MAP

GROUND ENGINEERING LIMITED
Tel: 01733-566668
www.groundengineering.co.uk

Site: ORT HOUSE, 126 ALBERT STREET, LONDON NW1

WINDOW SAMPLE WS2

Date: 15/05/17

Hole Size: 87mm dia to 3.00m
67mm dia to 5.00m
57mm dia to 8.00m

Ground Level: 32.20m. O.D.

Samples and in-situ Tests			(Date) Water	Inst.	Description of Strata	Legend	Depth m	O.D. Level m
0.10	D1				MADE GROUND - Firm, brown, slightly sandy, slightly gravelly SILT/CLAY. Gravel is flint, quartzite, occasional ash and brick fragments.			
0.50	D2						0.80	31.40
1.20	D3				MADE GROUND - Firm, fissured, brown, slightly gravelly, silty CLAY. Gravel is flint, concrete and brick fragments.		1.20	31.00
1.20-2.00	U1							
2.00-3.00	U2				MADE GROUND - Brown, silty, sandy GRAVEL with many cobbles of brick and concrete. Gravel is flint, concrete and brick fragments.			
3.00-4.00	U3						3.10	29.10
3.80-4.00	U3A				firm, becoming stiff below 4.00m depth, fissured, brown and grey, silty CLAY with occasional orange brown silt partings and selenite crystals below 3.80m depth.			
3.95	V1	(54)						
4.00-5.00	U4							
4.80-5.00	U4A							
4.95	V2	(114)						
5.00-6.00	U5							
5.80-6.00	U5A							
5.95	V3	(117)						
6.00-7.00	U6							
6.80-7.00	U6A							
6.95	V4	(110)						
7.00-8.00	U7							
7.30-7.50	U7A							
7.70-7.90	U7B							
7.95	V5	(129)			(LONDON CLAY)			
					Hole completed at 8.00m depth		8.00	24.20

REMARKS
1. Starter pit excavated from 0.00m to 1.20m depth
2. Live roots observed to 1.20m depth
3. Borehole cased to 3.00m depth
4. Gas monitoring standpipe installed to 5.00m depth

Project No 14161
Scale 1:50
Page 1/1

KEY
D - Disturbed Sample
B - Bulk Sample
U - Undisturbed Sample
W - Water Sample
▽ Water Strike
▼ Depth to Water on completion
ES - Environmental Sample
M - Mackintosh Probe
V - Vane Shear Test Cohesion ( ) kPa
P( ) - Hand Penetrometer Cohesion ( ) kPa
▽s Standpipe Level

Groundwater Strikes						Groundwater Observations			
	Depth m						Depth m		
No	Struck	Rose to	Rate	Cased	Sealed	Date	Hole	Casing	Water
						15/05/17	8.00		dry
						23/05/17	5.00	1.00	dry
						30/05/17	5.00	1.00	dry

JOMAS ASSOCIATES LTD

Window Sample No 1

Contract	Camden High Street	**Report No**	P8402J212
Client	Lazari Investments	**Date**	07/12/12
Site Address	Arlington Road, Camden	Ground Level ,	mOD

Type of Excavator	Window sampler	Water level after completion, m	DRY
Water Strikes, m	Pit Dimensions, m	Ease of Excavation, m	
1 None	Length 80mmϕ	Very Easy ☐	Difficult ☐
2	Breadth	Moderate ☒	Very hard ☐

Observations: Cleared for services to 1.20m.

Sample Type	Depth, m	SPT	Depth	Legend	Description
			0.10		Tarmac
					Concrete
D	0.25		0.25		
D	0.50				Made Ground (clay and sand fill with brick and concrete pieces)
			0.60		
					Made Ground (Demolition material , brick and concrete rubble with occasional pockets of clay).
D	1.00				
D	2.00	1			
			2.70		
					Firm to stiff brown silty CLAY becoming stiff with depth
D	3.00	16 HV= 110 kPa			
D	4.00	* HV= 110 kPa	4.00		
					End of sample hole
					*Hole collapsed at 2.50m, impossible to get SPT

Code: D – disturbed sample W – Water sample

TITLE

Fig 15: Geology – Local Borehole Records

Record boreholes from Ort House/126 Albert Street (island site) and 120 Arlington Road

OBSERVATION

Ground conditions confirmed as Made Ground over London Clay

No groundwater encountered

Both boreholes show made ground to 2.7-3m depth, (assumed remnants of old backfilled basements)

MAP

GEA — Geotechnical & Environmental Associates
Wilbury Barn | Wilbury Hill | Ware | SG12 7DE

Site: 131 Arlington Road, London NW1 7ET			Number: BH1
Excavation Method: Drive-in Window Sampler	Dimensions	Ground Level (mOD)	Client: Jonathan & Julie Myerson; Job Number: J19013
	Location	Dates: 29/01/2019	Engineer: Constructure; Sheet: 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.40)	Made Ground (dark brown silty slightly clayey sand with gravel, rootlets and brick fragments)		
0.40	D1				0.40			
					0.50	Made Ground (dark brown sandy clay with gravel, rootlets and fine brick and ash fragments))		
0.80	D2				0.60	Made Ground (brown clay with occasional fine brick fragments and rootlets)		
1.20	D3					Firm becoming stiff fissured brown CLAY with occasional pale grey veins and occasional partings of orange-brown fine sand		
1.50	D4							
1.80	D5				(2.50)			
2.50	D6							
					3.10	Complete at 3.10m		

Remarks
Groundwater not encountered.
Groundwater monitoring standpipe installed to 3.10 m.

Scale (approx): 1:50 — Logged By: AT

Figure No.: J19013.BH1

PROJECT: 133 Arlington Road — LBH4501
CLIENT: Grant Parkinson & Masha Feigelman

BOREHOLE BH1

BORING METHOD: Modular Window Sampler Rig — Date: 20/11/17

GROUND WATER: No Groundwater Observed

REMARKS:

G.L Approximately +31.5m OD

Samples No	Samples Type	Depth m	Tests	Legend	Depth m	Description
					0.50	MADE GROUND (Dark brown slightly clayey sandy topsoil with abundant rootlets and occasional stones and fragments of brick, flint and slate)
1	D	0.70			1.00	MADE GROUND (Light brown clayey sand with stones and brick fragments)
	SPT	1.30	7			Firm to stiff pale brown silty CLAY with occasional partings of pale yellow fine sand and scattered selenite crystals
2	D	1.50				
3	D	2.00				
	SPT	2.30	12			Firm to stiff, becoming stiff, brown and grey mottled fissured silty CLAY with occasional partings of pale yellow fine sand and scattered selenite crystals
4	D	3.00				
	SPT	3.30	11			
5	D	4.00				
	SPT	4.30	16			

U=Undisturbed
B= Bulk
D=Disturbed
W=Water

Sheet 1 of 2

LBH WEMBLEY ENGINEERING

TITLE

Fig 16: Geology – Local Borehole Records

Record boreholes 131 Arlington Road and 133 Arlington Road

OBSERVATION

Ground conditions confirmed as Made Ground over London Clay

Made ground to 0.6 to 1.0m depth

No groundwater encountered

MAP

Site Analytical Services Ltd.

Site CAMDEN BUS ESTATE AGENTS, 27A PARKWAY, LONDON, NW1 7PN			**Borehole Number** BH1
Boring Method HAND EXCAVATION	**Casing Diameter** 128mm cased to 0.00m	**Ground Level (mOD)**	**Client** CAMDEN BUS ESTATE AGENTS	**Job Number** 1524292
	Location TQ288837	**Dates** 13/10/2015	**Engineer** ELLIOTTWOOD PARTNERSHIP LLP	**Sheet** 1/2

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
						(0.15) 0.15	MADE GROUND: Concrete surface.		
0.25	D1					(0.35)	MADE GROUND: Brick rubble and hardcore fragments.		
0.50	D2					0.50	MADE GROUND: Soft clay containinG brick fragments.		
0.75	D3					(0.60)			
1.00-1.45 1.00	SPT(C) N=4 D4		DRY	1/1,1,1,1		1.10	MADE GROUND: Soft borwn grey silty clay.		
						(0.20) 1.30	Firm becoming stiff mottled brown silty sandy CLAY containing partings of silty fine sand, gypsum crystals and claystones.		
1.75	D5								
2.00-2.45	U1			40 blows					
2.75	D6								
3.00-3.45 3.00	SPT N=10 D7		DRY	1,2/2,2,3,3					
3.75	D8								
4.00-4.45	U2			60 blows					
4.75	D9								
5.00-5.45 5.00	SPT N=18 D10		DRY	3,3/4,4,5,5		(8.70)			
6.00	D11								
6.50-6.95	U3			90 blows					
7.50	D12								
8.00-8.45 8.00	SPT N=33 D13		DRY	5,6/7,9,8,9					
9.00	D14								
9.50-9.95	U4			140 blows					

Remarks
D = Disturbed sample
SPT(C) = Standard Penetration Test (Cone)
U = Undisturbed 100mm diameter sample
SPT = Standard Penetration Test
Groundwater was not encountered during drilling.
Excavating from 0.00m to 1.00m for 1 hour.

Scale (approx)	Logged By
1:50	TM

Figure No. 1524292.BH1

TITLE

Fig 17: Geology – Local Borehole Records

Record boreholes 27a Parkway

OBSERVATION

Ground conditions confirmed as Made Ground over London Clay

Made ground to 1.3m depth

No groundwater

MAP	TITLE

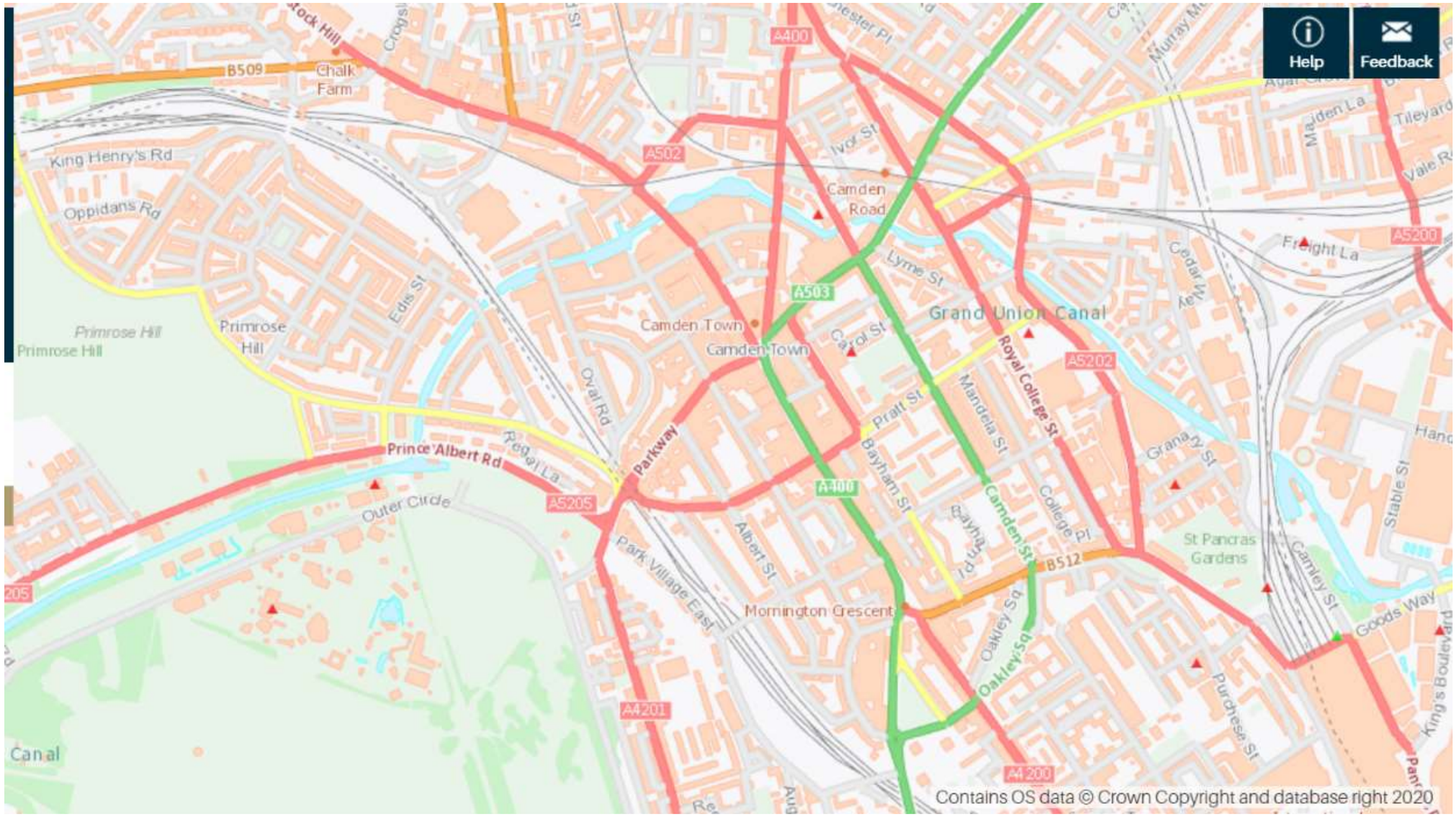


Fig 18: Geology – Water Well Locations

BGS Geoindex Onshore map showing location of water wells near site.

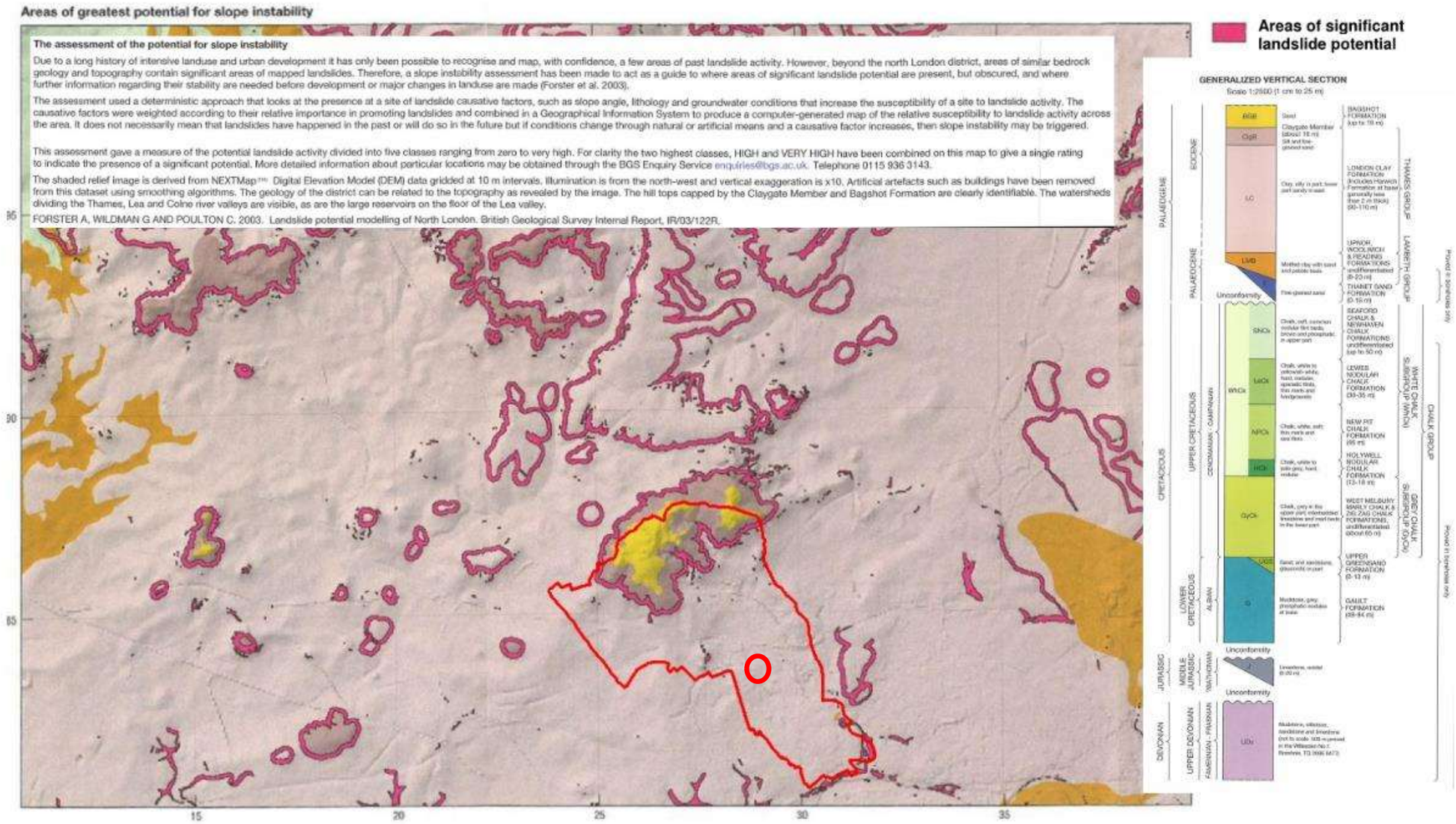
Water wells:

- Not Available
- 0 - 10m
- 10 - 30m
- 30m+

OBSERVATION

Nearest well located at 25 Carol Street, 265m from site.

MAP	TITLE



Source - British Geological Society, 1:50,000 Series
England and Wales Sheet 256 – North London

Camden Geological, Hydrogeological and Hydrological Study
Areas of landslide potential

213923 FIGURE **17**

Fig 19: Geology – LBC Areas of Landslide Potential

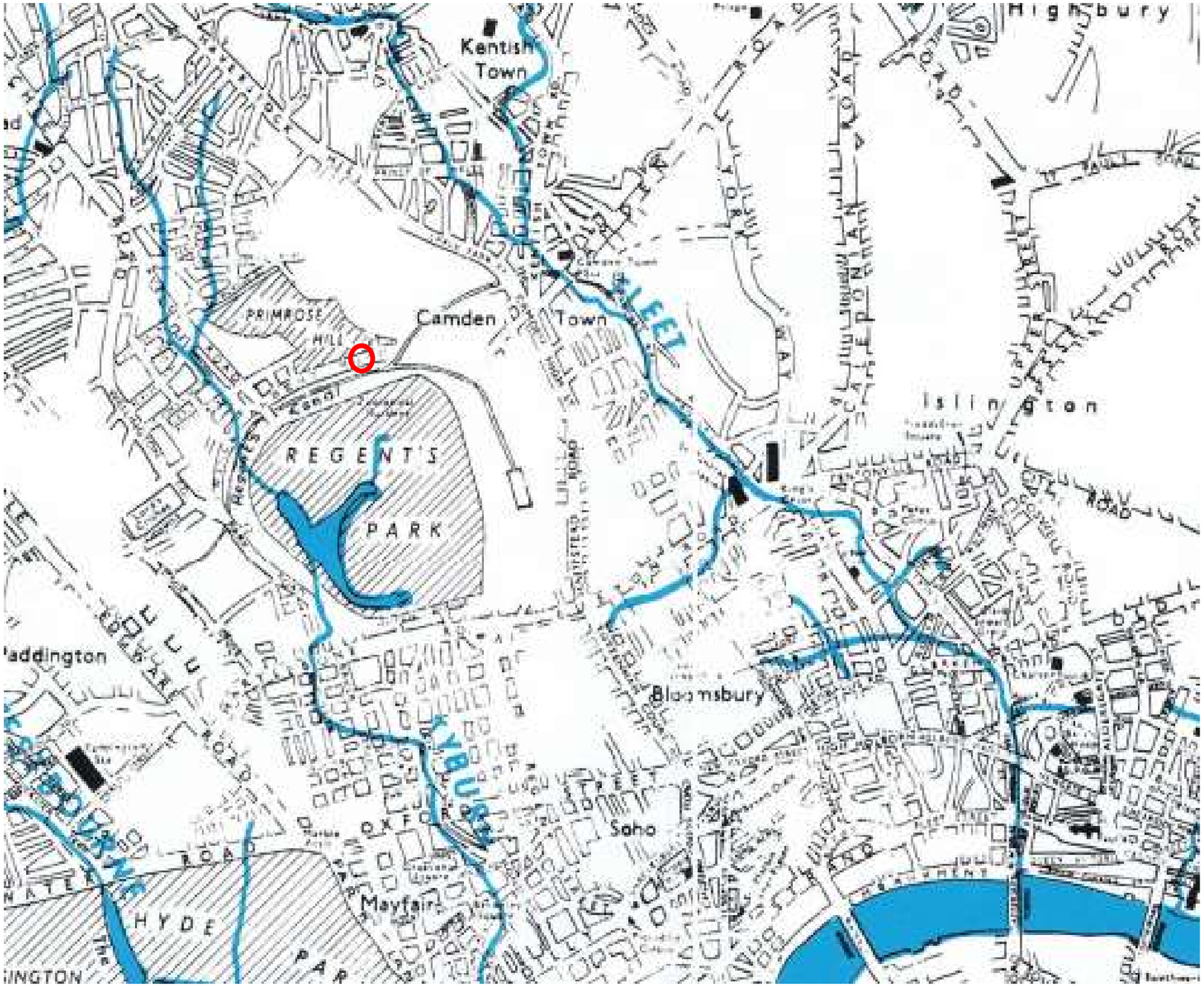
LBC - Camden geological, hydrogeological and hydrological study - Guidance for subterranean development. November 2010.

Figure 17 – Areas of Landslide Potential

OBSERVATION

Site is outside any areas of significant landslide potential.

Refer to Figures 7 & 8 – Topographical maps which indicate site has gentle fall to north-east – approximately 1.4deg so site is effectively flat (defined as less than 7deg)

MAP	TITLE
	**Fig 20: Hydrology -Lost Rivers** The Lost Rivers of London, Nicholas Barton **OBSERVATION** River Fleet approx. 365m to east, River Tyburn 2.25km to west.

MAP	TITLE

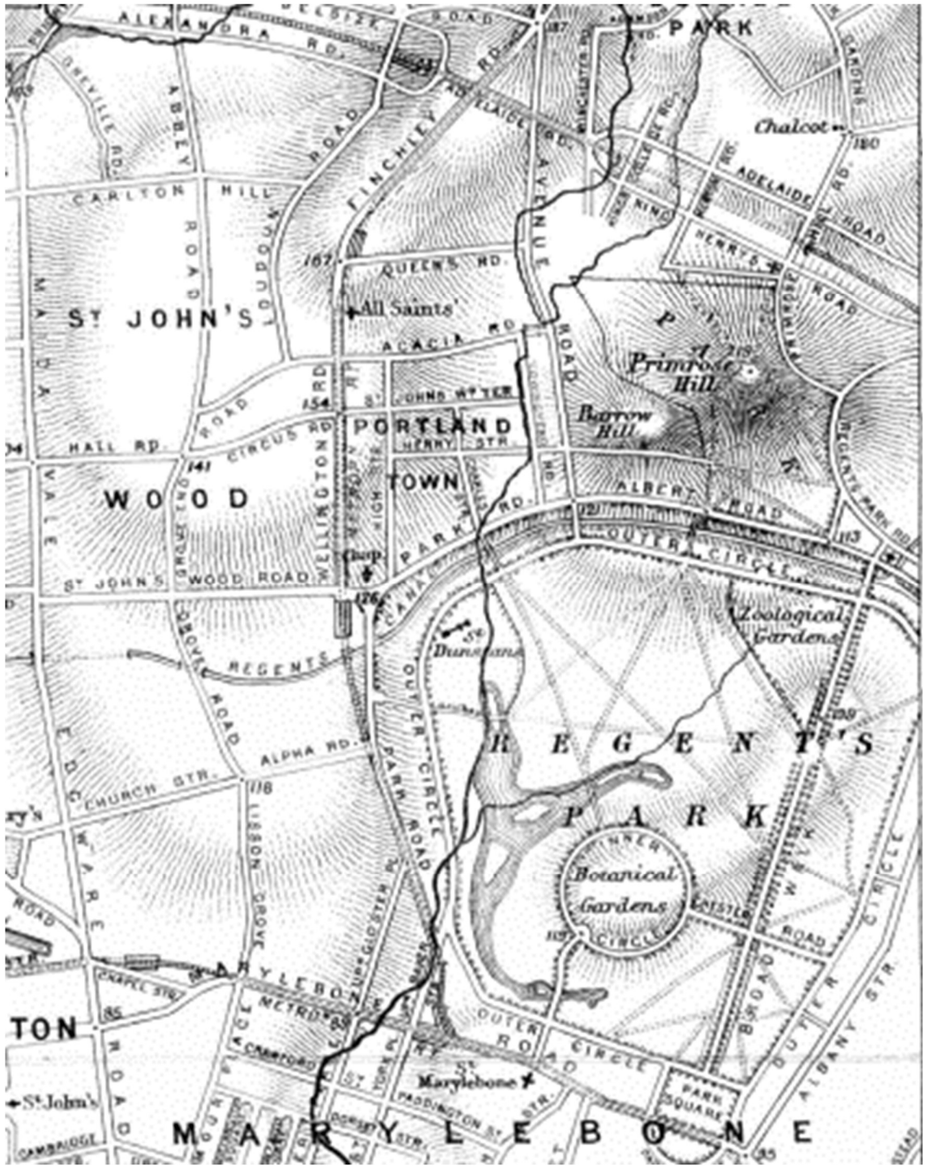


Figure 6a: LAMAS. 1890. Map of The Tybourne

Figure 6b: LAMAS. 1897. Map of The Fleet or Hole-Bourne

Fig 21: Hydrology - Lost Rivers – Routes of Fleet and Tyburn

Routes of the River Fleet and River Tyburn based on London and Middlesex Archaeological Society maps c 1890 and 1897

OBSERVATION

River Fleet approx. 365m to east, River Tyburn 2.25km to west.

No tributaries in area of site

MAP	TITLE

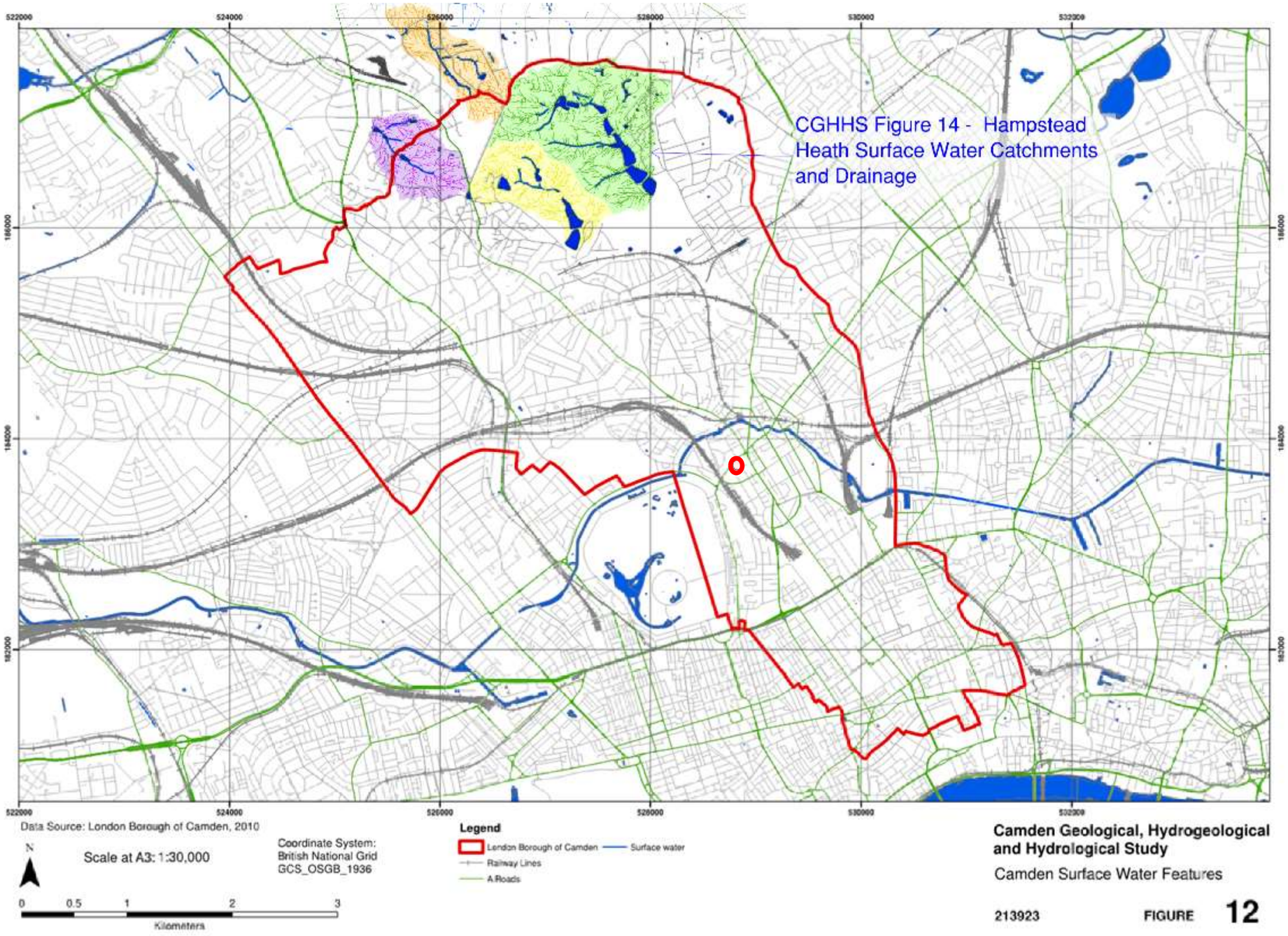


Fig 22: Hydrology - LBC Surface Water Features & Hampstead Heath Catchment Areas

LBC - Camden geological, hydrogeological and hydrological study - Guidance for subterranean development. November 2010.

Figure 12 – Camden Surface Water Features

Figure 14 - Hampstead Heath Surface Water Catchments and Drainage

OBSERVATION

Site is away from Regents Canal (approx 375m to north)

Site is outside Hampstead Heath and Highgate Ponds catchment areas

MAP	TITLE

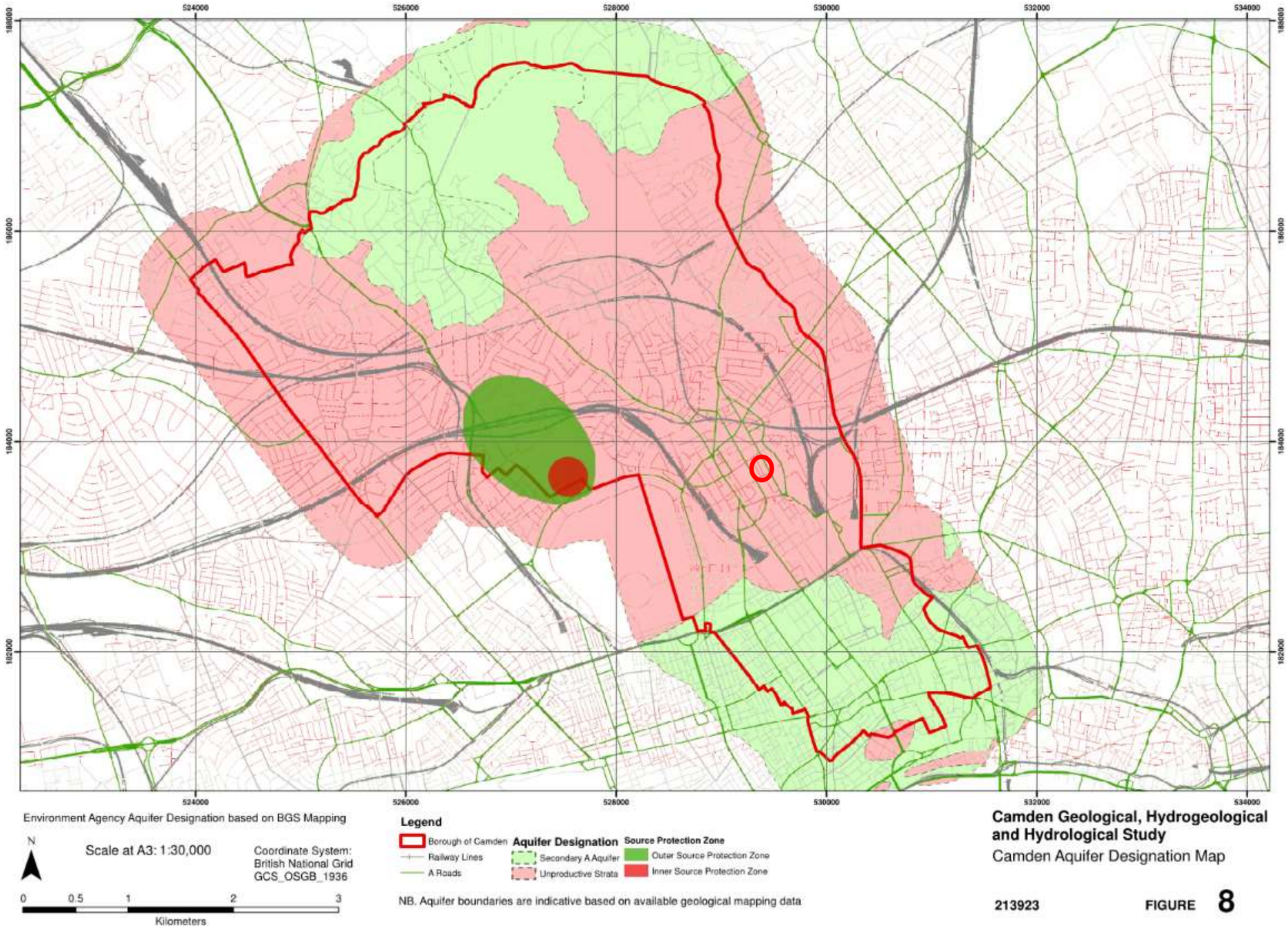


Fig 23: Hydrology – LBC Aquifer Designation Map

LBC - Camden geological, hydrogeological and hydrological study - Guidance for subterranean development. November 2010.

Figure 8 – Camden Aquifer Designation Map

OBSERVATION

Site is on Unproductive Strata (London Clay).

Site is outside aquifer source protection zones.

Note the inner source protection zone shown relates to the Barrow Hill site which ceased abstraction in 2012.

MAP	TITLE

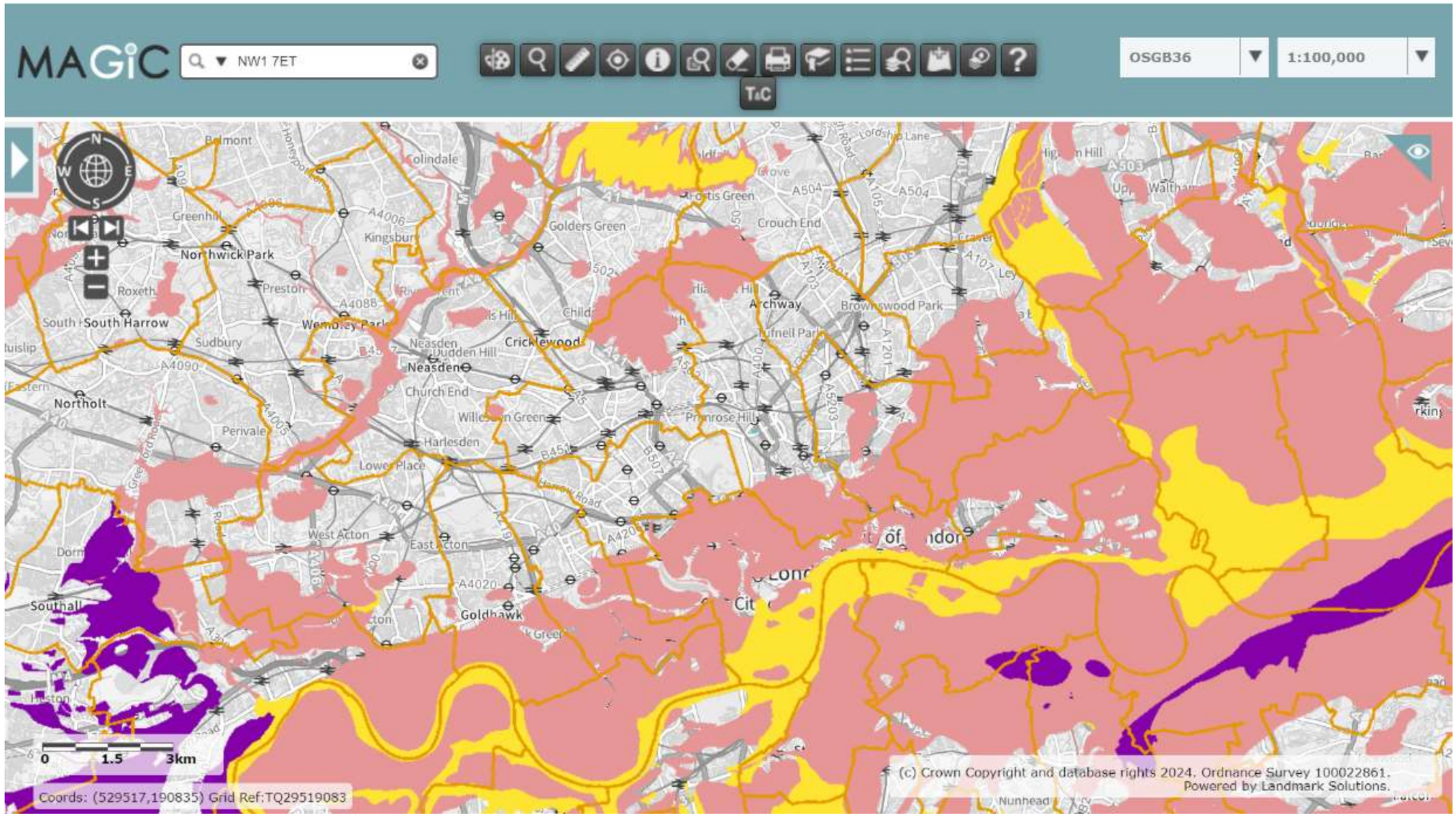


Fig 24: Hydrology – Environment Agency Aquifer Designation Map (England)

DEFRA Magic Map: https://magic.defra.gov.uk/MagicMap.aspx

BGS/Environment Agency map of aquifer designations identifying different types of aquifer - layers of water-bearing permeable rock or drift deposits from which groundwater can be extracted. These designations reflect the importance of aquifers in terms of groundwater as a resource (drinking water supply) but also their role in supporting surface water flows and wetland ecosystems.

Aquifer Designation Map

(Bedrock & Superficial Drift)

- Principal
- Secondary A
- Secondary B
- Secondary (undifferentiated)
- Unproductive

MAP	TITLE

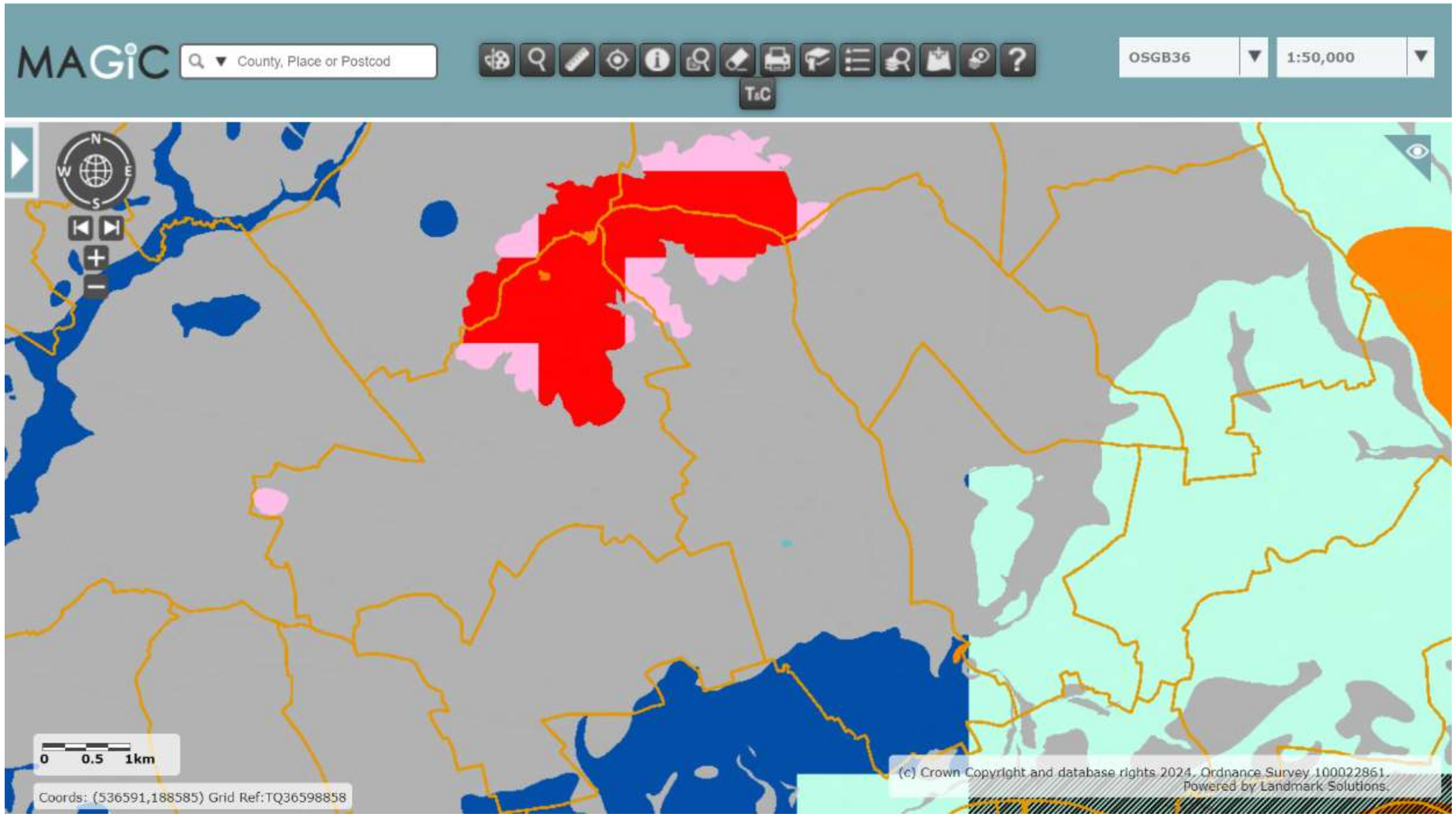


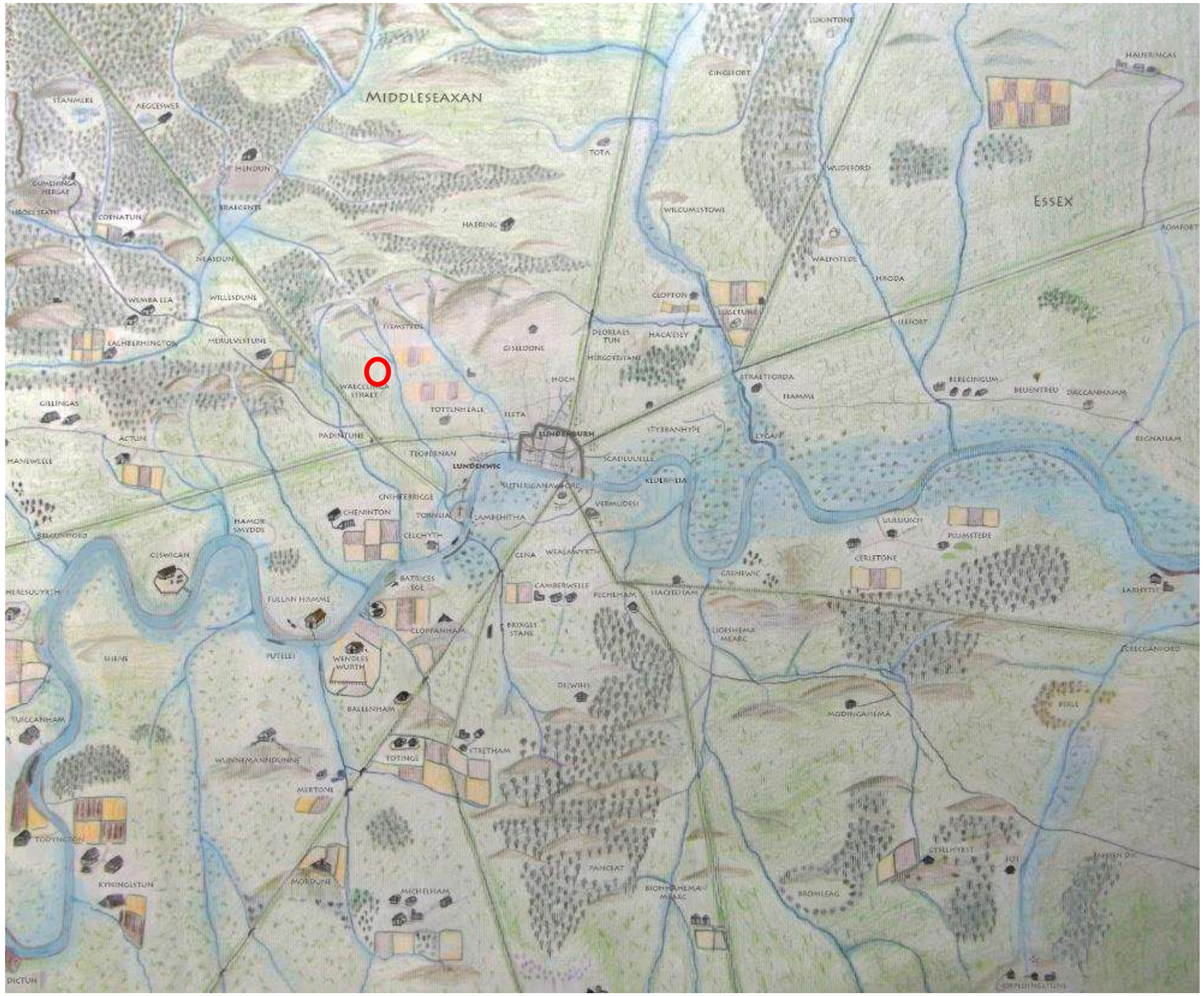
Fig 25: Hydrology – Environment Agency Groundwater Vulnerability Map (England)

DEFRA Magic Map: https://magic.defra.gov.uk/MagicMap.aspx

The Groundwater Vulnerability Maps show the vulnerability of groundwater to a pollutant discharged at ground level based on the hydrological, geological, hydrogeological and soil properties within a single square kilometre.

Groundwater Vulnerability Map (England)

- Local Information
- Soluble Rock Risk
- High
- Medium - High
- Medium
- Medium - Low
- Low
- Unproductive

MAP	TITLE
	**Fig 26: Historical Maps - Anglo Saxon London** https://londonist.com/2014/01/anglo-saxon-london-map-updated **DEVELOPMENT** Hampstead shown (Hemstede) Not near any old Roman roads (Edgware Road & A10 are closest) 'Lost Rivers; shown