FLOOD VOLUME AT 12.380mAOD LEVEL = 600m³

SCALE 1:1000

FLOOD VOLUME AT 12.460mAOD LEVEL = 1050m³

SCALE 1:1000

FLOOD VOLUMES FROM 12.300mAOD (HIGHEST LEVEL IN EXISTING HIGHWAY) TO 1 IN 100 YEAR +24% FLOOD LEVEL OF 12.460					
FLOOD LEVEL (mAOD)	EXISTING SITE FLOOD VOLUMES (m³)	PROPOSED SITE FLOOD VOLUMES (m³)	FLOOD STORAGE DIFFERENCE EXISTING TO PROPOSED (m³)	EXISTING FLOOD STORAGE FOR EACH 100mm SLICE	PROPOSED FLOOD STORAGE FOR EACH 100mm SLICE
12.380	300	600	300	-	-
12.460	750	1050	300	450	450

NOTES:

1. FLOOD LEVEL TAKEN FROM RAMBOLL FLOOD RISK APPRAISAL REPORT REF. 1620014229 DATED 05/04/2022.

DRAWINGS:

TOPOGRAPHICAL SURVEY - SURVEY SOLUTIONS DRAWING NUMBER 12615 se-01 REV - TITLED 'TOPOGRAPHICAL SURVEY'.
ARCHITECTS LAYOUT - UMC ARCHITECTS LAYOUT
21490-UMC-ZZZZ-SI-M2-A-0602 [D] TITLED 'SITE LAYOUT'

SURFACE ELEVATION DATA			
NUMBER	MINIMUM ELEVATION	MAXIMUM ELEVATION	COLOR
1	0.00	0.10	
2	0.10	0.20	
3	0.20	0.30	
4	0.30	0.40	
5	0.40	0.50	
6	0.50	0.60	
7	0.60	0.70	
8	0.70	0.80	
9	0.80	0.90	
10	0.90	1.00	

ISOPACHYTE BANDS REFER TO DEPTH FROM FLOOD LEVEL TO PROPOSED GROUND PROFILE THEREFORE REPRESENT FLOODING DEPTHS.

1 IN 100 YEAR + 24%
FLOOD LEVEL = 12.460

Rev.	Tech	Date	Description
P1	NDH	07.04.22	FIRST ISSUE.

Bradbrook Consulting

Berkhamsted Office
Bourne House
Prince Edward Street
Berkhamsted
Herts, HP4 3EZ
United Kingdom

T: +44 (0)20 8669 1903
E: info@bradbrookconsulting.com
W: www.bradbrookconsulting.com

Client: BRIDGE

Project Title: **WEYBRIDGE BUSINESS PARK, WEYBRIDGE**

Drawing Title: **PROPOSED FLOOD VOLUMES DURING 1 IN 100 YEAR + 24%**

Purpose of Issue: Information ○ Preliminary ● Approval ○ Tender ○ Construction ○ Record Copy ○

First Issue Date	Drawn By	Scale	Checked
MARCH 22	NDH	1:1000 @ A1	NRB

Drawing Number	Rev.
10334617-HDR-XX-XX-DR-C-604	P1

APPENDIX H

PUBLIC SEWER RECORDS

CommercialDW
Multisite Drainage & Water Enquiry

Thames Water Property Searches

TM Property Service Ltd.
1200, Delta Business Park
Swindon
SN5 7XZ

Search address supplied	MULTISITESEARCH, Weybridge Business Park, Addlestone Road, Addlestone, KT15 2LE
Your reference	22573750
Our reference	CDWS/CDWS Standard/2021_4532424
Received date	24 September 2021
Search date	22 November 2021

Keeping you up-to-date

Commercial Drainage and Water Enquiry

The Commercial Drainage and Water Enquiry is specifically designed for those purchasing or leasing land or commercial property.

With comprehensive information regarding water and sewerage services and infrastructure assets, combined with an appropriate guarantee for commercial property and land transactions, the Commercial Drainage and Water Enquiry mitigates risk and provides peace of mind for commercial property professionals and their advisers.

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

CON29DW COMMERCIAL DRAINAGE & WATER SEARCH

DRAINAGE + WATER SEARCHES NETWORK DWSN

Search address supplied: MULTISITESEARCH, Weybridge Business Park, Addlestone Road, Addlestone, KT15 2LE

Any new owner or occupier will need to contact Thames Water on 0800 316 9800 or log onto our website www.thameswater.co.uk and complete our online form to change the water and drainage services bills to their name.

The following records were searched in compiling this report: - the map of public sewers, the map of waterworks, water and sewer billing records, adoption of public sewer records, building over public sewer records, the register of properties subject to internal foul flooding, the register of properties subject to poor water pressure and the drinking water register. Thames Water Utilities Ltd (TWUL) holds all of these.

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

(iv) and compensation payments

Maps

1.1 Where relevant, please include a copy of an extract from the public sewer map.

A copy of an extract of the public sewer map is included, showing the public sewers, disposal mains and lateral drains in the vicinity of the properties.

1.2 Where relevant, please include a copy of an extract from the map of waterworks.

A copy of an extract from the map of waterworks is included in which the locations of the properties are identified.

Drainage

2.1 Does foul water from the properties drain to a public sewer?

Records indicate that foul water from all of the properties drains to a public sewer.

2.2 Does surface water from the properties drain to a public sewer?

Records indicate that surface water from all of the properties drains to a public sewer.

2.3 Is a surface water drainage charge payable?

Records confirm that a surface water drainage charge is applicable for the following properties:
Chep, Weybridge Business Park, Unit 2, Addlestone Road, Addlestone, KT15 2LE
Broadway Malyan, Weybridge Business Park, Unit 3, Addlestone Road, Addlestone, KT15 2LE
Weybridge Business Park, Unit 4, Addlestone Road, Addlestone, KT15 2LE
Weybridge Business Park, Unit 5, Addlestone Road, Addlestone, KT15 2LE
Weybridge Business Park, Unit 6, Addlestone Road, Addlestone, KT15 2LE
Weybridge Business Park, Unit 7, Addlestone Road, Addlestone, KT15 2LE
Weybridge Business Park, Unit 8, Addlestone Road, Addlestone, KT15 2LE
Weybridge Business Park, Unit 9, Addlestone Road, Addlestone, KT15 2LE

2.4 Does the public sewer map indicate any public sewer, disposal main or lateral drain within the boundaries of the properties?

The public sewer map included indicates that there is a public sewer, disposal main or lateral drain within the boundaries of the property. However, from the 1st October 2011 there may be additional public sewers, disposal mains or lateral drains which are not recorded on the public sewer map but which may further prevent or restrict development of the property.

2.4.1 Does the public sewer map indicate any public pumping station or any other ancillary apparatus within the boundaries of the property?

The public sewer map included indicates that there is no public pumping station within the boundaries of the property.

2.5 Does the public sewer map indicate any public sewer within 30.48 metres (100 feet) of any buildings within the properties?

The public sewer map included indicates that there is a public sewer within 30.48 metres (100 feet) of a building within the property.

2.5.1 Does the public sewer map indicate any public pumping station or any other ancillary apparatus within 50 metres of any buildings within the property?

The public sewer map included indicates that there is no public pumping station within 50 metres of any buildings within the property.

2.6 Are any sewers or lateral drains serving or which are proposed to serve the properties the subject of an existing adoption agreement or an application for such an agreement?

Records confirm that Foul sewers serving the development, of which the property forms part are not the subject of an existing adoption agreement or an application for such an agreement.

The Surface Water sewer(s) and/or Surface Water lateral drain(s) are not the subject of an adoption agreement.

2.7 Has a sewerage undertaker approved or been consulted about any plans to erect a building or extension on the properties over or in the vicinity of a public sewer, disposal main or drain?

There are no records in relation to any approval or consultation about plans to erect a building or extension on the property over or in the vicinity of a public sewer, disposal main or drain. However, the sewerage undertaker might not be aware of a building or extension on the property over or in the vicinity of a public sewer, disposal main or drain.

2.8 Is the building which is or forms part of the properties, at risk of internal flooding due to overloaded public sewers?

The property is not recorded as being at risk of internal flooding due to overloaded public sewers.

From the 1st October 2011 most private sewers, disposal mains and lateral drains were transferred into public ownership It is therefore possible that a property may be at risk of internal flooding due to an overloaded public sewer which the sewerage undertaker is not aware of. For further information it is recommended that enquiries are made of the vendor.

2.9 Please state the distance from the property to the nearest boundary of the nearest sewage treatment works.

The nearest sewage treatment works is Weybridge STW which is 1.603 kilometres to the south of the property.

Water

3.1 Are the properties connected to mains water supply?

Records indicate that all of the properties are connected to the mains water supply.

3.2 Are there any water mains, resource mains or discharge pipes within the boundaries of the properties?

The map of waterworks does not indicate any water mains, resource mains or discharge pipes within the boundaries of the property.

3.3 Is any water main or service pipe serving or which is proposed to serve the properties the subject of an existing adoption agreement or an application for such an agreement?

Records confirm that water mains or service pipes serving all of the properties are not the subject of an existing adoption agreement or an application for such an agreement.

3.4 Are the properties at risk of receiving low water pressure or flow?

Records confirm that the property is not recorded on a register kept by the water undertaker as being at risk of receiving low water pressure or flow.

3.5 What is the classification of the water supply for the property?

The water supplied to the property has an average water hardness of 115mg/l calcium which is defined as Hard by Affinity Water.

3.6 Is there a meter installed at this property?

Records indicate that there is a meter installed at the following properties:
Chep, Weybridge Business Park, Unit 2, Addlestone Road, Addlestone, KT15 2LE
Broadway Malyan, Weybridge Business Park, Unit 3, Addlestone Road, Addlestone, KT15 2LE
Weybridge Business Park, Unit 4, Addlestone Road, Addlestone, KT15 2LE
Weybridge Business Park, Unit 5, Addlestone Road, Addlestone, KT15 2LE
Weybridge Business Park, Unit 6, Addlestone Road, Addlestone, KT15 2LE
Weybridge Business Park, Unit 7, Addlestone Road, Addlestone, KT15 2LE
Weybridge Business Park, Unit 8, Addlestone Road, Addlestone, KT15 2LE
Weybridge Business Park, Unit 9, Addlestone Road, Addlestone, KT15 2LE

3.7 Please include details of the location of any water meter serving the properties.

Records indicate that the following properties are served by a water meter, which is located within the property.
Weybridge Business Park, Unit 4, Addlestone Road, Addlestone, KT15 2LE
Weybridge Business Park, Unit 5, Addlestone Road, Addlestone, KT15 2LE
Weybridge Business Park, Unit 6, Addlestone Road, Addlestone, KT15 2LE
Weybridge Business Park, Unit 7, Addlestone Road, Addlestone, KT15 2LE
Weybridge Business Park, Unit 8, Addlestone Road, Addlestone, KT15 2LE
Weybridge Business Park, Unit 9, Addlestone Road, Addlestone, KT15 2LE
Records indicate that the following properties are served by a water meter, which is not located within the property.
Chep, Weybridge Business Park, Unit 2, Addlestone Road, Addlestone, KT15 2LE
Broadway Malyan, Weybridge Business Park, Unit 3, Addlestone Road, Addlestone, KT15 2LE

Charging

4.1.1 – Who is responsible for providing the sewerage services for the property?

Thames Water Utilities Limited, Clearwater Court, Reading, RG1 8DB is the sewerage undertaker for the area.

4.1.2 – Who is responsible for providing the water services for the property?

Affinity Water Ltd, Tamblin Way, Hatfield, AL10 9EZ, is the water undertaker for the area.

4.2 Who bills the properties for sewerage services?

If you wish to know who bills the sewerage services for this property then you will need to contact the current owner. For a list of all potential retailers of sewerage services for the property please visit www.open-water.org.uk

4.3 Who bills the properties for water services?

If you wish to know who bills the water services for this property then you will need to contact the current owner. For a list of all potential retailers of water services for the property please visit www.open-water.org.uk

Trade Effluent

5.1 Are there any trade effluent consents relating to this site/property for disposal of chemically enhanced waste?

The following properties do not have a trade effluent consent:
Chep, Weybridge Business Park, Unit 2, Addlestone Road, Addlestone, KT15 2LE
Broadway Malyan, Weybridge Business Park, Unit 3, Addlestone Road, Addlestone, KT15 2LE
Weybridge Business Park, Unit 4, Addlestone Road, Addlestone, KT15 2LE
Weybridge Business Park, Unit 5, Addlestone Road, Addlestone, KT15 2LE
Weybridge Business Park, Unit 6, Addlestone Road, Addlestone, KT15 2LE
Weybridge Business Park, Unit 7, Addlestone Road, Addlestone, KT15 2LE
Weybridge Business Park, Unit 8, Addlestone Road, Addlestone, KT15 2LE
Weybridge Business Park, Unit 9, Addlestone Road, Addlestone, KT15 2LE

Wayleaves, Easements, Manhole Cover and Invert levels

6.1 Is there a wayleave/easement agreement giving Thames Water the right to lay or maintain assets or right of access to pass through private land in order to reach the Company's assets?

No.

6.2 On the copy extract from the public sewer map, please show manhole cover,depth and invert levels where the information is available.

Details of any manhole cover and invert levels application to this site are enclosed.

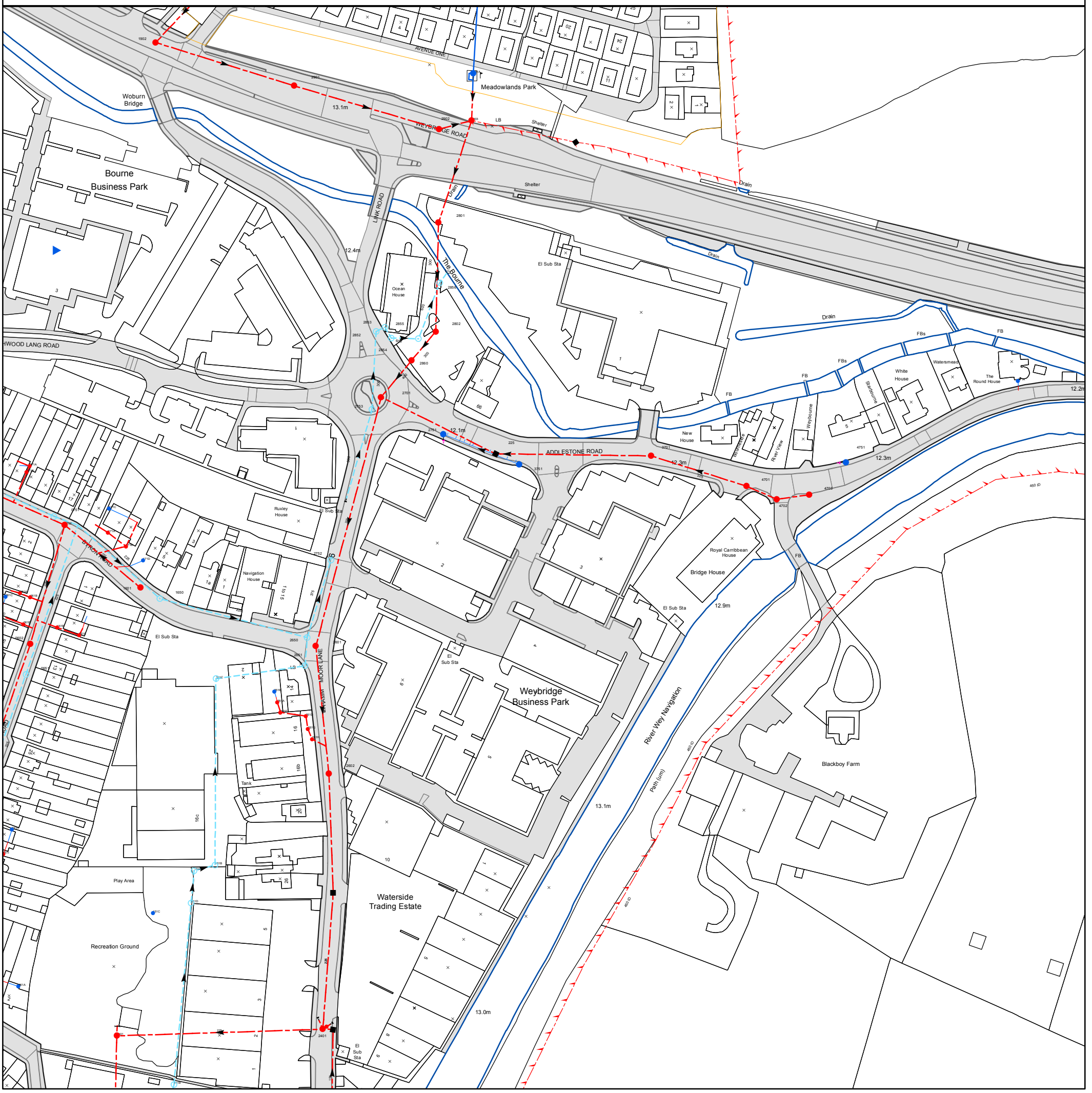
Payment for this Search

A charge will be added to your suppliers account.

Please note that none of the charge made for this report relate to the provision of ordnance Survey mapping information

Based on the Ordnance Survey Map with the sanction of the Controller of H.M Stationary Office License Number 10019345

CDWS/CDWS Standard/2021_4532424



The position of the apparatus shown on this plan is given without obligation and warranty, and the accuracy cannot be guaranteed. Service pipes 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 before any works are undertaken. Crown copyright Reserved

Scale:	1:1790
Width:	500m
Printed By:	Rveldhur
Print Date:	22/11/2021
Map Centre:	506325,164717
Grid Reference:	TQ0664NW

Comments:

CDWS/CDWS Standard/2021_4532424

NB: Level quoted in metres Ordnance Newlyn Datum. The value -9999.00 indicates no Survey information is available.

REFERENCE	COVER LEVEL	INVERT LEVEL
4703	12.5	10.5
3751		
0602	12.8	11.27
2802	12.6	10.05
2856	12.49	10.63
4751	12.38	11.14
1650	12.79	11.36
2852	12.54	10.7
2853	12.56	10.7
1601	12.87	11.93
2651	12.64	11.11
0751	13.14	11.59
2855	12.48	10.68
051H		
1702	13.16	11.54
171B		
141B		
151C		
051A		
061B		
071B		
1401	12.67	8.55
261A		
261E		
1902	12.74	
2902	12.58	
571A		
2601	12.63	9.39
261G		
161A		
171C		
171D		

REFERENCE	COVER LEVEL	INVERT LEVEL
4702	12.42	10.46
0651	12.78	
3701	12.29	10.26
2801		
2751		
061E		
2753	12.24	
2701	12.31	9.8
2854	12.64	10.69
2752	12.43	10.67
2650	12.45	10.98
2860		
4701	12.46	
051I		
171A		
151B		
151A		
151D		
061A		
071A		
061C		
2401	12.62	8.88
261B		
291A	12.84	10.74
2901	12.71	
2903	12.64	10.7
2602	12.73	9.19
261D		
261H		
161B		
151C		

Sewer Key - Commercial Drainage and Water Enquiry

Public Sewer Types (Operated & Maintained by Thames Water)

Foul: A sewer designed to convey waste water from domestic and industrial sources to a treatment works.

Surface Water: A sewer designed to convey surface water (e.g. rain water from roofs, yards and car parks) to rivers or watercourses.

Combined: A sewer designed to convey both waste water and surface water from domestic and industrial sources to a treatment works.

Trunk Surface Water

Trunk Foul

Storm Relief

Trunk Combined

Vent Pipe

Bio-solids (Sludge)

Proposed Thames Surface Water Sewer

Proposed Thames Water Foul Sewer

Gallery

Foul Rising Main

Surface Water Rising Main

Combined Rising Main

Sludge Rising Main

Proposed Thames Water Rising Main

Vacuum

Sewer Fittings

A feature in a sewer that does not affect the flow in the pipe. Example: a vent is a fitting as the function of a vent is to release excess gas.

Air Valve

Dam Chase

Fitting

Meter

Vent Column

Operational Controls

A feature in a sewer that changes or diverts the flow in the sewer. Example: A hydrobrake limits the flow passing downstream.

Control Valve

Drop Pipe

Ancillary

Weir

End Items

End symbols appear at the start or end of a sewer pipe. Examples: an Undefined End at the start of a sewer indicates that Thames Water has no knowledge of the position of the sewer upstream of that symbol, Outfall on a surface water sewer indicates that the pipe discharges into a stream or river.

Outfall

Undefined End

Inlet

Other Symbols

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

Public/Private Pumping Station

Change of characteristic indicator (C.O.C.I.)

Invert Level

Summit

Areas

Lines denoting areas of underground surveys, etc.

Agreement

Operational Site

Chamber

Tunnel

Conduit Bridge

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

Foul Sewer

Surface Water Sewer

Combined Sewer

Gulley

Culverted Watercourse

Proposed

Abandoned Sewer

Notes:

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

2) All measurements on the plans are metric.

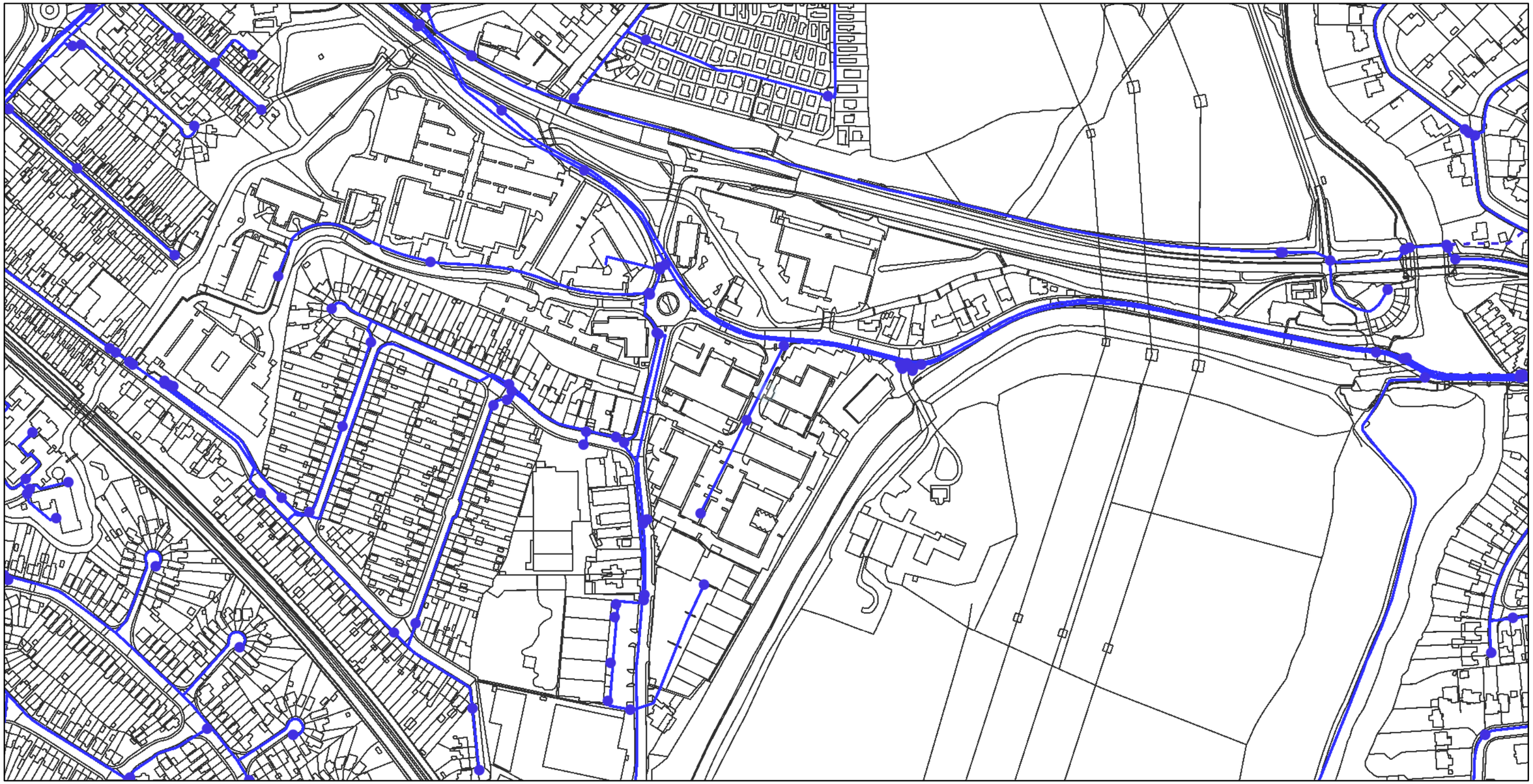
3) Arrows (on gravity fed sewers) or flecks (on rising mains) indicate direction of flow.

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.

Reference No. 2021_4532425



For further information about the contents of this plan, please contact Affinity Water at the address below

Affinity Water, Tamblin Way, Hatfield, Hertfordshire, AL10 9EZ. www.affinitywater.co.uk/central

This map is centred upon Ordnance Survey grid reference 506,324,164,716

- Water Main
- Abandoned Water Main
- Hydrants, Valves, etc
- Borehole, Pumping Facility, etc

N

1:3,205

11/22/2021

For your guidance:

- Thames Water Property Searches Complaints Procedure:
  - Thames Water Property Searches offers a robust complaints procedure. Complaints can be made by telephone, in writing, by email (searches@thameswater.co.uk) or through our website (www.thameswater-propertysearches.co.uk)

As a minimum standard Thames Water Property Searches will:

- endeavour to resolve any contact or complaint at the time of receipt. If this isn't possible, we will advise of timescales;
- investigate and research the matter in detail to identify the issue raised (in some cases third party consultation will be required);
- provide a response to the customer within 10 working days of receipt of the complaint;
- provide compensation, if no response or acknowledgment that we are investigating the case is given within 10 working days of receipt of the complaint;
- keep you informed of the progress and, depending on the scale of investigation required, update with new timescales as necessary;
- provide an amended search, free of charge, if required;
- provide a refund if we find your complaint to be justified; take the necessary action within our power to put things right.

If you want us to liaise with a third party on your behalf, just let us know.

If you are still not satisfied with the outcome provided, we will refer the matter to a Senior Manager, for resolution, who will respond again within 5 working days.

If you remain dissatisfied with our final response you may refer your complaint for consideration under The Property Ombudsman scheme (TPOs). Further information can be obtained by visiting www.tpos.co.uk or by sending an email to admin@tpos.co.uk

Question 1.1

For your guidance:

- The Water Industry Act 1991 defines Public Sewers as those which Thames Water have responsibility for. Other assets and rivers, watercourses, ponds, culverts or highway drains may be shown for information purposes only.
- 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.
- Assets other than public sewers may be shown on the copy extract, for information.

Question 1.2

For your guidance:

- The “water mains” in this context are those, which are vested in and maintainable by the water company under statute.
- Assets other than public water mains may be shown on the plan, for information only.
- Water companies are not responsible for private supply pipes connecting the property to the public water main and do not hold details of these. These may pass through land outside of the control of the seller, or may be shared with adjacent properties. The buyer may wish to investigate whether separate rights or easements are needed for their inspection, repair or renewal.
- 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.

Question 2.1

For your guidance:

- Water companies are not responsible for any private drains that connect the property to the public sewerage system and do not hold details of these. The property owner will normally have sole responsibility for private drains serving the property. These may pass through land outside the control of the seller and the buyer may wish to investigate whether separate rights or easements are needed for their inspection, repair or renewal.
- If foul water does not drain to the public sewerage system, the property may have private facilities in the form of a cesspit, septic tank or other type of treatment plant.
- An extract from the public sewer map is enclosed. This will show known public sewers in the vicinity of the property and it should be possible to estimate the likely length and route of any private drains and/or sewers connecting the property to the public sewerage system.

Question 2.2

For your guidance:

- Sewerage Undertakers are not responsible for any private drains that connect the property to the public sewerage system, and do not hold details of these.
- The property owner will normally have sole responsibility for private drains serving the property. These private drains may pass through land outside of the control of the seller and the buyer may wish to investigate whether separate rights or easements are needed for their inspection, repair or renewal.
- In some cases, 'Sewerage Undertakers' records do not distinguish between foul and surface water connections to the public sewerage system.
- At the time of privatisation in 1989, Sewerage Undertakers were sold with poorly-kept records of sewerage infrastructure. The records did not always show which properties were connected for surface water drainage purposes. Accordingly, billing records have been used to provide an answer for this element of the drainage and water search.
- Due to the potential inadequacy of 'Sewerage Undertakers' infrastructure records with respect to surface water drainage, it is the customer's responsibility to inform the Sewerage Undertaker that they do not receive the surface water drainage service. If on inspection, the buyer finds that surface water from the property does not drain to a public sewer, then the property may be eligible for a rebate of the surface water drainage charge. If you wish to know who bills the sewerage services for this property then you will need to contact the current owner. For a list of all potential retailers of sewerage services for the property please visit www.open-water.org.uk.
- If surface water from the property does not drain to the public sewerage system, the property may have private facilities in the form of a soakaway or private connection to a watercourse.
- An extract from the public sewer map is enclosed. This will show known public sewers in the vicinity of the property and it should be possible to estimate the likely length and route of any private drains and/or sewers connecting the property to the public sewerage system.

Question 2.3

For your guidance:

- If surface water from the property drains to a public sewer, then a surface water drainage charge is payable.
- Where a surface water drainage charge is currently included in the property's water and sewerage bill but, on inspection, the buyer finds that surface water from the property does not drain to a public sewer, then the property may be eligible for a rebate of the surface water drainage charge. If you wish to know who bills the sewerage services for this property then you will need to contact the current owner. For a list of all potential retailers of sewerage services for the property please visit www.open-water.org.uk.

Question 2.4

For your guidance:

- Thames Water has a statutory right of access to carry out work on its assets. Employees of Thames Water or its contractors may, therefore, need to enter the property to carry out work.
- Please note if the property was constructed after 1st July 2011 any sewers and/or lateral drain within the boundary of the property are the responsibility of the householder.
- The approximate boundary of the property has been determined by reference to the Ordnance Survey Record or the map supplied.
- The presence of a public sewer running within the boundary of the property may restrict further development. The Company has a statutory right of access to carry out work on its assets, subject to notice. This may result in employees of the Company, or its contractors, needing to enter the property to carry out work.
- 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.

Question 2.4.1

For your guidance:

- Private pumping stations installed before 1st July 2011 will be transferred into the ownership of the sewerage undertaker.
- From the 1st October 2016 private pumping stations which serve more than one property have been transferred into public ownership but may not be recorded on the public sewer map.
- The approximate boundary of the property has been determined by reference to the Ordnance Survey Record or the map supplied.
- The presence of a public pumping station within the boundary of the property may restrict further development. The company has a statutory right of access to carry out work on its assets, subject to notice. This may result in employees of the company, or its contractors, needing to enter the property to carry out work.
- 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.

Question 2.5

For your guidance:

- From the 1st October 2011 there may be additional lateral drains and/or public sewers which are not recorded on the public sewer map but are also within 30.48 metres (100 feet) of a building within the property.
- The presence of a public sewer within 30.48 metres (100 feet) of the building(s) within the property can result in the local authority requiring a property to be connected to the public sewer.
- The measurement is estimated from the Ordnance Survey record, between the building(s) within the boundary of the property and the nearest public sewer.
- 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.

Question 2.5.1

For your guidance:

- Private pumping stations installed before 1st July 2011 will be transferred into the ownership of the sewerage undertaker.
- From the 1st October 2016 private pumping stations which serve more than one property have been transferred into public ownership but may not be recorded on the public sewer map.
- The presence of a public pumping station within 50 metres of the building(s) within the property can result in the local authority requiring a property to be connected to the public sewer.
- The measurement is estimated from the Ordnance Survey record, between the building(s) within the boundary of the property and the nearest public sewer.
- 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.

Question 2.6

For your guidance:

- Any sewers and/or lateral drains within the boundary of the property are not the subject of an adoption agreement and remain the responsibility of the householder. Adoptable sewers are normally those situated in the public highway.
- This enquiry is of interest to purchasers who will want to know whether or not the property will be linked to a public sewer.
- Where the property is part of a very recent or ongoing development and the sewers are not the subject of an adoption application, buyers should consult with the developer to ascertain the extent of private drains and sewers for which they will hold maintenance and renewal liabilities.
- Final adoption is subject to the developer complying with the terms of the adoption agreement under Section 104 of the Water Industry Act 1991 and meeting the requirements of 'Sewers for Adoption' 6th Edition.

Question 2.7

For your guidance:

- From the 1st October 2011 most private sewers, disposal mains and lateral drains were transferred into public ownership and the sewerage undertaker may not have been approved or consulted about any plans to erect a building or extension on the property over or in the vicinity of these.
- Buildings or extensions erected over a sewer in contravention of building controls may have to be removed or altered.

Question 2.8

For your guidance:

- For reporting purposes buildings are restricted to those normally occupied and used for residential, public, commercial, business or industrial purposes.
- 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 Utilities Ltd on Tel: 0800 316 9800 or website www.thameswater.co.uk

Question 2.9

For your guidance:

- The nearest sewage treatment works will not always be the sewage treatment works serving the catchment within which the property is situated.
- The sewerage undertaker's records were inspected to determine the nearest sewage treatment works.
- It should be noted that there may be a private sewage treatment works closer than the one detailed above that has not been identified.
- As a responsible utility operator, Thames Water Utilities Ltd seeks to manage the impact of odour from operational sewage works on the surrounding area. This is done in accordance with the Code of Practice on Odour Nuisance from Sewage Treatment Works issued via the Department of Environment, Food and Rural Affairs (DEFRA). This Code recognises that odour from sewage treatment works can have a detrimental impact on the quality of the local environment for those living close to works. However DEFRA also recognises that sewage treatment works provide important services to communities and are essential for maintaining standards in water quality and protecting aquatic based environments. For more information visit www.thameswater.co.uk

Question 3.1

For your guidance:

- The Company does not keep details of private supplies. The situation should be checked with the current owner of the property.

Question 3.2

For your guidance:

- The boundary of the property has been determined by reference to the plan supplied. Where a plan was not supplied, the Ordnance Survey Record was used. If the Water undertaker mentioned in Question 4.1.2 is not Thames Water Utilities Ltd the boundary of the property has been determined by the Ordnance Survey.
- The presence of a public water main within the boundary of the property may restrict further development within it. Water companies have a statutory right of access to carry out work on their assets, subject to notice. This may result in employees of the Company, or its contractors, needing to enter the property to carry out work.

Question 3.3

For your guidance:

- This enquiry is of interest to purchasers who will want to know whether or not the property will be linked to the mains water supply.

Question 3.4

For your guidance:

- "Low water pressure" means water pressure below the regulatory reference level, which is the minimum pressure when demand on the system is not abnormal.
- Water Companies are required to include in the Regulatory Register that is presented annually to the Director General of Water Services, properties receiving pressure below the reference level, provided that allowable exclusions do not apply (i.e. events which can cause pressure to temporarily fall below the reference level)
- The reference level of service is a flow of 9 litres/minute at a pressure of 10metres / head on the customer's side of the outside stop valve (osv). The reference level of service must be applied on the customer's side of a meter or any other company fittings that are on the customer's side of the main stop tap. The reference level applies to a single property. Where more than one property is served by a common service pipe, the flow assumed in the reference level must be appropriately increased to take account of the total number of properties served. For two properties, a flow of 18 litres/minute at a pressure of 10metres/head on the customers' side of the osv is appropriate. For three or more properties the appropriate flow should be calculated from the standard loadings provided in BS806-3 or the Institute of Plumbing handbook.
- **Allowable exclusions** The Company is required to include in the Regulatory Register properties receiving pressure below the reference level, provided that allowable exclusions listed below do not apply.
- **Abnormal demand:** This exclusion is intended to cover abnormal peaks in demand and not the daily, weekly or monthly peaks in demand, which are normally expected. Companies should exclude from the reported figures properties which are affected by low pressure only on those days with the highest peak demands. During the report year companies may exclude, for each property, up to five days of low pressure caused by peak demand.
- **Planned maintenance:** Companies should not report low pressures caused by planned maintenance. It is not intended that companies identify the number of properties affected in each instance. However, companies must maintain sufficiently accurate records to verify that low-pressure incidents that are excluded because of planned maintenance are actually caused by maintenance.
- **One-off incidents:** This exclusion covers a number of causes of low pressure; mains bursts; failures of company equipment (such as pressure reducing valves or booster pumps); firefighting; and action by a third party. However, if problems of this type affect a property frequently, they cannot be classed as one-off events and further investigation will be required before they can be excluded.
- **Low-pressure incidents of short duration:** Properties affected by low pressure, which only occur for a short period, and for which there is evidence that incidents of a longer duration would not occur during the course of the year, may be excluded from the reported figures.
- Please contact your water undertaker mentioned in Question 4.1.2 if you require further information on water pressure.

Question 3.5

For your guidance:

- Water hardness can be expressed in various indices for example the hardness settings for dishwashers are commonly expressed in Clark's degrees, but check with the manufacturer as there are also other units. The following table shows the normal ranges of hardness.

Hardness Category	Calcium (mg/l)	Calcium Carbonate (mg/l)	English Clarke degrees	French degrees	General/ German degrees
Soft	0 to 20	0 to 50	0 to 3.5	0 to 5	0 to 2.8
Moderately Soft	21 to 40	51 to 100	3.6 to 7	6 to 10	2.9 to 5.6
Slightly hard	41 to 60	101 to 150	8 to 10.5	11 to 15	5.7 to 8.4
Moderately hard	61 to 80	151 to 200	10.6 to 14	16 to 20	8.5 to 11.2
Hard	81 to 120	201 to 300	15 to 21	21 to 30	11.3 to 16.8
Very hard	Over 120	Over 300	Over 21	Over 30	Over 16.8

- Please contact your water undertaker mentioned in Question 4.1.2 if you require further information on water hardness.

Question 3.6

For your guidance:

- The Water Industry Act 1991 Section 150, The Water Resale Order 2001 provides protection for people who buy their water or sewerage services from a person or company instead of directly from a water or sewerage company. Details are available from the Office of Water Services (OFWAT) website is www.ofwat.gov.uk.
- The Company may install a meter at the premises where a buyer makes a change of use of the property or where the buyer uses water for:
  - Watering the garden other than by hand (this includes the use of sprinklers).
  - Automatically replenishing a pond or swimming pool with a capacity greater than 10,000 litres.
  - A bath with a capacity in excess of 230 litres.
  - A reverse osmosis unit Where a meter does not serve the property and the customer wishes to consider this method of charging, they should contact the current owner if they wish to know who bills the sewerage and water services for this property. For a list of all potential retailers of sewerage and water services for the property please visit www.open-water.org.uk.

Question 3.7

For your guidance:

- Where a meter does not serve the property and the customer wishes to consider this method of charging, they should contact the current owner if they wish to know who bills the water services for this property. For a list of all potential retailers of water services for the property please visit www.open-water.org.uk.

Question 5.1

For your guidance:

- If a Trade effluent consent applies to the premises which are the subject of this search, it is for the applicant to satisfy itself as to the suitability of the consent for its client's requirements. The occupier of any trade premises in the area of a sewerage undertaker may discharge any trade effluent proceeding from those premises into the undertaker's public sewers if he does so with the undertaker's consent. If, in the case of any trade premises, any trade effluent is discharged without such consent or other authorisation, the occupier of the premises shall be guilty of an offence.
- Please note any existing consent is dependent on the business being carried out at the property and will not transfer automatically upon change of ownership.
- For further information regarding Trade Effluent consents please contact: Trade Effluent Control, Crossness STW, Belvedere Road, Abbey Wood London SE2 9AQ.

Question 6.1

For your guidance:

- This question relates only to private agreements between the water company acting in a private capacity and a landowner. Such contracts may often be part of a conveyance or land transfer, or a deed of grant of easement.
- If there is no formal easement, then a sewer or water main may have been constructed following the service of notice under the provisions of the Public Health Act 1936, Water Act 1945,Water Act 1989 or Water Industry Act 1991 as applicable. The company does not hold copies of these notices. However, in the absence of evidence to the contrary there is a legal presumption that all matters were properly dealt with. All rights and obligations relating to sewers and water mains are now covered by the Water Industry Act 1991. Where rights exist at the boundary of the property, but we are not sure of the exact correlation, we will answer “Yes” to this question. A documentary right can exist even if the physical asset itself has not yet been laid, or has been moved, or removed. Likewise the position of the right and of the asset may differ.
- You may also find that an asset is protected both with contractual rights and statutory rights. Please consult your solicitor as to why this may happen, and its effects.
- We refer to “defined” assets for the following reasons: Often a contract may give the water company an expressed right to install and maintain assets within an area but without stating the exact position or route of such assets. Also, the law may imply rights where none have been mentioned specifically in a related contract, such as a conveyance. Finally, rights may come into being through long use. In any of these cases the rights are undefined, and although the water company may need to rely on them from time to time, as we cannot map the rights accurately, we will answer “no” to this question.
- Information obtainable from physical inspection (including Trial Bore Holes) overrides information contained in the report.
- Any error in answering this question is not to be regarded as a waiver of the water company’s rights or title, or an agreement or representation that the water company is prepared to vary or discharge any of its rights or title.

Customer and Clients are asked to note these terms, which govern the basis on which this CommercialDW Drainage & Water Enquiry is supplied

Definitions

'Client' means the person, company or body who is the intended recipient of the Report with an actual or potential interest in the Property.
'Company' means a water service company or their data service provider producing the Report.
'Customer' means the person, company, firm or other legal body placing the Order, either on their own behalf as Client, or, as an agent for a Client.
'Order' means any request completed by the Customer requesting the Report.
'Property' means the address or location supplied by the Customer in the Order.
'Report' means the drainage and/or water report prepared by The Company in respect of the Property.
'Thames Water" means Thames Water Utilities Limited registered in England and Wales under number 2366661 whose registered office is at Clearwater Court, Vastern Road, Reading, Berks, RG1 8DB;

Agreement

1 Thames Water agrees to supply the Report to the Customer and the Client subject to these terms. The scope and limitations of the Report are described in paragraph 2 of these terms. Where the Customer is acting as an agent for the Client then the Customer shall be responsible for bringing these terms to the attention of the Client. The Customer and Client agree that the placing of an Order for a Report indicates their acceptance of these terms.

The Report

2. Whilst Thames Water will use reasonable care and skill in producing the Report, it is provided to the Customer and the Client on the basis that they acknowledge and agree to the following:-

2.1 The information contained in the Report can change on a regular basis so Thames Water cannot be responsible to the Customer and the Client for any change in the information contained in the Report after the date on which the Report was produced and sent to the Client.

2.2 The Report does not give details about the actual state or condition of the Property nor should it be used or taken to indicate or exclude actual suitability or unsuitability of the Property for any particular purpose, or relied upon for determining saleability or value, or used as substitute for any physical investigation or inspection. Further advice and information from appropriate experts and professionals should always be obtained.

2.3 The information contained in the Report is based upon the accuracy, completeness and legibility of the address and other information supplied by the Customer or Client.

2.4 The Report provides information as to the location and connection of existing services and should not be relied on for any other purpose. The Report may contain opinions or general advice to the Customer and the Client and Thames Water cannot ensure that any such opinion or general advice is accurate, complete or valid and accepts no liability therefore.

2.5 The position and depth of apparatus shown on any maps attached to the Report are approximate, and are furnished as a general guide only, and no warranty as to its correctness is given or implied. The exact positions and depths should be obtained by excavation trial holes and the maps must not be relied on in the event of excavation or other works made in the vicinity of apparatus shown on any maps.

Liability

3 Thames Water shall not be liable to the Client for any failure, defect or non-performance of its obligations arising from any failure of, or defect in any machine, processing system or transmission link or anything beyond Thames Water's reasonable control or the acts or omissions of any party for whom Thames Water are not responsible.

3.1 Where the Customer sells this report to a Client (other than in the case of a bona fide legal adviser recharging the cost of the Report as a disbursement) Thames Water shall not in any circumstances (whether for breach of contract, negligence or any other tort, under statute or statutory duty or otherwise at all) be liable for any loss or damage whatsoever and the Customer shall indemnify Thames Water in respect of any claim by the Client.

3.2 Where a report is requested for an address falling within a geographical area where Thames Water and another Company separately provide Water and Sewerage Services, then it shall be deemed that liability for the information given by Thames Water or the Company as the case may be will remain with Thames Water or the Company as the case may be in respect of the accuracy of the information supplied. Where Thames Water is supplying information which has been provided to it by another Company for the purposes outlined in this agreement Thames Water will therefore not be liable in any way for the accuracy of that information and will supply that information as agent for the Company from which the information was obtained.

3.3 Except in respect of death or personal injury caused by negligence, or as expressly provided in these Terms:

3.3.1 The entire liability of Thames Water or the Company as the case may be in respect of all causes of action arising under or in connection with the Report (whether for breach of contract, negligence or any other tort, under statute or statutory duty or otherwise at all) shall not exceed £2,000,000 (two million pounds); and

3.3.2 Thames Water shall not in any circumstances (whether for breach of contract, negligence or any other tort, under statute or statutory duty or otherwise at all) be liable for any loss of profit, loss of goodwill, loss of reputation, loss of business or any indirect, special or consequential loss, damage or other claims, costs or expenses;

Copyright and Confidentiality

4. The Customer and the Client acknowledge that the Report is confidential and is intended for the personal use of the Client. The copyright and any other intellectual property rights in the Report shall remain the property of Thames Water or the Company as the case may be. No intellectual or other property rights are transferred or licensed to the Customer or the Client except to the extent expressly provided

4.1 The Customer or Client is entitled to make copies of the Report but is not permitted to copy any maps contained in, or attached to the Report

4.2 The maps contained in the Report are protected by Crown Copyright and must not be used for any purpose outside the context of the Report.

4.3 The Customer and Client agree (in respect of both the original and any copies made) to respect and not to alter any trademark, copyright notice or other property marking which appears on the Report.

Payment

5. Unless otherwise stated all prices are inclusive of VAT. The Customer shall pay for the price of the Report specified by Thames Water, without any set off, deduction or counterclaim.

5.1 Unless payment has been received in advance, Customers shall be invoiced for the agreed fee once their request has been processed. Any such invoice must be paid within 14 days. Where the Customer has an account with Thames Water, payment terms will be as agreed with Thames Water.

5.2 No payment shall be deemed to have been received until Thames Water has received cleared funds.

5.3 If the Customer fails to pay Thames Water any sum due Thames Water shall be entitled but not obliged to charge the Customer interest on the sum from the due date for payment at the annual rate of 2% above the base lending rate from time to time of Natwest Bank, accruing on a daily basis until payment is made. Thames Water reserves the right to claim interest under the Late Payment of Commercial Debts (Interest) Act 1998.

5.4 Thames Water reserves the right to increase fees on reasonable prior written notice at any time.

Cancellations or Alterations

6. Once an Order is placed, Thames Water shall not be under any obligation to accept any request to cancel that Order and payment for the Order shall still be due upon completion of the Report. In cases where an error has been made in the original Order (e.g. the Customer has supplied an incorrect address), the Customer will need to place a second Order, detailing the correct information, and shall be liable to pay a second charge in accordance with clause 5 above.

Delivery

7. On receiving your order the reports will be posted to you within 10 working days from receipt.

7.1 Delivery is subject to local post conditions and regulations. All items should arrive within 12 working days, but Thames Water cannot be held responsible should delays be caused by local post conditions, postal strikes or other causes beyond the control of Thames Water.

General

8. If any provision of these terms is or becomes invalid or unenforceable, it will be taken to be removed from the rest of these terms to the extent that it is invalid or unenforceable. No other provision of these terms shall be affected.

8.1 These terms shall be governed by English law and all parties submit to the exclusive jurisdiction of the English courts.

8.2 Nothing in this notice shall in any way restrict the Customer or Clients statutory or any other rights of access to the information contained in the Report.

These Terms & Conditions are available in larger print for those with impaired vision.

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 TWUL 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. TWUL 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 TWUL's discretion for increased administration costs.

A copy of TWUL'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 Water Industry Act 1991, and you remain dissatisfied you can refer your complaint to CC Water on 0845 039 2837 (it will cost you the same as a local call) or write to them at 11 Belgrave Road, London SW1V 1RB.

Ways to pay your bill

By Post – Cheque only, made payable to 'Thames Water Utilities Ltd' writing your Thames Water account number on the back. Please fill in the payment slip below and send it with your cheque to Thames Water Utilities Ltd., PO Box 223, Swindon SN38 2TW	**By BACS Payment** direct to our bank on account number 90478703, sort code 60-00-01 may be made. A remittance advice must be sent to Thames Water Utilities Ltd., PO Box 223, Swindon SN38 2TW. Or fax to 01793 424599 or email: cashoperations@thameswater.co.uk	**Telephone Banking** By calling your bank and quoting your invoice number and the Thames Water`s bank account number 90478703 and sort code 60-00-01	**By Swift Transfer** You may make your payment via SWIFT by quoting **NWBKGB2L** together with our bank account number 90478703, sort code 60-00-01 and invoice number

APPENDIX I

GREENFIELD RUNOFF CALCULATIONS

ICP SUDS Mean Annual Flood

Input

Return Period (years) 1 SAAR (mm) 700 Urban 0.000
Area (ha) 1.000 Soil 0.400 Region Number Region 6

Results l/s

QBAR Rural 3.4
QBAR Urban 3.4

Q1 year 2.9

Q1 year 2.9
Q30 years 7.7
Q100 years 10.9

APPENDIX J

TRC SOAKAWAY TESTING REPORT

Work.Life
20 Red Lion Street
London, UK WC1R 4PQ

T +44.20.7812.0620
TRCcompanies.com

4th April 2022

Bridge Industrial
14 Old Bond Street
London
W1S 4PP

Attention Of: Stephen Vickers

Subject: Addlestone Road, Weybridge, KT15 2UP – Infiltration Assessment
TRC Project No. 470021.0001.0000

Dear Sir,

TRC Companies Limited (TRC) was commissioned by Bridge Industrial (the 'Client') to carry out a investigation to appraise the ground conditions for soakaway design at Addlestone Road, Weybridge, KT15 2UP (the 'Site').

The purpose of the assessment was to determine potential soakage rates of soils beneath the Site to support the Client and engineer in determining viability of soakaways for surface water drainage. This letter report details the findings of the intrusive investigation carried out at the Site by TRC.

I trust that this report is satisfactory and meets with your project requirements. Please do not hesitate to contact me if you have any questions regarding the works.

Yours faithfully,

TRC

Colin Morton
Senior Consultant

Attachments: Attachment 1 – Letter Report
Attachment 2 – Figures
Attachment 3 – Photolog
Attachment 4 – Exploratory Hole Logs
Attachment 5 – Field Data

Attachment 1
Report

1.0 Introduction

1.1 Purpose

TRC Companies Limited (TRC) was commissioned by the Client to undertake an intrusive ground investigation at the Site. The purpose of the assessment was to appraise soakage rates of underlying soils to support the Client and engineer in determining whether soakaways are viable for the proposed industrial / warehouse development at the Site.

A Site location plan is presented as Figure 1 in Attachment 2.

The Client is proposing to redevelop the Site for light industrial / warehouse type units with associated loading yards and car parking. A proposed development plan is presented as Figure 2 in Attachment 2.

The trial pit and infiltration test locations are presented as Figure 3 in Attachment 2.

1.2 Background Information

This investigation follows previous phases of environmental investigation and assessment performed at the Site reported as follows:

- TRC Companies Limited (November 2021), Phase I Environmental and Geotechnical Site Assessment, report ref. 470021.0000.0000.
- TRC Companies Limited (January 2022), Phase II Geo-Environmental Site Assessment, report ref. 470021.0000.0000.

The Phase I Environmental and Geotechnical Site Assessment and Phase II Geo-environmental Site Assessment prepared by TRC Companies Limited provides a summary of the likely conditions to be expected at the Site. This has been used to inform this letter report to assist in the appraisal of soakaway viability. A summary of the Phase I and Phase II is presented below:

- The Site comprises an approximate 3.45 ha plot of land centered on National Grid Reference 506320, 164720, approximately 640m east of Addlestone Railway Station. The Site comprises two plots with Addlestone Road separating them and are west of River Wey. The Site comprises six large buildings with associated vehicle parking and limited soft landscaping. The Site has an average elevation of approximately 15m Above Ordnance Datum (AOD). Topographically the Site appears generally flat.

- Earliest available mapping (1872) shows that the Site remained partially undeveloped, with a sawmill present in the east of the Site. The sawmill was extended in 1913-1914 and then redeveloped into various large works facilities in 1934-1936. In 1984-1989, the Site was redeveloped into a business park, with six large buildings. The Site appears in its current layout from approximately 2016, when one of the large buildings was split and the business park contained seven buildings and associated vehicle parking.

- Made Ground was encountered between ground level and 2.7m, recording a maximum thickness of 1.6m in the south of the Site, and 2.7m in the north. Superficial deposits of

alluvium were encountered between 0.6 and 1.6m, recording a maximum thickness of 3.0m. Kempton Park Gravel Member deposits were encountered between 1.6 and 2.7m, recording a maximum thickness of 1.7m.

- Geological mapping shows that the Site is underlain by natural deposits comprising: Superficial Deposits consisting of Alluvium and River Terrace Deposits (Kempton Park Gravel) and the Bedrock Geology consisting of Bagshot Formation.

- Groundwater seepages/strikes were recorded during drilling of the window samples at depths between 1.3mbgl and 3.2mbgl. Shallow groundwater was encountered during the monitoring period at depths between 0.7mbgl and 1.8mbgl.

- No visual or olfactory evidence of contamination was encountered during the previous Site investigation. No significant contamination was encountered in soil or groundwater samples taken during the investigation. No remediation was considered necessary in the areas investigated.

1.3 Investigation Scope of Works

TRC was engaged to perform a ground investigation to appraise whether the ground conditions are suitable for soakaway design at the Site. The scope comprised the following works:

- Six soakaway pits were excavated ranging from 1.2m to 2.7m below ground level (bgl) and infiltration testing was carried out in general accordance with BRE 365: Soakaway Design (2016);

- Two of the soakaway pit locations could not be used to perform infiltration tests as the Made Ground was flooded with perched groundwater;

- An engineer inspected the soils within the pits to facilitate logging and performed the infiltration assessment; and,

- Upon completion the trial pits were backfilled with arisings and compacted under machine weight. Surplus arisings were stockpiled locally to the test pits.

1.4 Significant Assumptions

This report presents TRC observations, findings, and conclusions as they existed on the date that this report was issued. The report is subject to modification if TRC becomes aware of additional information after the date of this report that is material to its findings and conclusions.

The reliability of information provided by others to TRC cannot be guaranteed to be accurate or complete. TRC found no reason to question the validity of information received unless explicitly noted elsewhere in this report.

2.0 Factual Summary of Investigation Findings

2.1 Ground Conditions

The British Geological Survey (BGS) online GeoIndex indicates that the Site is underlain by Alluvium – Clay, Silt, Sand and Gravel over the Bagshot Formation.

Table 1 presents a summary of the ground conditions encountered by TRC at the Site during the infiltration assessment. For full details refer to the exploratory logs displayed in Attachment 3 and the photographs displayed in Attachment 5.

Table 1: Summary of Ground Conditions

Strata	Description	Observed Thickness (m)	Range Depth to top of Strata (m)	Maximum recorded depth (m)
Brick Pavement	Brick Pavement	0.1	0	0.1
Made Ground	Slightly silty very gravelly SAND	0.1 – 1.8	0.1	1.8
Alluvium	clayey slightly gravelly SAND and silty slightly gravelly SAND	0.3 – 1.5	1.0 – 1.8	>2.7
Bagshot Formation	unknown	unknown	unknown	unknown

Brick Pavement

The entire Site is covered in brick pavement hardstanding except for small landscaped areas around the buildings.

Made Ground

Made Ground underlies the Brick Pavement. It consists of slightly silty very gravelly SAND. Sand is fine to medium, gravel is angular to sub-rounded, fine to coarse grained. Gravel consists of brick, concrete, flint, mudstone and sandstone. The maximum recorded thickness of made ground was 1.8m.

Alluvium

The strata being tested for infiltration consist mostly of clayey slightly gravelly SAND and silty slightly gravelly SAND. Maximum depth excavated was to 2.7m below ground level (bgl) in TP102. In three of the trial pits, located in the western and southern areas of the Site (TP102, TP104 and TP106), the uppermost 0.4 – 0.5m of the alluvium was observed to have a higher clay content and exhibited a blueish colour.

2.2 Groundwater Levels

Water strikes observed during the site works are summarised in the Table below.

Table 2: Groundwater Observations

Exploratory Hole	Water Strike (m)	Water Resting Depth (m)
TP101	1.55m	1.50
TP102	2.60	2.35
TP103	1.20	1.10
TP104	2.40	2.10
TP105	1.77	1.70
TP106	2.60	2.60

Groundwater was encountered in TP103 and TP105 at depths of 1.1m and 1.70m, before the full extent of the made ground had been excavated. Groundwater was recorded in the underlying alluvium between depths of 1.5m and 2.6m bgl.

3.0 Infiltration Testing

3.1 Introduction and Assessment Methodology

The infiltration test data was assessed in general accordance with the methodology outlined in BRE Digest 365: Soakaway Design (2016). This document describes 'design and construction procedures for soakaways' and explains how to calculate rainfall design values and soil infiltration rate and gives design examples.

The methodology applied in this assessment specifically relates to the soil infiltration within the unsaturated zone. Resting groundwater levels were recorded at between 0.7 and 1.8m in a previous investigation. The infiltration testing was aimed to test soakage rates of the near surface alluvial soils. Infiltration testing was undertaken at four trial pit locations (TP101, TP102, TP104 and TP106). Two locations (TP103 and TP105), could not be used for infiltration testing as the resting groundwater levels were found to be within the made ground. The details of the infiltration testing pits are presented in the following table:

Table 3: Infiltration Test Pit Details

Location	Length (m)	Width (m)	Depth (m)	Lithology Description
TP 101	1.3	0.5	2.3	0 – 0.1m – pavement 0.1 – 1.2m – made ground 1.2 – 2.3m – alluvium
TP 102	1.5	0.5	2.7	0 – 0.1m – pavement 0.1 – 1.2m – made ground 1.2 – 2.7m – alluvium
TP 103	1.5	0.5	1.2	0 – 0.1m – pavement 0.1 – 1.2m – made ground >1.2m - unknown
TP 104	1.3	0.5	2.4	0 – 0.1m – pavement 0.1 – 1.0m – made ground 1.0 – 2.4m – alluvium
TP 105	1.4	0.5	2.1	0 – 0.1m – pavement 0.1 – 1.8m – made ground 1.8 – 2.1m – alluvium
TP 106	1.4	0.5	2.65	0 – 0.1m – pavement 0.1 – 1.4m – made ground 1.4 – 2.65m – alluvium

Groundwater ingress was noted in four (TP102 at 1.5m, TP102 at 2.6m, TP104 at 2.4m and TP106 at 2.6m), of the trial pits prior to the infiltration testing. This excludes TP103 and TP105 which were flooded in the Made Ground.

3.2 Assessment of Results

The results of the infiltration tests completed have been used to determine soil infiltration rates. The results are summarised in the table below. Only one test was performed in all of the soakaway test locations due to no significant change in the water levels observed during the first test, which indicates a failure to drain and low soakage rate.

Table 4: Soil Infiltration Rates

Location	Test	Lithology of Test Section	Estimated Infiltration Rate (m/s)
TP 101	1	clayey slightly gravelly SAND	N/A
TP 102	1	slightly clayey SAND	N/A
TP 103	none	made ground (flooded)	unknown
TP 104	1	slightly clayey SAND	N/A
TP 105	none	made ground (flooded)	unknown
TP 106	1	clayey slightly gravelly SAND	N/A

Notes:

I. N/A – Soakage of at least 25% effective depth is required in order to calculate the infiltration rate. Where N/A is referenced this has not been achieved and therefore it is not possible to determine an estimate infiltration rate.

II. Lithology of Test Section – The zone between 25% and 75% effective depth.

III. Unknown – Made Ground was flooded with perched water leading to no infiltration test being conducted.

The complete set of recorded data is provided within Attachment 4.

The results confirm that the variable granular and cohesive based deposits (i.e. sand and clay) recorded in TP101, TP102, TP104 and TP106 had a very low soakage potential and no permeability coefficient could be calculated for any of the locations during the testing.

3.3 Best Practice Guidance

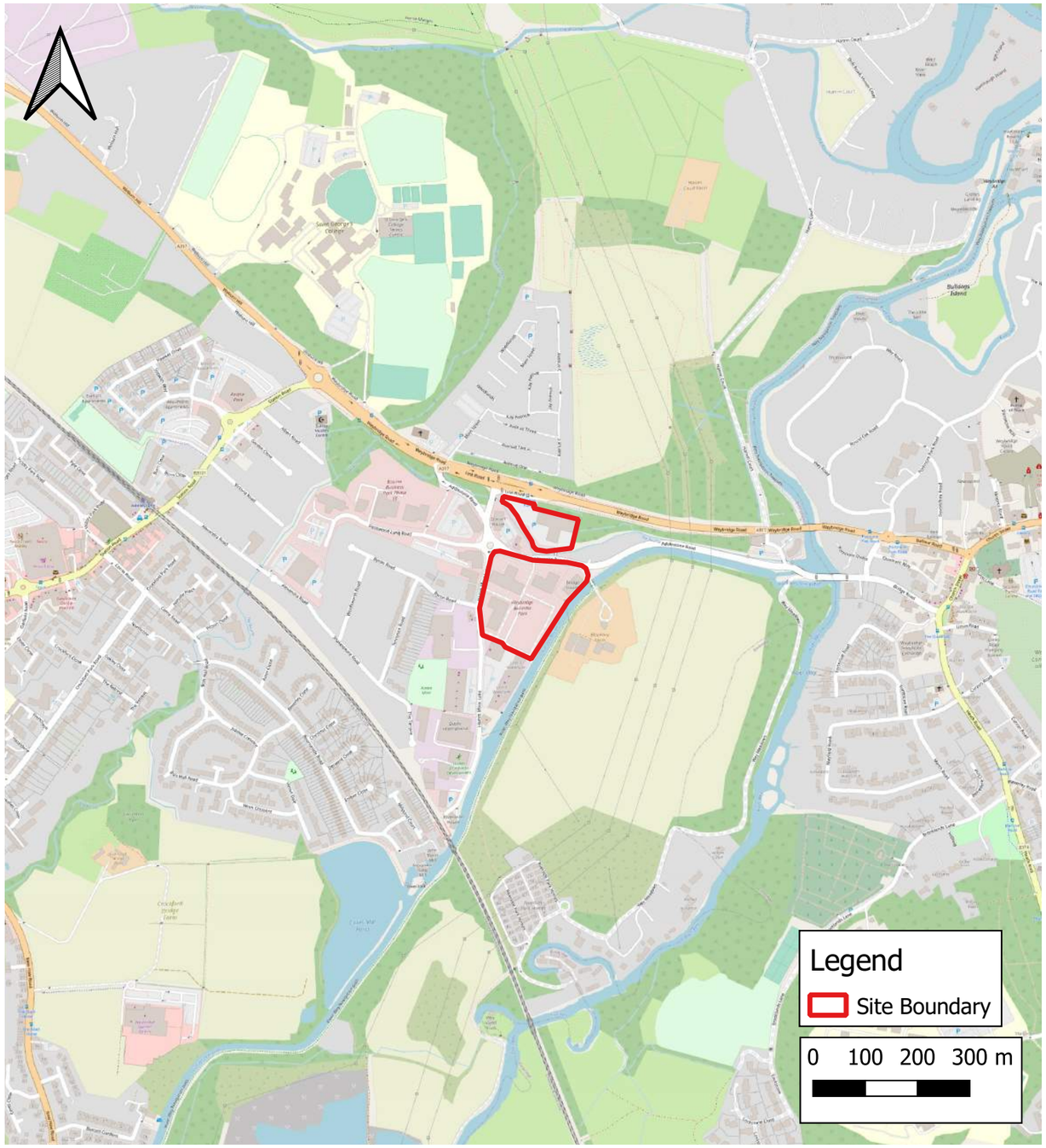
Reference to the SUDS Manual (CIRIA C697, 2007) provides the following salient information, which should be considered within the subsequent drainage design:

- The SUDS manual suggests that SUDS should be designed to ensure infiltration and storage systems operate during periods of extreme (up to 1% annual probability) groundwater levels.
- The SUDS manual also provides the following advice *inter alia* in relation to infiltration criteria: *'Groundwater levels must be checked to ensure that the infiltration surface is at least 1m above the maximum anticipated level. Infiltration systems require an unsaturated soil to provide effective pollution protection.'*

3.4 Conclusions and Recommendations

Based on the findings from the infiltration testing and the BRE Digest 365: Soakaway Design (2016) guidance, the infiltration rates of the soil are low and therefore the soils appear unsuitable for the use of soakaways within the drainage design. Groundwater levels were recorded at depths between 1.1 and 2.6m bgl. Groundwater may be subject to seasonal variations which may further impact the potential use of soakaways on Site. Further consultation with a design engineer is recommended to appraise potential solutions.

Attachment 2
Figures



NOTES

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REVISIONS

P01	FIRST ISSUE			
	Initials	LS		22/11/21
REV.	REVISION NOTES/COMMENTS			
	Initials			

Work.Life
20 Red Lion Street
London
WC1R 4PS

TITLE
SITE LOCATION PLAN

TRC PROJECT NO.
470021

SCALE
1:10,000 @ A3
1:2,000 @ A3

BRIDGE INDUSTRIAL

PURPOSE OF ISSUE
SUITABLE FOR INFORMATION

STATUS

PROJECT
ADDLESTONE ROAD, WEYBRIDGE

DRAWING NO
FIGURE 01

REVISION
P01

NOTES

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P01	FIRST ISSUE			
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TRC

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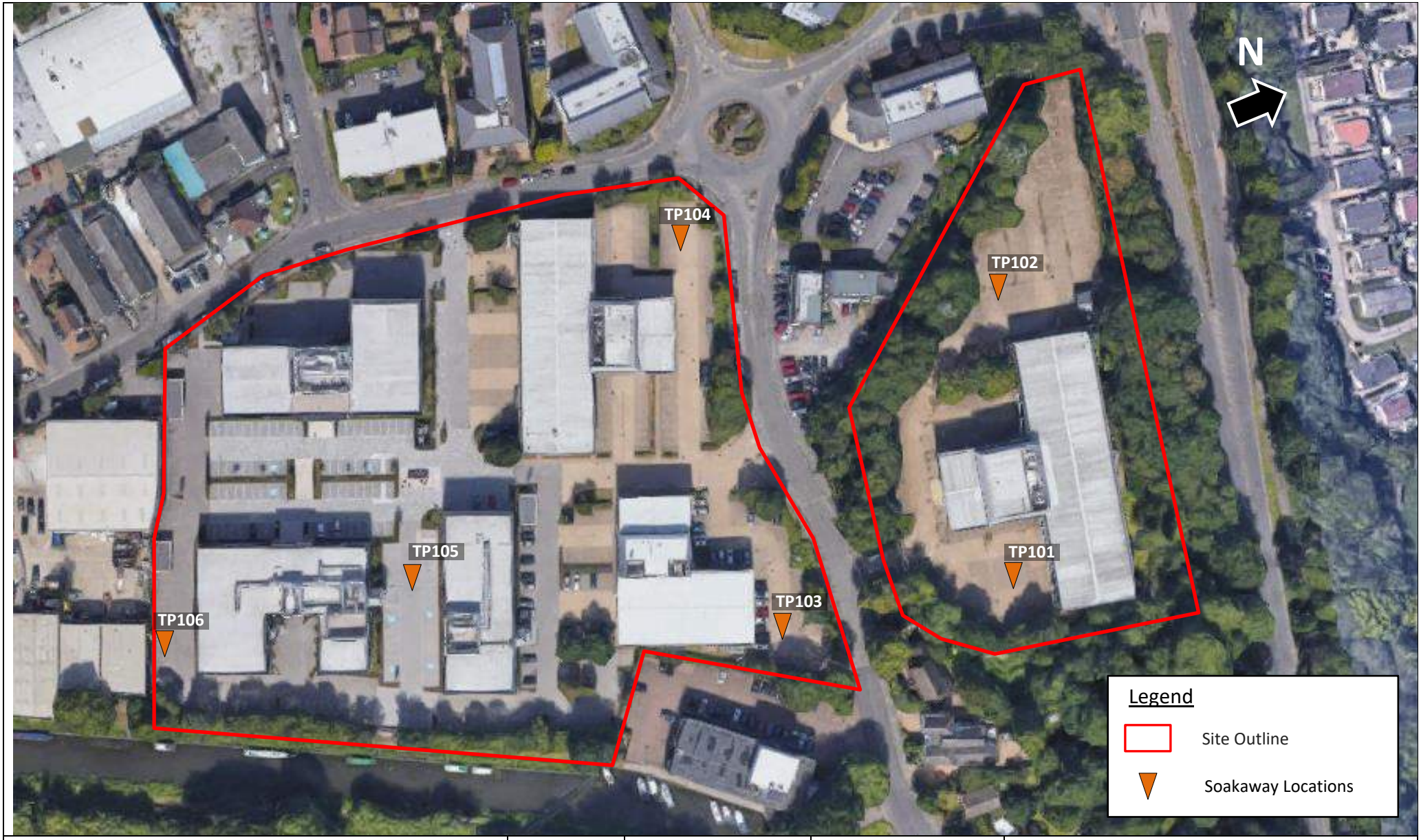
BRIDGE INDUSTRIAL

PROJECT
ADDLESTONE ROAD, WEYBRIDGE

TITLE		
PROPOSED DEVELOPMENT PLAN		
TRC PROJECT NO.	SCALE	
470021		
PURPOSE OF ISSUE		STATUS
SUITABLE FOR INFORMATION		
DRAWING NO		REVISION
FIGURE 02		PO1



CLIENT:	DRAWN BY:	PROJECT NO.:	DATE:	LOCATION:
BRIDGE INDUSTRIAL	CM	470021.0001.0000	MARCH 2022	ADDLESTONE ROAD, WEYBRIDGE

TRC
20 Red Lion Street
London, WC1R 4PQ
http://www.trccompanies.com/

FIGURE: 3

Attachment 3
Photolog

Photographic Log

Client Name:	Site Location:	Project No.:
Bridge Industrial	Addlestone Road, Weybridge	470021

Photo No.	Date
1	March 2022

Description:

TP101 – Soakaway test.

Photographic Log

Client Name:	Site Location:	Project No.:
Bridge Industrial	Addlestone Road, Weybridge	470021

Photo No.	Date
2	March 2022

Description:

TP102 – Soakaway test.

Photographic Log

Client Name:	Site Location:	Project No.:
Bridge Industrial	Addlestone Road, Weybridge	470021

Photo No.	Date
3	March 2022

Description:

TP103 – Perched water in Made ground.

Photographic Log

Client Name:	Site Location:	Project No.:
Bridge Industrial	Addlestone Road, Weybridge	470021

Photo No.	Date
4	March 2022

Description:

TP103 – Location of TP103, all encountered utilities or flooded from perched water in the Made Ground.

Photographic Log

Client Name:	Site Location:	Project No.:
Bridge Industrial	Addlestone Road, Weybridge	470021

Photo No.	Date
5	March 2022

Description:

TP103 – Area around TP103 consist of possible underground water drains.

Photographic Log

Client Name:	Site Location:	Project No.:
Bridge Industrial	Addlestone Road, Weybridge	470021

Photo No.	Date
6	March 2022

Description:

TP104 – Location of TP104.

Photographic Log

Client Name:	Site Location:	Project No.:
Bridge Industrial	Addlestone Road, Weybridge	470021

Photo No.	Date
7	March 2022

Description:

TP105 – Flooded by perched water in Made ground.

Photographic Log

Client Name:	Site Location:	Project No.:
Bridge Industrial	Addlestone Road, Weybridge	470021

Photo No.	Date
8	March 2022

Description:

TP106 – Soakaway test.

Attachment 4
Exploratory Hole Logs

Trial Pit Log

Project Name: Addlestone Road, Weybridge	Client: Bridge Industrial	Date: 08/03/2022
Location: Addlestone Road, Weybridge.	Contractor: TRC	Co-ords: E506396.00 N164803.00
Project No. : 470021.0001	Crew Name: J Brown Groundworks	Equipment: Tracked

Location Number	Location Type	Level	Logged By	Scale	Page Number
TP101	TP		Martin Dorfling	1:25	Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.10			MADE GROUND: Concrete. Pavement
					0.20			MADE GROUND: light yellowish brown SAND. Sand is fine to coarse grained.
					0.40			MADE GROUND: light pink slightly clayey very gravelly SAND. Sand is fine to coarse, Gravel is angular, medium grained. Gravel consists of sandstone.
								MADE GROUND: grey very clayey gravelly SAND. Sand is fine to medium, Gravel is sub-angular, fine to coarse grained. Gravel consists of brick, concrete, flint and mudstone.
					1.20			Blueish brown clayey slightly gravelly SAND. Sand is fine to coarse, Gravel is sub-angular, medium grained. Gravel consists of flint. (ALLUVIUM)
					2.30			

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Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks

Remarks

Trial Pit Log

Project Name: Addlestone Road, Weybridge	Client: Bridge Industrial	Date: 08/03/2022
Location: Addlestone Road, Weybridge.	Contractor: TRC	Co-ords: E506312.00 N164836.00
Project No. : 470021.0001	Crew Name: J Brown Groundworks	Equipment: Tracked

Location Number	Location Type	Level	Logged By	Scale	Page Number
TP102	TP		Martin Dorfling	1:25	Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.10			MADE GROUND: Concrete. Pavement
					0.20			MADE GROUND: light yellowish brown SAND. Sand is fine to coarse grained.
					0.40			MADE GROUND: light pink slightly clayey very gravelly SAND. Sand is fine to coarse, Gravel is angular to sub-angular, medium grained. Gravel consists of sandstone.
								MADE GROUND: light black slightly sandy slightly gravelly CLAY. Sand is fine to coarse grained. Gravel is angular, fine to coarse grained. Gravel consists of brick. Fragments of glass and wire present.
					1.20			Blueish yellowish brown slightly clayey SAND. Sand is fine to coarse grained. Blueish mottling only from 1.2 to 1.8m. Yellowish brown from 2.3m to 2.7m.
					2.70			

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Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks

Remarks

Trial Pit Log

Project Name: Addlestone Road, Weybridge	Client: Bridge Industrial	Date: 08/03/2022
Location: Addlestone Road, Weybridge.	Contractor: TRC	Co-ords: E506383.00 N164737.00
Project No. : 470021.0001	Crew Name: J Brown Groundworks	Equipment: Tracked

Location Number	Location Type	Level	Logged By	Scale	Page Number
TP103	TP		Martin Dorfling	1:25	Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.10			MADE GROUND: Concrete. Pavement
					0.20			MADE GROUND: light yellowish brown SAND. Sand is fine to coarse grained.
					0.25			MADE GROUND: light pink slightly clayey very gravelly SAND. Sand is fine to coarse, Gravel is angular, medium grained. Gravel consists of sandstone.
								MADE GROUND: grey slightly silty very gravelly SAND. Sand is fine to coarse, Gravel is sub-angular, fine to coarse grained. Gravel consists of brick, concrete, flint, mudstone and sandstone.
	▼				1.00			MADE GROUND: light brown very sandy GRAVEL. Sand is fine to coarse, Gravel is sub-angular to sub-rounded, medium to coarse grained. Gravel consists of flint.
					1.20			

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Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks

Remarks

Trial Pit Log

Project Name: Addlestone Road, Weybridge	Client: Bridge Industrial	Date: 08/03/2022
Location: Addlestone Road, Weybridge.	Contractor: TRC	Co-ords: E506267.00 N164762.00
Project No. : 470021.0001	Crew Name: J Brown Groundworks	Equipment: Tracked

Location Number	Location Type	Level	Logged By	Scale	Page Number
TP104	TP		Martin Dorfling	1:25	Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.10			MADE GROUND: Concrete. Pavement
					0.20			MADE GROUND: yellowish brown SAND. Sand is fine to coarse grained.
					0.30			MADE GROUND: light pink slightly clayey very gravelly SAND. Sand is fine to coarse, Gravel is sub-angular, medium grained. Gravel consists of sandstone.
					0.40			MADE GROUND: black very gravelly SAND. Sand is medium to coarse, Gravel is angular to sub-angular, fine to medium grained. Gravel consists of asphalt, flint, mudstone and sandstone.
					0.80			MADE GROUND: greyish brown slightly silty very gravelly SAND. Sand is fine to coarse, Gravel is angular to sub-rounded, fine to coarse grained. Gravel consists of brick, concrete, flint and sandstone.
					1.00			MADE GROUND: dark blueish black sandy CLAY. Sand is fine to medium grained.
								Blueish yellowish brown slightly clayey SAND. Sand is fine to coarse grained. Blue mottling from 1.0m to 1.5m (ALLUVIUM)
					2.40			

1 2 3 4 5

Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks

Remarks

Trial Pit Log

Project Name: Addlestone Road, Weybridge	Client: Bridge Industrial	Date: 09/03/2022
Location: Addlestone Road, Weybridge.	Contractor: TRC	Co-ords: E506324.00 N164649.00
Project No. : 470021.0001	Crew Name: J Brown Groundworks	Equipment: Tracked

Location Number	Location Type	Level	Logged By	Scale	Page Number
TP105	TP		Martin Dorfling	1:25	Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.10			MADE GROUND: Concrete. Pavement
					0.20			MADE GROUND: light yellowish brown SAND. Sand is fine to coarse grained.
								MADE GROUND: dark greyish brown slightly silty very gravelly SAND. Sand is fine to coarse, Gravel is angular, fine to coarse grained. Gravel consists of brick, concrete, flint, mudstone, and sandstone. fragments of rebar and metal.
					1.80			Blueish yellowish brown very sandy CLAY. Sand is fine to coarse grained. (ALLUVIUM)
					2.10			

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Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks

Remarks

Trial Pit Log

Project Name: Addlestone Road, Weybridge	Client: Bridge Industrial	Date: 09/03/2022
Location: Addlestone Road, Weybridge.	Contractor: TRC	Co-ords: E506314.00 N164583.00
Project No. : 470021.0001	Crew Name: J Brown Groundworks	Equipment: Tracked

Location Number	Location Type	Level	Logged By	Scale	Page Number
TP106	TP		Martin Dorfling	1:25	Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.10			MADE GROUND: Concrete. Pavement
					0.20			MADE GROUND: yellowish brown SAND. Sand is fine to coarse grained.
					0.30			MADE GROUND: light pink slightly clayey very gravelly SAND. Sand is fine to coarse, Gravel is sub-angular, medium grained. Gravel consists of flint and sandstone.
								MADE GROUND: light brown slightly silty very gravelly SAND. Sand is fine to coarse, Gravel is angular to sub-angular, fine to coarse grained. Gravel consists of brick, concrete and flint.
					1.00			MADE GROUND: Reworked light yellowish brown very sandy CLAY. Sand is fine to coarse grained. Occasional coarse gravels of concrete.
					1.40			Light blueish yellowish brown clayey slightly gravelly SAND. Sand is fine to coarse, Gravel is sub-rounded, medium grained. Gravel consists of flint. Blue mottling occurs from 1.4 to 1.9m. (ALLUVIUM)
	▼				2.44			Light yellowish brown slightly silty very gravelly SAND. Sand is fine to coarse, Gravel is sub-angular to sub-rounded, medium to coarse grained. Gravel consists of flint. (ALLUVIUM)
					2.65			

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Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks

Remarks

Key to Exploratory Hole Logs

Composite Materials and Lithology

Legend	Code	Description
	101	Topsoil
	102	Made Ground or Fill
	103	Asphalt
	104	Concrete
	201	Clay
	301	Silt
	401	Sand
	501	Gravel
	601	Peat
	701	Cobbles

Legend	Code	Description
	730	Boulders
	801	Mudstone
	802	Siltstone
	803	Sandstone
	804	Limestone or Dolomite
	805	Chalk
	806	Coal
	807	Breccia
	808	Conglomerate
	809	Fine Grained Igneous

Legend	Code	Description
	810	Medium Grained Igneous
	811	Coarse Grained Igneous
	812	Fine Grained Metamorphic
	813	Medium Grained Metamorphic
	814	Coarse Grained Metamorphic
	815	Pyroclastic
	816	Gypsum or Rocksalt
	817	Shale
	998 999	No recovery Void

Backfill

Legend	Code	Description
	901	Sand Filter
	902 908	Gravel Filter Ballast
	903	Bentonite
	904	Grout
	905	Arisings
	906 912	Concrete Paving Slab
	907	Asphalt
	999	Void

NB: Composite soil types are represented by combined legends. Each type will have its own code within the AGS data.

In-Situ Testing

Prefix	Type	Comments
SPT(S) SPT(C)	Standard Penetration Test (S) Split Spoon (C) Solid Cone	Uncorrected test results at relevant start depth. Hammer ID and Energy Ratio reported on log and in relevant AGS fields
HV	Hand Vane Test	Undrained Shear Strength reported in kPa.
PP	Hand Penetrometer Test	Unconfined Compressive Strength reported in kPa
PID	On-Site Volatile Headspace Testing by Photo Ionization Detector	Screening reported as ppmv. Headspace testing undertaken as per contract documents
PPM	In-Situ Permeability Test	Permeability (k) reported in m/s. Please refer to individual test sheets for data and methodology

Rotary Boreholes:

T.C.R. - Total Core Recovery %

S.C.R. - Solid Core Recovery %

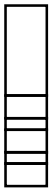
R.Q.D. - Rock Quality Designation %

F.I. - Fracture Index

Sampling

Prefix	Type	Comments
D	Small Disturbed Sample	Nominally 1kg
B	Bulk Disturbed Sample	Nominally 5kg
LB	Large Bulk Disturbed Sample	25kg to 60kg depending on material type, for compaction related tests
U	Undisturbed sample - thick wall driven tube	For CP, nominally 100mm diameter, 450mm length. For WS, nominally 38mm diameter, 100mm length. Blows to drive tube and recovery found in remarks
UT	Undisturbed Sample – Thin wall driven tube	Nominally 100mm diameter, 450mm length. Blows to drive tube and recovery found in remarks
P	Pushed piston sample	Nominally 100mm diameter, 1000mm length. Recovery found in remarks
C	Core sample	-
AMAL	Amalgamated Sample	Details of samples used noted in remarks as well as relevant AGS field
W	Water sample	Not for environmental testing purposes
ES	Environmental sample	Multiple containers used where appropriate
EW	Environmental water sample	Multiple containers used where appropriate

Installations

Legend	Description
	Piezometer Plain Pipe Piezometer Slotted Pipe

Water Observations

Legend	Description
	Water strike
	Standing water level after specified time

Details are provided on each log through the Water Strike Table

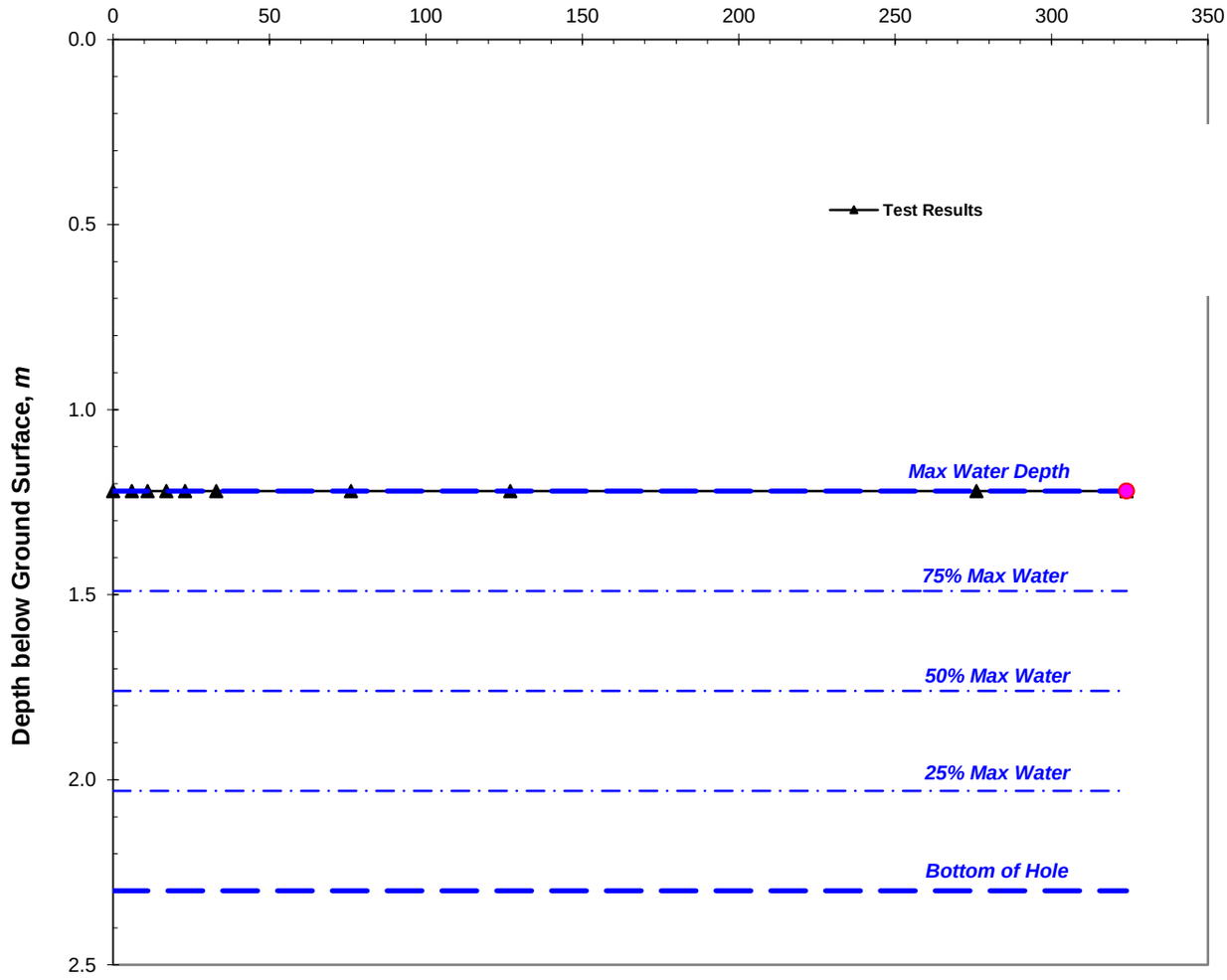
All soil and rock descriptions in general accordance with BS5930, BS EN ISO 14688 and BS EN ISO 14689

Attachment 5
Field Data

BRE Digest 365 Soakage Test

Test Hole No: TP101
Test No: Test No 1 (Initial)

Time from Filling to Maximum Water Depth, *minute*



Pit Length, m	1.300	Depth to Water at Start of Test, *m*	1.220
Pit Width, m	0.500	Max Water Dropdown during Test, *m*	0.000
Depth to Pit Base, m	2.300	Total Soakage Test Time, *min*	324.0
Depth to Top of Permeable Soils, *m*		Mean Internal Discharge Area, m^2	4.538
Depth to Groundwater Surface, *m*		Discharge Rate, *litre/min*	0.000
Depth to Top of Granular Fill, *m*		Soakage Rate, $litre/m^2/min$	**0.0000**
Voids Assumed for Granular Fill, %	100%	BRE Soil Infiltration Rate, *m/sec*	**0.00E+00**

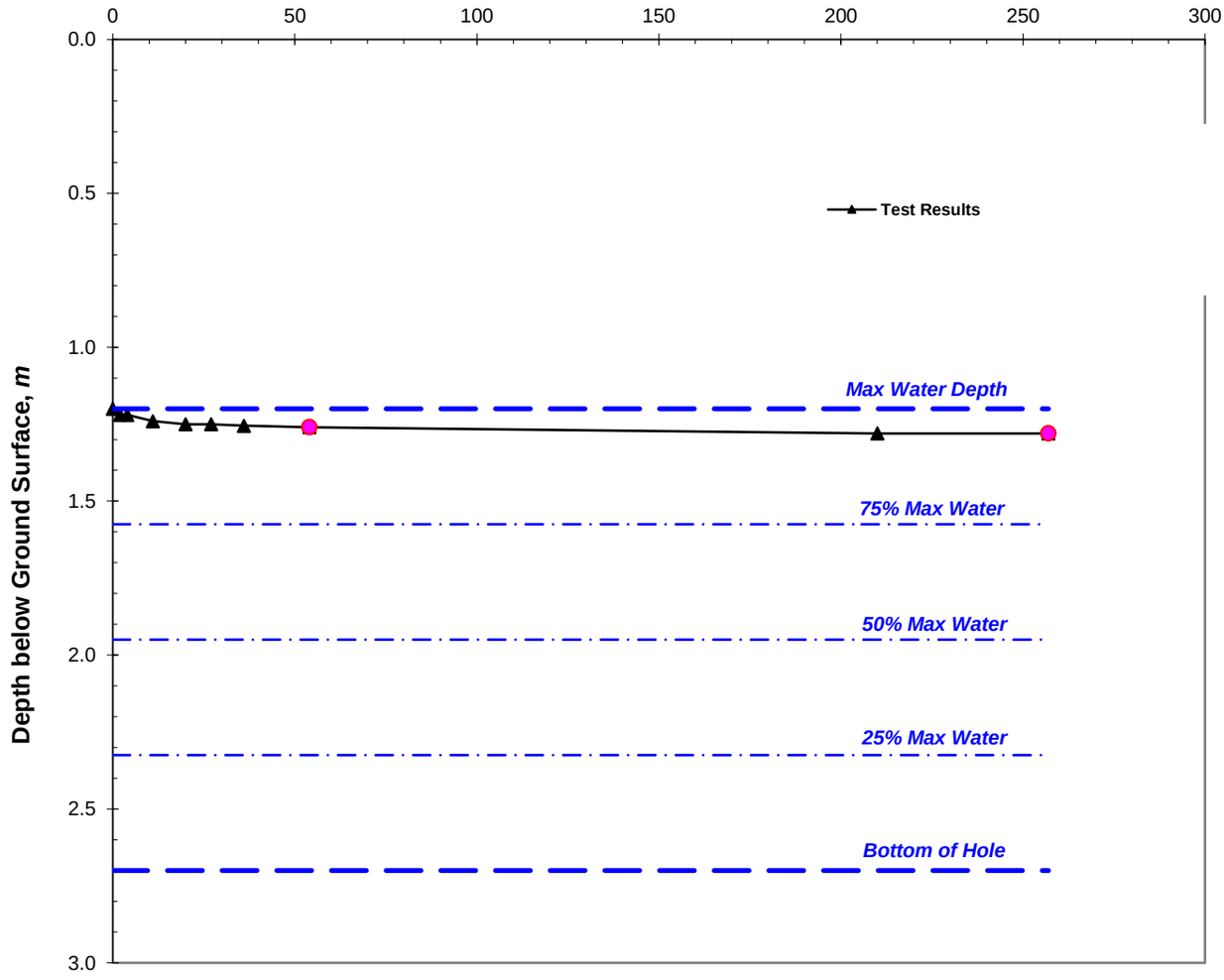
Comments: *No groundwater encountered.*
Water level did not fall to 75% max water depth, calculations were based on actual fall of water level achieved.
Result not compliant with BRE365 requirement since water did not fall to 25% max water depth.

Client:	Bridge Induatrial	**Job No:**	470021	**Test Date:**	08/Mar/2022		
Site:	Addlestone Road, Weybridge	**Tested By:**	MD	**Engineer:**	CM	**Fig.**	**S1**

BRE Digest 365 Soakage Test

Test Hole No: TP102
Test No: Test No 1 (Initial)

Time from Filling to Maximum Water Depth, *minute*



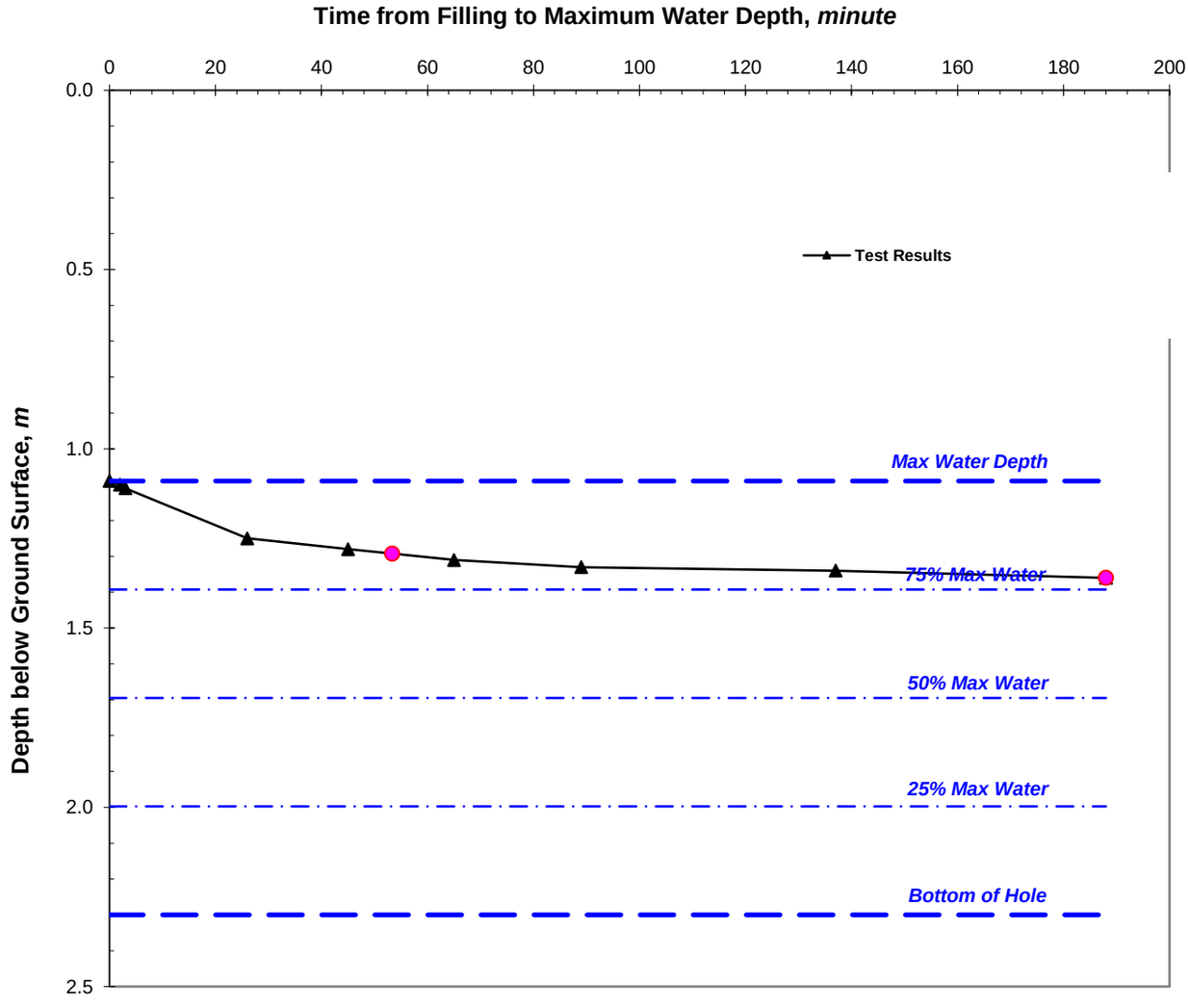
Pit Length, m	1.500	Depth to Water at Start of Test, *m*	1.200
Pit Width, m	0.500	Max Water Dropdown during Test, *m*	0.080
Depth to Pit Base, m	2.700	Total Soakage Test Time, *min*	257.0
Depth to Top of Permeable Soils, *m*		Mean Internal Discharge Area, m^2	6.470
Depth to Groundwater Surface, *m*		Discharge Rate, *litre/min*	0.074
Depth to Top of Granular Fill, *m*		Soakage Rate, $litre/m^2/min$	**0.011**
Voids Assumed for Granular Fill, %	100%	BRE Soil Infiltration Rate, *m/sec*	**1.90E-07**

Comments: *Groundwater depth resting at 2.34m*
Water level did not fall to 75% max water depth, calculations were based on actual fall of water level achieved.
Result not compliant with BRE365 requirement since water did not fall to 25% max water depth.

Client:	Bridge Induatrial	**Job No:**	470021	**Test Date:**	08/Mar/2022		
Site:	Addlestone Road, Weybridge	**Tested By:**	MD	**Engineer:**	CM	**Fig.**	**S2**

BRE Digest 365 Soakage Test

Test Hole No: TP104
Test No: Test No 1 (Initial)



Pit Length, m	1.300	Depth to Water at Start of Test, *m*	1.090
Pit Width, m	0.500	Max Water Dropdown during Test, *m*	0.270
Depth to Pit Base, m	2.300	Total Soakage Test Time, *min*	188.0
Depth to Top of Permeable Soils, *m*		Mean Internal Discharge Area, m^2	4.156
Depth to Groundwater Surface, *m*		Discharge Rate, *litre/min*	0.326
Depth to Top of Granular Fill, *m*		Soakage Rate, $litre/m^2/min$	**0.078**
Voids Assumed for Granular Fill, %	100%	BRE Soil Infiltration Rate, *m/sec*	**1.31E-06**

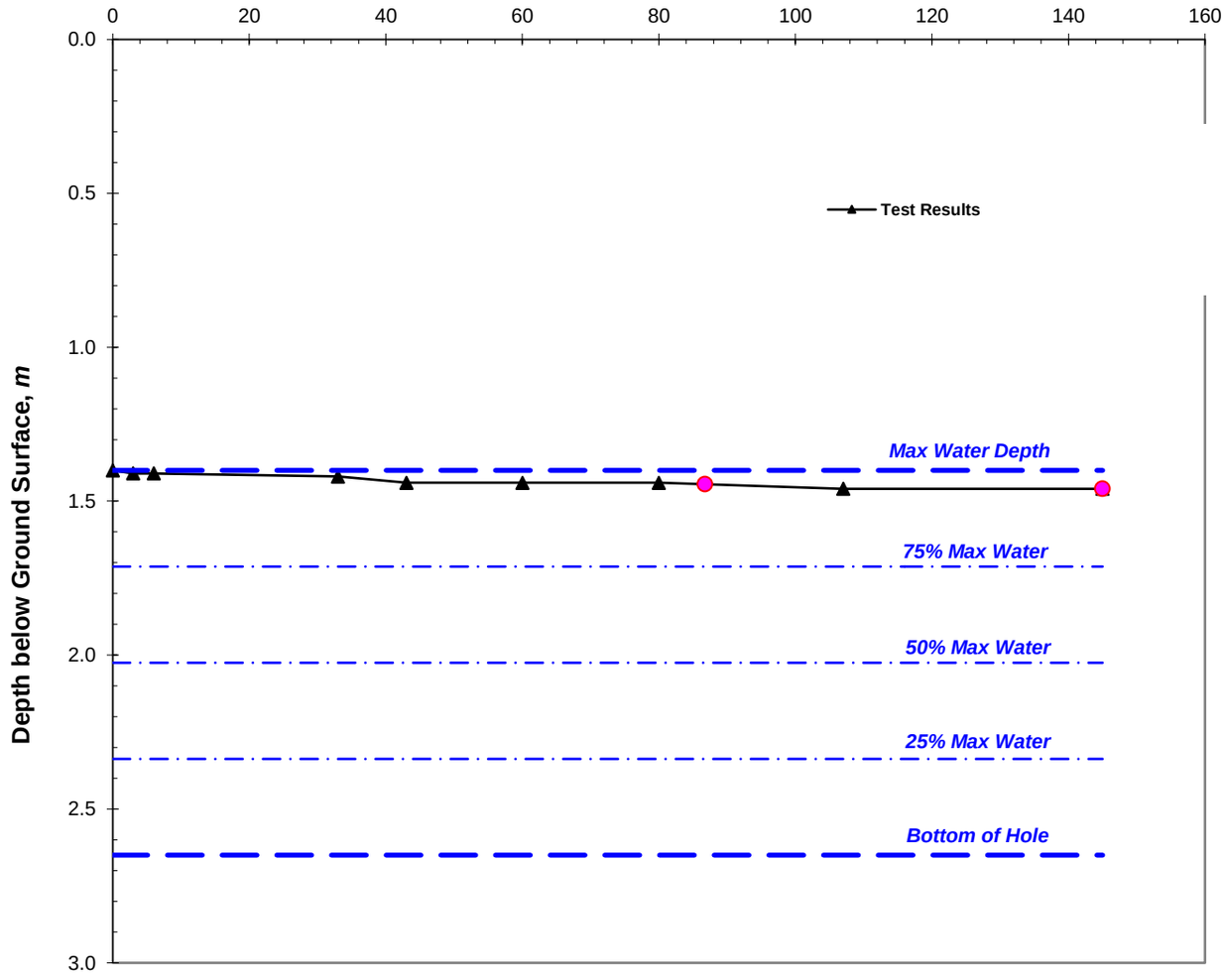
Comments: *Groundwater depth resting at 2.1m*
Water level did not fall to 75% max water depth, calculations were based on actual fall of water level achieved.
Result not compliant with BRE365 requirement since water did not fall to 25% max water depth.

Client:	Bridge Induatrial	**Job No:**	470021	**Test Date:**	09/Mar/2022		
Site:	Addlestone Road, Weybridge	**Tested By:**	MD	**Engineer:**	CM	**Fig.**	**S3**

BRE Digest 365 Soakage Test

Test Hole No: TP106
Test No: Test No 1 (Initial)

Time from Filling to Maximum Water Depth, *minute*



Pit Length, m	1.400	Depth to Water at Start of Test, *m*	1.400
Pit Width, m	0.500	Max Water Dropdown during Test, *m*	0.060
Depth to Pit Base, m	2.650	Total Soakage Test Time, *min*	145.0
Depth to Top of Permeable Soils, *m*		Mean Internal Discharge Area, m^2	5.251
Depth to Groundwater Surface, *m*		Discharge Rate, *litre/min*	0.180
Depth to Top of Granular Fill, *m*		Soakage Rate, $litre/m^2/min$	**0.034**
Voids Assumed for Granular Fill, %	100%	BRE Soil Infiltration Rate, *m/sec*	**5.72E-07**

Comments: *Groundwater depth resting at 2.3m*
Water level did not fall to 75% max water depth, calculations were based on actual fall of water level achieved.
Result not compliant with BRE365 requirement since water did not fall to 25% max water depth.

Client:	Bridge Induatrial	**Job No:**	470021	**Test Date:**	09/Mar/2022		
Site:	Addlestone Road, Weybridge	**Tested By:**	MD	**Engineer:**	CM	**Fig.**	**S4**

Summary Sheet

Results of BRE Digest 365 Soakage Tests

Site :	Addlestone Road, Weybridge	**Job No :**	470021.0001
Client :	Bridge Induatrial	**O S Reference :**	
Tested By :	MD	**Engineer:** CM	**Test Date :** 08/Mar/2022

Hole No	Test No	Hole Depth *m*	Soakage Rate for Each Test *litre/m²/min*	Soakage Rate for Each Hole *litre/m²/min*	Soakage Rate for Each Hole *m/sec*	Water Level at Finish of Test	Remarks
TP101	No 1	2.30	0.0000	0.0000	0.00E+0	Water level did not fall during test.	No groundwater encountered.
TP102	No 1	2.70	0.011	0.011	1.90E-7	Pit was not emptied; Non compliant value was calculated.	Groundwater depth resting at 2.34m
TP104	No 1	2.30	0.078	0.078	1.31E-6	Pit was not emptied; Non compliant value was calculated.	Groundwater depth resting at 2.1m
TP106	No 1	2.65	0.034	0.034	5.72E-7	Pit was not emptied; Non compliant value was calculated.	Groundwater depth resting at 2.3m
Mean Value of All Calculated Soakage Rates :				**0.031** *litre/m²/min*	**5.17E-7** *m/sec*		

APPENDIX K

DRAINAGE STRATEGY DRAWING