

Appendix B Correspondence

Thames Water Asset Location Search (28/04/2022)

Thames Water Sewer Flooding History (29/04/2022)

Environment Agency Flood Information Enquiry (09/05/2022)

Environment Agency HNL Pre-App Advice and Source Protection Information (09/05/2022)

Williams, James

From: [REDACTED]
Sent: 28 April 2022 12:52
To: [REDACTED]
Subject: [EXTERNAL] Your ref: Eisai Our ref: 1472422
Attachments: 1472422-Asset Location Search - Exp-1432921.pdf

Importance: High

Dear Customer

[REDACTED]

Your Reference: Eisai.

Site Address Supplied: Eisai Europe Ltd, Mosquito Way, Hatfield, AL10 9SN.

Thank you for placing your order with Thames Water Property Searches. Please see the attached file for further details regarding your case.

Yours faithfully

Customer Service Team
Thames Water Property Searches



Thames Water Property Searches, PO Box 3189, Slough SL1 4WW

DX 151280 Slough 13

(T) 0800 009 4540 (E) OnlineCustomers@thameswater.co.uk (W) www.thameswater-propertysearches.co.uk

Registered in England and Wales No. 2366661. Registered Office Clearwater Court, Vastern Road, Reading, RG1 8DB

Visit us online www.thameswater.co.uk, follow us on twitter www.twitter.com/thameswater or find us on www.facebook.com/thameswater. We're happy to help you 24/7.

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Asset location search



Property Searches

AECOM
The Colmore Building
20 Colmore Circus Queensway
BIRMINGHAM
B4 6AT

Search address supplied Eisai Europe Ltd
Mosquito Way
Hatfield
AL10 9SN

Your reference Eisai

Our reference [REDACTED]

Search date 28 April 2022

Knowledge of features below the surface is essential for every development

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

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

Contact us to find out more.



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



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



0800 009 4540

Search address supplied: Eisai Europe Ltd, Mosquito Way, Hatfield, AL10 9SN

Dear Sir / Madam

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

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

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

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

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

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

Contact Us

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

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

Email: [REDACTED]

Web: www.thameswater-propertysearches.co.uk

Waste Water Services

Please provide a copy extract from the public sewer map.

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

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

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

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

For your guidance:

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

Clean Water Services

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

With regard to the fresh water supply, this site falls within the boundary of another water company. For more information, please redirect your enquiry to the following address:

Affinity Water Ltd
Tamblin Way
Hatfield
AL10 9EZ
Tel: 0345 3572401

Asset location search



Property Searches

For your guidance:

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

Payment for this Search

A charge will be added to your suppliers account.



Further contacts:

Waste Water queries

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

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

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

Tel:

Email:

Clean Water queries

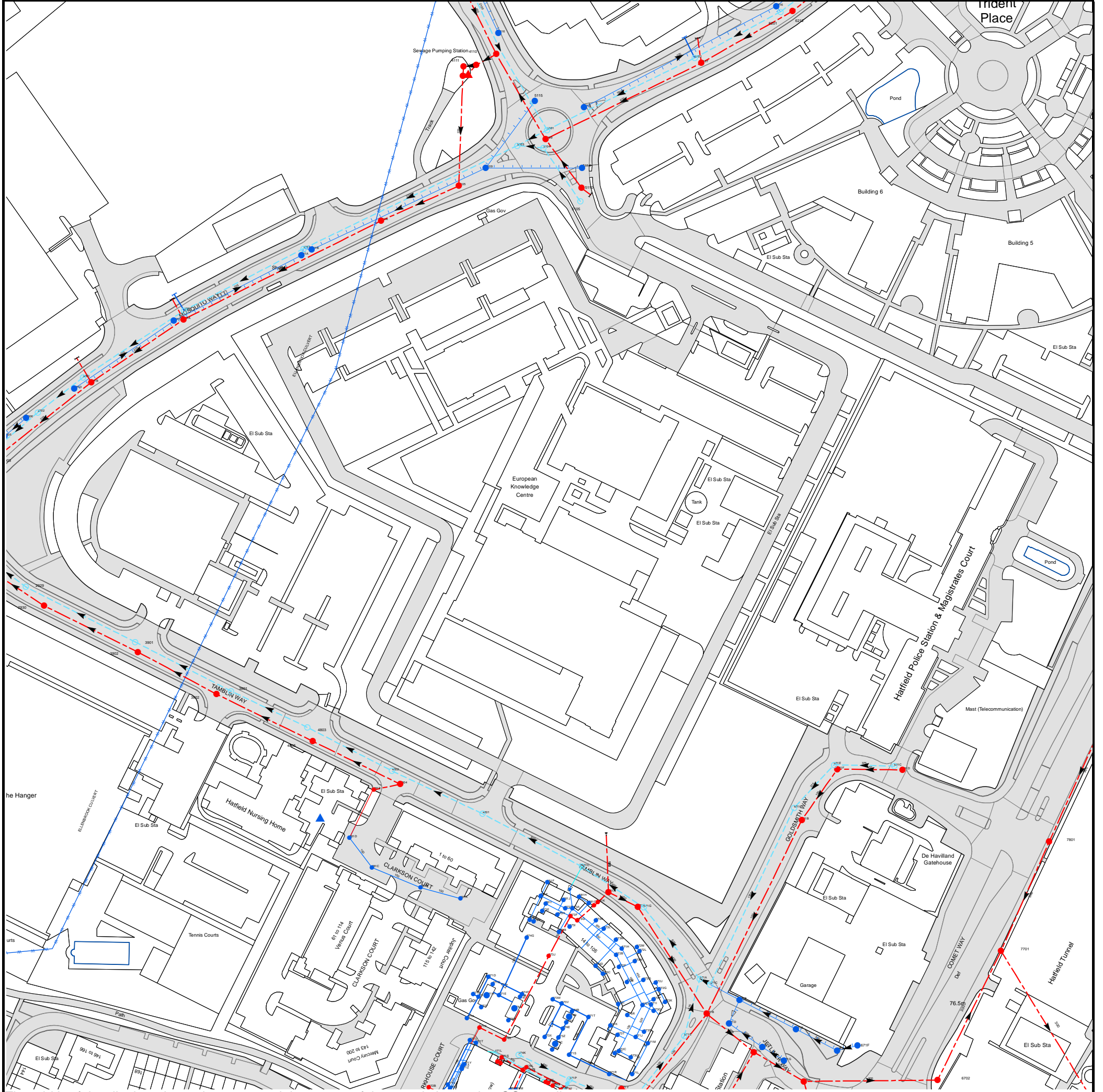
Should you require any advice concerning clean water operational issues or clean water connections, please contact:

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

Tel:

Email:

Asset Location Search Sewer Map - ALS/ALS/24/2022 4634076



The width of the displayed area is 500 m and the centre of the map is located at OS coordinates 521523,208966

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.

Based on the Ordnance Survey Map (2020) with the Sanction of the controller of H.M. Stationery Office, License no. 100019345 Crown Copyright Reserved.

NB. Levels quoted in metres Ordnance Newlyn Datum. The value -9999.00 indicates that no survey information is available

Manhole Reference	Manhole Cover Level	Manhole Invert Level
411B	74.77	72.69
4113	74.77	69.74
411A	74.93	72.34
5105	75.5	71.42
5110	75.41	69.18
4105	75.34	72.48
4109	75.41	73.13
5114	75.46	73.46
5104	75.65	70.75
5103	75.41	69.83
5109	75.59	68.72
5101	75.49	69.82
5113	75.7	73.91
5115	75.52	74.06
411D	74.3	72.86
411C	74.3	73.33
4111	74.32	68.11
5107	75.44	69.65
5102	75.35	70.45
4110	75.51	68.43
5116	75.43	73.11
2006	75.91	74.43
2002	76.02	69.32
301D	75.98	74.71
301B	75.76	71.08
3001	75.89	69.89
301C	75.36	73.77
301A	75.21	71.46
3002	75.21	69.7
6201	75.06	70.66
6212	75.17	70.12
6216	74.99	73.12
7701	76.19	n/a
7801	76.57	70.44
681B	75.57	72.16
681A	75.51	72.11
681D	74.97	72.555
681F	75.26	72.34
681C	74.97	72.315
681E	75.25	72.225
6701	75.86	71.01
6702	n/a	n/a
571Y	75.35	71.9
571L	75.7	74.95
571R	75.4	74.8
671G	75.695	74.205
573U	n/a	n/a
572D	n/a	n/a
671C	75.48	71.275
572C	75.65	74.65
671D	76.13	73.88
6707	75.49	74.08
671F	75.99	74.23
571M	75.7	74.4
571J	75.5	73.62
571E	75.87	72.11
573T	n/a	n/a
573S	n/a	n/a
671E	74.38	72.86
571K	75.75	74.75
571D	75.7	73.825
573R	n/a	n/a
571B	75.95	71.44
573Q	n/a	n/a
572A	75.75	74.49
571I	75.7	73.46
572I	n/a	n/a
572K	n/a	n/a
671B	75.58	72.65
573P	n/a	n/a
572G	n/a	n/a
573I	n/a	n/a
573F	75.7	74.13
573A	75.7	73.08
573G	75.57	74.09
581H	n/a	n/a
581C	74.98	71.64
581G	n/a	n/a
573D	n/a	n/a
573K	n/a	n/a
581K	75.55	72.12
573C	n/a	n/a
573L	n/a	n/a
581A	75.21	72.06
573M	n/a	n/a
572B	75.7	74.33
572F	n/a	n/a
571H	75.65	73.28
572E	n/a	n/a
573N	n/a	n/a
572M	n/a	n/a
















Manhole Reference	Manhole Cover Level	Manhole Invert Level
571F	75.38	71.91
572L	n/a	n/a
573O	n/a	n/a
571G	75.367	71.775
572J	n/a	n/a
571A	75.998	71.9
571C	76.1	71.995
574N	n/a	n/a
574M	75.5	74.52
571U	75.5	74.45
572T	n/a	n/a
574Q	n/a	n/a
574P	n/a	n/a
572W	n/a	n/a
571P	75.3	72.76
574S	75.45	74.62
574U	75.5	74.5
574L	75.45	74.45
471R	n/a	n/a
471Q	n/a	n/a
471S	75.45	74.58
571S	75.6	74.6
574K	75.2	72.95
471L	75.5	74.9
574A	n/a	n/a
574C	75.6	73.92
574R	75.4	74.56
573Z	n/a	n/a
573X	75.5	74.8
574E	75.45	73.96
471K	75.25	74.64
573Y	n/a	n/a
574H	n/a	n/a
571T	75.5	74.75
574D	75.2	73.92
574B	n/a	n/a
574J	75.4	73.56
471F	n/a	n/a
573V	75.15	74.07
573W	75.2	74.2
471C	75	73.76
574I	n/a	n/a
471H	75.05	73.59
471E	75.15	73.61
574F	75.3	74.3
472B	75.2	74.14
471V	75.5	74.5
471J	75.5	74.86
471Z	n/a	n/a
471X	75.5	74.8
471Y	n/a	n/a
471A	74.95	74
471U	75.45	74.75
471B	74.95	73.95
471T	n/a	n/a
3802	n/a	n/a
3801	n/a	n/a
401A	74.71	73.03
4803	n/a	n/a
4805	n/a	n/a
481D	n/a	n/a
481C	n/a	n/a
481E	n/a	n/a
4802	n/a	n/a
4804	n/a	n/a
481B	n/a	n/a
481A	n/a	n/a
4801	n/a	n/a
471D	74.9	73.7
471G	n/a	n/a
574G	75.1	74.1
572X	75.5	74.9
572Y	n/a	n/a
581E	75.3	73.4
573E	n/a	n/a
581I	75.55	74.9
581F	n/a	n/a
573J	75.35	74.27
573H	n/a	n/a
573B	n/a	n/a
581J	n/a	n/a
572Z	75.65	73.26
3902	n/a	n/a
3901	n/a	n/a
2930	n/a	n/a
2929	n/a	n/a

The position of the apparatus shown on this plan is given without obligation and warranty, and the accuracy cannot be guaranteed. Service 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.









Asset Location Search - Sewer Key

Public Sewer Types (Operated and maintained by Thames Water)

-  **Foul Sewer:** A sewer designed to convey waste water from domestic and industrial sources to a treatment works.
-  **Surface Water Sewer:** A sewer designed to convey surface water (e.g. rain water from roofs, yards and car parks) to rivers or watercourses.
-  **Combined Sewer:** A sewer designed to convey both waste water and surface water from domestic and industrial sources to a treatment works.
-  Storm Sewer
-  Sludge Sewer
-  Foul Trunk Sewer
-  Surface Trunk Sewer
-  Combined Trunk Sewer
-  Foul Rising Main
-  Surface Water Rising Main
-  Combined Rising Main
-  Vacuum
-  Thames Water Proposed
-  Vent Pipe
-  Gallery

Other Sewer Types (Not operated and maintained by Thames Water)

-  Sewer
-  Culverted Watercourse
-  Proposed
-  Decommissioned Sewer
-  Content of this drainage network is currently unknown
-  Ownership of this drainage network is currently unknown

Notes:

- 1) All levels associated with the plans are to Ordnance Datum Newlyn.
- 2) All measurements on the plan are metric.
- 3) Arrows (on gravity fed sewers) or flecks (on rising mains) indicate the direction of flow.
- 4) Most private pipes are not shown on our plans, as in the past, this information has not been recorded.

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
-  Meter
-  Dam Chase
-  Vent
-  Fitting

Operational Controls

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

-  Ancillary
-  Drop Pipe
-  Control Valve
-  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.

-  Inlet
-  Outfall
-  Undefined End




Other Symbols

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





-  Change of Characteristic Indicator
-  Public / Private Pumping Station
-  Invert Level
-  Summit

Areas

Lines denoting areas of underground surveys, etc.

-  Agreement
-  Chamber
-  Operational Site

Ducts or Crossings

-  Casement
 -  Conduit Bridge
 -  Subway
 -  Tunnel
- Ducts may contain high voltage cables. Please check with Thames Water.

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

6) The text appearing alongside a sewer line indicates the internal diameter of the pipe in millimeters. 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, please contact Property Searches on 0800 009 4540.

Terms and Conditions

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

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

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

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

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

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

Ways to pay your bill

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

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

Sewer Flooding

History Enquiry



Property Searches

AECOM

20 Colmore Circus Queensway

Search address supplied Eisai Europe Ltd
Mosquito Way
Hatfield
AL10 9SN

Your reference Eisai

Our reference [REDACTED]

Received date 28 April 2022

Search date 28 April 2022



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

Sewer Flooding

History Enquiry



Property Searches

Search address supplied: Eisai Europe Ltd, Mosquito Way, Hatfield, AL10 9SN

This search is recommended to check for any sewer flooding in a specific address or area

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) and any negligent or incorrect recording of that interpretation in the search report
- (iv) compensation payments



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

History of Sewer Flooding

Is the requested address or area at risk of flooding due to overloaded public sewers?

The flooding records held by Thames Water indicate that there have been no incidents of flooding in the requested area as a result of surcharging public sewers.

For your guidance:

- 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 on Tel: 0800 316 9800 or website www.thameswater.co.uk



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

Williams, James

From: NET Enquiries [REDACTED]
Sent: 09 May 2022 09:07
To: Hale, Alexandra
Subject: [EXTERNAL] HNL 261343 JH -- RE: 220428/SSR23 - Proposed Development at Eisai Hatfield

Dear Alex

Thank you for your request dated 19 April 2022 to use Environment Agency data.

Please note that this information is also freely available online via the links below.

The information on Flood Zones in the area relating to Eisai Europe Limited, Mosquito Way, Hatfield, Hertfordshire AL10 9SN is as follows:

The property is in an area located within Flood Zone 1 shown on our Flood Map for Planning (Rivers and Sea).

Note - This information relates to the area that the above named site is in and is not specific to the property/proposed development itself.

Because this site does not fall within an area at risk of flooding from rivers or the sea, we do not hold any detailed flood modelling data that would impact your site. As such we are unable to provide a flood risk product.

We do not hold records of historic flood events from rivers and/or the sea affecting the area local to this site. However, please be aware that this does not necessarily mean that flooding has not occurred here in the past, as our records are not comprehensive.

This address is in an area at High risk of surface water flooding.

Following the Flood and Water Management Act 2010, Lead Local Flood Authorities are responsible for the management of groundwater and surface water flooding. They also maintain a register of property flooding incidents. You may want to seek further advice from the Lead Local Flood Authority – Hertfordshire County Council who may have further information.

Please use the following link for details of reports for known problems regarding groundwater flooding issues <https://www.gov.uk/government/collections/groundwater-current-status-and-flood-risk> if there is not one for your site this means that we don't know about any problems in our records.

You can also view and print surface water flood maps online at: <http://watermaps.environment-agency.gov.uk/wiyby/wiyby.aspx?topic=ufmfsw#x=357683&y=355134&scale=2>

You can view the reservoir maps on our website: <https://flood-warning-information.service.gov.uk/long-term-flood-risk/map?map=SurfaceWater>

These give information on the indicative extent, depth and velocity of reservoir flooding. Reservoir flooding is extremely unlikely to happen. There has been no loss of life in the UK from reservoir flooding since 1925. However, if a large reservoir failed it would cause widespread flooding with serious consequences which could include endangering people's lives. This is why we share and discuss the hazard presented by flooding from reservoirs with partners and are making this information available to the public.

If you have requested this information to help inform a development proposal, then you should note the information on GOV.UK on the use of Environment Agency Information for Flood Risk Assessments

<https://www.gov.uk/planning-applications-assessing-flood-risk>

<https://www.gov.uk/government/publications/pre-planning-application-enquiry-form-preliminary-opinion>

Here is the link to the climate change allowances: <https://www.gov.uk/government/publications/peak-river-flow-climate-change-allowances-by-management-catchment>

This information is provided subject to the [Open Government Licence](#), which you should read.

We respond to requests for recorded information that we hold under the Freedom of Information Act 2000 (FOIA) and the associated Environmental Information Regulations 2004 (EIR).

Data Available Online

Many of our flood datasets are available online:

- You can view and download flood risk maps from our website at: <http://watermaps.environment-agency.gov.uk/wiyby/wiyby.aspx?topic=floodmap#x=357683&y=355134&scale=2>
- Flood Map For Planning ([Flood Zone 2](#), [Flood Zone 3](#), [Flood Storage Areas](#), [Flood Defences](#), [Areas Benefiting from Defences](#))
- [Risk of Flooding from Rivers and Sea](#)
- [Historic Flood Map](#)
- [Assets and Defences](#)
- [Current Flood Warnings](#)
- [Open data](#)

I hope that we have correctly interpreted your request. If you are not satisfied with our response to your request for information you can contact us within 2 calendar months to ask for our decision to be reviewed.

Kind regards

James Hammett

Tel: [REDACTED]

[REDACTED]
Environment Agency, Herts and North London Office, Alchemy, Bessemer Road, Welwyn Garden City, Hertfordshire, AL7 1HE

Pronouns: he/his ([why is this here?](#))

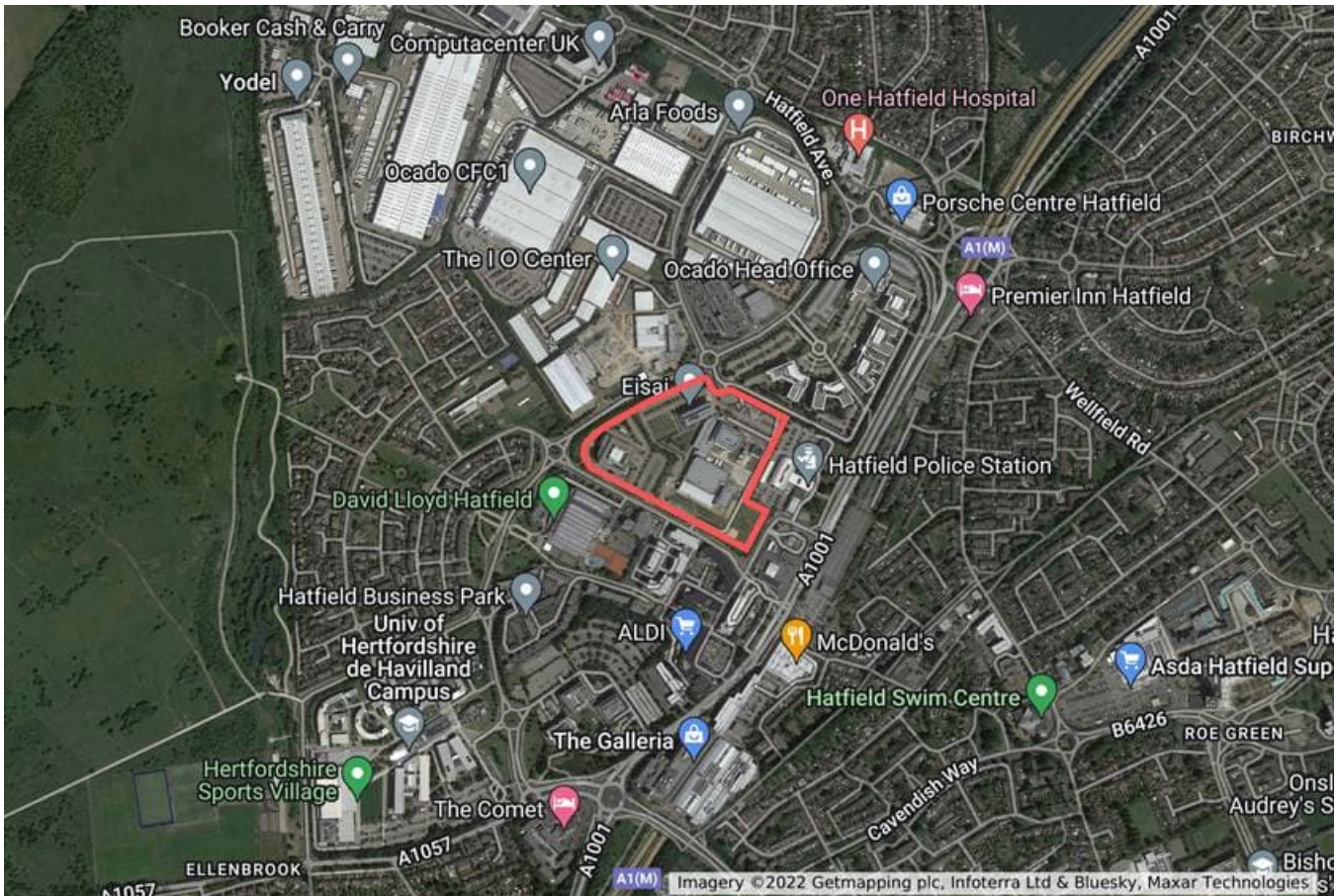
From: Hale, Alexandra [REDACTED]
Sent: 19 April 2022 15:17
To: Enquiries, Unit [REDACTED]
Subject: 220428/SSR23 - Proposed Development at Eisai Hatfield

Dear Environment Agency

Could I please order 'product 3' for a proposed development at Eisai Hatfield, Hertfordshire? (as described on [Flood risk assessments if you're applying for planning permission - GOV.UK \(www.gov.uk\)](#))

Site address: Eisai Europe Limited, Mosquito Way, Hatfield, Hertfordshire
Site postcode: AL10 9SN

The red line boundary for the proposed development has not been confirmed yet, but here is an outline of the existing Eisai Hatfield site:



Please let me know if any more information is required.

Kind Regards

Alex

Alexandra Hale, MEng (Hons)
Graduate Engineer, Infrastructure, Buildings + Places
M [REDACTED]

AECOM
The Colmore Building
20 Colmore Circus Queensway
Birmingham, B4 6AT, UK & Ireland

T +44 (0)121 710 1100

aecom.com

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Williams, James

From: HNL Sustainable Places [REDACTED]
Sent: 09 May 2022 16:43
To: Hale, Alexandra
Cc: Enquiries, Unit
Subject: [EXTERNAL] RE: 220505/CMC08 - Pre-Application Enquiry - Eisai Hatfield
Attachments: HNL Pre-Application Advice.pdf

Follow Up Flag: Follow up
Flag Status: Completed

Dear Alex,

Thank you for your enquiry. The site is also located within an SPZ2 (Source Protection Zone 2) which highlights areas designated for drinking water abstraction from groundwater. The site also falls within the Bromate Plume, however, is only a concern if it were to be disturbed by deep penetrating groundworks such as piling. For information relating to constraints, please find attached our pre-application advice note.

Due to workload and resourcing pressures, we are unable to provide any site-specific preliminary opinions or answer any queries outside of the statutory planning application process or our charged pre-application service at this time. Unfortunately, unless there are any deep groundworks being proposed, this proposal falls outside of our remit for our charged pre-application advice.

If you have any further questions, please do not hesitate to ask.

Kind regards,

Isabel Smith

Planning Advisor, Hertfordshire & North London Sustainable Places
Environment Agency | Alchemy, Bessemer Road, Welwyn Garden City, Hertfordshire, AL7 1HE
Tel: [REDACTED]

[REDACTED]

Pronouns : she/her ([why is this here ?](#))



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Does Your Proposal Have Environmental Issues or Opportunities? Speak To Us Early!

If you're planning a new development, we want to work with you to make the process as smooth as possible. We offer a bespoke advice service where you will be assigned a project manager who will be a single point of contact for you at the EA, giving you detailed specialist advice. This early engagement can significantly reduce uncertainty and delays to your project. More information can be found on our website [here](#).

From: Hale, Alexandra [REDACTED]
Sent: 27 April 2022 10:13
To: Enquiries, Unit [REDACTED]
Cc: Trigueros, Borja [REDACTED]
Subject: 220505/CMC08 - Pre-Application Enquiry - Eisai Hatfield

To whom it may concern,

My name is Alexandra Hale and I am working in the Civil Engineering team at AECOM. We would like to request a preliminary opinion on a proposed development on Eisai Hatfield (AL10 9SN). The project includes an extension to the existing goods area, a new automated warehouse, and an extension to an existing high-bay warehouse. Additional site details can be found in the attached Pre-Application Enquiry Form. A location plan, site plan and flood map for planning are also attached to this email. The site is located in Hatfield, Hertfordshire and falls within flood zone 1.

Are you aware of any other environmental constraints that may affect the proposed development?

Thank you for the assistance and we look forward to hearing from you soon. Should you require any further information, please do not hesitate to contact me.

Kind Regards

Alex

Alexandra Hale, MEng (Hons)
Graduate Engineer, Infrastructure, Buildings + Places
M [REDACTED]

AECOM
The Colmore Building
20 Colmore Circus Queensway
Birmingham, B4 6AT, UK & Ireland
T +44 (0)121 710 1100
aecom.com

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Pre-application Advice Note

Last Updated: August 2020

This document sets out the environmental issues we will consider when providing our planning application consultation advice to Local Planning Authorities (LPA). It can be used by applicants, developers and consultants at the pre-planning stage.

Further pre-application options

We are able to provide detailed and bespoke advice and answer technical questions for a charged fee which equates to £100 per hour plus VAT.

If you are interested in finding out more about this service, please email:

Section 1: Flood Risk

Development must be safe and should not increase the risk of flooding.

You can view a site's flood zone on the Flood Map for Planning on our website: <https://flood-map-for-planning.service.gov.uk/>

If your proposed development is located within flood zone 2 or 3 you should consult the Flood Risk and Coastal Change pages of the National Planning Policy Guidance (NPPG) <http://planningguidance.communities.gov.uk/blog/guidance/flood-risk-and-coastal-change/>

Here you can determine whether the flood risk vulnerability of your proposed development and the flood zone are compatible. You can also establish if there are flood risk sequential test and exception test requirements for your proposed development.

Sequential Test

The NPPF and associated NPPG requires the sequential test to be applied to development shown within [Table 3](#) where the application site is located within Flood Zone 2, 3a or 3b. The only exceptions are sites allocated in an adopted Local Plan, change of use or [minor development](#). Further details can be found within the Planning Practice Guidance: [Flood Risk and Coastal Change](#).

For the site to pass the Sequential Test it must be satisfactorily demonstrated to the LPA that there are no alternative sites available for this development at a lower risk of flooding. It is for the LPA to determine if the Sequential Test has to be applied and whether or not there are other sites available at lower flood risk. Therefore, we recommend that you discuss the requirements of the Sequential Test with the LPA at the earliest opportunity.

Sequential Approach

If the sequential test is passed then a sequential approach should be applied within the site to direct development to the areas of lowest flood risk (Flood Zone 1 first, followed by Flood Zone 2). If it is not possible to locate all of the development within Flood Zone 1, then the most vulnerable elements of the development should be located in the lowest risk parts of the site.

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Development In Flood Zone 3b

Flood zone 3b is land classed as the 'functional floodplain' and is land defined by LPA's Strategic Flood Risk Assessment's (SFRA) as having the highest probability of flooding. Please be aware that we will object in principle to any development that is deemed not compatible with Flood Zone 3b in line with tables 1, 2 and 3 of the Flood Zones and Flood Risk Tables of the Planning Practice Guidance (PPG).

Flood Risk Assessment (FRA) Requirements

If your development is located within flood zone 2, 3a or 3b, as part of your planning application you will need to submit a Flood Risk Assessment (FRA). This is required by paragraph 163, Footnote 50 of the [National Planning Policy Framework](#) (NPPF).

In accordance with the NPPF and associated NPPG, a site specific FRA must clearly demonstrate how you intend to manage flood risk on site to ensure that the proposed development will be safe for its lifetime and that flood risk is not increased on site and elsewhere.

As part of your FRA we would expect you to address (but not necessarily be limited to) the following issues:

- Consideration of the level of flood risk and whether the proposed use would be appropriate in accordance with its vulnerability classification outlined within [Table 2](#) of the Planning Practice Guidance: [Flood Risk and Coastal Change](#) (section 25).
- Identification of the level of flood risk on the site and consideration of the impact a range of flood events would have on the proposed development, including an assessment of the impacts of climate change by selecting the appropriate climate change allowances.
- Confirmation of any flood defences and standard of protection provided, to confirm the level of residual risk in accordance with the Strategic Flood Risk Assessment (SFRA) for the local planning authority in which the development is located.
- Estimation of flood depths at the site for a range of flood events, to calculate internal flood depths and level of refuge required in the event of a breach or failure of the flood defences.
- Appropriate and realistic flood mitigation measures based on flood characteristics at site.
- Details of set back of the development from the riverbank / defence.
- Confirmation that a safe route of access and egress with a 'very low flood hazard' rating in accordance with the guidance document '[FD2320 \(Flood Risk Assessment Guidance for New Developments\)](#)' is achievable.

For further information on our flood map products please visit our [website](#). Guidance on the content of a site specific FRA can be found on the NPPG and at:

<https://www.gov.uk/guidance/flood-risk-assessment-for-planning-applications>

We can provide any flooding information which we have available – such as predicted flood levels and historical flood data – for use in FRAs. Please contact our Customers and Engagement Team at [REDACTED] for further details.

Modelling

In some instances a detailed hydraulic model or flood modelling work may be necessary, in particular if there are gaps in the data for the area of your planning application or to take into account correct climate change allowances. Please be aware that if you are required to carry out

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flood modelling as part of your proposal you will need to submit the flood model files to the LPA as part of your planning application.

Climate Change Allowances

On 19 February 2016, we published new guidance for planners and developers on how to use climate change allowances in a site-specific FRA: <https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances>. For some development types and locations, it is important to assess a range of risk using more than one allowance. You must factor the revised climate change allowances into your Flood Risk Assessment rather than the previous 20% allowance. The extent, speed and depth of flooding shown in the assessment should be used to determine the flood level for flood risk mitigation measures. Where assessment shows flood risk increases steadily and to shallow depths, it is likely to be more appropriate to choose a flood lower in the range. Where assessment shows flood risk increases sharply due to a 'cliff edge' effect caused by, for example, sudden changes in topography or defences failing or overtopping, it is likely to be more appropriate to choose a flood level higher in the range.

Finished Floor Levels

We request that for any new developments within Flood Zones 2 and 3, finished floor levels are set no lower than 300 millimetres above the 1 in 100 chance in any year including an allowance for climate change flood level, to protect people and property from flooding. Where this cannot be achieved due to other planning constraints, we request that floor levels are set as high as possible (for extensions to existing buildings, no lower than the existing floor levels) and that flood resilience/resistance measures are considered, where appropriate, up to the design flood level. Information on preparing property for flooding can be found on the Gov.UK website in the documents '[Improving the Flood performance of new buildings](#)' and '[Prepare your property for flooding](#)'.

For tidal developments we recommend the finished floor levels of all development are set above the modelled Thames tidal breach level for the year 2100. As a minimum any sleeping accommodation should be located above this breach level.

Increase In Built Footprint

Your FRA will need to demonstrate that any increase in built footprint within the 1 in 100 chance in any year flood extent including an allowance for climate change can be directly compensated for, on a volume-for-volume and level-for-level basis to prevent a loss of floodplain storage. If it is not possible to provide level for level flood plain compensation then other forms of mitigation may be considered if agreed with the LPA or there should be no increase in built footprint. It will need to be demonstrated that the proposed development does not impact the flow and conveyance of water.

Please note the use of voids, stilts or undercroft parking as mitigation for a loss in floodplain storage should be avoided, as they may become blocked over time by debris or domestic effects. We would not recommend these methods to the LPA as an acceptable means of compensation.

Safe Access

During a flood, the journey to safe, dry areas completely outside the 1 in 100 chance in any year plus including an allowance for climate change floodplain would involve crossing areas of potentially fast flowing water. Those evacuating on foot in areas where flooding exceeds 100

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millimetres or so would be at risk from a wide range of hazards, including for example unmarked drops, or access chambers where the cover has been swept away.

Safe access and egress routes should be assessed in accordance with the guidance document '[FD2320 \(Flood Risk Assessment Guidance for New Developments\)](#)'. Where safe access cannot be achieved, an emergency flood plan that deals with matters of evacuation and refuge to demonstrate that people will not be exposed to flood hazards should be submitted to and agreed with the LPA.

We recommend that you also discuss safe access and egress routes with the local authority emergency planners as they will be responsible for agreeing to any emergency plan submitted with your application.

Flood Defences (Fluvial)

It should be demonstrated that any flood walls/defences are in good enough condition to protect the proposed development for the lifetime of development (this is usually 100 years for residential development). This should be submitted in the form of a survey and should include an assessment of any remedial works or flood defence replacement options required to protect the site from flooding for the lifetime of the development.

The FRA should assess the impacts of the failing flood defence on the proposed development and demonstrate that it will not be at an unacceptable risk of flooding.

Thames Estuary 2100 (Tidal Defences)

In line with requirements set out in the Thames Estuary 2100 ([TE2100](#)) plan, any application in this location will need to demonstrate how the flood defence could be raised in the future to meet the demands of climate change.

In addition, any application will need to demonstrate how your proposed development adjacent to flood defences does not have a detrimental impact on the integrity of existing flood defences and should aim to be set back from the banks of watercourses and those defences to allow their management, maintenance and upgrading in accordance with both the TE2100 plan and London Plan respectively.

In some cases we hold technical drawings of flood defence structures which may be of use in designing your scheme. To request these you should contact our customers and engagement team at HNLenquiries@environment-agency.gov.uk.

Proximity To Watercourse

We require a buffer zone of 8 metres (fluvial) and 16 metres (tidal) between any new development and the top of the bank of the river. The permanent retention of a continuous unobstructed area is an essential requirement for emergency access to the river for repairs to the bank and for future maintenance and/or improvement works. A buffer between new development and the river wall is also required to ensure no adverse loading which could impact the stability of the channel wall.

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Where development is proposed next to the river we recommend that it includes a green buffer strip alongside the watercourse. Where such a buffer strip does not currently exist, we normally seek that it is established. This is a key way in which we carry out our legal duty to further and promote the ecological and landscape value of rivers and land associated with them. In urban areas, in particular, rivers have often been degraded by past development, and we expect that any new development should go some way to redress the balance.

Flood Risk Activity Permit

Under the Environmental Permitting (England and Wales) Regulations 2016, you must submit plans to the Environment Agency and apply for a Flood Risk Activity Permit if you want to do work:

- In, over or under a main river
- Within 8m of the bank of a main river, or 16m if it is a tidal main river
- Within 8m of any flood defence structure or culvert on a main river, or 16m on a tidal main river

Flood risk activities can be classified as: Exclusions, Exemptions, Standard Rules or Bespoke. These are associated with the level of risk your proposed works may pose to people, property and the environment.

Further guidance on applying for flood risk activity permits can be found at <https://www.gov.uk/guidance/flood-risk-activities-environmental-permits>.

Flood risk activity permits are required irrespective of any planning permission and are not guaranteed.

Section 2: Ecology

Ecological Enhancements & Biodiversity Net Gain

We recommend your development proposal seeks to protect and enhance the local environment and seek opportunities to enhance ecology. Biodiversity net gain should be achieved. Biodiversity Net Gain is development that leaves biodiversity in a better state than before.

The enhancement of biodiversity in and around development should be led by a local understanding of ecological networks, and should seek to include:

- habitat restoration, re-creation and expansion;
- improved links between existing sites;
- buffering of existing important sites;
- new biodiversity features within development; and
- securing management for long term enhancement

Water Framework Directive (WFD)

With any development alongside watercourses, consideration should be given to the requirements of the [Water Framework Directive](#) (WFD) which includes causing no overall deterioration in water quality or the ecological status of any waterbody.

To comply with WFD and the Thames [River Basin Management Plan](#) (RBMP) we expect the development to comply with recommendations of the Catchment Plan.

Proposed development in close proximity to watercourses may require a [WFD Assessment](#). This must assess any potential impacts on the watercourses and demonstrate that the required enhancements will be delivered. Any development that has the potential to cause deterioration in classification under WFD or that precludes the recommended actions from being delivered in the future is likely to be considered unacceptable to us. You will find actions associated with the WFD by searching for your watercourse on the [EA Catchment Data Explorer](#)

River Naturalisation and Culverted Watercourses

We would strongly recommend you consider all options to deculvert any culverted sections of watercourses as part of your proposals. This will provide environmental improvements for biodiversity, will help deliver [Water Framework Directive](#) (WFD) improvements and will also reduce the risk of flooding. If deculverting is not possible on the site we would expect to see adequate justification for this.

An 8 metre undeveloped buffer zone must be provided from the edge of any culvert. Any development within 8 metres of the edge of the culvert will require a Flood Risk Activity Permit from us.

Buffer Zone

Your scheme should be designed with a naturalised buffer zone of at least 8 metres from the top of bank of both sides of any main river or 16 metres from the tidal main river to protect and enhance the conservation value of the watercourse and ensure access for flood defence maintenance.

This buffer zone should be designed and managed for the benefit of biodiversity for example by the planting of locally appropriate, UK native species. The buffer zone should be undisturbed by development with no fencing, footpaths or other development and should not include formal landscaping. This buffer zone will provide multiple benefits including natural flood management, an aesthetically pleasing space, improved habitat for local biodiversity and allows access for any maintenance requirements. We would recommend that you submit a suitably scaled plan showing the distance of the new development from the watercourse.

Mowing regime should be low intensity, allowing plants to flower. Light spill within the buffer zone from external artificial lights should be kept at an absolute minimum and be located and directed so that light levels of 0-2 lux are maintained

You can find out more about the ecological status of your water course on our [Catchment Data Explorer](#). This is in line with paragraph 174 of the NPPF which aims to promote the conservation, restoration and enhancement of priority habitats.

To identify any Main Rivers in proximity to your proposed development please see our Main Rivers Consultation Map: <http://apps.environment-agency.gov.uk/wiyby/151293.aspx>.

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Chalk Rivers

A large proportion of the rivers in our area are Chalk streams. Chalk streams are rare habitats and are important for wildlife, supporting some of the UK's most endangered species, and are therefore a [priority habitat](#). This is in accordance with obligations stated in Section 40 of the Natural Environment Research Council (NERC) Act 2006, where chalk streams are one of the Section 41 habitats of principal importance, and to contribute towards DEFRA outcomes within Biodiversity 2020: A strategy for England's wildlife and ecosystem services. Public bodies have a biodiversity duty under the [habitats directive](#) to conserve and provide net gains for biodiversity.

Nature Conservation & Ecology Surveys

If your proposed development is located on or within 8 metres of a main river or 16 metres of a tidal main river, an ecological survey is required to establish whether development is likely to have a detrimental impact on the biodiversity of the watercourse. We would object to the development proposals if there was shown to be a likely detrimental impact on the water environment. In accordance with the NPPF, any development proposal should avoid significant harm to biodiversity and seek to protect and enhance it. Opportunities to incorporate biodiversity in and around the development will be encouraged where appropriate, see examples in our [Estuary Edges Guidance](#).

If there is a possibility that your site has protected species on or adjacent to the site, for example, water voles, then as part of your planning application, you will need to undertake and submit a Phase I Habitat & Species Survey as a minimum. If protected species are identified in close proximity to the site, then further assessments (e.g. specific water vole surveys) may be required. Works may also require licensing from Natural England and therefore we recommend you contact Natural England for their advice.

You can find a full list of protected sites, species and the precautions required for planning on the [GOV.UK](#) website.

Invasive Species

If there is suspected or known invasive species present within the proposed development site, prior to the commencement of development (including ground clearance), we would expect a detailed method statement for the removal or long-term management /eradication of the invasive species on the site to be submitted to and approved in writing by the LPA. This will help avoid the spread of the plant whilst work is being carried out and consider the longer term management of the plant. When visiting any site, work methods must include appropriate biosecurity measures (considered for all potential spread pathways) to [prevent the spread](#) and introduction of Invasive Non-native Species in order to avoid contravention of the Wildlife and Countryside Act 1981. Without this, avoidable damage could be caused to the nature conservation value of the site. This is particularly significant if the river is a chalk stream.

Section 3: Groundwater Quality and Contaminated Land

Source Protection Zones (SPZs)

These zones indicate areas designated for drinking water abstraction from groundwater.

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Therefore, the bedrock and groundwater are vulnerable to mobilised contaminants. In these areas we may consider it inappropriate for development to discharge foul/surface water into the ground.

To see if your proposed development is located within a Source Protection Zone, please use our online map: <http://apps.environment-agency.gov.uk/wiyby/37833.aspx>.

Aquifer Designation

These designations reflect the importance of aquifers in terms of groundwater as a resource (drinking water supply) but also their role in supporting surface water flows and wetland ecosystems. To see if your proposed development is located within which aquifer designation please use our online map: <http://apps.environment-agency.gov.uk/wiyby/117020.aspx>.

Inappropriate Development in SPZ1

We would object to the following developments within SPZ1 in line with our Groundwater Protection Position Statements: <https://www.gov.uk/government/publications/groundwater-protection-position-statements>.

- large-scale above or below ground storage of hazardous substances (as may occur at a chemical works or at a petrol filling station)
- New development of non-landfill waste operations where the operation poses an intrinsic hazard to groundwater. For example, deposit of waste for recovery activities.
- Landspreading of sludge or liquid waste containing significant concentrations of pollutants.
- The locating of any new cemetery or the extension of any existing cemetery, within SPZ1, or 250 metres from a well, borehole or spring used to supply water that is used for human consumption, whichever is the greater distance.

Land Affected By Contamination

The NPPF takes a precautionary approach to land contamination. Before the principle of development can be determined, land contamination should be investigated to see whether it could preclude certain development due to environmental risk or cost of remediation.

Where contamination is known or suspected, you will need to demonstrate how the proposed development both during construction and after the construction phase will not negatively affect water quality in surface water or groundwater bodies. As part of your planning application, we would expect to see as a minimum, a preliminary risk assessment (PRA), such as a site walkover or conceptual model. Where contamination may have a pollution risk to controlled waters, Site

Investigation and Remediation Strategy reports may be required. Where this reports are missing or where they don't demonstrate that there will be no adverse impact of the environment, we are likely to raise an objection to the planning application.

Site investigation and remediation strategy reports may be required for submission with a planning application for sensitive land use types or where significant contamination, or uncertainty, is found. When dealing with land affected by contamination, developers should follow the risk management framework provided in 'Model procedures for the management of land contamination ([CLR11](#)),' when dealing with land affected by contamination.

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Please also note that any surface water drainage system must not pose a risk to groundwater quality and must not be constructed in ground affected by contamination.

Further guidance is available at the following links:

[Pollution prevention for businesses](#)

[Discharge to surface or ground water](#)

[Manage business and commercial waste](#)

[Store oil](#) and [oil storage regulations](#)

We recommend you contact your Local Authority's Environmental Health team who may hold records on known/potential land contamination. Please note our primary concern is with regards to water quality. Your Local Authority's Environmental Health team will advise you on issues related to human health.

Surface Water Drainage

We recommend the use of Sustainable Drainage Systems (SuDs). The collection and dispersal of clean surface water to ground to recharge aquifer units and prevent localised drainage or surface systems flooding in heavy rainfall is encouraged. However, dispersal into the ground through soakaways or other infiltration systems requires a site-specific investigation and risk assessment. Generally, we would accept roof drainage going to soakaway (or other systems), but other surface drainage may need to go through treatment systems or to foul main, for instance vehicle parking. Infiltrating water has the potential to cause mobilisation of contaminants present in shallow soil/made ground which could ultimately cause pollution of underlying groundwater resources. Where contamination is known or suspected, remedial or other mitigating measures will likely be required so that it can be demonstrated that there is no resultant unacceptable risk to Controlled Waters.

Infiltration via deep borehole soakaways are not acceptable within SPZs, other than when a drainage and hydrogeological risk assessment shows this to be the only viable option and that any risks to groundwater will be adequately mitigated. We are concerned that boreholes, wells and deep soakaways designed for water disposal at depth could bypass any potential attenuation layers and offer a direct conduit for the rapid transport of contaminants to groundwater. Where necessary, we will seek to control the depths of these soakaway systems by recommending maximum penetration depths and a requirement that the water table shall not be intersected. In general, groups of shallow soakaways are preferable to one or two deep boreholes.

In line with position statement G9 in [The Environment Agency's approach to groundwater protection](#) (formerly GP3) we would usually only agree to the use of deep infiltration systems for surface water if you can demonstrate the following:

- There are no other feasible options such as shallow infiltration systems or drainage fields / mounds that can be operated in accordance with the with the appropriate British standard; (e.g. discharge to a shallow infiltration system, surface water or sewer)
- The system is no deeper than is required to obtain sufficient soakage;
- Acceptable pollution control measures are in place;
- Risk assessment demonstrates that no unacceptable discharge to groundwater will take place; and,

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- There are sufficient mitigating factors or measures to compensate for the increase risk arising from the use of deep structures.

The above should be read in conjunction with the position statement G1, G9, G12 and G13 position statements <https://www.gov.uk/government/publications/groundwater-protection-position-statements>. Please note that we cannot issue an Environmental Permit for the direct discharge of hazardous substances into groundwater.

Sustainable Drainage Systems (SuDs) should always be carefully considered in discussions with the Lead Local Flood Authority, who are responsible for providing advice on the management of surface water from new larger developments. Please consult them for their comments on your proposal.

Section 4: Foul Water Drainage & Water Resources

Foul Water Drainage

The PPG: [Water supply, wastewater and water quality](#) (paragraph 16) explains that water quality is likely to be a significant planning concern when a proposal would indirectly affect water bodies, for example through a lack of adequate infrastructure to deal with wastewater. You should ensure in the first instance that there is sufficient capacity/headroom in the current waste water infrastructure network to serve your development and fully comply with any Local Plan policies on the provision of waste water infrastructure.

New development should connect to the public mains sewer, wherever possible. We recommend you contact the relevant water company about connecting to their mains sewerage system.

Government guidance contained within [Planning Policy Guidance](#) and [building regulations](#) drainage and waste disposal approved document H provides a hierarchy of drainage options that must be considered and discounted in the following order:

- Connection to the public sewer
- Connection to a private sewer, communicating with a public sewer,
- Either a septic tank or another wastewater treatment system,
- A cesspool

If you are unable to connect to the mains sewer, your planning application should outline how you will deal with foul drainage discharge. You should include evidence as to why it is not possible to connect to the mains system, including details of any prohibitive costs.

Please note that some 'non-mains' foul drainage systems will require an environmental permit, as well planning permission. The [Environmental Permitting Regulations 2010](#) make it an offence to cause or knowingly permit an activity that will result in the input of pollutants to surface water or groundwater, unless authorised to do so by an environmental permit. This type of development may require an environmental permit from us. The applicant is advised to telephone 03708 506 506, or email enquiries@environment-agency.gov.uk to discuss the issues likely to be raised.

Further information on septic tanks and treatment plants can be found [here](#)

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Water Resources

The Environment Agency '[Water Stressed Areas Final Classification \(2013\)](#)' is a primary source of evidence that identifies areas of serious water stress where household demand for water is (or likely to be) a high proportion of the current effective rainfall available to meet that demand. The Hertfordshire and North London area (an area served by Affinity Water and Thames Water) is classed as seriously water stressed. This is already having an adverse impact on the ecological health of our rivers, including chalk rivers and water dependant habitats. With the onset of climate change this also has significant implications for our own water use in the future. Securing sustainable supplies is now demanding substantial improvements in the efficiency of water usage across all sectors.

As there is a clear local need, local planning authorities in this area have Local Plan policies requiring new dwellings to meet the [Building Regulations](#) optional requirement of 110 litres per person per day for water consumption. You will be expected to demonstrate how you have complied with this requirement. We suggest you submit a [water efficiency calculator](#) report, or equivalent information, at the planning stage to demonstrate compliance with this standard. Achieving 110 litres per person per day can be done with existing technology by installing efficient showerheads, spray taps and low flush toilets. Complex greywater recycling and rainwater harvesting schemes are not typically required to adhere to this water efficiency standard.

Additionally, we recommend that new non-residential commercial buildings are required to achieve a [BREEAM](#) 'excellent' rating for water efficiency (or an equivalent rating with any successors). There may be Local Plan policies which set out the standard to be achieved.

Older buildings are often the least efficient in resource use. We strongly recommend the retrofitting of existing buildings where opportunities arise through refurbishments and changes of use. There are a number of [BREEAM Technical Standards](#) documents to support retrofitting for commercial and residential buildings.

Section 5: Waste

Development Close To An Existing Waste Facility

New development in such close proximity to an existing waste facility could result in the community at the proposed development being exposed to odour, noise, dust and pest impacts. The severity of these impacts will depend on the size of the facility, the nature of the waste it takes and prevailing weather conditions. If the site operator can demonstrate that they have taken all reasonable precautions to mitigate these impacts, the facility and community will co-exist, with some residual impacts. In some cases, these residual impacts may cause local residents concern, and there are limits to the mitigation the operator can apply. Only in very exceptional circumstances would we revoke the operators Permit.

Generally, sensitive development (e.g. occupied buildings) within 50m of such a facility is unacceptable because of the potential impacts to residents that may not be able to be mitigated. If any development is proposed within 50m of this site at the planning application stage, we may object to the application on this basis.

customer service line
03708 506 506

incident hotline
0800 80 70 60

floodline
03459 88 11 88

Waste Management

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 are waste or have ceased to be waste. Under the Code of Practice:

- excavated materials that are recovered via a treatment operation can be re-used on-site providing they are treated to a standard such that they 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

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

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.

Environmental Permitting Regulations

To see if your proposed development requires an Environmental Permit under the Environmental Permitting Regulations please refer to our website:

<https://www.gov.uk/guidance/check-if-you-need-an-environmental-permit>

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floodline
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Further Advice and Final Comments

Further Advice

Should you wish us to review any technical documents or want further advice to address the environmental issues, we can do this as part of our charged for service.

Further engagement at the pre-application stage will speed up our formal response to your planning application and provide you with certainty as to what our response to your planning application will be. It should also result in a better quality and more environmentally sensitive development. As part of our charged for service we will provide a dedicated project manager to act as a single point of contact to help resolve any problems.

We currently charge £100 per hour plus VAT. We will provide you with an estimated cost for any further discussions or review of documents. The terms and conditions of our charged for service are available [here](#).

We can also provide an Environment Agency Agreed Statement that will provide an indication of what our response will be to your application or confirm that we are likely to recommend that your condition is discharged. It will guarantee that we will not delay the Local Planning Authority's decision making process and we will always respond to the Local Planning Authority within 21 days or less.

Final Comments

Please note that this document is a response to a pre-application enquiry only and does not represent our final view in relation to any future planning application made in relation to any site. We reserve the right to change our position in relation to any such application. This response is based on current planning policy, associated legislation and environmental data/information. If any of these elements change in the future then we may need to reconsider our position.


You should seek your own expert advice in relation to technical matters relevant to any planning application before submission.

If you have any questions please contact the Hertfordshire and North London Sustainable Places team: [REDACTED]

Appendix C Calculations

Greenfield Runoff Rate

Quick Storage Estimates for the Existing Site, and Options 1 & 2

AECOM		Page 1
Midpoint Alencon Link Basingstoke, RG21 7PP		
Date 05/05/2022 14:48 File	Designed by Alexandra.Hale Checked by	
Innovyze	Source Control 2020.1	

IH 124 Mean Annual Flood

Input

Return Period (years) 100 SAAR (mm) 659 Urban 0.000
Area (ha) 50.000 Soil 0.300 Region Number Region 6

Results 1/s

QBAR Rural 84.9
QBAR Urban 84.9

Q100 years 270.9

Q1 year 72.2
Q2 years 74.8
Q5 years 108.7
Q10 years 137.6
Q20 years 170.1
Q25 years 182.4
Q30 years 192.4
Q50 years 222.5
Q100 years 270.9
Q200 years 318.4
Q250 years 333.7
Q1000 years 438.1

Eisai EML Warehouse Expansion Quick Storage Estimates

Existing Site (1.6 ha impermeable area)

Input data

Quick Storage Estimate

Micro Drainage

Variables

FEH Rainfall

Return Period (years) 100

Version 1999

Site GB 520800 208250 TL 20800 08250

Cv (Summer) 0.750

Cv (Winter) 0.840

Impemeable Area (ha) 1.600

Maximum Allowable Discharge (l/s) 90.0

Infiltration Coefficient (m/hr) 0.00000

Safety Factor 2.0

Climate Change (%) 40

C (1km) -0.029 D3 (1km) 0.292

D1 (1km) 0.304 E (1km) 0.324

D2 (1km) 0.308 F (1km) 2.459

Analyse OK Cancel Help

Enter Area between 0.000 and 999.999

Results

Quick Storage Estimate

Micro Drainage

Results

Global Variables require approximate storage of between 678 m³ and 902 m³.

These values are estimates only and should not be used for design purposes.

Analyse OK Cancel Help

Enter Area between 0.000 and 999.999

Surface Water Drainage Option 1 & 2 (0.561 ha impermeable area)

Input data

The screenshot shows the 'Quick Storage Estimate' window with the 'Variables' tab selected. The interface includes a sidebar with navigation options: Variables, Results, Design, Overview 2D, Overview 3D, and Vt. The main area contains the following input fields:

Variable	Value
FEH Rainfall	FEH Rainfall
Return Period (years)	100
Version	1999
Site	GB 520800 208250 TL 20800 08250
C (1km)	-0.029
D1 (1km)	0.304
D2 (1km)	0.308
D3 (1km)	0.292
E (1km)	0.324
F (1km)	2.459
Cv (Summer)	0.750
Cv (Winter)	0.840
Impemeable Area (ha)	0.561
Maximum Allowable Discharge (l/s)	2.0
Infiltration Coefficient (m/hr)	0.00000
Safety Factor	2.0
Climate Change (%)	40

Buttons: Analyse, OK, Cancel, Help

Footer: Enter Area between 0.000 and 999.999

Results

The screenshot shows the 'Quick Storage Estimate' window with the 'Results' tab selected. The main area displays the following text:

Global Variables require approximate storage of between 437 m³ and 563 m³.

These values are estimates only and should not be used for design purposes.

Buttons: Analyse, OK, Cancel, Help

Footer: Enter Area between 0.000 and 999.999

Appendix D Drainage Layouts

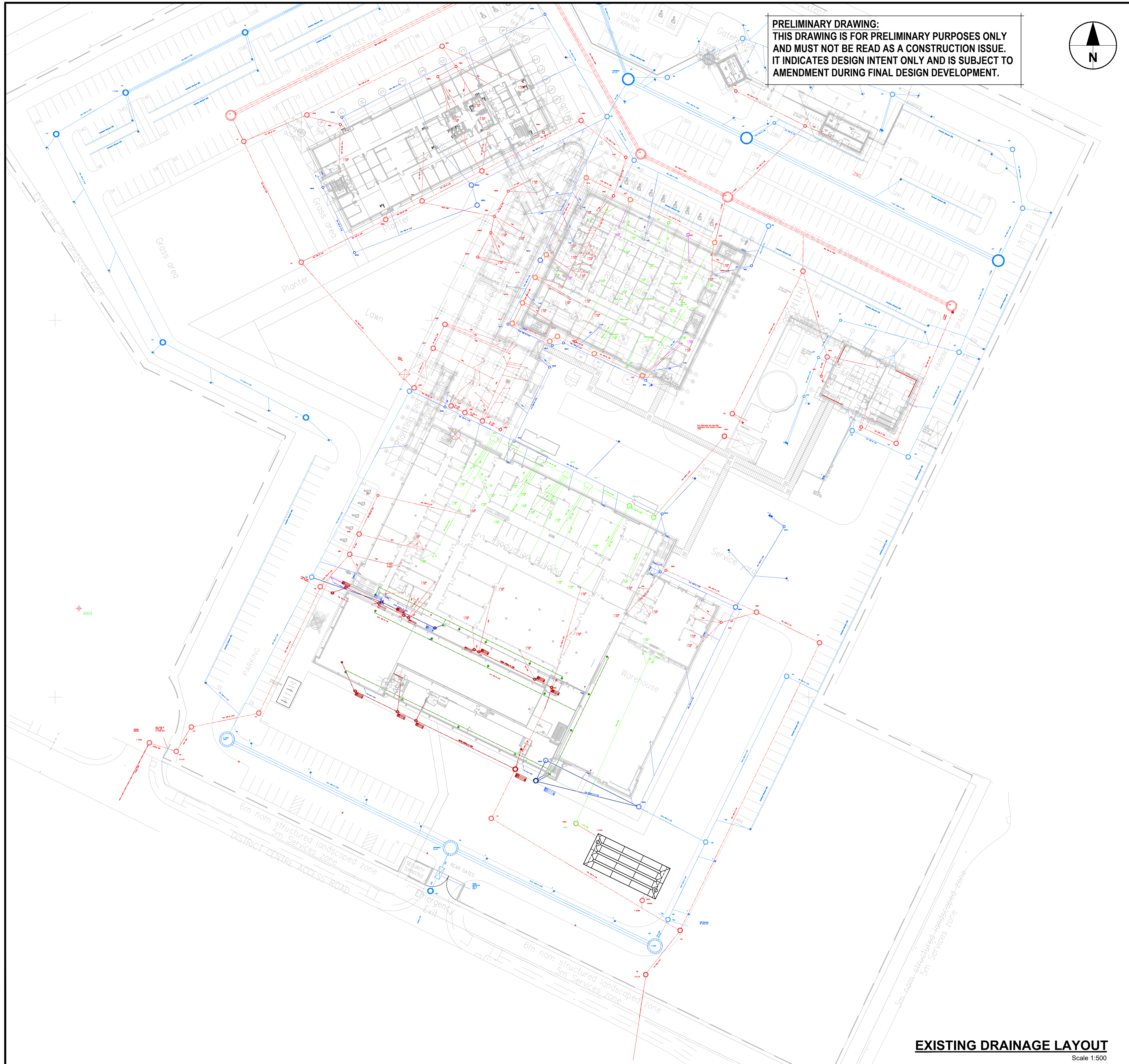
Existing Drainage Layout (ESL-ACM-XX-ZZ-DR-C-0500)

Proposed Surface Water Drainage Layout Option 1 (ESL-ACM-XX-ZZ-DR-C-0501)

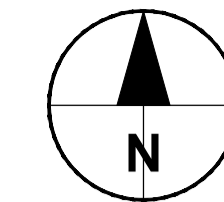
Proposed Surface Water Drainage Layout Option 2 (ESL-ACM-XX-ZZ-DR-C-0502)

Proposed Surface Water Drainage Layout Option 3 (ESL-ACM-XX-ZZ-DR-C-0503)

Proposed Foul Water Drainage Layout (ESL-ACM-XX-ZZ-DR-C-0505)



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SURFACE WATER:
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(EML)

CONSULTANT
AECOM
The Colmore Building
Colmore Circus
Queensway
Birmingham B4 6AT
T:+44-121-210-0700
www.aecom.com

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 - ANY DISCREPANCIES IN DIMENSIONS OR DETAILS ON OR BETWEEN THESE DRAWINGS SHALL BE DRAWN TO THE ATTENTION OF THE PROJECT MANAGER FOR CLARIFICATION.

KEY

	HIGH LEVEL SIPHONIC DRAINAGE SYSTEM
	EXISTING SURFACE WATER DRAINAGE
	EXISTING FOUL WATER DRAINAGE

ISSUE/REVISION

NO	DATE	DESCRIPTION	BY	CHK	APP
P01	01-06-2022	STAGE 2 PRELIMINARY ISSUE	AH	JW	AF
I/R	DATE	DESCRIPTION	BY	CK	AP

SUITABILITY
S4 - Suitable for stage approval

PROJECT NUMBER
60681916

SHEET TITLE
EML FACILITY EXPANSION
EXISTING DRAINAGE LAYOUT

SHEET NUMBER
ESL-ACM-XX-ZZ-DR-C-0500

SCALE 1:500 @ A1
REVISION P01

EXISTING DRAINAGE LAYOUT
Scale 1:500



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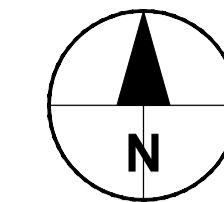
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MAINTENANCE / CLEANING RISKS

DEMOLITION RISKS

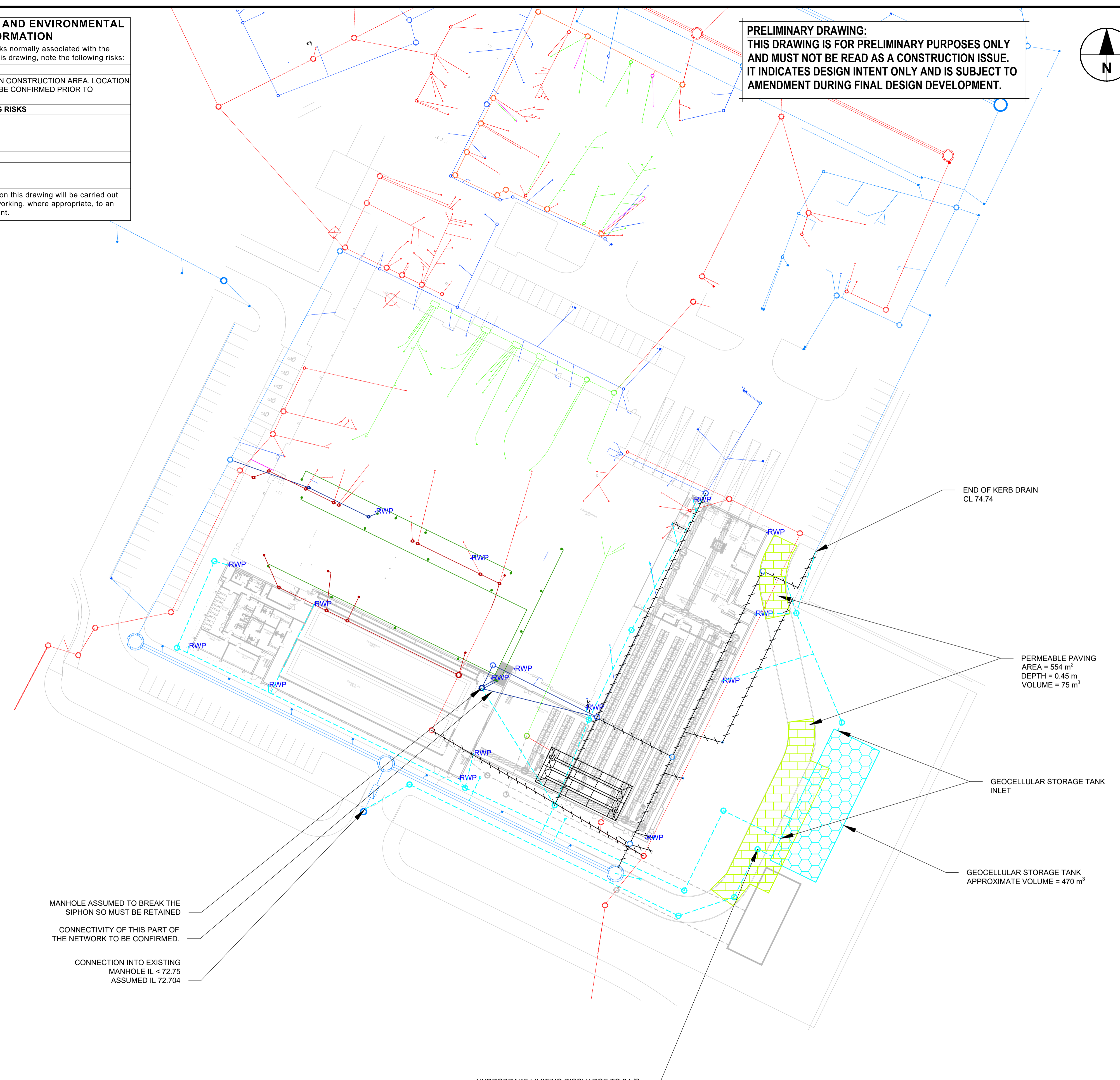
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END OF KERB DRAIN
CL 74.74

PERMEABLE PAVING
AREA = 554 m²
DEPTH = 0.45 m
VOLUME = 75 m³

GEOCELLULAR STORAGE TANK
INLET

GEOCELLULAR STORAGE TANK
APPROXIMATE VOLUME = 470 m³

MANHOLE ASSUMED TO BREAK THE
SIPHON SO MUST BE RETAINED

CONNECTIVITY OF THIS PART OF
THE NETWORK TO BE CONFIRMED.

CONNECTION INTO EXISTING
MANHOLE IL < 72.75
ASSUMED IL 72.704

HYDROBRAKE LIMITING DISCHARGE TO 2 L/S

KEY

- PROPOSED SURFACE WATER SEWER
- PROPOSED GEOCELLULAR STORAGE TANK
- PROPOSED PERMEABLE PAVING
- PROPOSED FOUL WATER SEWER
- EXISTING SURFACE WATER SEWER
- EXISTING FOUL WATER SEWER
- PIPE TO BE ABANDONED

ISSUE/REVISION

NO	DATE	DESCRIPTION	BY	CHK	APP
P01	DD-MM-YYYY	PRELIMINARY ISSUE	AH	BT	AF
I/R	DATE	DESCRIPTION	BY	CK	AP

SUITABILITY

S4 - Suitable for stage approval

PROJECT NUMBER

60681916

SHEET TITLE

EML FACILITY EXPANSION
PROPOSED SURFACE WATER
DRAINAGE LAYOUT
OPTION 1

SHEET NUMBER

ESL-ACM-XX-ZZ-DR-C-0501

SCALE

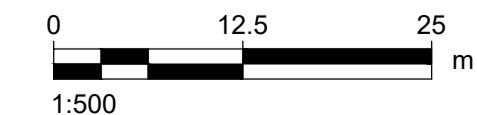
1:500 @ A1

REVISION

P01.01

PROPOSED SW DRAINAGE LAYOUT OPTION 1

Scale 1:500



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CLIENT
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CONSULTANT
AECOM
The Colmore Building
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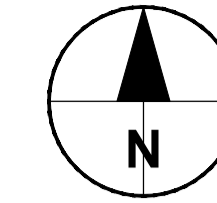
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NOTES

KEY

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	PROPOSED GEOCELLULAR STORAGE TANK
	PROPOSED PERMEABLE PAVING
	PROPOSED FOUL WATER SEWER
	EXISTING SURFACE WATER SEWER
	EXISTING FOUL WATER SEWER
	PIPE TO BE ABANDONED

ISSUE/REVISION

NO	DATE	DESCRIPTION	BY	CK	AP
P01	01-06-2022	STAGE 2 PRELIMINARY ISSUE	AH	BT	AF
I/R	DATE	DESCRIPTION	BY	CK	AP

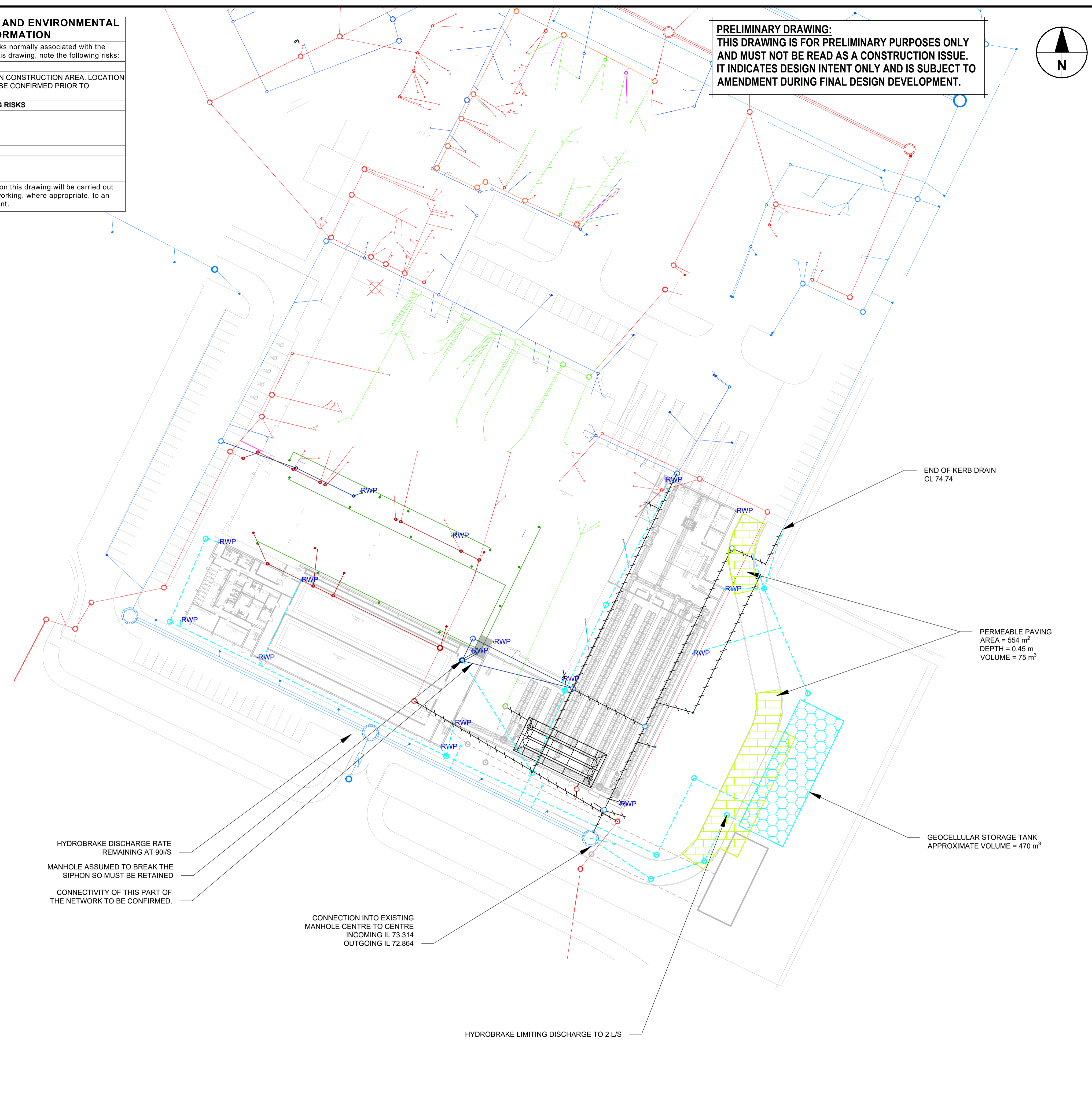
SUITABILITY
S4 - Suitable for stage approval

PROJECT NUMBER
60681916

SHEET TITLE
EML FACILITY EXPANSION
PROPOSED SURFACE WATER
DRAINAGE LAYOUT
OPTION 2

SHEET NUMBER
ESL-ACM-XX-ZZ-DR-C-0502

SCALE 1:500 @ A1
REVISION P01

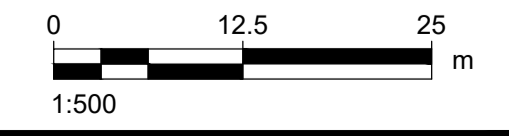


HYDROBRAKE DISCHARGE RATE REMAINING AT 90L/S
MANHOLE ASSUMED TO BREAK THE SIPHON SO MUST BE RETAINED
CONNECTIVITY OF THIS PART OF THE NETWORK TO BE CONFIRMED.

CONNECTION INTO EXISTING MANHOLE CENTRE TO CENTRE
INCOMING IL 73.314
OUTGOING IL 72.864

HYDROBRAKE LIMITING DISCHARGE TO 2 L/S

PROPOSED SW DRAINAGE LAYOUT OPTION 2
Scale 1:500



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SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazard/risks normally associated with the types of work detailed on this drawing, note the following risks:

CONSTRUCTION RISKS

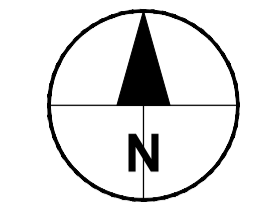
HY CABLE LOCATED WITHIN CONSTRUCTION AREA. LOCATION AND DEPTH OF CABLE TO BE CONFIRMED PRIOR TO CONSTRUCTION.

MAINTENANCE / CLEANING RISKS

DEMOLITION RISKS

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NOTES:

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- ALL EXTERNAL DRAINAGE WORKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH 'CIVIL ENGINEERING SPECIFICATION FOR THE WATER INDUSTRY' 7th EDITION FOR ADOPTABLE DRAINAGE, AND TO THE RELEVANT PROJECT SPECIFICATION AS DIRECTED BY THE ENGINEER FOR PRIVATE DRAINAGE.
- PIPE MATERIAL SHALL BE AS FOLLOWS:
1000 TO 2250 - CLAYWARE TO BS EN 295
3000 AND ABOVE - CONCRETE TO BS EN 1916.
N.B PVCu PIPES TO BE EN 1401-1:1998 MAY BE USED SUBJECT TO THE APPROVAL OF THE ENGINEER. PIPES OF LESS THAN 400MM DIAMETER TO HAVE A RESISTANCE OF 270 BAR.
- ALL FOUL PIPES ARE TO BE 1000 UNLESS STATED OTHERWISE OR TO SUIT ABOVE GROUND PIPEWORK. SURFACE WATER PIPE DIAMETERS ARE AS INDICATED. PIPE GRADIENTS UNLESS SHOWN ARE:
FOUL:
MINIMUM GRADIENT WITHOUT W.C. TO BE 1:40.
MINIMUM GRADIENT WITH W.C. TO BE 1:80.
SURFACE WATER:
MINIMUM GRADIENT 1:80.
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- BACKFILL TO TRENCHES MAY BE SUITABLE EXCAVATED MATERIAL IN LANDSCAPED AREAS & UNDER DRIVEWAYS, PATIOS ETC. TYPE 1 GRANULAR MATERIAL TO BE USED UNDER HARDSTANDINGS AND ROADS.
- ROAD GULLY CONNECTIONS SHALL BE 150mm DIAMETER AND WITH CLASS Z BEDDING.
- ROAD GULLIES SHALL BE TRAPPED 450mm DIAMETER x 900mm DEEP WITH CLASS D400 FRAME AND GRATING TO BS EN 124.
- DESIGN OF THE DRAINAGE CHANNELS IS INDICATIVE ONLY. DETAILED DESIGN SHALL BE UNDERTAKEN BY THE CONTRACTOR'S PREFERRED CHANNEL MANUFACTURER/ SUPPLIER.
- ALL MANHOLE AND DRAINAGE CHANNEL COVERS SHALL COMPLY WITH BS EN 124. FOR DETAILS OF COVER TYPE & LOCATION, PLEASE REFER TO THE MANHOLE SCHEDULE.
MANHOLE COVERS WITHIN BLOCK PAVED AREAS & BUILDINGS SHALL BE RECESSED, DOUBLE SEALED WITHIN BUILDING.
- LIGHT LIQUID SEPARATORS ARE NOT REQUIRED IN CAR PARKS SMALLER THAN 50 SPACES ACCORDING TO ENVIRONMENT AGENCY GUIDELINE PPG3. HOWEVER SOME LOCAL AUTHORITIES MAY HAVE DIFFERENT REQUIREMENTS.
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PROJECT
Eisai Manufacturing Ltd (EML)
Facility Expansion

CLIENT
Eisai Manufacturing Ltd (EML)

CONSULTANT
AECOM
The Colmore Building
Colmore Circus
Queensway
Birmingham B4 6AT
T:+44-121-210-0700
www.aecom.com

NOTES

KEY

	PROPOSED SURFACE WATER SEWER
	PROPOSED GEOCELLULAR STORAGE TANK
	PROPOSED PERMEABLE PAVING
	PROPOSED FOUL WATER SEWER
	EXISTING SURFACE WATER SEWER
	EXISTING FOUL WATER SEWER
	PIPE TO BE ABANDONED

ISSUE/REVISION

NO	DATE	DESCRIPTION	BY	CK	AP
P01	01-06-2022	STAGE 2 PRELIMINARY ISSUE	AH	BT	AF
I/R	DATE	DESCRIPTION	BY	CK	AP

SUITABILITY

S4 - Suitable for stage approval

PROJECT NUMBER

60681916

SHEET TITLE

EML FACILITY EXPANSION
PROPOSED SURFACE WATER
DRAINAGE LAYOUT
OPTION 3

SHEET NUMBER

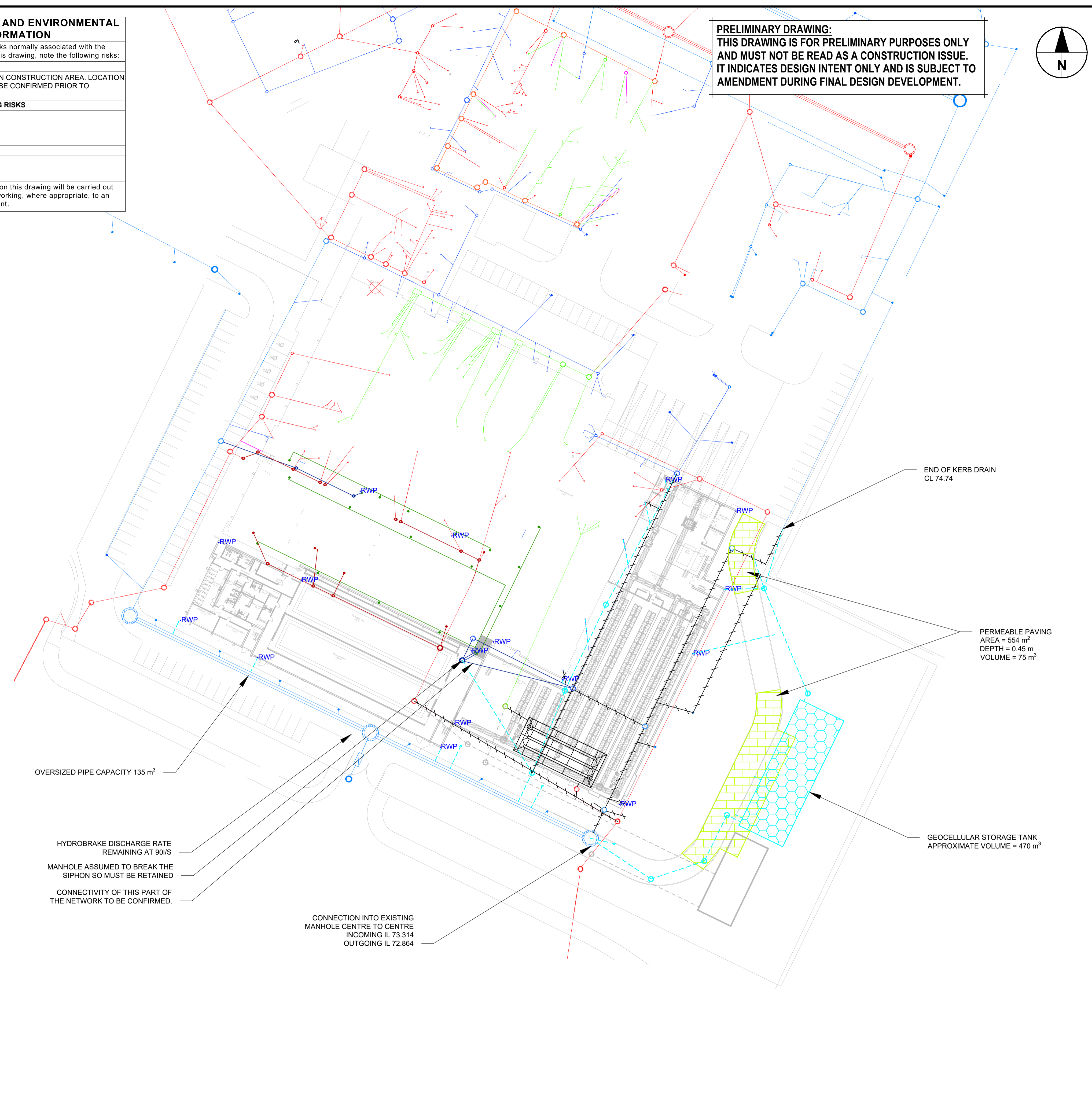
ESL-ACM-XX-ZZ-DR-C-0503

SCALE

1:500 @ A1

REVISION

P01



OVERSIZED PIPE CAPACITY 135 m³

HYDROBRAKE DISCHARGE RATE REMAINING AT 90l/s
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CONNECTION INTO EXISTING MANHOLE CENTRE TO CENTRE
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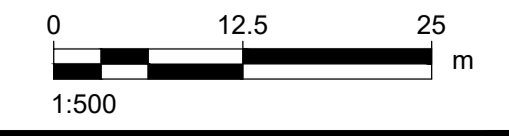
END OF KERB DRAIN
CL 74.74

PERMEABLE PAVING
AREA = 554 m²
DEPTH = 0.45 m
VOLUME = 75 m³

GEOCELLULAR STORAGE TANK
APPROXIMATE VOLUME = 470 m³

PROPOSED SW DRAINAGE LAYOUT OPTION 3

Scale 1:500



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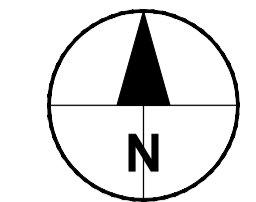
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 Facility Expansion

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ISSUE/REVISION

I/R	DATE	DESCRIPTION	BY	CK	AP
P01	01-06-2022	STAGE 2 PRELIMINARY ISSUE	AH	BT	AF

SUITABILITY

S4 - Suitable for stage approval

PROJECT NUMBER

60681916

SHEET TITLE

EML FACILITY EXPANSION
 PROPOSED FOUL WATER
 DRAINAGE LAYOUT

SHEET NUMBER

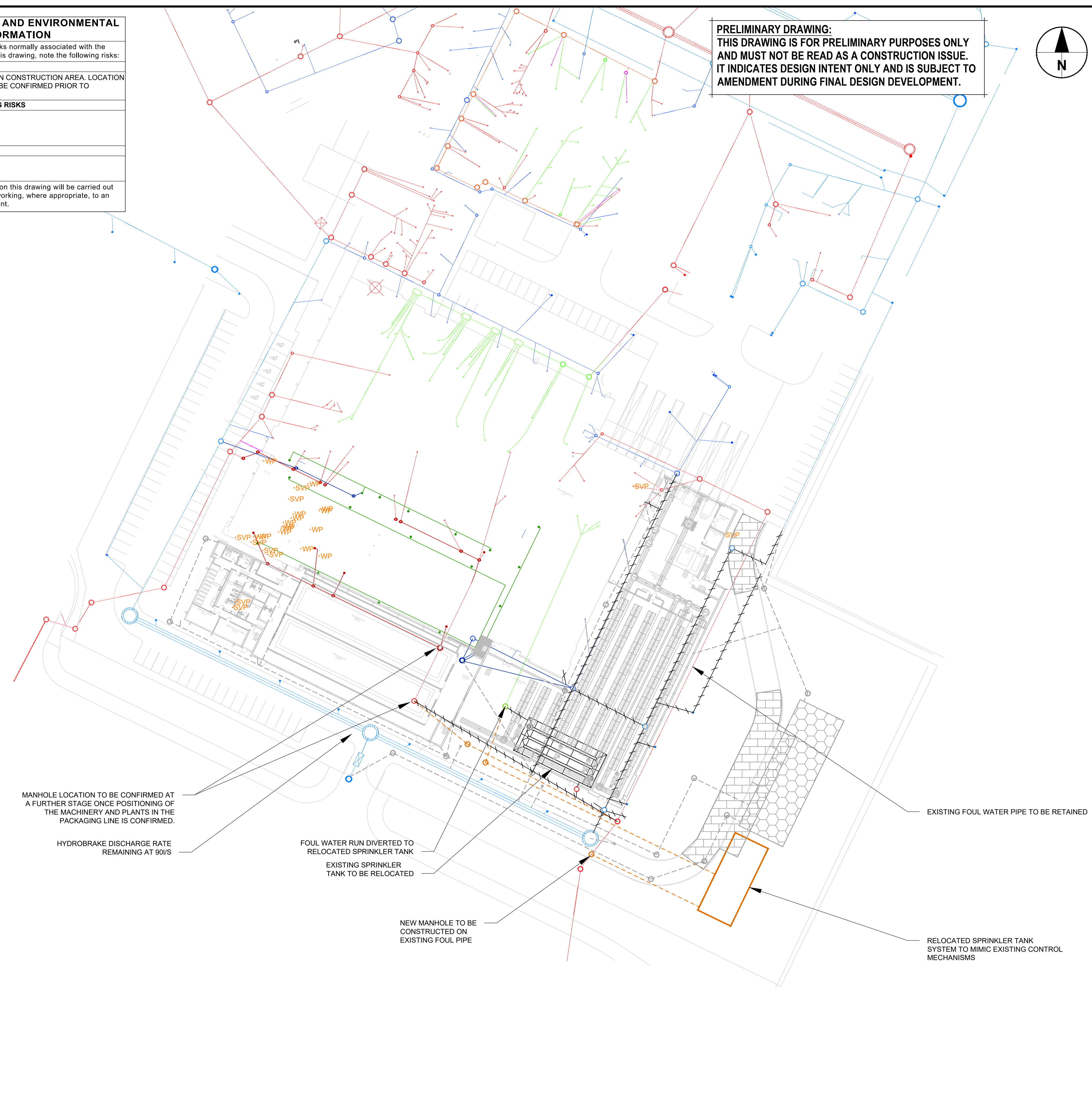
ESL-ACM-XX-ZZ-DR-C-0505

SCALE

1:500 @ A1

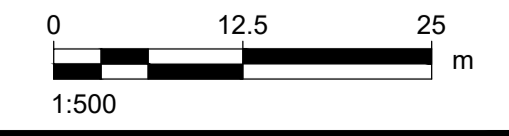
REVISION

P01



PROPOSED FW DRAINAGE LAYOUT

Scale 1:500



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