

SUPPLEMENTARY INFORMATION

1. Site Details

Site Name	Princess Road	Site Address	BARLOW MOOR ROAD AND PRINCESS ROAD, MANCHESTER, M20 2ZF
NGR	E383052 N: 392052		
Site Ref Number	MAN084	Site Type ¹	Macro

2. Pre- Application Check List

Site Selection (for New Sites only)

(would not generally apply to upgrades/alterations to existing sites)

Was a local planning authority mast register available to check for suitable sites by the operator or the local planning authority?	Yes	No
If no explain why: The Ofcom database was used to search for existing sites in the area which is the most up to date source of information.		
Were industry site databases checked for suitable sites by the operator:	Yes	No
If no explain why: N/A		

Pre-application consultation with local planning authority

Date of written offer of pre-application submission:	None	
Was there pre-application contact:	No	
Date of pre-application contact:		
Name of contact:		
Summary of outcome/Main issues raised: The application was progressed directly to application.		

Ten Commitments Consultation

Rating of Site under Traffic Light Model:	Red	Amber	Green
Outline Consultation carried out: The application was progressed straight to application.			

¹ Macro or micro

Summary of outcome/Main issues raised:

School/College

Location of site in relation to school/college:
None

Outline of consultation carried out with school/college:

N/A

Summary of outcome/Main issues raised:

N/A

Civil Aviation Authority/Secretary of State for Defence/Aerodrome Operator consultation (only required for an application for prior approval)

Will the structure be within 3km of an aerodrome or airfield?	~~Yes~~	No
Has the Civil Aviation Authority/Secretary of State for Defence/Aerodrome Operator been notified?	~~Yes~~	No
Details of response: N/A		

Developer's Notice

Copy of Developer's Notice enclosed	Yes	~~No~~
Date served:	28/2/2020	

3. Proposed Development

The proposed site:
Background MBNL is a joint venture owned by EE (UK) Ltd and Three (UK) Ltd. MBNL undertakes the management and network deployment of telecommunications sites on behalf of both EE (UK) Ltd and Three (UK) Ltd. Mobile telecoms networks are now ubiquitous throughout the UK. It is an expectation that an individual can connect and use their mobile phone whenever and wherever they so require. With the advent of new technology, under the banner of 5G, further advances are proposed, and central government has seen the telecoms industry, and 5G, to be at the forefront of economic development. The expectations are that future telecom's technology will support government policy regarding digital inclusion; improvements in health and social care; assisting in local economic growth; advancing the development of Smart Cities and supporting innovative uses throughout the transport sector for both personal and public travel. At the beginning of March 2017 the Department of Culture, Media and Sport (DCMS) issued an updated UK Digital Strategy (UK Digital Strategy) with the goal of ensuring that the UK delivers a "world-leading digital economy that works for everyone". The strategy focuses on seven key strands:

- Building world-class digital infrastructure for the UK
- Giving everyone access to the digital skills they need
- Making the UK the best place to start and grow a digital business
- Helping every British business become a digital business
- Making the UK the safest place in the world to live and work online
- Maintaining the UK government as a world leader in serving its citizens online
- Unlocking the power of data in the UK economy and improving public confidence in its use

The government has noted within the Digital Strategy that the UK lags other similar nations in the delivery of fast, reliable, consistent connectivity for its population, wherever they are in the Kingdom. In conjunction with the new Electronic Communications Code (2018), the DCMS wishes to make it easier for operators to upgrade and share their equipment with other operators to help increase coverage. The DCMS also sees new technology and improved connectivity and coverage as key to the future growth, both socially and economically, of the UK.

In a letter dated 07 March 2019 'Collaborating for digital connectivity', Ministers from the DCMS and MHLG wrote to the CEOs of all Local Planning Authorities in England asking them to support the investment necessary to make the United Kingdom world leader in 5G, with the majority of the population covered by 5G signal by 2027.

EE and Three are committed to following through on the Government's aims and delivering that high-quality service that the public has come to expect and that they deserve and are upgrading the network in the area. This submission forms part of this new investment and commitment where there is a specific requirement for an upgrade to the existing radio base station at this location to provide for 5G services and to improve the 4G provision.

Description of the Site

The existing and proposed replacement site is located in a landscaped grassed traffic island at the junction of Barlow Moor Road and Princess Road, a major, multi lane, traffic route to central Manchester. The island accommodates mature trees and street lighting columns. Its sits to the front of large commercial buildings.

Proposed Development

The installation of a replacement 20m monopole, accommodating 12 no. antenna together with the upgrade of the equipment cabinets and ancillary development thereto.

Type of Structure: Streetworks	
Height:	20m
New Equipment Housing	Width x Depth x Height
X3 Cabinet	600x480x1600
X1 Cabinet	600x500x1595
X1 Cabinet	2000x750x1850
X1 Cabinet	600x480x16000
X1 Cabinet	1600x600x1600
Retained Equipment Housing	
X1 Cabinet	1098x745x1300
X1 Cabinet	600x400x1600
Materials:	
Column/mast etc:	Grey
Equipment housing –external colour:	Grey

Reasons for choice of design:

As part of the operators' continued network improvement there is a requirement for an upgrade to the telecommunications base station at this location to provide enhanced 4G but principally for new 5G provision for both EE and Three. It is the optimum solution available to provide the 5G service whilst proposing a design to minimise the impact of the development on the environment. The preferred option for 5G provision at this location is two separate masts comprising two separate 20m masts approx. 20-100m apart (depending upon locality) accommodating 6 no antenna on each mast; but an alternate option is being progressed in view of the local environmental context.

Development of this site provides an opportunity to substantially improve the existing local telecommunications network and it demonstrates compliance with national (NPPF) and local planning policies which both encourage the usage and sharing of telecommunications facilities.

The proposed design of the replacement upgraded mast has been heavily influenced by technical constraints of the new technology for x2 no. operators on the single site.

The application is submitted in full, due to the increase in width from the existing mast in situ to the replacement. This increased width is required to support the headframe and the antenna for the new technology for two operators on a single mast. The principle of a base station at this location has, however, been established.

For the base station to effectively provide coverage to the target area in line with the established network pattern, specific antenna orientations and heights, determined by Network Radio Planners, must be achieved. The mast height is determined by features of the surrounding area such as existing buildings and trees, the antenna must be able to 'see over' any obstructions in order that they do not block the signals from the antennas. There are also limitations on how far from the antennas the equipment housing can be placed. To achieve EE and H3G's upgrade requirements the height of the proposed, replacement structure will be 20m metres in order to 'see' above the existing built environment and to provide enough space for both operators to share the same site.

The replacement mast will resemble the existing mast as closely as possible although due to the antennas required for the two operators to share one mast and the number of antennas required it is not possible to shroud the headframe, so the antenna will be exposed albeit in a slim profile headframe.

There is also the requirement for additional cabinets, which on their own merits they do not normally require a formal determination of the Council and would be considered as permitted development. The equipment cabinets are proposed to be manufactured grey finish to match existing and helping them to blend into the environment and reducing their prominence within the immediate urban environment.

The proposed upgraded replacement mast will be viewed within the context of other linear features including street lighting columns, existing masts and mature trees, in a busy location where the existing mast is already an established feature.

The mast replaces an existing, so there is already an acceptance of a tall vertical structure at the location and the key consideration is the *additional* effect upon visual amenity. The mast is higher than existing and this increase in height is an absolute requirement of 5G provision to allow 2 no. operators to share a single mast. This must be considered in balancing the importance of the best telecommunication infrastructure against additional adverse effect upon visual amenity. It is not considered that the additional height causes a substantial additional adverse effect upon visual amenity. Shared 5G service cannot be provided on the existing size and types of monopole common in the streetscene. The view of the mast from the road is fleeting as drivers pass by and it sits in front of commercial buildings. It is well screened by trees for long distance views along and across Princess Road.

4. Technical Information

International Commission on Non-Ionizing Radiation Protection Declaration attached (see below)* International Commission on Non-Ionizing Radiation Protection public compliance is determined by mathematical calculation and implemented by careful location of antennas, access restrictions and/or barriers and signage as necessary. Members of the public cannot unknowingly enter areas close to the antennas where exposure may exceed the relevant guidelines. When determining compliance, the emissions from all mobile phone network operators on or near to the site are considered. In order to minimise interference within its own network and with other radio networks, EE (UK) Ltd and H3G (UK) Limited operates its network in such a way the radio frequency power outputs are kept to the lowest levels commensurate with effective service provision As part of EE (UK) Ltd and H3G (UK) Limited's network, the radio base station that is the subject of this application will be configured to operate in this way. All operators of radio transmitters are under a legal obligation to operate those transmitters in accordance with the conditions of their licence. Operation of the transmitter in accordance with the conditions of the licence fulfils the legal obligations in respect of interference to other radio systems, other electrical equipment, instrumentation or air traffic systems. The conditions of the licence are mandated by Ofcom, an agency of national government, who are responsible for the regulation of the civilian radio spectrum. The remit of Ofcom also includes investigation and remedy of any reported significant interference. The telecommunications infrastructure the subject of this application accords with all relevant legislation and as such will not cause significant and irremediable interference with other electrical equipment, air traffic services or instrumentation operated in the national interest.	Yes
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5. Technical Justification

Enclose predictive coverage plots if appropriate e.g. to show coverage improvement.

Reason(s) why site required e.g. coverage, upgrade, capacity:
The proposed new upgraded installation and upgraded equipment provides the latest technology and the ability to prepare for new technology 5G. The applicants are committed to following through on the Government's aims and delivering that high-quality service that the public has come to expect and that they deserve, and the proposed upgraded installation will form an essential part of EE and H3G's 5G network. The growth of digital connectivity over the last few decades has transformed all aspects of life within the UK. It has provided the opportunity to work differently, to socialise and interact differently, and to offer new commercial opportunities. In addition, 5G offers download speeds far in excess of what can be achieved today, even by fixed line broadband. Such increased speeds and low latency provide the potential for far greater opportunities. Examples of this new world that will emerge from 5G coverage involves such things as connected and autonomous vehicles, traffic management, smart manufacturing with heterogenous autonomous machines, direct machine to machine communication, advanced medical devices, automated agriculture, far greater security provision, more stable and reliable connectivity and advances in further application development with uses not yet identified.

It is acknowledged that coverage plots would usually be submitted in support of a telecoms base station upgrade but in this instance coverage plots have not been provided as there is currently no 5G service and this proposed upgrade is principally to provide for the new 5G service for 2 no. operators from a single site as an upgrade to an existing site.

6. Site Selection Process – alternative sites considered and not chosen

In accordance with the licence obligations and advice in the National Planning Policy Framework and the Code of Best Practice in England the applicant's network rollout team investigated the following siting and design options using this sequential approach to site selection:

- Upgrading their own existing base stations;
- Using existing telecommunications structures belonging to another communications operator. i.e. Mast and/ or site sharing, co-location;
- Installations on existing high buildings or structures including National Grid pylons;
- Using small scale equipment; and finally
- Erecting a new ground based mast site – (1st) Camouflaging or disguising equipment. (2nd) A conventional installation e.g. a lattice mast and compound.

The applicant's site selection strategy is to keep the overall environmental impact to a minimum. Utilising existing masts is always progressed where it is technically and legally possible. New sites are only developed where there are no viable or accessible alternatives. The feasibility of the acquisition build and maintenance of the site also needs to be considered.

In order to be robust in the presentation of the application, an assessment of alternative sites was made before progressing the submission further. To ensure the efficient operation of the network, alternative sites must be within a short radius of the existing mast to maintain the existing network coverage. If the mast was relocated substantially away from the existing site, it would leave a gap in existing network coverage elsewhere. Sites also had to have the following characteristics:

- They must be environmentally suitable i.e. where any inevitable and associated impacts are within acceptable parameters.
- They must be available on reasonable commercial terms
- They must be capable of being developed, e.g. without unstable ground conditions
- They must have safe and satisfactory vehicular access for construction and future maintenance and servicing;
- They must afford a reasonable degree of security;
- They must be supplied with power or capable of having an economic supply connected.

Paragraph 113 of the NPPF states that LPAs should aim to keep the number of radio and telecommunications masts sites to a minimum consistent with the efficient operation of the network. The document states that existing masts, buildings and other structures should be used, unless the need for a new site has been justified.

It is important to note that a search of alternative sites was undertaken in implementing the existing mast and no suitable alternatives were found at that time. In order to be robust in the presentation of the application, a new assessment of alternative sites was made before progressing the submission further to ensure there are no suitable sites, which have become available since the original scheme.

To ensure the efficient operation of the network, alternative sites must be within a short radius of the existing mast to maintain the existing network coverage. If the mast was relocated substantially away from the existing site, it would leave a gap in existing network coverage elsewhere. The area comprises principally highway junction. The rooftops of the commercial buildings to the east are unsuitable for the equipment. The current street works location is the best site for the upgrade to serve the wider area and this extremely important route into central Manchester.

In accordance with this sequential approach and the lack of alternative site, the proposal is to upgrade the existing base station in this location in line with National and local Policy.

Option Number	Name	NGR	Reason for discounting
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There are no alternative sites available in the cell search area.

N/A	N/A	N/A	N/A
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If no alternative site options have been investigated, please explain why:

As referred to above, the applicant has taken a sequential approach and is seeking to redevelop an existing installation to enable a single grid network to principally provide a new 5G services, for both EE and H3G to the local surrounding area. It is considered that utilising the location of an existing established radio base station installation is preferable to pursuing a second base station within the vicinity which would not be in line with national policy. Given the siting of existing telecoms infrastructure on the site, it was established that the upgrading of facilities using existing infrastructure and replacing the mast would be the most viable solution.

Additional relevant information (planning policy and material considerations)

National Planning Policy Framework (February 2019)

The government's National Planning Policy Framework (NPPF) was published in February 2019. The Government's latest thinking strongly supports communications infrastructure. Paragraph 112 of the framework document sets out the objectives of the Communications Infrastructure. It 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 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)."*

It goes on to acknowledge that the numbers of radio and telecommunications masts and the sites for such installations should be kept to the minimum consistent with the efficient operation of the network. Paragraph 114 indicates that local planning authorities should not impose a ban on new telecommunications development.

NPPF paragraph 116 sets out a clear message to local planning authorities on health issues and the need for telecommunications systems. It states that *"Local planning authorities must determine applications on planning grounds only. They should not seek to prevent competition between different operators, question the need for an electronic communications system, or set health safeguards different from the International Commission guidelines for public exposure"*.

Throughout the NPPF there is strong support for sustainable development which is summed up in paragraph 10 which states 'At the heart of the Framework is a presumption in favour of sustainable development.

Code of Best Practice on Mobile Phone Network Development in England (November 2016)

The Code of Best Practice provides guidance primarily to mobile network operators, their agents and contractors and to local planning authorities in England.

The principal aim of this Code is to ensure that the Government's objective of supporting high quality communications infrastructure is achieved in a timely manner, but in a way, that also minimises the potential impact that can be associated with such development. It provides clear and practical advice to ensure the delivery of significantly better and more effective communication and consultation between operators, local authorities and residents.

The Code highlights that the mobile telecommunications network is a key element of national infrastructure in both economic and social terms and a crucial component of everyday life. It states that "*coverage in rural area is recognised as a vital component for maintaining economic activity and social inclusion*". It acknowledges that the pressure on networks to upgrade and improve networks through changes to existing sites and the development of new sites is constant. With the ever-increasing demand and the Government's ambitious aspirations it is becoming more important to improve connectivity and capacity.

Concerning the erection of new ground based masts; The Code provides examples of where the environmental and visual impact of the mast can be greatly reduced.

- *Placing the mast near similar structures. For example, industrial and commercial premises, road signs and lamp posts;*
- *Placing a mast within or adjacent to an existing group of trees*
- *Using simple and unfussy designs. Masts which have complex designs are more likely to dominate and be in discord with the landscape and have adverse visual impacts; and*
- *Appropriate colouring. Masts seen against the sky, for example, are best left in their galvanised state or painted pale grey. Against a wooded backdrop a matt green or brown colour scheme would be more applicable.*

It acknowledges that Operators should bear in mind that there are certain locations where sensitive siting and design are of increased importance. These include National Parks; AONBs and Sites of Special Scientific Interest. It states that in these areas, attention will need to be paid to the nature of the proposals, the significance of the location, the impact that the proposals could have and the need to reduce any adverse impact. It goes on that operators may sometimes be able to avoid a specific site (e.g. a Listed Building) but not an entire protected area (e.g. a National Park) in which case they should seek to minimise the impact through sensitive design and appropriate siting of the proposals.

DCMS & MHCLG 'Collaborating For Digital Connectivity' (March 2019)

As indicated earlier Ministers from the DCMS and MHCLG wrote to all CEOs of Council's in England setting out their position in respect of supporting investment in high-quality, reliable digital connectivity. The Government acknowledges that such infrastructure is essential for communities to benefit from faster economic growth and greater social inclusion. Ministers state:

'It is essential to keep pace with growing demand for internet bandwidth and mobile data from local businesses, residents and those who visit our communities. As outlined in the Future Telecoms Infrastructure Review, the Government would like to see nationwide full fibre coverage by 2033. We would also like the UK to be a world leader in 5G, with the majority of the population covered by a 5G signal by 2027. We are writing to ask for your help in supporting the investment necessary to achieve these objectives.

Recent years have seen substantial investment in mobile and fixed digital infrastructure across the UK.

While mobile coverage across the UK has been significantly improving, there are still too many areas where coverage is poor. The UK has now achieved 95% superfast broadband coverage but still only 6% full fibre coverage.

We need to create the market and policy conditions necessary to support the large-scale commercial investment required to extend and future-proof digital connectivity. A key part of this is making it easier for operators to deploy infrastructure. To help to achieve this, the Government recently reformed the Electronic Communications Code - the statutory framework which underpins agreements between communications

network providers and those in both the private and public sector who can provide sites for the installation of network equipment. The purpose of the reforms was to make it easier and more cost effective for communications network providers to deploy and maintain digital infrastructure.

Local authorities have an essential role to play as site providers. As Chief Executives, you can support investment in digital communications infrastructure by ensuring your organisations have policies and procedures in place that promote effective engagement with the digital communications industry and minimise barriers to deployment’.

Local Policy

At the present time the Development Plan for Manchester City Council is the Manchester City Council Core Strategy 2012. While there are no specific telecommunications policies, there are policies that relate to design which are of importance.

Policy CC9 relates to Design and Heritage

“Design of new buildings will need to be of the highest standard in terms of appearance and function. The standards and guidance explained in other LDF policies should be the basis for the approach to design, with particular attention to be given to the City Centre context and character”.

Policy EN 1 relates to Design Principles and Strategic Character Areas which indicates that all development in Manchester will be expected to follow the seven principles of urban design, as identified in national planning guidance,

Policy DC17.1 is a saved policy of the UDP and relates to telecommunication development it states that:

“Applications for telecommunications developments will normally be approved if the Council can be satisfied that the development has been sited and designed to minimise its impact on residential amenity and in environmentally sensitive areas. Wherever possible, the Council will expect the potential of existing buildings and masts, including the sharing of such facilities, to be fully explored before agreeing to additional separate development.”

The supporting text to the policy indicates that *“the Council recognises the need for Manchester to be at the forefront in the field of telecommunications. The Council therefore starts from a presumption in favour of new development and investment in the telecommunication systems serving the City. Equally, it wishes to ensure that new developments are brought forward in a way which protects residential amenity and minimises the visual impact of such equipment, particularly in Conservation Areas and other environmentally sensitive areas in Parks and the river valleys. The Council is also concerned to make maximum possible use of existing buildings and facilities by encouraging operators to share facilities wherever possible in order to avoid unsightly duplication and clutter.”*

Planning Assessment Compliance with Planning Policy

There is a very high demand for mobile services in this area and as such is subject to the investment for an upgrade to provide for 5G service and increased 4G provision. It has been demonstrated that the site has been chosen as the most suitable option utilising the site of an existing base station site which has become part of the established landscape.

The NPPF and the recent correspondence from Government ministers to local authorities clearly highlights the government’s positive stance regarding telecommunications and broadband development whilst noting the substantial environmental and social benefits telecommunications can bring. We acknowledge that the authority accepts the importance of telecommunications infrastructure indicated in Policy and the NPPF guidance on this is particularly relevant. The mast is higher and wider than existing and indeed than other masts that we are used to seeing. This is because this mast will accommodate the latest 5G

technology in the Country's first rollout. This is an important consideration in balancing the importance of the telecommunications infrastructure, against visual impact in line with local and national policy. Shared 5G service cannot be provided on the existing size and type of monopoles commonly seen.

The proposed telecommunications installation fully complies with the objectives of the NPPF, as it states that the number of radio and telecommunication masts should be kept to a minimum consistent with the efficient operation of the network, utilises an existing base station and proposes a mast which will accommodate x2 no competing operators from a single installation to provide the new 5G service.

The site is an established base station location where the existing mast is an established part of the street scene and it has been designed to minimise the effect on the area as much as possible set within roadside grass verge well screened from long views; whilst providing for x2 operators to share x1 site in providing 5G service in line with local and national policy. Whilst it is acknowledged that the proposed upgraded, replacement mast is higher than existing, we reiterate that it is the minimal required to meet the technical requirements of the 5G provision for 2 operators at the single site.

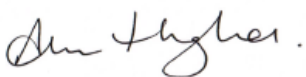
Summary

Taking into consideration all the relevant factors set out above, it is considered that this proposal is the optimum solution in terms of providing 5G provision from a single site for two operators, minimising any adverse impacts on local amenity. The height of the proposed mast (at 20 metres to the top) is the absolute operational minimum to clear the immediate environment and provide coverage.

To summarise the case in favour of the proposal the following points are of relevance:

- With specific regard to telecommunications development, the proposal is fully compliant with the NPPF the Code of Best Practise on Mobile Phone Development, and local policy.
- Site selection was progressed in accordance with advice in NPPF and the Code of Best Practice and represents the least environmentally intrusive, technically suitable, available option;
- The operator's site selection strategy is to keep the overall environmental impact to a minimum where the operator will choose a site with the least impact upon the character of the area utilising an existing site;
- In this instance, this site is considered to have the least impact upon the character of the local area sited opposite commercial facilities;
- The proposal fully accords with National and Local Policy and should, therefore, be approved.

Contact Details

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Signed		Date	28/2/2020
Position	Principal Planner	Company (on behalf of the above operator)	Entrust UK Ltd