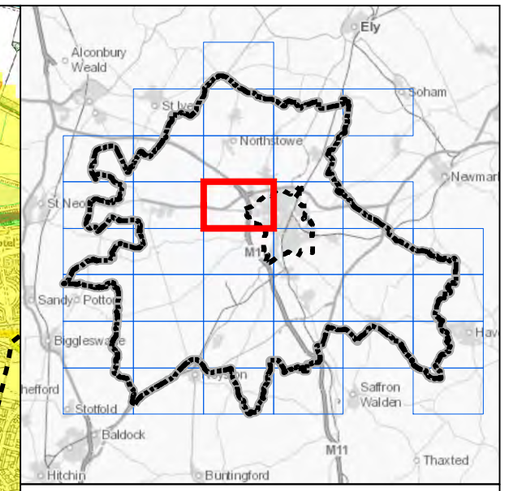

Legend

Study Area

- Cambridge City Boundary
- South Cambridgeshire Boundary

Groundwater Flooding Potential

- Limited potential for groundwater flooding to occur
- Potential for groundwater flooding of property situated below ground level
- Potential for groundwater flooding to occur at surface

Notes

The Susceptibility to Groundwater Flooding dataset indicates areas where geological conditions could enable groundwater flooding to occur, whether that be close to the ground surface or at the surface. It has been produced by the British Geological Survey (BGS) and classifies the potential of groundwater flooding, based on geological and hydrogeological information, into three classes:

'Limited potential for groundwater flooding to occur';
'Potential for groundwater flooding of property situated below ground level';
'Potential for groundwater flooding to occur at surface'.

Areas not classified as any of these are not considered to be prone to groundwater flooding.

It should be noted that the data indicates susceptibility to groundwater flooding and not illustrate hazard or risk; therefore should not be used on its own to inform planning decisions at any scale.

Stantec

Client: GREATER CAMBRIDGE SHARED PLANNING

Greater Cambridge Integrated Water Management Study

Susceptibility to Groundwater Flooding

0 1 2 km

Sheet Number: 12 of 37

1:23,960 @ A3	Date: 26/07/2021
Drawn: MD	Checked: PJ
Figure: 48444/4005/GIS024	Rev A

Document Path: J:\48444 Greater Cambridge Water Cycle Study\GIS\Workspaces\48444 GIS024 Groundwater Flood Risk.mxd

Appendix G PREPLANNING ENQUIRY ANGLIAN WATER

Pre-Planning Assessment Report

North West Cambridge

InFlow Reference: PPE-0217160

Assessment Type: Used Water

Report published: 13/12/2024

Thank you for submitting a pre-planning enquiry.

This has been produced for AECOM Ltd.

Your reference number is **PPE-0217160**.

This report can be submitted as a drainage strategy for the development should it seek planning permission.

If you have any questions upon receipt of this report, you can submit a further question via InFlow. Alternatively, please contact the Planning & Capacity team on **07929 786 955** or email planningliaison@anglianwater.co.uk

---

Section 1 - Proposed development

The response within this report has been based on the following information which was submitted as part of your application:

List of planned developments	
Type of development	**No. Of units**
Dwellings	6000

The anticipated residential build rate is:

Year	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12
Build rate	50	50	50	50	50	50	50	50	50	50	50	5450

Development type: Greenfield

Planning application status: Unknown

Site grid reference number: TL4268060293

The comments contained within this report relate to the public water mains and sewers indicated on our records.

Your attention is drawn to the disclaimer in the useful information section of this report.

Section 2 - Assets affected

Our records indicate that we have the following types of assets within or overlapping the boundary of your development site as listed in the table below.

Additionally, it is highly recommended that you carry out a thorough investigation of your proposed working area to establish whether any unmapped public or private sewers and lateral drains are in existence. We are unable to permit development either over or within the easement strip without our prior consent. The extent of the easement is provided in the table below. Please be aware that the existing water mains/public sewers should be located in highway or open space and not in private gardens. This is to ensure available access for any future maintenance and repair and this should be taken into consideration when planning your site layout.

Water and Used water easement information		
Asset type	Pipe size (mm)	Total easement required (m)
Sewer mains	150	3.00 m either side of the centre line
Sewer mains	225	3.00 m either side of the centre line
Sewer mains	300	3.00 m either side of the centre line
Sewer mains	375	3.00 m either side of the centre line
Sewer mains	450	3.50 m either side of the centre line

If it is not possible to avoid our assets then these may need to be diverted in accordance with Section 185 of the Water Industry Act (1991). You will need to make a formal application if you would like a diversion to be considered.

Pumping Station

The development site is within 15 metres of a sewage pumping station. This asset requires access for maintenance and will have sewerage infrastructure leading to it. For practical reasons therefore it cannot be easily relocated.Anglian Water consider that dwellings located within 15 metres of the pumping station would place them at risk of nuisance in the form of noise, odour or the general disruption from maintenance work caused by the normal operation of the pumping station.The site layout should take this into account and accommodate this infrastructure type through a necessary cordon sanitaire, through public space or highway infrastructure to ensure that no development within 15 metres from the boundary of a sewage pumping station if the development is potentially sensitive to noise or other disturbance or to ensure future amenity issues are not created.

Due to the private sewer transfer in October 2011 many newly adopted public used water assets and their history are not indicated on our records. You also need to be aware that your development site may contain private water mains, drains or other assets not shown on our records. These are private assets and not the responsibility of Anglian Water but that of the landowner.

Section 3 - Water recycling services

In examining the used water system we assess the ability for your site to connect to the public sewerage network without causing a detriment to the operation of the system. We also assess the receiving water recycling centre and determine whether the water recycling centre can cope with the increased flow and effluent quality arising from your development.

Water recycling centre

The foul drainage from this development is in the catchment of Cambridge Water Recycling Centre which currently does not have capacity to treat the flows from the development site. Anglian Water has applied to the Environment Agency for an interim new permit to address exceedance. Please note that it is Anglian Water responsibility to take the necessary steps to ensure there is capacity to accommodate the domestic flows from the proposed development.

Our long-term plans for Cambridge WRC are linked to the Cambridge relocation project and the Development Consent Order. The new Cambridge WRC will take all existing domestic flows from current Cambridge WRC and all flows from the future growth within the WRC catchment.

We are working with Greater Cambridgeshire to understand the long-term growth figures, using the emerging local plan allocations and planning permissions. This allows us to design and deliver a new Cambridge WRC which can meet future demand.

Used water network

Our assessment has been based on development flows connecting to the nearest foul water sewer of the same size or greater pipe diameter to that required to drain the site. The infrastructure to convey foul water flows to the receiving sewerage network is assumed to be the responsibility of the developer. Conveyance to the connection point is considered as Onsite Work and includes all work carried out upstream from of the point of connection, including making the connection to our existing network.

This connection point has been determined in reference to the calculated discharge flow and on this basis, a 750mm internal diameter pipe is required to drain the development site. We have assessed your preferred connection point which is to the 1200mm sewer located in Madingley Road at National Grid reference (NGR) TL 43650 59105. Anglian Water has assessed the impact of a pumped conveyance from the planned development to the public foul sewerage network and we can confirm that this connection is acceptable as the foul sewerage system, at present, has available capacity for your site. In line with Sewers for Adoption, the pumped discharge will need to connect via an intermediate manhole and at least 5 metres of an appropriately sized gravity sewer. The pump rate and configuration of the connection will be determined with your detailed design. You should submit this detail with your Section 106 new connection application.

Due to the size of this site, we would like to understand your onsite drainage design in greater detail. Therefore, we would like to arrange a meeting to examine the available options and establish an effective strategy. Please advise our team of your availability for a meeting via Planningliaison@anglianwater.co.uk.

Please note that Anglian Water will request a suitably worded condition at planning application stage to ensure this strategy is implemented to mitigate the risk of flooding.

It is assumed that the developer will provide the necessary infrastructure to convey flows from the site to the network. Consequently, this report does not include any costs for the conveyance of flows.

Surface water disposal

You indicated on the Pre-Planning Application form that a connection to the public surface water sewer network is not required. Therefore a capacity assessment has not been made on the public surface water network.

As you may be aware, Anglian Water will consider the adoption of SuDs provided that they meet the criteria outline in our SuDs adoption manual. This can be found on our website. We will adopt features located in public open space that are designed and constructed, in conjunction with the Local Authority and Lead Local Flood Authority (LLFA), to the criteria within our SuDs adoption manual. Specifically, developers must be able to demonstrate:

1. Effective upstream source control,
2. Effective exceedance design, and
3. Effective maintenance schedule demonstrating than the assets can be maintained both now and in the future with adequate access.

If you wish to look at the adoption of any SuDs then an expression of interest form can be found on our website

As the proposed method of surface water disposal is not relevant to Anglian Water; we suggest that you contact the relevant Local Authority, Lead Local Flood Authority, the Environment Agency or the Internal Drainage Board, as appropriate.

Trade Effluent

We note that you do not have any trade effluent requirements. Should this be required in the future you will need our written formal consent. This is in accordance with Section 118 of the Water Industry Act (1991).

Used Water Budget Costs

Your development site will be required to pay an Infrastructure charge for each new property connecting to the public water and sewerage network that benefits from Full planning permission. The infrastructure charge replaces the zonal charge as previously identified.

You will be required to pay an infrastructure charge upon connection for each new plot on your development site. The infrastructure charge are types of charges set out in Section 146(2) of the Water Industry Act 1991.

The charge should be paid by anyone who wishes to build or develop a property and is payable upon request of connection.

- The Infrastructure Charge is based on the cost of any reinforcement and upgrades to our existing network ("Network Reinforcements"), whether designed to address strategic or local capacity issues. For more information on our Infrastructure Charge, please see the 'Useful Information' section of this report.

Infrastructure charges are raised on a standard basis of one charge per new connection (one for water and one for sewerage).

The Water Recycling Infrastructure charge for your dwellings is:

Infrastructure charge	Number of units	Total
£ 403	6000	£2,418,000.00

Please note that you should also budget for infrastructure charges on non-household premises where applicable and these will be calculated according to the number and type of water fittings in the premises. This is called the "relevant multiplier" method of calculating the charge and the relevant multiplier will be applied to the figures set out in our 2024-25 Developer Charging Arrangements to arrive at the amount payable. Details of the relevant multiplier for each fitting can be found on our website.

Section 4 – Map of connection point

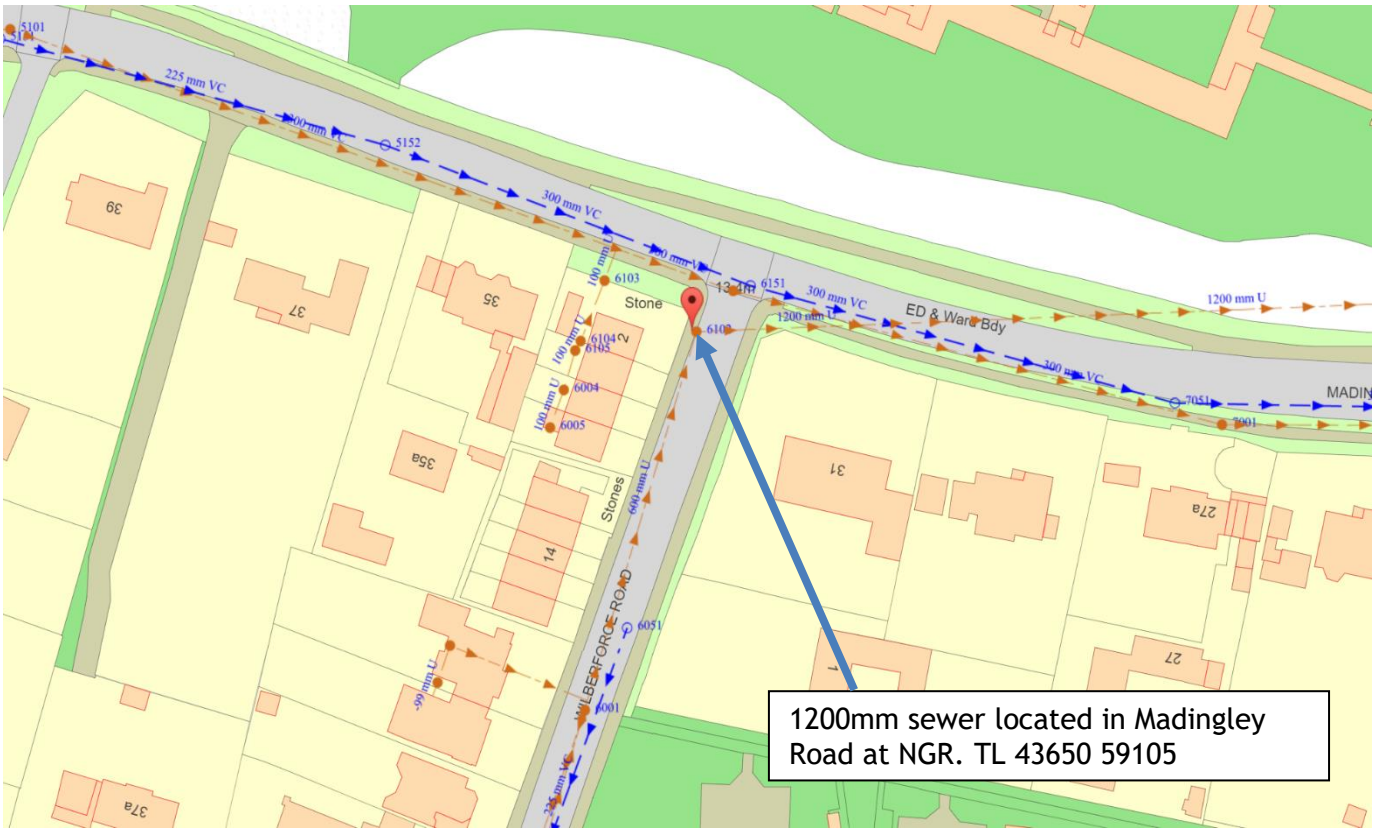

Figure 1: Showing your connection point for foul water

Section 5 - Useful information

Water Industry Act – Key used water sections

Section 98:

This provides you with the right to requisition a new public sewer. The new public sewer can be constructed by Anglian Water on your behalf. Alternatively, you can construct the sewer yourself under section 30 of the Anglian Water Authority Act 1977.

Section 102:

This provides you with the right to have an existing sewerage asset vested by us. It is your responsibility to bring the infrastructure to an adoptable condition ahead of the asset being vested.

Section 104:

This provides you with the right to have a design technically vetted and an agreement reached that will see us adopt your assets following their satisfactory construction and connection to the public sewer.

Section 106:

This provides you with the right to have your constructed sewer connected to the public sewer.

Section 185

This provides you with the right to have a public sewerage asset diverted.

Details on how to make a formal application for a new sewer, new connection or diversion are available on our website or via our Development Services team on **0345 60 66 087**.

Sustainable drainage systems

Many existing urban drainage systems can cause problems of flooding, pollution or damage to the environment and are not resilient to climate change in the long term. .

Our preferred method of surface water disposal is through the use of Sustainable Drainage Systems or SuDS.

SuDS are a range of techniques that aim to mimic the way surface water drains in natural systems within urban areas. For more information on SuDS, please visit our website

We recommend that you contact the Local Authority and Lead Local Flood Authority (LLFA) for your site to discuss your application.

Private sewer transfers

Sewers and lateral drains connected to the public sewer on the 1 July 2011 transferred into Water Company ownership on the 1 October 2011. This follows the implementation of the Floods and Water Management Act (FWMA). This included sewers and lateral drains that were subject to an existing Section 104 Adoption Agreement and those that were not. There were exemptions and the main non-transferable assets were as follows:

Surface water sewers and lateral drains that do not discharge to the public sewer, e.g. those that discharged to a watercourse.

Foul sewers and lateral drains that discharged to a privately owned sewage treatment/collection facility.

Pumping stations and rising mains will transfer between 1 October 2011 and 1 October 2016.

The implementation of Section 42 of the FWMA will ensure that future private sewers will not be created. It is anticipated that all new sewer applications will need to have an approved section 104 application ahead of a section 106 connection.

It is anticipated that all new sewer applications will need to have an approved Section104 application ahead of a Section 106 connection

Encroachment

Anglian Water operates a risk based approach to development encroaching close to our used water infrastructure. We assess the issue of encroachment if you are planning to build within 400 metres of a water recycling centre or, within 15 metres to 100 metres of a pumping station. We have more information available on our website

Locating our assets

Maps detailing the location of our water and used water infrastructure including both underground assets and above ground assets such as pumping stations and recycling centres are available from digdat

All requests from members of the public or non-statutory bodies for maps showing the location of our assets will be subject to an appropriate administrative charge.

We have more information on our website

Charging arrangements

Our charging arrangements and summary for this year's water and used water connection and infrastructure charges can be found on our website

Section 6 - Disclaimer

The information provided in this report is based on data currently held by Anglian Water Services Limited ('Anglian Water') or provided by a third party. Accordingly, the information in this report is provided with no guarantee of accuracy, timeliness, completeness and is without indemnity or warranty of any kind (express or implied).

This report should not be considered in isolation and does not nullify the need for the enquirer to make additional appropriate searches, inspections and enquiries. Anglian Water supports the plan led approach to sustainable development that is set out in the National Planning Policy Framework ('NPPF') and any infrastructure needs identified in this report must be considered in the context of current, adopted and/or emerging local plans. Where local plans are absent, silent or have expired these needs should be considered against the definition of sustainability holistically as set out in the NPPF.

Whilst the information in this report is based on the presumption that proposed development obtains planning permission, nothing in this report confirms that planning permission will be granted or that Anglian Water will be bound to carry out the works/proposals contained within this report.

No liability whatsoever, including liability for negligence is accepted by Anglian Water or its partners, employees or agents, for any error or omission, or for the results obtained from the use of this report and/or its content.

Furthermore, in no event will any of those parties be liable to the applicant or any third party for any decision made or action taken as a result of reliance on this report.

This report is valid from the date issued and the enquirer is advised to resubmit their request for an up to date report should there be a delay in submitting any subsequent application for water supply/sewer connection(s). Our pre-planning reports are valid for 12 months, however please note Anglian Water cannot reserve capacity and available capacity in our network can be reduced at any time due to increased requirements from existing businesses and houses as well as from new housing and new commercial developments.

Appendix H LLFA CORRESPONDENCE

Outlook

RE: (Pre-app Request) North West Cambridge: 2024 Masterplan - LLFA Liaison Drainage Strategy Proposals - Meeting Weds 16th Oct 10.00

From Benjamin Woolf <Benjamin.Woolf@cambridgeshire.gov.uk>
Date Wed 2025-02-19 10:54
To Limbu, Bimarsha <Bimarsha.Limbu@aecom.com>
Cc Guarniere, Stuart <stuart.guarniere@aecom.com>; Howgego, Dom <Dominic.Howgego@aecom.com>; NWC2024 <NWC2024@aecom.com>

Hello Bimarsha,

Yes we agree to the approach below in principle.
Happy to answer any questions going forward.

Kind regards,

Benjamin Woolf
SuDS and Flood Risk Officer
M: 07780 119465
Flood Risk Team

Cambridgeshire County Council

Alconbury Weald Civic Hub, Emery Crescent, Enterprise Campus, Alconbury Weald, PE28 4YE

Upcoming Leave:

From: Limbu, Bimarsha <Bimarsha.Limbu@aecom.com>
Sent: 19 February 2025 09:08

To: Benjamin Woolf <Benjamin.Woolf@cambridgeshire.gov.uk>
Cc: Guarniere, Stuart <stuart.guarniere@aecom.com>; Howgego, Dom <Dominic.Howgego@aecom.com>; NWC2024 <NWC2024@aecom.com>
Subject: RE: (Pre-app Request) North West Cambridge: 2024 Masterplan - LLFA Liaison Drainage Strategy Proposals - Meeting Weds 16th Oct 10.00

Hi Ben,

Thankyou for your time yesterday.

As discussed, AECOM is currently preparing the flood risk assessment to support the new OPA. The vast majority of the Site is in Flood Zone 1. A small area northwest of the Site is in Flood Zone 2, however, no habitable buildings are proposed within Flood Zone 2. A flood alleviation scheme comprising of a two-stage channel with flow control structure running parallel to the Washpit Brook within the Site was fully implemented as part of the Phase 1 works to ensure that the completed development in its entirety does not result in increased flooding. AECOM undertook fluvial modelling of the Washpit Brook with the updated climate change factors in line with the current gov.uk climate change guidance. The model showed the flood alleviation scheme still provided betterment to downstream flood risk. The FRA will be prepared based on this implemented flood alleviation scheme reducing flood risk and the fluvial modelling results will be submitted as part of the assessment.

Please let us know if you are in agreement with the approach outlined above?

Kind Regards,

Bimarsha Limbu, MEng CEng MICE
Principal Engineer, Infrastructure, Buildings and Places
D +44-(0)20-7798-5062
M +44-(0)75-5252-0382
bimarsha.limbu@aecom.com

From: Benjamin Woolf <Benjamin.Woolf@cambridgeshire.gov.uk>
Sent: 13 February 2025 13:14
To: Limbu, Bimarsha <Bimarsha.Limbu@aecom.com>
Cc: Guarniere, Stuart <stuart.guarniere@aecom.com>; Howgego, Dom <Dominic.Howgego@aecom.com>; NWC2024 <NWC2024@aecom.com>
Subject: RE: (Pre-app Request) North West Cambridge: 2024 Masterplan - LLFA Liaison Drainage Strategy Proposals - Meeting Weds 16th Oct 10.00

Thank you, see you then.

Kind regards,
Ben

From: Limbu, Bimarsha <Bimarsha.Limbu@aecom.com>
Sent: 13 February 2025 13:01
To: Benjamin Woolf <Benjamin.Woolf@cambridgeshire.gov.uk>
Cc: Guarniere, Stuart <stuart.guarniere@aecom.com>; Howgego, Dom <Dominic.Howgego@aecom.com>; NWC2024 <NWC2024@aecom.com>

Subject: RE: (Pre-app Request) North West Cambridge: 2024 Masterplan - LLFA Liaison Drainage Strategy Proposals - Meeting Weds 16th Oct 10.00

Hi Benjamin,

Tuesday 2pm works. I'll send out a Teams invite shortly.

Kind Regards,

Bimarsha Limbu, MEng CEng MICE
Principal Engineer, Infrastructure, Buildings and Places
D +44-(0)20-7798-5062
M +44-(0)75-5252-0382
bimarsha.limbu@aecom.com

From: Benjamin Woolf <Benjamin.Woolf@cambridgeshire.gov.uk>
Sent: 13 February 2025 12:58
To: Limbu, Bimarsha <Bimarsha.Limbu@aecom.com>
Cc: Guarniere, Stuart <stuart.guarniere@aecom.com>; Howgego, Dom <Dominic.Howgego@aecom.com>; NWC2024 <NWC2024@aecom.com>
Subject: RE: (Pre-app Request) North West Cambridge: 2024 Masterplan - LLFA Liaison Drainage Strategy Proposals - Meeting Weds 16th Oct 10.00

Hello Bimarsha,

Can we go for the Tuesday at 2pm?

Kind regards,

Benjamin Woolf
SuDS and Flood Risk Officer
M: 07780 119465
Flood Risk Team

Cambridgeshire County Council

Alconbury Weald Civic Hub, Emery Crescent, Enterprise Campus, Alconbury Weald, PE28 4YE

Upcoming Leave:

North West Cambridge Masterplan

Initial Meeting with the LLFA

16th October 2024.

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Meeting Overview

Proposed Agenda

1. Introductions
2. Masterplan context and relationship to existing scheme
3. Flood risk and drainage background (previous consented scheme)
4. Proposed Surface Water Drainage Strategy
    a. Key points and what's changed
    b. Non-potable water
    c. Catchment areas
    d. Discharge rates
    e. Surface water detention at Western Edge
    f. Climate Change Allowance
5. AOB

Intended outcomes

LLFA familiarity with, and endorsement of, broad strategy principles and key elements (to be discussed as part of the meeting).

To identify any key points for further liaison and agree forward communication with the LLFA.

Masterplan context

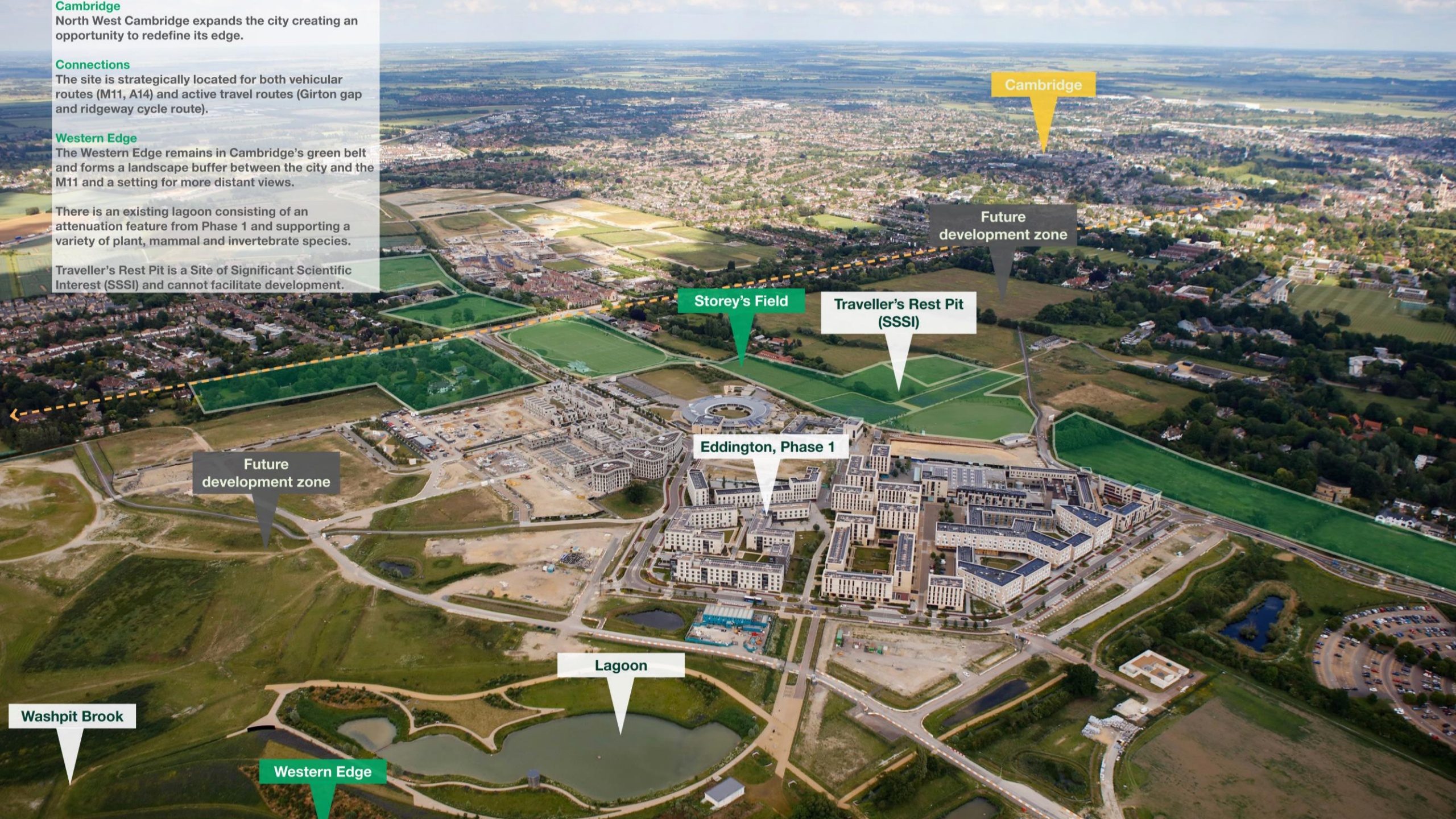
Cambridge
North West Cambridge expands the city creating an opportunity to redefine its edge.

Connections
The site is strategically located for both vehicular routes (M11, A14) and active travel routes (Girton gap and ridgeway cycle route).

Western Edge
The Western Edge remains in Cambridge's green belt and forms a landscape buffer between the city and the M11 and a setting for more distant views.

There is an existing lagoon consisting of an attenuation feature from Phase 1 and supporting a variety of plant, mammal and invertebrate species.

Traveller's Rest Pit is a Site of Significant Scientific Interest (SSSI) and cannot facilitate development.



Allocated site for 3,000 dwellings (student accommodation, employment, retail and community uses).

Benefits from existing although largely lapsed planning permissions.

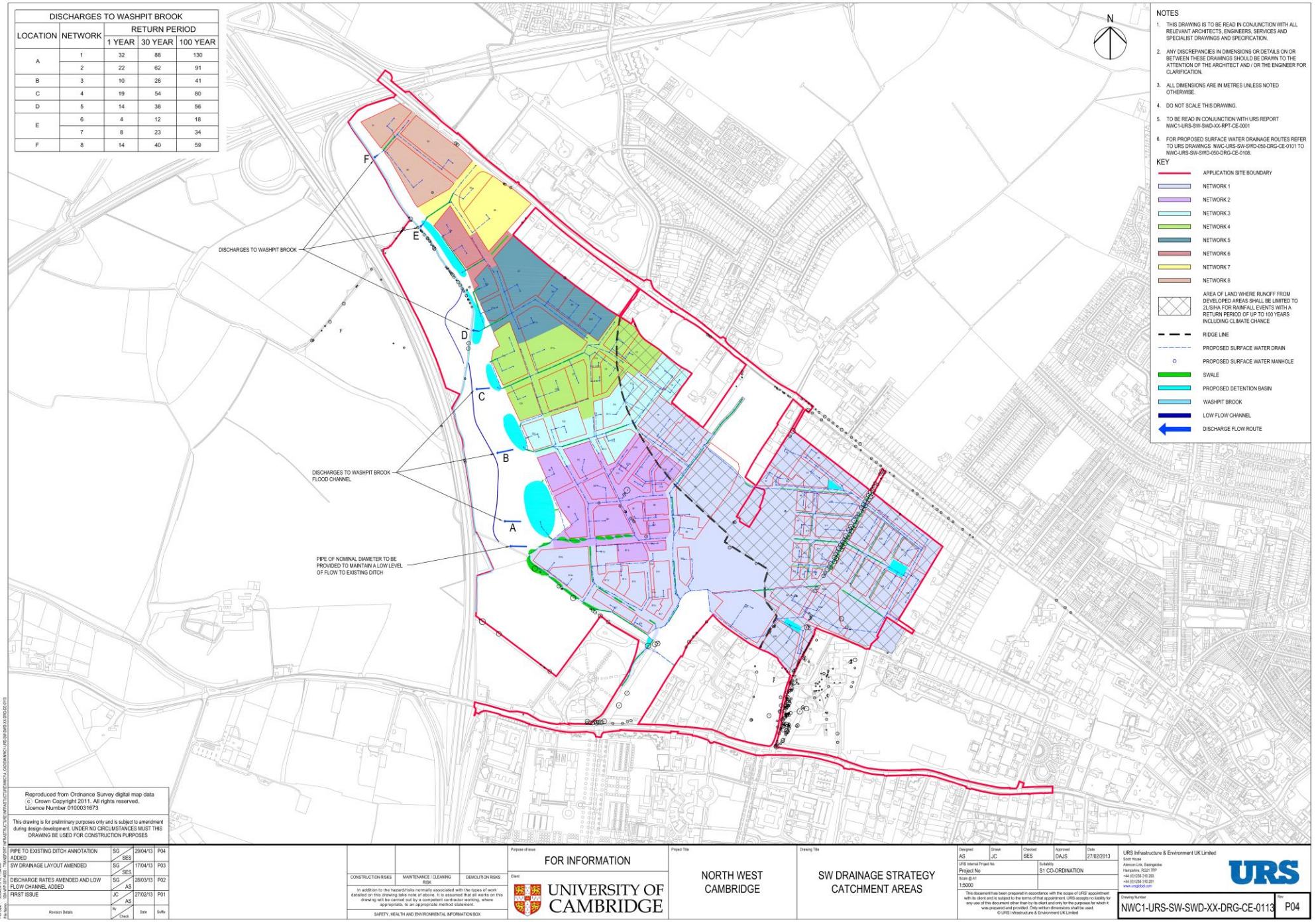
Principle of development established.

Phase 1 (1800 dwellings).

Proposals seek an uplift to between 4,500 and 6000 dwellings, subject to testing of design typologies and infrastructure constraints.

Flood risk and drainage background


Hungtindon Road
M-11
Phase 1



DISCHARGES TO WASHPIT BROOK				
LOCATION	NETWORK	RETURN PERIOD		
		1 YEAR	30 YEAR	100 YEAR
A	1	32	88	130
	2	22	62	91
B	3	10	28	41
C	4	19	54	80
D	5	14	38	56
E	6	4	12	18
	7	8	23	34
F	8	14	40	59

This drawing is for preliminary purposes only and is subject to amendment during design development. UNDER NO CIRCUMSTANCES MUST THIS DRAWING BE USED FOR CONSTRUCTION PURPOSES

Revision Details	By / Check	Date	Suffix
PIPE TO EXISTING DITCH ANNOTATION ADDED	SG / SES	29/04/13	P04
SW DRAINAGE LAYOUT AMENDED	SG / SES	17/04/13	P03
DISCHARGE RATES AMENDED AND LOW FLOW CHANNEL ADDED	SG / AS	28/03/13	P02
FIRST ISSUE	JC / AS	27/02/13	P01

CONSTRUCTION RISKS | MAINTENANCE / CLEANING RISK | DEMOLITION RISKS

In addition to the hazard/risks normally associated with the types of work detailed on this drawing take note of above. It is assumed that all works on this drawing will be carried out by a competent contractor working, where appropriate, to an appropriate method statement.

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION BOX

Purpose of issue: FOR INFORMATION

Client: UNIVERSITY OF CAMBRIDGE

Project Title: NORTH WEST CAMBRIDGE

Drawing Title: SW DRAINAGE STRATEGY CATCHMENT AREAS

Designed	Drawn	Checked	Approved	Date
AS	JC	SES	DAJS	27/02/2013

URS Internal Project No: Project No

Suitability: S1 CO-ORDINATION

Scale @ A1: 1:5000

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Scott House
Alencon Link, Basingstoke
Hampshire, RG21 7PP
+44 (0)1256 310 200
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www.ursglobal.com

URS

Drawing Number: NWC1-URS-SW-SWD-XX-DRG-CE-0113

Rev: P04

Key Points

Consented and implemented scheme:

Flood risk scheme implemented for Washpit Brook.

On plot attenuation with discharge rates controlled to swale system (“green fingers”)

Western edge attenuation prior to discharge at agreed rates to Washpit Brook.

Non potable on site storage via lagoons for phase 1.

aecom.com

Proposed Drainage Strategy

PROPOSED SURFACE WATER DRAINAGE STRATEGY

Key Points

Masterplan Drainage Strategy

On plot attenuation with discharge rates controlled to swale system (“green fingers”).

Western edge attenuation prior to discharge at agreed rates to Washpit Brook.

Non potable on plot storage via tanked system.

Key Elements.

a. Surface water runoff to discharge to Washpit Brook via a number of outfalls.

b. Discharge rates limited to greenfield at 2 l/s/ha where future plots are also to be restricted to 2 l/s/ha.

c. Discharge rate and attenuation calculation based on developable area only.

d. Surface water runoff to be restricted at both plot level (with on plot attenuation) and at Western Edge (attenuated volume to be detained along the Western Edge prior to discharge to Washpit Brook).

e. Use of FEH rainfall data.

f. Reference to gov.uk guidance for climate change allowances for both peak rainfall and river flow.

Minutes

Meeting name
North West Cambridge LLFA Liaison

Meeting date
16.10.24

Location
MS Teams

AECOM project number
60732815

Subject
Emerging Surface Water Drainage Strategy

Time
10.00

Project name
North West Cambridge Masterplan

Prepared by
Dom Howgego

Attendees
Benjamin Woolfe, LLFA (Cambs CC)
Rebecca Saunt, Planning Team, UoC.
Sophie Butler, Planning, QUOD
Stuart Guarniere, Engineering, AECOM
Bimarsha Limbu, Drainage Lead, AECOM
Dom Howgego, Project Manager, AECOM

Circulation list
Guy Wilson, Planning Officer, CCC
Matt Sherwood, Planning Lead, QUOD
Gemma Bushell, Project Manager, Turner and Townsend.

Ref	Notes	Initial
01	Following introductions, the general scheme context was outlined. BW confirmed that he had not previously had an involvement North West Cambridge (NWC). The Planning Officer is Guy Wilson (Greater Cambridge Planning). An initial project pre-application meeting has taken place and DH noted that there is some useful context and initial planning feedback available. The project was introduced through the attached slide pack. The supporting description below is quoted from planning correspondence in response to the first pre application meeting: The site is allocated for development under the North West Cambridge Area Action Plan (NWCAAP) and benefits from existing, albeit largely lapsed, planning permissions. As such the principle of development of the site is established. The site is allocated for approximately 3,000 dwellings, alongside other uses. The proposals seek a significant uplift, taking the total number of dwellings to between 4,500 and 6,000, with the final figure to be derived through testing of proposed design typologies and infrastructure constraints. Whilst this would not accord with the site allocation, national policy advocates the efficient use of land, and (whilst at an early stage) the emerging joint Local Plan includes an uplift of approximately 1,500 homes as part of its strategy for meeting housing needs. Furthermore, the government has indicated support for a significant increase in housing delivery in the Cambridge area to support growth. On this basis, the general principle of densification of the site is accepted, subject to testing design typologies and understanding infrastructure constraints to determine the site's capacity.	**Display**
02	The balance of the Masterplan at North West Cambridge is programmed to be submitted for an Outline Planning Application in Q3 2025. The purposes of this initial introductory meeting with the LLFA is as outlined in the slide deck.	
03	SG ran through the Phase 1 (now implemented) flood risk and drainage strategy. The key points are on the slide deck. It was noted that the consented flood risk management scheme is now complete and operational and is designed to cater for the entire development footprint. Attenuation was provided on plot and at the Western Edge, prior to discharging at agreed rates to the Washpit Brook. A swale system conveyed attenuated flows from plots to the western edge. Non potable on site storage was via Lagoons for Phase 1.	
04	Three key points were highlighted in respect of the planned drainage strategy for the balance of the Masterplan (also with reference to the slide deck). a) The principles of the drainage strategy are following the consented strategy. On plot attenuation / swale system / western edge attenuation prior to discharge at agreed rates to the Washpit Brook (at a number of locations).	

Ref	Notes	Initial
	b) It is noted that a number of parameters have changed since the previous consent (such as climate change allowances) and these are being considered appropriately as part of the emerging strategy. Please refer to the list on the slide deck. c) For the balance of the masterplan non potable water storage is proposed to be on plot.	
05	BW noted that consideration needs to be given to maintenance routes and access to drainage infrastructure on the western edge and that any permanent water bodies should be considered in impermeable area calculations (this was noted).	
06	The proposals were well received in the meeting by BW. DH requested some written feedback with an endorsement of the principles as far as possible at this stage. BW noted that the LLFA would respond accordingly and include relevant written guidance.	**BW**
07	It was noted that further liaison with a more detailed proposal maybe appropriate and AECOM would advise and update the LLFA accordingly. BW noted small queries could be responded to as needed by the LLFA. Please note for the avoidance of doubt no liaison is currently planned with the Environment Agency.	**DH/BL**

North West Cambridge

Meeting with the LLFA

11th December 2024

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Meeting Overview

Proposed Agenda

1. Introductions
2. Update on development scheme
3. Surface Water Drainage Strategy Update
4. AOB

Intended outcomes

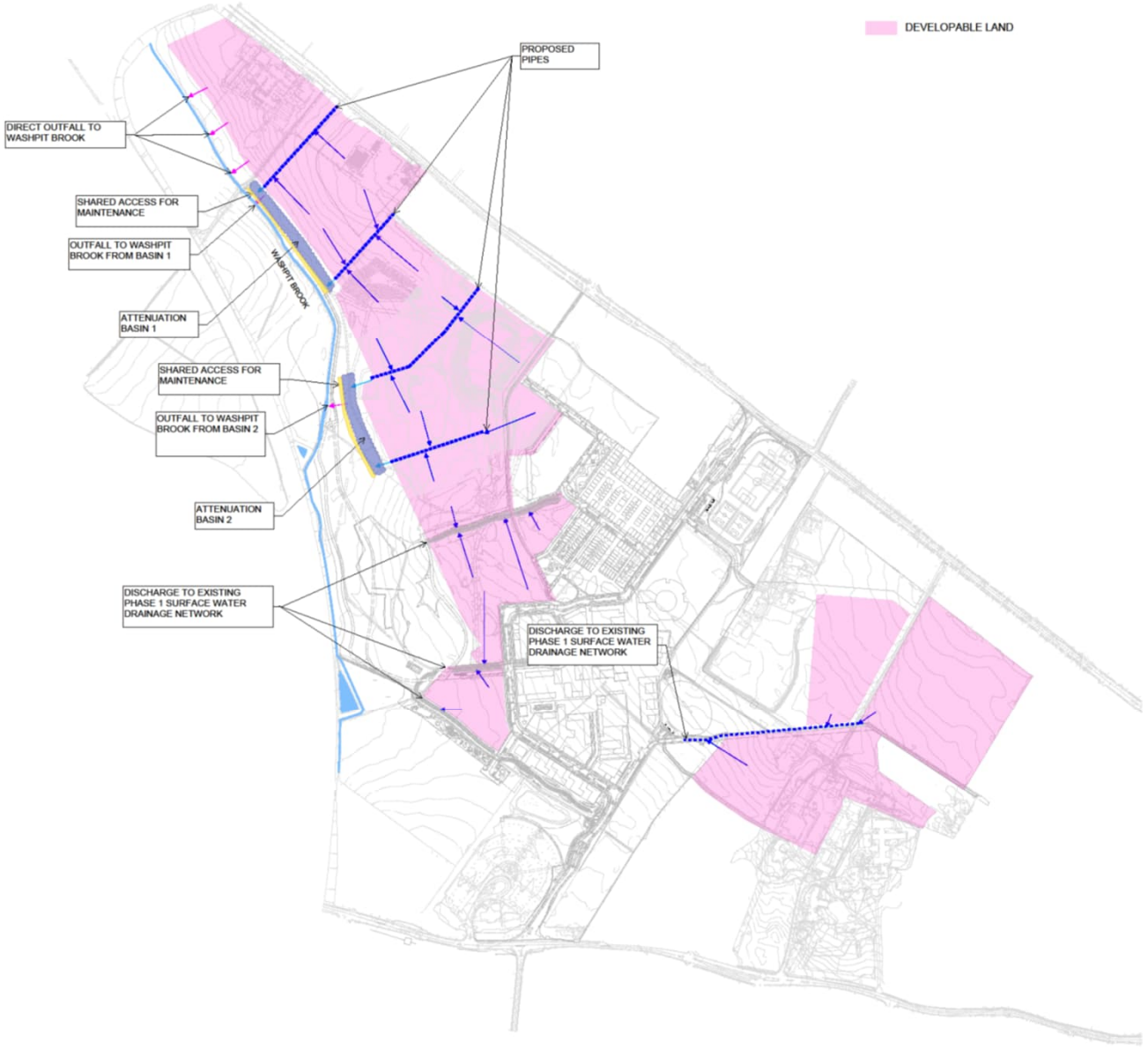
1. Confirmation of the proposed design parameters and proposal presented

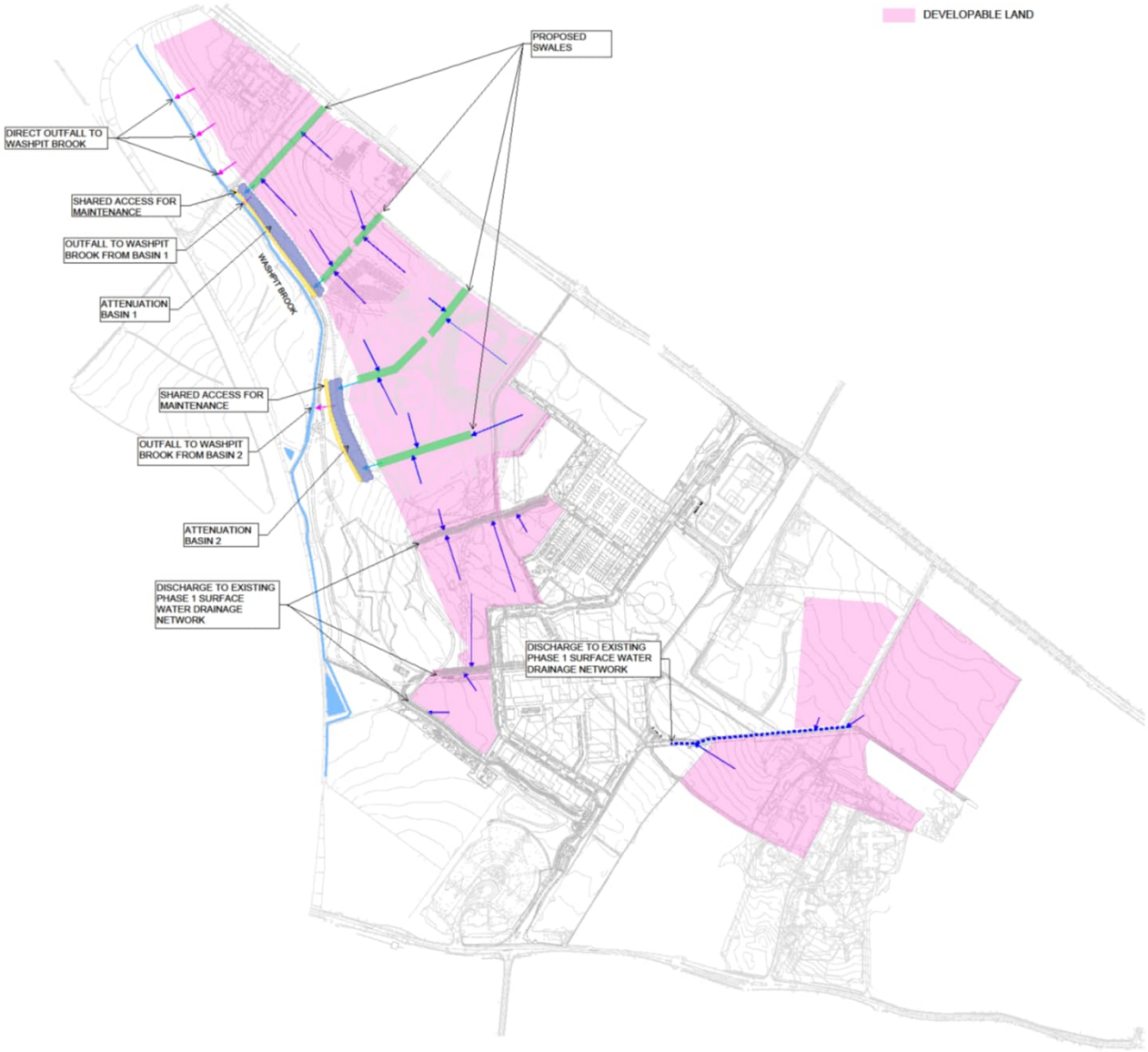
Proposed Development Scheme Update

- Proposals seek an uplift to between 4500 and 6000 dwellings, student accommodation, employment, retail and community use subject to testing of design typologies and infrastructure constraints.

- Masterplan layout currently being developed

- Additional pre-application discussions undertaken with the planning officer


DEVELOPABLE LAND
PROPOSED PIPES
DIRECT OUTFALL TO WASHPIT BROOK
SHARED ACCESS FOR MAINTENANCE
OUTFALL TO WASHPIT BROOK FROM BASIN 1
WASHPIT BROOK
ATTENUATION BASIN 1
SHARED ACCESS FOR MAINTENANCE
OUTFALL TO WASHPIT BROOK FROM BASIN 2
ATTENUATION BASIN 2
DISCHARGE TO EXISTING PHASE 1 SURFACE WATER DRAINAGE NETWORK
DISCHARGE TO EXISTING PHASE 1 SURFACE WATER DRAINAGE NETWORK


DEVELOPABLE LAND
PROPOSED SWALES
DIRECT OUTFALL TO WASHPIT BROOK
SHARED ACCESS FOR MAINTENANCE
OUTFALL TO WASHPIT BROOK FROM BASIN 1
WASHPIT BROOK
ATTENUATION BASIN 1
SHARED ACCESS FOR MAINTENANCE
OUTFALL TO WASHPIT BROOK FROM BASIN 2
ATTENUATION BASIN 2
DISCHARGE TO EXISTING PHASE 1 SURFACE WATER DRAINAGE NETWORK
DISCHARGE TO EXISTING PHASE 1 SURFACE WATER DRAINAGE NETWORK

Proposed Surface Water Drainage Strategy

- Surface water runoff from individual plots and external areas including highways to discharge to sitewide drainage network and to the Western Edge where the runoff will be attenuated and discharge to the Washpit Brook at greenfield runoff rate.

- Surface water runoff is proposed to be conveyed via swales or pipe network.

Design Parameters

- Surface water runoff rate will be restricted to 2 l/s/ha prior to discharge to Washpit Brook.

- Individual plots will be restricted to greenfield runoff rate 2 l/s/ha prior to discharge to the sitewide drainage network.

- FEH rainfall data used and therefore, return period of 2 year is used a minimum.

- Surface water attenuation will be provided for up to 1 in 100 year + 40% climate change over 24-hour duration.

Western Edge Attenuation and Outfall to Washpit Brook

- Attenuation basin of up to 650mm depth and 1 in 3 side slopes.

- A 4m wide shared path for maintenance access to the basin and public access is proposed adjacent to the basin.

- Outfall to the Washpit Brook will be kept as shallow as possible to remain above the peak flood water level of the Washpit Brook to maintain free discharge. Where this is not possible and the outfall is submerged, attenuation basin within the Western Edge will allow for the volume of surface water to be held back until such time where free discharge can be achieved.

- Non return/valves will be proposed to prevent backflow.

AOB

Minutes

Meeting name
North West Cambridge LLFA Liaison

Meeting date
11.12.24

Location
MS Teams

Subject
Emerging Surface Water Drainage Strategy

Time
9.00

Project name
North West Cambridge Masterplan

Document number
60732815

Prepared by
Bimarsha Limbu

Attendees
Benjamin Woolfe, LLFA (Cambs CC)
Sophie Butler, Planning, QUOD
Stuart Guarniere, Engineering, AECOM
Bimarsha Limbu, Drainage Lead, AECOM
Dom Howgego, Project Manager, AECOM

Circulation List
Guy Wilson, Planning Officer, CCC
Matt Sherwood, Planning Lead, QUOD
Rebecca Saunt, Planning Team, UoC
Gemma Bushell, Project Manager, Turner and Townsend.

Ref	Notes	Initial
01	A general update on the project was provided. The masterplan is currently being developed and further pre-application discussions have been undertaken.	
02	A presentation of progress was tabled. The surface water drainage strategy is being developed in parallel with the emerging masterplan. There are a number of competing demands for external space within the site, including the need to manage level differences across the footprint. Balancing drainage objectives with landscape and amenity provision is one example. To support this, two extreme options from a spatial perspective have been assessed which include: a) Surface water conveyance via a piped network from the Site to the Western Edge b) surface water conveyance via swales from the Site to the Western Edge For both options, the surface water runoff is still proposed to be restricted at the Western Edge prior to discharge to the Washpit Brook at greenfield runoff rate of 2 l/s/ha with individual plots also restricted at greenfield runoff rate of 2l/s/ha prior to discharging to the sitewide drainage network. The above options are modelled mainly to demonstrate that they work from technical and hydraulic perspective. SG highlighted that whilst the proposed pipe network results in needing additional form of surface water treatment, it provides additional space at ground level for landscaping and amenity areas. The strategy is eventually envisaged to be a combination of the two options to balance the SuDS requirement and space required for landscaping/amenity areas. The strategy will include two stages of treatment prior to discharge to the Washpit Brook. BW queried on the use of permeable paving to provide surface water treatment. BL/SG noted these will be considered as the strategy gets developed and as part of the future plot detailed design. SG noted that permeable paving would need to be tanked due to underlying geology (Gault Clay).	
03	BL provided a summary of the design parameters used as per the slides. BL noted a minimum of 2-year rainfall event is used as FEH rainfall data is being used. BW advised this is acceptable.	
04	Attenuation basins will be provided along the Western Edge to store the surface water runoff and restrict to greenfield runoff rate. Adjacent maintenance access provision was shown in the presentation and noted in the discussions. The outfall to the Washpit Brook will be kept as shallow as possible. Where this is not possible and the outfall is submerged below the peak flood water level of the brook, the storage within the Western Edge will allow for the volume of surface water to be held back during the submerged condition until free discharge can be achieved. SG also highlighted that the proposed plot levels are significantly higher than the peak flood water level.	

Ref	Notes	Initial
05	BW noted on the requirement to consider exceedance flow paths. SG confirmed overland flow rates will be considered as the design is developed.	
06	SG queried whether liaison with the Environment Agency (EA) is required to notify of the consultation being undertaken with the LLFA. BW advised he'll confirm and provide contact detail for the EA.	**BW**
07	In general terms BW was accepting and supportive of the principles put forward in the discussion.	

North West Cambridge

Meeting with the LLFA

18th November 2025

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Meeting Overview

Proposed Agenda

1. Introductions
2. Executive Summary
3. Masterplan context
4. Site Topography and Levels
5. Flood risk and drainage background (previous consented scheme)
6. Proposed Surface Water Drainage Strategy
7. AOB

Executive Summary

Executive Summary

- Drainage Strategy follows that of the previously consented scheme, but updated in line with policy change and climate parameters
- Two stages of attenuation and run off rate limiting – on plot prior to outfall to the strategic network, and then again prior to entering the Washpit Brook
- Site land raising being undertaken to avoid bulk offsite disposal to landfill
- Full flood resiliency alleviation scheme constructed in Phase 1 and has remained the key design constraint going forward
- Environment Agency flood mapping used was current at project commencement

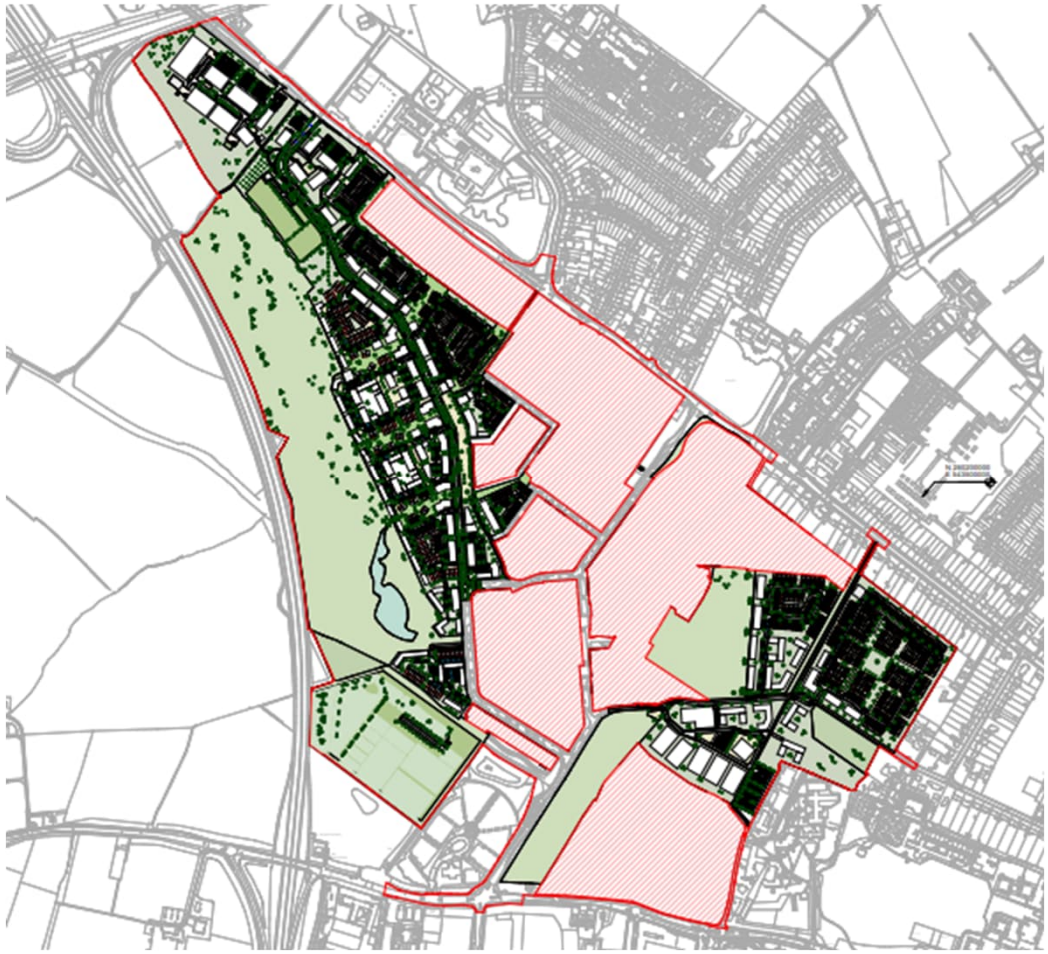
Masterplan Context

Proposed Development Scheme Update

- Proposals seek an uplift to between 4500 and 6000 dwellings, student accommodation, employment, retail and community use. Benefits from existing although largely lapsed planning permissions.

- Allocated site under South Cambridgeshire Local Plan (2018) and North West Cambridge Area Action Plan (2009) for residential led mixed-use development. Site allocated for approximately 3000 dwellings, alongside other uses with emerging joint Local Plan to include uplift of approximately 1500 homes for to meet housing needs.

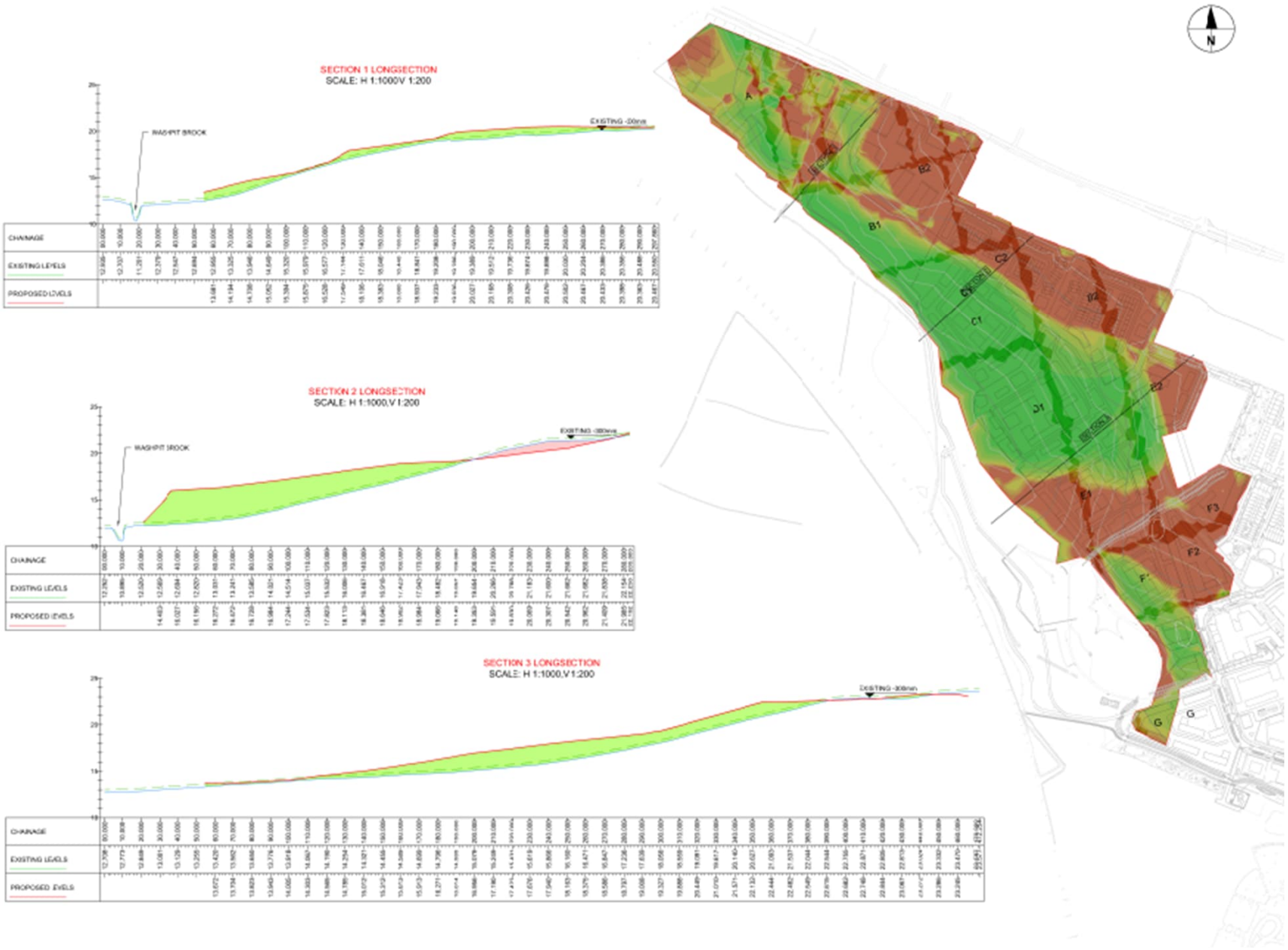
- Phase 1 (1800 dwellings)



Site Topography and Levels

Site Topography and Levels

- Localized stockpiles of arisings within the site
- Need for reuse of the existing stockpiled arisings within the site and avoid offsite disposal
- Raised plot levels to facilitate reuse of arisings and limit excavation within the site.
- No land raising within the Washpit Brook floodplain


SECTION 1 LONGSECTION
SCALE: H 1:1000/V 1:200
WASHPIT BROOK
EXISTING -00m/s
CHAINAGE
EXISTING LEVELS
PROPOSED LEVELS
SECTION 2 LONGSECTION
SCALE: H 1:1000,V 1:200
WASHPIT BROOK
EXISTING -000m/s
CHAINAGE
EXISTING LEVELS
PROPOSED LEVELS
SECTION 3 LONGSECTION
SCALE: H 1:1000,V 1:200
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E2
F1
F2
F3
G

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Flood Risk and Drainage Background

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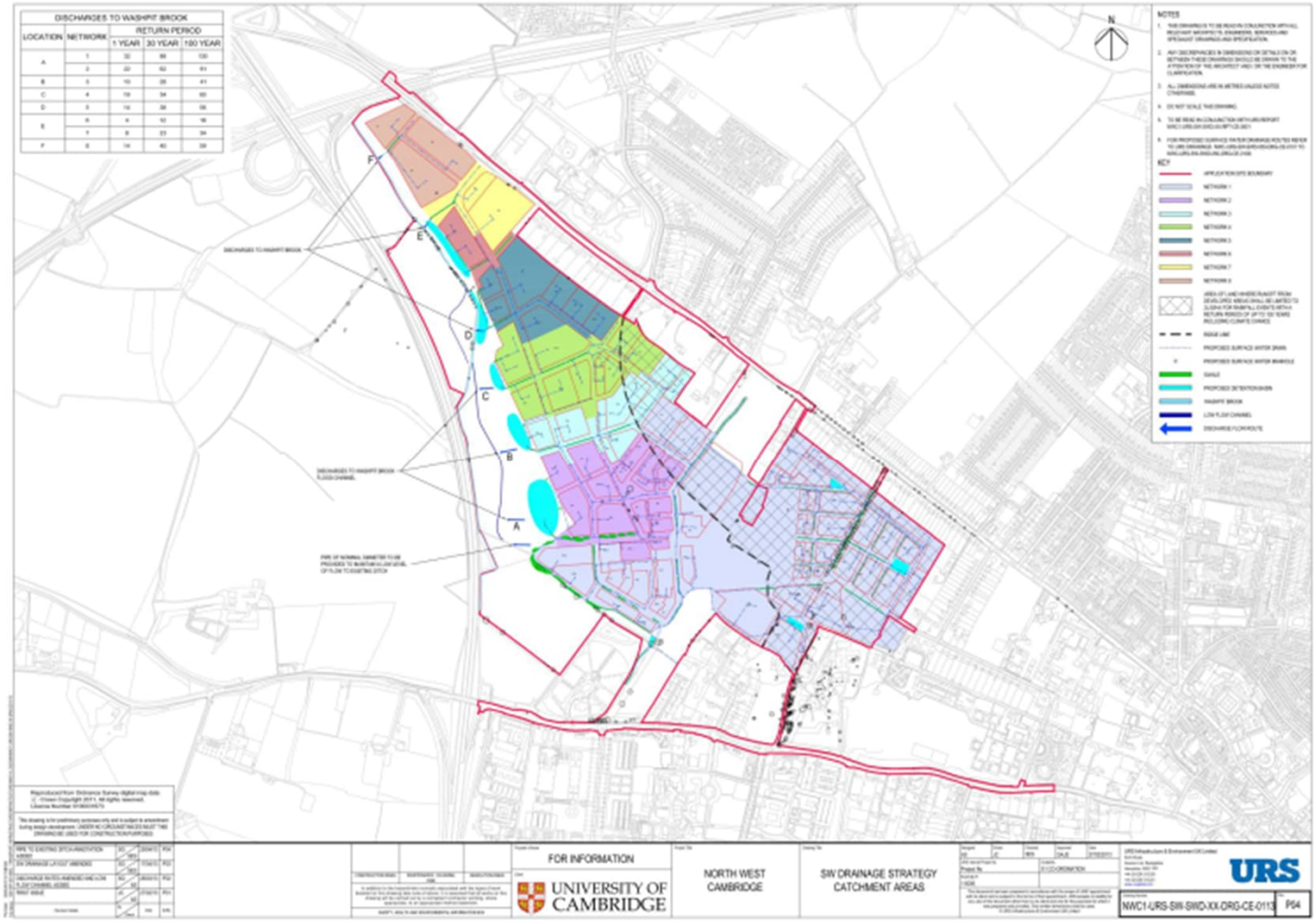
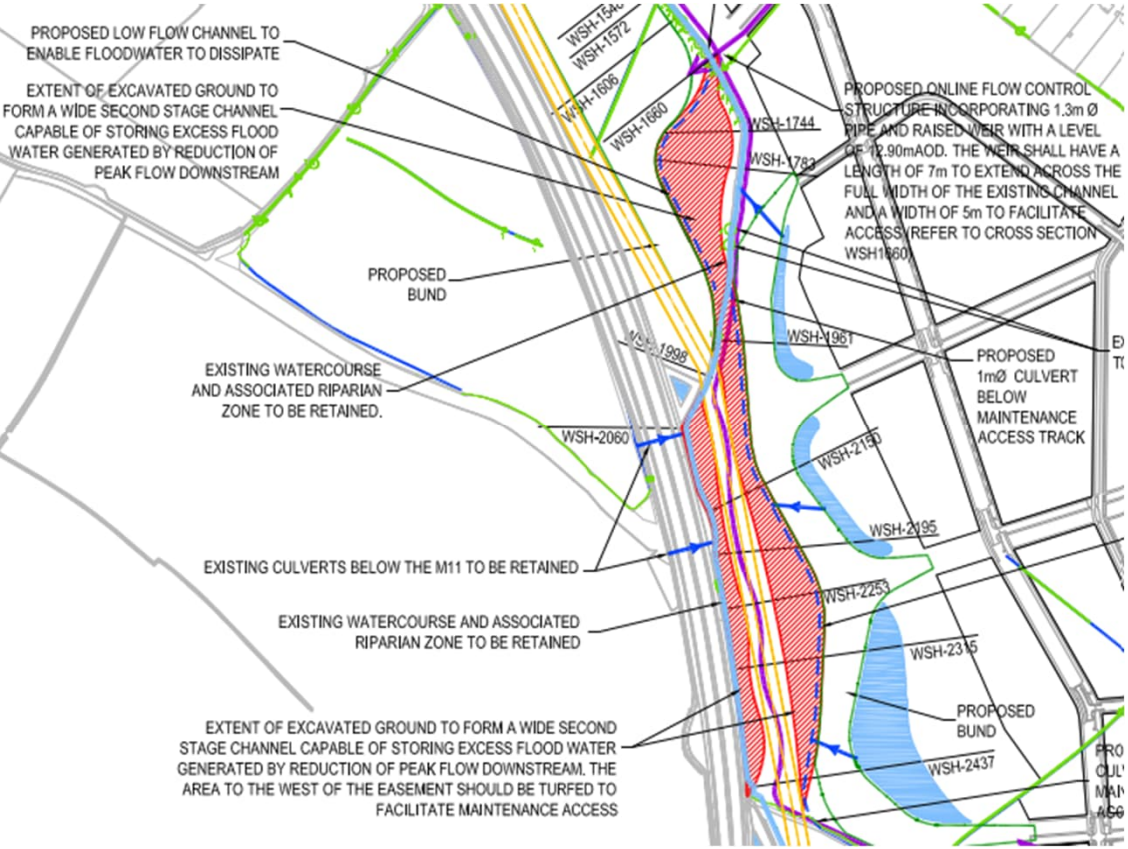
Flood Risk and Drainage Background

- Consented and implemented scheme
- Flood Alleviation Scheme implemented for Washpit Brook
- On plot attenuation with discharge rates controlled to “green fingers”
- Attenuation along Western Edge prior to discharge at agreed rates to Washpit Brook

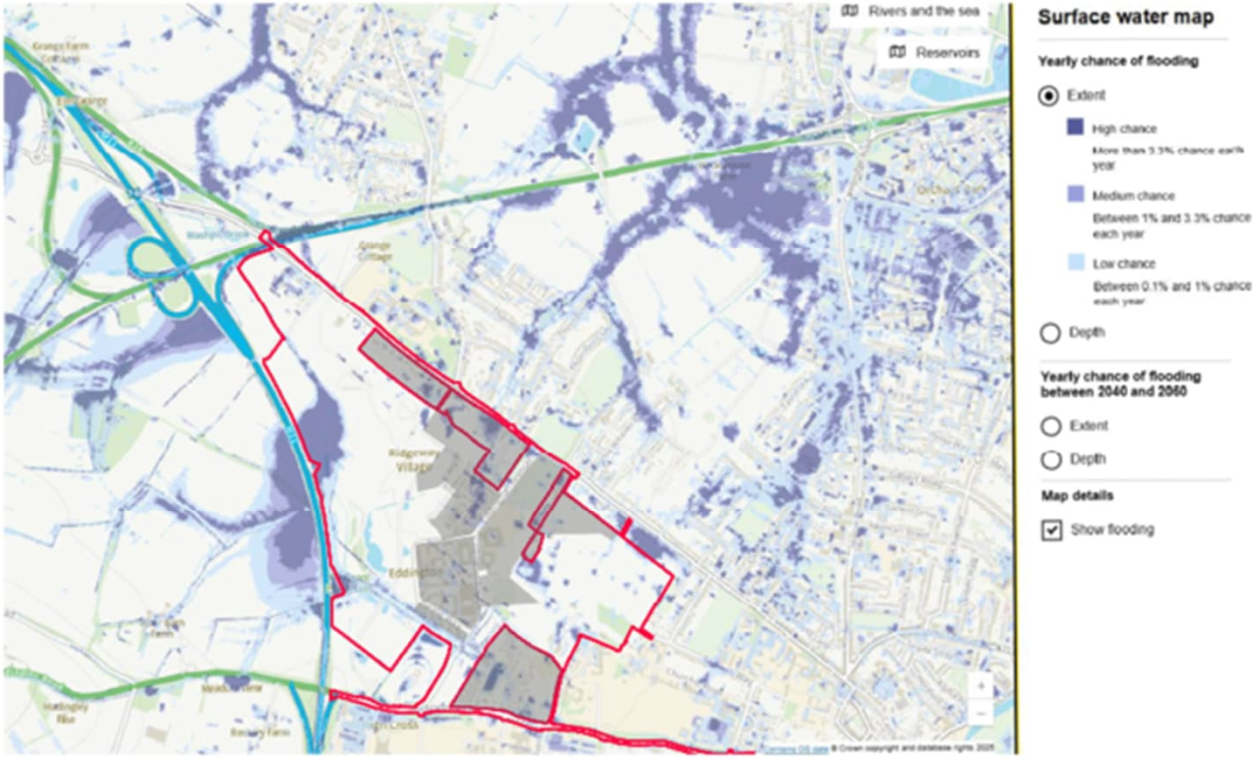


Phase 1 Constructed Scheme



Flood Risk and Drainage Background

Extract of surface water flood map from submitted FRA and SWDS)



Extract of latest surface water flood map

Proposed Surface Water Drainage Strategy

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