## herrington consulting



## **Client: Medley Asset Ltd**

Flood Risk and SuDS Assessment for the Proposed Development at 329-333 Kentish Town Road, Kentish Town, London

## September 2021

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## **Contents Amendment Record**

This report has been issued and amended as follows:

lssue	Revision	Description	Date
1	0	Draft report issued by email.	24 March 2021
2	1	Minor amendments. Final report issued by email.	26 March 2021
3	2	Qualifications added. Final report issued by email.	02 September 2021



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## **Document Verification**

Issue	Revision	Date:	24 March 2021	
1	0	Author(s):	JK	BI
		Checked By:	КТ	
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		Checked By:	KT	
Issue	Revision	Date:	02 September 2021	
3	2	Author(s):	BI	
		Director Sign-Off:	SMB	

## Qualifications

## **Basement Impact Assessment – Surface Flow and Flooding**

Report reviewed and signed off by (SMB) **Simon Maiden-Brooks** BSc. (Hons) MSc. C.Eng C.WEM MCIWEM.



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## herrington CONSULTING LIMITED

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## 1 Scope of Appraisal

Herrington Consulting has been commissioned by **Medley Asset Ltd** to prepare a Flood Risk and Sustainable Drainage Assessment for the proposed development at **329-333 Kentish Town Road**, **Kentish Town, London, NW5 2AA**.

The London Borough of Camden Council Strategic Flood Risk Assessment shows that the application site is shown to be located within a Critical Drainage Area, as such the applicant is required to submit a Flood Risk Assessment to accompany the application for the proposed development.

A Flood Risk Assessment (FRA) appraises the risk of flooding to development at a site-specific scale and recommends appropriate mitigation measures to reduce the impact of flooding to both the site and the surrounding area. New development has the potential to increase the risk of flooding to neighbouring sites and properties through increased surface water runoff and as such, an assessment of the proposed site drainage can help to accurately quantify the runoff rates, flow pathways and the potential for infiltration at the site. This assessment considers the practicality of incorporating Sustainable Drainage Systems (SuDS) into the scheme design, with the aim of reducing the risk of flooding by actively managing surface water runoff.

This report has been prepared to supplement a full planning application and has been prepared in accordance with the requirements of both national and local planning policy. To ensure that due account is taken of industry best practice, reference has also been made to CIRIA Report C753 'The SuDS Manual' and any relevant local planning policy guidance. The surface water management strategy included within this report is not intended to constitute a detailed drainage design.



## 2 Background Information

## 2.1 Site Location and Existing Use

The site is located at Ordnance Survey (OS) coordinates 528983, 185125 off Kentish Town Road in London. The site covers an area of approximately 0.051 hectares and currently comprises retail throughout 329-331 Kentish Town Road and retail and a dental practice at 333 Kentish Town Road. The location of the site, in relation to the surrounding area, is shown in Figure 2.1 below.



Figure 2.1 – Location map (Contains Ordnance Survey data © Crown copyright and database right 2021).

## 2.2 Site Geology and Topography

Reference to the British Geological Survey (BGS) data identifies that the bedrock geology at the site comprises London Clay Formation, with no overlying superficial deposits.

A site-specific topographic survey has been provided. The survey is not referenced to an Ordnance Datum; instead, an arbitrary reference has been used. From the arbitrary reference, the existing basement is located 2.67m below the existing ground floor.

## 2.3 Proposed Development

The development proposals comprise a lowering of the floor of part of the existing basement (Figure 2.2).



**329-333 Kentish Town Road, Kentish Town** Flood Risk & SuDS Assessment



Figure 2.2 – Proposed section drawing (top image) and basement layout (bottom image).

Further drawings of the proposed scheme are included in Appendix A.1 of this report.

## 2.4 Climate Change

The global climate is constantly changing but it is widely recognised that we are now entering a period of accelerating change. Over the last few decades there have been numerous studies into the impact of potential future changes in the climate and there is now an increasing body of scientific evidence which supports the fact that the global climate is changing as a result of human activity. Past, present and future emissions of greenhouse gases are expected to cause significant global climate change during this century.

The nature of climate change at a regional level will vary. For the UK, projections of future climate change indicate that more frequent short-duration, high-intensity rainfall, and more frequent periods of long-duration rainfall (of the type responsible for the recent UK flooding), could be expected.

These effects will tend to increase the size of flood zones associated with rivers and the amount of flooding experienced from other inland sources. Consequently, the following section of this report

takes into consideration the impacts of climate change and references the most contemporary guidance that is applicable to the development site.

#### Planning Horizon

To ensure that any recommended mitigation measures are sustainable and effective throughout the lifetime of the development, it is necessary to base the appraisal on climate change predictions that are commensurate with the planning horizon for the proposed development. The NPPF and supporting Planning Practice Guidance Suite state that residential development should be considered for a minimum of 100 years, but that the lifetime of a non-residential development depends on the characteristics of the development. For commercial development, a 60-year design life is typically assumed. The development that is the subject of this assessment is classified as commercial and therefore, a design life of 60 has been assumed.

#### Potential Changes in Climate

The recommended allowances for increases in peak rainfall are applicable nationally. These allowances, shown in Table 2.1 below, provide a range of values that correspond with the Central and Upper End percentiles (i.e. the 50<sup>th</sup> and 90<sup>th</sup> percentile respectively) over three-time epochs.

Allowance Category	Total potential change anticipated for each epoch			
(applicable nationwide)	2015 to 2039	2040 to 2069	2070 to 2115	
Upper End	+10 %	+20 %	+40 %	
Central	+5 %	+10 %	+20 %	

Table 2.1 – Recommended peak rainfall intensity allowance for small and urban catchments (1961 to 1990 baseline).

#### Impacts of Climate Change on the Development Site

Guidance published by the EA states that the 'Upper End' allowance should be considered when designing SuDS. As the development subject to this FRA has a planning horizon of 60 years, a 40% increase in peak rainfall intensity has been used for the calculations in the outline surface water management strategy (refer to Section 4).

## **3** Potential Sources of Flooding

In determining whether the proposals for development are compliant with the NPPF, it is necessary to determine whether the development will be sustainable in terms of flood risk. Consequently, the main sources of flooding have been assessed and are discussed in Table 3.1 below.

Source of Flooding	Evidence		
Risk of Flooding from Rivers, Ordinary and Man-Made Watercourses	Inspection of OS mapping of the site and surrounding area reveals that there are no rivers or artificial watercourses within close proximity to the site. In addition, the EA's 'Flood Map for Planning' shows the site is situated in Flood Zone 1 and is not at risk of flooding from a river. Therefore, the risk of flooding from this source is considered to be <i>low</i> .		
Risk of Flooding from Sea	The site is located a significant distance inland and is elevated above predicted extreme tide levels. Consequently, the risk of flooding from this source is considered to be <i>low</i> .		
Risk of Flooding from Overland flow	Inspection of the EA's 'Flood Risk from Surface Water' mapping identifies that the site is at 'very low' risk of flooding from surface water. Additionally, the London Borough of Camden Council Strategic Flood Risk Assessment (SFRA) has no records of historic surface water flooding in proximity to the site. Consequently, the risk of flooding from this source is considered to be <i>low</i> .		
Risk of Flooding from Groundwater	It is acknowledged that the site is shown to be located on, or near to, the route of the historic River Fleet. However, groundwater flooding is most likely to occur in low-lying areas that are underlain by permeable rock (aquifers). The geology in this area is London Clay with no overlying superficial deposits, which is not typically associated with groundwater flooding due to its low permeability. The BGS Groundwater Hazard Map shows that the site is in area deemed at low risk of groundwater flooding. Furthermore, mapping on groundwater emergence provided as part of the Defra Groundwater Flood Scoping Study (May 2004) shows that no groundwater flooding events were recorded during the very wet periods of 2000/01 or 2002/03 and that the site itself is not located within an area where groundwater emergence is predicted. Additionally, the London Borough of Camden Council SFRA mapping shows the site to be located in area at low risk of groundwater flooding. Consequently, the risk of flooding from this source is considered to be <i>low</i> .		
Risk of Flooding from Sewers	Inspection of the asset location mapping provided by Thames Water identifies that the nearest public sewers to the site are combined sewers. However, if floodwater were to exit the sewer network, i.e. as a result of a blockage or an extreme pluvial event, it is unlikely that floodwater would reach the site and would instead likely be contained within the highway, flowing southwards away from the site following the sloping topography. Additionally, the London Borough of Camden Council SFRA contains no records to suggest that the site has been affected by sewer flooding in the past. Consequently, the risk of flooding to the site from sewers is considered to be <i>low</i> .		
Risk of Flooding from Artificial Sources	Inspection of the OS mapping for the area shows that there are no artificial sources of flooding within close proximity to the site. In addition, the EA's 'Flood Risk from Reservoirs' map shows that the site is not within an area considered to be at risk of flooding from reservoirs. Consequently, the risk of flooding is considered to be <i>low</i> .		

Table 3.1 – Assessment of the risk of flooding from all sources

From the analysis in Table 3.1, it can be seen that **the risk of flooding to the site from all sources is low.** 



## 4 Existing Drainage

## 4.1 Existing Surface Water Drainage

Thames Water has provided sewer mapping as part of their asset location data for the site and surrounding area (Figure 4.1). The mapping shows that there are public combined sewer running in close proximity to the site.



Figure 4.1 – Extract from Thames Water asset location mapping for the area around the subject site.

The existing site drainage has not been surveyed, but it is assumed at all surface water runoff from the development is discharged into the combined public sewer system running along Kentish Town Road.

Surface water runoff is discharged at an unrestricted rate from the existing site and this rate of discharge has been calculated for a range of rainfall events with varying return periods (Table 4.1). These hydrological calculations have been undertaken using the Modified Rational Method and synthetic rainfall data derived using the variables obtained from the Flood Estimation Handbook (FEH).

Return Period (years)	Peak runoff from the existing site (I/s)
2	12.2
30	22.6
100	23.1

Table 4.1 - Summary of peak runoff rates for the existing site.



## 5 Sustainable Drainage Assessment

## 5.1 Site Characteristics

The general requirement for all new development is to ensure that the runoff is managed sustainably, and that the development does not increase the risk of flooding at the site, or within the surrounding area. The important characteristics of the site, which have the potential to influence the surface water drainage strategy are summarised in Table 5.1 below.

Site Characteristic	Development Site	
Total area of site	~0.051 ha	
Current site condition	Developed (brownfield)	
Infiltration	The underlying geology is associated with very low infiltration rates	
Current surface water discharge method	Assumed connection into the combined public sewer	
Is there a watercourse nearby?	Νο	
Impermeable area	Existing Proposed ~ 511 m <sup>2</sup> ~ 511 m <sup>2</sup>	

Table 5.1 – Site characteristics affecting rainfall runoff.

The proposed development will maintain the percentage of impermeable area within the boundaries of the site. As a result, the rate and volume of surface water runoff discharged offsite will not be increased by the proposed development. The risk of surface water flooding to the surrounding area will therefore not increase as a result of the proposals for development.

Notwithstanding this, the NPPF states that sustainable drainage systems should be incorporated into new development, where possible. Therefore, the use of SuDS has been considered further in the following sections of this report.

## 5.2 Opportunities to Discharge Surface Water Runoff

Policy SI 13 of The London Plan summarises a hierarchy of options for discharging surface water runoff from developments. Under Policy SI 13, the preferred option is to manage surface water runoff at its source by promoting the storage and **reuse** of surface water runoff for later use, reducing the reliance of potable water, or to allow water to **infiltrate** into the underlying geology, recharging ground water tables. If this option is not viable, the next option is for the runoff to be

discharged into a **watercourse**. The water should only be conducted into the **public sewer** system if neither of the previous options are possible.

The following opportunities for managing the surface water runoff discharged from the development site are listed in order of preference:

*Water Re-use* – Water re-use systems generally require the yield from the building and hardstanding area to balance perfectly with the demand from the proposed development. However, the existing building occupies the entire curtilage of the site and therefore water reuse systems are not considered a viable solution for managing surface water runoff from the site.

*Infiltration* – The soil and underlying geology at this location (London Clay) is unlikely to be sufficiently permeable to support the use of infiltration SuDS. Additionally, due to the requirement of a 5m safety radius for soakaways in accordance with Part H of the building regulations, infiltration-based SuDS are not feasible within the site. Therefore, discharging surface water runoff via infiltration has not been deemed viable for this development.

**Discharge to Watercourses** – There are no watercourses located within close proximity to the site. As a result, there is no opportunity to discharge surface water runoff from the development to an existing watercourse.

**Discharge to Public Sewer System** – With no alternative options available, it is assumed that the existing connections to the public sewer system will present the most viable solution for managing the surface water runoff discharged from the development.

## 5.3 Surface Water Management

A range of typical SuDS that can be used to improve the environmental impact of a development is listed in Table 5.2 below along with the relative benefits of each feature and the appropriateness for the subject site.

#### **329-333 Kentish Town Road, Kentish Town** Flood Risk & SuDS Assessment



SuDS	Description	Comments	Appropriate for site?
Rainwater harvesting systems	Collecting of rainwater and storing for reuse on site, e.g. in form of water butts.	There is limited use for these systems on site.	No
Green roofs	Provide landscaping and planting at roof level to reduce surface water runoff rates.	The applicant has confirmed that the existing flat roof is subject to an approved application for future development.	No
Infiltration systems	Allow water to percolate into the ground at a controlled rate via natural infiltration.		No
Filter strips	Wide gently sloping densely planted areas promoting sedimentation and filtration		No
Filter drains	Trenches infilled with stone/gravel providing attenuation, sedimentation and filtration		No
Swales	Broad shallow channels that convey and store runoff and allow infiltration.		No
Bioretention systems / rain gardens	A shallow landscaped depression allowing runoff to pond temporarily on the surface or planters/tree crates designed specifically to intercept and store stormwater	Insufficient space on site due to building covering entire curtilage of site.	No
Pervious surfacing	Runoff is allowed to soak into structural paving and stored, potentially being allowed to infiltrate		No
Attenuation storage tanks	Large, below ground voided spaces which can be used to temporarily store storm water.		No
Detention basins	A landscaped depression for attenuation with a restricted runoff.		No
Ponds and wetlands	A permanent pool of water which can be used for attenuation and controlled outflows by water levels.		No

Table 5.2 – Suitability of SuDS.

The proposals for development are simply to lower the floor level of the existing basement and no external changes are proposed. Furthermore, the building encompasses the entire curtilage of the site. Therefore, as demonstrated in Table 5.2, the opportunity to incorporate sustainable drainage into the development is severely limited.

Notwithstanding this, it has been demonstrated that the proposed development does not increase the rate or volume of discharge offsite when compared to the existing site. Therefore, the risk of flooding to the surrounding area will not be increased as a result of the development proposals and the proposals are considered acceptable in accordance with the NPPF and local policy.

## 6 Conclusions and Recommendations

The overarching objective of this report is to appraise the risk of flooding at 329-333 Kentish Town Road to ensure that the proposals for development are acceptable in this location and that the risk of flooding offsite will not increase as a result of the development, in accordance with the NPPF and local planning policy.

Although the site is in Flood Zone 1, it has been identified as being in a Critical Drainage Area. Therefore, the risk of flooding has been considered for a wide range of sources, and it has been concluded that the risk to the proposed development is low.

The opportunities to include SuDS within the proposed development have been explored but as the proposals are limited to lowering the existing basement floor level, and the building occupies the entire curtilage of the site, there is no scope to include SuDS within the development. However, the development will not increase the rate or volume of runoff compared to the existing site, and therefore there is no increased risk of flooding to the surrounding area.

In conclusion, it is evident that the development is at low risk of flooding and will not increase the risk of flooding offsite. Consequently, the proposals will meet the requirements of the NPPF and local planning policy.



## 7 Appendices

Appendix A.1 – Drawings

Appendix A.2 – Thames Water Asset Location Data



Appendix A.1 – Drawings



#### NOTE: Architectural Information — the level of detail show drastings is relative to the submission REJANNIK APPLICATION.

EANNING APPLICATION. The drawings should therefore not be used for any depose without both the prior the agreement of mehitect, and subsequent checking / development typers

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Regulations Planning – the client/ the contractor will ensure phaghtables completed in accordance with the **Bysmanyd** drawings and take responsibility for the distance planning conditions

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Power Areas provided on drawings are rounded to the wholesbrit. Measurements are based upon received intoweyation and as such a reasonable allowance sh brade for discrepancies or deviations that may occu donistruction.



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EXISTING

Drawing Name Existing Site Drawing No E002 Revision

D Scale 1:500 @ A3



0 12.5

25

m















## Appendix A.2 – Thames Water Asset Location Data

# Asset location search



Herrington Consulting Limited Barham Business Park, Unit 6 Barham Business Park

## CANTERBURY CT4 6DQ

Search address supplied

329-331 Kentish Town Road Kentish Town Camden NW5 2AA

Your reference

2856/GP

**Our reference** 

ALS/ALS Standard/2021\_4377141

Search date

9 March 2021

## Knowledge of features below the surface is essential for every development

The benefits of this knowledge not only include ensuring due diligence and avoiding risk, but also being able to ascertain the feasibility of any development.

Did you know that Thames Water Property Searches can also provide a variety of utility searches including a more comprehensive view of utility providers' assets (across up to 35-45 different providers), as well as more focused searches relating to specific major utility companies such as National Grid (gas and electric).

Contact us to find out more.



Thames Water Utilities Ltd Property Searches, PO Box 3189, Slough SL1 4WW DX 151280 Slough 13



searches@thameswater.co.uk www.thameswater-propertysearches.co.uk



0800 009 4540





**Search address supplied:** 329-331, Kentish Town Road, Kentish Town, Camden, NW5 2AA

Dear Sir / Madam

An Asset Location Search is recommended when undertaking a site development. It is essential to obtain information on the size and location of clean water and sewerage assets to safeguard against expensive damage and allow cost-effective service design.

The following records were searched in compiling this report: - the map of public sewers & the map of waterworks. Thames Water Utilities Ltd (TWUL) holds all of these.

This searchprovides maps showing the position, size of Thames Water assets close to the proposed development and also manhole cover and invert levels, where available.

Please note that none of the charges made for this report relate to the provision of Ordnance Survey mapping information. The replies contained in this letter are given following inspection of the public service records available to this company. No responsibility can be accepted for any error or omission in the replies.

You should be aware that the information contained on these plans is current only on the day that the plans are issued. The plans should only be used for the duration of the work that is being carried out at the present time. Under no circumstances should this data be copied or transmitted to parties other than those for whom the current work is being carried out.

Thames Water do update these service plans on a regular basis and failure to observe the above conditions could lead to damage arising to new or diverted services at a later date.

## **Contact Us**

If you have any further queries regarding this enquiry please feel free to contact a member of the team on 0800 009 4540, or use the address below:

Thames Water Utilities Ltd Property Searches PO Box 3189 Slough SL1 4WW

Email: <u>searches@thameswater.co.uk</u> Web: <u>www.thameswater-propertysearches.co.uk</u>

# Asset location search



### Waste Water Services

## Please provide a copy extract from the public sewer map.

Enclosed is a map showing the approximate lines of our sewers. Our plans do not show sewer connections from individual properties or any sewers not owned by Thames Water unless specifically annotated otherwise. Records such as "private" pipework are in some cases available from the Building Control Department of the relevant Local Authority.

Where the Local Authority does not hold such plans it might be advisable to consult the property deeds for the site or contact neighbouring landowners.

This report relates only to sewerage apparatus of Thames Water Utilities Ltd, it does not disclose details of cables and or communications equipment that may be running through or around such apparatus.

The sewer level information contained in this response represents all of the level data available in our existing records. Should you require any further Information, please refer to the relevant section within the 'Further Contacts' page found later in this document.

For your guidance:

- The Company is not generally responsible for rivers, watercourses, ponds, culverts or highway drains. If any of these are shown on the copy extract they are shown for information only.
- Any private sewers or lateral drains which are indicated on the extract of the public sewer map as being subject to an agreement under Section 104 of the Water Industry Act 1991 are not an 'as constructed' record. It is recommended these details be checked with the developer.

### Clean Water Services

### Please provide a copy extract from the public water main map.

Enclosed is a map showing the approximate positions of our water mains and associated apparatus. Please note that records are not kept of the positions of individual domestic supplies.

For your information, there will be a pressure of at least 10m head at the outside stop valve. If you would like to know the static pressure, please contact our Customer Centre on 0800 316 9800. The Customer Centre can also arrange for a full flow and





pressure test to be carried out for a fee.

For your guidance:

- Assets other than vested water mains may be shown on the plan, for information only.
- If an extract of the public water main record is enclosed, this will show known public water mains in the vicinity of the property. It should be possible to estimate the likely length and route of any private water supply pipe connecting the property to the public water network.

### Payment for this Search

A charge will be added to your suppliers account.





#### **Further contacts:**

#### Waste Water queries

Should you require verification of the invert levels of public sewers, by site measurement, you will need to approach the relevant Thames Water Area Network Office for permission to lift the appropriate covers. This permission will usually involve you completing a TWOSA form. For further information please contact our Customer Centre on Tel: 0845 920 0800. Alternatively, a survey can be arranged, for a fee, through our Customer Centre on the above number.

If you have any questions regarding sewer connections, budget estimates, diversions, building over issues or any other questions regarding operational issues please direct them to our service desk. Which can be contacted by writing to:

Developer Services (Waste Water) Thames Water Clearwater Court Vastern Road Reading RG1 8DB

Tel: 0800 009 3921 Email: developer.services@thameswater.co.uk

#### **Clean Water queries**

Should you require any advice concerning clean water operational issues or clean water connections, please contact:

Developer Services (Clean Water) Thames Water Clearwater Court Vastern Road Reading RG1 8DB

Tel: 0800 009 3921 Email: developer.services@thameswater.co.uk



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Thames Water Utilities Ltd, Property Searches, PO Box 3189, Slough SL1 4W, DX 151280 Slough 13 T 0800 009 4540 E searches@thameswater.co.uk I www.thameswater-propertysearches.co.uk NB. Levels quoted in metres Ordnance Newlyn Datum. The value -9999.00 indicates that no survey information is available

Manhole Reference	Manhole Cover Level	Manhole Invert Level
0103	38.76	n/a
0101	n/a	n/a
91BI	n/a	n/a
91AH	n/a	n/a
91BB	n/a	n/a
91AG	n/a	n/a
9002	35.6	32.95
0004	n/a	n/a
011C	n/a	n/a
011B	n/a	n/a
0001	35.02	31.95
00CI	n/a	n/a
011A	n/a	n/a
00CH	n/a	n/a
00CF	n/a	n/a
00CG	n/a	n/a
9101	36.58	35.5
9003	36.08	34.55
91BJ	n/a	n/a
The position of the apparatus shown on this plan is given without obligation and warranty, and the accuracy cannot be guaranteed. Service pines are not		

shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by Thames Water for any error or omission. The actual position of mains and services must be verified and established on site before any works are undertaken.



#### Sewer Fittings



#### **Other Symbols**

Symbols used on maps which do not fall under other general categories

Change of characteristic indicator (C.O.C.I.) -68 Invert Level < Summit Lines denoting areas of underground surveys, etc. Aareement

Other Sewer Types (Not Operated or Maintained by Thames Water)



#### Notes:

1) All levels associated with the plans are to Ordnance Datum Newlyn.

2) All measurements on the plans are metric.

3) Arrows (on gravity fed sewers) or flecks (on rising mains) indicate direction of flow.

4) Most private pipes are not shown on our plans, as in the past, this information has not been recorded.

5) 'na' or '0' on a manhole level indicates that data is unavailable.

6) The text appearing alongside a sewer line indicates the internal diameter of the pipe in milimetres. Text next to a manhole indicates the manhole reference number and should not be taken as a measurement. If you are unsure about any text or symbology present on the plan, please contact a member of Property Searches on 0800 009 4540.

Undefined End

Inlet

A

Public/Private Pumping Station 

#### Areas

Operational Site /// ..... Chamber Tunnel Conduit Bridge



Based on the Ordnance Survey Map with the Sanction of the controller of H.M. Stationery Office, License no. 100019345 Crown Copyright Reserved.

ALS Water Map Key

Water Pipes (Operated & Maintained by Thames Water)

- Distribution Main: The most common pipe shown on water maps.
   With few exceptions, domestic connections are only made to distribution mains.
- Trunk Main: A main carrying water from a source of supply to a treatment plant or reservoir, or from one treatment plant or reservoir to another. Also a main transferring water in bulk to smaller water mains used for supplying individual customers.
- **Supply Main:** A supply main indicates that the water main is used as a supply for a single property or group of properties.
- STERE
   Fire Main: Where a pipe is used as a fire supply, the word FIRE will be displayed along the pipe.
- **Metered Pipe:** A metered main indicates that the pipe in question supplies water for a single property or group of properties and that quantity of water passing through the pipe is metered even though there may be no meter symbol shown.
- Transmission Tunnel: A very large diameter water pipe. Most tunnels are buried very deep underground. These pipes are not expected to affect the structural integrity of buildings shown on the map provided.
- **Proposed Main:** A main that is still in the planning stages or in the process of being laid. More details of the proposed main and its reference number are generally included near the main.

PIPE DIAMETER	DEPTH BELOW GROUND	
Up to 300mm (12")	900mm (3')	
300mm - 600mm (12" - 24")	1100mm (3' 8")	
600mm and bigger (24" plus)	1200mm (4')	

Thames Water Utilities Ltd, Property Searches, PO Box 3189, Slough SL1 4W, DX 151280 Slough 13 T 0800 009 4540 E searches@thameswater.co.uk I www.thameswater-propertysearches.co.uk



Valves

- Undefined End
- Manifold
- Customer Supply
- Fire Supply





## **Other Symbols**

Data Logger

Other Water Pipes (Not Operated or Maintained by Thames Water)

Other Water Company Main: Occasionally other water company water pipes may overlap the border of our clean water coverage area. These mains are denoted in purple and in most cases have the owner of the pipe displayed along them.

**Private Main:** Indiates that the water main in question is not owned by Thames Water. These mains normally have text associated with them indicating the diameter and owner of the pipe.

## **Terms and Conditions**

All sales are made in accordance with Thames Water Utilities Limited (TWUL) standard terms and conditions unless previously agreed in writing.

- 1. All goods remain in the property of Thames Water Utilities Ltd until full payment is received.
- 2. Provision of service will be in accordance with all legal requirements and published TWUL policies.
- 3. All invoices are strictly due for payment 14 days from due date of the invoice. Any other terms must be accepted/agreed in writing prior to provision of goods or service, or will be held to be invalid.
- 4. Thames Water does not accept post-dated cheques-any cheques received will be processed for payment on date of receipt.
- 5. In case of dispute TWUL's terms and conditions shall apply.
- 6. Penalty interest may be invoked by TWUL in the event of unjustifiable payment delay. Interest charges will be in line with UK Statute Law 'The Late Payment of Commercial Debts (Interest) Act 1998'.
- 7. Interest will be charged in line with current Court Interest Charges, if legal action is taken.
- 8. A charge may be made at the discretion of the company for increased administration costs.

A copy of Thames Water's standard terms and conditions are available from the Commercial Billing Team (cashoperations@thameswater.co.uk).

We publish several Codes of Practice including a guaranteed standards scheme. You can obtain copies of these leaflets by calling us on 0800 316 9800

If you are unhappy with our service you can speak to your original goods or customer service provider. If you are not satisfied with the response, your complaint will be reviewed by the Customer Services Director. You can write to her at: Thames Water Utilities Ltd. PO Box 492, Swindon, SN38 8TU.

If the Goods or Services covered by this invoice falls under the regulation of the 1991 Water Industry Act, and you remain dissatisfied you can refer your complaint to Consumer Council for Water on 0121 345 1000 or write to them at Consumer Council for Water, 1st Floor, Victoria Square House, Victoria Square, Birmingham, B2 4AJ.

Credit Card	BACS Payment	Telephone Banking	Cheque
Call <b>0800 009 4540</b> quoting your invoice number starting CBA or ADS / OSS	Account number 90478703 Sort code 60-00-01 A remittance advice must be sent to: Thames Water Utilities Ltd., PO Box 3189, Slough SL1 4WW. or email ps.billing@thameswater. co.uk	By calling your bank and quoting: Account number <b>90478703</b> Sort code <b>60-00-01</b> and your invoice number	Made payable to ' <b>Thames</b> Water Utilities Ltd' Write your Thames Water account number on the back. Send to: <b>Thames Water Utilities</b> Ltd., PO Box 3189, Slough SL1 4WW or by DX to 151280 Slough 13

## Ways to pay your bill

Thames Water Utilities Ltd Registered in England & Wales No. 2366661 Registered Office Clearwater Court, Vastern Rd, Reading, Berks, RG1 8DB.