## 14.0 UTILITIES

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## 14.1 INTRODUCTION

- 14.1.1 Brookbanks Consulting Limited has been appointed to complete this chapter of the ES, based on the Service Supply Statement (Appendix 14.01), for a Proposed Development of 850 dwellings on land at Bankside, Banbury Phase II.
- 14.1.2 This chapter considers the likely utilities effects that may arise as a result of the Proposed Development and to identify the outline requirements for any necessary reinforcements to existing networks.
- 14.1.3 This report summarises the findings of the study and specifically addresses the following issues:
  - Identify potential utility diversions and upgrading works required to accommodate and service the Proposed Development.
  - Evaluate the significance of potential impacts in terms of beneficial/adverse consequences.
  - Establish mitigation measures where appropriate.
  - Identify residual impacts.

## 14.2 METHODOLOGY

- 14.2.1 Baseline conditions at the site relating to Utilities have been established using both published information and detailed site investigations.
- 14.2.2 For each service, the utility provider has given an assessment of the likely reinforcement and/or upgrades to their networks and potential diversions required to accommodate the Proposed Development, and this information has been used to determine the potential impact on the relevant utilities.
- 14.2.3 The following bodies have been consulted while completing the study:

Thames Water - Potable Water

• Thames Water - Foul Water

Western Power Distribution - Electricity

• SGN - Gas

• BT Openreach - Telecommunications

• Virgin Media - Telecommunications

• Vodafone - Telecommunications

• Sam Knows Website - Broadband Availability

• Multi Utility Company – GTC - Electricity and Gas

• Multi Utility Company – UK Power Solutions - Electricity and Gas

14.2.4 For each service, the utility provider has given an assessment of the likely reinforcement and/or upgrades to their networks and potential diversions required to

accommodate the Proposed Development, and this information has been used to determine the potential impact on the relevant utilities.

Legislation

## 14.2.5 The introduction of the Water Act 2003 has:

- Formalised the procedures for developers wishing to complete self-lay schemes through multi-utility businesses.
- Implemented revised financial procedures, being more developer focused by offsetting capital costs of infrastructure against supply revenue.
- 14.2.6 The result is that the provision of water and drainage infrastructure for new developments is now cheaper.
- 14.2.7 Under current regulations, the new off-site and on-site infrastructure can be implemented by multi-utility contractors, with the exception of a small element of non-contestable works where the new supply is connected to the existing network. Alternative asset owning businesses are able to implement and supply a strategic area through an Inset Appointment. Alternative asset owners normally procure the water supply through a bulk supply contract with the incumbent business or by an alternative means of supply such as a borehole.
- 14.2.8 The Water Act 2003 allows two principal options in terms of financial arrangement between the developer and water infrastructure business. Both take into account the revenue earned by the business as a result of the new supplies.

- The Discounted Aggregate Deficit (DAD) / Commuted Sum method calculates the cost of implementing and funding the required infrastructure over a ten year period. The year on year income from new supplies is then offset against the funding, which when brought forward to an equivalent present day cost, identifies the contribution attributed to the developer. The mains are then installed by the water infrastructure company.
- The Asset Value method, whereby the mains may be laid by a multi-utility contractor, calculates the year on year income generated from the water supply, which is then paid back to the developer on the adoption of the mains. As a multi-utility contractor generally completes the work at a lower cost than the water supplying company, the Asset Payment method can often be the most cost effective.
- 14.2.9 The procedures outlined in the Water Act 2003 should result in all water businesses (including the incumbent operator) giving similar rebates through either the Asset Value or Commuted Sum procedures. The Asset Value method generally offers a cheaper scheme for site developers wishing to procure services through a multi-utility contract.
- 14.2.10 Ofwat has recently instigated significant changes into the charging regimes of the water companies. Whereas prior to April 2018, the water companies would charge developers for any reinforcement works to the existing network directly attributable to the new demand, under the new charging rules the developer has to only fund infrastructure works to the nearest practicable point of connection (defined as network of an equal or greater size to the infrastructure supplying the site). As such

any reinforcement works are covered by the Infrastructure Charge, payable per plot for all new connections.

- 14.2.11 Competition in the electrical market is now reasonably mature and a developer is free to procure third party Distribution Network Operators (DNOs) to provide an embedded network, or indeed multi-utility / third party installations. The likes of Metropolitan and GTC take a holistic view in putting together infrastructure reinforcements, site distribution and supply packages and off-set the costs with anticipated future revenue through the transmission and supply of service to give a better financial arrangement and single point of responsibility for the developer.
- 14.2.12 Early deregulation in the gas infrastructure market has led to a competitive environment. Third party shippers are permitted to offset the capital cost of infrastructure against the income generated from conveying the gas which may reduce future development costs.
- 14.2.13 BT Openreach is the incumbent national communications business throughout most of the country, with the exception of K-Com in the Hull area. They own and operate the majority of fibre and copper telecoms networks in the country.
- 14.2.14 With BT Openreach controlling the existing cables feeding residential development, and the exchange (known as the 'local loop' or 'last mile'), they have maintained a dominant position in controlling the communications sector.
- 14.2.15 The industry regulator, Ofcom has completed much work in unbundling the local loop and bringing competition into the residential market. Following this

deregulation, Virgin Media, TalkTalk and Vodafone are undertaking major investment to place switch equipment into BT's existing exchanges and hence allow direct access to their network. This system, known as Carrier Pre-Selection is becoming increasingly popular, although wholesale line provision down at local loop level, within the residential market, has yet to develop. Accordingly, BT or local cable franchise cable operators are the prime source of network connections on residential sites.

14.2.16 Virgin Media and GTC offer rival options to supply telecoms to residential developments, although the choice of alternative ISPs is more restricted than via the BT Openreach network.

Assessment Process

14.2.17 The assessment process reflects that described generally in Chapter 1. The Baseline Conditions describe and assign a sensitivity value to the environmental receptors, such as network outage. The effects of the Proposed Development are then considered and the magnitude of change to the environmental receptor is described or quantified. Lastly, to determine the significance of the environmental effects the matrix described in Table 14.3 is applied.

14.2.18 The following scale of significance is used where an impact is identified:

- Major Loss of resource and/or quality and integrity of resource; severe damage to key characteristics or elements, for example injuries to people or damage to buildings through flooding.
- Moderate Loss of integrity or partial loss of attribute, for example damage or loss of access through flooding

- Minor Minor impact / minor loss of attribute, temporary loss of access through flooding.
- Negligible Insignificant impact to water quality or flood risk

**Table 14.1: Sensitivity of Environmental Receptor** 

Sensitivity	Receptor
High	Internationally / Nationally Important
Medium	Regionally Important
Low	Locally Importance

Table 14.2: Magnitude of Change to Environmental Receptor

Extent of Change	Magnitude
High	Entire loss / gain or major variation to key elements / features of the baseline conditions so that the post-development character / configuration of the baseline condition would be fundamentally changed.
Medium	Loss / gain or variation to one or more key elements / features of the baseline conditions so that the post-development character / configuration of the baseline condition would be materially changed.

Low	Minor change from the baseline conditions. The changes are
	measureable, but not material in the sense that the changes are
	similar to those pre-development.
Negligible /	Inconsequential or no change from baseline conditions
None	

**Table 14.3: Matrix of Significance of Impacts** 

Sensitivity of Receptor	Magnitude of Change			
	High	Medium	Low	Negligible/None
High	Major	Major	Moderate	Not Significant
Medium	Major	Moderate	Minor	Not Significant
Low	Moderate	Minor	Minor	Not Significant

**Table 14.4: Definition of Significance of Environmental Impacts** 

Significance of Impacts	Definition
Major	An effect which in isolation could have a material influence on the decision making process.

Moderate	An effect which on its own could have moderate influence on decision making, particularly when combined with other similar effects.
Minor	An effect which on its own is likely to have a minor influence on decision making, but when combined with other effects could have a more material influence.
Negligible	An effect which on its own or in combination with other effects will not have an influence on decision making.

## Limitations

- 14.2.19 Third party information has been used in the preparation of this report, which Brookbanks Consulting Ltd, by necessity assumes is correct at the time of writing.
- 14.2.20 The current analysis of the utilities and impacts is based on a point in time analysis of the utilities network and will be affected by any alterations to the networks carried out by the incumbent utilities providers.

## 14.3 BASELINE CONDITIONS

Water Supply

- 14.3.1 Thames Water (TW) has been consulted regarding the location and capacity of their existing network within the vicinity of the Site.
- 14.3.2 TW operate a 3" and 6" potable water main to the south and south-west of the Site along Banbury Road and Oxford Road.
- 14.3.3 Additional potable water mains are shown to the south and west of the Proposed Development, along individual roads feeding the residential developments (which includes 4" and 6" mains). 125mm HPPE and 250mm HPPE proposed mains are shown to the west of the Proposed Development.

Foul Water Sewerage and Storm Water Drainage

- 14.3.4 Thames Water (TW) has been consulted regarding the location and capacity of their existing sewerage network within the vicinity of the Site.
- 14.3.5 TW operate Foul Water Sewers and Foul Rising Mains within the vicinity of the Proposed Development. A 500mm Foul Rising Main is shown to cross Proposed Development through the centre of the Site.
- 14.3.6 Additionally, TW operate a 300mm Foul Water Sewer south of the Site within an open field, with additional foul water sewers and foul rising mains to the south-west of the Site, supplying the residential dwellings.

Electricity Supply

14.3.7 Western Power Distribution (WPD) has been consulted regarding their existing

network locations.

14.3.8 WPD operate an 11kV High Voltage (HV) and Low Voltage (LV) network to the

north-east of the Proposed Development adjacent to the M40. WPD also operate an

11kV to the south-west of the Site off Oxford Road, and is within close proximity to

the Proposed Development, but does not appear to be crossing the Site.

14.3.9 11kV networks are shown to the south-west along Oxford Road, with addition HV

and LV networks shown to the west of the Site along individual roads, feeding the

residential area.

14.3.10 In addition to WPD, GTC have proposals to install HV and LV cables adjacent to the

west of the Site.

Gas Supply

14.3.11 SGN has been consulted regarding the location of their existing network in the

vicinity of the Site.

14.3.12 Asset plans provided by SGN highlight Medium Pressure (MP) networks to the west

of the Site along Banbury Road and south of the Site along Twyford Road.

Additionally, Low Pressure (LP) gas mains are shown along Oxford Road.

14.3.13 SGN also operate LP gas mains to the north-west of the Proposed Development along individual road, supplying the adjacent residential dwellings.

14.3.14 In addition to SGN, GTC have proposals to install LP mains adjacent to the west of the Site.

**Telecommunications** 

14.3.15 The main incumbent telecommunications provider is BT Openreach. Existing BT Openreach networks to the south-west of the Site along Oxford Road.

14.3.16 Further BT assets are shown to the west of the Proposed Development supplying the residential areas off Oxford Road.

14.3.17 Virgin Media and Vodafone also operate apparatus within close proximity of the Site, also shown within Appendix 14.01. Both operate apparatus to the -west along Oxford Road.

Service Supply Competition

14.3.18 The traditional procurement route, up until recently, has been to provide service supplies to a new development through a local network operator. With the incumbent companies having a monopoly, competition in the market was poor.

14.3.19 However, following deregulation of the service supply networks, through the likes of Ofgen, Ofcom and Ofwat, independent network operators have been able to enter the market and provide new service supplies to developments.

- 14.3.20 Companies such as GTC and Connect take a holistic view in putting together infrastructure reinforcements, site distribution and supply packages and off-set the costs with anticipated future revenue through the transmission and supply of service to give a better financial arrangement and single point of responsibility for the developer.
- 14.3.21 These businesses use a multi-utility business to implement the infrastructure. The independent companies are still regulated by the relevant office of regulation and subsequently asset owners must:
  - Ensure that the installed network meets regulated standards
  - Design to an operating lifetime of 40+ years
  - Manage a return on their investment
  - Ensure that the existing network performance is not compromised
- 14.3.22 Throughout this document a review has been completed for the provision of service supply infrastructure at the site through the local network operators. This approach provides a good indication as to the likely upgrading requirements for the local infrastructure, but at this stage, does not demonstrate a competitive cost for services procurement.
- 14.3.23 Multi-utility companies provide significant investment to the provision of services at a development based on a whole life financial model, considering revenue from supply conveyance. Due to these investments, large reductions can be achieved to the capital cost for the provision of services at a site.

14.3.24 A development of this size has the potential to benefit a great deal from the financial investment of companies such as Connect and GTC. As such independent companies may be utilised to provide final network supplies for the Site.

14.3.25 This report summarises the details relating to the current network conditions outlining the requirements for reinforcements and provision of supply through the existing network.

#### 14.4 IMPACTS

During Construction – Water

Supply Loading

14.4.1 To assist Thames Water in their capacity assessment of their existing network, a total Peak Clean Water Demand of 11.31/s was provided.

Network Requirements

- 14.4.2 TW has confirmed that there is only enough capacity within the current local network for 49 properties and they are unable to meet the full development quantum without the appropriate upgrades/offsite reinforcement.
- 14.4.3 To ascertain the reinforcement work required, modelling will be required. The modelling will design a solution and build necessary improvements, where required.

14.4.4 To progress with modelling, Thames Water will need confirmation of the developer

owning the land and either having outline/full planning permission.

14.4.5 However, in advance of TW's formal response, Ofwat has recently instigated

significant changes into the charging regimes of the water companies. Whereas prior

to April 2018, the water companies would charge developers for any reinforcement

works to the existing network directly attributable to the new demand, under the new

charging rules the developer has to only fund infrastructure works to the nearest

practicable point of connection (defined as network of an equal or greater size to the

infrastructure supplying the site). As such any reinforcement works are covered by

the Infrastructure Charge, payable per plot for all new connections.

Diversions – onsite

14.4.6 From the asset records obtaining to date, no TW potable water assets are shown to

cross the Proposed Development. Once confirmed at the detailed design stage, TW

could be contacted to confirm whether any necessary diversions will be required.

Diversions – offsite

14.4.7 TW operate potable water mains to the south and south-west along Banbury Road and

Oxford Road. Additionally TW have proposed water main to the west of the Site.

Once confirmed at the detailed design stage, TW may be contacted to confirm

whether their assets cross the Proposed Development and whether any necessary

diversions will be required

During Construction – Foul Water

Supply Loading

14.4.8 To assist TW in their capacity assessment of their existing foul network, a total Foul

Water demand for the site of 10.751/s has been calculated by TW during their

assessment.

Network Requirements

14.4.9 TW has been consulted to provide a pre-development enquiry for the Proposed

Development. TW has confirmed that the sewerage network will not have enough

capacity to accommodate the proposed foul water flows from the Proposed

Development. Therefore TW confirm they will require investigations to be

undertaken to assess the impact of the development by hydraulic impact study to

determine possible connection points.

14.4.10 To progress with modelling, Thames Water will need confirmation of the developer

owning the land and either having outline/full planning permission.

14.4.11 Any reinforcement works are covered by the Infrastructure Charge, payable per plot

for all new connections, as detailed previously within paragraph 14.4.5.

Diversions – onsite

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14.4.12 A 500mm Foul Rising Main is shown to run through the centre Proposed Development. However, once confirmed at the detailed design stage, TW may be contacted to confirm whether any necessary diversions and/or protective measures will be required.

Diversions – offsite

14.4.13 TW do not operate any assets which are shown within close proximity of the Site, with the exception of the Rising Main which crosses the Site. However once confirmed at the detailed design stage, TW may be contacted to confirm whether their assets cross the Site and whether any necessary diversions will be required.

During Construction – Electricity

Supply Loading

14.4.14 To assist WPD in their capacity assessment of their existing network, a total Electricity Demand for the Site of 1,700kVA was provided.

Network Requirements

14.4.15 WPD has provided a budget estimate to supply the Proposed Development of £1,190,000.00.

Diversions – onsite

14.4.16 From asset records obtained to date, WPD operate HV networks within close proximity of the Site in the north-east and north-west, which could potentially cross the Proposed Development. Once confirmed at the detailed design stage, WPD and GTC may be contacted to confirm whether any necessary diversions of their existing assets are required.

*Diversions – offsite* 

14.4.17 WPD operate HV and LV networks along Oxford Road to the south and west within close proximity of the Site. Once confirmed at the detailed design stage, WPD and GTC may be contacted to confirm whether any necessary diversions of their existing assets are required.

During Construction – Gas

Supply Loading

14.4.18 To assist Cadent Gas in their capacity assessment of their existing network, a Total Peak Gas Demand for the Site of 19,550kWh and an annual gas demand of 14,450,000kWh were provided.

Network Requirements

14.4.19 SGN has provided a budget estimate of £590,750.00 to supply the Proposed Development. This estimate includes for the installation of appropriately sized gas infrastructure at suitable location. The estimate also includes for carrying out the necessary excavation and reinstatement of the trenches up to the Site boundary.

14.4.20 SGN has confirmed a Point of Connection to the Medium Pressure Gas Main in Oxford Road opposite the junction of Weeping Cross.

Diversions – onsite

14.4.21 SGN do not operate any assets which are shown to cross the Proposed

Development. Once at the detailed design stage, SGN and GTC may be contacted to

confirm whether any necessary diversions of their existing assets are required.

Diversions - offsite

14.4.22 SGN operate LP/MP mains along Oxford Road/Banbury Road and MP mains to the

south along Twyford Road which may be affected by. Any assets which are shown to

be in close proximity of the Proposed Development. Once at the detailed design

stage, SGN and GTC may be contacted to confirm whether any necessary diversions

of their existing assets are required.

Supply Requirements

14.4.23 A development of this nature will require a suite of communication services, typically

being:

FTTP:

Fibre to the Premises (FTTP) technology, where the fibre

runs all the way to the home or business, from the local

exchange is being deployed in certain areas. FTTP will offer

the top current download speed of 330Mbp for residential

properties and 1Gbps for commercial properties. This is labelled 'Ultrafast Broadband' by BT Openreach.

**ADSL:** 

Asymmetric Digital Subscriber Line (ADSL) is the basic broadband service delivered over the traditional copper network and predominately in use in rural areas offering up to 24Mbps downloads, and up to 2.5Mbps upstream. This is adversely affected by distance from the exchange.

Cable Television:

Cable television services provide an option for the proposed domestic dwellings to replace the need for satellite dishes.

Cable Television is provided by Virgin Media, BT (BT Vision) and GTC.

FTTC:

Fibre to the Cabinet (FTTC) relies on the existing copper network between the telephone cabinets but is then fed by fibre optic cables to the local exchange. This reduces the loss experienced over the copper network. Download speeds offered can be up to 80Mbps.

LLU:

Local Loop Unbundling (LLU) is the process of opening up a telephone exchange so that it can be used by a number of different broadband providers. These broadband providers are then able to use connections from the telephone exchange through to the customer's homes to deliver home broadband.

ISP:

Internet Service Providers (ISP) supplies the end user with internet access services over the telecom network. The speeds offered by the ISP are restricted by the physical network. The available ISPs delivering services over FTTP are currently limited but will increase as it is rolled out to more customers

to increase the market.

*During Construction – Telecommunications* 

Network Requirements

14.4.24 A Connectivity Assessment can be applied for through BT Openreach to confirm

supply requirements for the Proposed Development. BT Openreach advise the ideal

time for this request is at land purchase stage. The north of the Proposed

Development is covered by the Banbury Exchange, and the south of the Site covered

by the Adderbury Exchange. In addition to BT Openreach, ADSL, an initial review

has identified the following LLU operators are present in the Banbury Exchange:

Sky, Talk Talk (CPW) and Vodafone (enabled since 03/06/2006). In addition to BT

Openreach, ADSL, an initial review has identified the following LLU operators are

present in the Adderbury Exchange: Sky and Talk Talk (CPW).

14.4.25 The Banbury Exchange (approximately 3.2km north-west of the Proposed

Development) can offer FTTC and FTTP, where the Adderbury Exchange

(approximately 1.2km south of the Proposed Development) can only off FTTC and

not FTTP.

Diversions – onsite

14.4.26 From the asset records obtained to date, BT Openreach, Virgin Media and Vodafone

do not operate apparatus which are shown to cross the Proposed Development.

Once at the detailed design stage, BT Openreach, Virgin Media and Vodafone may be

contacted to confirm whether any necessary diversions of their existing assets are

required.

Diversions –offsite

14.4.27 BT Openreach, Virgin Media and Vodafone own apparatus along Oxford Road to the

west of the Proposed Development. Once at the detailed design stage, BT

Openreach and Virgin Media may be contacted to confirm whether any necessary

diversions of their existing assets are required.

During Construction - Offsite Utility Infrastructure

14.4.28 Diversions and/or protection of existing underground offsite utilities adjacent to the

site may be required accommodate the Proposed Development access from Pound

Lane. Localised diversion and/or protections will be agreed for each location at the

detailed design stage.

14.4.29 As the impact on the existing offsite utilities will be limited to the locations of the

proposed new access only, the likely effects arising from the diversion works is likely

to give rise to a minor adverse effect.

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14.4.30 It has been judged that the utility installations during the construction period outlined above will largely involve the digging of trenches to lay new service cabling.

Post Construction - Effects on Existing End User and Future End User

14.4.31 Unmitigated, direct and indirect shortages of service supplies, both locally and in the wider network, due to constraints on the supplying network.

14.4.32 It is assessed that with mitigation measures implemented, construction of the Proposed Development will have Minor Adverse effect on existing end users and/or future end users.

Post Construction - Effects on Existing End User, Future End User and the newly installed Utility

- 14.4.33 Inadequate provision of service supplies to a development can result in local and more widespread reductions in network robustness and supply continuity. Hence, when assessing the supply requirements for a development, appropriate supply operators should be involved in assessing their existing network and given the opportunity to form strategies for dealing with supply growth.
- 14.4.34 It is assessed that with mitigation measures implemented, construction of the Proposed Development will have Minor Adverse effect on existing and future end users

## 14.5 MITIGATION & MONITORING

- 14.5.1 The procedures for managing the construction of the Proposed Development will be set out in a Construction Environmental Management Plan.
- 14.5.2 Specific requirements for diversionary and/or protections to existing utility apparatus will be progressed into detailed design with the incumbent utility providers as the development progresses.
- 14.5.3 The provision of new utility supply infrastructure will be procured via formal applications to the appropriate utility provider and the utilities will be procured to meet the requirements of the phased build out for the development. The on-site utilities installation will be an integral component of the phased development infrastructure provision.
- 14.5.4 In mitigation of the potential construction effects consideration is given to the need to shut down supplies while making new connections, network operators have developed methodologies to permit 'live jointing' or the like whereby the existing network remains fully operational during connection works. During certain operations, and only very occasionally, it remains necessary to temporarily shut down the local network. In such circumstances, the area to be shut down is localised and planned for periods that cause the least disruption. The supplying company is required to give adequate notice to the affected users and ensure that appropriate provision is made for essential supplies.
- 14.5.5 Potential loss of supply through network damage is mitigated through carefully planning of the construction phases of the development. The existing and planned networks will be located on the ground and on plans for all contractors to use during

implementation. Good working practices, such as 'licence to dig' will be employed, encompassed by the Health & Safety file, to control site operations. Such means of control will substantially reduce the potential risk of damage to the supplying network.

14.5.6 Good working practices and site controls will be maintained throughout the site development implementation process to minimise the risk of network 'outages' to the lowest practical level.

14.5.7 In mitigation of the potential Operational effects, all service companies will be involved in developing supply strategies for the planned development. Overall supply capacity and phased load increase assessments will enable the supply companies to assess the necessary provision and where necessary, prepare proposals to reinforce networks, to ensure that the supply demands of the Proposed Development and ongoing requirements are met.

14.5.8 The strict regulatory regimes under which all public service supply companies operate dictate that any network expansion results in no loss or reduction of service.

These will ensure that the minimum regulatory standards are maintained and that no environmental effect results from supplying the site with network services.

Post Construction Stage

14.5.9 Using professional judgement, it has been determined that should be no foreseen mitigation and monitoring required.

## 14.6 CUMULATIVE IMPACTS

14.6.1 The cumulative effects of development growth proposals in the vicinity will be taken into account when finalising service supply strategies with the respective service and utility companies. As such the development will result in a positive effect as it will work as a catalyst that ensures that the local networks complete the necessary upgrades so that they are capable of supplying all growth proposals without prohibitive constraints.

## 14.7 RESIDUAL IMPACTS

Construction Stage

14.7.1 The potential constructional effect is assessed as nil and not significant. Short term potential effects during the construction phases are considered to be minor.

Post Construction Stage

- 14.7.2 Accordingly, the potential Operational effect is also assessed as negligible and not significant.
- 14.7.3 The site, during operation, will not impact on the baseline conditions. Information gathered in relation to the baseline site conditions, when considered in the context of the development proposals and proposed mitigation; does not identify any significant environmental effect or constraint on development.

## 14.8 CONCLUSIONS

- 14.8.1 The significance of the impacts in relation to utilities at the site has been assessed.

  Where possible, the significance has been quantified, and where this has not been possible, it has been assessed on the basis of professional judgement.
- 14.8.2 The potential significance of the effects assumes that the mitigation measures outlined above have been implemented and are fully in accordance with current guidance and the requirements of the regulating authorities.
- 14.8.3 It can be concluded therefore that from a utilities perspective, there will be no adverse environmental impacts resulting from this scheme.
- 14.8.4 Some localised, non-prohibitive reinforcements may be necessary together with protections or diversions where existing plant is affected by the proposals. This will be confirmed once all enquiries have been completed by each respective utility company.
- 14.8.5 Investigations have determined that the potential impacts of the utilities connections to the site are likely to be negligible to minor adverse in the absence of specific mitigation. Standard good practice mitigation measures will be employed during the development which will ensure that there will be negligible effects arising as a result of the Utilities connections to the Site.