Reading Golf Club

Superfast Broadband Strategy Statement

On behalf of **Fairfax (Reading) Ltd and Reading Golf Club Ltd**

Project Ref: 45675/2505 | Rev: 0 | Date: December 2020

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Revision	Date	Description	Prepared	Reviewed	Approved

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1 Introduction

1.1 Overview

1.1.1 Stantec has been commissioned by Fairfax (Reading) Ltd and Reading Golf Club Ltd ('the Applicants') to prepare a Superfast Broadband Strategy Statement (SBSS) for the development at Reading Golf Club for up to 260 residential homes and community provision including a health centre (the 'Proposed Development'). The Application Site sits within the administrative boundary of Reading Borough Council (RBC).

1.2 Purpose of the Strategy

1.2.1 This SBBS has been prepared to address item 19 of RBC's planning application validation checklist (December 2016)[1], which requires a SBSS to be submitted for all proposals of housing development with over 50 units. The guidance states:

1.2.2 "SBSS documents should outline how the developer has considered facilitating the proposed development with Superfast Broadband (24Mbps+) and what discussions they may have had with the Operators in advance of submitting a formal planning application."

1.2.3 The SBSS considers the provision of superfast broadband to the residential elements of the Proposed Development.

1.3 Site Description

1.3.1 Reading Golf Club (RGC) traverses the constituency boundary of RBC and South Oxfordshire District Council (SODC). However, the Application Site falls entirely within the constituency boundary of RBC. The Application Site Location Plan is contained within **Appendix A**.

1.3.2 The Application Site is located within the northernmost suburb of Emmer Green, Reading. Emmer Green is located approximately 3.5 km north of the centre of Reading and has conurbation with Caversham to the south.

1.3.3 The Application Site is approximately 12.1 hectares (ha). The north western boundary abuts the existing section of the RGC within the constituency boundary of SODC. It is bounded to the east by the residential roads of Brooklyn Drive and Kidmore End Road. To the south lies the residential road of Lyefield Court and Emmer Green Primary School. To the south west lies the retirement complex Lyefield Court & the Conifers, which is set back from the boundary. To the west lies the residential roads Eric Avenue and Highdown Hill Road.

1.3.4 The Application Site envelopes 12.1 ha of land, of which approximately 3.83 ha are allocated by way of Policy CA1b in RBC's Local Plan. Policy CA1b makes provision for 90 to 130 residential homes, community provision including healthcare and replacement clubhouse.

1.4 Proposed Development

The development proposals seek permission for an outline planning application, with all matters reserved except access, for the development of land at Reading Golf Club, involving demolition of the existing clubhouse and the erection of a new residential-led scheme, including provision of community infrastructure. An indicative layout plan is provided in **Appendix B**.

[1] Reading Borough Council (2016) Planning applications validation – information requirements checklists and guidance. December 2016. https://www.reading.gov.uk/media/2660/Validation-Checklist-Updated-Dec-2016/pdf/Validation_Checklist_Final_Dec_16.pdf

1.4.1 The Proposed Development will provide up to 260 dwellings of varying types, sizes and tenures. A health centre is also proposed.

1.4.2 There will also be provision of open space with retention of existing landscape features wherever possible, including mature trees and hedgerows. New landscaping features are proposed, such as native tree planting along boundary fences. Footpath links will provide safe routes linking the residential areas with open space.

1.5 Structure of this Report

1.5.1 This SBSS is structured as follows:

- **Section 2: Superfast Broadband Explained** – explains what superfast broadband is, the benefits of superfast broadband in the domestic sector and types of broadband connections;
- **Section 3: Policy Context** – outlines Britain's superfast broadband strategy, as well as the national and local policy context for delivering superfast broadband; and
- **Section 4: Infrastructure Delivery Options** – demonstrates how consideration has been given to facilitating superfast broadband at the Proposed Development.

2 Superfast Broadband Explained

2.1 What is Superfast Broadband?

2.1.1 'Superfast broadband' refers to broadband download speeds of at least 30 megabits per second (Mbps), with download speeds over 300 Mbps defined as ultrafast[2].

2.1.2 Unlike the majority of UK broadband connections, which use copper telephone lines, superfast broadband products use sophisticated fibre-optic cables made up of glass and plastic, which allows a greater throughput of data (i.e. a larger amount of data to be transmitted at any one time). A total of 27.7 million UK homes (95%) can access superfast broadband as of May 2020.

2.2 Benefits of Superfast Broadband in the Domestic Sector

2.2.1 Access to superfast broadband allows homeowners to make the most of all the entertainment on offer on the internet, including downloading and streaming television shows, movies and music, as well as providing a better online gaming experience. It also allows better use of remote access for home working and studying, which are anticipated to become more predominant following the Covid-19 pandemic.

2.2.2 The quality of the data transfer for fibre versus copper is the main advantage.

2.3 Types of Broadband Connections

2.3.1 Within the UK there are several routes that can provide 'Superfast Broadband'[3]:

- **Fixed Line Broadband** – this includes the following three types of fibre broadband connections:
  - Fibre-to-the-Cabinet (FTTC) – this is the most widely available superfast broadband which uses the existing copper telephone network. Fibre optic cables are installed in a nearby telephone exchange or distribution point to the street or internal cabinets which then connect to a standard phone line. There are no loses over the copper cable from the cabinet to the unit, as long as the cable length does not exceed 90 m;
  - Cable (hybrid fibre coaxial) – this is where fibre is installed to a nearby cabinet and then segments of a coaxial copper network connect premises in the vicinity (also known as Asymmetric Digital Subscriber Line, or ADSL); and
  - Fibre-to-the-Premises (FTTP) - this is also often referred to as Fibre-to-the-Home (FTTH) and provides end-to-end fibre optic connection the full distance from the exchange to the building.
- **Fixed Wireless Broadband** – fixed wireless broadband is a way of achieving connectivity in premises without the need for a physical (wired) connection. A small dish is attached to the side of the property, which then links into a local transmitter which is connected to the fibre network spine.

[2] OFCOM (May 2020) Connected Nations Update https://www.ofcom.org.uk/__data/assets/pdf_file/0028/195256/connected-nations-spring-update-2020.pdf

[3] Department for Culture, Media & Sport - New build homes: superfast broadband connectivity options (April 2016)

- **Satellite Broadband** – satellite broadband is another way of achieving connectivity in premises, without the need for a physical (wired) connection. A satellite dish is installed onto the property for which the incoming occupant will be required to purchase a satellite internet package. Satellite packages tend to currently be more expensive for consumers than fibre or fixed wireless packages.

- **Mobile Broadband** - the four major mobile network operators (Vodafone, EE, Three, and O2) provide widespread coverage of mobile broadband through their 4G and 3G networks. Mobile broadband doesn't require a physical (wired) connection, instead consumers purchase a "dongle" that plugs into their computer or run their device as a 'Hot Spot', and then have access to the mobile network of their choosing.

    - 5G is the next generation of wireless communications technology, following on from 4G. 5G is expected to deliver faster mobile broadband with higher capacity and faster response times. 5G is being rolled out by the four major mobile network operators: Vodafone, EE, Three and O2. The first commercial networks providing 5G went live in major UK cities in 2019. The UK Government is targeting that the majority of the population will be covered by a 5G signal by 2027[4].

[4] House of Commons Briefing Paper (September 2019) 5G https://commonslibrary.parliament.uk/research-briefings/cbp-7883/

3 Policy Context

3.1 Introduction

3.1.1 This section provides a summary of the UK's position on superfast broadband, as well as the national and local policy context for its adoption.

3.2 Britain's Superfast Broadband Future (May 2011)

3.2.1 Broadband infrastructure is considered vital in supporting the overall growth agenda in Britain. The former Coalition Government's ambition was to provide everyone in the UK with access to broadband with a download speed of at least 2 Mbps and to provide 95% of the UK with broadband speeds of at least 24 Mbps (referred to then as 'next-generation access') by 2017.

3.2.2 The Coalition Government allocated £530 million to do this with a strategy called 'Britain's Superfast Broadband Future' in December 2010[5], which sought to incentivise the deployment of broadband in areas that the private sector would not otherwise reach, through a variety of technologies. It also set up Broadband Delivery UK (BDUK) to manage the delivery of this strategy and the roll-out of broadband in rural areas.

3.2.3 In February 2015 the Department for Culture, Media and Sport (DCMS) published figures[6] showing that the programme had extended superfast broadband to more than 2 million homes and businesses and was on track to extend superfast broadband to 95% of UK homes and businesses by 2017.

3.2.4 In the March 2015 Budget, the Coalition Government announced a new ambition that ultrafast broadband (defined then as speeds of at least 100 Mbps) would be available to nearly all UK premises, however no target date was given.

3.2.5 This ambition was confirmed in the Conservative Government's 2015 election manifesto. It also restated their commitment to deliver superfast broadband to 95% of the UK by 2017 and pledged that rural Britain would have "near universal" superfast broadband by the end of the 2015 parliament[7].

3.3 UK Digital Strategy (March 2017)

3.3.1 The UK Digital Strategy was prepared in March 2017[8] to specifically address the approach that the UK will take toward digital technology and in particular, broadband internet connection. It states that the UK's digital infrastructure *"must be able to support this rapid increase in traffic, providing coverage with sufficient capacity to ensure data can flow at the volume, speed and reliability required to meet the demands of modern life. Broadband and mobile must be treated as the fourth utility, with everyone benefiting from improved connectivity."*

3.3.2 The Digital Strategy builds on the principles set out in the Industrial Strategy (see **3.4** below). Key principles set out in the UK Digital Strategy relating to broadband provision include:

[5] Department for Culture, Media and Sport (2011) *Britain's Superfast Broadband Future* [online] available at: https://www.gov.uk/government/publications/britains-superfast-broadband-future

[6] Department for Culture, Media and Sport (2015) *Superfast broadband reaches 2 million more homes and businesses* [online] available at: https://www.gov.uk/government/news/superfast-broadband-reaches-two-million-more-homes-businesses

[7] Everett, M., Hirst, D., Baker, J., White, E. and Baker, C. (2015) *Fixed Broadband: Policy and Speeds*. Briefing Paper Number CBP06643, 24 June 2015. House of Commons Library.

[8] Department for Digital, Culture, Media and Sport (2017) *Policy paper: UK Digital Strategy 2017* [online] available at: https://www.gov.uk/government/publications/uk-digital-strategy/uk-digital-strategy

- Implementation of a 'Universal Service Obligation' *"giving every individual, business and public premise across the country the right to request an affordable high speed broadband connection"*;

- Acceleration of the *"development and uptake of next generation digital infrastructure – including full fibre and 5G"*; and

- *"The future of high-speed and high-quality connectivity lies in deeper, more extensive fibre networks. To promote this, we will invest £400 million in a new Digital Infrastructure Investment Fund, which we anticipate will be more than matched by private sector investors. This new fund will catalyse the market for alternative full fibre providers by ensuring that they can access the finance they need to help scale the UK market for full fibre broadband."*

3.4 UK Industrial Strategy: Building a Britain fit for the future (November 2017)

3.4.1 In November 2017 the Department for Business, Energy and Industrial Strategy (BEIS) published the 'Industrial Strategy: Building a Britain fit for the future'[9]. The Strategy sets out four areas that the UK's investment and research will focus on. These include Artificial Intelligence and the Data Economy, Clean Growth, the Future of Mobility and an Ageing Society.

3.4.2 The strategy recognises that the world is becoming increasingly digitalised and *"digital connectivity has rapidly become an essential requirement for the way people live and do business"*. The UK is undertaking a major upgrade to the UK digital infrastructure and is improving services the infrastructure that supports full-fibre broadband, new 5G networks and smart technologies.

3.4.3 A key policy set by the UK Government is to *"boost our digital infrastructure with over £1bn of public investment, including £176m for 5G and £200m for local areas to encourage roll out of full-fibre networks".*

3.4.4 The strategy includes the following targets:

- *"95 per cent of premises will have access to superfast broadband by the end of 2017"*;

- *"99 per cent have indoor voice coverage"*; and

- *"96 per cent have indoor 4G data coverage"*.

3.5 National Planning Policy Framework (2019)

3.5.1 The National Planning Policy Framework (NPPF) was revised on the 24th of July 2018 and subsequently updated on 19th February 2019 and 19th June 2019[10]. This supersedes the existing policy within the previous NPPF (March 2012). The NPPF sets out the UK Government's planning policies for England and how they should be applied.

3.5.2 Under Chapter 10: Supporting high quality communications, the NPPF states that:

"Advanced, high quality and reliable communications infrastructure is essential for economic growth and social well-being. Planning policies and decisions should support the expansion of

[9] BEIS (2017) *Industrial Strategy: Building a Britain fit for the future* [online] available at: https://www.gov.uk/government/publications/industrial-strategy-building-a-britain-fit-for-the-future

[10] Ministry of Housing, Communities and Local Government (2019) *National Planning Policy Framework* [online] available at: https://www.gov.uk/government/publications/national-planning-policy-framework--2

electronic communications networks, including next generation mobile technology (such as 5G) and full fibre broadband connections. Policies should set out how high quality digital infrastructure, providing access to services from a range of providers, is expected to be delivered and upgraded over time; and should prioritise full fibre connections to existing and new developments (as these connections will, in almost all cases, provide the optimum solution)."

"The number of radio and electronic communications masts, and the sites for such installations, should be kept to a minimum consistent with the needs of consumers, the efficient operation of the network and providing reasonable capacity for future expansion. Use of existing masts, buildings and other structures for new electronic communications capability (including wireless) should be encouraged. Where new sites are required (such as for new 5G networks, or for connected transport and smart city applications), equipment should be sympathetically designed and camouflaged where appropriate."

3.6 Reading Borough Council Local Plan (November 2019)

3.6.1 In November 2019, RBC adopted a new Local Plan[11], which sets out their aspirations for superfast broadband delivery within the borough.

3.6.2 In this, RBC has developed an Infrastructure Delivery Plan which sets out how the identified infrastructure needs will be met. In most cases there will not be the requirement for significant infrastructure on a site-by-site bases, instead the infrastructure schemes will be strategic in nature.

3.6.3 The Site will fall under the 'Berkshire Superfast Broadband Scheme' which has the following requirements:

"Implementation of broadband infrastructure to 24mb wherever possible; ensure a minimum superfast infrastructure for 98% of properties by 2019; private sector is developing fibre based gigabit solutions."

3.6.4 This scheme is led by RBC and private sector providers *to "ensure sufficient capacity to accommodate future growth"* and *"support economic growth by increasing digital connectivity".*

[11] RBC (2019) *New Local Plan* [online] available at: https://www.reading.gov.uk/newlocalplan

4 Infrastructure Delivery Options

4.1 Introduction

4.1.1 There are several utility companies that have the relevant accreditations and licences as issued by OFCOM (The Office of Communications) to identify feasible and viable delivery solutions to provide superfast broadband infrastructure to the Site.

4.1.2 For the purposes of this strategy, a proxy postcode[12] has been used to appraise the availability of broadband infrastructure at the Site.

4.1.3 According to OFCOM's mobile and broadband checker[13], superfast broadband is available in the area with a highest available download speed of 120 Mbps and a highest available upload speed of 20 Mbps. There is also localised ultrafast broadband access available in the area. The leading providers that supply broadband services to the area and types of connection available include:

- **BT Openreach -** the Site could get several types of internet with BT, including BT Wholesale Asymmetric Digital Subscriber Line (ADSL), BT Wholesale ADSL Max, BT Wholesale Broadband Connect (WBC) (21CN), BT Wholesale Symmetric Digital Subscriber Line (SDSL) and BT FTTC[14];
- **Vodafone** - Vodafone Local Loop Unbundling (LLU)[15];
- **Talk Talk** - TalkTalk LLU[16]; and
- **Sky -** Sky Broadband[17].

4.1.4 The above list is not exhaustive. However, for the purposes of this SBSS the four providers above have been explored further as potential delivery options, because these companies have online broadband checkers.

4.1.5 The following sections summarise the consideration given to facilitating superfast broadband at the Proposed Development and the main options available at this stage.

4.2 BT Openreach

4.2.1 BT Openreach is one of the main installers of fibre cable for connection to a superfast broadband service. Openreach also looks after the fibres, wires and cables that connect the country. It does not sell superfast broadband services (this is done by a separate BT body), but instead works on behalf of over 560 services providers (e.g. Talk Talk, BT, Sky) to maintain the local access network that covers at least 30 million customers.

4.2.2 The BT website has a fibre availability checker[14] that shows whether a specific area is fibre enabled or not. The checker shows that the Site is enabled for fibre broadband (up to 300 Mbps) and could receive a variety of BT packages. Firstly, Fibre Essential which provides download speeds of between 19 Mbps and 36 Mbps and an upload speed range of 5 – 7

[12] Proxy postcode used: Reading Golf Club, 17 Kidmore End Road, Reading, RG4 8SQ, for which there is an existing active phoneline.

[13] OFCOM (2020) Mobile and Broadband Checker https://checker.ofcom.org.uk/broadband-coverage [Accessed 18.05.2020].

[14] BT Fibre Availability Checker https://www.bt.com/broadband/availability/ [Accessed 18.05.2020].

[15] Vodafone Broadband Availability https://www.vodafone.co.uk/broadband/deals/superfast [Accessed 18.05.2020].

[16] Talk Talk Availability Checker https://www.talktalk.co.uk/business/availability-checker [Accessed 18.05.2020].

[17] Sky Broadband Checker https://www.sky.com/shop/broadband-talk/broadband-speed-checker/ Accessed 18.05.2020].

Mbps. Secondly, the Fibre 1 package, which provides an average speed of 50 Mbps as shown in **Figure 4.1**.

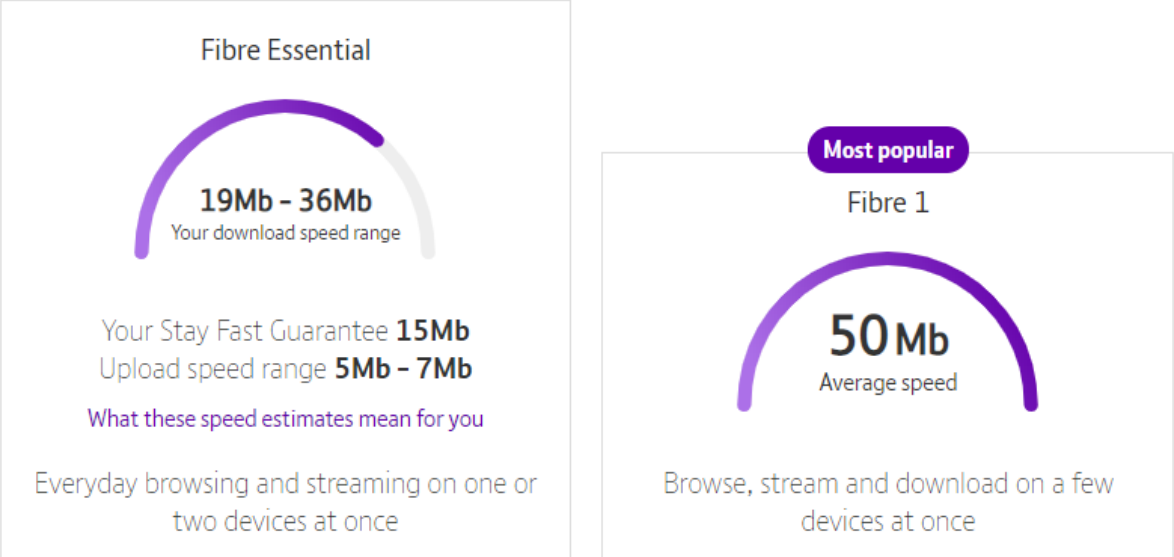


Figure 4.1: BT Fibre Availability Checker Results

4.3 Vodafone

4.3.1 Vodafone's online broadband checker[15] (extract provided in **Figure 4.2**) confirms that superfast broadband speeds of up to 40.2 Mbps are available at the Site.

Figure 4.2: Vodafone Fibre Availability Checker Results

4.4 Talk Talk

4.4.1 Talk Talk's online facility[16] (extract provided in **Figure 4.3**) confirms that superfast broadband speeds of up to 37 Mbps are available at the Site (minimum download speeds of 35 Mbps).

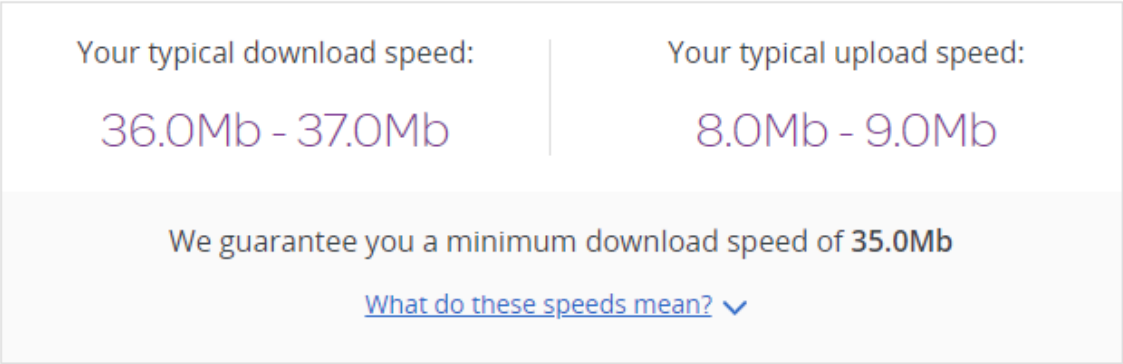


Figure 4.3: Talk Talk Fibre Availability Checker Results

4.5 Sky

4.5.1 Sky's online facility[17] (extract provided in **Figure 4.4**) confirms that superfast broadband speeds of up to 37 Mbps are available at the Site.

Figure 4.4: Sky Fibre Availability Checker Results

4.6 Preferred Approach at the Proposed Development

4.6.1 **Sections 4.2**, **4.3**, **4.4** and **4.5** confirm that there are a range of options for the delivery of superfast broadband at the Proposed Development. It is considered at this stage that BT Openreach provides the optimum service for the Site for the following reasons:

- BT Openreach provides an average speed of 50 Mbps in the area;
- BT Openreach provides the largest range of internet connectivity options available to the Site; and
- BT Openreach is obliged to allow line rentals through their open access policy, thus ensuring end users have flexibility of supplier.

4.6.2 The strategy proposed at this stage is to instruct BT Openreach, however it is recognised that there are a range of other operators available. Thus, the preferred superfast broadband installer and installation strategy will continue to be reviewed as the detailed design progresses. It is recommended that further detailed connectivity checks and engagement with the various internet providers is undertaken following outline planning consent.

5 Summary

5.1.1 This Superfast Broadband Strategy Statement has been prepared to address item 19 of Reading Borough Council's planning validation checklist (December 2016). It outlines how the Applicants intend to consider facilitating the Proposed Development with superfast broadband.

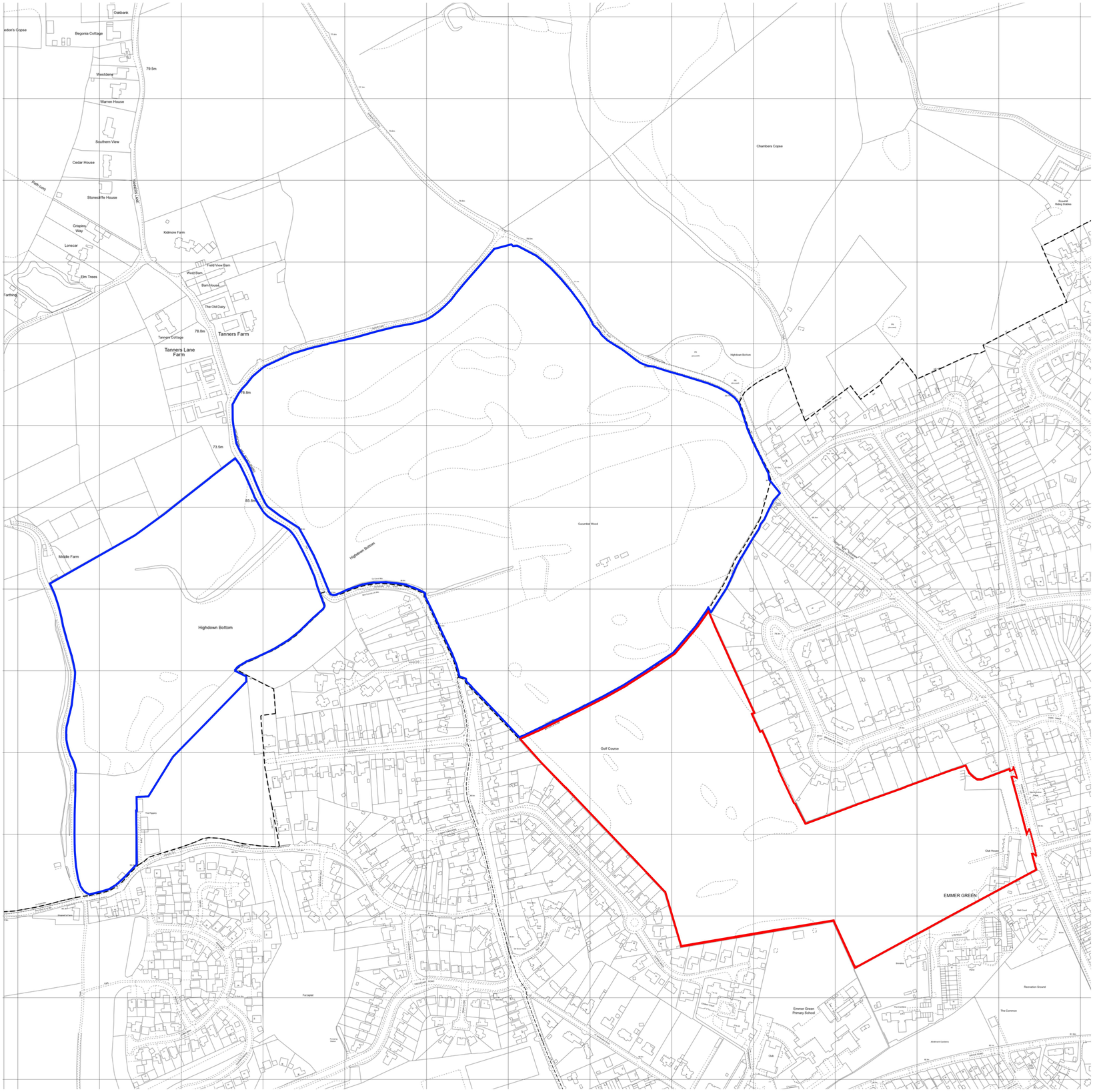
5.1.2 The strategy has identified that there are a range of potential options for delivering superfast broadband at the Site at this stage. This SBSS has focused on BT Openreach, Vodafone, Talk Talk and Sky as the best-placed companies to provide this key communications utility to the Site, as they are already active in the Reading area.

5.1.3 At this stage in the development process, it is considered that BT Openreach is likely to provide the optimum service for the Proposed Development for the following reasons:

- BT Openreach provides an average speed of 50 Mbps in the area;
- BT Openreach provides the largest range of internet connectivity options available to the Site; and
- BT Openreach is obliged to allow line rentals through their open access policy, thus ensuring end users have flexibility of supplier.

5.1.4 The strategy proposed at this stage is to instruct BT Openreach, however it is recognised that there are a range of other operators available. Thus, the preferred superfast broadband installer and installation strategy will continue to be reviewed as the detailed design progresses. It is recommended that further detailed connectivity checks and engagement with the various internet providers is undertaken following outline planning consent.

Appendix A Location Plan



Metres

0 20 40 60 80 100

1:2500

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Reference: OI1226899
Centre coordinates: 471350 177152

N

Fairfax

Fairfax (Reading) Ltd and Reading Golf Club Ltd

project:

Land at:

READING GOLF CLUB
KIDMORE END ROAD,
EMMER GREEN, READING

title:

LOCATION PLAN

date: May '20 **scale:** 1:2500 @ A1

drawing number:	Rev.
2036/PL.01	B

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Appendix B Indicative Site Layout Plan

Fairfax

FAIRFAX AQUISITIONS LTD

Scale: 1 : 1000 Drn By: PjH Date: May '20

Drg No: 2036/SK.04 Rev.J

Project: Land at:
READING GOLF CLUB
KIDMORE END ROAD,
EMMER GREEN, READING

Drawing Title:
INDICATIVE SITE LAYOUT - BASE

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