SUPPLEMENTARY INFORMATION

1. Site Details

Site Name:	Birthwaite Hall Farm	Site Address:	Telecommunications Base Station on the land at Birthwaite Hall Farm, Huddersfield Road, Barnsley, South Yorkshire, S75 5JS.
NGR:	E: 430443 N: 410881		
Site Ref Number:	CTIL _109598_TEF_71745_VF_5387	Site Type:[1]	Macro

2. Pre Application Check List

Site Selection (for New Sites only)
(would not generally apply to upgrades/alterations to existing sites)

Was an LPA mast register used to check for suitable sites by the operator or the LPA?		No
If no explain why: Application is an upgrade to an existing site.		
Was the industry site database checked for suitable sites by the operator:		No
If no explain why: Application is an upgrade to an existing site.		

Annual Area Wide consultation with local planning authority

Date of information submission to local planning authority	06/10/2014 (Letter), 13/01/2015 (Meeting)
Name of Contact	Mr. Steve Kirkham
Summary of any issues raised:	Eamon Hansberry from CTIL presented the roll-out proposals to Steve Kirkham on January 13th, detailing the level of coverage improvements to be provided and the upgrades required. The planning officer invited the submission of the planning applications to allow the proposals be formally assessed and determined.

Pre-application consultation with local planning authority

Date of written offer of pre-application consultation:	N/A	
Was there pre-application contact:	N/A	
Date of pre-application contact:	N/A	
Name of contact:	N/A	
Summary of outcome/Main issues raised: No response received to date.		

[1] Macro or Micro

Ten Commitments Consultation

Rating of Site under Traffic Light Model:	~~Red~~	Amber	~~Green~~
Outline Consultation carried out: Consultation with local Ward Councillors A. Cave, L. Burgess and S. Howard. Pre-application consultation letters were sent to these parties on the 08.12.2014			
Summary of outcome/Main issues raised: No specific comments received to date.			

Rating of Site under Traffic Light Model:	~~Red~~	Amber	~~Green~~
Outline Consultation carried out: Consultation with local Ward Councillors' D. Leech, J. Plats, S. Tattersal and MP D. Jarvis. Pre-application consultation letters were sent to these parties on the 14.11.2014.			
Summary of outcome/Main issues raised: No specific comments received to date.			

School/College

Location of site in relation to school/college: Rambles Day Nursery, Ballfield Lane, Kexborough, Barnsley, South Yorkshire, S75 5LW.
Outline of consultation carried out with school/college: Pre-consultation letter sent to the Manager for the above Nursery on 08.12.2014
Summary of outcome/Main issues raised: No specific comments received to date.

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?		No
Has the Civil Aviation Authority/Secretary of State for Defence/Aerodrome Operator been notified?		N/A
Details of response: N/A		

Developer's Notice

Copy of Developer's Notice enclosed?			YES
Date served:	29/01/2015		

3. Proposed Development

The proposed site:

Background

Vodafone Limited has entered into an agreement with Telefonica Limited pursuant to which the two companies plan to jointly operate and manage a single network grid across the UK. These arrangements will be overseen by Cornerstone Telecommunications Infrastructure Limited (CTIL) which is a joint venture company owned by Telefonica UK Limited and Vodafone Limited. This agreement allows both organisations to:

- pool their basic network infrastructure, while running two, independent, nationwide networks
- maximise opportunities to consolidate the number of base stations
- significantly reduce the environmental impact of network development

This application is submitted for and on behalf of CTIL and Vodafone Limited. As part of Vodafone's continued network improvement programme, there is a specific requirement for a radio base station upgrade at this location to provide new 2G and 4G coverage and enhanced, upgraded and integrated 3G coverage on the part of two operators. The site will be capable of accommodating new, more advanced technologies (including 4G) that have already come on stream and will continue to do so in the future.

Site

The site is located between two agricultural fields which forms part of Birthwaite Hall Farm. The site is located adjacent to the M1 Motorway which is approximately 40 metres east from the monopole. Towards the west of the site is Park Hill (A637) highway. South from the site is Birthwaite Business Park which creates an industrial feel to the surrounding area. Generally overall though the area is predominantely rural in nature, surrounded by agricultural land and a mixture of semi-mature and mature trees.

The precise site location is located near to a strip of semi-mature and mature trees which provides screening to the existing monopole when viewed from the adjacent motorway. The site is located between two agricultural fields used for the growing of crops. To the north, west and south is agricultural land. Towards the east beyond the strip of woodland is the M1 Motorway.

The landscape overall is agricultural in nature with Birthwaite Hall farmstead, mature pockets of woodland, and open fields. However, it is also made up of a number of man-made, linear items which to some extent detract from the rural feeling of the area (Birthwaite Business Park) and will help to accommodate the proposal which is for the upgrade of an existing telecommunications base station.

Enclose map showing the cell centre and adjoining cells:

This is an upgrade to the existing site to fundamentally enable the operators to jointly operate and manage a single network grid across the UK, to provide new 2G and 4G coverage and enhanced, upgraded and integrated 3G coverage on the part of two operators, in accordance with the CTIL joint venture arrangements.

Type of Structure: 17.5m slimline monopole

Description

The current telecommunications site is comprised of an 15m monopole (overall height 17.3m including headframe) 6 no. antennas attached, 2 no. equipment cabinets and 1 no. meter cabinet and ancillary works thereto.

This proposal is for the replacement of the existing 15m monopole (overall height 17.3m including headframe) supporting 6 no. antennas, 1 no. 300mm transmission dish, 2 no. existing equipment cabinets and 1 no. meter cabinet and ancillary works. The installation of a replacement of a 17.5m slimline monopole supporting 9 no. replacement antennas; 1 no. replaced 300mm transmission dish, 2 no. additional 300mm transmission dishes, 2 no. replacement cabinets, 1 no. additional cabinet and ancillary development thereto.

The proposed structure will have an increased height of 0.2m overall and will be moved 3.3m towards the north west. The proposed monopole will be finished in a galvanised colour which is the same colour as the existing pole.

The existing 1 no. 300mm transmission dish will be of the same dimensions as previously however would be located 0.5m lower on the monopole. The 2 no. additional transmission dishes will be located on the monopole at approximatetly 13m above the ground.

The 3 no. new cabinets will replace 2 no. existing cabinets (dimensions below) and will be green in colour to maintain the existing site appearance as much as possible and blend in with their surroundings. The location of the cabinets will be located near to existing vegetation in order to blend the cabinets into the surroundings.

Utilising an existing established telecommunications radio base station site is considered to be more sequentially preferable than the installation of a new ground based installation for the operators elsewhere within the cell area, which would lead to the proliferation of masts. As such, alternative sites have not been considered.

Overall Height: Phase 4.5 monopole	17.5 Metres
Height of existing building :	N/A
Equipment Housing: Ericsson 6102 (x2)	
Length:	1.300 Metres
Width:	0.700 Metres
Height:	1.450 Metres
Equipment Housing: Alifabs TSC (x1)	
Length:	1.300 Metres
Width:	0.700 Metres
Height:	0.250 Metres

Materials:	
Tower/mast etc. – type of material and external colour:	Galvanised grey
Equipment housing – external colour:	Green

Reasons for choice of design:
The current installation provides 3G only (internet) coverage to Vodafone and Telefonica customers in the area. As part of Vodafone's continued network improvement programme, there is a specific requirement for a radio base station upgrade at this location to provide new 2G (voice) and 4G (high speed data) services, plus enhanced and integrated 3G for both Vodafone and Telefonica to improve overall network capacity. The site following the proposed upgrade, will be capable of accommodating new, more advanced technologies including 4G.

The new monopole is required due to changed radio coverage dynamics (4G) and structural/ technical unsuitability of the older pole model currently on site. The proposed structure has an overall increase in hight by 0.2 metres compared to the existing monopole in order to accommodate both operators to utilise the same apparatus in order to minimise any visual impacts and to be as close to the existing monopole as is technically possible.

The antennas on the replacement monopole will be mounted on a new headframe. The width of the monopole will be 480mm in diameter at its widest part (existing 220mm widest part). The width of the headframe with antennas attached will be 2m (existing headframe 1.2m). The requirement for a headframe is to accommodate the 4G technology for both operators in addition to 2G and 3G technologies for this rural area and has been kept to its absolute minimum in width and scale. The increase in width of the monopole is required for the structural support for the new headframe and has been kept to an absolute minimum in width to support the additional equipment for the new technologies.

The new cabinets are required to accommodate the equipment supporting the provision of additional frequencies and capacity of the site.

The proposed upgrade will result in a slight increase in height of by 0.2m overall. The wider monopole and headframe are essential for this rural location in order to fit the multiple technologies within the same structure and provide coverage and flexibility for the area for 2 no. operators. It is the minimalist solution available to provide the required upgrade and the replacement column will be of similar materials to those already in situ.

Without the change in design of the structure, multi-technologies for both operators on a single site would not be able to be provided in this area. It is therefore likely that the operators would need to install an additional column elsewhere within the cell area to meet their technological requirements. This would lead to the proliferation of masts contrary to local and national planning guidance.

Development of this site provides an opportunity to improve the existing local telecommunications network and it demonstrates compliance with national (NPPF) and local planning policies which both encourage the usage of existing structures, sharing of telecommunications facilities and the use of sensitively designed masts such as this one which is a slimline monopole. Given that the replacement structure will be similar colour and material as the existing installation already in situ at this rural location close to Birthwaite Business Park means that the site will be able to absorb the proposal at the site without causing any detrimential impact upon the surrounding landscape.

In light of the operators' efforts to design the best solution for this particular site so as to minimise the impact of the development on the environment, it is considered that the appearance of the replacement slimline monopole would not seriously impact on the visual amenity of the area, nor would it form an obtrusive feature within the landscape.

It is therefore considered that the proposal 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 which is to provide new 2G (voice) and 4G (high speed data) service, plus enhanced and integrated 3G (data) for both Vodafone and Telefonica would not be discordant within the surrounding landscape.

4. Technical Information

International Commission on Non-Ionizing Radiation Protection (ICNIRP) Declaration attached: International Commission on Non-Ionizing Radiation Protection public compliance is determined by mathematical calculation and implemented by	Yes	

careful location of antennas, access restrictions and/or barriers and signage as necessary. Members of the public cannot unknowingly enter areas close to the antennas where exposure may exceed the relevant guidelines. When determining compliance the emissions from all mobile phone network operators on or near the site are taken into account.		

Frequency:	2G 900MHz, 3G 2100Mhz and 4G 800Mhz
Modulation characteristics[2]	2G (900) –GMSK 3G (2100) – QPSK 4G (800) - QAM
Power output (expressed in EIRP in dBW per carrier)	800 MHz 31dBW 900 MHz 32 dBW 2100 MHz 35 dBW
In order to minimise interference within its own network and with other radio networks, Vodafone Ltd operates its network in such a way that the radio frequency power outputs are kept to the lowest levels commensurate with effective service provision. As part of Vodafone Ltd.s network, the radio base station that is the subject of this application will be configured to operate in this way. All operators of radio transmitters are under a legal obligation to operate those transmitters in accordance with the conditions of their licence. Operation of the transmitter in accordance with the conditions of the licence fulfils the legal obligations in respect of interference to other radio systems, other electrical equipment, instrumentation or air traffic systems. The conditions of the licence are mandated by Ofcom, an agency of national government, which is responsible for the regulation of the civilian radio spectrum. The remit of Ofcom also includes investigation and remedy of any reported significant interference. The telecommunications infrastructure the subject of this application accords with all relevant legislation and as such will not cause significant and irremediable interference with other electrical equipment, air traffic services or instrumentation operated in the national interest.	

5. Technical Justification

Reason(s) why site required e.g. coverage, upgrade, capacity:
A mobile phone transmitter is designed to cover a specific area and links its coverage to the next site in the network, creating a patchwork of overlapping coverage 'cells' across the county. So, if a person is on the move, the network will transfer their calls from one site to the next. However, in certain areas

[2] The modulation method employed in 2G (GSM) is GMSK (Gaussian Minimum Shift Keying) which is a form of Phase modulation
The modulation method employed in 3G (UMTS) is QPSK (Quad Phase Shift Keying) which is another form of Phase Modulation
The modulation method employed in 4G (LTE) is 64 QAM (Quadrature Amplitude Modulation) which is another form of Phase Modulation

there will be gaps between these cells, resulting in a loss of coverage. This can be for a variety of reasons, the most common being topography or buildings which block the path of the signal. The operators' network rollout programme is designed to identify and address these gaps within their coverage and ensure that people can use their phones whenever and wherever they are.

The distances between transmitter sites will depend on many factors, including the geography of the mobile services. There is a specific requirement for an upgraded radio base station at this location to provide new 2G (voice) and 4G (high speed data) services, plus enhanced and integrated 3G for both Vodafone and Telefonica to improve overall network capacity.

This single network grid will automatically increase each operator's footprint by 40%, adding competition and choice for customers in areas that previously only had one operator's coverage available and is a principal reason for the proposed upgrade.

Additionally, laying the foundations for a 4G system that provides mobile ultra-broadband internet access, e.g. to laptops with USB wireless modems, to smartphones and to other mobile devices, is desirable. 4G provides superfast mobile broadband and will provide better, faster and more reliable mobile broadband connection according to Ofcom's Chief Executive. OfCom's Chief Executive also acknowledges that down load speeds will initially be at least 5 to 7 times faster than existing 3G networks.

The National Planning Policy Framework states at paragraph 46 that local planning authorities should not question the need for the telecommunications system, which the proposed development is to support. However, for the avoidance of doubt, the proposed installation is to provide new 2G (voice) and 4G (high speed data) services, plus enhanced and integrated 3G for both Vodafone and Telefonica to improve overall network capacity

The Government has expressed its commitment to the UK having the best superfast broadband network (i.e. those services with a headline speed of 30Mbit/s or more) by 2015. It also wants superfast broadband networks to be available to 90% of homes and businesses.

The current installation provides 3G only (internet) coverage to Vodafone and Telefonica customers in the area. The new slimline monopole is required due to changed radio coverage dynamics (4G) and structural/ technical unsuitability of the older pole model.

The new cabinets are required to accommodate the equipment supporting the provision of additional frequencies and capacity of the site.

The area within which an installation needs to be established in order to meet the coverage requirement is constrained by the location and extent of the coverage provided by existing installations in the surrounding area. The proposed scheme utilises an existing established radio base station installation which will be upgraded to provide 2G (voice) and 4G (high speed data) services, plus enhanced and integrated 3G for both Vodafone and Telefonica to improve overall network capacity. This will enable the operators to meet their efficiency, capacity and ever increasing technical capability requirements within a single grid network.

Further detail regarding the general operation of the network can be found in the accompanying document entitled 'General Background Information for Telecommunications Development'. This information is provided to assist the LPA in understanding any technical constraints at the location of the proposed development.

6. Site Selection Process – alternative sites considered and not chosen (not generally required for **upgrades/alterations to existing sites** including redevelopment of an existing site to facilitate an upgrade or sharing with another operator)

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.

In accordance with the above sequential approach, and in line with the principles of pooling the two operators existing network infrastructure to create a single network grid, the proposal is to upgrade the existing base station in this location.

Site	Site Name and address	NGR	Reason for not choosing
N/A	N/A	N/A	N/A

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

As referred to above, the applicant has taken a sequential approach and is seeking to redevelop an existing installation to enable a single grid network to provide new 2G (voice) and 4G (high speed data) services, plus enhanced and integrated 3G for both Vodafone and Telefonica to improve overall network capacity to service to the local surrounding area. It is considered that utilising an existing established radio base station installation is preferable to pursuing a second base station within the immediate vicinity, as it would reduce the visual impact therefore preserving the character and amenity of the area. Given the makeup of the area and the siting of existing telecoms infrastructure on the site, it was established that the upgrading of facilities through the use of existing infrastructure would be the most viable solution. Based on this sequential approach no other sites have been considered.

Additional relevant information:

Siting

The site is located within an agricultural area less than 200m to the north of Birthwaite Business Park and adjacent to junction 36 of the M1 Motorway. The site is mainly surrounded by agricultural land from all aspects and has some residential dwellings to the north west of the site location. The new monopole would be slightly higher (200mm) compared with the existing structure. Part of the existing monopole is visual from a short stretch of the M1 Motorway (south) however this would not be considered as a sensitive receptor. It should be noted that travelling along the M1 Motorway towards Junction 38 the viewer would be able to see Birthwaite Business Park which creates a sense that the area is quite industrialised. Traveling along Park Hill (A637) from Junction 38 off the M1 Motorway towards Barnsley Road the existing monopole is hardly noticeable due to the built environment, extensive amounts of screening provided by semi-mature and mature trees, landscape form and other linear structures.

Birthwaite Hall Farm is a Grade II listed building which is approximately 520m from the proposed

slimline monopole. Due to substantial screening from trees, topography and the orientation of the listed building there will be no detrimential impact caused to the heritage asset.

The site will be located in an agricultural area. There is a specific requirement for a radio base station upgrade at this location to provide new 2G (voice) and 4G (high speed data) services, plus enhanced and integrated 3G for both Vodafone and Telefonica to improve overall capacity. The site following the proposed upgrade, will be capable of accommodating new, more advanced technologies for this cell area so that customers will be able to continue to use their smartphones and tablet computers whever and wherever they are to assess services such as instant messaging, emailing, video calls, downstreaming data to name just a few of the benefits of the latest technologies that 3G and 4G provides.

Utilising an existing established radio base station will reduce the cumulative number of base stations in this area that are required and meets with the requirements for minimising the number of radio base stations as set out in NPPF.

It is likely that once built, the site will be visited infrequently for maintenance purposes only, as is currently the case. Access to the site will be by foot in which the applicant would gain access to the equipment housed within the cabinets. In the event of the antennas within the mast needing to be maintained this will be achieved by siting a cherry picker with a hydraulic platform alongside the base station.

Visual Appearance

The need for additional structures will be kept to a minimum through the removal and replacement of the existing structure on this site. However, the operator recognises the need to minimise the visual impact of any new structure on the site. The slimline structure is the thinnest possible in order to house the 2G, 3G and 4G technologies on the same structure, thus allowing both operators to utilise the same apparatus having the same height of structure it replaces albeit at a slightly wider shroud diameter and new headframe.

The new monopole is required due to changed radio coverage dynamics (4G) and structural/ technical unsuitability of the older pole model currently on site. It is acknowledged that the proposed monopole would appear larger in diameter in the most upper section of the pole compared to the existing one. However, if the monopole or headframe were any shorter in diameter, then the technologies would not be able to be accommodated within the same structure and an additional monopole would be required in this rural area, which would lead to the proliferation of masts, contrary to national and local planning policy.

The requirement for a headframe is to accommodate the 4G technology for both operators in addition to 2G and 3G technologies for this rural area and has been kept to its absolute minimum in width and scale. The headframe is required to support and to provide the required flexibility for the multiple technology antennas for both operators to function adequately in this rural location. The increase in the width of the monopole is required for the structural support for the new headframe and has been kept to an absolute minimum in width to support the additional equipment for the new technologies.

It is considered that due to the rural location of the radio base station and the existing vertical features in the surrounding area, such as street lights and telegraph pole lines to the north west and Birthwaite Business Park along with the adjacent M1 Motorway which has created a sense of industrialisation to the landscape to the south, in addition to the significant amount of natural vegetation in the area means that the impact on visual amenity within the landscape will not be detrimental and that the benefits would significantly outweigh the costs.

The proposed cabinets can be painted in an appropriate colour in order to help it merge with its surroundings, although green is proposed to match the existing equipment cabinet already in situ which will be obscured from view from the west by the natural vegetation adjacent to it to the field

boundary to the west. The applicant will comply fully with all conditions relating to the colouring of the equipment.

In light of the operator's efforts to design the best solution for this particular site so as to minimise the impact of development on the local environment, it is considered that the appearance of the replacement structure would not seriously impact upon the visual amenity of the area, nor would it form an obtrusive feature within the landscape.

Possible Electrical Interference

We can advise on behalf of the client that the proposed installation should not cause any undue electrical interference for nearby residents. Vodafone Limited operates within radio bands which are licensed and specific to them and this is regulated in the UK by the Office of Communications (Ofcom).

Health and Safety

The latest government research conducted by the Independent Expert Group on Mobile Phone Technology titled "Mobile Phones and Health" (also known as the Stewart Report) concluded that "the balance of evidence indicates that there is no general risk to the health of people living near to base stations on the basis that exposures are expected to be small fractions of the guidelines".

However, the report also recommended as a precautionary approach that the ICNIRP guidelines for public exposure be adopted in the UK. In response to the report, the Government has stated that emissions from base stations should meet the ICNIRP guidelines and that if they do then local authorities need take no further action. As such, a new ICNIRP declaration is required and attached to this application for this proposal.

Noise

There will be no noise issues related to this site.

Planning Policy Framework

Planning policy is provided at national level by the National Planning Policy Framework (NPPF). It is a material consideration in planning decisions.

National Planning Policy Framework

The National Planning Policy Framework (NPPF) supports high quality communications infrastructure and recognises it as a strategic priority.

Paragraph 43 states that '*Local Planning Authorities should support the expansion of electronic communications networks, including telecommunications and high speed broadband*'. It goes on to acknowledge that the numbers of radio and telecommunications masts and the sites for such installations should be kept to the minimum consistent with the efficient operation of the network. The NPPF supports the use of existing masts, buildings and other structures, unless the need for a new site has been justified. It goes on to state that where new sites are required, the equipment should be sympathetically designed.

NPPF paragraph 46 sets out a clear message to local planning authorities on health issues and the need for telecommunications systems. It states that '*local planning authorities must determine applications on planning grounds. 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*'.

Throughout the NPPF there is strong support for sustainable development which is summed up in

paragraph 14 which states 'At the heart of the National Planning Policy Framework is a presumption in favour of sustainable development, which should be seen as a golden thread running through both plan making and decision taking. For decision-taking this means:

- Approving development proposals that accord with the development plan without delay; and
- Where the development plan is absent, silent or relevant policies are out-of-date, granting planning permission unless:

- Any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole; or
- Specific policies in this Framework indicate development should be restricted.

Section 7 of the NPPF sets out the requirement for good design and states at paragraph 56 that '*the Government attaches great importance to the design of the built environment. Good design is a key aspect of sustainable development, is indivisible from good planning, and should contribute positively to making places better for people*'. Paragraph 65 goes on to state that '*local planning authorities should not refuse planning permission for buildings or infrastructure which promote high levels of sustainability because of concerns about incompatibility with an existing townscape, if those concerns have been mitigated by good design*'.

The NPPF sets out 12 core principles which should underpin plan-making and decision-making these principles include that every effort should be made objectively to identify and meet development needs of an area, and respond positively to wider opportunities for growth (para 17).

Code of Best Practice on Mobile Phone Network Development in England (July 2013)

The Code of Best Practice provides guidance primarily to mobile network operators, their agents and contractors and to local planning authorities in England. It supersedes the Code of Best Practice on Mobile Phone Network Development (2002).

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

The Code highlights that the mobile telecommunications network is a crucial piece of national infrastructure in both economic and social terms. It acknowledges that the pressure on networks to upgrade and improve networks through changes to existing sites and the development of new sites is constant. With the 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. However, The Code notes that upgrading and improving mobile networks will not be possible without the necessary infrastructure on which they rely.

The Code acknowledges that the operators anticipate largely using existing network infrastructure for the provision of 4G services and are similarly upgrading their 2G and 3G network infrastructure to improve capacity and coverage. However, the Code goes on to state that this does not mean that there will not be a need for new base stations. 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 Policy and customer demand or where sites have been lost for example due to redevelopment.

Mast and site sharing continues to be supported within both Government policy and the Code of Best Practice. The Code acknowledges that shared sites will tend to be slightly bigger, but fewer sites will be needed overall to improve coverage and capacity. The Code acknowledges that sharing of sites is now the norm, and network operators now share much of their network infrastructure via joint venture commercial arrangements.

Due to the character of the cell area being predominately rural and agricultural in nature, the applicant has designed a relatively slender mast rather than the use of a more traditional lattice type mast which would be considered incongruous and it is likely that such a proposal would have an unacceptable visual impact in this agricultural area. It is therefore considered that the use of a 17.5m high, slim-line monopole which provides the space and technical flexibility for the 2G, 3G and 4G technologies to function adequately at this location which is at the same overall height as the existing structure.

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

- *Placing the mast near similar structures. For example, industrial and commercial premises, road signs and lamp posts;*
- *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.*

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 development plan as defined by the Planning and Compulsory Purchase Act 2004 for Barnsley Metropolitan Borough Council comprises the Core Strategy, the Barnsley Education Sites Development Plan Document (DPD) (both of which form part of the Local Development Framework), the remaining saved policies of the Unitary Development Plan, and the Regional Spatial Strategy.

Barnsley MBC is currently producing a Local Plan. Its status is that it is currently at public consultation stage which ended on the 11th January 2015. This new local plan (once adopted) will replace the Core Strategy and Unitary Development Plan.

There is no current statutory policy pertaining specifically to telecommunications as 'Policy UTL5 Telecommunications' of the UDP is not a 'saved' policy.

Barnsley Core Strategy (2011)

CSP 29 Design Principles:

High quality development will be expected, that respects, takes advantage of and enhances the distinctive features of Barnsley, including:

- topography, Green Infrastructure assets, important habitats, woodlands and other natural features
- views and vistas to key buildings, landmarks, skylines and gateways
- heritage, townscape and landscape character including the scale, layout, building styles and materials of the built form particularly in and around: Barnsley Town Centre Penistone and the rural villages in the west of the borough within and adjacent to Conservation Areas

Development should:

- contribute to place making and be of a high quality, that contributes to a healthy, safe and sustainable environment

- help to transform the character of physical environments that have become run down and are lacking in distinctiveness
- enable all people to gain access safely and conveniently, providing, in particular, for the needs of families and children, and of disabled people and older people
- contribute towards creating attractive, sustainable and successful neighbourhoods
- achieve a Building For Life assessment rating of 'good' or equivalent as a minimum, in developments of 10 or more dwellings

Barnsley Local Plan Consultation Draft 2014

25 Utilities

25.1 The National Planning Policy Framework requires local planning authorities to work with other authorities and providers to assess the quality and capacity of all types of infrastructure including utilities, and its ability to meet the forecast demands. The responsibility and resources to provide services rests with the utilities companies, however, we must make sure that we co-ordinate the development of an effective network of services with existing and proposed development. We will support new services development, and will work with operators to make sure that any proposed development is well positioned and designed.

Evaluation in Light of National and Local Policy

The NPPF clearly highlights the government's positive stance regarding telecommunications and broadband development and the support whilst noting the environmental and social benefits telecommunications can provide.

The proposed replacement telecommunications installation at Birthwaithe Hall Farm fully complies with the objectives of the NPPF, as it states [par 43] that the number of radio and telecommunication masts should be kept to a minimum consistent with the efficient operation of the network. Existing masts, buildings and other structures should be used unless the need of a new site has been justified [NPPF para 43].

The application site is an established telecommunications site whereby the proposed replacement structure is being proposed for 2 no. operators to utilise one single network grid point in accordance with the NPPF and Code of Best Practise as it offers the best environmental solution by limiting the visual intrusion in the area.

The principle of a telecommunications base station installation at this location has already been accepted by the Council and has become part of the established streetscene. The proposed upgrade to the existing site is sequentially the most preferable option as it is to be sited as close as possible to the existing structure. The proposed design is intentionally as similar as possible to mimic the existing structure in terms of height and width as is technically possible to minimise any impacts in the surrounding area which contains a number of existing vertical structures most notably existing lighting columns, road signage and a significant number of trees both semi-mature and mature which help to absorb and assimilate the proposal into this streetscene.

In accordance with the NPPF, Barnsley Core Strategy CSP 29 and Barnsley Local Plan Consultation Draft 2014 great care was taken with regards to the design of the proposed structure which is one of the most sensitive designs available to operators.

The proposed monopole is 0.2m higher than the existing one which is necessary at this location for the antennas to have a clear line of sight, without compromising the quality of the new 4G high speed internet network for both operators in addition to the 2G and 3G technologies which would be considered technically unacceptable at the height of the existing structure.

The wider headframe and height increase of 0.2m is essential in order to fit all technologies within the same structure. It is the minimalist solution available to provide the required upgrade and the

replacement column will be of similar materials to those already in situ. Without the amendments to the column multi technologies for both operators on a single site would not be able to be provided. It is therefore likely that the operators would need to install an additional monopole elsewhere within the cell area to meet their technological requirements. This would lead to the proliferation of masts contrary to local and national planning guidance. Given that the replacement monopole will appear as similar as possible to the existing structure already in situ where there are lots of other linear structures and trees this will help the replacement mast blend in with the landscape.

The Code of Best Practise acknowledges that shared structures tend to be higher. The headframe is 0.8m wider than the existing one to accommodate the additional different technologies for both operators.

It is acknowledged that Birthwaite Hall Farm is located to the south-west. There are limited number of residential properties within the immediate area, therefore the impacts will be significantly reduced. It should be noted that given the existing monopole already in situ, together with the distance, orientation and existing trees means that the proposed upgrade to the existing radio base station will not cause a significant loss to the landscape in accordance with the NPPF and Code of Best Practice.

The NPPF states at paragraph 43 that local planning authorities should support the expansion of electronic communications networks, including telecommunications and high speed broadband. It acknowledges that high quality communications infrastructure is essential for sustainable economic growth. The NPPF also highlights that the development of high speed broadband technology also plays a vital role in enhancing the provision of local community facilities and services.

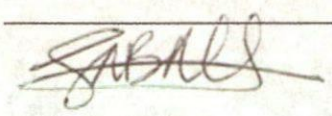
Taking all these factors into consideration, it is our opinion that the proposal meets all local policy requirements of Barnsley MBC and national policy as set out in the NPPF.

Conclusion

Taking into consideration all the relevant factors set out herein this document, it is considered that this telecommunications base station upgrade at Birthwaite Hall Farm is the optimum solution in terms of providing the required technology coverage, minimising any adverse impacts on local amenity and the surrounding landscape. The proposal is fully compliant with the NPPF [par 14, 17, 43, 46, 56, 65], Code of Best Practise on Mobile Phone Development, Barnsley Core Strategy [CSP29] and Barnsley Local Plan Consultation Draft [25].

For these reasons it is considered that this planning application should be approved.

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