27.09.2024	Site: 41 Hollycroft Avenue, NW3
<u>HL 3</u>		
		FLOOR
	PROX	
	1600 APPROX	
		JOISTS ARE 170 X 50 @ 200 CENTRES
	+	
	190	JOISTS ARE 70 X 40 @ 470 CENTRES JOISTS RUN FRONT TO BACK
	PLASTERBOARD	
<u>HL 4</u>		JOISTS ARE 170 X 50 @ 350 CENTRES JOISTS RUN SIDE TO SIDE
	PLASTER & MESH	JOISTS RUN SIDE TO SIDE

