Haringey LONDON

GREATER**LONDON**AUTHORITY

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1. Project & Site Details

Project / Site Name (including sub-catchment / stage / phase where appropriate)	Haringey Civic Centre RIBA Stage 2: Planning
Address & post code	High Road, Wood Green, N22 8LE
OS Grid ref. (Easting, Northing)	E 530856 N 190742
LPA reference (if applicable)	
Brief description of proposed work	Redevelopment of the Haringey Civic Centre Site. Includes the refurbishment of the existing Grade 2 listed Civic Centre and new build annex in the car park.
Total site Area	10380 m^2
Total existing impervious area	6421 m^2
Total proposed impervious area	6500 m^2
Is the site in a surface water flood risk catchment (ref. local Surface Water Management Plan)?	No
Existing drainage connection type and location	Separated surface and foul water drainage network. The existing Haringey Civic Centre surface water appears to discharge to a 305mm diameter Thames Water sewer along Bounds Green Road. The foul discharges to a 381mm diameter Thames Water sewer along High Road.
Designer Name	Jessie Britnell Craven
Designer Position	Engineer
Designer Company	Buro Happold

2. Proposed Discharge Arrangements

2a. Infiltration Feasibility

Superficial geology classification	1m Made Ground (a mixture of Sand and Clay) and then London Clay which has low/poor permeability for infiltration.
Bedrock geology classification	London Clay Formation.
Site infiltration rate	0 m/s
Depth to groundwater level	n/a m below ground level
Is infiltration feasible?	No

2b. Drainage Hierarchy

	Feasible (Y/N)	*Proposed (Y/N)*
1 store rainwater for later use	N	N
2 use infiltration techniques, such as porous surfaces in non-clay areas	N	N
3 attenuate rainwater in ponds or open water features for gradual release	Y	Y
4 attenuate rainwater by storing in tanks or sealed water features for gradual release	Y	Y
5 discharge rainwater direct to a watercourse	N	N
6 discharge rainwater to a surface water sewer/drain	Y	Y
7 discharge rainwater to the combined sewer.	N	N

2c. Proposed Discharge Details

Proposed discharge location	(1) Thames Water surface water manhole 7703 on Trinity Road. (2) A new manhhole Trinity Road surface water sewer. (3) Re-use of the existing connection to the 305mm dia. surface water sewer on Bounds Green Road.
Has the owner/regulator of the discharge location been consulted?	A pre-development enquiry has been submitted to Thames Water ref. DS6092

3. Drainage Strategy

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	5.9			
1 in 1	5	69.3	64	5.9
1 in 30	10.2	169.2	87	5.9
1 in 100	11.8	216.9	201	5.9
1 in 100 + CC			472	5.9
Climate change allowance used		40%		

3b. Principal Method of Flow Control	Vortex flow control house in upstream manholes prior to discharge to Thames Water network.

3c. Proposed SuDS Measures

	Catchment area (m^2)	*Plan area (m^2)*	*Storage vol. (m^3)*
Rainwater harvesting			0
Infiltration systems	0		0
Green roofs		0	0
Blue roofs	0	0	0
Filter strips	0	0	0
Filter drains	0		
Bioretention / tree pits	0	206	31
Pervious pavements		2630	245
Swales	0	235	112
Basins/ponds	0	0	0
Attenuation tanks	0		84
Total	**0**	**3071**	**472**

4. Supporting Information

4a. Discharge & Drainage Strategy	*Page/section of drainage report*
Infiltration feasibility (2a) – geotechnical factual and interpretive reports, including infiltration results	Section 5.1
Drainage hierarchy (2b)	Section 5
Proposed discharge details (2c) – utility plans, correspondence / approval from owner/regulator of discharge location	Appendices
Discharge rates & storage (3a) – detailed hydrologic and hydraulic calculations	Section 6 Appendices
Proposed SuDS measures & specifications (3b)	Section 5 & 6
4b. Other Supporting Details	*Page/section of drainage report*
Detailed Development Layout	Section 2.3 & Appendix A
Detailed drainage design drawings, including exceedance flow routes	Appendices
Detailed landscaping plans	Appendix A
Maintenance strategy	Section 5.9
Demonstration of how the proposed SuDS measures improve:	Section 5
a) water quality of the runoff?	Section 5
b) biodiversity?	Section 5
c) amenity?	Section 5

Appendix G Correspondence with LLFA

Nikolajs Anosovs

From: Pankit Shah <Pankit.Shah@haringey.gov.uk>
Sent: 14 February 2023 18:40
To: Jessie Britnell Craven
Subject: RE: Haringey Civic Centre Project - LLFA Consultation

Hi Jessie,

I am fine thank you and hope the same. Thank you for your email and the draft strategy for the Haringey Civic Centre Project. Please accept our sincere apologies for the delayed response.

Having looked at the email trail, I am not sure but when you sent couple of emails to drainageandflooding@haringey.gov.uk, did you get any response ? We are not sure who manages that email address. So, going forward, if you have any LLFA related enquiries, it would be good if those enquiries can be sent to planning department as pre-application enquiries on Planningsupport@haringey.gov.uk. There might be some charges for providing a pre-application advice. The LLFA's direct email address that is being monitored on daily basis is planningsudenquiries@haringey.gov.uk

Anyway, with regards to the Surface water drainage strategy as developed for Haringey Civic Centre Project, the proposal for the restricted flow rate to a Greenfield (QBAR) rate of 5.9 l/s in TOTAL for 3 proposed outfalls using Micro-Drainage ICP SuDS method is acceptable to us. I have also gone through the SuDS proforma and Drainage Strategy markup drawings as provided.

In view of above, so that you are aware, as a part of any Full planning applications, we would be requiring the following information to the least:

1) A Flood Risk Assessment / Drainage Strategy Report demonstrating that there will be no increase in runoff from the proposed development. Therefore calculations are required for the pre and post development Greenfield / Brownfield runoff rates, potential impacts of increased impermeable area, and the attenuation volumes required to reduce the runoff from the developed site.

2) Calculations should include a full range of rainfall data for each return period provided by Micro drainage modelling or similar simulating storms through the drainage system, with results of critical storms, demonstrating that there is no surcharging of the system for the 1 in 1 year storm, no flooding of the site for 1 in 30 year storm and that any above ground flooding for 1 in 100 year storm is limited to areas designated and safe to flood, away from sensitive infrastructure or buildings. These storms should also include an allowance for climate change.

3) For the calculations above, we request that the applicant utilises more up to date FEH rainfall datasets rather than usage of FSR rainfall method.

4) For all 3 propose surface water outfalls as they discharge into the Thames Water Sewers, a confirmation of the allowable rate of point of discharge should be provided from Thames Water.

5) Any overland flows as generated by the scheme will need to be directed to follow the path that overland flows currently follow. A diagrammatic indication of these routes on plan demonstrating that these flow paths would not pose a risk to properties and vulnerable development.

Hope the above is helpful. Please do not hesitate to contact me should you require any further information.

Best Regards,

Pankit Shah PG Dip, B.Eng, MCIHT
Flood & Water Management Lead

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From: Jessie Britnell Craven <Jessie.BritnellCraven@BuroHappold.com>
Sent: Thursday, February 9, 2023 2:44 PM
To: Pankit Shah <Pankit.Shah@haringey.gov.uk>
Subject: RE: Haringey Civic Centre Project - LLFA Consultation

Hi Pankit

I hope you are well. As part of the Haringey Civic Centre project, we have developed a surface water drainage strategy as summarised below:

The proposal is for a restricted flow rate to a greenfield (QBAR) rate, this equates to a discharge of 5.9 l/s for the 1.037 ha site; equivalent to 5.67 l/s/ha as calculated with MicroDrainage (see attached snapshot). There are 3 proposed surface water outfalls from the site:

- Outflow 1: 1.3 l/s discharge to the existing Thames Water manhole ref 7703 on Trinity Road
- Outflow 2: 1.4 l/s discharge to a new proposed manhole on Thames Water sewer in Trinity Road
- Outflow 3: 3.2 l/s discharge to the existing Thames Water sewer along Bounds Green Road

Below is a link to the drainage mark-ups and attached the SuDS Proforma. Can you please confirm if you have any comments on the proposed strategy?
HCC_Drainage strategy markup.pdf

Kind regards

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BURO HAPPOLD

From: Jessie Britnell Craven
Sent: 18 February 2022 14:38
To: drainageandflooding@haringey.gov.uk
Cc: Nichole Pau <Nichole.Pau@BuroHappold.com>
Subject: RE: Haringey Civic Centre Project - LLFA Consultation

Good afternoon

Following my email last week, is it possible to have a meeting w/c 21st February to discuss the concept drainage strategy for Haringey Civic Centre re-development?

Kind regards

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BURO HAPPOLD

From: Jessie Britnell Craven
Sent: 10 February 2022 15:35
To: drainageandflooding@haringey.gov.uk
Cc: Nichole Pau <Nichole.Pau@BuroHappold.com>
Subject: Haringey Civic Centre Project - LLFA Consultation

Good afternoon

I am developing the surface water drainage design for the refurbishment and redevelopment of Haringey Civic Centre.

It would be useful to discuss the concept strategy with yourselves before planning is submitted at the end of February. Attached is a draft of the SuDS pro-forma which will be finalised for the planning submission, would you be free for a meeting early next week to allow us the opportunity to discuss the concept drainage strategy?

Kind regards
Jessie

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BURO HAPPOLD

Appendix H Correspondence with Thames Water

Jessie Britnell Craven
Buro Happold
17 Newman Street
London
W1T 1PD

Wastewater pre-planning
Our ref DS6092911

13 February 2023

Pre-planning enquiry: Confirmation of sufficient capacity

Site: Haringey Civic Centre, High Road, Wood Green, London, N22 8LE

Dear Ms Britnell Craven,

Thank you for providing information on your development.

Proposed site: Refurbishment of existing offices (5,680m2) and addition of new annexe office building (7039m2)

Proposed foul water discharge into 150mm foul water sewer in High Road via manhole TQ30908705 for existing offices and into assumed 150mm diameter foul water sewer in Trinity Road downstream of manhole TQ3090871A for new annexe office.

Proposed surface water discharge by gravity at 5.9/s for all storm events up to and including 1:100yr+40%CC split as follows; 1.3l/s into 305mm surface water sewer in Trinity Road via manhole TQ30907703, 1.4l/s into 305mm surface water sewer in Trinity Road downstream of manhole TQ30908702 and 3.2l/s into 305mm surface water sewer in Bounds Green Road between manholes TQ30907605 and TQ30908607)

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. store rainwater for later use.
2. use infiltration techniques where possible.
3. attenuate rainwater in ponds or open water features for gradual release.
4. attenuate rainwater by storing in tanks or sealed water features for gradual release.
5. discharge rainwater direct to a watercourse.
6. discharge rainwater to a surface water sewer/drain.
7. discharge rainwater to the combined sewer.
8. discharge rainwater to the foul sewer

Where connection to the public sewerage network is still 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 5.9l/s for all storm events up to and including 1:100yr+40%CC, then Thames Water would not have any objections to the proposal.

Please see the attached 'Planning your wastewater' leaflet for additional information.

Diversion

There are existing public sewers crossing the site. New buildings will need to be kept between 3 and 6.5m away from existing sewer depending on the size and depth of the sewer. Alternatively, it may be possible for sewers to be diverted around the new development. If you wish us to review a diversion proposal, please submit this via a Section 185 Diversion application. On some occasions it may be possible to abandon existing public sewers. Please contact us for further information on this process.

Source Protection Zone

The development site boundary falls within a Source Protection Zone for groundwater abstraction. These zones may be at particular risk from polluting activities on or below the land surface. To prevent pollution, the Environment Agency and Thames Water (or other local water undertaker) will use a tiered, risk-based approach to regulate activities that may impact groundwater resources, this may potentially affect your drainage or surface water strategies where deep or infiltration systems are proposed. The applicant is encouraged to read the Environment Agency's approach to groundwater protection (available at https://www.gov.uk/government/publications/groundwater-protection-position-statements and may wish to discuss the full implications for their development with a suitably qualified environmental consultant.

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 have any further questions, please contact me on 0800 009 3921.

Kind Regards,

Kojo Howard
Developer Services – Adoptions Engineer, Sewer Adoptions Team
Tel: 0800 009 3921

Get advice on making your sewer connection correctly at connectright.org.uk

Clearwater Court, Vastern Road, Reading, RG1 8DB
Find us online at developers.thameswater.co.uk

Appendix H Proposed Drainage Strategy