

REPORT

Honingham Thorpe Development

Honingham Thorpe
Utilities Feasibility Study

Client: Brown & Co.

Reference: T&PPB7750-RDH-FE-HS-RP-D-0001R001D1.0

Revision: 1.0

Date: 29 January 2019

HASKONINGDHV UK LTD.

2 Abbey Gardens
Great College Street
London
SW1P 3NL
Transport UK
VAT registration number: 792428892

+44 207 2222115 **T**
info.london@uk.rdhv.com **E**
royalhaskoningdhv.com **W**

Document title: Honingham Thorpe Development

Document short title: Utilities Feasibility Study

Reference: T&PPB7750-RDH-FE-HS-RP-D-0001R001D1.0

Revision: 1.0

Date: 29 January 2019

Project name: Honingham Thorpe

Project number: PB7750-RDH-FE-HS-RP-D-0001

Author(s): Kwasi Amoah

Drafted by: KA

Checked by: PV

Date / initials: 29/01/18/PV

Approved by: PWJ

Date / initials: 29/01/19/PWJ

Classification

Project related



Disclaimer

No part of these specifications/printed matter may be reproduced and/or published by print, photocopy, microfilm or by any other means, without the prior written permission of HaskoningDHV UK Ltd.; nor may they be used, without such permission, for any purposes other than that for which they were produced. HaskoningDHV UK Ltd. accepts no responsibility or liability for these specifications/printed matter to any party other than the persons by whom it was commissioned and as concluded under that Appointment. The integrated QHSE management system of HaskoningDHV UK Ltd. has been certified in accordance with ISO 9001:2015, ISO 14001:2015 and OHSAS 18001:2007.

Table of Contents

1	INTRODUCTION	1
2	SITE DESCRIPTION	3
3	UTILITIES ASSESSMENT	4
3.1	Overview of Utilities Assessment	4
3.2	Gas	4
3.3	Electricity	5
3.4	Potable Water	5
3.5	Foul Drainage	6
3.6	Telecommunications	6
3.7	Other Utilities on Site	7

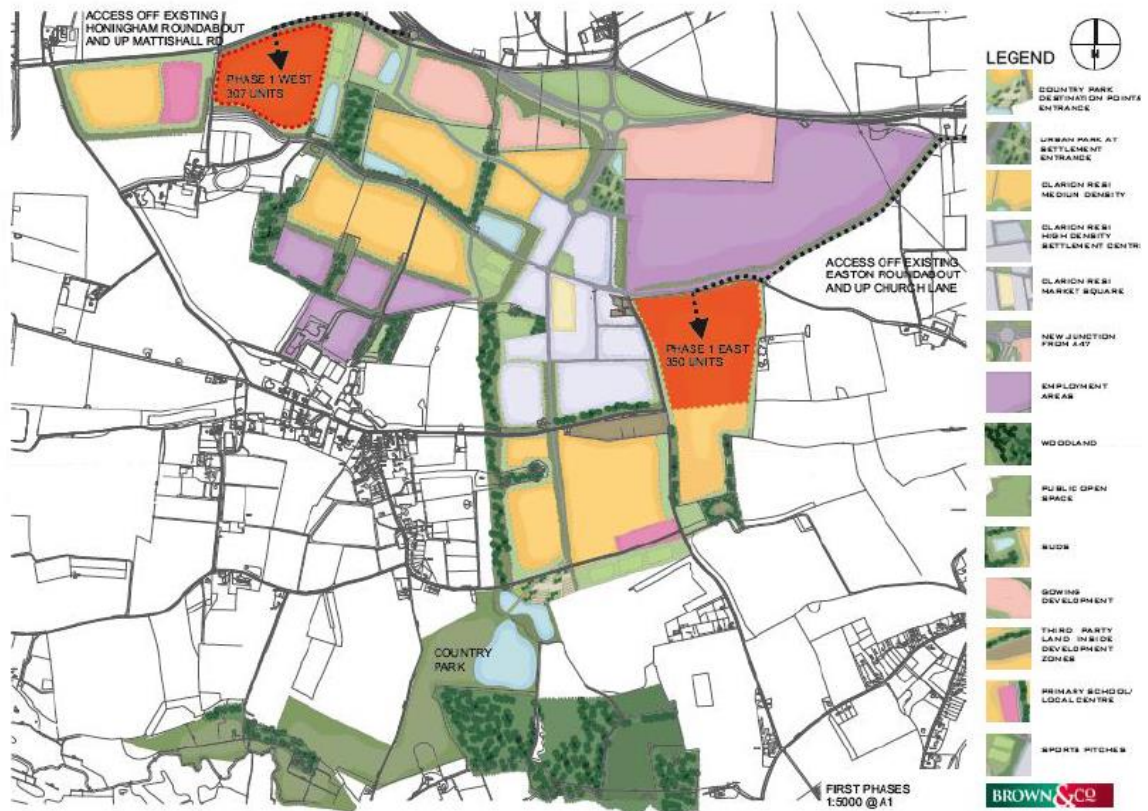
Appendices

Appendix A	Development Plan
Appendix B	Utilities Assessment Plan
Appendix C	Utilities Assessment Record Data

1 INTRODUCTION

Royal HaskoningDHV has been commissioned by Brown and Co. to undertake a feasibility assessment of utility provision for a proposed development site known as “Honingham Thorpe Development” (the Site) at Honingham, Norfolk as shown in **Insert 1-1**. A plan with a summary of the proposed development is shown in **Appendix A**. It is understood that the proposals are being progressed for the development of new settlement for Phase 1, comprising residential and commercial led end use at Honingham Thorpe.

Inset 1-1: Proposed development layout for Honingham Thorpe (Source: Clarion Housing Group)



The scope of the work is to undertake an assessment with regards to the presence of the existing services gas, water, foul and electricity in close proximity to the site.

Suitable connection points to the respective networks have not been established at this stage. However, this is to be added to the plan in the future once confirmation by the service providers is received at the Pre-Planning Enquiries (PPE) stage.

The report does not assess the likely service demand of the development, the capacity of existing systems and any on-site or off-site upgrade, or reinforcement required to meet the future demand of the development. The location of existing apparatus is determined from record data provided by the utility providers.

This report is a document which provides utilities assessment for the proposed development.

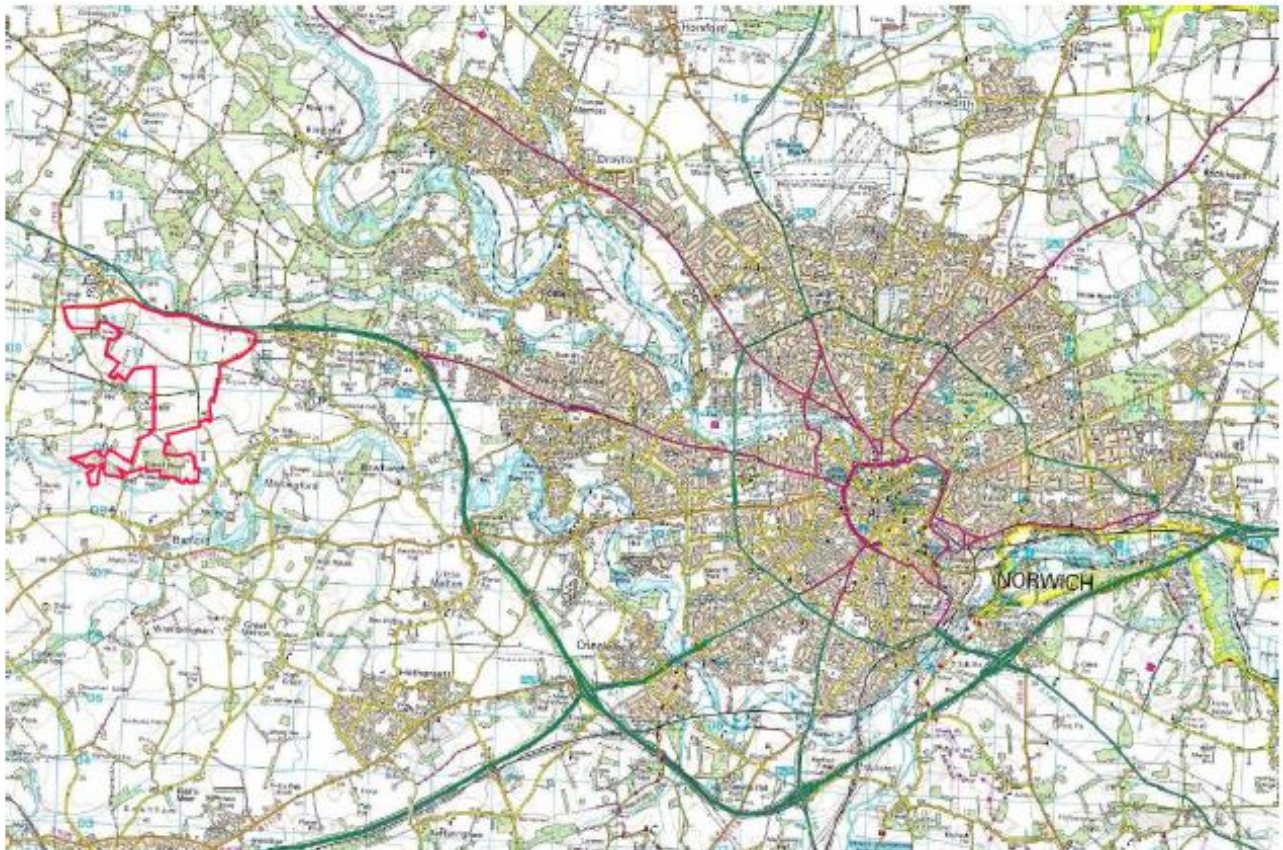
2 SITE DESCRIPTION

The Site is located at Honingham Thorpe to the south of A47 trunk road in County of Norfolk (Grid Reference: TG102110) and covers an area of approximately 367.5ha. The site is bounded to the north-west and west by Mattishall Road and to west by Norwich Road respectively and by open farmland to the east and south. The approximate red line boundary of the 'Phase 1' site is shown in **Insert 2.1**.

There are a series of ponds within the site, with majority located at the south. The main access points to the site are from the north, off the A47 at the Honingham Roundabout and Easton Roundabout.

There are existing buildings located south and south-east of 'Phase 1 West' and to the west of 'Phase 1 East'. As the Site has not been previously developed, it is considered a greenfield site. The 'Phase 1' locations are shown in **Insert 2-1**.

Inset 2-1: Site location plan



3 UTILITIES ASSESSMENT

The Utilities Assessment in respect of existing services (New Roads and Streetworks C2) to support development at the Site considers:

- Gas - Cadent.
- Electricity - UK Power Networks.
- Potable Water and Foul Drainage - Anglian Water.
- Telecommunication-BT Openreach.

The key stages of these assessments is to establish locations, routes, within close proximity of the site

3.1 Overview of Utilities Assessment

Utility companies were approached to enquire about the presence of existing apparatus, local to and within the proposed development site together with provision of new services for the site.

Existing services for 'Phase 1' are indicated on Drawings PB7750-RHD-GE-SW-DR-D-0500 and PB7750-RHD-GE-SW-DR-D-0501, in **Appendix B**. The drawings are based on record data received from service providers as shown in **Appendix C**.

PPE have not been made to the above-mentioned service providers at this stage. Through the PPE process information including; budget cost estimates, potential connection points, required reinforcement of the network and any further work or studies that would be required will be determined.

3.2 Gas

Record data received from Cadent Gas shows there are no gas mains running in close proximity to the Site. Following a review of existing information supplied by 'Brown & Co.' regarding the assessment of gas transmission lines by National Grid gas apparatus, the plan shows no gas main supply to the neighbouring buildings close to the site. However, it appears National Grid has a Low-Pressure main on the Norwich Southern Bypass located approximately 1000m east of Easton Roundabout.

Further investigation regarding the site would have to be undertaken by either Cadent Gas or National Grid at the PPE stage to establish feasible options for the provision of gas mains to the Phase 1 development.

3.3 Electricity

UKPN has primary distribution cables of over 11kV up to 33kV and secondary distribution HV cable over 230/400V and up to 11kV whose approximate routes run across 'Phase 1 West'. The HV cable runs along the A47 at the north of 'Phase 1 West' and continues to north verge of the A47 mainline and across the site to a Church of England building, located south of Easton Roundabout. A HV cable is also located to west of Blind Lane and Colton Road, which serves Mill Cottage at the west of the 'Phase 1 East'.

There is also LV cable located at the southern verge along the A47, Norwich Road at the south of the development and west of Blind Lane near the 'Phase 1 East' development site. LV cables also appear to run along a local road to serve properties west of Barford Road and between Macerator Station and buildings both at the south of Marlingford Road

The HV cable which runs in Mattishall Road and Norwich Rd through to A47 between Honingham Roundabout and Easton Roundabout provides primary distribution. This appears to serve the St Peter's Church at the south-west of Easton Roundabout. The HV cable is also located at the western verge of Barnham Broom and terminates at northern footway of Mattishall Road outside the west side of 'Phase 1 West'

The secondary HV distribution cable whose approximate route runs in Mattishall Road and Colton Road appear to serve buildings adjacent to the Colton Road and Fellowes Road. The 230/400V cable run in the Mattishall Road could potentially serve the Phase 1 West units. This will have to be confirmed by the service provider at the PPE stage.

LV underground cable runs within the site at north of 'Phase 1 East and south west of Easton Roundabout'. Depending on its depth, this main may need to be diverted as result of the works to construct the development site accesses, subject to confirmation by UKPN.

There are existing high voltage cables located outside 'the development running west of the Country Park across Barford Road at the south of the Country Park . The cable also runs through west side of 'Phase 1 West' development and splits into two routes, taking both the north west and the south west directions. At the south west, one route appears to serve Greenacre Farm, located south west of the existing lake and other route continues through to 'Phase 1 West'. On the north west, one route serves nearby development located north of the Norwich Road and the other route runs further south of the development.

3.4 Potable Water

Anglian Water has an existing 355mm HPPE/PE100 potable water main and a decommissioned water main near the site on the west, south and east of the Honingham roundabout along the A47 through Easton Roundabout. Both water main and decommissioned water main at the east of the Honingham Roundabout are located within the southern verge of A47.

The potable main located at the south of the Honingham Roundabout could potentially be utilised as a connection point to service the 'Phase 1 West' development. However, this will need to be confirmed by Anglian Water at the Pre-Planning Enquiry stage.

There is also a 180mm water main at the southern verge of A47 between St Andrew's Church and 150m west of Church Farm Cottages. This changes to a 6in PVCu pipe runs across the site outside east and south of 'Phase 1 West' and on the north of A47 along Taverham Road. This appears to serve nearby buildings adjacent to Honingham Thorpe and Taverham Road respectively. The 6in PVCu connects to a 4in CI at the south of the development on Norwich Road. There is also 3in CI water main on Highhouse Farm Lane which connects to 4in CI pipe its junction with Norwich Road. The 4in CI pipe continues on the south side of Norwich Rod and changes to 3in CI on The Street and continues along Church Lane and Marlingford Road serving nearby buildings. The 3in CI water main changes to 4in CI at the junction between Marlingford Road and Colton Road and to continues to run along the western verge of Colton Road.

3.5 Foul Drainage

There appears to be a 150mm VC pipe located outside the site boundary to the south at Highhouse Farm Lane and along Norwich Road, where it runs to connect to northern and southern side of the buildings. From the Norwich Road, The 150mm VC pipe diverts onto the street, Barford Road to Marlingford Road before connecting to 80mm CI pipe which appears to be a rising main at the south of Marlingford Road. It also appears that Anglian Water has an existing 100mm PVC sewer which seems to be a rising main, that run west and east of A47 Honingham Roundabout.

Similarly, this is as located at the east of the roundabout within the southern verge of the A47 mainline through to southern verge of Easton Roundabout.

3.6 Telecommunications

BT Openreach has existing cables running north of 'Phase 1 West' in Mattishall Road and Colton Road. The cables also run outside the west and south of development on Barnham Broom Road and Barford Road respectively and along west boundary of the development through to Highhouse Farm Lane and Norwich Road. The existing cable also runs in the A147 mainline between the Honingham Roundabout and Easton Roundabout, within the site at Blind Lane, Colton Road, Marlingford Road, The Street at the west of 'Phase 1 East. These cables appear to provide services to the nearby buildings.

Openreach also inferred and planned cables serving properties at the west of Berrys Lane and The Street outside the development.

Openreach services to the buildings located west and east of The Street could provide a potential connection point for 'Phase 1 East' subject to PPE Enquiry. The cable is located in Taverham Road, north of A47, and outside the development on Chapel Street at the south of Country Park.

3.7 Other Utilities on Site

The following telecommunication companies have indicated they do not have apparatus within the vicinity of the site:

- Virgin Media;
- GTC
- Vodafone
- KPN
- Sky
- Plancast;
- Verizon;
- Gtt;
- Energetics;
- Colt Technology Services (also known as C. A Telecom, UK Limited);
- Centurylink Communications UK Limited; and
- Telent