JH Groundwater Ltd
Hydrogeological Solutions

28 HARLEY ROAD, NW3. SUBTERRANEAN AND SURFACE WATER BASEMENT IMPACT ASSESSMENT - SCREENING AND SCOPING REPORT

CONSTRUCT 360

March 2016

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REVISION Record

	Revision 0	Revision 1	Revision 2	Revision 3
Project Number	1053	1053	1053	
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Description of Revision	Draft	Final	Final	
Prepared by	Julian Hatherall and Paul Timmins	Julian Hatherall and Paul Timmins	Julian Hatherall and Paul Timmins	
Approved by	Julian Hatherall	Julian Hatherall	Julian Hatherall	
Revision date	20/01/2016	22/01/2016	22/03/2016	
Notes			Revised following receipt of comments from Camden	

CONTENTS

APPENDICES

1 Introduction

1.1 Introduction

This report presents the outcome of a subterranean and surface water basement impact assessment for the proposed development at 28 Harley Road, Swiss Cottage, London NW3 3BN (Figure 1). The site is located at NGR TQ 2701 8399. The local planning authority is Camden.

The structure of this report follows that of a subterranean and surface water basement impact assessment compliant with Camden Borough CPG4 dated 2015[1].

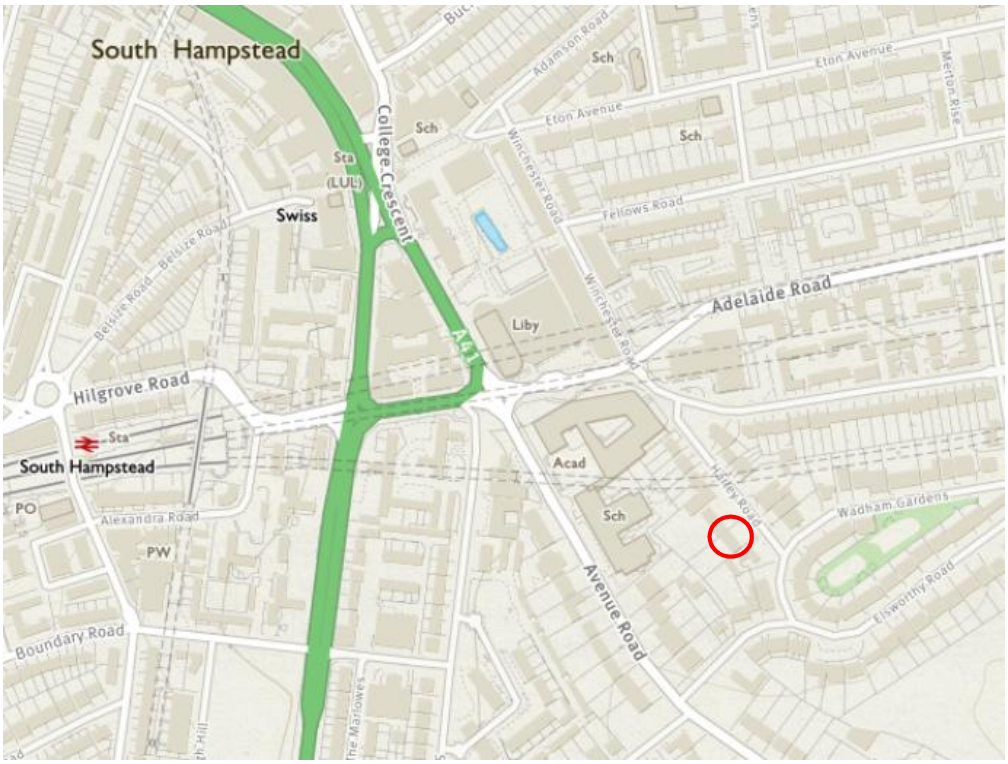


Figure 1 Site Location.

1.2 Proposed basement works

The site is located on the southwest side of Harley Road, London NW3, just to the north of the junction with Wadham Gardens. The existing building is 3 storeys high including rooms in the loft, with a small single storey extension to the rear. Planning permission is being sought for a basement under the footprint of main house. Please note that this assessment covers the basement only and that no consideration is given to drainage issues in relation to above ground extension works to the rear of the property.

[1] London Borough of Camden, July 2015. Camden Planning Guidance (CPG), Basements and lightwells CPG4.

Whilst the base of the existing lower ground floor reaches about 1.0 m below street level, the proposed development involves excavating beneath the existing building to a depth of approximately 3.5 m below the existing property level. In addition to the excavation of the basement below the existing property a new extension will be constructed to the rear (south) of the property that adds a reception room and roof terrace.

Appendix 1 show the existing and planned designs for the property and the basement outline.

1.3 Report Authors

JH Groundwater Ltd was instructed in January 2015 to complete this report. It does not include a stability or structural assessment which has been produced by others.

The report has been prepared by Julian Hatherall BSc(Hons), MSc, CGeol, EurGeol, FGS and Paul Timmins BEng(Hons) CEng MICE.

Julian Hatherall is a Chartered Geologist with 19 years of experience providing advice on groundwater and hydrogeological issues and has significant knowledge of the assessment and management of groundwater and water resources. His experience encompasses both contaminant and water resource hydrogeology and includes baseline groundwater studies, groundwater risk assessment, groundwater advice in relation to the development of infrastructure and buildings including drainage, groundwater in the extractive industry, waste management and the development and management of groundwater abstractions. He has regularly contributed to Environmental Impact Assessments, has previously provided specialist hydrogeological support to regulators and has experience in the field of groundwater flooding and SuDS.

Paul Timmins is a Chartered Civil Engineer with eighteen years of experience in the design and management of civil engineering projects in Britain and Ireland. His professional background encompasses infrastructure engineering disciplines, such as; flood risk assessment, drainage design, SuDS design and hydraulic network modelling. He also manages technical advice for environmental baseline studies to support planning applications for residential, commercial and educational developments.

2 Basement Impact Assessment Screening - Groundwater

The following subterranean (groundwater) screening follows the procedure outlined in CPG4 (2015).

1) (a) Is the site located directly above an aquifer?

NO. The geological map and the nearest off-site boreholes[2] indicate that significantly permeable superficial deposits are not likely to be present beneath the site.

The geological map and the nearest off-site boreholes and site investigation Trial Pits for structural purposes[3] recorded no Made Ground overlying London Clay (classified by the EA as Unproductive Strata). Subsequent trial pitting recorded Made Ground of up to 0.5m in two trial pits (TPs 2 and 3) and up to 2.7m in TP1. The results of which are attached in Appendix 2. Some localised groundwater may be associated with the Made Ground but, based on available information this is not considered to be extensive and can be controlled by localised dewatering during the works.

Boreholes records consulted from within 500m of the proposed development show little or no evidence of groundwater strikes. Although some localised groundwater strikes are possible this formation does not constitute an aquifer. An absence of groundwater strikes was confirmed during the ground investigation trial pitting (appendix 2) and no subsequent groundwater monitoring was therefore undertaken.

Some of the boreholes in the wider area show a thin layer of grey-brown clay and stones, possibly Head, above the London Clay although NERC (2006)[4] does not show an area of Head to be present at the site.

A considerable thickness of London Clay (possibly in excess of 60m) is present which isolates the deeper aquifer units of the London Basin aquifer from the surface.

None of these deposits can be considered an aquifer.

The site is shown to be located within a groundwater source protection zone but this is associated with the Barrow Hill Abstraction Borehole which abstracts groundwater from the Chalk beneath the London Clay and is not significant to the current assessment.

1) (b) Will the proposed basement extend beneath the water table surface?

NO. There is no aquifer directly beneath the site. The London Clay is not an aquifer and therefore does not support a water table.

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

NO. There are no current surface water bodies within 100m of the site. There are no known water wells within 100 m of the site. Geological conditions indicate no potential for development of a spring line.

[2] British Geological Survey Geoindex http://www.bgs.ac.uk/geoindex/ accessed 17/1/16.

[3] Michael Chester and Partners (2015). Structural Report to Accompany Planning application.

[4] NERC, 2006. British Geological Survey 1:50 000 map for North London (Sheet 256).

Nicholas Barton (1993)[5] indicates two upper tributaries of the Tyburn both running generally north/south, one approximately 100m to 125m to the east of the site and one approximately 100m to 125m to the west. No mapped superficial deposits are shown to be associated with these tributaries although the site investigation will assist in proving conditions below the site.

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 external areas?

NO. There is no proposal for a change to the area of hardstanding on the site.

5) As part of the site drainage, will more surface water (e.g. rainfall and runoff) than at present be discharged to the ground (e.g. via soakaways and/or SuDS)?

NO. The use of SuDS is not proposed as part of this development and no additional rainfall runoff will be discharged to ground.

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 or spring line?

NO. The nearest mapped water body at 1:25 000 scale is the Grand Union Canal about 800m to the south east. Ponds in Regents Park are located at a distance of more than 800m and are topographically below the lowest level of the basement. This is too far from the site to be a concern, especially given that there are considered to be no significant permeable superficial deposits beneath the site.

[5] Barton, N.J., 1993. The Lost Rivers of London 3rd edition.

3 Basement Impact Assessment Screening - Surface Water

The development is in Flood Zone 1 (see Flood Map for Planning in Appendix 3). The Technical guidance accompanying the National Planning Policy Framework states that a Flood Risk Assessment would be required for sites over a hectare in area or for those developments that have the potential to increase the risk of flooding elsewhere.

The surface flow and flooding screening below follows the procedure outlined in CPG4 (2015). Please note that this assessment relates to the basement only and that no consideration is given to drainage issues in relation to above ground extension works to the rear of the property.

1) 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.

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 volume of rainfall runoff and the peak run-off rate will not change due to the development proposals.

3) Will the proposed basement development result in a change in the proportion of hard surfaced / paved external areas?

NO. There is no proposal for a change to the area of hardstanding on the site.

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 proposed basement will have no effect on the quality of surface water being received by adjacent properties or downstream watercourses.

5) Will the proposed basement result in changes to the quality of surface water being received by adjacent properties or downstream watercourses?

NO. The proposed basement will have no effect on surface water being received by adjacent properties or downstream watercourses.

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 site is not within an area identified as having surface water flood risk according to the Camden Flood Risk Management Strategy, or the Strategic Flood Risk Assessment[6] (SFRA) dated 2014.

Although Figure 3v of the SFRA (see Appendix 3) identifies Harley Road as being flooded in 1975 (as shown in Orange), the development site is shown to be remote from the current mapped areas at risk of surface water flooding (as shown in shades of Blue). The site may therefore be described as being at a Very Low risk

[6] URS, 2014. London Borough of Camden SFRA Strategic Flood Risk Assessment.

of surface water flooding. It is possible that the flooding of Harley Road in 1975 could have been located at the northern end of the road, which would coincide with the location of surface water flooding predicted by the Environment Agency's latest modelling data.

The SFRA includes data from Thames Water Utilities Ltd DG5 Internal Sewer Flood Register for the study area. This data comprises the number of properties within 4 digit postcode areas that have experienced flooding either internally or externally within the last 10 years. The data shows that the Site is located within an area affected by internal sewer flooding in the past 10 years. The map shows that eight properties were affected. However, a site specific report regarding the incidents of sewer flooding at the development site was ordered from Thames Water (Appendix 4), which confirms that no flooding from sewer sources has occurred at the site.

The Environment Agency website also confirms that the site is not at risk from Reservoir flooding.

4 Conceptual Site Model

4.1 Drainage and topography

Based on Ordnance Survey 1:50 000 mapping the ground surface around the site slopes gently southwards. Elevation of the site is estimated to be approximately 48m above Ordnance Datum (AOD).

There are no surface water features near the site. Nicholas Barton (1993) indicates two upper tributaries of the Tyburn both running generally north/south, one approximately 100m to 125m to the east of the site and one approximately 100m to 125m to the west. According to Michael Chester and Partners (2015) a 1920 geological map generally considered to be more accurate shows the tributary to the west at about 100m distant and the tributary to the east about 250m from the site.

No surface water flooding has been identified as affecting adjacent properties although the SFRA (URS, 2014) does state that Harley Road was subject to flooding in 1975. The location of the property itself is not highlighted at risk of surface water flooding in any of the reports consulted.

4.2 Geology and hydrogeology

Bedrock at the site comprises London Clay (classified by the EA as Unproductive Strata). According to NERC (2006), this is interpreted to be at least 60m thick and isolates the main aquifer of the London Basin from the surface. Nearby borehole records available from the British Geological Survey also show minimal superficial deposits, with some areas of thin Made Ground and/or Head over London Clay.

Many boreholes in the surrounding are with records viewed in the BGS GeoIndex were recorded as containing little or no water. This is typical of the London Clay. However, small discrete pockets of groundwater can be present in fractures as well as within top soils and around existing foundations. No groundwater strikes were identified during excavation of trial pits in March 2016.

It is concluded that there is not an aquifer directly beneath the site, and there is no water table in the low permeability near-surface formations.

5 Scoping

The purpose of scoping is to assess in further detail the factors to be investigated in the impact assessment. Potential consequences are assessed for each of the identified potential impact factors. Land stability is being assessed under separate cover.

Potential Impact	Possible Consequence and Actions
Available geological information indicates that there is no aquifer directly beneath the site. This means that there is insignificant risk of changing groundwater flow patterns beneath 28 Harley Road. Trial Pit excavations have been used to show that the London Clay at the site doesn't not contain a water table or significant volumes of groundwater. The London Clay is not considered to be an aquifer.	The presence of an aquifer could result in adverse groundwater flows. Literature data and site investigation data demonstrates that London Clay is present and there is an absence of significantly permeable strata. Based on updated information from the site investigation undertaken in early March 2016, no further action is proposed.

6 Basement Impact Assessment and Conclusions

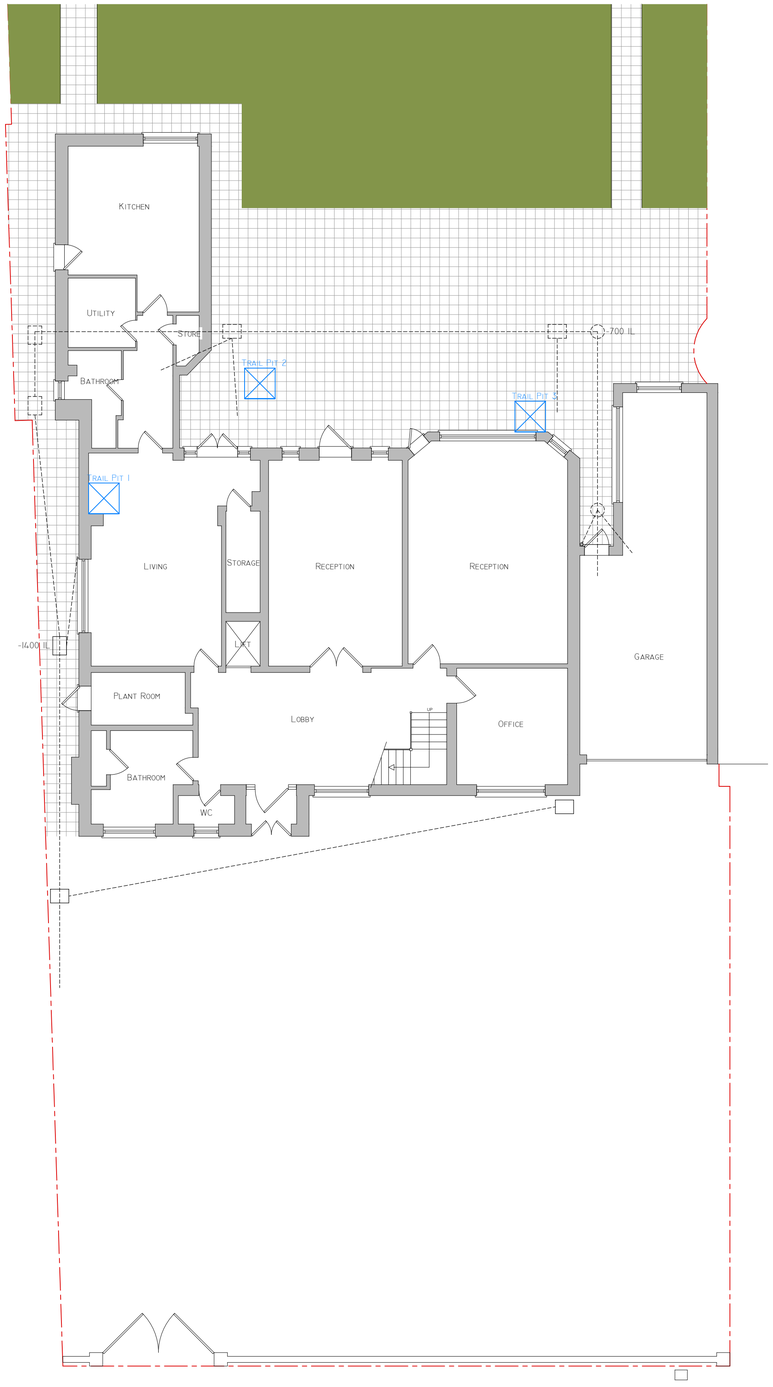
Potential environmental impacts of the proposed basement development at 28 Harley Road have been considered. The following summary conclusions are made:

- There will be no increase in man-made impermeable area associated with the basement development plans so the amount, timing and quality of surface water runoff will not be materially changed by the development.
- Surface water flooding has historically affected properties on the street but the exact location of this has not been established. However there is no evidence of high future flood risk at Number 28 Harley Road based on available data.
- Available geological information strongly indicates that there is no aquifer directly beneath the site and no groundwater strikes were observed. This indicates that the basement will pose an insignificant risk of changing groundwater flow patterns beneath the property.

No further assessment is recommended.

Appendices

Appendix 1 – Development Proposals



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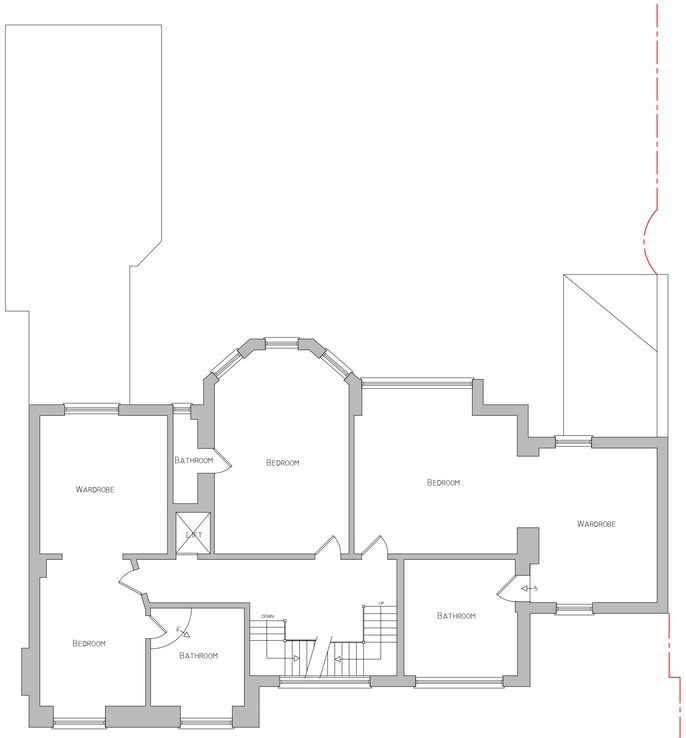

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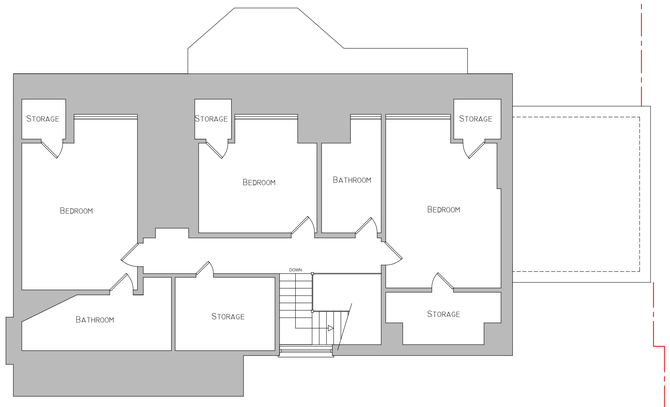
SCALE 1:100



EXISTING LOFT FLOOR PLAN
SCALE 1:100

0 5 10
Meters 1:100

Legend	
Walls Removed	
New Walls	
Existing Walls to Remian	
Roof Structure	
Sound Seperating Walls	
Boundary	

IMPORTANT GENERAL NOTE
The specification is to be read in conjunction with the plans/section details, and other associated Structural details as may be provided.
All work is to be carried out to the Local Authority Planning and Building Regulations Approval, and the Codes of Practice and British Standards as necessary.
All dimensions, levels, sizes, positions and locations of particulars as indicated on drawings are to be verified by the appointed Contractor on site prior to engaging in works. Any discrepancies must be reported to the Architect/Surveyor/Engineer or responsible person/s immediately.
The Contractor is responsible for ensuring compliance with the CDM Regulations, and appropriate Health & Safety on site precautions.
The Client/Building Owner must obtain any necessary PARTY WALL AGREEMENTS, prior to engaging in the works on site.

Revison	Date	Description
A	18.01.16	Drains Added

Paper Size: A1
Scale: 1:100
Revision: A
Oct-15
Drawn By/Checked By: AP/HW

Contact 360 Ltd. Trading as:
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info@constrct360.co.uk
Tel: 0208 206 0011

Site Address:
28 Harley Road
London
NW3 3BN

Existing Plans

Drawing Number: HR28-1001

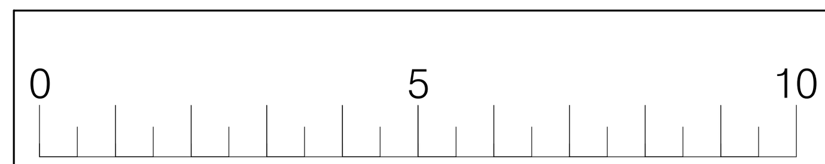
Please note that construction must only commence once planning, building control and any other approvals have been received. It is the responsibiltity of the owner/contractor to commence prior to these approvals.

EXISTING FRONT ELEVATION
SCALE 1:100

EXISTING SIDE ELEVATION
SCALE 1:100

EXISTING REAR ELEVATION
SCALE 1:100

EXISTING SIDE ELEVATION
SCALE 1:100



Legend	
Walls Removed	
New Walls	
Existing Walls to Remian	
Roof Structure	
Sound Seperating Walls	
Boundary	

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Revision	Date	Description

Paper Size: A1

Scale: 1:100

Revision: 1st

Oct-15

Drawn By/Checked By: AP/HW

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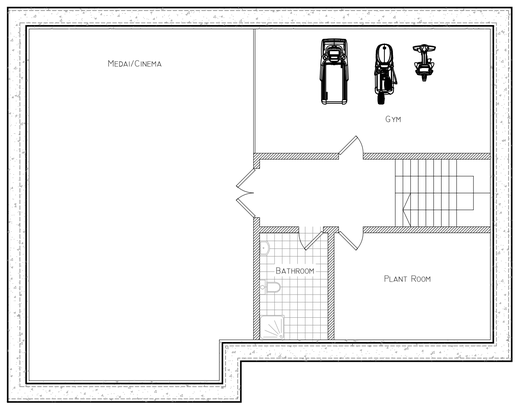
Site Address: 28 Harley Road
London
NW3 3BN

Existing Elevations

Drawing Number: HR28-1002



Proposed Basement Floor Plan
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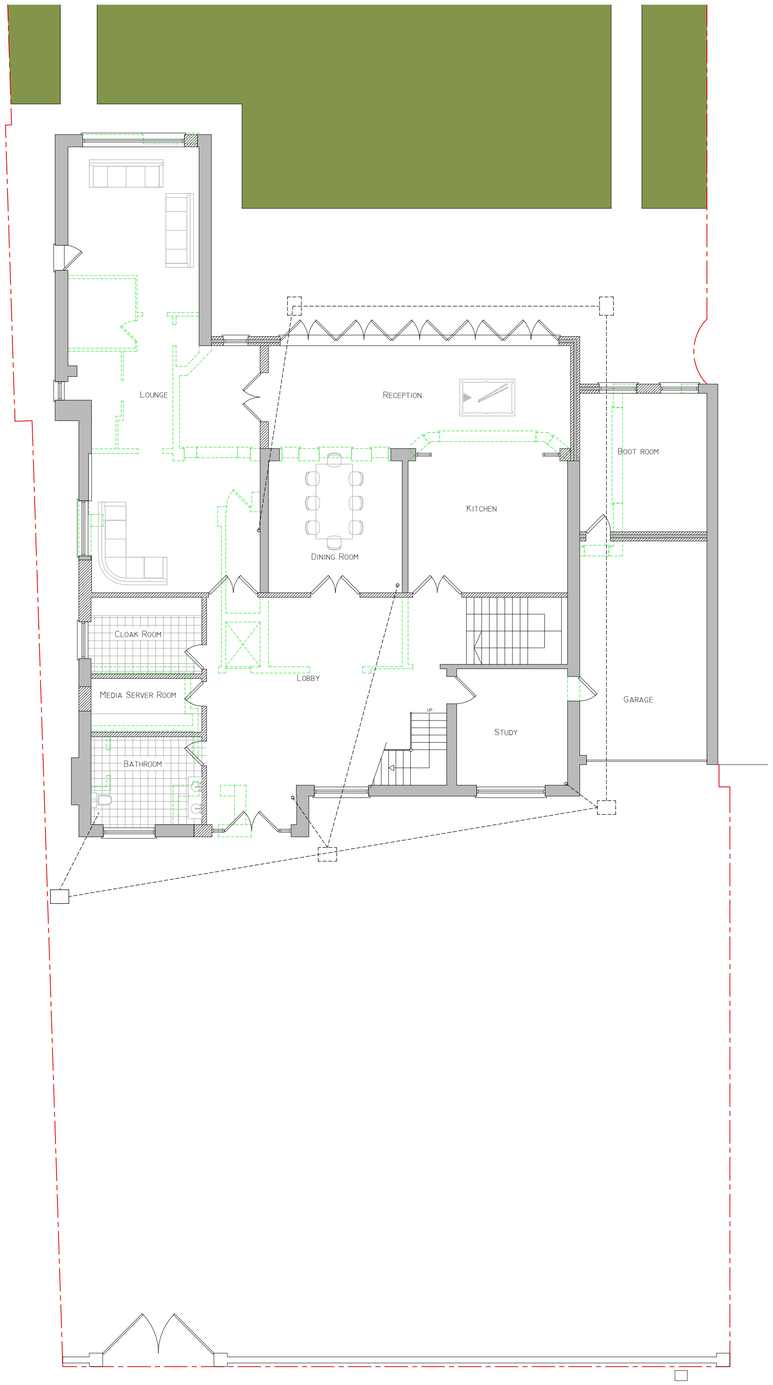

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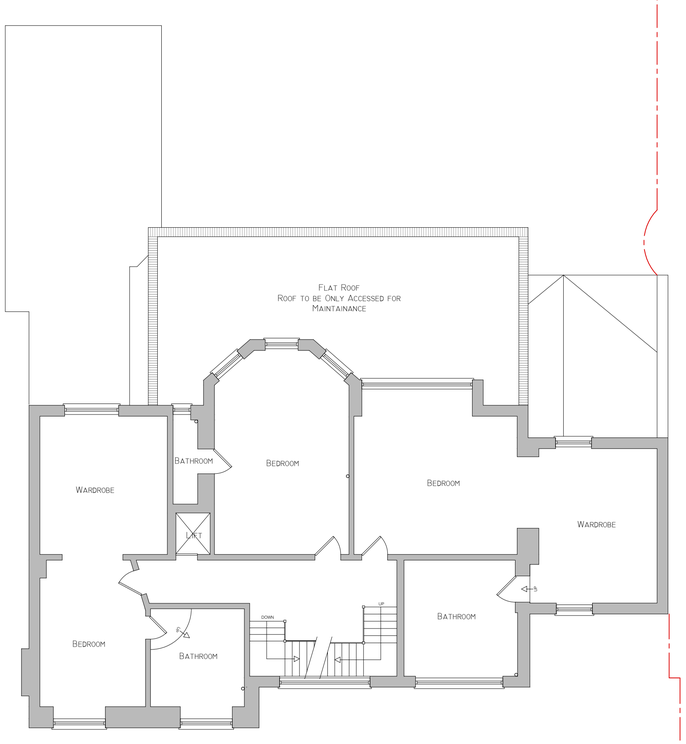
Scale 1:100



Proposed First Floor Plan
Scale 1:100

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Meters 1:100

Legend	
Walls Removed	
New Walls	
Existing Walls to Remian	
Roof Structure	
Sound Seperating Walls	
Boundary	

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All work is to be carried out to the Local Authority Planning and Building Regulations Approval, and to the British Standard Code of Practice where applicable
All dimensions, levels, sizes, positions and locations of particulars as indicated on drawings are to be verified by the appointed Contractor on site prior to engaging in works. Any discrepancies must be reported to the Architect/Surveyor/Engineer or responsible person/s immediately.
The Main Contractor is responsible for ensuring compliance with the CDM Regulations, and appropriate Health & Safety on site precautions.
The Client/Building Owner must obtain any necessary PARTY WALL AGREEMENTS, prior to engaging in the works on site.

Revision	Date	Description
A	18.01.16	Drains Added
B	01.02.16	Lightwell Removed
C	01.03.16	Roof Terrace Removed

Paper Size: A1
Scale: 1:100
Revision: B
Oct-15
Drawn By/Checked By: AP/HW

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Site Address:
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Proposed Plans

Drawing Number:
HR28-1003C

Please note that construction must only commence once planning, building control and any other approvals have been received. It is the responsibiltity of the owner/contractor to commence prior to these approvals.

Proposed Front Elevation
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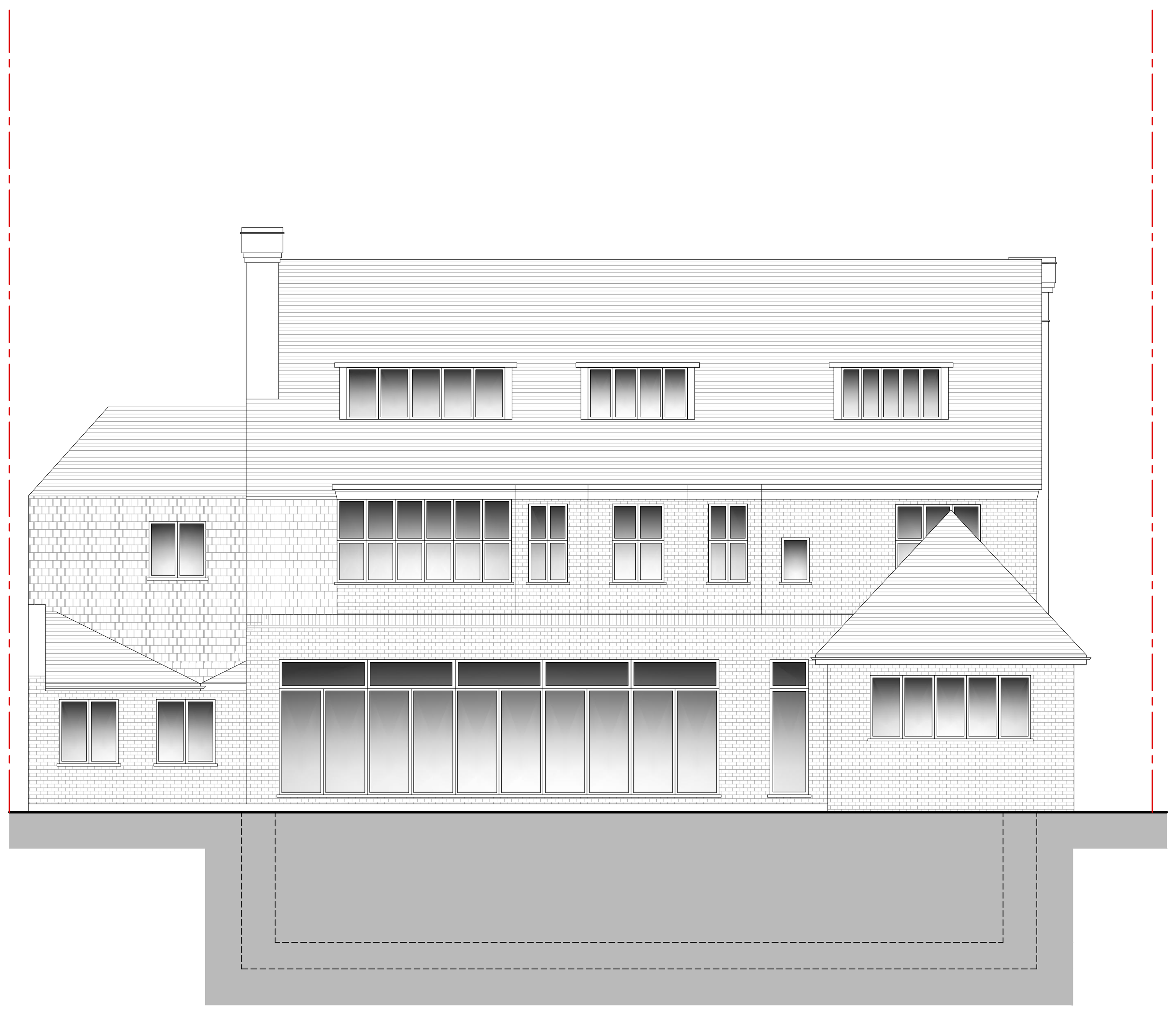
Proposed Side Elevation
Scale 1:100



Proposed Rear Elevation
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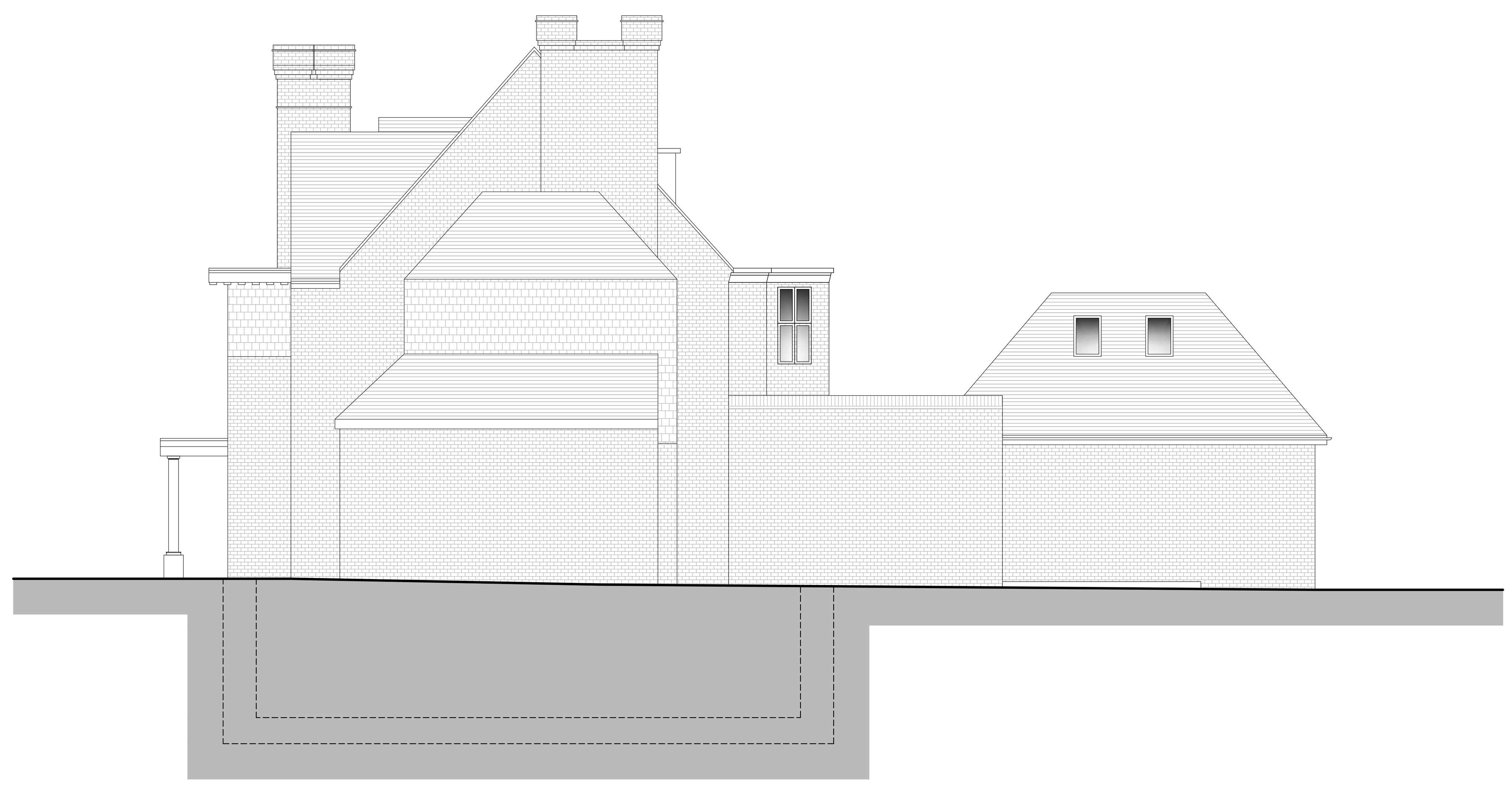

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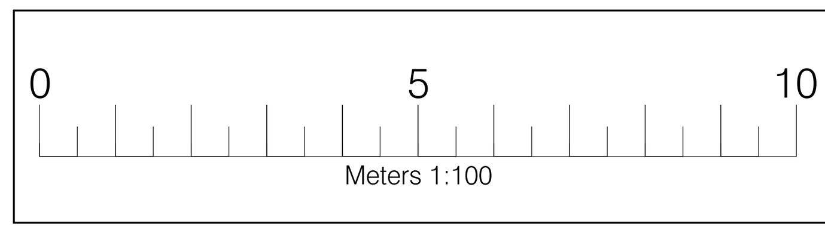

Legend	
Walls Removed	green dashed line
New Walls	hatched
Existing Walls to Remian	grey fill
Roof Structure	orange dashed line
Sound Seperating Walls	orange cross-hatch
Boundary	red dash line

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Revision	Date	Description
A	01.02.16	Lightwell Removed
B	01.03.16	Roof Terrace Removed

Paper Size: A1
Scale: 1:100
Revision: B
Oct-15
Drawn By/Checked By: AP/HW

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Site Address
28 Harley Road
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NW3 3BN

Proposed Elevations

Drawing Number HR28-1004B

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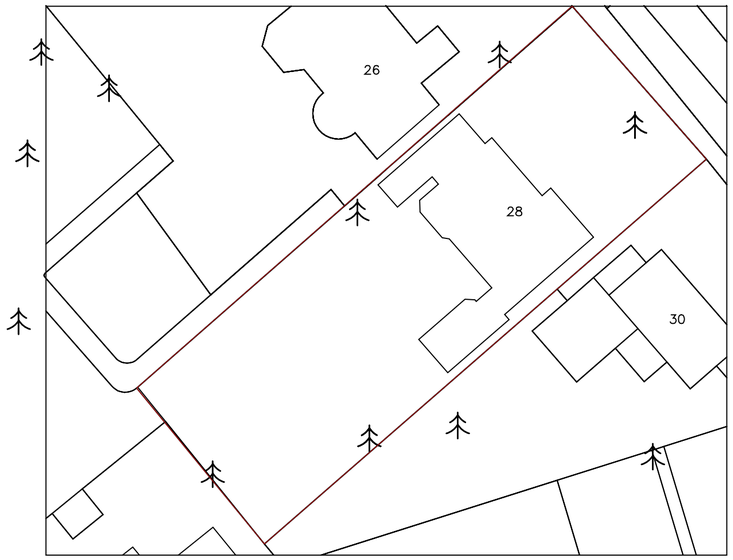

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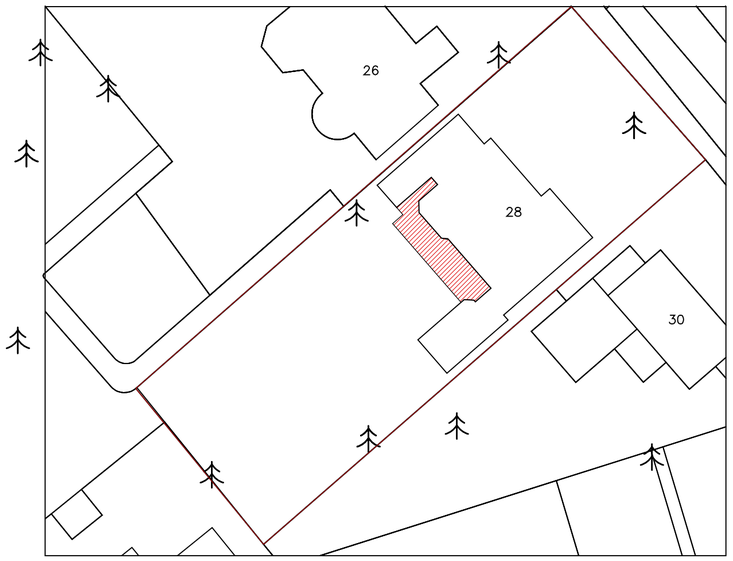

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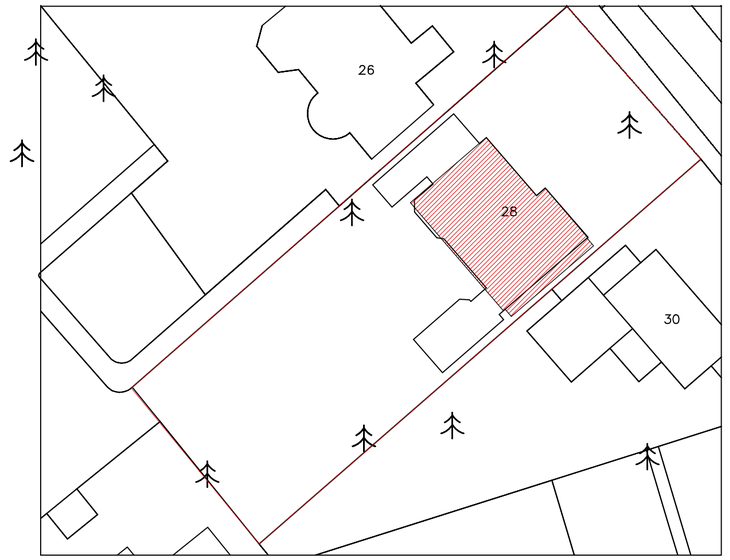
Showing Extensions at Ground Floor Level



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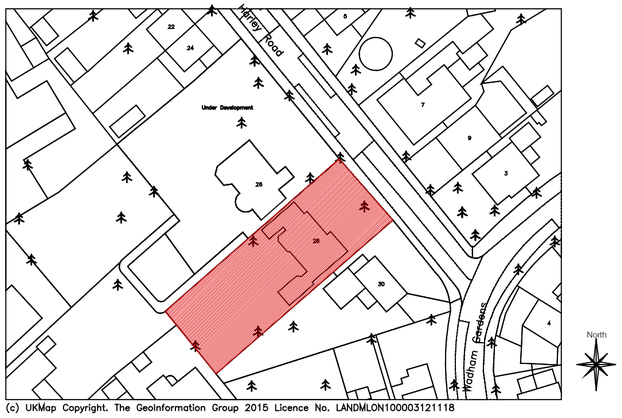
Proposed Block Plan Scale 1:1250
Showing Extensions at Basement Level



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Location Plan Scale 1:1250

0 5 10

Meters 1:100

Legend	
Walls Removed	
New Walls	
Existing Walls to Remian	
Roof Structure	
Sound Seperating Walls	
Boundary	

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Revision	Date	Description

Paper Size: A2

Scale: 1:1250/500

Revision: 1st

Sep-15

Drawn By/Checked By: AP/HW

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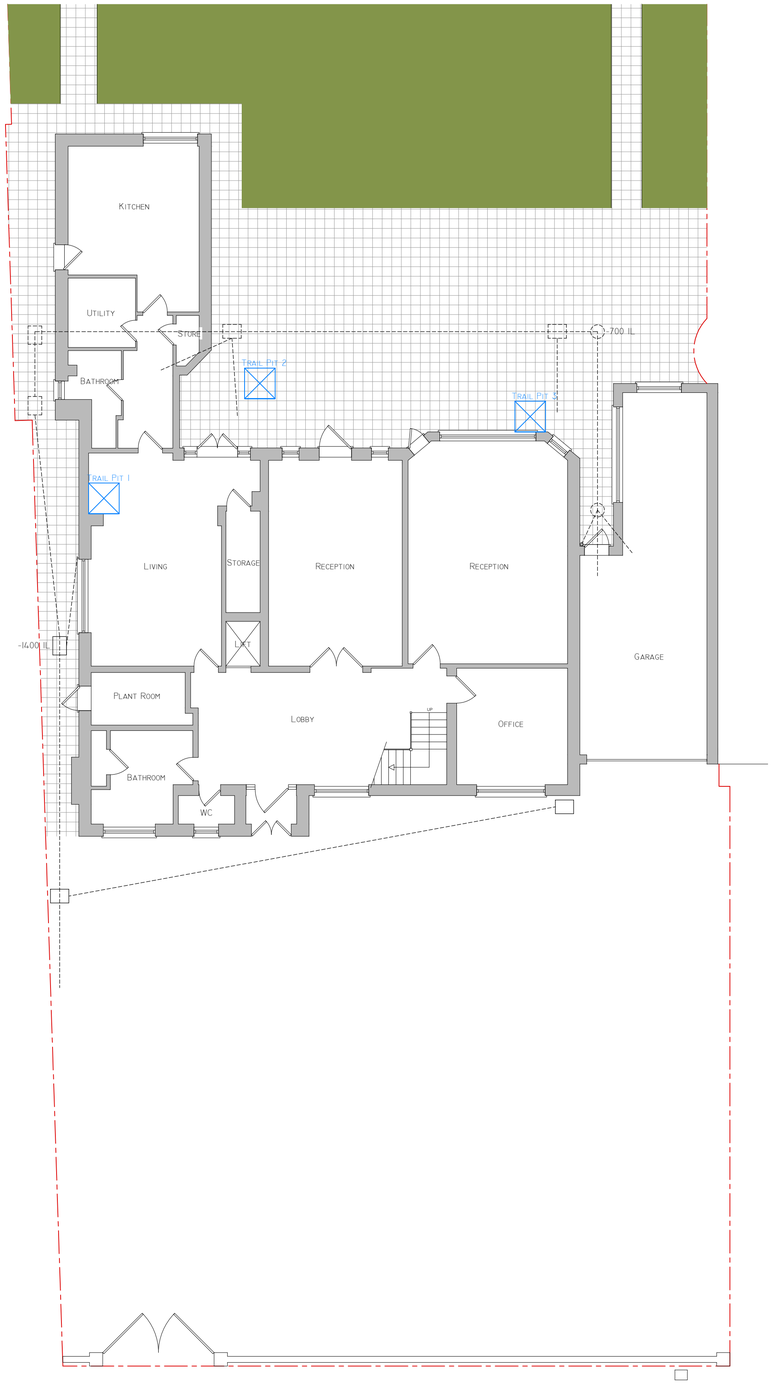
Site Address: 28 Harley Road, London, NW3 3BN

Location & Block Plans

Drawing Number: HR28-1005

Appendix 2 – Ground Investigation Trial Pit Records



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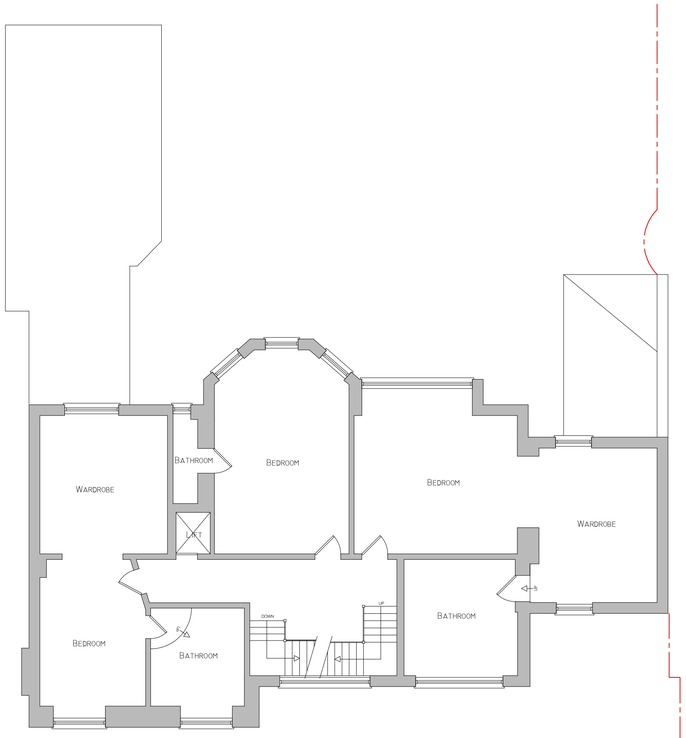
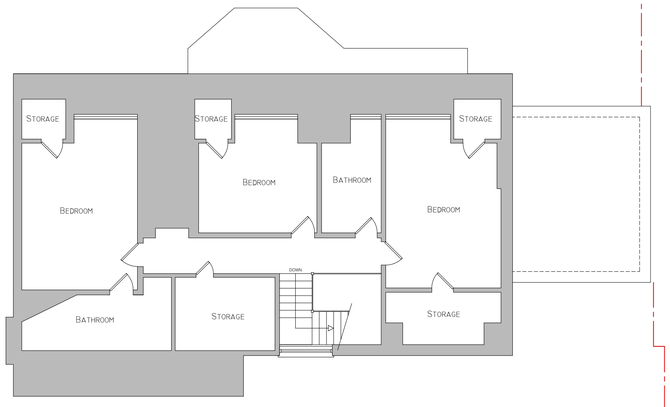
SCALE 1:100



EXISTING FIRST FLOOR PLAN
SCALE 1:100



EXISTING LOFT FLOOR PLAN
SCALE 1:100

0 5 10
Meters 1:100

Legend	
Walls Removed	
New Walls	
Existing Walls to Remian	
Roof Structure	
Sound Seperating Walls	
Boundary	

IMPORTANT GENERAL NOTE
The specification is to be read in conjunction with the plans/section details, and other associated Structural details as may be provided.
All work is to be carried out to the Local Authority Planning and Building Regulations Approval, and the Codes of Practice and British Standards as necessary.
All dimensions, levels, sizes, positions and locations of particulars as indicated on drawings are to be verified by the appointed Contractor on site prior to engaging in works. Any discrepancies must be reported to the Architect/Surveyor/Engineer or responsible person/s immediately.
The Contractor is responsible for ensuring compliance with the CDM Regulations, and appropriate Health & Safety on site precautions.
The Client/Building Owner must obtain any necessary PARTY WALL AGREEMENTS, prior to engaging in the works on site.

Revison	Date	Description
A	18.01.16	Drains Added

Paper Size: A1
Scale: 1:100
Revision: A
Oct-15
Drawn By/Checked By: AP/HW

Contact 360 Ltd. Trading as:
DontMoveExtend.com
Planning Permission Specialists
info@constrct360.co.uk
Tel: 0208 206 0011

Site Address:
28 Harley Road
London
NW3 3BN

Existing Plans

Drawing Number: HR28-1001

OJ Environmental Consultancy

Land Quality Assessors and Contaminated Land Specialists

Depth (m)	Description of strata	Sample	Type	Water	Remarks
0.00-0.10	Concrete Slab	N/A	N/A	Dry	Made Ground. Grass and roots.
0.10-2.60	MADE GROUND comprised of existing concrete columns with occasional cross mesh rebar	N/A	N/A	Dry	Made Ground. Organic fragments estimated at <1%.
2.60-2.70	Firm to stiff brown gravelly sandy CLAY with low subangular concrete cobble. Gravel is angular to subangular concrete and brick (MADE GROUND)	N/A	N/A	Dry	Made Ground. Organic fragments estimated at <1%.
2.60-3.00	Firm becoming stiff with depth greyish brown mottled orange and brown CLAY with rare fine and medium gravel sized roots and rootlets. (LONDON CLAY).	N/A	N/A	Dry	London Clay with Organic fragments estimated at <1%.

Trial Pit Length (m): 8.00 X 7.50 X 3.00

Groundwater Observation: Dry

Shoring: None

Weather: Rain

Comments: Depths are given from lowest point of surface at trial pit location: the base of the landscaped bund at this location. Pits excavated with JCB 3CX tracked excavator with 3ft bucket.

Project	Trial Pit No	Logger	Date	Job No:
28 Harley Road, London	TP01	OJ	05/03/2016	D28H

Trial Pit/Trench Description **TP02**

OJ Environmental Consultancy

Land Quality Assessors and Contaminated Land Specialists

Depth (m)	Description of strata	Sample	Type	Water	Remarks
0.00-0.10	Concrete Slab	N/A	N/A	Dry	Made Ground. Grass and roots.
0.10-0.40	Dark brown slightly gravelly sandy clayey SILT with low subangular brick cobble content. Gravel is angular and subangular fine to coarse flint, concrete and brick. Rare fine ash. (MADE GROUND).	N/A	N/A	Dry	Made Ground. Organic fragments estimated at <1%.
0.40-3.00	Firm becoming stiff with depth greyish brown mottled orange and brown CLAY with rare fine and medium gravel sized roots and rootlets. (LONDON CLAY).	N/A	N/A	Dry	London Clay with Organic fragments estimated at <1%.

Trial Pit Length (m): 2.00 X 1.50 X 3.00

Groundwater Observation: Dry

Shoring: None

Weather: Rain

Comments: Depths are given from lowest point of surface at trial pit location: the base of the landscaped bund at this location. Pits excavated with JCB 3CX tracked excavator with 3ft bucket.

Project	Trial Pit No	Logger	Date	Job No:
28 Harley Road, London	TP02	OJ	05/03/2016	D28H

Trial Pit/Trench Description **TP03**

OJ Environmental Consultancy

Land Quality Assessors and Contaminated Land Specialists

Depth (m)	Description of strata	Sample	Type	Water	Remarks
0.00-0.10	Concrete Slab	N/A	N/A	Dry	Made Ground. Grass and roots.
0.10-0.50	Dark brown slightly gravelly sandy clayey SILT with low subangular brick cobble content. Gravel is angular and subangular fine to coarse flint, concrete and brick. Rare fine ash. (MADE GROUND).	N/A	N/A	Dry	Made Ground. Organic fragments estimated at <1%.
0.50-3.00	Firm becoming stiff with depth greyish brown mottled orange and brown CLAY with rare fine and medium gravel sized roots and rootlets. (LONDON CLAY).	N/A	N/A	Dry	London Clay with Organic fragments estimated at <1%.

Trial Pit Length (m): 2.00 X 1.50 X 3.00

Groundwater Observation: Dry

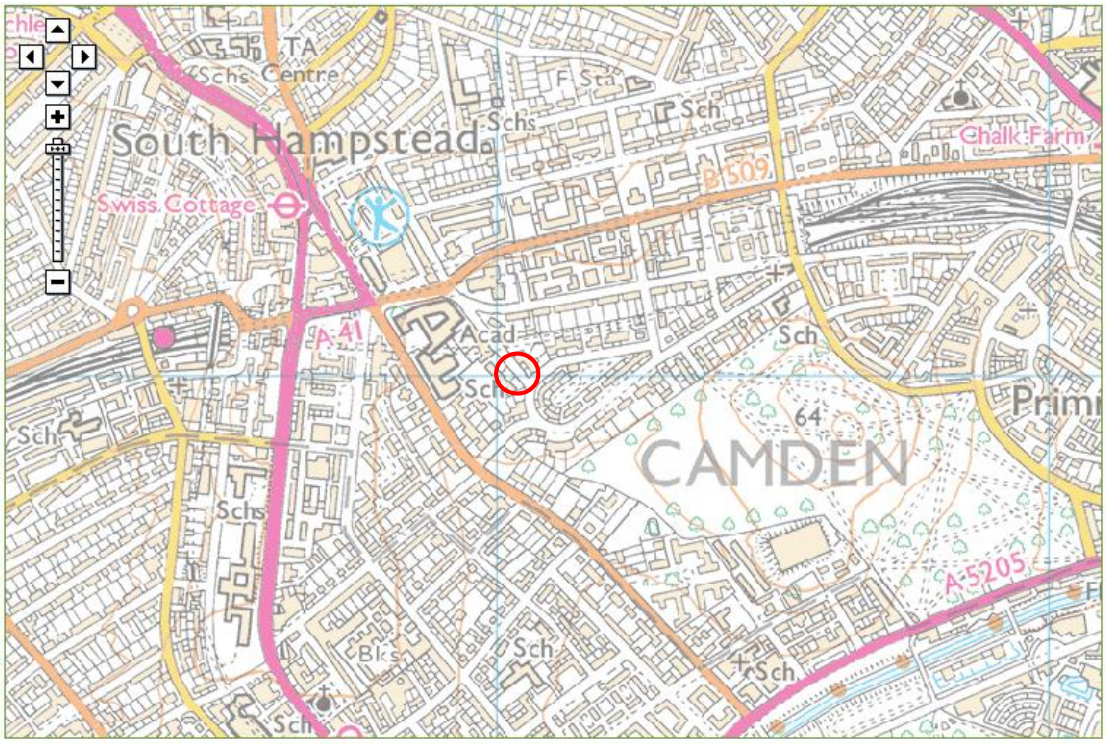
Shoring: None

Weather: Rain

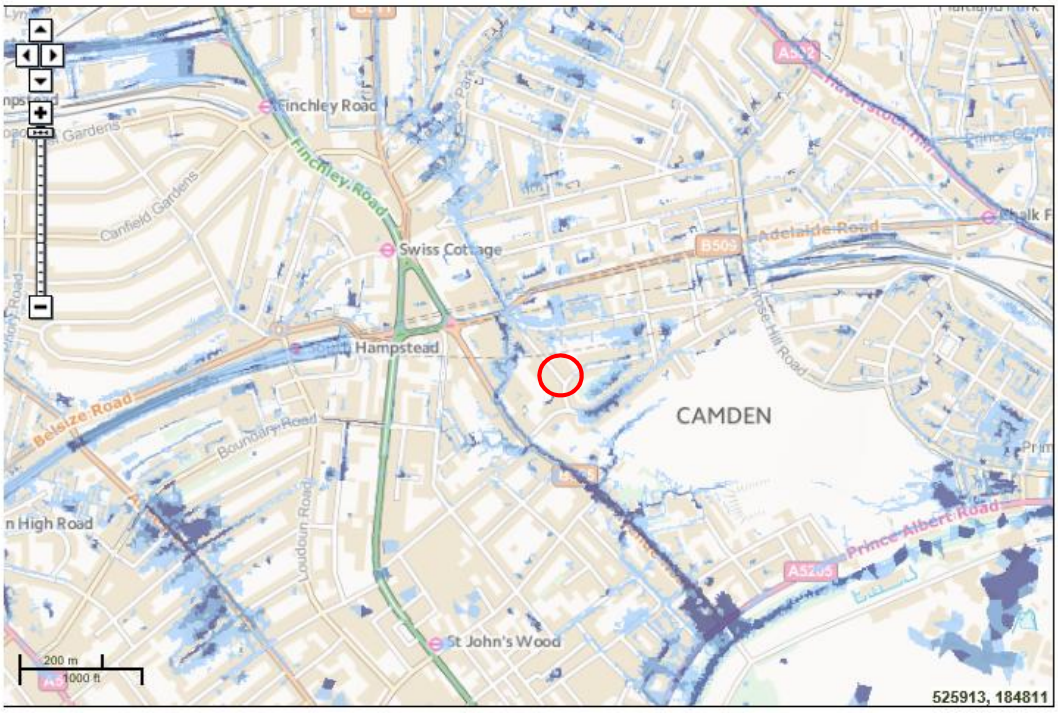
Comments: Depths are given from lowest point of surface at trial pit location: the base of the landscaped bund at this location. Pits excavated with JCB 3CX tracked excavator with 3ft bucket.

Project	Trial Pit No	Logger	Date	Job No:
28 Harley Road, London	TP03	OJ	05/03/2016	D28H

Appendix 3 – Extracts of Relevant Drawings



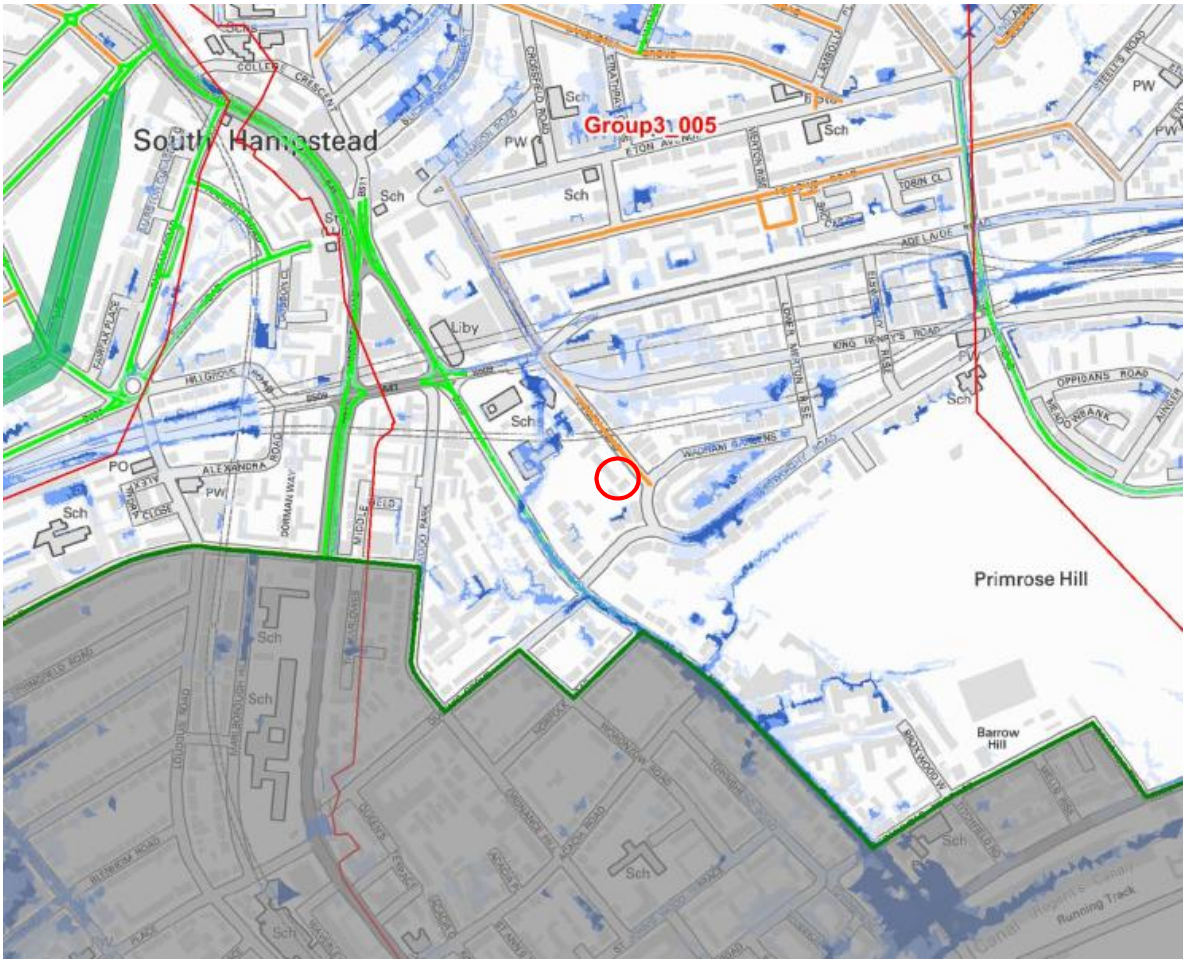
Flood Map for Planning (Rivers and Sea) from Environment Agency WIYBY[7] - accessed 16/1/16.



Surface Water Flood Risk mapping from Environment Agency WIYBY[8] - accessed 16/1/16.

[7] http://apps.environment-agency.gov.uk/wiyby/default.aspx

[8] http://apps.environment-agency.gov.uk/wiyby/default.aspx



Extract from Figure 3v of Camden's SFRA URS (2014)[9]

[9] URS, 2014. London Borough of Camden Strategic Flood Risk assessment – July 2014

Appendix 4 – Sewer Flooding History Enquiry

Sewer Flooding
History Enquiry

KPT Properties Ltd

Search address supplied

28
Harley Road
Camden
London

Your reference Harley Road Camden

Our reference SFH/SFH Standard/2016_3234809

Received date **18 January 2016**

Search date **19 January 2016**

Thames Water Utilities Ltd

Property Searches
PO Box 3189
Slough SL1 4WW

DX 151280 Slough 13

T 0118 925 1504
E searches@thameswater.co.uk
I www.thameswater-propertysearches.co.uk

Registered in England and Wales
No. 2366661, Registered office
Clearwater Court, Vastern Road
Reading RG1 8DB

Sewer Flooding

History Enquiry

Search address supplied: 28,Harley Road,Camden,London

This search is recommended to check for any sewer flooding in a specific address or area

TWUL, trading as Property Searches, are responsible in respect of the following:-

(i) any negligent or incorrect entry in the records searched;

(ii) any negligent or incorrect interpretation of the records searched;

(iii) and any negligent or incorrect recording of that interpretation in the search report

(iv) compensation payments

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Registered in England and Wales
No. 2366661, Registered office
Clearwater Court, Vastern Road
Reading RG1 8DB

Sewer Flooding

History Enquiry

History of Sewer Flooding

Is the requested address or area at risk of flooding due to overloaded public sewers?

The flooding records held by Thames Water indicate that there have been no incidents of flooding in the requested area as a result of surcharging public sewers.

For your guidance:

- A sewer is “overloaded” when the flow from a storm is unable to pass through it due to a permanent problem (e.g. flat gradient, small diameter). Flooding as a result of temporary problems such as blockages, siltation, collapses and equipment or operational failures are excluded.
- “Internal flooding” from public sewers is defined as flooding, which enters a building or passes below a suspended floor. For reporting purposes, buildings are restricted to those normally occupied and used for residential, public, commercial, business or industrial purposes.
- “At Risk” properties are those that the water company is required to include in the Regulatory Register that is presented annually to the Director General of Water Services. These are defined as properties that have suffered, or are likely to suffer, internal flooding from public foul, combined or surface water sewers due to overloading of the sewerage system more frequently than the relevant reference period (either once or twice in ten years) as determined by the Company’s reporting procedure.
- Flooding as a result of storm events proven to be exceptional and beyond the reference period of one in ten years are not included on the At Risk Register.
- Properties may be at risk of flooding but not included on the Register where flooding incidents have not been reported to the Company.
- Public Sewers are defined as those for which the Company holds statutory responsibility under the Water Industry Act 1991.
- It should be noted that flooding can occur from private sewers and drains which are not the responsibility of the Company. This report excludes flooding from private sewers and drains and the Company makes no comment upon this matter.
- For further information please contact Thames Water on Tel: 0800 316 9800 or website www.thameswater.co.uk

Thames Water Utilities Ltd

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