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32 LINKSWAY NORTHWOOD

BASEMENT IMPACT ASSESSMENT

DATE: JAN 22

**CLIENT: DUSEK DESIGN
ASSOCIATES**

JOB NO:222313

1. Background

The proposed development comprises a new dwelling over 4 floors, including a basement, ground floor, first floor and second floor with associated surface car parking.

The site currently consists of an existing property known as "No.32 Linksway Northwood", the site has a cross fall of approximately 1m and a fall from the front boundary to the rear garden of 1.5m, the site comprises various mature trees including oak, cypress, yew and fruit trees. (Planning scheme see appendix c)

2. Ground Model

A desk top study of the site revealed that the site has been occupied by the existing residential property for the entirety of its developed history.

Referring to geological records and site investigation encountered at No.18 Linksway, Northwood the site geological conditions can be summarised as follows:-

- Shallow top soil / made ground
- Overlying
- Reading Bed formation, comprising Stiff Orange- Brown mottled grey clay 0.4-3.2m
- Overlying
- Upnor formation comprising Dense Dark Brown fine and medium sand & gravel 3.2-13m
- Overlying
- Upper Chalk Deposits 12-20, and not penetrated

During all of the fieldwork no ground water was encountered to a depth of 20m in depth. (see Appendix A for borehole records)

3. Flood Risk Assessment

Referring to Environment Agency Database the site lies in flood zone 1, an area with a low probability of flooding. (see appendix B for records)

The flood risk detailed assessment for 1:100+ year storm event, indicates the site is outside any area for flooding.

Learn more about this area's flood risk

Select the type of flood risk information you're interested in. The map will then update

Flood risk

Low risk: depth

Location

HA62XB



4. Proposed Basement Construction

In view of the depth of the basement construction and the associated depth of basement excavations, precautions will be required in order to safe guard the neighbouring properties as outlined below:-

- No.30 Linksway Northwood is a existing property of at leasr 20-30 years old
- No.34 Linksway Northwood is a existing property of at leasr 20-30 years old

In order to construct the proposed new build basement a bored pile wall will be constructed around the proposed basement foot print to enable the basement excavation and works to progress in a safe environment, protecting the neighbouring properties from any potential settlement.

The proposed method of construction and relationship to the adjoining properties is illustrated in Appendix D of this report.

Due to the fact that no ground water was encountered during the adjacent site investigation works it is considered only localised pumping will be required to deal with ground water collected during times of rainfall.

We would point out that prior to commencement on site, that a series of ground water standpipes should be installed and monitored.

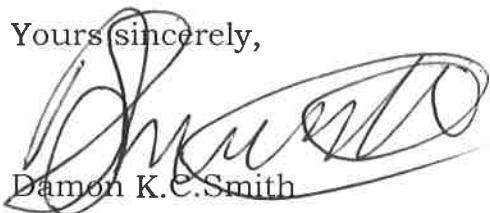
5. Ground Water Flooding and Drainage Risks.

Due to the fact that no ground water was encountered during the adjacent site investigation works , and the desk top study highlighted the site to be contained within a flood zone 1with no flooding risk during a 1:100+ year storm event. It is considered that the risk of the proposed development causing any flooding or drainage issues are negligible.

We would point out that prior to commencement on site, that a series of ground water standpipes should be installed and monitored.

We trust the above is of assistance and should you require anything further please contact the writer.

Yours sincerely,

A handwritten signature in black ink, appearing to read "Damon K.C. Smith".

Damon K.C. Smith

APPENDIX A : SI DATA

Site
20 Links Way, Northwood, Middlesex HA6 2XB

Borehole
Number
BH1

Client

Job
Number

Engineer

Sheet
2/2

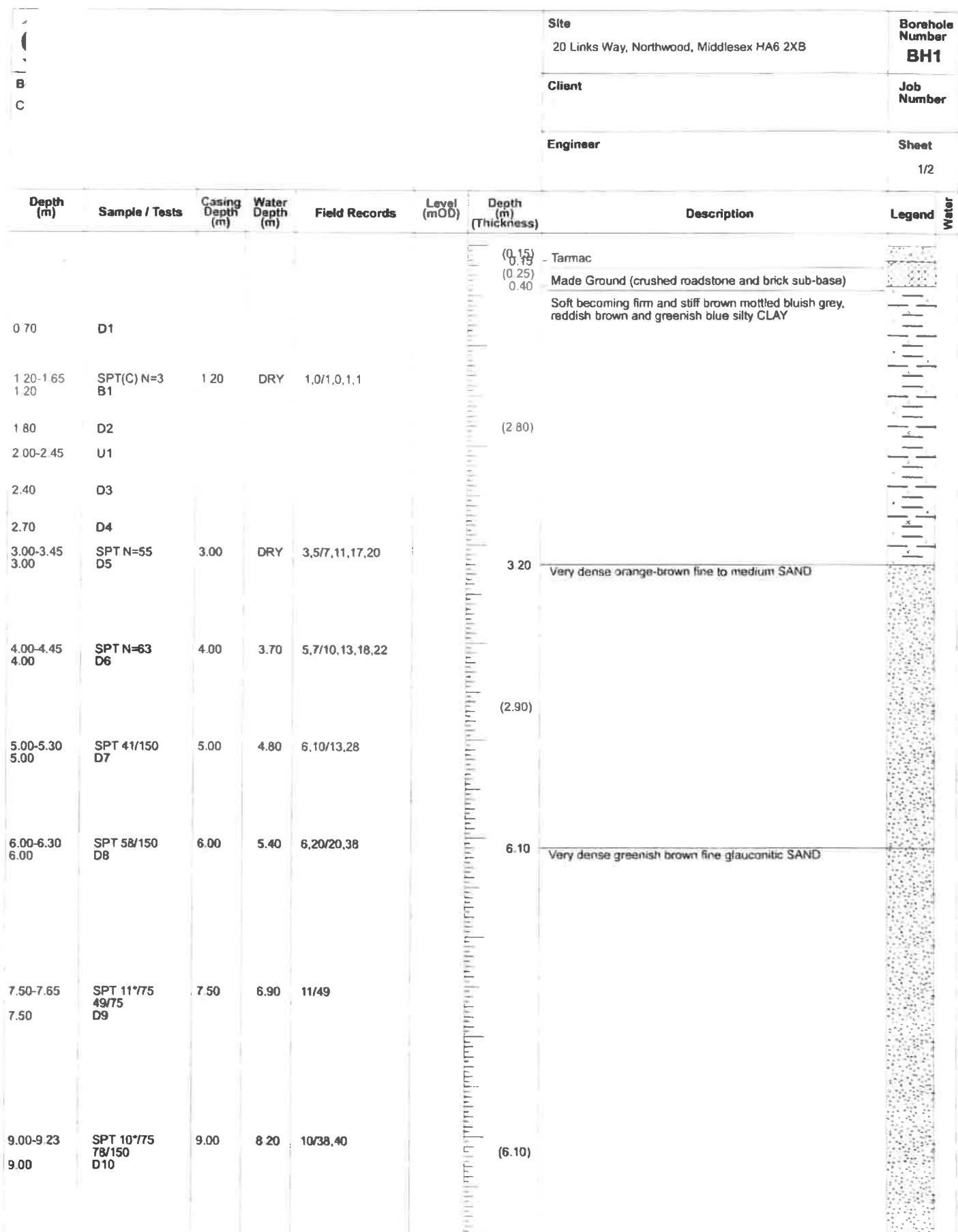
Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend Water
10.50-10.88 10.50	SPT 80/225 D11	10.50	10.00	9.9/21,26,33				
12.00-12.45 12.00	SPT N=53 D12	12.00	11.30	7,10/12,12,14,15	12.20	(1.10)	Very dense bluish green mottled brown fine to medium SAND with black rounded pebbles	
13.50-13.95 13.50	SPT N=29 D13	13.50	DRY	8.8/7,7,7.8	13.30	(6.70)	CHALK recovered as strong medium to high density white with black specks CHALK with occasional flints and orange-brown staining	
15.00-15.45 15.00	SPT N=41 D14	13.50	DRY	5.5/7,12,12,10				
16.50-16.95 16.50	SPT N=41 D15	13.50	DRY	6.7/10,10,11,10				
18.00-18.30 18.00	SPT 65/150 D16	13.50	DRY	7.29/30,35			Cobble sized flint at 18.2 m	
19.50-19.95 19.50	SPT N=46 D17	13.50	DRY	6.7/10,12,11,13				
					20.00			

Remarks

Scale (approx)
1:50

Logged By
ML

Figure No.
J13109.BH1


Remarks

Excavating services inspection pit from GL to 1.2 m for 30 mins.
Groundwater not encountered.
Water added to aid drilling through the sand from 3.2 m to 13.3 m.
Groundwater monitoring standpipe installed to 6.00 m.
1 hr spent collecting water.

Scale (approx)
1:50
Logged By
ML

Figure No.

J13109 BH1

E
C

Site

20 Links Way, Northwood, Middlesex HA6 2XB

Number
BH2

Client

Job
Number

Engineer

Sheet

1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend
0.20	D1				(0.30) 0.30	Made Ground (brown silty slightly sandy clay with gravel, rootlets, brick and coal fragments)	
0.50	D2				(1.20)	Soft orange-brown mottled grey silty CLAY with decayed roots and pockets of calcareous excretions	
1.00-1.45	SPT N=8	DRY	0.1/2,2,2,2				
1.50	D3				1.50	Firm rapidly becoming stiff reddish brown mottled grey and dark orange-brown silty CLAY with abundant calcareous nodules and occasional pyrite	
2.00-2.45	SPT N=19	DRY	2,3/3,4,5,7		(1.00)		
2.50	D4				2.50 (0.30) 2.80	Hard orange-brown mottled greenish grey slightly cemented silty CLAY with calcareous nodules	
3.00-3.45	SPT N=42	DRY	3,5/6,8,11,17		(0.50)	Very stiff fissured reddish brown mottled greenish grey and yellowish brown silty glauconitic CLAY	
3.30	D5				3.30	Very dense dark orange-brown mottled pale orange-brown and reddish brown fine to medium, locally cemented, SAND with occasional pyrite nodules	
3.50	D6						
4.00-4.31	SPT 25°/145 50/160	DRY	9,16/21,24,5		(2.05)		
4.50	D7						
4.90-5.17	SPT 25°/145 50/125	DRY	10,15/30,20				
					5.35	Terminated at 5.35m	

Remarks

Groundwater not encountered.
 Groundwater monitoring standpipe installed in borehole to a depth of 5.00 m.
 Borehole terminated due to the density of the sand.

Scale (approx) Logged By

1:50 ML

Figure No.
J13109.BH2

Site 20 Links Way, Northwood, Middlesex HA6 2XB						Number BH3
Client						Job Number
Engineer						Sheet 1/1
Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description
0.20 0.40	D1 D2				(0.20) 0.20	Topsoil (dark brown clayey silt with abundant roots, organic content and fine gravel)
					(1.80)	Soft orange-brown mottled grey silty CLAY with rootlets to 0.6 m and abundant calcareous excretions
1.50	D3				2.00	Stiff becoming very stiff dark orange-brown becoming reddish brown mottled greenish grey and yellowish brown silty CLAY with occasional calcareous nodules
2.50	D4				(1.50)	
3.60	D5				3.50 (0.50)	Hard greenish grey mottled reddish brown and orange-brown cemented glauconitic silty CLAY with calcareous nodules
4.40	D6				4.00 (0.50)	Very stiff reddish brown mottled orange-brown and grey silty slightly sandy CLAY with occasional black specks
4.60	D7				4.50 (0.50)	Very dense dark orange-brown fine to medium, locally cemented, SAND with occasional pyrite
					5.00	Terminated at 5.00m

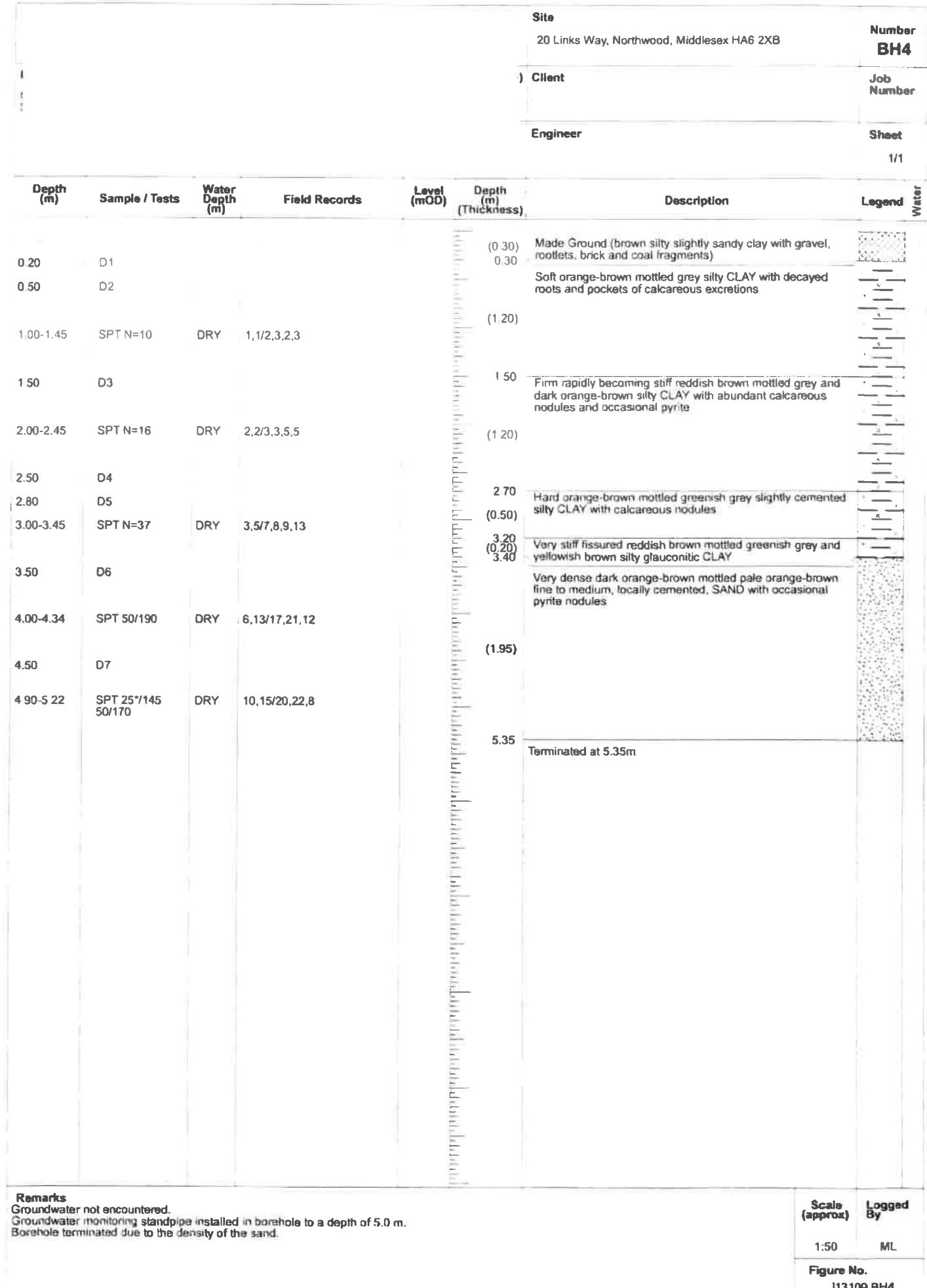
Remarks
Groundwater not encountered.
Borehole terminated due to the density of the sand.

Scale
(approx)

1:50

ML

Figure No.
J13109.BH3



APPENDIX B : FLOOD RISK DESK TOP STUDY

Flood map for planning

Your reference
HA62XB

Location (easting/northing)
508467/190752

Created
15 Feb 2021 17:13

Your selected location is in flood zone 1, an area with a low probability of flooding.

This means:

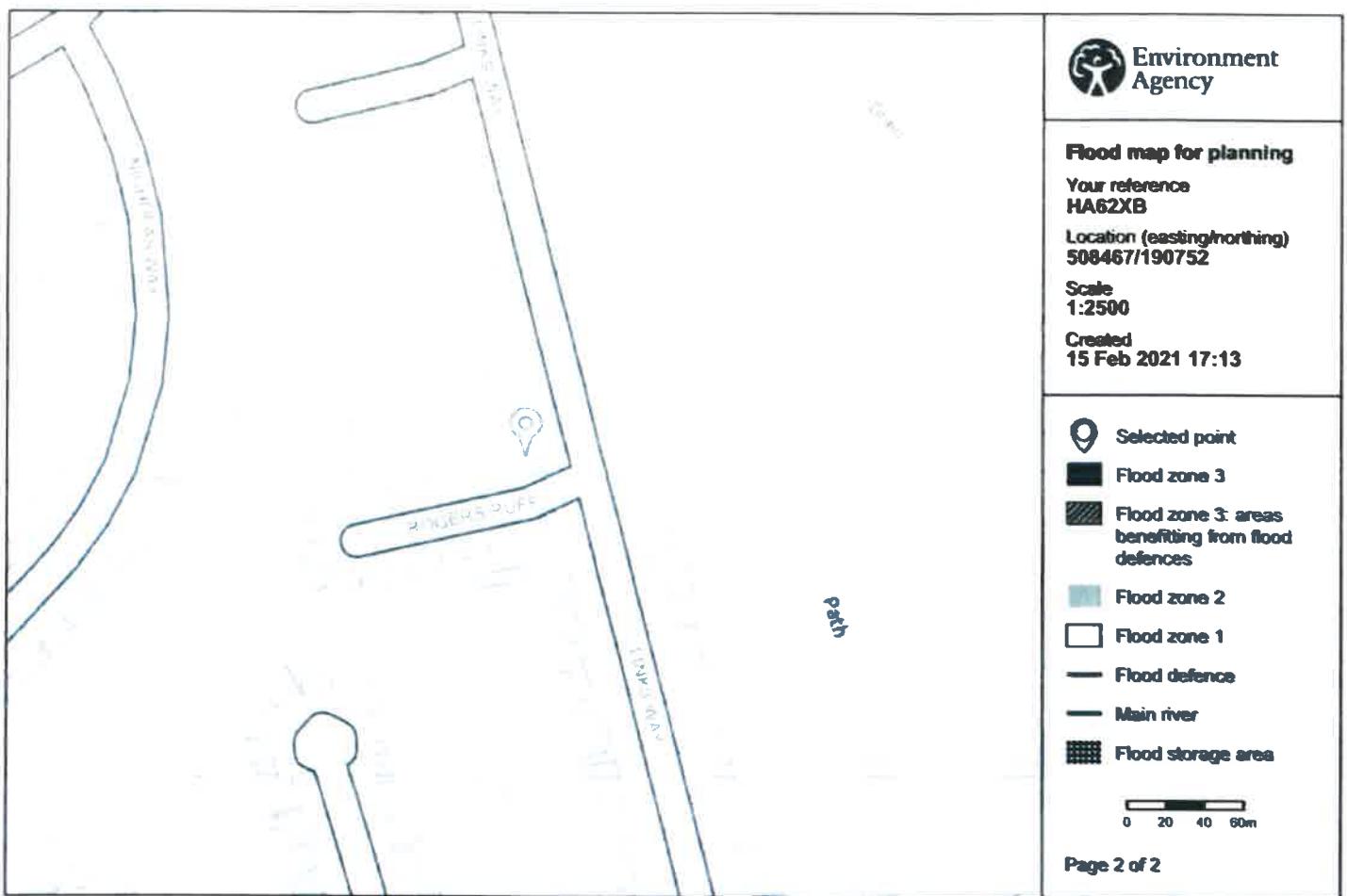
- you don't need to do a flood risk assessment if your development is smaller than 1 hectare and not affected by other sources of flooding
- you may need to do a flood risk assessment if your development is larger than 1 hectare or affected by other sources of flooding or in an area with critical drainage problems

Notes

The flood map for planning shows river and sea flooding data only. It doesn't include other sources of flooding. It is for use in development planning and flood risk assessments.

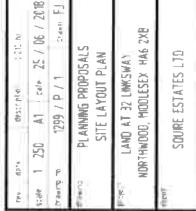
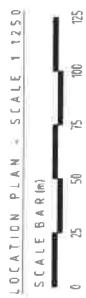
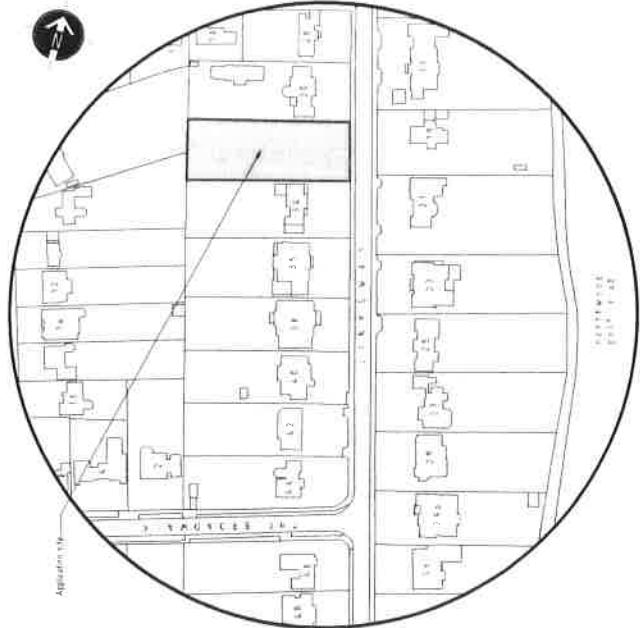
This information relates to the selected location and is not specific to any property within it. The map is updated regularly and is correct at the time of printing.

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<https://www.nationalarchives.gov.uk/doc/open-government-licence/version/3/>

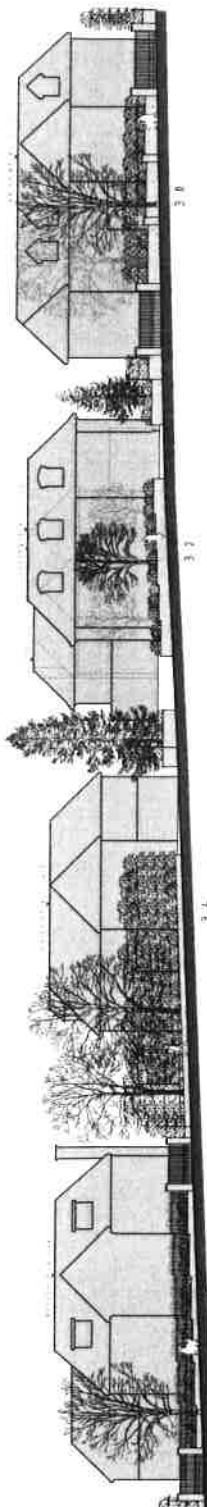


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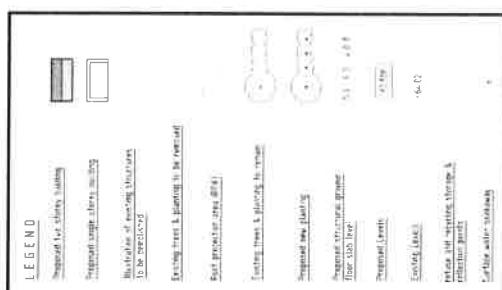
APPENDIX C: PROPOSED PLANNING SCHEME



DUSEK DESIGN ASSOCIATES LTD
ARCHITECTURE + PLANNING



STREET SCENE FROM LINKSWAY
STATE 1 200



REESTAKING DETAIL

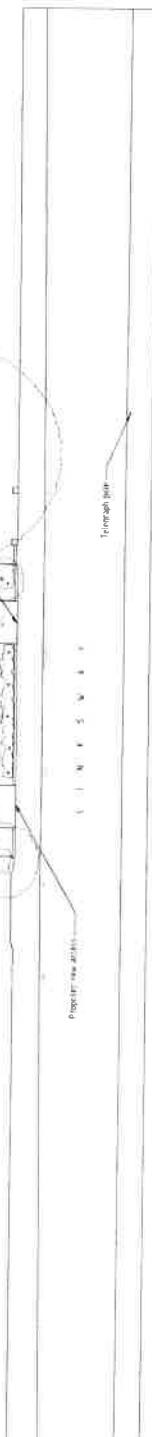
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AN AND SLOPE SPECIFICATION
The following generally is to be used in
all contracts with the State of Texas, unless
otherwise provided in the contract.
The word "slope" as used in this specification
means the angle of the incline of the ground
surface measured in degrees from the
horizontal. The word "grade" means the
vertical rise per unit of horizontal distance
measured in feet per mile. The word
"bank" means the side of a cut or fill
and the word "bottom" means the bottom
of a cut or fill.

Highly levered and highly volatile assets are the most suitable for hedge funds, but growth in the market for these assets is declining. The growth in the market for growth assets is increasing.

BIVIEW SPECIFICATION

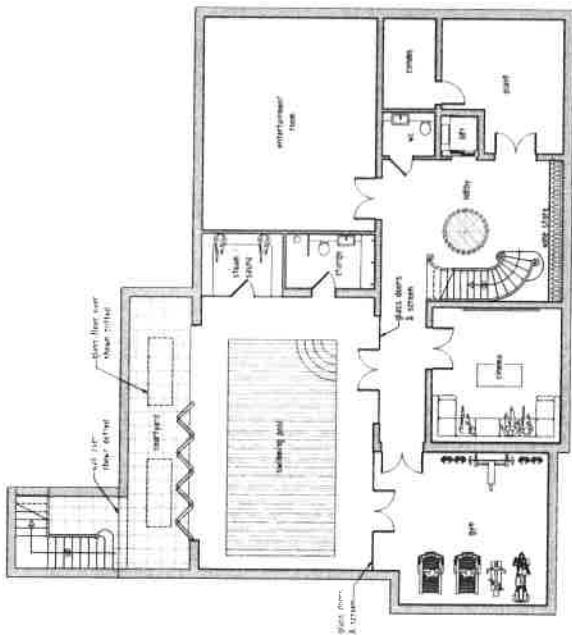
can be formed with variable intensity. Generally, a 25% area gain is used in the case of a single layer after it has reached a laying factor of 100%, at which time the fiber length is about 200 m. The fiber length is then increased with a decrease of 200 m at each layer (from 1000 m to 100 m with defined edges) depending on the conditions.



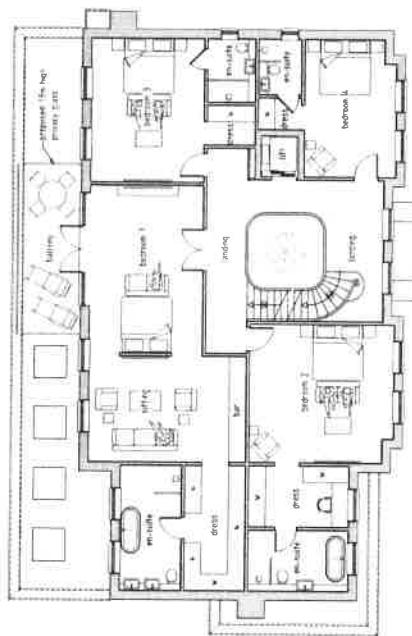
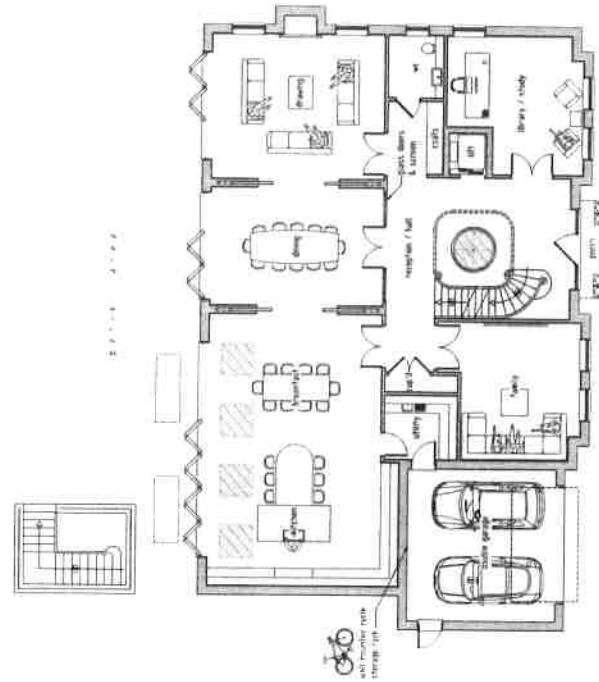
SITEL AVONITE BIANCO SCARICE 4 250



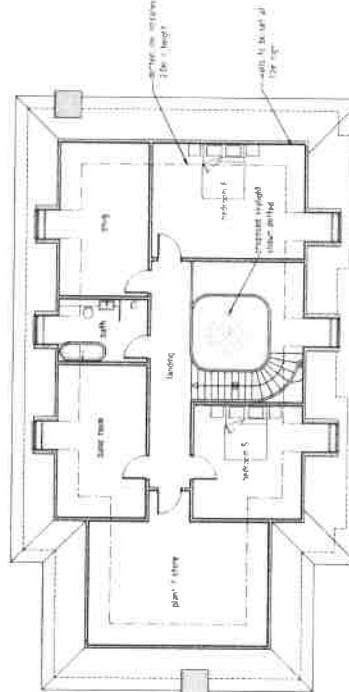
[Document] Israel Section Accession List



PROPOSED ASSESSMENT INDEX



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DDA

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ARCHITECTURE + PLANNING

A horizontal scale bar with tick marks at 0, 2, 4, 6, 8, and 10 meters. The text "SCALE BAR (m)" is written vertically to the left of the bar.



PROPOSED REABEVALUATION

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1939
ELEVATIONS
LAND AT 32 LIMSWAY
NORTHWOOD, MIDDLESEX, H.A.C. 2XB
SQUARE ESTATES LTD

SCALE BAR [m]

APPENDIX D : PROPOSED BASEMENT SECTIONS

