

SUPPLEMENTARY INFORMATION

1. Site Details

Site Name:	Cleobury Road SW	Site Address:	Grass Verge off Cleobury Road, near Kidderminster, Bewdley, Worcestershire, DY12 2JW
National Grid Reference:	E: 377621 N: 275283		
Site Ref Number:	WYF003	Site Type: ¹	Macro (Street furniture)

2. Pre-Application Check List

Site Selection

Was a local planning authority mast register available to check for suitable sites by the operator or the local planning authority?		No
If no explain why: Wyre Forest District Council do not have a publicly accessible, up to date mast register.		
Were industry site databases checked for suitable sites by the operator:	Yes	
If no explain why: Existing site WYF003 identified as part of this process.		

Site Specific Pre-application consultation with local planning authority

Was there pre-application contact:	Yes
Date of pre-application contact:	26/11/2021
Name of contact:	N/A
Summary of outcome/Main issues raised: A pre-application consultation letter and copy of the proposal drawings were sent to the Chief Planning Officer by email, on 26/11/2021. A response was received on 29/11/2021, requesting a fee in order to register the information as a formal pre-application enquiry. As the proposal is for the minimum amount of equipment at the minimum height possible, in the only feasible location for the operator's technical requirements, it was not considered suitable to proceed with formal pre-application in this instance.	

Community Consultation

Rating of Site under Traffic Light Model:	Red	Amber	Green
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¹ Macro or Micro

Outline of consultation carried out:

Pre-application consultation was carried out with the local councillors for the Bewdley & Rock district (Councillors Roger Coleman, Calne Edginton-White and Anna Coleman), the Bewdley county councillor Dan Morehead, the local MP Mark Garnier, and Bewdley Parish Council. Pre-application consultation letters and drawings of the proposal were sent to these parties on 26/11/2021.

Summary of outcome/main issues raised (include copies of relevant correspondence):

A response was received from Councillor Coleman on 26/11/2021, stating:

"I have no issues and no member of the public has contacted me. They may well do once your planning application goes live. I understood Huawei equipment was no longer acceptable?"

A response was received from Bewdley Parish Council on 16/12/2021, stating:

"It was agreed that the enclosed planning application should be recommended for approval."

No further responses have been received to date.

School/College

Location of site in relation to school/college (include name of school/college):

N/A

Outline of consultation carried out with school/college (include evidence of consultation):

N/A

Summary of outcome/main issues raised (include copies of main correspondence):

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	
Has the Civil Aviation Authority/Secretary of State for Defence/Aerodrome Operator been notified?	Yes	
Details of response: An Aerodrome notice was sent to Droppingswells Farm Airfield on 26/11/2021 by Recorded Delivery. Copy of the notice and proof of delivery enclosed as a separate supporting document. No response has been received to date.		

Developer's Notice

Copy of Developer's Notice enclosed?	Yes	
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Date served:

06/01/2022

Developers' notices were sent to the Worcestershire County Council Highways Department via email on 06/01/2022. Email, delivery receipt and response from Highways can be found below.



Clarke Telecom Limited
Unit E, Madison Place,
Northampton Road,
Manchester M40 5AG
T: +44 (0) 161 785 4500
F: +44 (0) 161 785 4501
www.clarke-telecom.com

Our ref: WYF003

Highways Department
Worcestershire County Council

Email: highwaysdevcontrol@worcestershire.gov.uk

BY EMAIL

6th January 2022

Dear Sir/Madam,

APPLICATION FOR PRIOR APPROVAL: FOR MBNL ON BEHALF OF HUTCHISON 3G UK LIMITED

PROPOSED TELECOMMUNICATIONS RADIO BASE STATION INSTALLATION AT WYF003, GRASS VERGE OFF CLEOBURY ROAD, NEAR KIDDERMINSTER, BEWDLEY, WORCESTERSHIRE, DY12 2JW (NGR E: 377621, N: 275283)

Please find attached a notice that is required under paragraph under Part 16 of Schedule 2 to the Town and Country Planning (General Permitted Development) (England) Order 2015 (as amended).

The notice is being served on you as the authority which owns/maintains the land to which the application relates to advise that an application for prior approval is to be submitted to the local planning authority for the proposed telecommunications equipment noted above and shown on the attached drawings. Should you wish to make representations to the local planning authority on the application then the relevant details are contained on the Notice.

Should you have any further queries regarding the proposal please do not hesitate to contact me.

Yours faithfully

A handwritten signature in blue ink that reads "V. Parsons".

Vicky Parsons MSc
Town Planner
Clarke Telecom
Tel: +44 (0)161 785 4500 Fax: +44 (0)161 785 4501
Email: vicky.parsons@clarke-telecom.com
For MBNL on behalf of Hutchison 3G UK Limited

Enc Drawings

BY EMAIL

Developer's Notice as required under the Town and Country Planning (General Permitted Development) (England) (Amendment) (No.2) Order 2016

Proposed Development at: GRASS VERGE OFF CLEOBURY ROAD, NEAR KIDDERMINSTER, BEWDLEY, WORCESTERSHIRE, DY12 2JW

National Grid Reference: E: 377621, N: 275283

Ref no: WYF003

I give notice that Clarke Telecom Limited, Unit E, Madison Place, Northampton Road, Manchester, M40 5AG, for MBNL on behalf of Hutchison 3G UK Limited, will be applying to the The Chief Planning Officer, Wyre Forest District Council, Economic Prosperity & Place Directorate, Wyre Forest House, Finepoint Way, Kidderminster, Worcs, DY11 7WF, under Part 16 of Schedule 2 of the Town and Country Planning (General Permitted Development) (England) Order 2015 (as amended) for its determination as to whether the prior approval of the authority will be required as to the siting and appearance of:

The installation of a new 15 metre high monopole supporting 6 no. antennas with a wraparound equipment cabinet at the base of the column, the installation of 3 no. new equipment cabinets, and ancillary development thereto.

The application and accompanying plans are available for public inspection at the offices of the above Authority at Wyre Forest District Council, Economic Prosperity & Place Directorate, Wyre Forest House, Finepoint Way, Kidderminster, Worcs, DY11 7WF during usual office hours.

Any individual and organisation wishing to make representations about the siting and appearance of the proposed development may do so in writing to the Local Planning Authority at the address above (Wyre Forest District Council, Economic Prosperity & Place Directorate, Wyre Forest House, Finepoint Way, Kidderminster, Worcs, DY11 7WF). Any representations must be received by the Local Planning Authority no later than 20th January 2022.

Name: Vicky Parsons

Signed: _____

V. Parsons

for MBNL, for and on behalf of Hutchison 3G
UK Limited

Date: 6th January 2022

Vicky Parsons

From: Vicky Parsons
Sent: 06 January 2022 17:00
To: highwaysdevcontrol@worcestershire.gov.uk
Subject: Developer's Notice - Proposed Installation of Telecommunications Equipment at Grass Verge off Cleobury Road, near Kidderminster, Bewdley [Our ref: MBNL WYF003]
Attachments: WYF003 Developers Notice Covering Letter.pdf, WYF003 Developers Notice.pdf, WYF003 Planning Drawings Issue B.pdf

FAO HIGHWAYS DEPARTMENT

Dear Sirs,

Please find attached a Developer's Notice and set of drawings in relation to the proposed installation of telecommunications equipment at Grass Verge off Cleobury Road, near Kidderminster, Bewdley, Worcestershire, DY12 2JW (E 377621, N 275283).

Please can you confirm receipt of this email at your earliest convenience?

If you have any queries, please don't hesitate to contact me.

Kind regards,
Vicky

Vicky Parsons

From: Microsoft Outlook
To: highwaysdevcontrol@worcestershire.gov.uk
Sent: 06 January 2022 17:00
Subject: Relayed: Developer's Notice - Proposed Installation of Telecommunications Equipment at Grass Verge off Cleobury Road, near Kidderminster, Bewdley [Our ref: MBNL WYF003]

Delivery to these recipients or groups is complete, but no delivery notification was sent by the destination server:

highwaysdevcontrol@worcestershire.gov.uk (highwaysdevcontrol@worcestershire.gov.uk)

Subject: Developer's Notice - Proposed Installation of Telecommunications Equipment at Grass Verge off Cleobury Road, near Kidderminster, Bewdley [Our ref: MBNL WYF003]



Developer's
Notice - Propos...

Vicky Parsons

From: Highways Development Control Team
<highwaysdevcontrol@worcestershire.gov.uk>
Sent: 07 January 2022 10:22
To: Vicky Parsons
Subject: RE: Developer's Notice - Proposed Installation of Telecommunications Equipment at Grass Verge off Cleobury Road, near Kidderminster, Bewdley [Our ref: MBNL WYF003]

Dear Vicky Parsons

I hereby acknowledge receipt of the Developer's Notice for the proposed installation of telecommunications equipment in the above location and it is noted that this is in addition to existing equipment. There is no objection in principle and the Highway Authority will await consultation by the Local Planning Authority.

Regards

Fiona Allen
Development Control Engineer
Transport Planning Unit
Directorate of Economy & Infrastructure
Worcestershire County Council
County Hall, Spetchley Road, Worcester, WR5 2NP
Tel: 01905 843753
Email: fallen@worcestershire.gov.uk



worcestershire
county council

3. Proposed Development

The proposed site:

Background:

MBNL undertakes the management and network deployment of telecommunications sites on behalf of both EE (UK) Ltd and Hutchison 3G UK Ltd (H3G). The proposal is for a new H3G column, in order to provide the latest 4G and new 5G technologies to this area of Bewdley.

The Government is committed to supporting investment in high-quality, reliable digital connectivity so that communities can benefit from faster economic growth and greater social inclusion. 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 part of MBNL and H3G's continued network improvement program, there is a specific requirement for a complementary installation at this location to provide 5G services, ensuring that this area of Bewdley maintains access to the latest technologies.

There is an existing telecommunications street pole EE_73256_MBNL_WYF003_3UK_DY0123, on the Grass Verge off Cleobury Road, near Kidderminster, Bewdley, Worcestershire, DY12 2JW (NGR: E 377621, N 275283). This existing street pole is shared by both EE and H3G and provides vital 2G/3G/4G coverage and capacity to the Bewdley area.



Image 1: Existing 2G/3G/4G site

MBNL and H3G are seeking to upgrade and enhance their network services in the area by installing infrastructure that will allow them to fulfil their licence obligations and deliver new 5G technologies to this area. However, the nature of 5G and the network services it provides, means the equipment and antennas it uses are quite different to previous, and existing, service requirements.

The proposed new mast has been sited and designed in order to provide 5G coverage for H3G and to support the existing mobile network. As the new pole will be complementary to the existing 2G/3G/4G mast it must be located as close as possible to the existing pole in order to replicate the coverage.

At present it is paramount that digital connectivity is supported and maintained throughout the country. In particular the current massive shift in user demand from city centres and places of work to residential areas and suburbs requires an improvement in coverage and capacity throughout the whole network. The current proposal therefore provides such additional capacity to the network whilst still promoting the improved 5G technology.

The proposed development is within the limits set out in Part 16 for permitted development with Prior Approval. The location enables the whole of the surrounding area to benefit from improved 5G network coverage and has been designed to be future proof, thus enabling other technologies to be deployed depending upon the demand required. As the shift in demand is expected for the foreseeable future and that as central Government considers digital communications to be a critical national infrastructure, the operator intends to support customers and local residents by ensuring as little disruption as possible.

The existing site will therefore be retained so that all existing users may benefit at this difficult time. In addition, EE will become the Emergency Services Network Provider and in order to dedicate the 4G network for that use, the intention is to support all users during the current climate and to maintain all current services without the removal of any existing equipment.

It is not the operator's intention to retain the existing equipment and have two sites for a significant period of time. The existing equipment on the grass verge off Cleobury Road will be removed as soon as possible, but we are currently unable to confirm a timescale for its removal due to ongoing delays being experienced as a result of the Covid-19 pandemic. The removal of the equipment as soon as reasonably practicable after it is no longer required for electronic communications purposes is in full accordance with the Town and Country Planning (General Permitted Development) (England) (Amendment) (No. 2) Order 2016, Condition A.2 (2), which is an embedded and enforceable condition within the statutory instrument.

As 5G is to deliver new technology, so too the infrastructure required is different than that necessary to provide the previous generations of connectivity. Wherever possible, existing installations will be utilised to accommodate the necessary infrastructure. In certain cases, the upgrade of service will require a dual pole solution for sites which currently have a single pole design. Due to the beamforming technology required for 5G service, the antenna height in many cases must be greater than that for previous generation technology.

The Covid-19 pandemic has created unparalleled demand and pressure on the operator's network while people try to keep life and the economy moving through isolation and containment measures, with many people now working from home or remotely. This is a perfect example of why the operator must continue with its rollout as streamlined as is possible.

For the first time in history, all of the mobile networks sent out a government message to their customers with details of the new shutdown measures. The message from 24 March 2020 reads: 'GOV.UK CORONAVIRUS ALERT. New rules in force now: you must stay at home. More info and exemptions at [gov.uk/coronavirus](https://www.gov.uk/coronavirus) Stay at home. Protect the NHS. Save lives'. Even the World Health Organisation launched a WhatsApp chatbox allowing people to get instant information about the coronavirus through the smartphone messaging application. None of this would be possible without the physical infrastructure associated with mobile phone industry such as masts, antennas, microwave dishes and cabinets.

Further information is provided in Section 4 'Technical Justification' below and the additional information sheets, '5G and Future Technology – Delivering the UK's Telecoms Future Streetworks Monopoles in support of 5G Setting the scene'.

The site

The application site is positioned on the grass verge off Cleobury Road, slightly to the east of the existing equipment. The surrounding area is predominantly residential in nature, comprising of traditional two-storey residential dwelling-houses and bungalows. There are a number of existing vertical features in the immediate area including streetlighting columns, road signage, telegraph

poles, other statutory undertakers' equipment cabinets, and street trees. These linear structures help the proposed column and associated equipment assimilate with its surroundings.

The site is not located within a conservation area or any other designated Article 2(3) land or within the setting of a listed building.



Image 2: The application site (Source: Google)

The operator is limited in siting options as there is a requirement to provide equivalent 2G/3G/4G coverage and capacity for this area of Bewdley whilst also providing new 5G services. The requirement to replicate the coverage provided by the existing pole means that the operator has to be located as close as possible to the existing installation in order to maintain the provision of equivalent coverage and capacity to the surrounding local area.

MBNL and H3G are proposing the installation of a 15.0m column supporting 6 no antennas, together with ground-based equipment cabinets and ancillary development thereto.

MBNL and H3G have specified a 15.0m column as this is the minimum height that can provide the required 3G/4G/5G coverage for H3G within one facility.

Planning History

A previous planning application was submitted by Mono Consultants for the upgrade of the existing site, comprising of the installation of a 20 metre high monopole and associated equipment cabinets in this location (LPA reference 20/0463/TEL). The application was refused on 6th August 2020, for the following reason:

"The proposed telecommunications installation would extend significantly above the height of the existing mast and mature street trees, street lighting columns and nearby buildings, and due to its unsympathetic design and siting on the edge of the footpath would appear unduly prominent and incongruous in the streetscene. As such, the development would have a

detrimental impact on the character and appearance of the surrounding area and on the outlook of neighbouring residential properties, to the detriment on both the amenity of local area and existing residents, contrary to Policy SAL.CC5 of the Adopted Site Allocations and Policies Local Plan and the National Planning Policy Framework."

This application takes into account the previous reasons for refusal.

The proposed monopole will now measure 15 metres in height. This is the minimum height possible to provide acceptable levels of coverage to the target coverage area. Whilst a taller height would be preferable for the radio planners' technical requirements, they have been willing to compromise here to ensure that the visual impact of the proposal is minimised so far as practicable, particularly given the highly residential nature of the area.

It is noted that the Officer's Report for application reference 20/0463/TEL stated:

"At a height of 20 metres it would easily be the tallest item in the locality and would be highly visible when travelling up or down Cleobury Road. I have suggested to the applicant that a 15m mast may be more acceptable and have asked them to look into this as an alternative, but no response has been received to this proposal."

Enclose map showing the cell centre and adjoining cells if appropriate:

As part of MBNL's continued network improvement program, there is a specific requirement for a new mast on the grass verge off Cleobury Road, to ensure that the latest high quality 2G, 3G and 4G service provision continues to be provided in this area of Bewdley for EE and H3G. The proposed new column will also ensure that new 5G coverage can be provided at this location for H3G. This ensures that coverage and capacity requirements are maintained. The column is designed such that should EE require additional service provision it will be able to utilise the same installation under its joint agreement with H3G to utilise each other's equipment.

The proposed new mast has been sited and designed in order to provide 5G coverage and to support the existing mobile network. At present it is paramount that digital connectivity is supported and maintained throughout the country. In particular the current massive shift in user demand from city centres and places of work to residential areas and suburbs requires an improvement in coverage and capacity throughout the whole network. The current proposal therefore provides such additional capacity to the network whilst still promoting the improved 5G technology.

The 3G and 4G provision allows internet access, video calling, data downstreaming, accessing social media networks and emailing to name just a few of the benefits. Therefore, to maintain high quality indoor 3G and 4G services in to this area would promote activity in line with the general population demand as the ownership of smart devices increases. 5G service provision will bring faster, more responsive and reliable connections than ever before.

The search area is very small for this new installation. The existing site is shared and as such the surrounding network of existing cells and services is configured to the position of that existing site. This means that the complementary site must be in close proximity to fit within that existing network cell configuration. Given this, there will be no change to the existing cell configuration.

Fact sheets on '5G and Future Technology – Delivering the UK's Telecoms Future Streetworks Monopoles in support of 5G Setting the scene' have been attached to this application for reference.

Type of Structure (e.g. tower, mast, etc): Phase 8 Street Pole	
Description: The installation of a new 15 metre high monopole supporting 6 no. antennas with a wrap around equipment cabinet at the base of the column, the installation of 3 no. new equipment cabinets, and ancillary development thereto. Cabinet Dimensions: 1 No. H3G APM5930 Cabinet – 640mm x 440mm x 1225mm (W x D x H) 1 No. H3G Bowler Cabinet – 1900mm x 660mm x 1827mm (W x D x H) 1 No. H3G HAT Cabinet – 600mm x 500mm x 1585mm (W x D x H)	
Overall Height:	15 metres
Height of existing building (where applicable):	N/A
Equipment Housing:	
Length:	Please see above
Width:	Please see above
Height:	Please see above
Materials (as applicable):	
Tower/mast etc – type of material and external colour:	Galvanised steel, painted RAL 7035 (Grey)
Equipment housing – type of material and external colour:	All steel – RAL 6009 (Green)

Reasons for choice of design, making reference to pre-application responses:
<p>Central Government attaches great importance to the design of the built environment and outlines this within Section 12 (Paragraph 126) National Planning Policy Framework (Revised). It states:</p> <p><i>'Good design is a key aspect of sustainable development, creates better places in which to live and work and helps make development acceptable to communities'.</i></p> <p>In keeping with the National Planning Policy Framework (NPPF) guidelines of using: "high quality communications infrastructure", the proposed design has been selected to minimise visual impact upon the surrounding environment.</p> <p>The nature of 5G and the network services it provides, means the equipment and antennas it uses are quite different to previous, and existing, service requirements.</p> <p>The design of any communications infrastructure is dictated primarily by operational requirements and secondly by the development's setting.</p> <p>From an operational perspective, the operators must ensure the following when devising a final design solution for any site:</p> <ul style="list-style-type: none"> • antennas are specifically orientated to transmit effectively and efficiently without signal being impeded; • dish links (if required) achieve a direct line of site connection with other base station sites within the network; and • GPS modules achieve a direct satellite link.

To achieve this the operator undertakes panoramic assessment to determine what is the minimum height for transmission equipment to be located in a context of local topography and clutter, such as manmade or natural features, and in all cases the operator is committed to limiting the size and amount of apparatus to an operational minimum.

In terms of setting, given that the subject site is located on the grass verge off Cleobury Road, a complementary street furniture style development has been deemed to be the most suitable type of base station as this is the most accepted design for urban, suburban and rural roadside locations throughout the UK.

The operator carefully considered the design of the proposed column. The operator is proposing the most sensitive design currently available to them which will provide the necessary coverage and capacity to the surrounding area. Due to all the technologies that will be available at this location, 2G, 3G, 4G and 5G, 6 antennas need to be installed at the top of the slim-line monopole. These are split into a dual stack formation where 3 antennas will be located at the top of the column and the other 3 will be located underneath the upper set of antennas. The 3 upper antennas will provide new 5G technology for the operator to the surrounding area. The other lower 3 antennas will provide the latest 2G, 3G and 4G service provision to this area of Bewdley.

5G new radio technologies operate in higher frequency bands than older technologies. Since it operates at higher frequencies where attenuation of the radio signal is naturally higher and the effects of clutter are greater it will normally require a higher structure to achieve the same coverage footprint. To increase capacity and data speeds to the user, the antenna will normally need to be mounted higher than conventional antennae. These factors drive a requirement for an increase in antenna height in 5G.

The new antennas are all unshrouded for technical reasons. However, they have been designed to be as tight as possible and virtually the same width as the main column, to minimise their visual appearance. The higher the radio frequency the more signal attenuation there is. The higher frequency 5G antennas are unable to operate effectively through the Glass Reinforced Plastic that the shroud is made up of and as such if these antennas were to be shielded then they would not be able to provide the necessary coverage to the target coverage area. An additional installation would be needed elsewhere within the cell area, leading to the proliferation of masts.

This is the slimmest design possible which will enable all technologies to be supported from this site. If the column and shroud width were to be any slimmer then the technology would not fit in the one column and another radio base station would be required, which would lead to an unnecessary proliferation of masts contrary to national Government guidance set out in the NPPF and The Code of Best Practice. Similarly, if the column were to be a uniform width throughout then the overall width would have to increase which would appear more visually prominent in the streetscene, than the proposed design.

The proposed design is more visually sensitive and much easier to assimilate into a streetscene than lattice towers or unshrouded pole designs with bulky headframes. These non-stealth designs are preferred by operators as they are structurally capable of hosting more equipment and give greater scope for antenna orientation and are thus more efficient structures. However, such designs would appear alien in this location. Therefore, the operator has compromised on obtaining maximum coverage in order to better assimilate in to the streetscene.

The design of the column resembles as closely as possible the other existing vertical structures within the immediate area, including streetlighting columns, telegraph poles, road signage and

other statutory undertakers' equipment cabinets, as well as nearby trees. These will help the proposed radio base station assimilate with the surrounding area.

The design of the column is a simple, functional, vertical structure which will not appear incongruous within the streetscene, which is characterised by similar linear structures. The column will be coloured grey to match the existing monopole, which is also considered to be the best colour to blend with the typical grey skyline but can be coloured any other colour the LPA consider appropriate.

The cabinets are designed to appear like other statutory undertakers' equipment cabinets, including in the immediate streetscene. The proposed equipment cabinets are small for telecommunications apparatus and proposed to be coloured green to match the equipment cabinets located on the grass verge and other statutory equipment cabinets located on Cleobury Road.

The equipment cabinets can be installed under the operators' permitted development rights but have been included on the plans and in the description in order to remain fully transparent.

The proposed co-location solution will ensure mobile telecommunications service within this locale meet the expectation of residents, businesses and visitors, while minimising the visual impact of the infrastructure on the surrounding environment and meeting all ICNIRP certification requirements.

Although no pre-application advice was received from the Local Planning Authority in relation to this application, the decision notice and officer's report from the previous refusal were assessed.

It is therefore considered that the proposal before you strikes a good balance between environmental impact and operational considerations. The proposed height and design represents the best compromise between the visual impact of the proposal on the surrounding area and meeting the technical requirements for the site. Taking all matters into account it is considered that this proposal, to provide the latest 2G, 3G and 4G service provision and 5G coverage providing high quality dense coverage and capacity, would not appear out of place within the streetscene.

Technical Information

<p>International Commission on Non-Ionizing Radiation Protection Declaration attached (see below)</p> <p>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.</p> <p>When determining compliance the emissions from all mobile phone network operators on or near to the site are taken into account.</p>	Yes	
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<p>In order to minimise interference within its own network and with other radio networks, 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</p> <p>As part of H3G UK Limited's network, the radio base station that is the subject of this application will be configured to operate in this way.</p> <p>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.</p> <p>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.</p>		
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4. Technical Justification

Coverage plots will not show the improvement in capacity.

Reason(s) why site required e.g. coverage, upgrade, capacity

There is a specific requirement for a new column and associated equipment cabinets at this location to allow H3G to improve their 2G, 3G and 4G coverage and capacity in and around the Bewdley area and be able to provide new 5G service provision to this cell. This ensures high quality indoor service provision is provided. Furthermore, due to the joint agreement with the two operators EE (UK) Ltd and H3G (UK) Ltd the installation will be designed so that EE can utilise the same equipment. This negates the need for further radio base stations in the vicinity for either of these two operators.

The dynamic nature of technological advances in the telecommunications industry coupled with ever increasing demand from subscribers dictates a continual reinvestment programme on the part of the operators. As a result, and in line with their licence requirements, mobile operators are constantly developing their networks as well as refining and modernising their infrastructure.

Cellular networks are made up of several individual cell areas, each of which has a base station within it. A good analogy for describing a cellular network is that of a patchwork quilt with each cell area being one of the many patches that are sewn together making up the network 'quilt'.

Notably, there are 3 main elements to a radio base station; the cabin or cabinets contain the equipment used to generate the radio signals(s), the supporting structure that holds the antennas in the air or fixes them to a building or structure and the antennas themselves, which emit the radio signals (along with the necessary amplifier or receiver units). Other elements necessary for the base station to function are a power source, feeder cables that link the equipment housing to the antennas and the various support structures, grillages and fixings, often referred to in general terms as '*development ancillary to*' the base station.

These base stations then receive and transmit to mobile devices using radio waves. The antennas operate like an aerosol spray with signal transmitted along a central orientation and dissipating with distance. The dishes operate on a direct line of sight basis, linking with dishes on other base station sites elsewhere within the wider network. The dish links also link the base station to a master control centre that manages the call handover process that occurs when a mobile user moves from one cell area to another. They also provide telemetric monitoring to ensure the site is working properly and offer remote maintenance.

In the early days of mobile communications, peripheral locations, high-level topographies and large-scale masts were often identified in order that transmission from a new base station could cover an expansive geographical area. However, whilst this approach was viable for early network generations, the number of mobile handset users has dramatically increased with time, as have the advancements in mobile technology itself. As a result, the cellular network construction and operational criteria have changed too. Because modern networks use higher frequencies with faster data rates whilst serving significantly increased numbers of mobile device users, typical network cell areas (i.e. the geographical area targeted for coverage for which a base station development provides a solution), are now smaller in their geographical expanse and tend to be directly proportionate to the number of users within it. They are also therefore greater in their number with base stations operating at a lower power output than their predecessors.

Mobile phone base stations operate on a low power and accordingly base stations therefore need to be located in the areas they are required to serve. Increasingly, people are also using their mobiles in their homes and this means the operator needs to position base stations in, or close to, residential areas.

Mobile connectivity and service is required where customers live, work and play. 5G coverage and superfast mobile broadband data capacity demand will continue to increase exponentially with the introduction of IoT (Internet of Things), machine to machine connectivity, automated transport/industry and other 'smart' applications. To this end the existing shared infrastructure within the built environment has had to be reviewed and adapted as appropriate.

In the UK, rollout is now commencing. The main benefits of 5G are that it will be much faster and have higher capacity than 4G, with download speeds in excess of 1Gbps. To place this in context, customers will be able to download - not merely stream - a full HD movie in less than 10 seconds on a 5G network. The same task would take closer to 10 minutes on 4G.

The case for 5G is compelling as it will bring faster, more responsive and reliable connections than ever before.

The Local Government Association (LGA) has produced a Councillor's Guide to Digital Connectivity and sets out some of the benefits of 5G technology:

- Faster mobile broadband and a more consistent experience in congested areas with a very high number of devices.

- Industrial applications, enabling businesses to improve their productivity, for example through predictive maintenance and real-time analytics.
- Internet of Things (IoT) services, many of which will help council's and businesses deliver services more efficiently including:
 - Transport and logistics: connected parcels and fleet tracking.
 - Health and social care.
 - Environmental monitoring: sensors monitoring air quality and water pollution in real-time.
 - Smart agriculture and smart animal farming, smart retailing.
 - Connected and autonomous cars: allowing cars to communicate with each other, other road users and even the road infrastructure.

Good connectivity allows people to access a wide range of essential services including emailing; downloading apps; social media; helping with homework; researching local events, businesses or transport timetables; managing personal finances; shopping; contacting local authorities; arranging medical appointments; general business functions; and much, much more.

5. Site Selection Process

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 and where it is the local planning authority's preferred environmental solution. New sites are only developed where there are no viable or accessible alternatives or it is the local planning authority's preferred approach. The feasibility of the acquisition, build and maintenance of the site also needs to be taken into account.

The proposed equipment will work alongside the existing established base station in this location. The existing equipment will be retained in order to ensure that there is no loss to 2G/3G/4G coverage in the area, whilst the proposed equipment will enhance capacity and provide new 5G coverage. The proposed equipment will therefore upgrade the existing coverage. As the two monopoles work in parallel with each other, serving the same target coverage area, the new equipment must be located as close to the existing site as possible. This has significantly reduced the search area.

Alternative sites considered and not chosen:

Site Type	Site Address	National Grid Reference	Reason for not choosing site
Existing site	Grass Verge at Cleobury Road, Bewdley, DY12 2JW	E: 377621 N: 275282	As explained throughout this statement, the existing MBNL monopole is not a shareable structure in its current form and cannot accommodate any further antennas. The existing site will remain in situ to continue to provide 2G, 3G and 4G coverage for EE and 3 customers with no break in service provision. However, it is not the operators' intention to have both poles in situ for a considerable amount of time. Once the new monopole is integrated and fully operational on all parts of the spectrum, the existing equipment will be decommissioned and removed. Due to the ongoing COVID-19 pandemic, the operator is not able to confirm exactly when this will be, but once it is no longer required the existing equipment will be removed as soon as possible in full accordance with Part 16 of the GPDO.

SW	Footway at Yew Tree Lane, Bewdley, DY12 2QD	E: 377575 N: 275300	The pavements on this road are narrow and there are regular driveways and pathways leading to the properties. Given the lack of space on the footways, an installation on this street would not be feasible. It would compromise pedestrian movements and access arrangements to properties. Therefore, this option has been discounted on highways safety grounds.
SW	Footway at The Lakes Road, Bewdley, DY12 2PH	E: 377747 N: 275314	There is insufficient space available on this stretch of pavement. An installation here would restrict pedestrian movements. As such, this option has been discounted on highways safety grounds.
SW	Footway at Hales Park, Bewdley, DY12 2JN	E: 377685 N: 275253	The pavements on this road are narrow and there are regular driveways and pathways leading to the properties. Given the lack of space on the footways, an installation on this street would not be feasible. It would compromise pedestrian movements and access arrangements to properties. Therefore, this option has been discounted on highways safety grounds.
SW	Footway at Elton Road, Bewdley, DY12 2HR	E: 377690 N: 275206	The pavements on this road are narrow and there are regular driveways and pathways leading to the properties. Given the lack of space on the footways, an installation on this street would not be feasible. It would compromise pedestrian movements and access arrangements to properties. Therefore, this option has been discounted on highways safety grounds.
SW	Footway at Hop Pole Lane, Bewdley, DY12 2QH	E: 377469 N: 275181	This location is too far removed from the operators' search area to provide the required level of coverage and capacity. As explained previously, the search area for this proposal is very small given the need to locate the proposed equipment as close as possible to the existing. Therefore, this option has been discounted on technical grounds as it would not meet the operators' technical requirements.
GF			Given the residential nature of the area, there are no spaces suitable for hosting a greenfield style installation and associated equipment cabinets and compound. A greenfield installation, such as a lattice tower, in the immediate vicinity of the existing installation would be more visually prominent than the chosen design at the application site. The chosen design is similar to the existing installation which is already an established feature in the streetscene.
RT			There are no suitable rooftops that are able to be utilised for the required equipment. All of the nearby buildings are bungalows and 2 storey pitched roof residential properties, which do not provide an adequate height and structurally are not feasible to host telecommunications equipment.

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

The proposed new mast has been sited and designed in order to provide 5G coverage and to support the existing mobile network. As the new pole will be complementary to the existing 2G/3G/4G mast it must be located as close as possible to the existing pole in order to replicate the coverage.

Paragraph 115 of the NPPF states *'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'*.

Environmental Information:

N/A

Land use planning designations:

Relevant information below.

Additional relevant information:

From the outset, it should be appreciated that irrespective of the proposed installation's use as a telecommunications base station, any change in form in the street scene will always be, to some degree, a noticeable alteration to those residents and regular passers-by found closest. However, it should be recognised that visibility or a development's siting and appearance, does not automatically result in overwhelming adverse harm.

The provisions of the GPDO require the local planning authority to assess the proposed development solely on its **siting and appearance**.

The principle of development has been established by the Government when the new permitted development rights came in to force in November 2016, which enabled sites such as this one to be built under the operators permitted development rights, (as the column height does not exceed 20m), with prior approval for siting and appearance being the only matters that the local planning authority can take in to consideration.

Planning Practice Guidance explains how a prior approval application differs from a planning application at paragraph 28. It states that:

'The statutory requirements relating to prior approval are much less prescriptive than those relating to planning applications. This is deliberate, as prior approval is a light-touch process which applies where the principle of the development has already been established (emphasis added). Where no specific procedure is provided in the General Permitted Development Order, local planning authorities have discretion on what processes they put in place. It is important that a local planning authority does not impose unnecessarily onerous requirements on developers, and does not seek to replicate the planning application system' (emphasis added).

The Planning Portal also provides Application Type Guidance. This guidance states that:

'Certain forms of telecommunication development, for example, mobile telephone masts, are known as 'permitted development' and subject to prior approval from the local planning authority. The prior approval procedure means that the principle of development is not an issue. The LPA can only consider the siting and appearance of the proposal'.

National Planning Guidance

Planning policy is provided at the national level by the National Planning Policy Framework (NPPF). It is a material consideration in planning decisions. The NPPF is pro – development with a 'presumption in favour of sustainable development' being seen as a golden thread, running through both plan making and decision taking'.

The thrust of this guidance is positive and a reminder to LPAs that we need to build the requisite infrastructure to enable economic growth.

It is not necessary to quote extensively from this document, but the following points are highlighted.

National Planning Policy Framework (July 2021)

The Government's National Planning Policy Framework (NPPF) was published on 24 July 2018 and updates the 2012 version. In February 2019 the NPPF was revised again, with minor alterations to wording relating to housing supply and not any parts relating to telecommunications. The NPPF was revised again in July 2021, in order to strengthen sections including requirements on improved design quality, a new requirement for Councils to produce local design codes or guides, an emphasis on using trees in new developments, revised policies on plan-making, removing statues and opting out of PD rights relating to residential conversions.

The Government's latest thinking continues to strongly support communications infrastructure. The NPPF remains very supportive of high quality communications. Indeed, a whole chapter is dedicated to high quality communications, emphasising the importance that the Government attaches to digital connectivity. Paragraph 114 states that advanced, high quality and reliable communications infrastructure is essential for economic growth and social well-being. This wording echoes guidance set out in paragraph 42 of the 2012 version of NPPF. However, it also includes the importance of *reliable* communications infrastructure for both economic growth *and social well-being*.

The NPPF continues to support the expansion of electronic communications networks at paragraph 114. It notes that 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. The economic and social benefits of providing high quality and reliable communications infrastructure are well documented and can be found later in this Supporting Information Statement.

The NPPF makes reference to 5G:

'Planning policies and decisions should support the expansion of electronic communications networks, including next generation mobile technology (such as 5G)...

With the above in mind, the Government is already forward thinking the evolution of data networks and seeks planning decisions to take account of this. 5G technology provides increased speed of data and more capacity in the network, to ensure that handheld devices can continue to be

used for the purposes in which they were purchased. This will bring even greater economic and social benefits to the area.

Paragraph 115 of the NPPF retains the requirement to minimise the number of installations consistent with the efficient operation of the network but also includes being consistent with the needs of consumers and providing reasonable capacity for future expansion.

Paragraph 118 of the NPPF retains the guidance set out in paragraph 46 of the 2012 NPPF version which relates to determining 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.

At the heart of the NPPF is the retained presumption in favour of sustainable development (para 11). For decision-taking this means approving development proposals that accord with an up-to-date development plan without delay or where there are no relevant development plan policies, or the policies which are most important for determining the application are out-of-date, granting permission unless the application of policies within the revised Framework that protect areas or assets of particular importance provides a clear reason for refusing the development proposed or any adverse impacts of granting permission would significantly and demonstrably outweigh the benefits, when assessed against the policies in the revised Framework taken as a whole.

The NPPF continues to provide guidance on decision-making. At paragraph 38 it states that:

'Local planning authorities should approach decisions on proposed development in a positive and creative way. They should use the full range of planning tools available, including...permission in principle, and work proactively with applicants to secure developments that will improve the economic, social and environmental conditions of the area. Decision-makers at every level should seek to approve applications for sustainable development where possible'.

The NPPF builds on the aspiration to build a strong, competitive economy. Paragraph 81 states:

'Planning policies and decisions should help create the conditions in which businesses can invest, expand and adapt. Significant weight should be placed on the need to support economic growth and productivity, taking in to account both local business needs and wider opportunities for development. The approach taken, should allow each area to build on its strengths, counter any weaknesses and address the challenges of the future. This is particularly important where Britain can be a global leader in driving innovation⁴² ...

Footnote 42 of the NPPF states:

'The Government's Industrial Strategy sets out a vision to drive productivity improvements across the UK, identifies a number of Grand Challenges facing all nations, and sets out a delivery programme to make the UK a leader in four of these: artificial intelligence and big data; clean growth; future mobility and catering for an ageing society. HM Government (2017) Industrial Strategy: Building a Britain fit for the future'.

Public benefits are defined within the NPPF and could be anything that delivers economic, social or environmental progress. Benefits do not always have to be visible or accessible to the public in order to be genuine public benefits.

The proposed development accords with all these aspects of the NPPF in that it will provide H3G with improved network provision within the Bewdley area, bringing a range of associated

economic and technical benefits. EE will also benefit should it require additional service provision and new 5G in this area without requiring a new installation elsewhere within the cell area.

Code of Best Practice on Mobile Network Development in England (24 November 2016)

The Code of Best Practice has been fully revised in November 2016 and is now even more supportive of mobile network provision in line with Government aspirations that everyone should have access to the information super highway no matter where they are located whether that be in rural or urban areas. This Code provides guidance to mobile network operators, their agents and contractors and equally to all local planning authorities in England. It supersedes the Code of Best Practice on Mobile Phone Network Development (2013).

The principal aim of this Code is to ensure that the Government's objective of supporting high quality communications infrastructure, which is vital to continued economic prosperity and social inclusion for all, is met. The development of such infrastructure must be achieved in a timely and efficient manner, and in a way, which balances connectivity imperatives and the economic, community and social benefits that this brings with the environmental considerations that can be associated with such development. The Code also has an important role in making sure that appropriate engagement takes place with local communities and other interested parties.

Section 2 of the Code highlights the Government's Communications Policy and Planning Policy. It acknowledges that the continued expansion and development of mobile networks is a key element of the National Infrastructure Delivery Plan 2016 – 2021. This recognises that digital communications are now a crucial component of everyday life, with improvements in connectivity being key to a vibrant economy (para 2.1).

Paragraph 2.2 goes on to state that consumers, businesses and public bodies increasingly rely on mobile communications and expect to receive a signal wherever they are. The Code indicates that recent changes in planning policy [and regulation] are intended to align with Government communications policy, where the ultimate goal is to achieve mobile coverage wherever it is needed.

Section 2 of this Code also reiterates NPPF guidance in strongly supporting high quality communications infrastructure, which is seen as essential for sustainable economic growth.

Section 3 of this Code acknowledges that there are special operational and technical considerations associated with mobile network development, which have changed over time due to changes in technology and associated changes in demand. The Code acknowledges that there remains a reliance on radio masts to provide the main umbrella of coverage. Paragraph 3.1 explains that radio signals operate like light and must "see" over the target coverage area, they cannot be hidden and so there will always be a degree of visual impact.

Paragraph 3.2 clearly indicates that in assessing the visual impact, greater emphasis than previously should now be placed on the radio planning requirements to achieve mobile coverage (as shown in the recent changes to permitted development rights, at the end of November 2016, and the reduced test in the most recent NPPF).

Paragraph 3.3 goes on to highlight that the [operator systems tend to be demand-led or to fulfil coverage obligations. With the ever-increasing demand for data hungry applications available to a range of connected devices, such as smart phones and tablets, the requirement to upgrade and improve networks through changes to existing sites and the development of new sites is constant. As most parts of the country move on to a superfast highway, so the need to bring coverage to 'not spots' (i.e. areas where there is no mobile coverage from any operator) and

improve coverage in 'partial not spots' (i.e. where there is some coverage but not from all operators) intensifies.

Paragraph 3.4 of The Code provides advice to local Planning authorities who are concerned about proposals, stating that they should not 'look for problems' but should work proactively with the Mobile Network Operators to find solutions, in line with paragraph 187 of the NPPF.

Section 4 of the Code sets out the evolution of mobile networks from 2G voice calls and text to 4G superfast mobile broadband which are now approximately the same speeds as fixed broadband connection.

Paragraph 4.1 of the Code acknowledges that customer expectations have evolved with technology. The expectation is that they will always be connected and able to access services in exactly the same way as fixed broadband for personal, educational and business purposes.

Paragraph 4.2 acknowledges that data, i.e. using the internet, puts increased demand on capacity and therefore the need for additional base stations to keep abreast of customer demand. Also, 3G base stations, originally using higher frequencies didn't travel as far and therefore each base station covered a smaller area. However, changes in working practices for the operators, in line with national guidance, streamlining networks, sharing base stations has reduced the overall amount of infrastructure required.

The Code goes on to acknowledge that operators maximise the use of their existing network infrastructure for the provision of 4G services and are similarly upgrading their 3G network infrastructure to improve capacity and coverage. However, the revised Code continues to advise that this does not mean that there will not be a need for any new base stations. Indeed, for example, more base stations will be needed in areas where there has previously been only limited or no coverage and where coverage and capacity needs to be enhanced in line with Government commitments and customer demand.

Similarly, some new sites will be required to replace existing sites that are lost, for example, through redevelopment of an existing building. Some masts may need to be redeveloped or replaced to enable an upgrade in services to take place.

Section 5 relates to mobile connectivity in the 21st Century, explaining that mobile phones and other devices are now everywhere. Mobile connectivity is not just making calls and texts but also mobile broadband. The majority of mobile phones in the UK are Internet-enabled smartphones and large numbers of people also now own tablet devices. People are increasingly choosing to access the internet using a mobile device even when they have fixed broadband connection available.

The Code acknowledges that by the second decade of the 21st Century, the greatest increase in traffic across mobile networks was in data i.e. internet use (para 5.3). Paragraph 5.4 states that in terms of the wider economic impact of mobile connectivity, research by Deloitte on the economic impact of mobile broadband across a range of countries, showed that a doubling of mobile data use leads to an increase of 0.5% in the Gross Domestic Product per capita, while another study put the benefit of 4G mobile broadband to the UK economy at £75 billion over a decade.

Section 5 of the Code goes on to highlight that connectivity promotes social inclusion. In recent years, more people rely on a mobile phone than they rely on a landline. Furthermore, people on lower incomes are even more likely to live in a mobile only household, or to access the Internet using a mobile connection (para 5.5).

The Code illustrates that mobile connectivity helps in the delivery of public services e.g. to access Central and Local Government via online services, acknowledging that lives are more likely to be saved when a 999 call is made from a mobile than from a landline, Telehealth is becoming increasingly important and text message reminders also improve compliance with medication and keeping NHS appointments.

Good mobile connectivity also promotes sustainability e.g. it reduces the need to travel and thus carbon emissions (para 5.7). The Code continues to support mobile telecommunications network as it is seen as a crucial piece of national infrastructure in economic, community and social terms (para 5.8).

Paragraph 5.9 states that there is a need to continually upgrade and improve mobile networks, which will not function without the necessary infrastructure on which they rely. This is driven by increasing consumer demand for data, improved connectivity and more capacity, together with Government aspirations for improving connectivity and coverage.

Section 7 of the Code sets out the need for all agencies to work together to deliver connectivity that is essential to the country's economy and society including Central Government which provides the overall strategy for connectivity, mobile operators to deliver the mobile network development through the planning system and helping to identify land and structures suitable for mobile infrastructure. Local Planning authorities can also ensure that the planning function works in tandem with other relevant departments and agencies such as their own economic development departments and appropriate digital connectivity teams in order to facilitate digital connectivity.

The Code provides guidance on siting and appearance principles at Appendix A. It sets out a number of design principles in respect of telecommunications development. However, the code acknowledges that the options for design used by an operator will be affected by site conditions including requirement to link the site to the network, landscape features and coverage and capacity requirements. The main options for the operator include:

- Mast and/or site sharing (including redevelopment of a site to enable upgrade or sharing with another operator);
- Installation on existing buildings and structures;
- Erecting new ground-based masts;
- Camouflaging or disguising equipment where appropriate;
- Using small scale equipment (although small cells themselves are generally used to address capacity issues as opposed to providing coverage).

The Code in Appendix A acknowledges that it has been a long-standing Government policy objective to support the sharing of masts and sites. Operators also aim to site share wherever viable. If operators are able to share sites, and install more equipment on each site, this reduces the overall visual impact of network infrastructure, because even though shared sites will tend to be slightly bigger, it means that fewer sites are needed to improve coverage and capacity, infrastructure becomes more feasible, and is more cost-effective to deploy. In fact, sharing of sites is now the norm, and network operators now share much of their network infrastructure via joint venture commercial arrangements.

However, the Code also highlights the constraints of mast sharing. Acknowledging that mast sharing may not be an appropriate environmental or technical solution in all cases. Visual intrusion may occur. The Code indicates other constraints which may include:

- Coverage problems – The existing mast may be poorly located or not have sufficient height to give the required coverage;
- Radio interference – Antennas need a separate amount of vertical and horizontal separation. This could lead to the visual impact of the mast significantly increasing;
- Structural Loading – The existing mast may not be able to hold extra equipment. The existing mast may need to be strengthened, redeveloped or replaced with a bigger structure with a consequent effect on visual amenity.

Concerning the erection of new ground based masts; The Code at Appendix A page 27 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. This option is more successfully implemented in or near wooded areas. It should also be noted that the top of the mast placed in trees will need to be above the tree-line in order for the equipment to work for the allowance of future tree growth;
- 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 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.

The Code continues to support sympathetic design and camouflaging including concealing antennas in familiar features such as flagpoles, street lamp posts, telegraph pole style designs and signs.

Local Policy

Section 38 (6) of the Planning and Compulsory Purchase Act 2004 states that “If regard is to be had to the development plan for the purpose of any determination to be made under the planning Acts the determination must be made in accordance with the plan unless material considerations indicate otherwise”.

The statutory development plan as defined by the Planning and Compulsory Purchase Act 2004 comprises the Wyre Forest District Council Core Strategy 2006-2026 and the Wyre Forest Site Allocations and Policies Local Plan.

Wyre Forest District Council Core Strategy 2006-2026

The Wyre Forest District Council Core Strategy was adopted in December 2010. It sets out the broad strategy and vision for development within the district up until 2026, and provides the overall context for the more detailed, site specific elements of the Site Allocations and Policies Local Plan which also forms part of the Local Development Framework. It also provides a focus for decision-making on planning applications in the district.

The Wyre Forest District Vision for 2026 states:

“In 2026 Wyre Forest District comprises an interactive triangle of the thriving riverside towns of Kidderminster, Stourport-on-Severn and Bewdley and outlying villages...”

Bewdley remains a thriving market town which meets the local community's needs. The town's historic character is preserved, and its flourishing riverside environment offers many opportunities for visitor attraction...

Attractive, affordable housing with low carbon emissions, supported by reliable infrastructure, is available in the tree towns and to meet local needs within the rural settlements...

A vibrant and sustainable economy exists providing a range of jobs across the service, retail, research and development and manufacturing sectors, with the infrastructure and a skilled population in place to support it... There has been significant growth in innovative manufacturing, recycling, and sustainable technologies...

Many rural residents now have the option to work from home...

The three towns and rural areas are well served by a sustainable transport network that delivers high levels of accessibility to key services and attractions. Local residents benefit from a variety of transport choices and no longer have to rely on the private motor car... There has been a significant shift from car use to more sustainable forms of transport. The urban environments experience reduced levels of traffic congestion and air quality within the town centres has been improved..."

In order to meet the Vision, the Core Strategy sets out 13 Development Objectives. These objectives provide a basis for the overall Development Strategy. A number of these Objectives are relevant to the proposal, including:

"2. To diversify and grow the District's economy, emphasising the development of the service sector, high tech industry and sustainable tourism...

9. Ensure the district is equipped to adapt to and mitigate the impacts of climate change by ensuring that future developments are low or zero-carbon and that they do not increase flood risk to new and existing property...

10. Improve the District's air quality, particularly in the town centre areas of Kidderminster, Stourport-on-Severn and Bewdley...

11. Support the development of an accessible, integrated, sustainable transport network through new and existing developments to provide attractive alternatives for all residents and visitors and promote sustainable freight transport...

13. Maximise community cohesion and safety and ensure new developments positively contribute towards crime reduction, improved health care and education across the District for the benefit of all residents."

Policy CP01 relates to Delivering Sustainable Development Standards. Within the policy justification, at Paragraph 6.5, it states *"this policy area seeks to ensure that new development within the district will... mitigate against climate change."*

Policy CP11 relates to Quality Design and Local Distinctiveness and sets out the expectations for development to be sensitive to its surroundings, for the District's historic environment and heritage assets to be positively managed and protected, and for designs to have a high level of quality.

Wyre Forest Site Allocations and Policies Local Plan 2006-2026

The Wyre Forest Site Allocations and Policies Local Plan was adopted in July 2013. It allocates and designates areas of land for particular uses and sets out development management policies which apply across the whole district and are used for determining planning applications.

Policy SAL.PFSD1 relates to a Presumption in Favour of Sustainable Development. It states:

"The District Council will view development proposals which accord with the overarching Development Strategy and reflect the principles of sustainable development positively... Planning applications that accord with the policies and objectives in the Development Plan (and, where relevant, with policies in Neighbourhood Plans) will be approved as soon as possible."

Policy SAL.CC5 relates to Telecommunications. It states:

"Proposals involving the erection of telecommunications equipment will be allocated where it is satisfactorily demonstrated that:

- i. There is clear evidence of need for the development.*
- ii. It is sited and designed so as not to result in significant adverse impact to interests of acknowledged importance, subject to operational and technical requirements.*
- iii. There are no satisfactory alternative available sites.*
- iv. There is no reasonable possibility of sharing facilities.*
- v. There is no possibility of erecting antenna on an existing building or structure.*

Proposals that will individually or cumulatively have a serious adverse impact on sensitive landscape, townscape or nature conservation will not be approved.

All proposals for telecommunications infrastructure must demonstrate that they meet International Commission guidelines for public exposure."

In the policy justification, at Paragraph 6.25, it is acknowledged that telecommunications development has significant benefits in relation to the economy. It states: *"the importance of telecommunications infrastructure to creating a strong economy means that a positive approach towards the consideration of necessary infrastructure is required."*

Greater Birmingham & Solihull Local Enterprise Partnership Strategic Economic Plan

The 'A Greater Birmingham for a Greater Britain' Strategic Economic Plan (SEP) sets out the Greater Birmingham & Solihull Local Enterprise Partnership (LEP)'s vision and strategy for delivering smarter, more sustainable and more inclusive growth for the benefits of their area. The LEP covers nine local authority areas – Birmingham, Solihull, East Staffs, Cannock Chase, Tamworth, Redditch, Bromsgrove and Wyre Forest.

The SEP states that the GSBLEP will seek to ensure that their *"businesses, supply chains and workforce are equipped to take advantage of the opportunities arising for disruptive and emerging technologies including digital and open data, intelligent and smart systems, advanced materials and low carbon energy."*

The SEP states that Greater Birmingham currently faces many supply-side barriers which prevent wealth spreading to all sections of society. One of these barriers is noted as being *"poor digital connectivity."* The SEP lists the LEP's current focus sectors, which include advances in digital services.

The vision of the LEP, particularly in relation to HS2, is *"for a fully integrated and globally connected Greater Birmingham, befitting our economic growth ambitions and creating a sustainable,*

attractive and economically vibrant city region that offers greater choice, stronger and more resilient networks, and an environment that supports an improved quality of life."

It goes on to state "The rapid pace of change in our transport and digital networks presents the opportunity to move towards a truly smart city region. The increased prevalence of smartphones combined with the decreased costs of deploying wireless connectivity is creating the perfect conditions for the Internet of Things. By harnessing big data and the potential of automation, the Internet of Things will enable autonomous vehicles (which are already being trialed in Coventry) and mobility as a service, revolutionary opportunities to reduce waste and improve efficiency on our transport networks."

The SEP recognises that improving digital infrastructure is a challenge. It states "The level of digital infrastructure across Greater Birmingham is generally strong... However, there are pockets of our urban centres that are poorly served, and many of our rural areas are, and will likely remain, hard to reach with wired solutions. Our focus to date has been largely on increasing speeds and needs to turn more to the quality of provision required to meet the needs of our people and businesses and wider policy considerations into the future." As a response, the SEP states that the LEP will "support the development and delivery of the next phase of digital infrastructure, beyond hardwired broadband solutions."

Worcestershire Local Enterprise Partnership – 5G initiatives

The Worcestershire Local Enterprise Partnership, along with Worcestershire County Council, began exploring the potential benefits that 5G could have to Worcestershire in late 2016. DCMS have supported the LEP by funding two 5G projects – 'Worcestershire 5G' and 'West Mercia Rural 5G' and this work continues today, as Worcestershire County Council and Worcestershire LEP work alongside businesses to encourage them to utilise the Worcestershire 5G network.

Online Nation 2020 Report (June 2020)

Online Nation is an annual research report, published for the first time in 2019. Using research produced both by Ofcom and others, it looks at what people in the UK are doing online, how they are served by online content providers and platforms, and their experiences of using the internet, alongside business models and industry trends. As well as looking at long-term trends, this year's report includes more recent data looking at online behaviour in the UK during the coronavirus (Covid-19) pandemic.

The Report sets out its findings:

With respect to the consumer and industry it found that time spent online, and associated revenues grew in 2019.

- In September 2019 the average time spent online each day by adults aged 18+ was 3 hours 29 minutes. In comparison, on average, adults spent 3 hours 19 minutes watching TV on a TV set each day, 2 and 2 hours 40 minutes listening to radio each day.
- 71% of all measured time spent online was on smartphones. 35% of internet users only accessed the internet on mobile devices (smartphone or tablet).
- Just 13% of adults do not use the internet
- In 2020, a fifth (22%) of UK adults have a smart speaker in the home and 11% of all UK households own some kind of 'smart home' technology (including devices such as smart home security, smart lighting and smart heating).

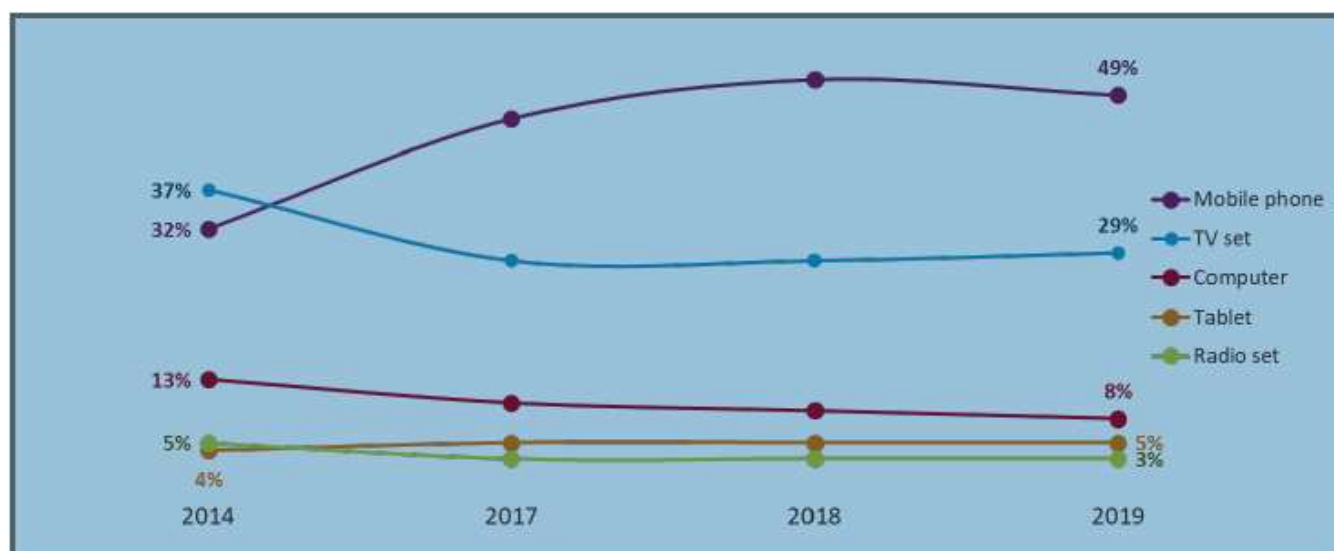
Key Metrics Online Consumer Market

UK online consumer market	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Internet take-up (%)	76	79	80	82	85	86	88	87	87	89
Smartphone take-up (%)	27	39	51	61	66	71	76	78	79	82
Tablet take-up (%)	2	11	24	44	54	59	58	58	54	52
Laptop take-up (%)	55	61	62	63	65	64	64	63	60	57
Consideration that the smartphone is the most important device for internet access (%)	n/a	n/a	n/a	32	32	38	46	48	52	60

As the table above highlights 60% of the consumer market consider Smartphones are now the most important device for internet access.

In September 2019, 81% of all measured time spent online was on a mobile device (both tablet and Smartphone).

The table below indicates the most-missed device among adults: 2014-2019 were it be taken away from them. As can be seen, nearly half of all adults say that their mobile device is the device they would miss most were it taken away from them.



Source: Ofcom Adults' Media Literacy Tracker 2014-2019

The Report found that social media and messaging sites reach 98% of the UK adult digital population. On average, visitors aged 18+ spent 49 minutes per person per day on social media sites, considerably more time on average than in key areas such as news sites (12 minutes per user), e-commerce sites (14 minutes) and even gaming sites (31 minutes).

Ninety-two per cent of time spent on social media sites took place on a mobile device (smartphones and tablets) rather than on a computer, compared to 81% of total time spent online.

The Connected Nations December 2020² report is published as the UK continues to address the challenges of the coronavirus (Covid-19) pandemic; a time when people, families and businesses have come to rely on their phone and broadband connections as never before. We report on how the networks have performed during this period and how the availability of services has evolved.

² https://www.ofcom.org.uk/_data/assets/pdf_file/0024/209373/connected-nations-2020.pdf

The report sets out in its findings:

The UK's fixed and mobile networks have generally coped well with increased demands during the pandemic. A shift to more people being at home drove increased demand on broadband networks during the day, although peak usage remained in the evening. Mobile networks also experienced increases in voice traffic.

The number of mobile base stations providing 5G services has risen ten-fold, to around 3,000 across the UK. 87% of these are in England, 7% in Scotland and 3% in both Wales and Northern Ireland.

Mobile coverage is generally stable. The four mobile network operators (MNOs) – EE, O2, Three and Vodafone - each estimate they provide outdoor coverage to 98%-99% of premises. Their networks' coverage of the UK landmass ranges from around 79% to around 85%. The Shared Rural Network programme agreed in March 2020 will extend coverage beyond this by 2025.

A small, but significant number of properties are still struggling to get connected. We estimate that 43,000 premises cannot access either a decent fixed broadband service, or good 4G coverage, indoors.

Mobile data consumption continues to rise, increasing by 42% compared with last year. 83% of the total data traffic was consumed in England with about 10% in Scotland, 4% in Wales and 3% in Northern Ireland (largely in line with UK population distribution). Reflecting this growth, the traffic carried in England in June exceeded that carried across the whole UK in February.

The report acknowledges that being connected has never been more important in the UK. *"People have been relying on phone and broadband services more and more over recent years, and the Covid-19 pandemic during 2020 has brought this reliance into even sharper view. In March 2020, life changed suddenly for millions of people across the UK. Fast, reliable broadband and mobile connections were essential to allow them to work from home, keep up with schoolwork, access medical appointments and public services, stay in touch with friends and family, order shopping online, and keep themselves entertained"*.

The report acknowledges that "during the first COVID 19 lockdown, UK MNOs coped successfully with the changes in data and voice traffic volumes and distribution as many people began working from home and schools were shut during the Covid-19 spring lockdown. New peaks were reached for most of the network metrics reported by MNOs just before or during the week lockdown measures were first introduced across the UK in March 2020. Although these peaks generally reduced with the gradual easing of lockdown, they have remained higher than they were before (in line with the historical trend for incremental growth in data consumption)".

The report further notes that the *"MNOs all experienced some form of congestion on their networks in this period, but successfully mitigated this, in part by increasing interconnect capabilities between themselves. Some operators applied further temporary upgrades to their voice and data capabilities in order to cope with increased demands during this period, for example deploying temporary base stations in and around hospitals (particularly at the Nightingale hospitals) to provide additional capacity"*.

"Compared to periods before the spring lockdown, mobile voice traffic increased by 10-45% across the operators. One operator observed an increase in average call duration from about 2.5 minutes (pre-lockdown) to 4 minutes in the week lockdown measures were introduced. These call lengths and volumes spiked in March, before gradually stabilising. Within this general trend for growth, we can also observe drops in average call duration and data traffic around 8pm for the

10-week period from 26 March 2020, coinciding with the nation coming together to applaud the efforts of the NHS during the Covid-19 crisis. Increased amounts of voice traffic were also offloaded to Wi-Fi, although with significant variations between operators".

Online Nation 2021 Report (June 2021)

The importance of the internet and access to smartphones is acknowledged within the latest Online Nation 2021 Report (June 2021). The report notes that the pandemic has highlighted the importance of being online and driven changes in the take-up and use of internet services, as many people have had a critical reliance on the internet for communications, information, entertainment and commerce. Increases in internet use in 2020 were most pronounced in spring and November 2020 lockdowns, as people turned to the internet and were more dependent than ever on online services for video calling for socialising or home-based working, home schooling, keeping in touch, films and gaming, shopping and information about the pandemic.

In September 2020, UK Internet users spent nearly 4 times as much time on smartphones than they did on computers. 68% of the time spent online was via smartphones up 4% from September 2019, this was compared to 18% of time spent online via computers and 13% via tablets.

By the end of 2020 approximately 94% of UK homes had internet access, up from 89% in 2019. Video calling became an important way for people to keep in touch during the pandemic. Zoom went from a few hundred thousand users in the first few months of 2020 to more than 13 million in April and May 2020. This has dropped to 10.4 million users in March 2021, while platforms used mainly for work and education, notably Microsoft Teams have shown a sustained increase in use (13.7 million users in March 2021, up by 5.3 million year on year).

The report found that most of the time people spend on the internet is via apps on mobile devices. Online services were a crucial way for people to find out information about the pandemic, and for governments to try and track and control the spread of the virus.

The report acknowledged that the internet helped most children continue their education throughout lockdown. Virtually all households with school-aged children had access to the internet at home. 7% did not have fixed broadband and 4% had access only to a mobile phone. 1 in 5 did not have access to an appropriate device for their schoolwork all the time. The Report found that 2020 saw the rapid adoption of digital remote education by teachers, parents and children such as video conferencing, and platforms for setting and collecting work. In the first few weeks of lockdown in spring 2020, two thirds of children in England were not receiving any live or recorded lessons. By January 2021, this was down to just one in ten. The Report suggests that the use of these platforms may continue such as for those who can't attend school due to illness, or to provide additional revision materials.

Nine in ten 8 – 15 year olds who use social-media said it helped them to feel closer to their friends in 2020. The report stated that social video services offer huge benefits for users and the economy. They provide a platform for self-expression through enabling user-generated content (31% of adults and 40% of 13-17 year olds post video content).

Lockdown influenced the types of social video that were most popular such as the first episode of Joe Wicks' PE which was the most viewed YouTube video of 2020, and videos relating to home baking such as sourdough bread increased by 458%.

Social media serves as a means of entertainment and education for many (used by 97% of adult internet users), and as an important method of marketing for businesses (online video advertising grew by 23% in the UK in 2020).

Online retail spend in the UK increased by 48% in 2020 (compared to an average annual increase of 13% in the previous 4 years). Online's share of retail spend increased from approximately 20% in 2019 to 35% in the spring lockdown and 30% in December 2020. By December 2020 11% of the UK grocery market sales were online, up from 5% at the beginning of the year. Online food delivery services also increased in demand - Just Eat being the most popular with its UK orders up 58% higher in the last quarter of 2020 compared to the same period in 2019.

People have relied on the internet for news and information throughout the pandemic. During the spring 2020 lockdown 52% of people said that news and current affairs was one of their main reasons to go online.

Adults are as likely to use social media to find information about the COVID-19 pandemic as they are to use news sites and apps (approximately 1 in 3), whilst one in eight 16 – 24 year olds considered social media to be their most important source of information about the coronavirus pandemic, compared to 5% of all UK online adults.

The report found that 91% of households used smartphones to access the internet in 2021, compared to 65% who used tablets and 47% who accessed the internet using computers. The report also noted that 61% of UK adults who access the internet did so using both computers and smart devices.

The Report notes that the smartphone is the most-used device for accessing the internet for all age groups apart from those aged 65 +. It found that in 2020, 85% of internet users aged 16 + used a smartphone to go online, compared to nearly 75% accessing the internet via a computer and just over 50% using a tablet to access the internet. One in ten adults also stated that they only use a smartphone to go online and three in ten used their phone to complete an online form or app on a weekly basis.

In addition, in February 2021, the Government said that more than 1.7 million app users across England and Wales had been advised to isolate by the NHS COVID-19 app, following close contact with someone who had tested positive.

Planning Assessment

The main issues arising from this prior approval notification are whether the proposed mast and cabinets due to their scale and siting would be a visually obtrusive feature which would be detrimental to the character and appearance of the area, and whether any perceived harm would outweigh the significant social and economic benefits associated with the increased service provision attributed to the proposal and other valid material considerations as outlined within NPPF, the Wyre Forest District Core Strategy and the Wyre Forest Site Allocations & Policies Local Plan, as well as the Greater Birmingham & Solihull Local Enterprise Partnership (LEP) Strategic Economic Plan (SEP) and the Worcestershire Local Enterprise Partnership (LEP) 5G initiatives.

Siting

The siting of the proposed radio base station has been carefully considered. To this end, it is located on a section of grass verge, in a location where the principle of telecommunications development has already been accepted previously, and viewed in the context of the linear pieces of street furniture which are present in the surrounding locality. The site has been carefully located and will be co-located as near as possible to the existing 2G/3G/4G pole. This will help the proposed installation assimilate into the streetscene and not appear unduly out of place. The surrounding area is predominantly residential, but care has been taken to locate the proposed

equipment as far away from the residential properties as possible on the grass verge, as opposed to directly outside the properties on the nearby footways. There are a number of existing vertical features in the immediate area including streetlighting columns, road signage, telegraph poles, other statutory undertakers' equipment cabinets, and street trees. These structures will help the column and associated cabinets from appearing prominent in the streetscene. Consequently, the visual impact of the proposed radio base station will be minimised within the streetscene. This is in line with Policy CP11 of the Wyre Forest District Core Strategy and the design aspirations of Policy SAL.CC5 of the Wyre Forest Site Allocations & Policies Local Plan.

The linear structures in the area will help the column and associated cabinets from appearing prominent in the streetscene and assimilate with their surroundings. The linear items of street furniture are similarly designed to the proposed column i.e. to be simple, functional vertical structures. Consequently, the visual impact of the proposed radio base station will be minimised within the streetscene.

The proposed equipment cabinets do not require planning permission, as they can be installed under the operators permitted development rights. In order to remain fully transparent, they have been included on the plans and in the description. The operator's equipment cabinets are similar to those of other statutory undertakers which are common place in urban areas including BT Openreach. Their limited height and scale will ensure that these cabinets will not be detrimental to the visual amenity of the area and will be finished in a green colour.

In line with the requirements of NPPF, there are no existing telecommunications installations for the operator to share, that would provide the necessary coverage to the target coverage area. Similarly, there are no buildings which are suitable and available that the operator could utilise to operate their equipment. The discounted options are set out in Section 5 above and their reasons for being discounted are fully explained.

3G and 4G signals by their very nature (as they carry high data rates) do not penetrate over long distances, (5G even less so), just a few hundred metres, depending on the topography of the land, building clutter and vegetation including trees in the area which can reduce their effectiveness. Therefore 3G, 4G and 5G radio base stations need to be close to their customer demand which is normally in residential areas. As this is a column for H3G, whose network configuration is well established in the area, the operator's search area is naturally smaller, than would otherwise be the case if the operator wasn't already providing service provision from this location. This severely limits the options for siting a new installation in the area.

Mobile phone base stations operate on a low power and accordingly base stations therefore need to be located in the areas they are required to serve. Increasingly, people are also using their mobiles in their homes and this means we need to position base stations in, or close to, residential areas.

The proposed new mast has been sited and designed in order to provide 5G coverage and to support the existing mobile network. As the new pole will be complementary to the existing 2G/3G/4G mast it must be located as close as possible to the existing pole in order to replicate the coverage.

Appearance

The design of the monopole has been carefully considered. To this end, it is a simple, functional slim-line monopole, with the main column being split in to two sections. The lower section is wider than the upper section in order to safely support the antennas at the top of the column. The mast will be coloured Grey in order to match the existing monopole, although it can be painted any

other colour the LPA consider appropriate. The cabinetry will be coloured Green, although again, they can be coloured any other colour the LPA consider appropriate. This is in line with Policy CP11 of the Wyre Forest District Core Strategy and the design aspirations of Policy SAL.CC5 of the Wyre Forest Site Allocations & Policies Local Plan.

In order to reduce the visual impact on the surrounding area the antennas have been positioned in a dual stack formation, with 3 antennas at the top of the mast and the other 3 antennas are proposed to be located underneath. The antennas are positioned as tight as possible and will only be marginally wider than the main column width, rather than being a bulky headframe, as such will not appear dissimilar to a shrouded design.

If the column and shroud were to be any slimmer, then the MORAN technologies would not be able to fit in the same installation and an additional radio base station would be required which would be contrary to national planning guidance. It would also not be structurally capable of supporting all the technologies including the latest 4G coverage and new 5G service provision. If the column were to be the same width throughout then it would have to be as wide as the antennas at the top of the column. This would appear more visually prominent in the streetscene than the current proposals.

It is essential that the 5G antennas are unshrouded. As the radio frequencies get higher, required for data carrying, the antennas are less able to propagate through immediate blockages including Glass Reinforced Plastic, which is what the shroud is made from. This affects the 5G antennas more so than any other technology. The result being they cannot operate effectively close to Glass Reinforced Plastic or any other blocking material. Therefore there is a technical reason why the 5G antennas need to be unshrouded. The latest 4G technology are also affected more so than older technologies by propagation, and are therefore less efficient if they are shrouded. As such, the other antennas also need to be unshrouded to ensure that the latest technologies are provided to the surrounding area, helping this area have integrated 21st Century infrastructure for digitally driven, clean and inclusive growth in line with central Government aspirations for the UK to be a world leader in 5G.

As previously explained in this supporting statement, the latest 4G and new 5G radio technologies operate in higher frequency bands than older technologies. At higher frequencies, attenuation of the radio signal is naturally higher and the effects of clutter are greater. It therefore follows that these antennas require a higher structure to achieve the same coverage footprint. As a result, to increase capacity and data speeds to the user, the antenna will normally need to be mounted higher than conventional antenna. This is the case in this situation. If the column were to be any lower, the antennas would not be able to provide the necessary 5G coverage to the target coverage area and would not be able to clear the urban clutter and nearby trees. As a result, the antenna signal would not be able to operate effectively. A lower height would lead to a poor user experience for a large part of the target coverage area. As such, this would fail the operators design brief and an additional installation would have to be found leading to the proliferation of masts contrary to national planning guidance contained in the NPPF.

The presence of the linear structures including the streetlighting columns, road signage, telegraph poles and other statutory undertakers' equipment cabinets in the surrounding area will ensure that the proposed column will not appear incongruous within the streetscene. Thus, there will be no detrimental loss of visual amenity to the area or environmental intrusion.

The telecommunications mast is proposed to be a slim-line simple, vertical, functional structure. The column is relatively slender and similar in design to the existing vertical structures in the immediate area along Cleobury Road, albeit taller in height. As a result this installation would not appear incongruous within the streetscene.

The installation of a 15m slim-line column designed to be as similar as possible to the other linear structures found in the immediate area will be no more at odds with the streetscene and character of the area than the other vertical structures within the immediate locale.

It is accepted that the height of the proposed installation is taller than other pieces of surrounding linear structures but this in itself is not a valid reason to conclude that it is not appropriate at a specific location. Indeed, Inspectors at appeal have noted that by their very nature to be effective masts are required to be taller than surrounding structures.

Telecommunications apparatus by their very nature must be taller than surrounding built and natural form to ensure its efficient operation. The Code of Best Practice explains this requirement fully in paragraph 3.1, '*radio signals operate like light and must "see" over the target coverage area...*' To suggest that it is inappropriate development because it is taller than adjacent lighting columns or road signage is no more relevant than suggesting that street lighting columns are inappropriate because they are taller than road signage or traffic lights. They are all essential pieces of infrastructure within a streetscene that carry out differing functions and therefore cannot be considered on the same merits. Should a street lighting column be capable of the provision of high quality 2G/3G/4G and 5G telecommunication services for two separate operators then this would be a reasonable consideration, but this is clearly not the case. As such, the proposal should not be considered negatively due to it being taller per se than other vertical structures. Reasonable consideration of the proposal in the context of nearby street furniture can only conclude that the presence of other vertical structures in the immediate area only seeks to provide a setting wherein a base station may appear more congruous from which to provide an important service to a wider area.

The proposed height at 15m is essential in order to clear the urban clutter and nearby trees in the area and provide equivalent replacement coverage as well as new 5G services to the Bewdley area. If the column height were to be reduced in this location, this would result in a degraded service due to the blocking effect from the surrounding urban clutter and nearby trees. This would especially be the case for the higher frequency technologies including 5G service provision. Thus if the column were to be any lower, the antennas would not be able to clear the nearby trees/urban clutter and as such would not be able to operate effectively. As such, an additional installation would be required which would lead to the proliferation of masts contrary to the NPPF.

This is a prior approval application where the principle of this type of development is already established by the Government under the Town and Country Planning (GPD) Order 2015 (as amended) which states that this type of development is permitted subject to the prior approval of the siting and appearance of the installation. This is therefore akin to an outline planning permission. Given the nature of the area which contains a number of vertical structures of various heights, and the fact that the principle of telecommunications equipment in the proposed location has already been found acceptable, the proposed radio base station would not appear prominent nor out of place.

NPPF states at paragraph 115 that 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. It accepts that new sites might be required for 5G networks (para 115). This is the case in this instance, in order to provide a new 5G service in this locality, the operator is unable to utilise the existing structure, as it is not designed to be able to support all the latest technologies, and must therefore erect a new column and cabinets in order to maintain, upgrade and provide the latest and new technologies to the surrounding area. The operator, as already explained above, is unable to shroud the antennas, but the design is as slim as possible and will remain a simple,

functional, vertical structure in the streetscene similar to the linear forms of essential infrastructure along Cleobury Road and the existing installation.

The equipment cabinets are designed to appear like other statutory undertakers' equipment cabinets often found in urban areas, and within the streetscene around the application site. They are small for telecommunications equipment. The proposed equipment cabinets are the least amount of cabinets that can be installed in this location and enable the radio base station to operate. If the number of cabinets were to be reduced then there would not be sufficient room to house all the operators' equipment. In any event, these cabinets are permitted development under the operators permitted development rights. They have only been included in the description and on the plans in order to remain fully transparent. In order to help blend in with their surroundings they are proposed to be coloured green, although they can be coloured any other colour that the council considers to be appropriate.

The design of the radio base station is one of the most sensitive designs available to the operators, designed to resemble typical existing urban linear street furniture, and that will allow two telecommunications operators to operate from a single site. This is in line with the requirements of NPPF which supports equipment which is sympathetically designed and camouflaged where appropriate [paragraph 115] and The Code of Best Practice, as well as Policy CP11 of the Wyre Forest District Core Strategy and the design aspirations of Policy SAL.CC5 of the Wyre Forest Site Allocations & Policies Local Plan.

The proposed new site accords with NPPF because the equipment will resemble other linear structures within the area, will expand the network, and ensure high quality communications infrastructure is maintained. Placing masts near similar structures such as lighting columns, utilising simple and unfussy designs is acknowledged in the Code of Best Practice on Mobile Network Development in England to be less likely to dominate and be in discord with the streetscene and as a result less likely to have a detrimental impact on the visual amenity of the surrounding area.

Lack of 5G Coverage – Material Consideration

Mobiles can only work with a network of base stations in place where people want to use their mobile phones or other wireless devices. Without base stations, the mobile phones and other devices we rely on simply won't work.

In accordance with the NPPF, the proposed installation is significant to enable continuous coverage of the telecommunication network, ensuring that Bewdley continues to get the mobile coverage it needs for H3G customers as well as new 5G coverage. The design of the new column will also enable EE to utilise the same installation when it is ready to roll out 5G in this area, with minimal design changes.

The current proposals will facilitate the development of an advanced broadband telecommunications infrastructure in line with National Government guidance contained within the NPPF which supports infrastructure especially where growth takes place. Digital growth plays a fundamental role in driving economic growth.

Without this new column the operator's customers would experience increasing numbers of dropped calls and buffering unable to access the internet on their handheld devices. They would also not be able to access the 5G network, a demand which is increasing rapidly as customers update their handheld devices to ones that are 5G compatible. If the 5G network is not available then the customers' would not be able to utilise these handheld devices for the purposes in which they were purchased. This is contrary to the aspirations of Central Government which aspires to everyone having access to the superfast highway network wherever they are.

In accordance with the Greater Birmingham & Solihull LEP SEP, the proposed installation will help improve the area's economic prosperity, strengthening the urban economy by supporting local businesses to start, grow, adapt and diversify. It will support a better environment for today and tomorrow by reducing the need to travel and in turn minimise carbon emissions, which is a key objective of Policy CP01 of the Wyre Forest District Core Strategy, as well as its Vision, and Policy SAL.PFS01 of the Wyre Forest Site Allocations & Policies Local Plan. The radio base station will support the delivery of healthcare provision and accessibility by enabling people greater access to online services, NHS appointment reminders, reminders to take medicines, make appointments etc.

By enhancing the 2G, 3G and 4G service provision to the surrounding area and enabling the site to provide new 5G coverage into the operator's network, this would fully support the vision of Central Government that people will be able to access the 'information highway' wherever they are.

The way 5G works, it is closely connected with the Smart City agenda and will enable centralized control of lots of different street infrastructure owned or managed by councils, such as street lights, water meters and bus stops. As such 21st century infrastructure is needed to enable this objective to become a reality. A new installation in this location enabling 5G service provision to the Bewdley area will ensure that this aspiration is fully met. This is fully in line with the aspirations of the Greater Birmingham & Solihull LEP SEP, which identifies the advantages of Smart City technology and aims to create a "*truly smart city region*", and will also allow the work of the Worcestershire LEP on their 5G initiatives to be continued.

Trials have already begun across the UK to demonstrate the potential of 5G and how it can improve and drive productivity and efficiency. In June 2019, West Midlands 5G partnered with BT and University Hospitals Birmingham to trial the UK's first 5G Connected Ambulance. Real-Time communications between the paramedics and the hospital doctors enabled the effective diagnosis of the patient at an early stage of care. The trial showed how a paramedic performed a remote-controlled ultra-sound scan on a patient in an ambulance over a public 5G network. These trials show how digital connectivity and technology can reduce patient waiting times and save lives (Source: WM5G).

The Councillor's Guide to Digital Connectivity notes that a survey conducted by the Confederation of British Industry found that 81% of firms said that they see more reliable mobile connectivity as essential. Studies have also shown that mobile broadband is associated with positive impacts nationally, such as higher GDP and increased employment.

Therefore, the Government fully supports high quality communications infrastructure, even more so with the advent of 5G. The NPPF continues to strongly support telecommunications connectivity and states at paragraph 114 that local planning authorities should support the expansion of electronic communications networks. It acknowledges that advanced, high quality and reliable communications infrastructure is essential for economic growth and social well-being.

The demand for mobile data in the UK is increasing rapidly, and as households and businesses become increasingly reliant on mobile connectivity, the infrastructure must be in place to ensure supply does not become a constraint on future demand.

An installation in this location will fill the current gap in the latest high quality 5G service provision and enable H3G to maintain access to their handheld devices wherever they are for the purposes in which they were purchased. This is fully in line with the Government's aspirations that everyone

has access to the superfast communications network, the NPPF, and the Greater Birmingham & Solihull LEP SEP.

Access to the internet in whatever medium now impacts every facet of our lives but only benefits those who can access and use it. The benefits of internet connectivity are key for both residents and businesses alike and a new column in this location providing the latest 2G, 3G, 4G and 5G technologies will support and promote the growth of the digital sector, increasing digital inclusion, so all people can access services, education and training.

In line with guidance contained within the NPPF and the Greater Birmingham & Solihull LEP SEP, which supports investment in infrastructure, a new column in this location will enable fast, reliable, secure internet accessibility wherever the user is located. An installation in this location would fully meet the latest operators' coverage and capacity requirements for 3G, 4G and new 5G provision. This would be wholly in line with the Government's latest aspirations to strongly support advanced, high quality and reliable communications infrastructure, essential for economic growth and social well-being. Where the NPPF notes that decisions should support the expansion of electronic communications networks. An installation outside this search area, regardless of whether there are existing sites, would not allow the operator to provide their desired level of coverage and therefore would not adequately maintain and provide new coverage and capacity.

The Code of Best Practice acknowledges that upgrading and improving mobile networks will not be possible without the necessary infrastructure on which we rely. With increasing consumer demand and the Government's aspirations for high quality communications infrastructure it is ever more important to improve connectivity and capacity.

In the Code of Best Practice it acknowledges *'the pressure on networks to upgrade and improve networks through changes to existing sites and the development of new sites is constant. With the increasing consumer demand and the Government's ambitious aspirations it is becoming more important to improve connectivity and capacity. This is due to the ever increasing demand for data hungry applications to be available to a range of connected devices, such as smartphones and tablet computers. However, The Code notes that upgrading and improving mobile networks will not be possible without the necessary infrastructure on which they rely'*. Therefore there is a significant need to locate the equipment in this area.

The Online Nation 2021 Report highlights the importance of continued access to the latest technology on mobile devices, noting that the smartphone is the most-used device for accessing the internet for all age groups apart from those aged 65 +. 85% of internet users aged 16 + access the internet on a smartphone, and just over 50% on a tablet. In September 2020, UK Internet users spent nearly 4 times as much time on smartphones than they did on computers.

It is therefore imperative that the operator continues to invest in ensuring that the latest technologies are available on its network, so that customers are able to continue to use their handheld devices wherever they are, for whatever reason, for the purposes in which they were purchased.

Economic and Social Benefits

The NPPF strongly supports sustainable development, as does the Council's Core Strategy Vision and Policy SP01, and Policy SAL.PFS01 of the Site Allocations & Policies Local Plan. Mobile communication plays a significant role in sustainable development. Being able to access the internet via a mobile device allows people to access a wide range of central and local government services, buy groceries, manage finances, apply for jobs/university, and carry out school projects, send emails, download applications, send and receive instant messages,

streaming and downloading data to name just a few of the benefits of being able to use an internet enabled handheld device. It also allows people to work from home or on the move without needing to return to the office. This reduces travel time, carbon emissions and increases the speed in which information is processed/shared. The proposals therefore fully comply with the NPPF and the Council's Core Strategy/Site Allocations & Policies Local Plan to minimise the effects of climate change reducing the need to travel and therefore the carbon footprint.

In such instances, as described above, the NPPF supports development that improves the economic, social and environmental conditions in the area. Enhancing the 2G, 3G and 4G coverage and capacity in this area and providing new 5G services will fully meet this national policy objective.

Mobile connectivity is essential to the future success of the economy. The combined value of 4G and 5G mobile connectivity is estimated to add £18.5bn to the economy by 2026 (Councils and Connectivity Sept 2018). Mobile connectivity is essential to creating a better society. Digital inclusion can help people gain employment, become more financially secure and improve health and well-being. Mobile connectivity is essential to fulfilling the potential of new technologies. Innovations such as artificial intelligence and connected cars will change how we work, spend our leisure time and run our public services.

Providing the latest digital infrastructure to enable improvements in digital technology empowers and enables residents to have the highest quality of life, supports the creation of high quality jobs and achieves the maximum productivity levels. It also helps the economy to be resilient and competitive. This is in full accordance with the ambitions of the Greater Birmingham & Solihull LEP SEP. It will help Wyre Forest become an area where its businesses, public service providers and citizens are using digital technology by default and to the fullest to grow their businesses and improve productivity to access skills, training and employment opportunities to address global challenges that have a local impact such as ill health, social isolation, homelessness and pollution; to improve living standards and well-being; and to improve the quality and value for money of public services.

Practical Applications of 5G Connectivity as Example of Material Socio-Economic Benefit:-

Education

The relationship between 5G and education is evolving at a massive rate with educators exploring the relevance of Virtual Reality (VR) technologies for education and training. Crucially, VR can support remote learning, allowing students a presence in the classroom even when working elsewhere.

5G's ability to deliver real-time information (low latency), ultra-fast speeds (critical for high-definition images and video), increased capacity and heightened security will also allow learning on the job, thanks to technologies such as Augmented Reality (AR) goggles, which can give engineers real-time instructions on how to fix a machine on a production line, for example.

Health

Patients across the country are now becoming accustomed to relying on remote healthcare services such as NHS 111, virtual GP appointments, and ordering online deliveries of essential medical supplies.

5G will prove critical in providing the infrastructure required to deliver remote health services over the next decade. By design, 5G's ability to deliver real-time information (low latency), ultra-fast

speeds (critical for high-definition images and video), increased capacity and heightened security are going to be fundamental in scaling the patient benefits of remote healthcare and keeping medical records secure and private. For instance, trials have shown that connecting ambulance crews to expert resources using 5G allows paramedics to work with doctors and conduct specialist procedures in real time whilst on the road.

There is a demand for mobile connectivity in areas where geography, logistics or economics – or a combination of all 3, make it difficult. Mobile network capacity needs to grow to meet the demand of mobile users, who are consuming ever increasing amounts of data.

Paragraph 38 of the revised NPPF states that:

'Local planning authorities should approach decisions on proposed development in a positive and creative way. They should use the full range of planning tools available, including...permission in principle, and work proactively with applicants to secure developments that will improve the economic, social and environmental conditions of the area. Decision-makers at every level should seek to approve applications for sustainable development where possible'.

Providing improved 2G, 3G, 4G and new 5G coverage and capacity in this area fully meets this part of the NPPF. The social and economic benefits are a significant material consideration which should be weighed against the visual impact associated with a radio base station in this location. HM Treasury outlined such benefits in its report *'Fixing the Foundations: Creating a More Prosperous Nation'* – July 2015. Paragraph 7.1 of the plan stated that reliable and high quality fixed and mobile broadband connections support growth in productivity, efficiency and labour force participation across the whole economy. They enable new and more efficient business processes, access to new markets and support flexible working and working from home.

Paragraph 7.2 goes on to highlight strong support for high quality communications infrastructure. It states

'by reducing red tape and barriers to investment, the Government will support the market to deliver the internationally competitive fixed and mobile digital communications infrastructure the UK's businesses need to thrive and grow, and which will enable the UK to remain at the forefront of the digital economy. The Government is working with business so that the market can play the lead role in delivering against the ambitions set out in the Digital Communications Infrastructure Strategy, published March, of near universal 4G and ultrafast broadband coverage.'

Indeed, MPs have noted in parliament that the UK's Superfast Broadband connectivity was 'relatively poor', and businesses were losing out from patchy coverage.

The Government recognises that widespread coverage of mobile connectivity is essential for people and businesses. People expect to be connected where they live, work, visit and travel. That is why the Government is committed to extending mobile geographical coverage further across the UK, with continuous mobile connectivity provided to all major roads and to being a world leader in 5G.

This will allow everyone in the country to benefit from the economic advantages of widespread mobile coverage. As well as improved mobile signal, 5G networks are also crucial to drive productivity and growth across the sectors that local areas are focusing on through their emerging Local Industrial Strategies. Enabling and planning for 5G implementation is central to achieving

the Government's objective to deliver property at the local level and enable all places to share in the proceeds of growth.

The Government is determined to ensure the UK receives the coverage and connectivity it needs. To this end, the Government wants to be a world leader in 5G, the next generation of wireless connectivity, and for communities to benefit from the investments in the new technology.

The case for 5G is compelling as it will bring faster, more responsive and reliable connections than ever before. More than any previous generation of mobile networks, 5G has the potential to improve the way people live, work and travel, and to deliver significant benefits to the economy and industry through the ability to connect more devices to the Internet at the same time, creating the so-called "Internet of Things". This will enable communities to manage traffic flow and control energy usage, monitor patient health remotely, and increase productivity for business and farmers, all through the real-time management of data.

The Local Government Association (LGA) has produced a Councillor's Guide to Digital Connectivity and sets out some of the benefits of 5G technology:

- Faster mobile broadband and a more consistent experience in congested areas with a very high number of devices.
- Industrial applications, enabling businesses to improve their productivity, for example through predictive maintenance and real-time analytics.
- Internet of Things (IoT) services, many of which will help council's and businesses deliver services more efficiently including:
 - Transport and logistics: connected parcels and fleet tracking.
 - Health and social care.
 - Environmental monitoring: sensors monitoring air quality and water pollution in real-time.
 - Smart agriculture and smart animal farming, smart retailing.
 - Connected and autonomous cars: allowing cars to communicate with each other, other road users and even the road infrastructure.

Further to the Government's commitment to improve connectivity, on 24th November 2016 the new permitted development rights for telecommunication operators came in to force, designed to lift the restrictions on mobile operators such is the significance and weight the Government place upon the benefits attached to modern connectivity.

In October 2016, there was also the BIG Infrastructure Group (as Chaired by MP Grant Shapps) Report release calling on operators to improve their network. This is signed and has comments from numerous MPs nationally.

A National Needs Assessment – A Vision for UK Infrastructure was also published in October 2016 ([https://www.ice.org.uk/getattachment/media-and-policy/policy/national-needs-assessment-a-vision-for-uk-infrastr/National-Needs-Assessment-PDF-\(1\).pdf.aspx](https://www.ice.org.uk/getattachment/media-and-policy/policy/national-needs-assessment-a-vision-for-uk-infrastr/National-Needs-Assessment-PDF-(1).pdf.aspx)). It sets out the infrastructure needs for the UK which includes the importance of digital technology. An extract of this assessment can be found below:

'A lack of digital connectivity has a detrimental effect on business operations, productivity and output and hence competitiveness in the global market place. Securing digital connectivity is thus critical to the UK's long term prosperity. A key challenge for the digital sector is a persistent digital divide between those who have access to the latest

technologies and those who do not, with resulting social and economic exclusion, particularly as dependence on e-services and digital communications increases'

The Assessment goes on to note that *'Universal digital connectivity would serve as an equaliser of economic opportunity in that it enables participation in a modern digital economy'*. Therefore this Needs Assessment further explains the consequences of a lack of coverage and the effects this has on social and economic prosperity. This clearly highlights the importance of maintaining and enhancing high quality 2G, 3G and 4G coverage and capacity in Bewdley as well as providing new 5G in this area, where the social and economic benefits will outweigh the environmental considerations.

The Government's continued strong support for connectivity is further evidenced by the DCMS who launched their UK wide Digital Connectivity Portal on 20 December 2018. The Digital connectivity portal provides guidance for local authorities and network providers on improving connectivity in local areas. The Government wants everyone in the UK to benefit from world-class connectivity no matter where they live, work or travel. The Future Telecommunications Infrastructure Review outlines a package of measures to create the right market and policy conditions to deliver world-class connectivity for citizens and businesses. As a result, the pressure to install a radio base station in this area of Bewdley to provide enhanced 2G, 3G and 4G coverage, and new 5G services for H3G, is significant.

Ministers from the DCMS and MHCLG wrote to all CEOs of Council's in England (March 2019) setting out its position in respect of supporting investment in high-quality, reliable digital connectivity **'Collaborating for 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.

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'.

On the 23 September 2020, the Digital Infrastructure Minister Matt Warman MP spoke about the ongoing work by the Government and telecoms industry to boost the UK's world class digital connectivity in his keynote speech at Connected Britain 2020³:

...'I'd like to take this opportunity to thank everyone in the industry for their tireless efforts at keeping us all connected through an unprecedented period of disruption.

...COVID has altered the way we live, work and most importantly, stay connected with our family and friends. The digital infrastructure that keeps us all connected was essential to our daily way of life under lockdown – and is now more important than ever as we head into recovery. Many of these changes – such as increased working from home – will stay with us for the foreseeable future.

People have referred to the internet as “the fourth utility” – and it's true. For countless people across the country, having fast and reliable broadband and a good mobile connection is as essential and vital to our daily lives as gas, water and electricity.

That's why I'm committed to working with you to ensure the entire nation has access to world-class, next generation gigabit connectivity that is secure and resilient enough to deal with all sorts of future challenges.

This Government is ambitious for the UK's digital infrastructure.

And because we know that more citizens are increasingly living their lives online, we will be one of the earliest adopters of 5G coverage, with the majority of the population able to access 5G by 2027.

...We know how important local authorities are to the delivery of digital infrastructure, which is why I have written to them, together with the Local Government Minister, to outline how they can work more effectively with the industry...

....Turning to 5G, while the commercial rollout of 5G continues at pace, we're pushing ahead with plans to make sure all sorts of industries benefit from this game-changing technology.

....since the start of the 5G Testbeds and trials programme, we've now funded 24 5G testbeds across the UK. Between them, those testbeds have trialled almost 70 different 5G technologies, products and applications. And more importantly than ever, we are investing in a range of sectors to foster, build and grow 5G cross wider industry...

...The world is in the middle of a digital revolution. COVID has accelerated this process, digitising almost every part of our everyday lives and making the infrastructure that connects us more important than ever. That's why it is at the top of the government's agenda...”

This Keynote Speech by Matt Warman MP highlights the importance that Government places on 5G and advanced, reliable, high quality 5G technology. To prevent this technology from being brought into the area would be contrary to the Government's key aims.

³ https://www.gov.uk/government/speeches/matt-warman-keynote-speech-at-connected-britain-2020?utm_source=01ad07cc-6884-4d9b-a0ca-8c212f0a4289&utm_medium=email&utm_campaign=govuk-notifications&utm_content=immediate

In a more recent letter published by the Digital Infrastructure Minister Matt Warman MP on the 24 May 2021 he spoke further about the Government's Commitment to extending mobile coverage:

'Digital connectivity is – now, more than ever – vital to enable people to stay connected and businesses to grow. The demand for mobile data is increasing rapidly, and the COVID-19 pandemic has highlighted how important it is that we all have access to reliable, high quality mobile connectivity...

...The Government is committed to extending mobile network coverage across the UK and providing uninterrupted mobile signal on all major roads, and our ambition is for the majority of the population to have access to a 5G signal by 2027...

...The National Planning Policy Framework ("the Framework") for England states that planning policies and decisions should support the expansion of electronic communications networks, including next generation mobile technology, such as 5G...

...In relation to electronic communications development, it also states that local planning authorities must determine applications on planning grounds only and they should not seek to prevent competition between different operators or question the need for an electronic communications system. As set out in planning practice guidance, it is in the public interest for local planning authorities to have effective delegation arrangements in place to ensure that decisions on planning applications that raise no significant planning issues are made quickly and that resources are appropriately concentrated on the applications of greatest significance to the local area'.

On the 1 October 2020, as part of the Speed up Britain Campaign, The Centre of Policy Studies Report published 'Upwardly Mobile: How the UK can gain the full benefits of the 5G revolution'⁴. The report identifies what the 5G opportunities are and what the Government needs to do so we can all benefit from this vital new technology. It states that delays to the rollout of 5G could cost the country tens of billions of pounds in lost economic output. The former Government advisers Alex Jackman and Nick King argue that Government's 'levelling up' agenda and the UK's recovery from the COVID-19 pandemic is at risk without a faster 5G rollout – to the tune of £41 billion.

The report highlights that if delays continue at their current rate, by 2027, over 11 million households and businesses could be missing out on vital digital connectivity. Improving digital infrastructure supports the Government's 'levelling up' agenda, by helping local areas to retain and attract businesses and talent as well as by reducing regional inequalities.

The report states that *'the UK must have a functioning network to now support the recovery from the pandemic, empowering businesses and communities with wider coverage, and preparing the ground for the services that 5G can provide'*.

Using analysis by the independent consultancy Policy Points, the report estimates that if 5G coverage reaches a quarter more of the population than the Government's current target of 51%, it will produce GDP gains of £41.7 billion by 2027. It highlights that the difference between the UK being a leader and a laggard in 5G adoption could be as much as £173 billion in incremental GDP over the coming decade, as estimated by the Future Communications Challenge Group.

The manufacturing, construction and agricultural sectors have been hit particularly hard by the pandemic, and these would benefit significantly from improved connectivity. However, onerous

⁴ <https://www.cps.org.uk/research/upwardly-mobile>

planning rules and loopholes in existing legislation are slowing down the infrastructure upgrades needed to make the most of this mobile revolution in these much-needed industries.

Digital networks and services have underpinned our resilience to the COVID-19 pandemic, and they will drive our recovery. By expanding them, we deliver not only immediate benefits but also the essential foundation stone for future prosperity.

The report highlights that while 5G promises to create economic benefits through increased capacity, reliability and speed – vastly improving business productivity and removing barriers imposed by poor digital connectivity – the system is plagued by red tape.

The report acknowledges that the gains are not just at national level. A more extensive digital infrastructure helps local areas to attract and retain businesses and talent, thereby playing a vital role in reducing regional inequalities. Providing a supportive environment for digital infrastructure is one of the few things the Government can do that costs little, boosts growth and helps level up the UK.... the key is speed. **The faster a network is built, the bigger the regional gains** (emphasis added). The telecommunications industry faces challenges on this front. The COVID-19 pandemic has increased demand on networks but delayed the availability of new spectrum to provide additional capacity.

The report notes that the reliability and reach of 4G is more important than ever. It is needed both to quench immediate demand, and also to facilitate 5G rollout, as the underlying passive infrastructure will initially support both technologies. Every failure to provide better coverage not only presents an immediate opportunity loss for local business and consumers but also has a bigger downstream economic impact. It acknowledges that productivity gains to business, equality gains for regions and economic gains for the country are only as achievable as the networks they can access.

The report recommended that the Government should reform the strategic planning framework to compel local authorities to ensure that the needs of future mobile connectivity are adequately addressed in Local Plans and that new developments are assessed on how they might impact, or could support, local connectivity.

The proposed upgrade in this location, comprising of the installation of a new column and equipment cabinets, will allow the operator to provide new and improved high quality 2G, 3G and 4G coverage and capacity and new 5G service provision supporting the Government's aim of '*focusing on ensuring that everyone is connected to the information superhighway*'. This fully meets the aspirations of the NPPF.

An installation in this location will ensure that the expansion of the electronic communications network is facilitated and that high quality communications infrastructure is provided to the immediate area. This is in full accordance with the operator's 4G license obligations and the Council's aims and aspirations to expand and improve telecommunications mobile coverage as required and to have the latest high quality 4G and 5G infrastructure, promoting and growing the digital sector and increasing digital inclusion.

Health and Safety

The proposed installation conforms to current government planning guidelines regarding potential health effects arising from telecommunications development. The operator has attached a declaration that the site conforms to ICNIRP guidance. This is in full accordance with NPPF.

The publication of the National Planning Policy Framework continues to highlight the Governments view that the planning system is not the appropriate mechanism for determining health safeguards. It sends a clear message to local planning authorities stating that they must *'determine applications on planning grounds. They should not seek to prevent competition between different operators, question the need for the telecommunications system, or determine health safeguards if the proposal meets International Commission guidelines for public exposure'*. This is reiterated in the Code of Best Practice.

Notably, Ofcom have now undertaken 5G audits in the major cities and the results indicate that the exposure level are a small fraction of the limits. This further reinforces the PHE guidance in respect of 5G which states: "It is possible that there may be a small increase in overall exposure to radio waves when 5G is added to an existing network or in a new area. However, the overall exposure is expected to remain low relative to guidelines and, as such, there should be no consequences for public health." (<https://www.gov.uk/government/publications/5g-technologies-radio-waves-and-health>)

In this instance, it is not necessary to consider health effects further, as recommended by NPPF. The operator is committed to ensuring that all new and existing installations are ICNIRP compliant, and consequently it is considered that there is no basis for this application to be refused on health and safety grounds or for reasons relating to public concerns about health and safety. ICNIRP compliance certificates are enclosed with this application.

Summary

5G rollout has begun and so MBNL on behalf of Hutchison 3G UK Limited is in the process of upgrading their existing radio base stations. As part of this continued network improvement program, there is a specific technical requirement to provide new 5G coverage in this area of Bewdley, Wyre Forest.

The proposed site has been carefully sited on the grass verge off Cleobury Road, in a location where the principle of telecommunications development has already been accepted, and viewed in the context of the existing linear items of street furniture and street trees. As this is a prior approval application, the Government confirms that this is permitted development, akin to outline planning permission, with just the finer details of siting and appearance to be considered by the local planning authority. The existing vertical structures help the proposed installation assimilate with the streetscene and not appear alien in the immediate area.

The proposed height at 15 metres is essential in order for the antennas to reach the target coverage area and clear the surrounding urban clutter, because at higher frequencies attenuation of the radio signal is naturally higher and the effects of clutter are greater. This ensures that the antennas are able to maintain and provide new high quality 2G, 3G, 4G and 5G service provision to Bewdley. This will fully meet the national Governments aim of *'ensuring that everyone is connected to the information superhighway'* and the national policies set out in the NPPF. If the height of the column were to be reduced then the antennas would not be able to operate effectively, leading to a significantly degraded service for the operator's customers especially for the higher frequency technologies including the latest 4G technology and new 5G service provision.

Site selection was progressed in accordance with the applicant's licence obligations, advice in the NPPF and the Code of Best Practice and represents the least environmentally intrusive, technically suitable, available option.

The operator is limited in siting options as there is a requirement to provide equivalent 2G/3G/4G coverage and capacity for this area of Bewdley whilst also providing new 5G services. The requirement to replicate the coverage provided by the existing pole means that the operator has to be located as close as possible to the existing installation in order to maintain the provision of equivalent coverage and capacity to the surrounding local area.

The social and economic benefits of providing reliable and high quality mobile broadband connections including 5G support growth in productivity, efficiency and labour force participation across the whole economy. This is fully supported by the NPPF. These benefits are strong material considerations which any perceived loss of visual amenity to the surrounding area.

At present due to the COVID 19 pandemic it is paramount that digital connectivity is supported and maintained throughout the country. In particular the current massive shift in user demand from city centres and places of work to residential areas and the suburbs requires an improvement in coverage and capacity throughout the whole network. It is therefore fundamental given these additional pressures on communications networks that existing sites are not lost.

The social and economic benefits of providing reliable and high quality mobile broadband connections including 5G support growth in productivity, efficiency and labour force participation across the whole economy. This is fully supported by the NPPF, the Wyre Forest District Core Strategy and Site Allocations & Policies Local Plan, and the Greater Birmingham & Solihull LEP SEP. It also supports the work of the Worcestershire LEP 5G initiatives. These benefits are strong material considerations which outweigh any perceived loss of visual amenity to the surrounding area.

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