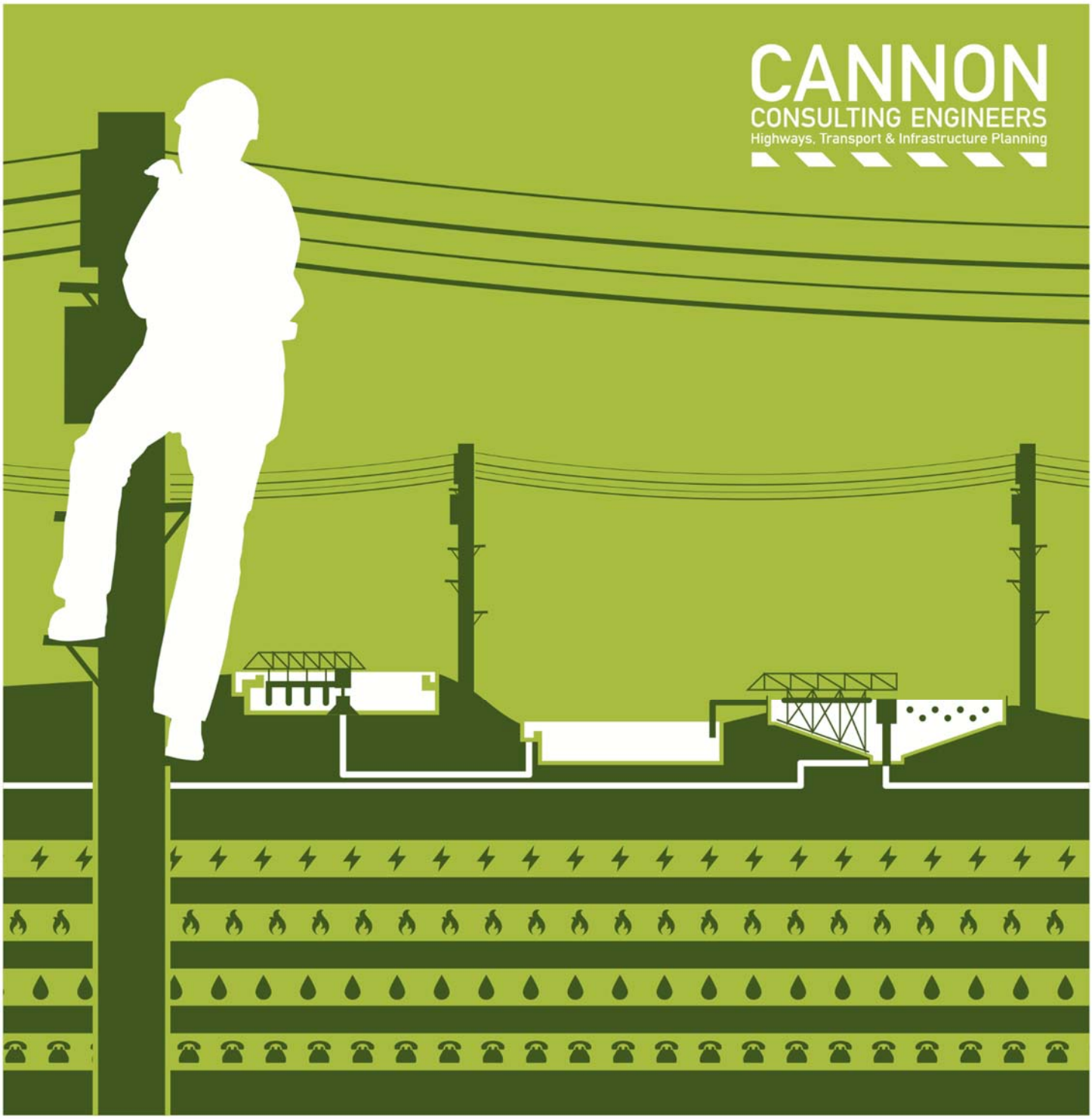


# utilities and wastewater assessment

**Land at Breck Farm, Taverham, Norfolk**

**Ref: CCE/U741/SA-02**

**December 2018**

**For Scott Properties**

**DOCUMENT REVIEW SHEET:**

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The validity of the statements made in this report may vary over time as network alterations occur.

| Reference | Date | Author | Checked |
|---|---|---|---|
| CCE/U741/SA-01 | May 2017 | JA-M | RT |
| CCE/U741/SA-02 | December 2018 | JA-M | RT |
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3. Wastewater Drainage

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A. Combined Services Plan

# 1.0 Introduction

1.1 This report has been prepared to provide an overview of the servicing constraint and supply implications associated with the proposed development of land at Breck Farm, Taverham, Norfolk. The site is also referred to as "land between Fir Covert Road and Reepham Road".

1.2 The site lies on the northern edge of Taverham, south of the A1270 Northern Distributor Road, at Ordnance Survey grid reference 616611, 315424.

1.3 With the exception of Breck Farm itself, the site is a greenfield site and is therefore not connected to the local utility networks; however, the site does border the serviced settlement of Taverham.

1.4 The content of the report relates to the site being developed to provide up to 1,400 residential dwellings.

1.5 A combined services plan highlighting the existing service infrastructure in the vicinity of the site is provided within Appendix A.

**Local Plan**

1.6 The Greater Norwich Local Plan (GNLP) December 2017 Housing and Economic Land Availability Assessment (HELAA) includes a high level assessment of the suitability of each site with regards to the capacity of utility networks. This site has been given the reference GNLP0337.

1.7 This site is given an 'Amber' classification for Utilities Capacity and a 'Green' classification for Utilities Infrastructure. The latter 'Green' output refers to no constraints presented by strategic utilities infrastructure crossing the site.

1.8 Appendix A of the HELAA explains that a site is considered to have an 'Amber' Utilities Capacity classification if one or more of the utility networks (electricity, gas, water supply, and wastewater) does not currently have spare capacity to serve the site, but that there is the potential for network improvements to be made which will provide the required capacity. Given this definition it is reasonable to expect the 'Amber' category to apply to a significant number of the HELAA sites.

1.9 Appendix A of the HELAA discusses that utility providers will be consulted as part of the HELAA. Paragraph 5.6 of the HELLA clarifies that the utilities capacity assessment element was established from written comments from Anglian Water. Following meetings with UK Power Networks and National Grid (energy providers) there were no known overriding constraints to the delivery of sites. Paragraph 5.10 of the HELAA goes on to explain that Anglian Water assessed the sites under their own criteria. It is reasonable to conclude therefore that a positive assessment from Anglian Water (an 'Amber' or 'Green' output) can be considered robust.

## 2.0 Utilities

**Electricity**

2.1 The electrical network in the area is owned and maintained by UK Power Networks (UKPN). There are existing high and low voltage cables located within the adjacent road networks. There are also a number of high voltage cables crossing the site which can be undergrounded / diverted in accordance with the wayleave agreement and as required to suit the proposed development layout.

2.2 Initial correspondence with UKPN provides an outline connection strategy for serving the proposed scale of development. The strategy includes laying two high voltage cables (approximately 1,500m) from Horsford Primary Substation to the site, establishing four on-site sub-stations and laying low voltage property supplies to provide 1,400 connections.

**Gas**

2.3 Cadent Gas (CG) has medium and low pressure gas mains within the adjacent road networks.

2.4 CG has confirmed that a connection can be made to the existing medium pressure main located within Reepham Road to the east of the site. As sufficient spare capacity exists there is no anticipated need for off-site reinforcement works; however, with the connection being to a medium pressure main there will be a requirement to locate a gas governor on the site.

**Water Supply**

2.5 There are existing Anglian Water (AW) potable water mains within the adjacent road networks.

2.6 2017 correspondence with AW confirmed that there was sufficient capacity within the existing network to supply the proposed scale of development and hence no off-site reinforcement works would be required.

2.7 The identified point of connection for the new supply was to the 355mm water main located within Fir Covert Road on the western boundary.

2.8 The new charging rules introduced by Ofwat in April 2018 updated the way in which water companies charge for new connections to their clean water supply network. Under the new charging regime each development pays a per connection charge. The funds raised under the new regime are pooled (by AW) and used for carrying out improvements to the network to cater for growth in the region. Despite this development not requiring network improvements, the per connection charge applies throughout the AW region.

**Telecommunications**

2.9 BT operates a service in the area and has overhead and underground cables located within the adjacent road networks in close proximity to the site. There is also an existing supply to Breck Farm.

2.10 BT has a statutory obligation to provide telecommunication services but it will be the developer's responsibility to arrange the required service at the appropriate time when the development proposals are advanced.

2.11 There are no Virgin Media or Viatel cables in the vicinity of the site and no strategic additions to these networks are envisaged in the immediate future.

**Pipelines**

2.12 Linesearch has shown there are no major pipelines or transmission infrastructure in the vicinity of the site that would act as a constraint to the proposed development.

**HELAA Conclusion**

2.13 Only the local electrical network has insufficient spare capacity to serve the proposed scale of development which would trigger an 'Amber' classification under the Utilities Capacity heading within the HELAA. However, in line with the definition of an 'Amber' rating within Appendix A of the HELAA, initial correspondence with UKPN has defined an outline strategy for serving the proposed development which highlights that improvements to facilitate capacity are available.

# 3.0 Wastewater Drainage

**Network**

3.1 Anglian Water (AW) own and maintain the wastewater network serving Taverham. There are a number of public foul water sewers in the vicinity of the site servicing the adjacent development.

**Conveyance**

3.2 2017 correspondence with AW stated that a direct connection to the public wastewater system, in its current form, is likely to have a detrimental effect on the network. This is unsurprising considering the scale of development proposed and corresponding wastewater generated.

3.3 The new charging rules also updated the way in which sewerage providers charge for new connections to their wastewater network. Under the new charging regime each development pays a per connection charge. The funds raised under the new regime are pooled (by AW) and used for carrying out improvements to the wastewater network to cater for growth in the region. The new charging regime helps to remove the variability in sewerage connection charges via the Section 98 process by effectively spreading the cost of improvements throughout a provider's region. This in turn helps to improve site viability by removing what would have previously been classed as an abnormal cost.

3.4 The new charging regime means that required improvements (mitigation) in order to accept wastewater from the proposed development into the AW network will be funded and provided by AW.

**Treatment**

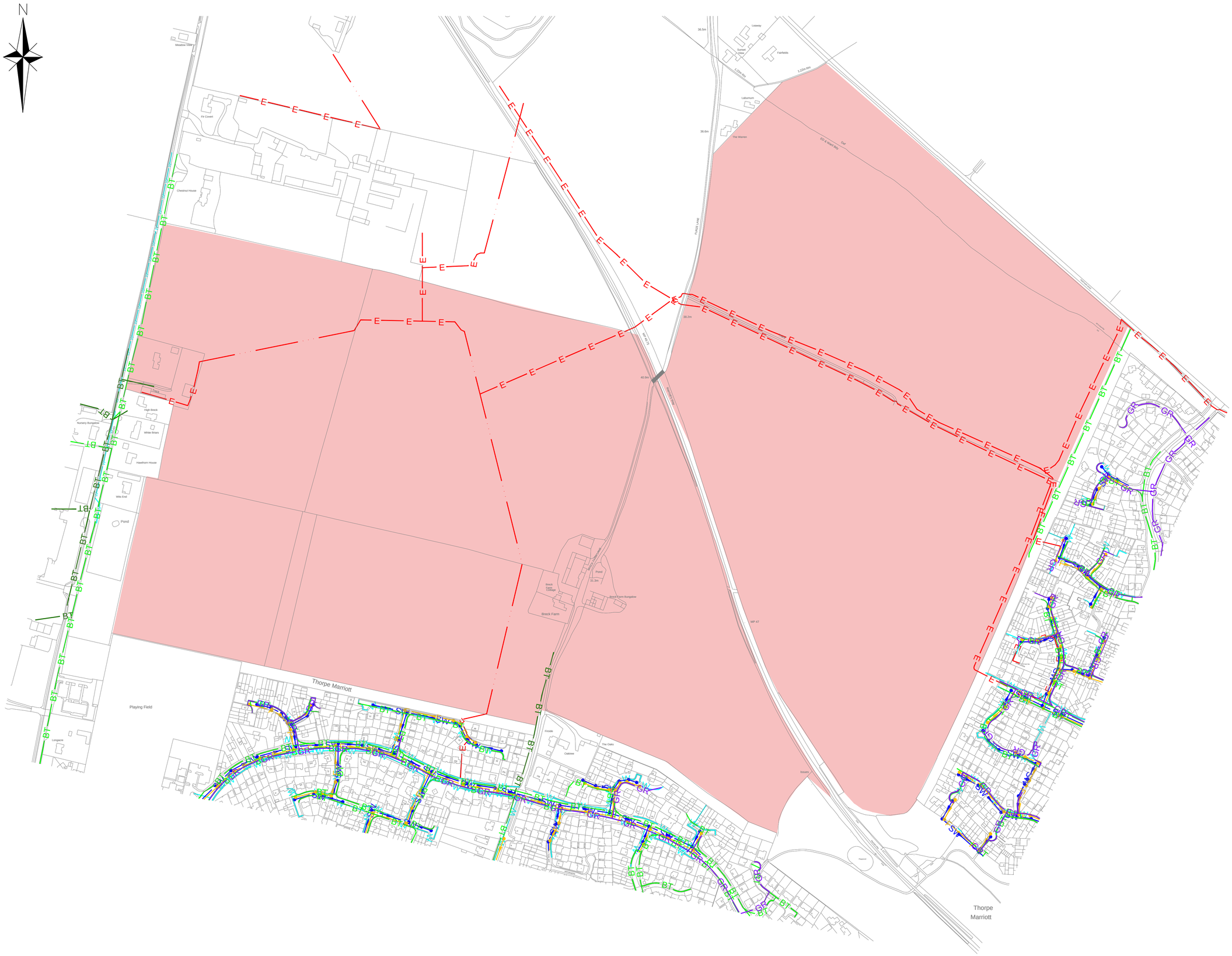
3.5 The proposed development is in the catchment of Whitlingham Trowse Water Recycling Centre (WRC), which is reported to have available capacity to treat the flows arising from the proposed development.

**HELAA Conclusion**

3.6 The wastewater conveyance network has insufficient spare capacity to serve the proposed scale of development which would trigger an 'Amber' classification under the Utilities Capacity heading within the HELAA. However, the new charging regime provides the mechanism for network upgrades which aligns with the definition of an 'Amber' rating within Appendix A of the HELAA where improvements to facilitate capacity are available.

# Appendices

# Appendix A – Combined Services Plan




KEY:

- SITE AREA
- UKPN HV OH ELECTRIC CABLES
- UKPN HV UG ELECTRIC CABLES
- UKPN LV UG ELECTRIC CABLES
- ANGLIAN WATER FOUL WATER SEWER
- ANGLIAN WATER SURFACE WATER SEWER
- ANGLIAN WATER POTABLE WATER MAIN
- NATIONAL GRID LP GAS MAIN
- BT UG CABLES
- BT OH CABLES

**Approximate positions only**

The position of the apparatus shown on this plan is given without obligation and warranty, and the accuracy cannot be guaranteed. The actual position of the services must be verified and established on site before any work is undertaken.



| REV | DESCRIPTION | DE | DR | CH | PA | DATE |
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| DESIGNED BY | DRAWN BY | CHECKED BY | PASSED BY |
|---|---|---|---|
| - | JA-M | RBT | - |

| SCALES @ A1 SIZE | DATE | ISSUE STATUS |
|---|---|---|
| N.T.S | 04/02/2017 | PRELIMINARY |

PROJECT TITLE

LAND AT BRECK FARM, TAVERHAM, NORFOLK

DRAWING TITLE

COMBINED SERVICES PLAN

CLIENT

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