

stay connected

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Telecommunications Connectivity

Fixed Network and Mobile
Coverage Assessment

Bray House
Maidenhead Office Park
Maidenhead
Berkshire
SL6 3QH



Bray House, Maidenhead Office Park, Maidenhead, Berkshire SL6 3QH

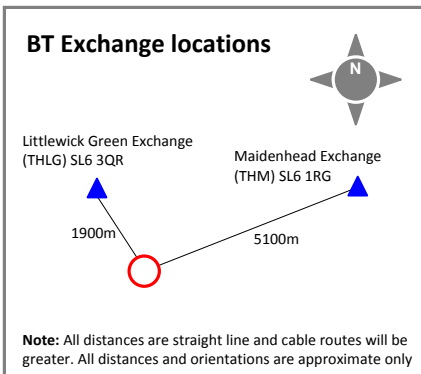
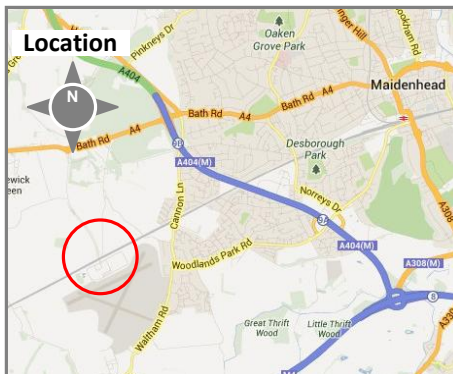
STRUCTURE

Bray House is a modern office building located on the Maidenhead Office Park to the west of Maidenhead town centre. The available accommodation is on the first floor, affording approximately 20,345 sq ft (1,890 sqm) of Grade A office accommodation over an open floor plate. The building extends to two floors with a central courtyard, and is of typical frame construction with full height glazed facades to all elevations. The building is located within an environment of similar height commercial premises with estate roads and parking areas in a semi rural location.

TOPOGRAPHY



Bray House
Maidenhead Office Park
Maidenhead, Berkshire SL6 3QH



BT SUMMARY

Bray House is located approximately 1900m from the Littlewick Green Exchange, situated to the north west of the site. Littlewick Green Exchange provides a number of services including ADSL, ADSL+ and 21CN WBC plus the availability of LLU services from O2/Be, Sky Easy Net and Talk Talk over BT infrastructure. Based on the existing standard services, Littlewick Green Exchange can offer broadband speeds of around 5Mbps at this time. Roll out of FTTC services are yet to be commenced with a proposed date of 2013 (Data via the BT website). Bray House sits on the fringe of the Maidenhead Exchange to the north east which provides excellent services across all technologies with a number of LLU providers. In addition, this exchange has been enabled to provide BT Infinity services over fibre with speeds of up to 80Mb.

TELECOMS CARRIERS

Telecommunications carriers with owned infrastructure located within easy reach of the building are listed below for information. In addition to these, there are a number of alternative carriers that can provide service, albeit over a third party network such as BT. It must be noted that the presence of infrastructure within the search area does not constitute availability of service at the building location.

British Telecom Tel: 0800 800 152 www.bt.com
Vodafone / Cable & Wireless Tel: 020 7111 0047 www.vodafone.com

SUMMARY

The BT services available at Littlewick Green Exchange to the north west, afford Bray House a good level of services to meet today's business needs albeit over their business tariff due to the restraints of distance for standard services. The actual presence of an alternative carriers infrastructure to BT from Vodafone/Cable & Wireless in the environs and adjacent to the site is one that affords the site with a good alternative with minimal requirements for civil infrastructure on first inspection. The added benefit of enhanced BT services from the Maidenhead Exchange, provides excellent opportunities for physical diversity and resilience should it be required.

RATING	BT / LLU	CARRIERS	BT / LLU	CARRIERS
	3	2	1 Limited services available from BT only	1 Limited infrastructure available
			2 Good BT services, limited by LLU Operators	2 Adequate level of infrastructure with limited access issues
			3 Good BT/LLU services now, or planned	3 Good level of infrastructure with limited access issues
			4 Excellent BT/LLU services now, with diversity	4 Excellent level of infrastructure with no access issues

GLOSSARY OF TERMS

ADSL (Asymmetric Digital Subscriber Line) Asymmetric line speed, the speed from the internet to the user, and the user to the internet are different. Feed over copper cable, governed by distance from exchange to user. (co-exists with voice services)

ADSL+ (Asymmetric Digital Subscriber Line+) Asymmetric line speed as above, but with faster connections both downstream and upstream over similar distance following roll-out of BT's 21CN Wholesale Broadband Connect (WBC).

SDSL (Symmetric Digital Subscriber Line) Symmetric line speed, the speed between the user and the internet are the same in both directions but cannot co-exist with voice services over the same line.

FTTC (Fibre to the Cabinet) Provides fibre to the cabinet, shortening copper cable length requirements to enhance speed

LLU (Local Loop Unbundling) Is the process by which third party network operators are able to install equipment into BT exchanges in order to deliver their own services without having to utilise BT's network.

BT Infinity (British Telecom) Fibre delivered broadband service from enabled exchanges providing broadband speeds of up to 75Mbps download (subject to conditions) at a lower cost to that of traditional leased fibre services.

Mobile Voice / Data Appraisal - Coverage Predictions

Bray House, Maidenhead Office Park, Maidenhead, Berkshire SL6 3QH

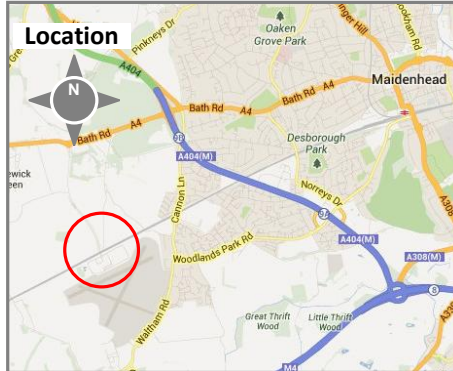
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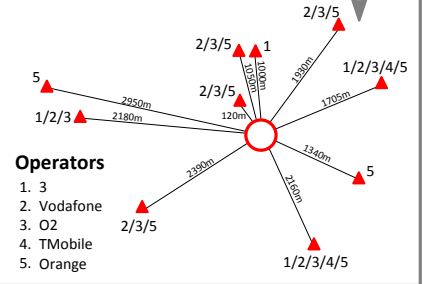


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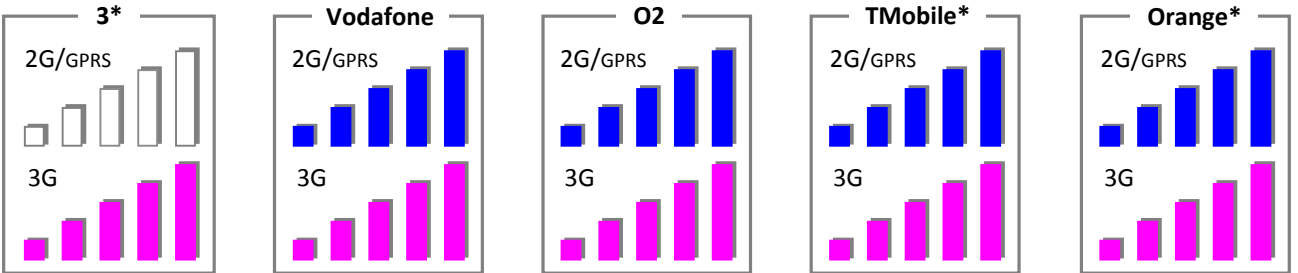


Macro Locations

Note: All distances and orientations are approximate only

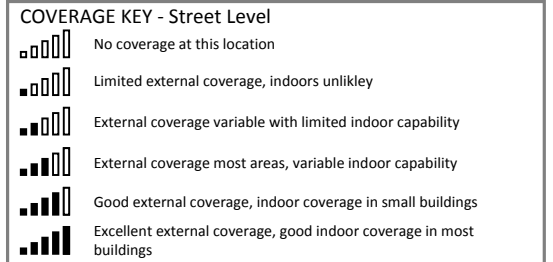


STREET LEVEL COVERAGE



OBSERVATIONS

Bray House affords a general level of macro coverage from all of the five mobile operators as shown in the plan above. The closest serving cells are detailed in respect of 2G and 3G services and can be seen vary in location and distance, providing general coverage to the building. The high concentration of users within the building may impact on the capacity available especially if this is confined to any one single network operator. Based on this information it is considered to be a location that affords an excellent level of overall coverage across all operators at street level.



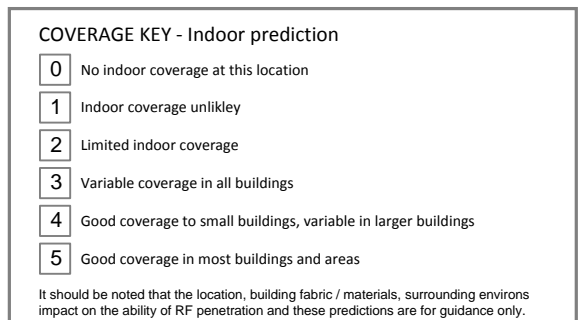
PREDICTIONS

Surrounding buildings, the distance and direction of the serving cells and building construction can all impact on the penetration of signal throughout a building. However, based on the location of the site and serving cells, it is envisaged that a good level of coverage will be present within the building for both 2G and 3G services. There may be limited isolated areas with potential coverage issues due to their location such as any internal rooms, stair wells etc where coverage may drop to 2G services only. Further to the coverage levels, the availability of service is dependant on capacity. This is the volume of data and simultaneous voice calls the macro cell can accommodate at any one time. Capacity issues result in 'network busy' messages or dropped calls. The level of capacity can be addressed by the operators should the building be populated with a high number of users on a single network which will impact on both them and others using the same cell.

A further detailed internal survey for one or all operators networks can be undertake to determine the actual level of service achievable throughout the building should this be required. From this information, we can address any issues on the owners/tenants behalf with the relevant mobile network operator to establish a suitable coverage solution.

INDOOR SUMMARY

OPERATOR	2G / GPRS	3G
3*	4	4
Vodafone	4	4
O2	4	4
T-Mobile*	4	4
Orange*	4	4



Fixed Telecoms Appraisal Summary

In addition to the Fixed Network carrier study completed, a review by survey of the above location was undertaken on the 20th June 2013. The purpose of this survey was to clearly identify the presence of existing fixed telecommunications carrier's infrastructure adjacent to the site, or within the local environs, plus an internal survey to determine actual telecoms presence.

Local Carriers

Bray House, on the Maidenhead Office Park is accessed via Westacott Way from the Bath Road (A4) via a railway crossing bridge adjacent to the entrance to the park. The park consists of a total of seven office buildings of varying layout and size, with surrounding access roads and car parking areas.

The level of civil infrastructure within Westacott Way at this time extends only to that of BT and Vodafone/Cable & Wireless. Civil infrastructure for both carriers is clearly visible along the length of Westacott Way, extending in both directions along the Bath Road to the north. Further carriers infrastructure is present within the Maidenhead area to the east, but was not located on the parks access road or local environs.

The BT presence is extensive to all areas around the office park with local access chambers to each building in more than one location. In addition, we were informed by an existing tenant that BT infrastructure was present from the south across the airfield domain onto the park. The level of BT infrastructure indicates that service provision will be by a number of routes providing a good level of connectivity and diversity around the park environs. The level of Vodafone/Cable & Wireless infrastructure was extensive along Westacott Way, but with no visual confirmation of crossing the railway bridge onto the park. However, an existing Vodafone/Cable & Wireless chamber was located (albeit historically marked 'Mercury') to the west of the entrance. It is envisaged that this was installed to provide services over owned infrastructure to a previous tenant of one of the adjacent buildings. The extent and location of any further infrastructure could not be identified at this stage.

Building Presence

On inspection, it is evident that existing BT services are located in the building on the ground floor. These were confirmed by the existing tenant who provided access to the main intake locations to the north and south. A central delivery room was also accessed which included the main BT distribution point and terminations for their copper networks and telephony services. However, this room now appears to fall within the domain of the existing ground floor tenant, and all first floor services were deemed to have been removed prior to renovation. In respect of the fibre presence, two intake locations were identified in ground floor riser cupboards, to the north and south sides of the building. These consist of a single duct route (100mm diameter approx) at ground level from an external chamber. Both ducts had copper and fibre presence within, with fibre termination points within the riser cupboards. Extension to the upper floor can be provided with ease via the full height riser to suit via the existing presence or with the introduction of addition cable from the external chamber where required as spare duct capacity was evident.

Service Availability

The standard services afforded by BT over its existing copper networks provides a level of broadband services with speeds expected in the region of 5Mbps due to distance constraints of the exchange to the site. The proposed 2013 roll out of FTTC services will see enhanced speeds providing an alternative to other business services. (Data obtained via the BT website). However, the current level of business tariff services available from BT provide an excellent level of service at this time. The second exchange at Maidenhead is fully enabled to provide BT Infinity services, but may be restricted due to distance and commercial constraints. In addition, there are a host of companies that can provide enhanced products over the existing infrastructure providing smaller businesses a more affordable level of service. The presence of Vodafone/Cable & Wireless affords an excellent alternative to BT, and will be able to offer a host of business services to suit any requirements. The location of their existing infrastructure adjacent to/on the site is one that will necessitate limited civil works in providing a connection based on our initial investigations, albeit with the potential requirement for third party connection over the last section.

Summary

Based on the local carrier infrastructure and the availability of services from BT's local exchange including the proposed roll out of FTTC services, we consider Bray House has an good level of connectivity with the ability to enhance this by means of additional fibre services over those already present within the building, if required in minimal timescales from order. The presence of the alternative carrier in the local environs and on the park affords a good alternative provision of service and diversity at this time with limited requirements for external street works albeit subject to rights of access requirements.