

TECHNICAL NOTE

Job Name: Land at Babraham
Job No: 332210692
Note No: TN001
Date: 1st December 2021
Prepared By: Tamur Butt
Subject: **Land at North Stevenage – Utilities Technical Note**

1.1 Introduction

Stantec, has been commissioned by Bidwells to prepare a Utilities Appraisal to support of the promotion of the proposed development at Babraham.

The site location is south of Babraham and to the west of the A11 of North Road within greenfield land. The nearest postcode for the site is CB22 3AW and the Grid coordinates are E 550730, N 250108.

The development is proposed to comprise of approximately 2,927 properties within a site area of 66.2 ha. The composition of the development proposed includes:

A1 and A3 uses
2 Form Entry Primary school
Residential uses

An existing utilities constraints plan (Ref: Stantec Drawing no. LAB-STN-EU-XX-DR-C-0001) has been produced based on the asset plans received from utility service providers showing the utility assets within and in the vicinity of the site.

The incumbent providers have been approached to determine potential connection points for the site and obtain a budget estimate for supplying the site.

1.2 National Grid

Following enquiry with National Grid, it was identified that a High Pressure Gas Main is located to the along the eastern side of the site running parallel to the A11 within the site boundary.

Following our engagement with HSE the following information was obtain the pipe information below.

Name: 3 Feeder Great Wilbraham / Royston

HSE Ref: 7453

Transco Ref: 1711

HSE Consultation Zones (These distances apply on either side of the pipeline)

Inner Zone (in metres): 78

Middle Zone (in metres): 78

Outer Zone (in metres): 255

In October 2021, following engagement with National Grid, the easement of 9.1m (either side from centre of the pipe) was provided. We are awaiting further information on pipe specification from National Grid.

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1.3 Cadent Gas

Cadent Gas is the incumbent gas supplier in the vicinity of the site.

Following a review of the asset records received, it was identified that there is an Intermediate Pressure (IP) gas main entering the northern part of the site at the junction of Cambridge road/High Street to supply the Babraham Institute.

There are other Low Pressure (LP) mains supplying the adjacent developments

An application for a budget estimate to supply the site has been submitted to Cadent Gas.

1.4 GTC

Besides Cadent Gas, it has been identified that GTC has an Intermediate Pressure (IP) gas main located to the east of the A11 out of the site boundary. Their plans also show LP infrastructure for a development located to the south of the site.

1.5 UK Power Network (UKPN)

UKPN is the incumbent electricity Distribution Network Operator in the area.

Following a review of the asset records, it was identified there is a network of High Voltage (HV) cables and Overhead lines along Cambridge Road and High Street.

Furthermore, there are High Voltage Overhead Lines connecting the south west corner of High Street and running in the south east direction within the site. It is envisaged that these Overhead lines may need to be diverted prior to the development of the site.

An application for a budget estimate to supply the site has been submitted to UKPN.

1.6 Cambridge Water

Cambridge Water is the incumbent statutory water provider in the vicinity of the proposed site.

Following a review of the asset records it was identified that there are 3 large water mains (300mm, 18in & 225mm) located within the red line boundary. The 225mm and 18in mains are located along High street serving Babraham while the 300mm main is located along the western edge of the site boundary.

As most of the mains lay within the existing roads/footways, which seem to be incorporated within the latest masterplan, it is likely that minimum alterations will be required.

An application for a budget estimate to supply the site has been submitted to Cambridge Water.

DOCUMENT ISSUE RECORD

Technical Note No	Rev	Date	Prepared	Checked	Reviewed (Discipline Lead)	Approved (Project Director)
TN001		01/12/2021	TB			

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T: +44 1233 527250 E: pba.ashford@stantec.com

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1.7 Anglian Water

Anglian Water is the incumbent statutory foul water service provider in the vicinity of the proposed site.

Following review of the asset records received from Anglian Water it was identified 110mm foul rising located within site running along the High Street and Sawston Road.

Upon review with the latest master plan it was identified that a small section of foul rising main connecting between Sawston Road and High street passes through the green infrastructure which may require diversion to make way for future developments.

An application for a budget estimate to supply the site has been submitted to Anglian Water.

1.8 Openreach

Following review of the asset records received from Openreach it was identified that there is network of underground cables and overhead lines along A11, Cambridge Road and High Street. Whilst most of the network is located within footways/roads, there are a few cables along the north eastern corner of the site which may require diversion.

The supply strategy for the development is supposedly a new connection to the telecommunications infrastructure within Cambridge Road and High Street. These proposals will be confirmed by Openreach New Sites following their detailed design works.

Openreach states that it normally undertakes to provide telephone and broadband services to all new developments free of charge with the end user ultimately paying for connection costs.

Regarding the onsite civils works, these are typically undertaken by the developer. Openreach provides free issue ducts and joint box chamber lids, with the developer providing and constructing the joint box chambers to Openreach confirmed designs and standards. Openreach states it will pull cables through the newly installed ducts as and when required.

1.9 University of Cambridge Granta Backbone Network

The records show ducts and chambers located within the site boundary. The ducts located along the south western corner of the site along the High Street and are connecting the Babraham Research Campus.

1.10 Virgin Media

There are assets located to the south of the development out of the site boundary.

1.11 Cityfiber.

There is a network of City Fibre cable along the north eastern corner of the site within the site.

1.12 Associated documents (Appendix A)

Attached to this technical note are:

Stantec Drawing no. LAB-STN-EU-XX-DR-C-0001 (DRAFT)



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Notes

1. ABANDONED SERVICES MAY NOT BE SHOWN ON THIS PLAN.
2. TRUE POSITION OF THE SERVICES MAY BE DIFFERENT TO THAT SHOWN ON THIS PLAN, WHICH IS INTENDED FOR GENERAL GUIDANCE ONLY. NO GUARANTEE CAN BE GIVEN TO ITS ACCURACY AND IT SHOULD NOT BE RELIED UPON DURING MASTERPLANNING, INTRUSIVE INVESTIGATIONS, EXCAVATIONS AND CONSTRUCTION.
3. THESE SERVICES MAY NOT RUN IN A STRAIGHT LINE EITHER HORIZONTALLY OR VERTICALLY BECAUSE OF GROUND CONDITIONS, OBSTACLES AND OTHER REASONS.
4. BURIED SERVICES MAY EXIST AT VARIOUS DEPTHS AS GROUND LEVEL MAY HAVE BEEN ALTERED SINCE THE UTILITY APPARATUS WAS LAID.
5. UTILITY COMPANY ASSET RECORDS (ASSETS, LOCATION AND DETAILS) ARE VALID FOR UP TO 3 MONTHS. IF WORKS DO NOT COMMENCE WITHIN THIS TIME PERIOD, THE ASSET RECORDS WILL NEED TO BE REFRESHED BEFORE ANY WORKS COMMENCE ON OR NEAR THE SITE.

BEFORE EXCAVATING OR GROUND WORKS

6. ANY SITE INVESTIGATION OR GROUND PENETRATING ACTIVITY SHALL COMPLY WITH THE REQUIREMENTS OF HSE GUIDANCE DOCUMENT HS(G) 47 "AVOIDING DANGER FROM UNDERGROUND SERVICES"
7. ALL UNDERGROUND SERVICES i.e. CABLES, PIPES, DUCTS SHOULD BE LOCATED USING THE FOLLOWING TECHNIQUES:
 - a. REFERENCE TO DETAILED LARGER SCALE DRAWINGS AND CABLE ROUTE PROFILES. THESE WILL NEED TO BE REQUESTED FROM THE SERVICE PROVIDER AND REFERRED TO DURING THE DESIGN STAGE AND MADE AVAILABLE ON SITE TO SITE OPERATIVES PRIOR TO THE COMMENCEMENT OF ANY GROUNDWORKS.
 - b. SUITABLE INSTRUMENTS i.e. GROUND PENETRATING RADAR, CABLE LOCATING DEVICES WILL NEED TO BE USED TO DETERMINE THE LOCATION AND PRESENCE OF UNDERGROUND SERVICES/OBSTRUCTIONS BEFORE EXCAVATION WORKS PROCEED.
 - c. SAFE DIGGING TECHNIQUES (HAND EXCAVATION) AS DETAILED IN HS(G) 47 WILL BE NECESSARY TO DETERMINE THE EXACT POSITION OF BURIED SERVICES AND OBSTRUCTIONS BEFORE WORK CAN PROCEED.
 - d. ALL APPARATUS FOUND SHOULD BE CROSS REFERENCED WITH THE DETAILED RECORD PLANS. ANY ABNORMALITIES SHOULD BE REPORTED TO THE PROJECT MANAGER.
8. INFORMATION CONCERNING THE POSITION OF EXISTING UTILITY INFRASTRUCTURE HAS BEEN EXTRACTED FROM RECORD MAPPING OBTAINED FROM THE FOLLOWING STATUTORY UNDERTAKERS:

AB	-	2021.10.15
Dwn.	Dsgn.	Chkd.
		YYYY.MM.DD

Issue Status

FOR INFORMATION

This document is suitable only for the purpose noted above. Use of this document for any other purpose is not permitted.

Client/Project Logo

Client/Project

LAND AT BABRAHAM

Title

EXISTING UTILITIES CONSTRAINTS PLAN

Project No.
332210692

Scale
1:10000

Revision

Drawing No.

LAB-STN-EU-XX-DR-C-0001

KEY	
	EXISTING WATER MAIN
	EXISTING FOUL WATER RISING MAIN
	EXISTING FOUL WATER SEWER
	EXISTING LOW PRESSURE GAS MAINS
	EXISTING MEDIUM PRESSURE GAS MAINS
	EXISTING INTERMEDIATE PRESSURE GAS MAINS
	EXISTING HIGH PRESSURE GAS MAINS
	EXISTING HV ELECTRICITY
	EXISTING HV ELECTRICITY OVERHEAD
	EXISTING LV ELECTRICITY
	EXISTING LV ELECTRICITY OVERHEAD
	EXISTING VIRGIN MEDIA COMMS
	EXISTING CITY FIBRE COMMS
	EXISTING UNIVERSITY OF CAMBRIDGE BACKBONE NETWORK
	EXISTING OPENREACH OVERHEAD LINES AND POLE
	EXISTING OPENREACH DUCTS
	EXISTING HSE CONSULTATION ZONE OUTER ZONE
	EXISTING HSE CONSULTATION ZONE INNER ZONE
	INDICATIVE SITE BOUNDARY

STATUTORY UNDERTAKER	MAPPING RECEIVED
ANGLICAN WATER	30/09/2021
CADENT GAS	24/09/2021
GTC	06/10/2021
NATIONAL GRID	24/09/2021
CAMBRIDGE WATER	04/10/2021
OPENREACH	06/10/2021
CITYFIBRE	06/10/2021
GANTRA BACKBONE	27/09/2021
VIRGIN MEDIA	04/10/2021
UKPN	28/09/2021