PAGERPOWER
Urban & Renewables

Broadband Connectivity Assessment

Plot F

Renaker Build Limited

October, 2021

PLANNING SOLUTIONS FOR:

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Issue	Date	Detail of Changes
1	June 2021	Initial issue
2	July 2021	Minor amendments
3	October 2021	Minor amendment to plans

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EXECUTIVE SUMMARY

Report Purpose

There is a requirement to ensure that new residences in Manchester have access to superfast broadband speed – understood to mean a minimum of 24 Mbps – to ensure future occupants can obtain the associated services. Pager Power has been commissioned to investigate the broadband connectivity at the proposed building development Plot F located at Great Jackson Street, Manchester.

Process

The availability of broadband services and the associated speeds has been determined based on:

- Openreach coverage checker – which is available via the Openreach website and identifies available speeds in any area within the UK.
- Crosschecks with three of the main UK broadband providers.
- Investigation of the process for obtaining superfast broadband to the premises.

Results

- Fast Fibre broadband from Openreach in the form of Fibre To The Cabinet (FTTC) is available at a nearby address (6 or 8 Great Jackson St, Manchester, M15 4AX). Standard speeds of up to 80 Mbps are available (for Sky, BT and Openreach).
- Superfast Fibre broadband from Openreach in the form of Fibre To The Premises (FTTP) is available at a nearby address. Standard speeds of up to 500 Mbps are available (for Virgin).
- Available internet speeds[1] from BT, Sky and Virgin are:
    - BT: Speeds of up to 50 Mbps for the nearest house number that can be verified (to 8 Great Jackson St, Manchester, M15 4AX).
    - Sky: Speeds in the range between 5.2Mbps and 10Mbps for the nearest house number that can be verified (to Ground Floor, 6 Gaddum House, Great Jackson Street, Manchester, M15 4AX).
    - Virgin: Speeds of up to 500Mbps are available at the nearest address that could be assessed via this service (to 8 Great Jackson St, Manchester, M15 4AX).

[1] The development postcode and, where applicable, nearest house number was submitted to each provider via their respective websites.

Conclusions and Recommendations

Fibre optic broadband is available at the closest address (to 6 or 8 Great Jackson St, Manchester, M15 4AX) in the form of FTTC (Fibre To The Cabinet). Fibre optic broadband (FTTC) typically provides a high internet speed.

FTTP is available free of charge for this development subject to application to Openreach. This would ensure internet speeds are maintained between the cabinet and premises. If this route were to be followed, the application must be done at least six months before provision of the service to the first property is provided. The site registration process is discussed in Section 3.4. The details that must be included within the registration are:

- Site start date and required service date.
- Site address and coordinates.
- Description of development including type, phases and capacity.
- Contact details.
- Location plan, site plan (1:500) and schematic or schedule of accommodation.

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ABOUT PAGER POWER

Pager Power is a dedicated consultancy company based in Suffolk, UK. The company has undertaken projects in 50 countries within Europe, Africa, America, Asia and Australasia.

The company comprises a team of experts to provide technical expertise and guidance on a range of planning issues for large and small developments.

Pager Power was established in 1997. Initially the company focus was on modelling the impact of wind turbines on radar systems. Over the years, the company has expanded into numerous fields including:

- Renewable energy projects.
- Building developments.
- Aviation and telecommunication systems.

Pager Power prides itself on providing comprehensive, understandable and accurate assessments of complex issues in line with national and international standards. This is underpinned by its custom software, longstanding relationships with stakeholders and active role in conferences and research efforts around the world.

Pager Power's assessments withstand legal scrutiny and the company can provide support for a project at any stage.

1 BACKGROUND

1.1 Introduction

There is a requirement to ensure that new residences in Manchester have access to superfast broadband speed – understood to mean a minimum of 24 Mbps – to ensure future occupants can obtain the associated services. Pager Power has been commissioned to investigate the broadband connectivity at the proposed building development Plot F located at Great Jackson Street, Manchester.

This report presents the investigation into the current internet speeds in the area to determine whether minimum internet speeds at the development can be met.

2 DEVELOPMENT PLANS

2.1 Description of Development

The site description is as follows[2]:

The Application Site ("the Site") comprises Plot F of the Great Jackson Street (GJS) Framework area, and measures approximately 0.88 ha. The Site is bounded by GJS to the South, by Deansgate Square to the north beyond Pond Street, to the east by the Boatmans apartments, and industrial units to the west. It forms a major part of the Southern Gateway redevelopment initiative and is situated on a key gateway into Manchester City Centre.

The Site comprises areas of a hardstanding formerly used as Peugeot car compound. It is currently occupied by the site cabins and surface car parking associated with the construction of Deansgate Square. There is no recent planning history of relevance to the Site. Furthermore, there is also a low-rise industrial unit located on the Site.

The Site is currently accessed from Great Jackson Street via Owen Street which runs through the centre of the Site. This section of Deansgate Square is currently not accessible to general traffic.

2.2 Proposed Development Red Line Boundary

The red line boundary of the proposed development is shown in Figure 1[2] below.

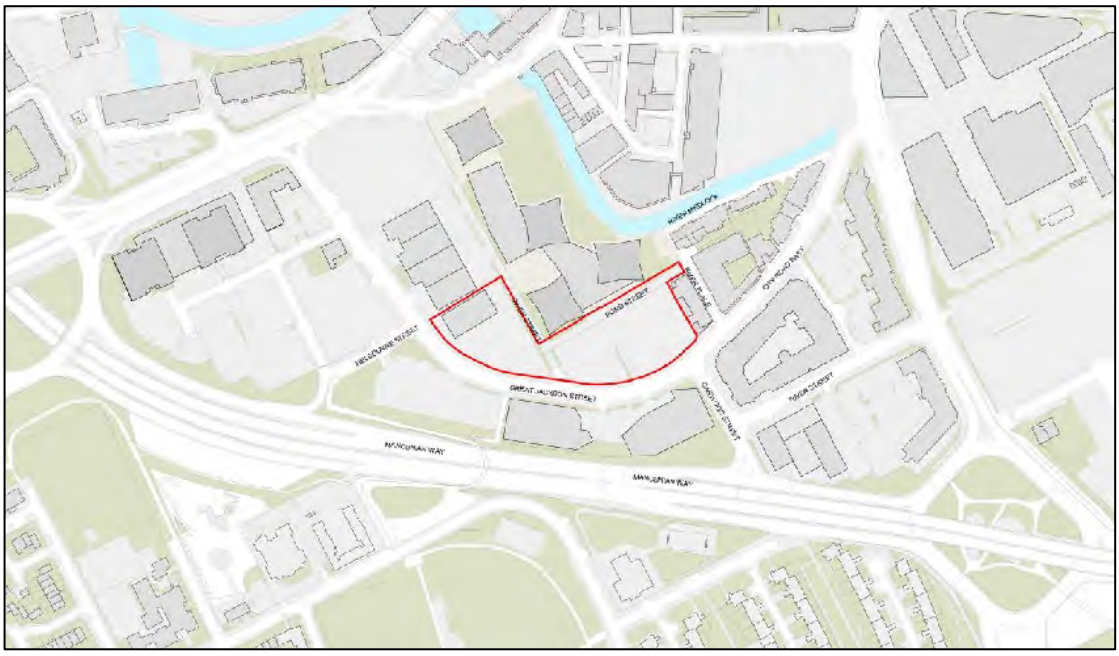

Figure 1 – *Proposed development red line boundary*

[2] Source: Deloitte. Great Jackson Street Plot F, EIA Briefing Note, June 2021.

2.3 Proposed Development – Tower Locations

The locations of the proposed towers are shown in Figure 2[3] below. The plan is to show location of buildings only and landscaping and floorplan included is indicative.

Figure 2 – *Proposed development – tower locations*

[3] Source: Deloitte. Great Jackson Street Plot F, EIA Briefing Note, June 2021. The plan is to show location of buildings only and landscaping and floorplan included is indicative.

3 INTERNET SERVICES IN THE UK

3.1 Types of Broadband

Broadband services in the UK can be provided in various ways. Options include:

- Asymmetric Digital Subscriber Line (ADSL) – which is provided via a copper telephone line.
- Fibre optic broadband – which is provided via a bespoke fibre network. Fibre optic broadband typically provides the highest speeds in the UK and can be further subdivided into:
    - Fibre To The Cabinet (FTTC) – whereby a fibre connection is made between the exchange and a distribution point, which in turn is connected to a residence via a copper cable.
    - Fibre To The Premises (FTTP) – whereby a fibre connection is made between the exchange and the residence.
- Gfast – which is a new technology that delivers broadband via a copper cable, much like ADSL, however the transmission is modified to increase the speed of the service.

3.2 Speed Requirements

The term 'superfast' is understood to mean speeds of 24 Mbps or higher[4]. Available speeds for the three fastest technologies are:

- Gfast – up to 330 Mbps.
- FTTC – up to 80 Mbps.
- FTTP – up to 1 Gbps[5].

[4] Source: BBC, 2014, *One million UK properties on 'superfast broadband' after investment'*. Last accessed November 2020.
[5] Source: Openreach. 1 Gbps = 1,000 Mbps.

3.3 Current Availability

The availability of internet services at the proposed development has been explored in two ways:

- Assessment via Openreach – which shows the availability of their fibre network at UK locations via an automated service on their website.
- Enquiries with three main high-speed broadband providers in the UK, namely:
  - BT.
  - Sky.
  - Virgin.

The results are shown in Table 1 below.

Company	Findings	Remarks
Openreach	The Openreach fibre network is accessible at the proposed development location.	Superfast Fibre speeds (up to 80Mbps) in the form of Fibre To The Cabinet (FTTC) is available at the nearest address that could be assessed via this service (8 Great Jackson St, Manchester, M15 4AX). The Openreach network is utilised by many providers. The potential suppliers that set up the Fibre To The Premises (FTTP) at this address are presented below: • BT • Cuckoo • Direct Save Telecom • EE • John Lewis Broadband • Direct Save telecom • NOW Broadband • Onestream • Origin Broadband • Plusnet • Pop Telecom • Sky • Shell Energy Broadband • SSE • TalkTalk • Zen

Company	Findings	Remarks
		Searches for the top three UK internet providers (BT, Sky and Virgin) have been completed to identify their current level of service. Note Virgin does not utilise the BT Openreach fibre network.
BT	Fibre broadband is available at the development location.	Fibre 1 speed (up to 50Mbps) in the form of Fibre To The Cabinet (FTTC) is available at the nearest address that could be assessed via this service (6 Great Jackson St, Manchester, M15 4AX).
Sky	Fibre broadband is not available at the development location, however, other options are available.	Essential internet (up to 10Mbps) is available at the nearest address that could be assessed via this (Ground Floor, 6 Gaddum House, Great Jackson Street, Manchester, M15 4AX).
Virgin	Fibre broadband is available at the development location.	500Mbps Fibre Broadband speeds in the form of Fibre To The Premises (FTTP) is available at the nearest address that could be assessed via this service (8 Great Jackson St, Manchester, M15 4AX).

Table 1 – *Current availability of high-speed broadband*

3.4 Facilitation of Fibre Internet Services to Premises

Whilst Fibre To The Cabinet (FTTC) is available at this property Fibre To The Premises (FTTP) is not. Property development can facilitate deployment of the Openreach fibre network to premises at locations where this is not currently available. The benefit of FTTP over FTTC is that internet speeds are maintained. The process and the cost of doing this varies depending on the development type and size.

For developments comprising more than 19 plots, Openreach will Fibre To The Premises (FTTP) for free. A 'plot' in this context is defined as "*an individually Council Addressed property paying full residency council tax*[6]". The proposed development therefore qualifies for free facilitation of the fibre network from the exchange to the properties themselves. This requires registration of the site, specifically:

[6] The definition was provided during an engagement with Openreach customer support carried out in 2018 it can also be found at the following link: https://www.openreach.com/fibre-broadband/fibre-for-developers/registering-your-site.

- Registration is required 6 months before provision of the service to the first property and eight weeks before development commences on site.
- The dates of commencement on site and required service must be provided.
- A description of the development including the number of plots, whether it is part of a larger development and associated phases.
- Contact details for the company building the properties and the person managing any queries from Openreach must be provided.
- Plans of the development must be provided including:
    - Location.
    - Site plan at a minimum of 1:500.
    - Schedule of accommodation that show how many plots per floor and their connection to a riser in cases of multiple cores.
- Registration is undertaken online[7], whereupon it will be assessed by the Openreach team. The timescale for this assessment is not defined, the customer service team advised that this varies according to the number of applications being processed at any given time, however a response from the assessment team should be received within five working days from submission of the registration form.
- Following assessment of the registration documents, an agreement will be provided by Openreach which must be signed and returned so that the application can be progressed by Openreach. This stage is not required if a framework agreement between the developer and Openreach has already been signed.
- Once the agreement has been signed it will be processed by the Openreach planning team, who will coordinate the connection process based on the development timescales.

[7] https://www.developers.openreach.co.uk/developerportal/index

4 CONCLUSIONS

4.1 Broadband Availability

Fibre optic broadband is available at the closest address (to 6 or 8 Great Jackson St, Manchester, M15 4AX) in the form of FTTC (Fibre To The Cabinet). Fibre optic broadband (FTTC) typically provides a high internet speed.

FTTP is available free of charge for this development subject to application to Openreach. This would ensure internet speeds are maintained between the cabinet and premises. If this route were to be followed, the application must be done at least six months before provision of the service to the first property is provided. The site registration process is discussed in Section 3.4. The details that must be included within the registration are:

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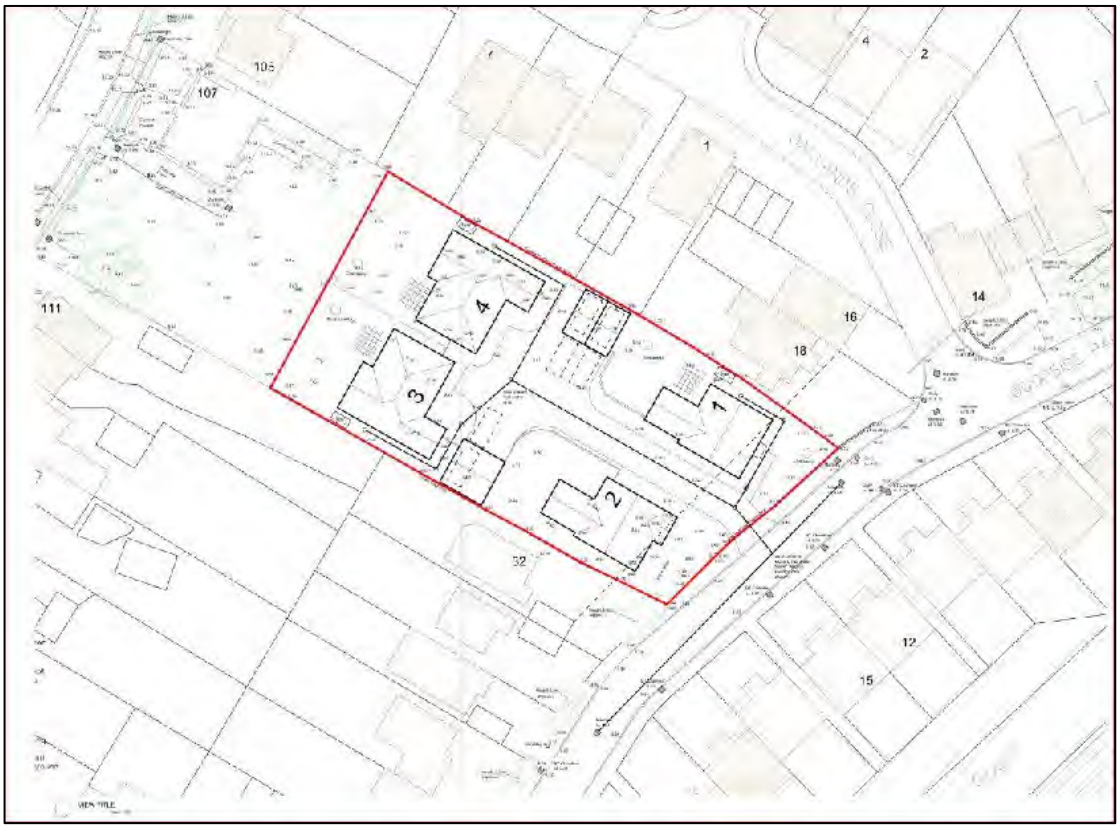
APPENDIX A – EXAMPLE DOCUMENTS FOR SITE SUBMISSION

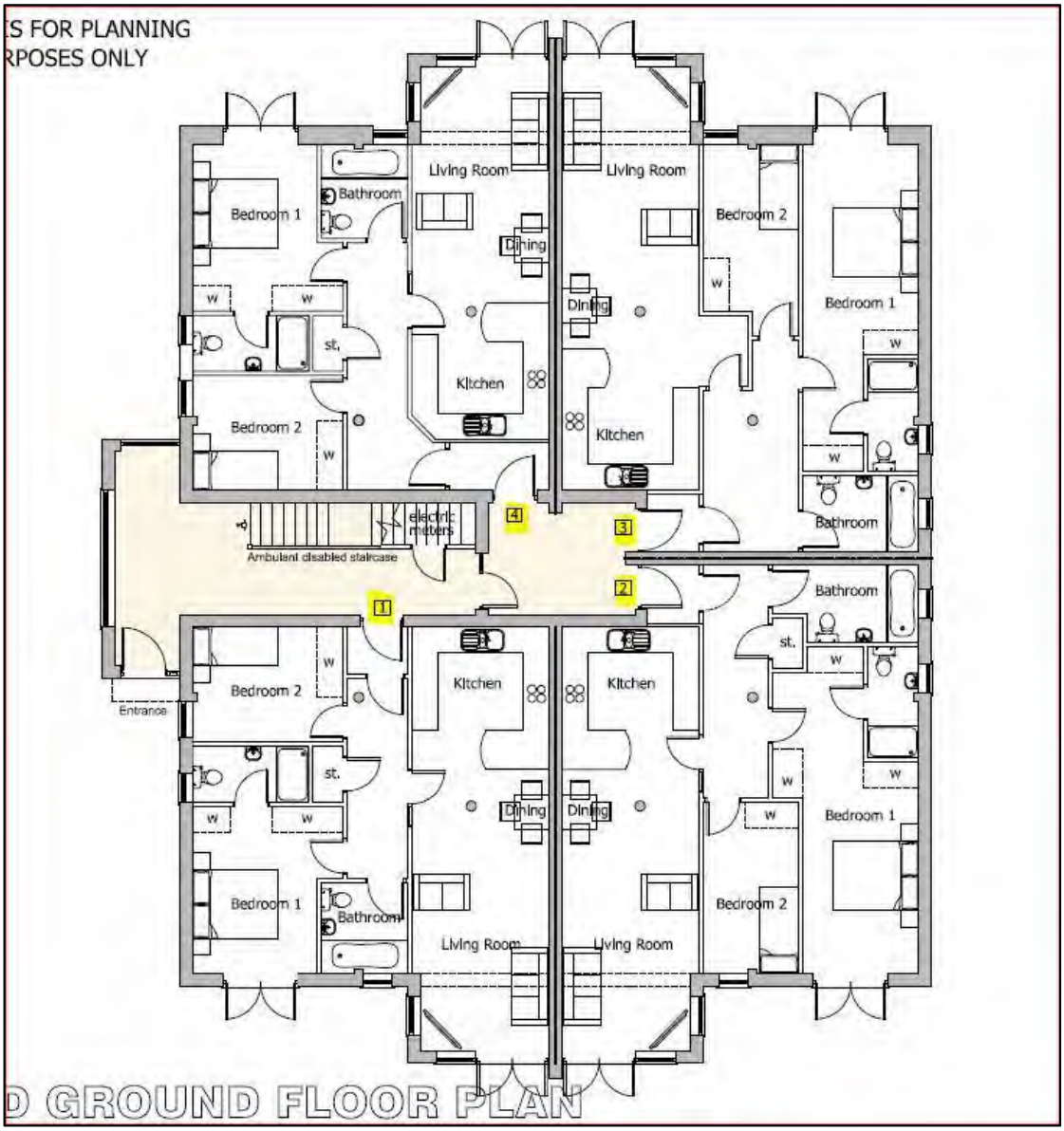
Purpose

Openreach have provided examples of good documentation to facilitate the site registration process. These are shown below for reference.

Example Site Plan



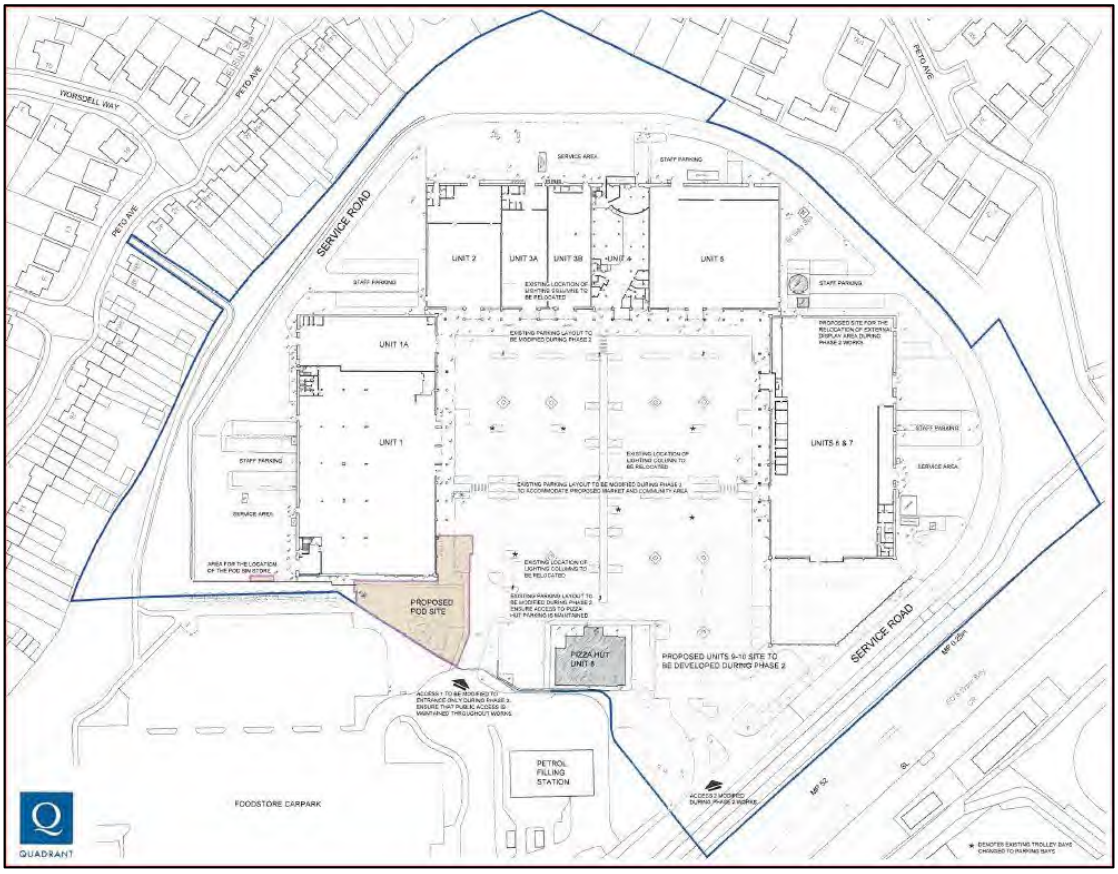
Example Site Plan with Plot Numbers



Example Flat Floor Plan with Plot Numbers

Example Site Plan for Business Unit

Example Site Plan for Business Unit Plots



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