

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 and established on site before any works are undertaken.

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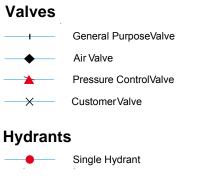


ALS Water Map Key

Water Pipes (Operated & Maintained by Thames Water)

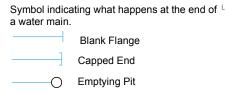
- Distribution Main: The most common pipe shown on water maps.
 With few exceptions, domestic connections are only made to distribution mains.
- Trunk Main: A main carrying water from a source of supply to a treatment plant or reservoir, or from one treatment plant or reservoir to another. Also a main 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.
- FIRE FIRE Fire Main: Where a pipe is used as a fire supply, the word FIRE will be displayed along the pipe.
- ^{3° METERED} 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')		





End Items



- Ondefined End
- Manifold
- —— O Customer Supply
- —— Fire Supply

Operational Sites



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.

Thames Water Utilities Ltd, Property Searches, PO Box 3189, Slough SL1 4W, DX 151280 Slough 13 T 0845 070 9148 E searches@thameswater.co.uk I www.thameswater-propertysearches.co.uk



Our ref: DS6041473

Miss Nora Balboni Pickfords Wharf Clink Street SE1 9DG

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0800 009 3921 Monday to Friday, 8am to 5pm

13 May 2018

Pre-planning enquiry: Confirmation of sufficient capacity

Dear Miss Balboni

Thank you for providing information on your development Stag Brewery, Mortlake, SW14 7QR, OS grid ref. 520380, 176003.

Redevelopment of the former Stag Brewery site to provide mix use development (Flats: 687, Primary School for 1200 pupils, Cinema: 475 seats, Sports Hall: 189 people, Hotel: 20 rooms, Car Home: 220 beds, Offices: 2424m², Warehouse: 5113m²). Foul Water discharging by gravity into multiple outfalls. Surface Water to be attenuated and discharged by gravity and pump into multiple outfalls (50% betterment anticipated from existing sw run-off). Surface Water from the north-eastern part of the site discharging into the River Thames.

If your proposals progress in line with the details you've provided (drawings ref: WIE SA 92 0004 Rev A05, WIE SA 92 0005 Rev A05, WIE SA 92 0006 Rev A05, WIE SA 92 0007 Rev A05) we're pleased to confirm that there will be sufficient sewerage capacity to serve your development.

However, Thames Water has concerns with capacity to the West of the development based on the proposed flows and connection points. We request that the developer updates Thames Water in advance of building phases as they come forwards in order to ensure that any investigative or upgrade works can be carried out before development commences.

This confirmation is valid for 12 months or for the life of any planning approval that this information is used to support, to a maximum of three years.

Please note that you must keep us informed of any changes to your design – for example, an increase in the number or density of homes. Such changes could mean there is no longer sufficient sewerage capacity.

What happens next?

Please make sure you submit your connection application, giving us at least 21 days' notice of the date you wish to make your new connection/s.

If you've any further questions, please contact me on 0203 577 8082.

Yours sincerely

Artur Jaroma

Thames Water



Lucy Elcoat-Dean

Waterman Group Pickfords Wharf Clink Street

SE1 9DG

Wastewater pre-planning Our ref DSXXXXXXX

22 March 2023

Pre-planning enquiry: Confirmation of sufficient capacity

Site Address: The Mortlake Brewery

Dear Lucy,

Thank you for providing information on your development.

Proposed site: brownfield site redevelopment. Foul water by gravity into multiple connections. Foul water split as follows:

MH4902 in Lower Richmond Rd at 2I/s, MH3005 in Ship Lane at 2I/s, MH4101 in North of the site d/s from MH3005 at 2.4I/s, MH4903 in Sheen Lane at 1.8I/s, MH4901in Lower Richmond Rd at 0.3I/s, MH6002 located in East/North corner of the site at 1.2I/s, MH6901 in Mortlake High St at 0.3I/s, MH3901 located at the junction of Richmond Road and Ship Lane at 1.2I/s, MH3007 in Aynescombe Path at 2.1I/s, MH2801 in Lower Richmond Road at 9I/s. Total 21.9I/s.

Surface water in total 37.4l/s. Proposed SW connections: MH4907 in Lower Richmond Rd at 2.4l/s, MH4906 in Lower Richmond Rd at 1.9l/s, MH5905 in Mortlake High St at 1.4l/s, MH2807 located at the junction of Ship Lane and Lower Richmond Rd at 8.3l/s, MH1001 in Williams Lane at 7.1l/s, MH1103 in Williams Lane at 6.1l/s.

We have completed the assessment of the foul water flows and surface water run-off based on the information submitted in your application with the purpose of assessing sewerage capacity within the existing Thames Water sewer network.

Foul Water

If your proposals progress in line with the details you've provided, we're pleased to confirm that there will be sufficient sewerage capacity in the adjacent foul water sewer network to serve your development.

This confirmation is valid for 12 months or for the life of any planning approval that this information is used to support, to a maximum of three years.

You'll need to keep us informed of any changes to your design – for example, an increase in the number or density of homes. Such changes could mean there is no longer sufficient capacity.

Surface Water

When developing a site, policy 5.13 of the London Plan and Policy 3.4 of the Supplementary Planning Guidance (Sustainable Design And Construction) states that every attempt should be made to use flow attenuation and SuDS/Storage to reduce the surface water discharge from the site as much as possible.

In accordance with the Building Act 2000 Clause H3.3, positive connection of surface water to a public sewer will only be consented when it can be demonstrated that the hierarchy of disposal methods have been examined and proven to be impracticable. Before we can consider your surface water needs, you'll need written approval from the lead local flood authority that you have followed the sequential approach to the disposal of surface water and considered all practical means.

The disposal hierarchy being:

- 1) rainwater use as a resource (for example rainwater harvesting, blue roofs for irrigation)
- 2) rainwater infiltration to ground at or close to source
- 3) rainwater attenuation in green infrastructure features for gradual release (for example green roofs, rain gardens)
- 4) rainwater discharge direct to a watercourse (unless not appropriate)
- 5) controlled rainwater discharge to a surface water sewer or drain
- 6) controlled rainwater discharge to a combined sewer.

Where connection to the public sewerage network is required to manage surface water flows we will accept these flows at a discharge rate in line with CIRIA's best practice guide on SuDS or that stated within the sites planning approval.

If the above surface water hierarchy has been followed and if the flows are restricted to a total of 37.4 l/s then Thames Water would not have any objections to the proposal.

What happens next?

Please make sure you submit your connection application, giving us at least 21 days' notice of the date you wish to make your new connection/s.

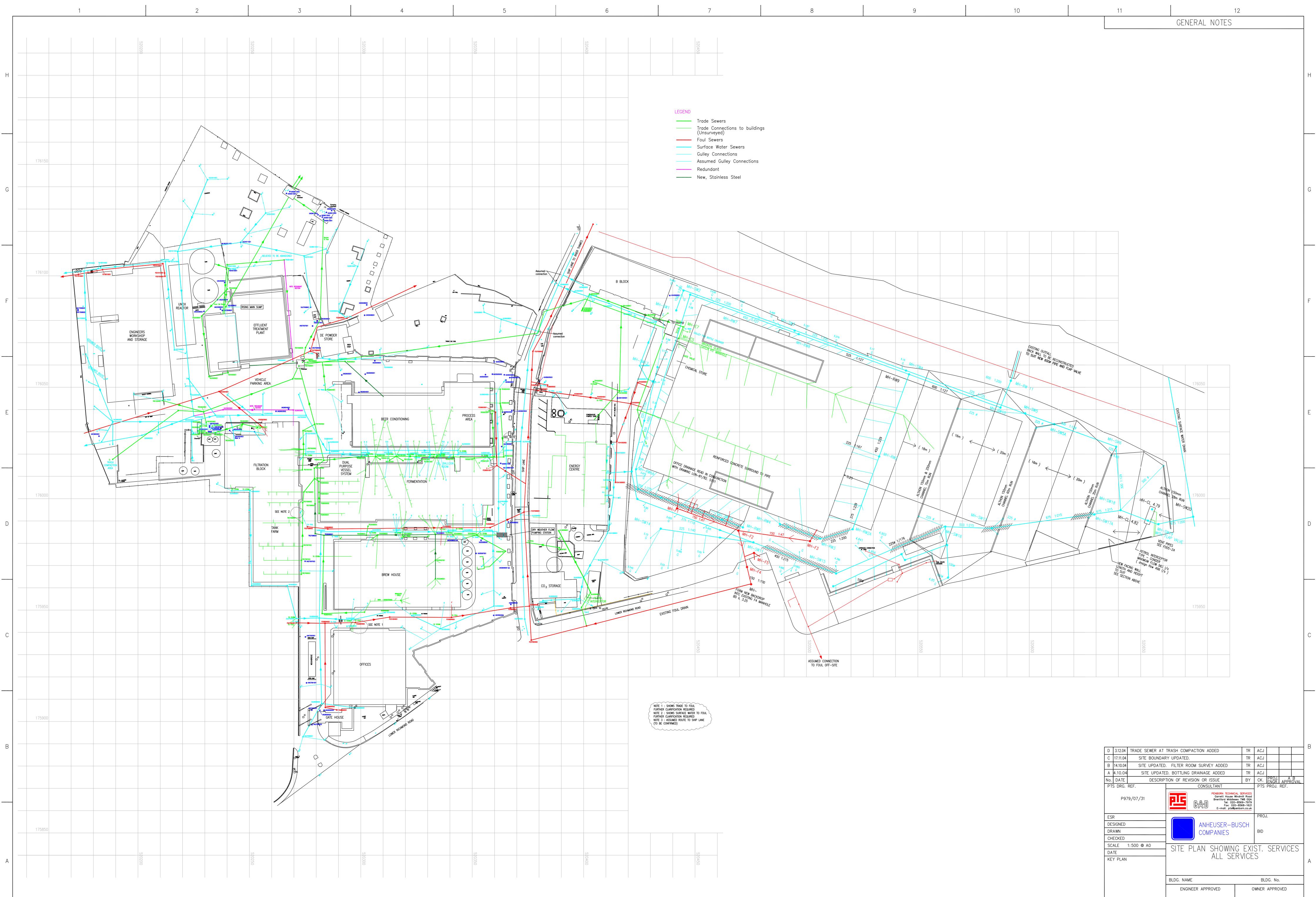
If you've any further questions, please contact me on 07747 641 932.

Yours sincerely



С. **Onsite Drainage Records**

> Appendices The Former Stag Brewery, Mortlake Project Number: WIE18671 Document Reference: WIE18671-104-R-11-7-1-DS



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D. Greater London Authority Correspondence

Appendices The Former Stag Brewery, Mortlake Project Number: WIE18671 Document Reference: WIE18671-104-R-11-7-1-DS

Nora Balboni

From:	Katherine Wood <katherine.wood@london.gov.uk></katherine.wood@london.gov.uk>
Sent:	08 February 2019 17:12
То:	Nora Balboni; Stuart McTaggart; Abby Crisostomo
Cc:	Anna Gargan; Suzanne Robson
Subject:	RE: Stag Brewery (GLA ref: 4172a/b) drainage strategy

Hi Nora,

Apologies, I should have confirmed with you that Stuart had reviewed this response and confirmed that it addressed outstanding issues on drainage.

Kind regards,

Katherine

Katherine Wood Team Leader, Development Management GREATERLONDONAUTHORITY City Hall, The Queen's Walk, London SE1 2AA 020 7983 5743 www.london.gov.uk/what-we-do/planning katherine.wood@london.gov.uk

From: Nora Balboni <nora.balboni@watermangroup.com>
Sent: 08 February 2019 17:07
To: Stuart McTaggart <Stuart.McTaggart@london.gov.uk>; Abby Crisostomo <Abby.Crisostomo@london.gov.uk>; Katherine Wood <Katherine.Wood@london.gov.uk>
Cc: Anna Gargan <AGargan@geraldeve.com>; Suzanne Robson <SRobson@geraldeve.com>
Subject: FW: Stag Brewery (GLA ref: 4172a/b) drainage strategy

Hi Stuart

Hope you are well. Have you had the chance to look at the Briefing Note?

Kind regards,

Nora Balboni Flood Risk Engineer Waterman Infrastructure & Environment Ltd

Pickfords Wharf | Clink Street | London SE1 9DG t +44 207 928 7888 | d +44 3300 602 725 www.watermangroup.com | LinkedIn | Twitter

From: Nora Balboni
Sent: 08 January 2019 16:22
To: 'Stuart McTaggart' <<u>Stuart.McTaggart@london.gov.uk</u>>
Cc: 'Anna Gargan' <<u>AGargan@geraldeve.com</u>>; 'Abby Crisostomo' <<u>Abby.Crisostomo@london.gov.uk</u>>; 'Katherine Wood' <<u>Katherine.Wood@london.gov.uk</u>>; Ellen Smith <<u>ellen.smith@watermangroup.com</u>>; Donal O'Donovan

Hi Stuart

Happy new year, I hope you had a great break.

Please find attached the Briefing Note outlining the amendments to the drainage strategy for the Stag Brewery development as per our agreements below.

Let me know if you have any queries.

Kind regards,

Nora Balboni Flood Risk Engineer Waterman Infrastructure & Environment Ltd

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From: Nora Balboni

Sent: 12 December 2018 09:24

To: Stuart McTaggart <<u>Stuart.McTaggart@london.gov.uk</u>>

Cc: Anna Gargan <<u>AGargan@geraldeve.com</u>>; Ellen Smith <<u>ellen.smith@watermangroup.com</u>>; Donal O'Donovan <<u>donal.odonovan@watermangroup.com</u>>; Abby Crisostomo <<u>Abby.Crisostomo@london.gov.uk</u>>; Katherine Wood <<u>Katherine.Wood@london.gov.uk</u>>;

Subject: RE: Stag Brewery (GLA ref: 4172a/b) drainage strategy [Filed 12 Dec 2018 09:24]

Hi Stuart

Thank you for confirming.

As discussed, we will provide a Briefing Note which will cover the following:

- Amended drainage strategy plan to show permeable paving extents;
- Volume calculations to estimate the attenuation available within the permeable paving sub-base and rain garden feature to show that a restriction of surface water runoff beyond the minimum 50% requirement is achieved;
- Sports pitch in south-west of site removed from surface water calculations under the assumption that it would drain freely, subject to ground investigations during detailed design; and
- Summary of all SuDS included.

Kind regards,

Nora Balboni Flood Risk Engineer Waterman Infrastructure & Environment Ltd

Pickfords Wharf | Clink Street | London SE1 9DG t +44 207 928 7888 | d +44 3300 602 725 www.watermangroup.com | LinkedIn | Twitter

From: Stuart McTaggart <<u>Stuart.McTaggart@london.gov.uk</u>>

Sent: 11 December 2018 15:23

To: Nora Balboni <<u>nora.balboni@watermangroup.com</u>>

Cc: Anna Gargan <<u>AGargan@geraldeve.com</u>>; Ellen Smith <<u>ellen.smith@watermangroup.com</u>>; Donal O'Donovan <<u>donal.odonovan@watermangroup.com</u>>; Abby Crisostomo <<u>Abby.Crisostomo@london.gov.uk</u>>; Katherine Wood

<<u>Katherine.Wood@london.gov.uk</u>> **Subject:** Re: Stag Brewery (GLA ref: 4172a/b) drainage strategy [Filed 12 Dec 2018 09:17]

Hi Nora,

To summarise our chat earlier:

- 1. The intent of the original drainage strategy was to show that it is possible within site constraints to meet the absolute minimum requirements of London Plan policy 5.13.
- 2. We would like to see that all efforts have been made to get as close to possible to the policy targets (i.e. greenfield runoff, drainage hierarchy, and a preference for SuDS with multiple benefits). We expect that on large sites such as this the policy targets should be able to be met in most cases.
- 3. Waterman will produce an addendum to the drainage strategy to more clearly show how the drainage will integrate SuDS with multiple benefits and identify an approximate maximum reduction in discharge rate. Where appropriate the reduction in discharge rate can be caveated with assumptions/risks that need confirmation during detailed design (e.g. infiltration rates of the subgrade below the 3G pitch).

Regards,

Stuart McTaggart

Flood Risk, Drainage & Water Policy Officer Development, Enterprise & Environment Greater London Authority City Hall, The Queens Walk, London SE1 2AA

Email: <u>stuart.mctaggart@london.gov.uk</u> Web: <u>Greening London / Greater London Authority</u> Follow the GLA's Environment team on Twitter <u>@LDN_Environment</u> <u>Sign up</u> to our e-newsletter

From: Nora Balboni <<u>nora.balboni@watermangroup.com</u>>
Sent: 04 December 2018 10:32
To: Stuart McTaggart <<u>Stuart.McTaggart@london.gov.uk</u>>
Cc: Anna Gargan <<u>AGargan@geraldeve.com</u>>; Ellen Smith <<u>ellen.smith@watermangroup.com</u>>; Donal O'Donovan
<<u>donal.odonovan@watermangroup.com</u>>
Subject: RE: GLA Flood Feedback

Hi Stuart

Thanks for your comments. Please feel free to give me a call to discuss as I don't have your contact number.

We understand that developments should aim to achieve greenfield runoff rates, or as close as feasible. To endeavour to achieve this we took the following approach:

- 1. As per the drainage hierarchy, the amount of surface water that could be discharged into the River Thames was maximised by incorporating the innovative shallow conveyance channel system;
- 2. For the remaining site, where discharge into the Thames was not feasible due to levels or crossing third party land, as many tanks were incorporated as possible. The horizontal constraints for the tanks include the basement extent, proposed building outlines, and landscaping. The vertical constraints include the required soil depth for tree pits and achieving a gravity connection into the surrounding sewer network. London Borough of Richmond accepted the 50% restriction during pre-application consultation. Conscious that the constraints of the site preclude a greater reduction in runoff, Thames Water were consulted to ensure that the surrounding sewer network has sufficient capacity. Thames Water confirmed capacity for both surface and foul water flows. It is important to note that the surface water flows from the development are only conveyed within the Thames Water network for maximum of 350m before discharging into the River Thames.

We are keen to find a solution to reduce runoff further to find an agreeable solution. I would appreciate your thoughts on the following options:

- Allowing the proposed sports pitch to drain freely, i.e. excluding it from the surface water calculations and therefore reducing the size requirement for the tank beneath the MUGA pitch. Subject to levels I could explore the possibility of directing surface water from other areas into this tank, reducing the restriction beyond the 50% mark. In the current strategy we assumed that the pitch would need to be positively drained due to the underlying London Clay to avoid potential water logging beneath the pitch. However, if no other areas would drain towards the pitch, allowing it to free drain could be considered.
- We took a conservative approach when designing the current drainage strategy, assuming 100% impermeable proposed area (discounting the park area in the south eastern corner of the site). We did not quantify the attenuation available within the rain garden along the green link and within the permeable paving, to demonstrate the worst-case scenario that the minimum required restriction (i.e. 50%) can be achieved within the tanks themselves. I will do a quick calculation to demonstrate the additional attenuating volume that these features would hold, reducing the restriction beyond the 50% mark.
- Exploring further areas for incorporation of permeable paving.
- The current proposals do not include for blue roofs. However, green roofs are proposed throughout the development, which, although not quantifiable, provide a betterment to the surface water runoff regime.

Let me know whether you find the above agreeable, I will then amend the drainage strategy drawing to show the constraints to the attenuation volumes and incorporate any changes, and will re-issue for you to review.

Kind regards,

Nora Balboni Flood Risk Engineer Waterman Infrastructure & Environment Ltd

Pickfords Wharf | Clink Street | London SE1 9DG t +44 207 928 7888 | d +44 3300 602 725 www.watermangroup.com | LinkedIn | Twitter

From: Anna Gargan
Sent: 28 November 2018 16:51
To: 'Ellen Smith'; 'Nora Balboni'
Cc: Guy Duckworth; Susie Taylor; Neil Henderson
Subject: GLA Flood Feedback

Hi Ellen / Nora,

I hope you are well.

The GLA has provided the following response to Flood comments issued on 20 November 2018.

Please can you review and respond. The officer states that he is happy to speak with you directly.

Kind regards,

Anna

"I have reviewed the Applicant's second response to our Stage 1 comments. Following our previous response at the end of October the final point of contention appears to be the proposed discharge rate where the site will drain to the public sewer. It is noted that the London Plan and DEFRA national guidance require a development to achieve as close to greenfield runoff rate as possible (approximately a >90% reduction from pre-development rates for a brownfield site). In this case the Applicant is proposing to reduce the discharge by 50%, well short of the policy requirements. The Applicant should calculate the greenfield runoff rate and provide calculations showing the attenuation storage required to meet this discharge rate. The Applicant should then seek to include additional attenuation storage to get as close to this value as possible. Our original comments suggested building the biodiverse roofs as green/blue roofs to provide additional storage and this has not been addressed to date. The Applicant should then provide a clear drawing or markup clearly showing the constraints to expanding attenuation storage if discharge at greenfield runoff rate is not proposed.

I am happy to discuss directly with the Applicant's consultant to resolve this if required.

Regards,

Stuart McTaggart Flood Risk, Drainage & Water Policy Officer Development, Enterprise & Environment Greater London Authority City Hall, The Queens Walk, London SE1 2AA

Email: stuart.mctaggart@london.gov.uk

Anna Gargan Planning Consultant

Tel. +44 (0)20 7518 7240 Mobile. +44 (0) 7979532721 AGargan@geraldeve.com

Gerald Eve LLP 72 Welbeck Street London W1G 0AY www.geraldeve.com





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E. Environment Agency Consultation

Appendices The Former Stag Brewery, Mortlake Project Number: WIE18671 Document Reference: WIE18671-104-R-11-7-1-DS

creating a better place for people and wildlife



Lucy Thatcher London Borough of Richmond upon Thames Planning Department Civic Centre (44) York Street Twickenham TW1 3BZ Our ref: SL/2022/121879/02-L01 Your ref: 22/0900/OUT

Date: 12 Ja

12 January 2023

Dear Lucy,

Hybrid application to include:

- 1) Demolition of existing buildings (except The Maltings and the façade of the bottling plant and former hotel), walls, associated structures, site clearance and groundworks, to allow for the comprehensive phased redevelopment of the site.
- 2) Detailed application for the works to the east side of Ship Lane
- 3) Outline application, with all matters reserved for works to the west of Ship Lane.

The Stag Brewery, Lower Richmond Road, Mortlake, London

Thank you for re-consulting us on the above application on 6 December 2022.

We have reviewed several documents that were supplied following our previous objection to this application dated 10 May 2022 (our ref: SL/2022/121879/01-L01). These include, but are not limited to:

• Stag Brewery, Mortlake - Consultee Responses, ref: WIE18671-114-BN-1.3.4-FR&D Response, August 2022.

Environment Agency position

We are pleased to see that the applicant has clarified our concerns about conflicting documentation regarding the proposed defence line, as raised in our previous letter dated 10 May 2022 (our ref: SL/2022/121879/01-L01).

We are therefore now in a position to **remove our objection** subject to the planning conditions detailed in **Appendix A** of this letter. Without these conditions we would object to the planning application in line with paragraphs 159, 161, 164, and 174 of the National Planning Policy Framework (NPPF).

Appendix B includes advice concerning environment issues and opportunities on the site, **Appendix C** outlines informatives that should be included the decision notice of any planning permission granted.

Decision notice

Please send a copy of the decision notice to kslplanning@environment-agency.gov.uk

customer service line 03708 506 506 gov.uk/environment-agency

creating a better place for people and wildlife



We hope our response is helpful, should you have any queries regarding this response, please contact me.

Yours sincerely,

George Goodby Sustainable Places Planning Advisor kslplanning@environment-agency.gov.uk



Appendix A- Planning conditions

Condition wording

If you wish to amend the wording of these requested conditions or if you wish to merge them with other Local Planning Authority conditions, please contact us to discuss the revised wording.

Condition 1: Implementation of Flood Risk Assessment

The development permitted by this planning permission shall be carried out in accordance with the submitted Flood Risk Assessment (FRA (Version 5, March 2022 by Hydro-Logic Services) and associated documents, and the following mitigation measures detailed:

- finished floor levels for residential accommodation shall be set no lower than 7.03 metres above Ordnance Datum (mAOD)
- no sleeping accommodation shall be located at basement level
- the crest level of the proposed new flood defence line will be set at a minimum of 6.70 mAOD
- the alignment of the proposed flood defence line will be as set out in drawing ref: P10736-00-004-GIL-106, Rev P00 (Gillespies, January 2022)

The mitigation measures shall be fully implemented prior to occupation and subsequently in accordance with the timing / phasing arrangements embodied within the scheme, or within any other period as may subsequently be agreed, in writing, by the local planning authority.

Reasons

To reduce the risk of flooding to the development and occupants.

To comply with paragraphs 159 and 164 of the NPPF, Policy LP 21- Flood Risk and Sustainable Drainage of the Richmond Local Plan (2018) and the requirements of the <u>Thames Estuary 2100 plan</u>.

Condition 2: Detailed flood defence design

The development hereby permitted must not be commenced until such time as detailed design drawings for all new and upgraded flood defence structures has been submitted to, and approved in writing by, the local planning authority.

The scheme shall be fully implemented and subsequently maintained, in accordance with the scheme's timing/phasing arrangements, or within any other period as may subsequently be agreed, in writing, by the local planning authority.

Reasons

To ensure a fit for purpose flood defence line is provided, and to reduce the risk of flooding to the development and occupants.

To comply with paragraphs 159 and 164 of the NPPF, and Policy LP 21 of the Richmond upon Thames Local Plan (2018).

customer service line 03708 506 506 gov.uk/environment-agency



Condition 3: Artificial lighting

No development shall take place until a sensitive lighting management plan has been submitted to, and approved in writing by, the local planning authority. This plan should demonstrate no net increase in artificial lighting to the River Thames and foreshore, as well as to any primary bat foraging and commuting routes across the development site.

The scheme shall be fully implemented and subsequently maintained, in accordance with the scheme's timing/phasing arrangements, or within any other period as may subsequently be agreed, in writing, by the local planning authority.

Reasons

Surveys have highlighted that a range of bat species are present at the development site for both roosting and foraging. These species are sensitive to any increase in artificial lighting of their roosting and foraging places and commuting routes.

To comply with paragraph 185 of the NPPF and Policies LP 10 and LP 18 of the Richmond upon Thames Local Plan (2018).

Advice to LPA and applicant

The sensitive lighting management plan should be prepared in line with the following guidance document:

 <u>Guidance Note 08/18. Bats and artificial lighting in the UK. Bats and the Built</u> <u>Environment. Bat Conservation Trust, London & Institution of Lighting</u> <u>Professionals, Rugby</u>".

Condition 4: Remediation Strategy

No development approved by this planning permission shall commence until a strategy to deal with the potential risks associated with any contamination of the site has been submitted to, and approved in writing by, the Local Planning Authority. This strategy will include the following components:

- 1. A preliminary risk assessment which has identified:
 - all previous uses;
 - potential contaminants associated with those uses;
 - a conceptual model of the site indicating sources, pathways and receptors; and
 - potentially unacceptable risks arising from contamination at the site.

2. A site investigation scheme, based on (1) to provide information for a detailed assessment of the risk to all receptors that may be affected, including those off site.

3. The results of the site investigation and the detailed risk assessment referred to in (2) and, based on these, an options appraisal and remediation strategy giving full details of the remediation measures required and how they are to be undertaken.

4. A verification plan providing details of the data that will be collected in order to demonstrate that the works set out in the remediation strategy in (3) are complete

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and identifying any requirements for longer-term monitoring of pollutant linkages, maintenance and arrangements for contingency action.

Any changes to these components require the written consent of the local planning authority. The scheme shall be implemented as approved.

Reasons

To ensure that the development does not contribute to, or is not put at unacceptable risk from, or adversely affected by, unacceptable levels of water pollution in line with paragraph 174 of the NPPF and Policies LP 10 and LP 23 of the Richmond upon Thames Local Plan (2018).

Condition 5: Verification Report

Prior to any part of the permitted development being occupied a verification report demonstrating the completion of works set out in the approved remediation strategy and the effectiveness of the remediation shall be submitted to, and approved in writing, by the local planning authority. The report shall include results of sampling and monitoring carried out in accordance with the approved verification plan to demonstrate that the site remediation criteria have been met.

Reasons

To ensure that the site does not pose any further risk to human health or the water environment by demonstrating that the requirements of the approved verification plan have been met and that remediation of the site is complete. This is in line with paragraph 174 of the NPPF and Policies LP 10 and LP 23 of the Richmond upon Thames Local Plan (2018).

Condition 6: Previously unidentified contamination

If, during development, contamination not previously identified is found to be present at the site then no further development (unless otherwise agreed in writing with the Local Planning Authority) shall be carried out until a remediation strategy detailing how this contamination will be dealt with has been submitted to and approved in writing by the Local Planning Authority. The remediation strategy shall be implemented as approved.

Reasons

To ensure that the development does not contribute to, or is not put at unacceptable risk from, or adversely affected by, unacceptable levels of water pollution from previously unidentified contamination sources at the development site in line with paragraph 174 of the NPPF and Policies LP 10 and LP 23 of the Richmond upon Thames Local Plan (2018).

Condition 6: Sustainable Drainage Systems (SuDs)

No infiltration of surface water drainage into the ground is permitted other than with the written consent of the Local Planning Authority. The development shall be carried out in accordance with the approved details.

Reasons

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To ensure that the development does not contribute to, or is not put at unacceptable risk from, or adversely affected by, unacceptable levels of water pollution caused by mobilised contaminants in line with paragraph 174 of the NPPF and Policy LP 23 of the Richmond upon Thames Local Plan (2018).

Condition 7: Piling

Piling or any other foundation designs using penetrative methods shall not be permitted other than with the express written consent of the Local Planning Authority, which may be given for those parts of the site where it has been demonstrated by a piling risk assessment that there is no resultant unacceptable risk to groundwater. The development shall be carried out in accordance with the approved details.

Reasons.

To ensure that the development does not contribute to, or is not put at unacceptable risk from, or adversely affected by, unacceptable levels of water pollution caused by mobilised contaminants in line with paragraph 174 of the NPPF and Policy LP 23 of the Richmond upon Thames Local Plan (2018).

Advice to LPA and Applicant

Piling can result in risks to groundwater quality by mobilising contamination when boring through different bedrock layers and creating preferential pathways. Thus it should be demonstrated that any proposed piling will not result in contamination of groundwater.

If Piling is proposed, a Piling Risk Assessment must be submitted, written in accordance with EA guidance document "<u>Piling and Penetrative Ground</u> <u>Improvement Methods on Land Affected by Contamination: Guidance on Pollution</u> <u>Prevention. National Groundwater & Contaminated Land Centre report NC/99/73</u>"



Appendix B- Advice to Local Planning Authority and Applicant

Flood Risk

Flood resistance and resilience

We recommend that flood resistant and resilient measures are incorporated in to the design and construction of the development proposals, where practical considerations allow, using guidance contained within the Department for Communities & Local Government (DCLG) document <u>'Improving the flood performance of new buildings:</u> <u>flood resilient construction</u>'.

Flood risk issues not within our direct remit

The following issues are not within our direct remit or expertise, but nevertheless may be important considerations for managing flood risk for this development. Prior to deciding this application we recommend that consideration is given to the issues below. Where necessary, the advice of relevant experts should be sought.

- Adequacy of rescue or evacuation arrangements
- Details and adequacy of an emergency plan
- · Provision of and adequacy of a temporary refuge
- Details and adequacy of flood proofing and other building level resistance an resilience measures
- Details and calculations relating to the structural stability of buildings during a flood
- Whether insurance can be gained or not
- Provision of an adequate means of surface water disposal such that flood risk on and off-site isn't increased

Biodiversity

Biodiversity Net Gain

We note that a majority of the biodiversity net gain has been achieved by the addition of green roofs. Whilst this is a welcomed enhancement, we would encourage that net gain is achieved through the provision of a more diverse range of habitat types, namely those at ground level, providing a more equal weighting of enhanced units.

A large proportion of the site is due to be hard landscaped which is a missed opportunity for addition of more ground-based habitat enhancements such as species rich grassland, native hedgerows and dead wood habitats.

Groundwater and Contaminated Land

Site Setting

The previous use of the proposed development site as a large brewery site presents a medium risk of residual contamination that could be mobilised during construction



to pollute controlled waters. Controlled waters are sensitive in this location because the proposed development site is located upon a Secondary aquifer

The setting of this planning application suggest that it will be possible to suitably manage the risk posed to controlled waters by this development. Further detailed information will however be required before built development is undertaken. It is our opinion that it would place an unreasonable burden on the developer to ask for more detailed information prior to the granting of planning permission but respect that this is a decision for the Local Planning Authority.

<u>Waste</u>

Waste to be taken off-site

Contaminated soil that is (or must be) disposed of is waste. Therefore, its handling, transport, treatment and disposal are subject to waste management legislation, which includes:

- Duty of Care Regulations 1991
- Hazardous Waste (England and Wales) Regulations 2005
- Environmental Permitting (England and Wales) Regulations 2016
- The Waste (England and Wales) Regulations 2011

Developers should ensure that all contaminated materials are adequately characterised both chemically and physically in line with British Standard BS EN 14899:2005 'Characterization of Waste - Sampling of Waste Materials - Framework for the Preparation and Application of a Sampling Plan' and that the permitting status of any proposed treatment or disposal activity is clear. If in doubt, the Environment Agency should be contacted for advice at an early stage to avoid any delays.

If the total quantity of hazardous waste material produced or taken off-site is 500kg or greater in any 12 month period, the developer will need to register with us as a hazardous waste producer. Refer to the hazardous waste pages on GOV.UK for more information.

Waste on-site

The CL:AIRE Definition of Waste: Development Industry Code of Practice (version 2) provides operators with a framework for determining whether or not excavated material arising from site during remediation and/or land development works is waste or has ceased to be waste. Under the Code of Practice:

- excavated materials that are recovered via a treatment operation can be reused on-site providing they are treated to a standard such that they are fit for purpose and unlikely to cause pollution
- treated materials can be transferred between sites as part of a hub and cluster project
- some naturally occurring clean material can be transferred directly between sites

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Developers should ensure that all contaminated materials are adequately characterised both chemically and physically, and that the permitting status of any proposed on-site operations are clear. If in doubt, the Environment Agency should be contacted for advice at an early stage to avoid any delays.

We recommend that developers should refer to:

- the <u>position statement</u> on the Definition of Waste: Development Industry Code of Practice
- The waste management page on GOV.UK

Illegal waste management activities and fly tipping

Vacant development sites can become targets of waste crime including the illegal transport and depositing of waste on a large scale which is then abandoned and left for the landowners/authorities to resolve. We recommend that the site is appropriately secured and there is visible security on site once vacant possession has been gained to protect the site from any fly tipping and illegal waste activities.

Incidents linked to illegal waste activities should be reported to the Environment Agency incident hotline Telephone: 0800 80 70 60. This is a 24- hour service. Waste crime can also be reported anonymously to Crime Stoppers on 0800 555 111



Appendix C- Informative

Flood Risk Activity Permit

The Environmental Permitting (England and Wales) Regulations 2016 require a permit to be obtained for any activities which will take place:

- on or within 8 metres of a main river (16 metres if tidal)
- on or within 8 metres of a flood defence structure or culvert (16 metres if tidal)
- on or within 16 metres of a sea defence
- involving quarrying or excavation within 16 metres of any main river, flood defence (including a remote defence) or culvert
- in a floodplain more than 8 metres from the river bank, culvert or flood defence structure (16 metres if it's a tidal main river) and you don't already have planning permission.

For further guidance please visit <u>https://www.gov.uk/guidance/flood-risk-activities-</u> <u>environmental-permits</u> or contact our National Customer Contact Centre on 03702 422 549 or by emailing enquiries@environment-agency.gov.uk. The applicant should not assume that a permit will automatically be forthcoming once planning permission has been granted, and we advise them to consult with us at the earliest opportunity.



F. London Borough of Richmond upon Thames Pro-forma

Appendices The Former Stag Brewery, Mortlake Project Number: WIE18671 Document Reference: WIE18671-104-R-11-7-1-DS





	Project / Site Name (including sub- catchment / stage / phase where appropriate)	The Former Stag Brewery		
	Address & post code	The Former Stag Brewery, Mortlake		
	OS Grid ref. (Easting, Northing)	E 520470		
6	OS GHUTEL (Easting, Northing)	N 176018		
tails	LPA reference (if applicable)			
1. Project & Site Details	Brief description of proposed work	Section 1		
•••	Total site Area	9941 m ²		
	Total existing impervious area	5890 m ²		
	Total proposed impervious area	5890 m ²		
	Is the site in a surface water flood risk catchment (ref. local Surface Water Management Plan)?	See FRA		
	Existing drainage connection type and location	Section 3		
	Designer Name	Brendan McCarthy		
	Designer Position	Technical Director		
	Designer Company	Waterman		

				_
	2a. Infiltration Feasibility			
	Superficial geology classification	Section 4		
	Bedrock geology classification		Section 4	
	Site infiltration rate		m/s	
	Depth to groundwater level		m belo	w ground level
	Is infiltration feasible?		Yes	
	2b. Drainage Hierarchy			
ements			Feasible (Y/N)	Proposed (Y/N)
ang	1 store rainwater for later use	Y	Y	
arge Arr	2 use infiltration techniques, such surfaces in non-clay areas	Ν		
d Discha	3 attenuate rainwater in ponds or features for gradual release	open water	Ν	
2. Proposed Discharge Arrangements	4 attenuate rainwater by storing ir sealed water features for gradual r		Y	Y
2. P	5 discharge rainwater direct to a w	vatercourse	Y	Y
	6 discharge rainwater to a surface sewer/drain	Υ	Y	
	7 discharge rainwater to the comb	Ν		
	2c. Proposed Discharge Details			
	Proposed discharge location	Section 4		
	Has the owner/regulator of the discharge location been consulted?		Section 4 and	5



GREATER **LONDON** AUTHORITY



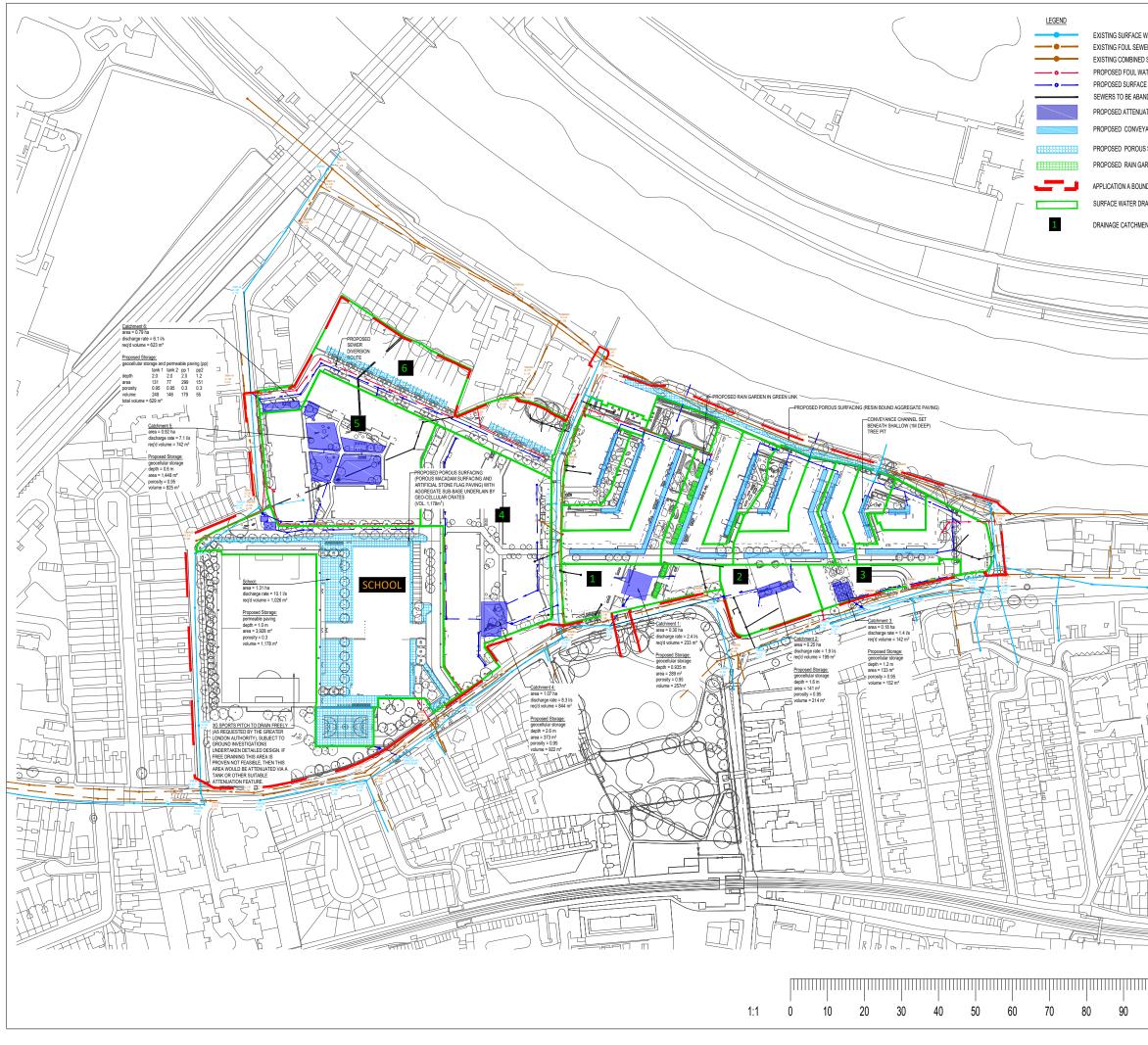
	3a. Discharge Rates & Required Storage					
		Greenfield (GF) runoff rate (l/s) -	Existing discharge rate (l/s)	Required storage for GF rate (m ³)	Proposed discharge rate (l/s)	
	Qbar	See Sectio	n 4			
	1 in 1				Π	
	1 in 30					
	1 in 100					
	1 in 100 + CC					
	Climate change a	llowance used	40%			
rategy	3b. Principal Met Control	hod of Flow				
ge St	3c. Proposed Su	DS Measures				
3. Drainage Strategy			Catchment area (m²)	Plan area (m²)	Storage vol. (m ³)	
3.	Rainwater harves	sting	See Sect	ion 4	D	
	Infiltration syster	ns			D	
	Green roofs				D	
	Blue roofs				D	
	Filter strips		_		D	
	Filter drains		_		D	
	Bioretention / tre		_		0	
	Pervious paveme	nts			O	
			-		5	
	Swales				0	

	4a. Discharge & Drainage Strategy	Page/section of drainage report		
	Infiltration feasibility (2a) – geotechnical factual and interpretive reports, including infiltration results	Section 4		
	Drainage hierarchy (2b)	Section 4		
5	Proposed discharge details (2c) – utility plans, correspondence / approval from owner/regulator of discharge location	Section 4		
4. Supporting Information	Discharge rates & storage (3a) – detailed hydrologic and hydraulic calculations	Section 4		
ting Inf	Proposed SuDS measures & specifications (3b)	Section 4		
bod	4b. Other Supporting Details	Page/section of drainage report		
ž	Detailed Development Layout	Appendix E		
4.	Detailed drainage design drawings, including exceedance flow routes	Appendix E		
	Detailed landscaping plans	Appendix A		
	Maintenance strategy	Section 4		
	Demonstration of how the proposed SuDS measures improve:	Section 4		
	a) water quality of the runoff?	Section 4		
	b) biodiversity?	Section 4		
	c) amenity?	Section 4		



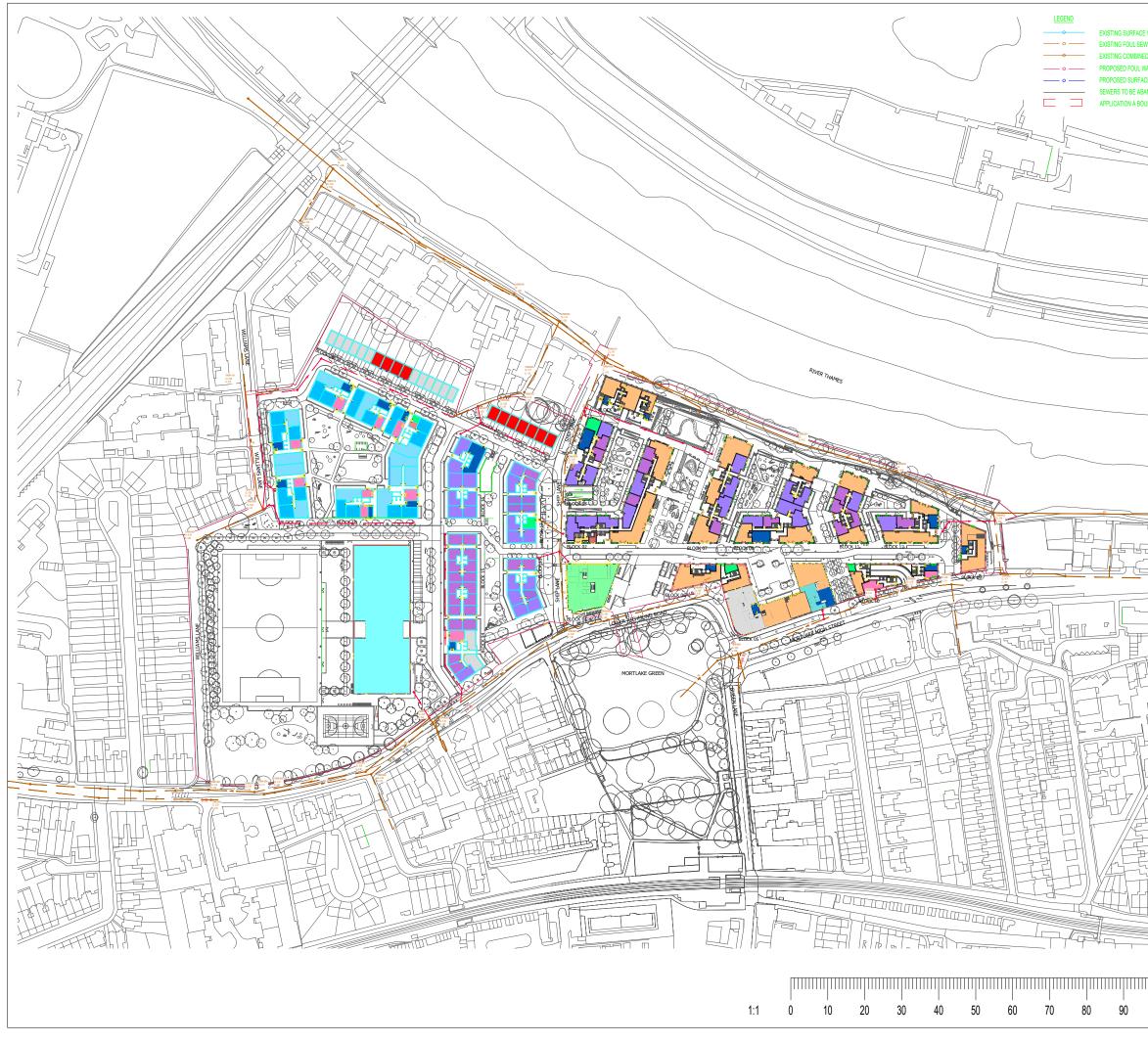
G. Existing and Proposed Drainage Strategy Plan

Appendices The Former Stag Brewery, Mortlake Project Number: WIE18671 Document Reference: WIE18671-104-R-11-7-1-DS



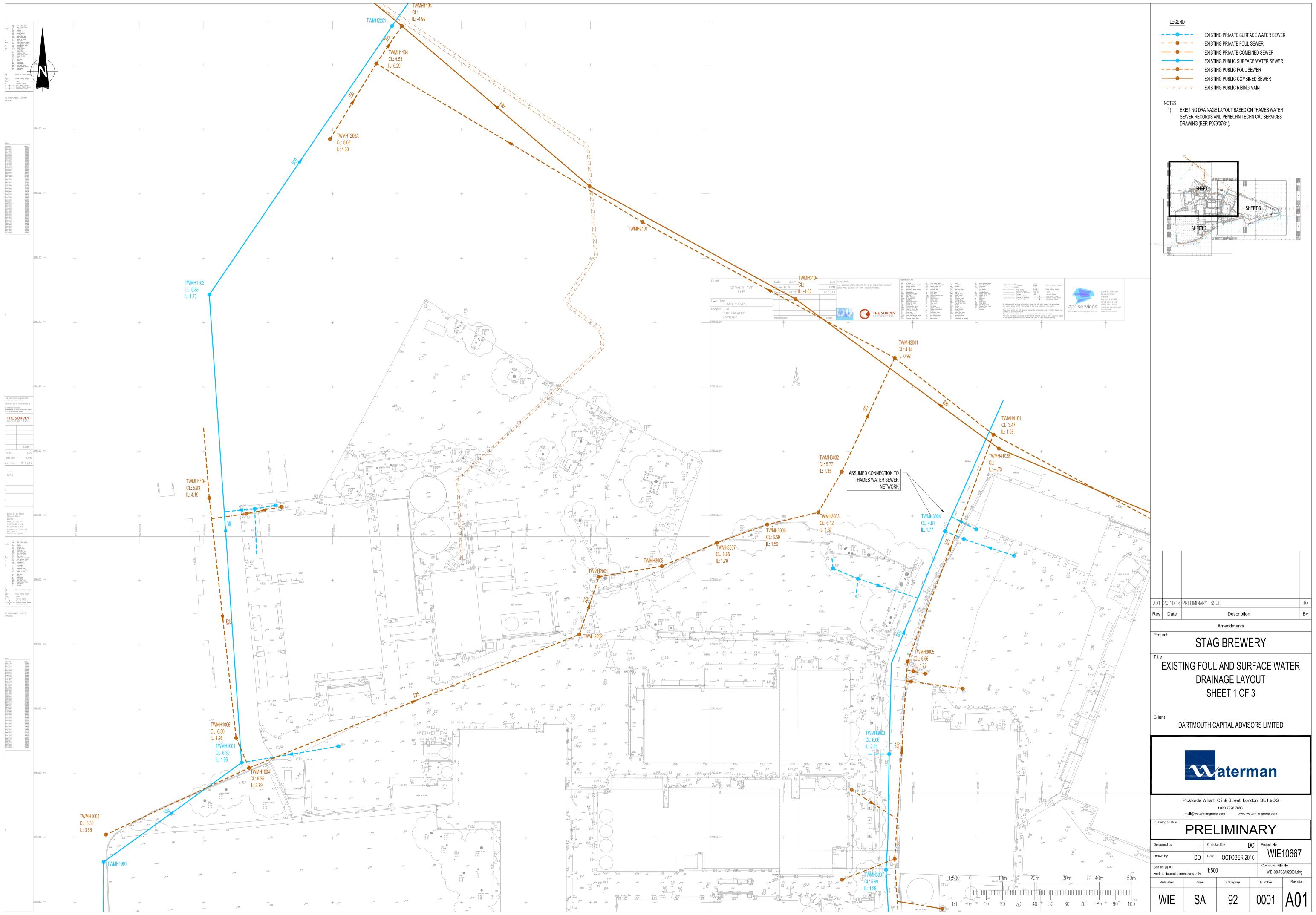
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SURFACING	4. ALL	WORK BY T		NTRACTOR MUST BE CARRIED			AT		
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AINAGE CATCHMENT	6. EXIS	STING DRAIN	IAGE L	JTORY AUTHORITIES AND REG AYOUT BASED ON THAMES W	ATER SEWER RE	CORDS A	ND		
NT NO.	7. EXIS	STING FOUL	AND S		,	D WHER	E		
	 EXISTING FOUL AND SURFACE WATER CONNECTIONS TO BE RE-USED WHERE FEASIBLE, SUBJECT TO DETAILED DESIGN. GREEN ROOFS AND WATER BUTTS ARE TO BE INCORPORATED ACROSS THE SITE TO PROVIDE SOURCE CONTROL AND FACILITATE WATER REUSE. THE PROPOSED LOCATION OF GREEN ROOFS CAN BE FOUND ON THE SITEWIDE URBAN GREEN FACTOR DRAWING (P10738-00-004-GIL-0802), WHICH IS AVAILABLE IN APPENDIX K OF THE DRAINAGE STRATEGY REPORT. THE PROPOSED LOCATION OF WATER BUTTS IS TO BE DETERMINED AT DETAILED DESIGN STAGE BUT CAN BE INDICATIVELY ASSUMED BASED ON THE LOCATION OF THE DEVELOPMENT BLOCKS, AS SHOWN WITHIN THE DEVELOPMENT PROPOSALS. 								
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	P03 5			ected annotation to match storage		SW	BM		
70	P01 S		ISSU	ED		SW	BM		
	Status	Date		Description		Ву	Chk		
				Amendments					
	Project Title					TER)		
	PROPOSED SURFACE WATER DRAINAGE STRATEGY								
	Client RESELTON PROPERTIES LIMITED								
	W waterman								
	Office Address Telephone & Fax numbers mail@watermangroup.com www.watermangroup.com Suitability								
	Designed	Ву		DORDINATION	Waterman Ref		51		
	Drawn By	Desig		BM	Scales @ A3	WIE18	3671		
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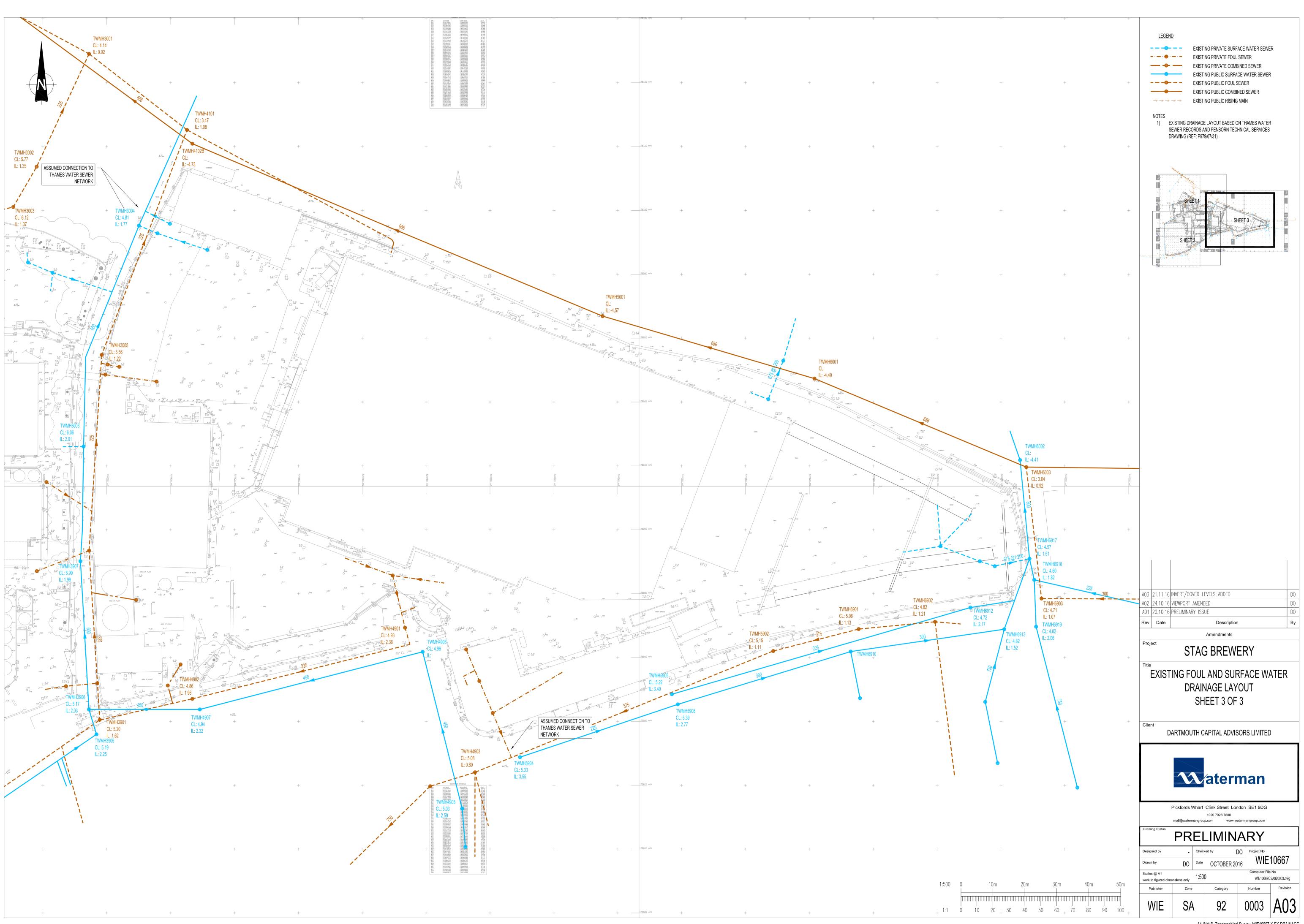
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	Project	S	T	AG BREWERY					
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	PROPOSED FOUL WATER DRAINAGE STRATEGY								
	DRAINAGE STRATEGT								
	Client RESELTON PROPERTIES LIMITED								
	M aterman								
	Office Address Telephone & Fax numbers mail@watermangroup.com www.watermangroup.com								
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A1-Wat-S, Topographical Survey, WIE10667-X-EX-DRAINAGE





A1-Wat-S, Topographical Survey, WIE10667-X-EX-DRAINAGE



H. London Borough Richmond upon Thames (LBRuT) Correspondence

Appendices The Former Stag Brewery, Mortlake Project Number: WIE18671 Document Reference: WIE18671-104-R-11-7-1-DS

O'Donovan, Donal

From:	Brian Humphris <brian.humphris@richmond.gov.uk></brian.humphris@richmond.gov.uk>
Sent:	03 March 2016 15:32
То:	O'Donovan, Donal
Subject:	RE: WIE10667 160122 DOBH Stag Brewery Flood Risk Enquiry
Attachments:	Gully reports.xlsx

Donal

In response to your questions below:-

- 1 Not sure who would be the best contact but they have area teams, so any enquiry relating to Stag site would be referred to them.
- 2 I can find no record of a name either. OS plan indicates that the culvert is fed by open ditches along both sides of Sheen Common, but nothing is indicated south of the common, within Richmond Park.
- 3 Please see attached reports as logged on our system.

Regards Brian

Brian Humphris Highway Asset Co-ordinator

020 8891 7738

From: O'Donovan, Donal [mailto:donal.odonovan@watermangroup.com]
Sent: 03 March 2016 12:03
To: Brian Humphris
Subject: RE: WIE10667 160122 DOBH Stag Brewery Flood Risk Enquiry

Hi Brian,

Many thanks for the response, I have a few follow up queries that I hope you will be able to answer.

- 1. You mentioned that we would need to confirmed if the Site had passed the Sequential Test with the Planners. Do you have the contact details for the best person/team to contact in relation to this.
- 2. You provided plan showing a culverted watercourse that has an outlet adjacent to the Site. Do you know what this watercourse is called? I have had a look online but not had any luck.
- 3. You mentioned that there have been some records of flooding due to blocked gullies. Can you provide any further information in relation to these (ie. extent, date, location etc.).

If you have any queries please feel free to give me a call.

Cheers,

Donal

Hi Donal

Please accept my apologies for the delay in responding to your enquiry. Unfortunately some of the information that you requested has taken some time to obtain. Please see comments below.

Regards Brian

Brian Humphris Highway Asset Co-ordinator

020 8891 7738

From: O'Donovan, Donal [mailto:donal.odonovan@watermangroup.com] Sent: 22 January 2016 14:34 To: Brian Humphris Subject: WIE10667 160122 DOBH Stag Brewery Flood Risk Enquiry

Hi Brian,

Thanks for speaking to me earlier.

Stag Brewery – Flood Risk Enquiry

I'm writing regarding the proposed redevelopment of Stag Brewery, located within the London Borough of Richmond upon Thames. The Site is approximately 9ha in size, and is located at approximate postcode SW14 7ET, please find attached a location plan for your information. The proposals comprise construction of a residential led mixed use development.

We have been commissioned to investigate the risk of flooding to the proposed development. I would be grateful if you could provide information relating to the following:

- The Environment Agency mapping shows that the Site lies within Flood Zones 2 and 3, and is generally shown as being defended The River Thames defences are identified as being continuous in this location, please could you confirm that the Site is fully defended from tidal and fluvial flooding. We do not have detailed records of River Defences. However photographs on pages 24 & 25 of the SPD show that there are no defences at Ship Lane. Street View images from the river appear to show river levels approx. 1m below the towpath level, although there is no way of knowing what the Tide Status was at that time. There are defences at Bulls Alley, as indicated on Page 13 of the SPD.
- The Stag Brewery SPD sets out the planning brief for potential development at the Site. Please could you confirm that the Sequential Test has been passed. This would need to be confirmed by our Planners.
- 3. As it is very early in the decision process it is currently unknown where development would be located. However, the design would ensure that appropriate mitigation steps would be incorporated. In line with other Sites within London we currently assume that commercial and retail ('less vulnerable') uses would be acceptable on the ground floor. We also assume that duplex residential uses would be acceptable on the ground and first floor (bedrooms location on the first floor), as a means of egress would be available to ensure safety. Please could you confirm this. We will further consul once the scheme plans have evolved. This approach is reasonable but Planners would make final approval. At other developments within Flood Zones floor levels are usually raised to at least 300mm above ground level to reduce flood risk.
- 4. Could you please provide a map showing the location of any Ordinary Watercourses near the Site, and note any development restrictions that would therefore apply.

Please note plans attached. Watercourses plan shows a watercourse under the site, although the alignment is probably only indicative. OS plan is marked with the known extents of relevant section – 'outlet' is marked on the plan.

- Please could you confirm whether or not there are any 'lost rivers' in the vicinity of the Site. Please could you provide any information you have relating to this, to include a map.
 See above
- Please could you provide your Risk of Flooding from Surface Water map in the vicinity of the Site, as the EA's online version is difficult to interpret due to the scale.
 Richmond does not have its own Flood risk maps, we use the EA plans.
- Please provide us with details of any historic tidal, fluvial, groundwater, surface water or sewer flooding affecting or in the vicinity of the Site. Alternatively, please confirm that you have no records of flooding in the vicinity.
 Our Highways Enquiry System has no record of any flooding reports at Mortlake High Street, Lower

Richmond Road, Ship Lane or Williams Lane, other than blocked gully reports.

- 8. Please could you confirm the likely groundwater levels in the vicinity of the Site. Unfortunately we do not have records of likely Groundwater Levels.
- 9. It is still very early in the design process and at this stage the drainage strategy is still being developed. We are currently looking at all options available to drain surface water runoff from the Site. Our approach will follow the drainage hierarchy where possible, with the preference of draining the site to the River Thames (unrestricted due to the tidal nature of the River). Should it not be possible to drain to the River Thames due to Site constraints, we would connect to the public sewer network. Following the requirements of the London Plan, we would limit surface water runoff from the Site to 50% of the existing rate, for the 1 in 100 year event, including for the predicted increase in rainfall intensity over the lifetime of the development due to climate change. Please could you confirm that this approach is acceptable.

We are also writing to the Environment Agency and Thames Water requesting details of recorded flooding incidents and relevant information. If you are aware of any other parties that may have useful information please let me know.

This information is required as soon as possible and we would be grateful if you could provide your written response by 5th February 2016. If this is unlikely to be achievable or you require any further information please feel free to get in contact.

Please feel free to give me a call if you wish to discuss the above.

Cheers,

Donal

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I. Tide Locking Calculations

Appendices The Former Stag Brewery, Mortlake Project Number: WIE18671 Document Reference: WIE18671-104-R-11-7-1-DS



CALCULATIONS

Company:	WIE	Office: L	ondon
Sheet No:	1 of 1	Project No	WIE10667
Ву	N Balboni	Date 2	27.09.2017
Checked:	D O'Donovan	Date 2	27.09.2017

Project Title:Former Stag Brewery, MortlakeCalculations Title:Tide Locking Calculation

							CA	LCUL	ATION	S						
Th	e 'rule c	of twel	lfths	' is a	a rule	of thum	o that	allows	the tio	le lev	el to be	estima	ted ba	ased c	on the h	igh and
	els. The															
of	geograp	hical	loca	atior	۱.											
	Source	e: Por	rt of	Lon	don A	uthority,	2017	. Tide	Tables	and	Port In	formatic	n			
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	Barnes	s MH\	ws	(m /	AOD)	4.13										
	Chisw) 4.08										
	Inputs	<u>i</u>									R	ule of T	welft	hs		
		•														
	Mean	High \	Wat	er S	pring	=		5.23	m AO	D		Hour	C	hange	e Wa	ter Lev
	Mean	Low V	Nat	er S	pring	=		-1.02	m AO	D		0		-		-1.02
												1		1/12		-0.50
	Invert	Level	of (Outfa	all	=		2.60	m AO	D		2		1/6		0.54
												3		1/4		2.11
												4		1/4		3.67
												5		1/6		4.71
												6		1/12		5.23
												7		1/12		4.71
												8		1/6		3.67
												9		1/4		2.11
												10		1/4		0.54
												11		1/6		-0.50
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