

RECORD OF WELL (SHAFT OR BORE)

TL 34 17
For Survey use only

204

204 251
Licence No.

2.50

EXACT SITE
OF WELL

At Wicker Hall

TL 3523 4004

Town or Village.....Therfield

County Herts

...Six-inch quarter sheet.....4 SE/E

For _____ State whether owner, tenant, builder, contractor, consultant, etc.:—

Address (if different from above) _____

Level of ground surface
above sea-level (O.D.) 339.0 ft.

If well-top is not at ground level, state how far .. { above; below;ft.

SHAFT.....ft.; diameter.....ft.; Full details of headings (dimensions and directions)

BORE.....ft.; diameter of bore: at top.....ins.; at bottom.....ins.

Full details of permanent lining tubes (position, length, diameter, plain, slotted etc.)

Water struck at depths of ft. below well-top.

TEST CONDITIONS

Rest level of water.....ft., above well-top. Suction at.....ft. Yield on.....hours' test

pumping at galls. per with depression to ft. below well-top.

Recovery to rest-level in.....mins.
hours Capacity of pump.....g.p.h. Date of measurements.....

DESCRIPTION OF PERMANENT PUMPING EQUIPMENT:

NORMAL
CONDITIONS

Make and/or type..... Motive power.....

Capacity.....gallons per hour. Suction at.....ft.

Amount pumped.....galls. per day. Estimated consumption.....galls. per week.

Well made by _____ Date of well _____

Information from.....

ADDITIONAL NOTES

ANALYSIS (please attach copy if available)

Water Level: 132.0 O.D.

Bottom of Well: 162.9 O.D. 7/1/96.

from Trans. Herks. Nat. Hist. Soc. 9. 1897.

Visited and sited on 6th Herts 4 SE/E; Wicker Hall cottages derelict;
well sealed. A.S. 16/9/00.

LOG OF STRATA OVERLEAF.

GEOLOGICAL SURVEY AND MUSEUM,
SOUTH KENSINGTON,
LONDON, S.W.7.

Section 6.

Date
Received

1" O.S. Map
No.

Site marked
on 1" Map

(use symbol
on 6" Map)

[illegible]

Flood map for planning

Your reference
<Unspecified>

Location (easting/northing)
535378/239935

Created
18 Feb 2025 11:49

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

You will need to do a flood risk assessment if your site is **any of the following:**

- bigger than 1 hectare (ha)
- In an area with critical drainage problems as notified by the Environment Agency
- identified as being at increased flood risk in future by the local authority's strategic flood risk assessment
- at risk from other sources of flooding (such as surface water or reservoirs) and its development would increase the vulnerability of its use (such as constructing an office on an undeveloped site or converting a shop to a dwelling)

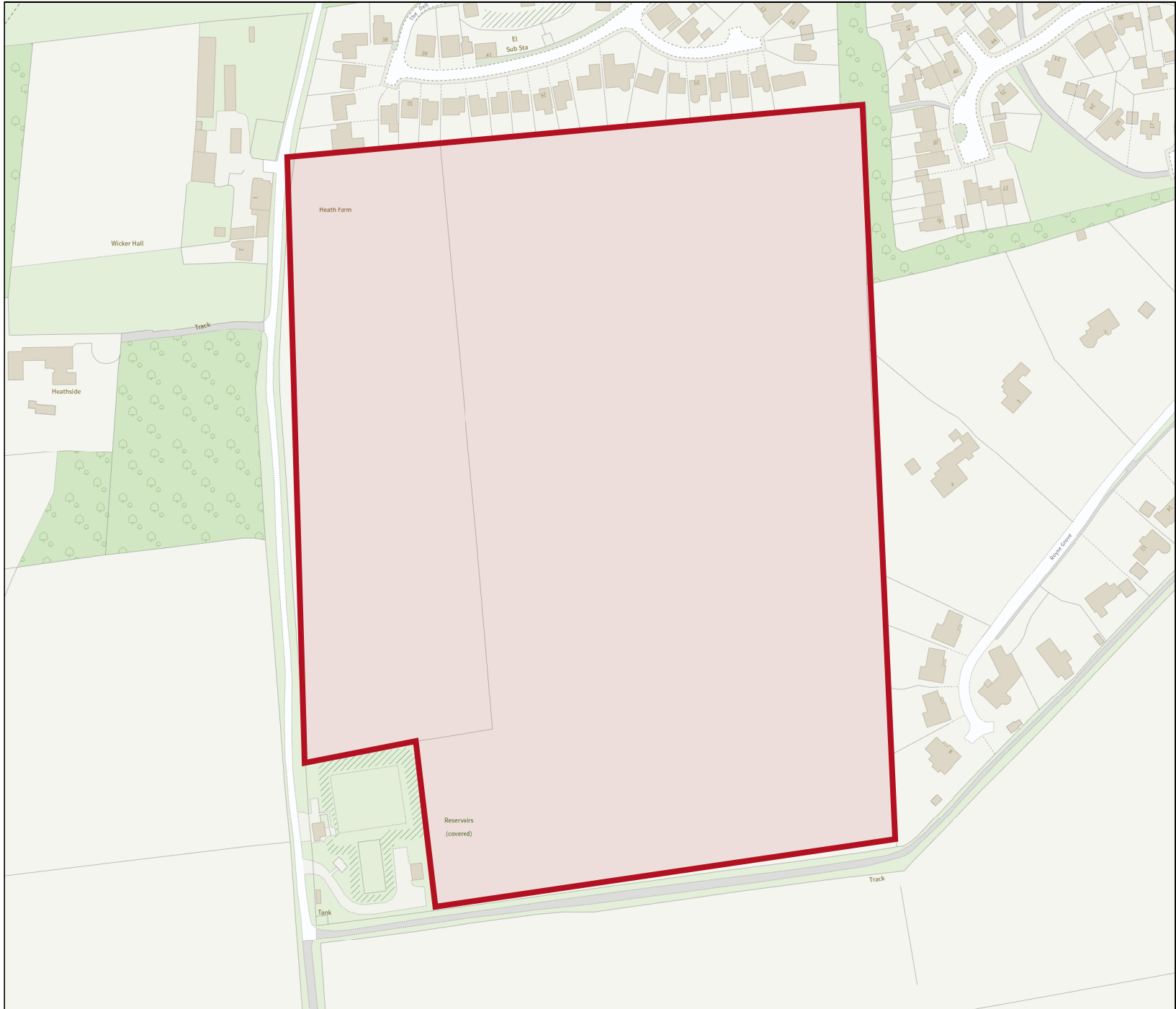
Notes

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.

Flood risk data is covered by the Open Government Licence **which** sets out the terms and conditions for using government data. <https://www.nationalarchives.gov.uk/doc/open-government-licence/version/3/>

Use of the address and mapping data is subject to Ordnance Survey public viewing terms under Crown copyright and database rights 2024 OS AC0000807064. <https://flood-map-for-planning.service.gov.uk/os-terms>



Flood map for planning

Your reference
<Unspecified>

Location (easting/northing)
535378/239935

Scale
1:2500

Created
18 Feb 2025 11:49

-  Selected area
-  Flood zone 3
-  Flood zone 2
-  Flood zone 1
-  Flood defence
-  Main river
-  Water storage area



Appendix D PHOTOGRAPHIC RECORD

PHOTOGRAPHIC LOG

Photo no. 1	Date: 17/02/2025
------------------------------	----------------------------



Description:

Field in west, viewed from the northern site boundary showing the site (grassland) as well as residential properties

Photo No. 2	Date: 17/02/2025
------------------------------	----------------------------



Description:

Looking south from the western site boundary at site land use -grassland

Photo No. 3	Date: 17/02/2025	
Description: Showing the eastern site boundary		

Photo No. 4	Date: 17/02/2025	
Description: Showing the eastern site boundary with adjacent residential properties		

Photo No. 5	Date: 17/02/2025	
Description: Residential properties to east and Agricultural field to southeast		

Photo No. 6	Date: 17/02/2025	
Description: Waste heap / burn pile identified in the south of the site		

Photo No. 7	Date: 17/02/2025
Description: Double gate on southern site boundary and underground service covers on the track	

A photograph showing a dirt and grass track leading to a closed wooden double gate. To the right of the gate is a tall, dense hedge. In the background, there are trees and a clear sky. A concrete slab, likely an underground service cover, is visible on the track in the foreground.

Photo No.	Date:	
8	17/02/2025	
Description:		
Pumping station southwest of the site. Grass mounds are probably part buried water tanks		

Photo No. 9	Date: 17/02/2025	
Description: Pumping station		

Photo No. 10	Date: 17/02/2025	
Description: Southern site boundary, showing the northern edge of reservoir and pumping station		

Photo No. 11	Date: 17/02/2025	
Description: Western area of the site - grassland		

Photo No. 12	Date: 17/02/2025	
Description: Western site boundary facing south showing overhead phone line		

Photo No. 13	Date: 17/02/2025	
Description: Land use Offsite to west/southwest- agricultural land		

Photo No. 14	Date: 17/02/2025
Description: Adjacent land use : Heath farm to the west of the site	


--

Photo No. 15	Date: 17/02/2025	
Description: Adjacent land use: Sparse woodland to west of the site and track		

Appendix E

SITE RECONNAISSANCE SURVEY NOTES

Feature observed	Presence Y/N	Description
Physical characteristics		
1. Are there any access constraints?	Y	Wooden double gates (4m) on northwest corner and southern boundary are padlocked. Single track access is uneven ground
2. Is the site approximately level?	N	Falls to northwest and southeast from high ridge in middle and southwest
3. Any evidence of subsidence, landslip or slope erosion?	N	None identified
4. Any changes in level between the site and adjacent sites?	N	Land Falls to north and southeast. No major level change between pumping station and site
5. Surface cover	Y	The site is approx. 2% hard surfacing in area of current residential property
	Y	The site is approx. 98% soft standing
Environmental characteristics		
6. Vegetation on site	Y	Grasses, Hedges
7. Evidence for vegetation stress	N	None identified
8. Invasive species	N	Based upon the walkover survey obvious evidence of Japanese Knotweed or other invasive species has not been identified on-site. However, it should be noted that a detailed survey of the possible presence or absence of invasive species is outside of the scope of investigation and consideration should be given to commissioning a specialist survey, as necessary. It should be noted the walkover was conducted in February during the die back period.
9. Surface water features	N	no surface water features were identified onsite
	N	no surface water features identified within 250m

Feature observed	Presence Y/N	Description
10. Site drainage	Y	The site is general soft standing and drains directly to ground.
	N	No area of waterlogging was identified
Structures and services		
11. Existing buildings on-site	N	No buildings are present on-site
12. Buried and overhead services present	Y	Underground services: inspection covers identified on track immediately west of the site
	Y	Above ground services: Overhead phone line on western boundary
13. Underground structures	Y	Off site Semi buried tanks to southwest in relation to the reservoir
Geotechnical characteristics		
14. Evidence of damage to existing building structures on site?	N	None identified
15. Remains of building structures present on or adjacent to site?	N	None identified
16. Retaining walls and adjacent buildings on or close to site boundary?	N	None identified
17. Any abrupt changes in ground level present on or adjacent to site?	Y	Fall in residential gardens to southeast and north
18. Any potentially unstable slopes/ exposed ground present on or adjacent to site?	N	None identified
19. Any mature trees on site?	Y	Adjacent and in hedge on boundary
20. Any visual evidence of infilled basements on site?	N	None identified
Potential evidence for contamination		
21. Underground/ above ground storage tanks and pipework	N	None identified
22. Potentially hazardous materials storage and use	N	None identified

Feature observed	Presence Y/N	Description
23. Waste storage	N	None identified
24. Fly-tipping	Y	Burn pile identified onsite
25. Electricity sub-stations/ transformers	N	None identified
26. Asbestos-containing materials	N	None identified
27. Fire history	Y	There was a burn / bonfire identified onsite
28. Is there any visual evidence of potential contamination on site?	Y	Burnt plant material onsite possible contaminates but unlikely
29. Is there any visual evidence of potential contamination on adjacent sites?	N	None identified

Appendix F

TECHNICAL BACKGROUND

F 1. Desk Study

Aquifer designation and Source protection zones (England and Wales)

Principal aquifer: layers of rock or drift deposit that have high intergranular and/or fracture permeability (usually providing a high level of water storage). They may support water supply and/or river base flow on a strategic scale.

Secondary A aquifer: permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers.

Secondary B aquifer: predominantly lower permeability layers that may store and yield limited amounts of groundwater due to localised features such as fissures, thin permeable horizons and weathering.

Secondary undifferentiated aquifer: it has not been possible to attribute either a category A or B to a rock type. In most cases this means that it was previously designated as both a minor and non-aquifer in different locations owing to the variable characteristics.

Unproductive strata: low permeability with negligible significance for water supply or river base flow.

The EA generally adopts a three-fold classification of source protection zones (SPZ) surround abstractions for public water supply. The Site is situated in an area defined as follows:

- Zone 1 or the 'inner protection zone' is located immediately adjacent to the groundwater source and is based on a 50-day travel time from any point below the water table to the source. It is designed to protect against the effects of human activity and biological/chemical contaminants that may have an immediate effect on the source
- Zone 2 or the 'outer protection zone' is defined by a 400-day travel time from a point below the water table to the source. The travel time is designed to provide delay and attenuation of slowly degrading pollutants
- Zone 3 or the 'total catchment' is the area around the source within which all groundwater recharge is presumed to be discharged at the source.

Preliminary risk assessment methodology

LCRM outlines the framework to be followed for risk assessment in the UK. The framework is designed to be consistent with UK legislation and policies including planning. An outline conceptual model should be formed at the preliminary risk assessment stage that collates all the existing information pertaining to a site in text, tabular or diagrammatic form. The outline conceptual model identifies potentially complete (termed possible) contaminant linkages (contaminant–pathway–receptor) and is used as the basis for the design of the site investigation. The outline conceptual model is updated as further information becomes available, for example as a result of the site investigation.

Production of a conceptual model requires an assessment of risk to be made. Risk is a combination of the likelihood of an event occurring and the magnitude of its consequences. Therefore, both the

likelihood and the consequences of an event must be taken into account when assessing risk. RSK has adopted guidance provided in CIRIA C552 for use in the production of conceptual models.

The likelihood of an event can be classified on a four-point system using the following terms and definitions based on CIRIA C552:

- highly likely: the event appears very likely in the short term and almost inevitable over the long term or there is evidence at the receptor of harm or pollution
- likely: it is probable that an event will occur or circumstances are such that the event is not inevitable, but possible in the short term and likely over the long term
- low likelihood: circumstances are possible under which an event could occur, but it is not certain even in the long term that an event would occur and it is less likely in the short term
- unlikely: circumstances are such that it is improbable the event would occur even in the long term.

RSK also adopt a 'very unlikely' probability to account for where there may be increased certainty over whether an event is probable in the long term.

The severity can be classified using a similar system also based on CIRIA C552. The terms and definitions relating to severity are:

- severe: short term (acute) risk to human health likely to result in 'significant harm' as defined by the Environment Protection Act 1990, Part IIA. Short-term risk of pollution of sensitive water resources. Catastrophic damage to buildings or property. Short-term risk to an ecosystem or organism forming part of that ecosystem (note definition of ecosystem in 'Draft Circular on Contaminated Land', DETR 2000)
- medium: chronic damage to human health ('significant harm' as defined in 'Draft Circular on Contaminated Land', DETR 2000), pollution of sensitive water resources, significant change in an ecosystem or organism forming part of that ecosystem
- mild: pollution of non-sensitive water resources. Significant damage to crops, buildings, structures and services ('significant harm' as defined in 'Draft Circular on Contaminated Land', DETR 2000). Damage to sensitive buildings, structures or the environment
- minor: harm, not necessarily significant, but that could result in financial loss or expenditure to resolve. Non-permanent human health effects easily prevented by use of personal protective clothing. Easily repairable damage to buildings, structures and services.

Once the probability of an event occurring and its consequences have been classified, a risk category can be assigned according to the following table.

		Consequences			
		Severe	Medium	Mild	Minor
Probability	Highly likely	Very high	High	Moderate	Moderate/low
	Likely	High	Moderate	Moderate/low	Low
	Low likelihood	Moderate	Moderate/low	Low	Very low
	Unlikely	Moderate/low	Low	Very low	Very low
	Very Unlikely	Low	Very Low	Negligible	Negligible

Definitions of these risk categories are as follows together with an assessment of the further work that may be required:

- very high: there is a high probability that severe harm could occur or there is evidence that severe harm is currently happening. This risk, if realised, could result in substantial liability; urgent investigation and remediation are likely to be required
- high: harm is likely to occur. Realisation of the risk is likely to present a substantial liability. Urgent investigation is required. Remedial works may be necessary in the short term and are likely over the long term
- moderate: it is possible that harm could arise, but it is unlikely that the harm would be severe and it is more likely that the harm would be relatively mild. Investigation is normally required to clarify the risk and determine the liability. Some remedial works may be required in the longer term
- low: it is possible that harm could occur, but it is likely that if realised this harm would at worst normally be mild
- very low: there is a low possibility that harm could occur and if realised the harm is unlikely to be severe.