SUPPLEMENTARY INFORMATION

1. Site Details

Site Name:	Scholes	Site Address:	Scholes Wellend Stables Wellend Lane Cleckheaton West Yorkshire BD19 6EY
National Grid Reference:	E: 417518, N: 425426		
Site Ref Number:	CTIL 112372	Site Type:[1]	Upgrade

2. Pre Application Check List

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: The site is an upgrade.		
Were industry site databases checked for suitable sites by the operator:	Yes	
If no explain why: N/A		

Site Specific Pre-application consultation with local planning authority

Was there pre-application contact:	Yes
Date of pre-application contact:	15th July 2019
Name of contact:	The Director of Planning
Summary of outcome/Main issues raised: Prior to the submission of this application the applicant initiated pre-consultation discussions with the local planning authority. This provides an opportunity for the LPA to discuss development proposals and identify site specific issues. Strategic level pre-rollout meetings are held with the LPA to discuss the necessities of the project, benefits and best practice going forward.	

Community Consultation

Rating of Site under Traffic Light Model:			Green

[1] Macro or Micro

Outline of consultation carried out: Prior to the submission of this application the applicant initiate pre-consultation discussions with the local planning authority. This provides an opportunity for the LPA to discuss development proposals and identify site specific issues. No comments were received in respect to the consultation submitted at the time of submission. Further consultation with the local Ward Councillors for Kirklees Metropolitan Council (Councillor Kath Pinnock, Councillor John Lawson, Councillor Andrew Pinnock).
Summary of outcome/main issues raised (include copies of relevant correspondence): No responses had been received from any of the Ward Councillors at the time of submission.

School/College

Location of site in relation to school/college: There are no schools in close proximity as defined by the search criteria within the CoBP.
Outline of consultation carried out with school/college: N/A
Summary of outcome/main issues raised: N/A

Civil Aviation Authority/Secretary of State for Defence/Aerodrome Operator consultation

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?		No
Details of response: N/A		

Developer's Notice

Copy of Developer's Notice enclosed		Yes	
Date served:	30th July 2019		

3. Proposed Development

The proposed site:
The proposed site at Scholes, Wellend Stables, Wellend Lane, Cleckheaton, West Yorkshire, BD19 6EY is an established telecommunication installation. This submission is purely to upgrade this existing installation with new equipment to facilitate improved coverage. The current installation is being replaced but only with a lattice installation of the same height and similar design. The visual implications of this site share upgrade are limited. The sharing of base stations between multiple operators is one of the key strategic policy principles contained within the NPPF. H3G and EE have a network sharing agreement as do VF and TEF and thus these installations are fully compliant with the NPPF. Local Planning Authority:Kirklees Council Development Plan: Kirklees Unitary Development Plan (1999) (Saved Policies) Site and its surrounds Policy Relevant to the Development Site: The site location designation is not a material consideration. The site is an existing telecommunications site. Kirklees Council does not have a specific telecoms policy. Therefore the NPPF is of relevance. The National Planning Policy section of this supporting statement goes into detailed analysis of why this site is in compliance with the NPPF. Policy Analysis: The proposed works on this existing site would not be to the visual detriment of the surrounding area, would not result in demonstrable harm to the character of the area (reflects the industrial nature of the area), but are necessary to ensure improved delivery of service, and would respect and continue to maintain the appearance of the area, and would be suitably distant from potentially sensitive users, so according with the principles of the policies. It fully accords with the requirements of the NPPF Central Government attaches great importance to the design of the built environment and outlines this within Section 12 (para. 124) of the National Planning Policy Framework. It states:

"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."

In keeping with the National Planning Policy Framework (NPPF). guidelines of using: "high quality communications" (Section 10), the proposed design has been selected to minimise visual impact upon the surrounding area by integrating with the existing built environment.

The design of the proposed equipment is considered to be the least visually intrusive option available.

In keeping with the National Planning Policy Framework (NPPF). guidelines of using: "high quality communications infrastructure", the proposed design has been selected to minimise its visual impact upon the immediate and wider locale.

The presence of the existing lattice column sets a clear precedent for telecommunications development in this location and indicates that the principle of this proposal is acceptable in terms of siting. As stated above the National Planning Policy Framework advocates site sharing, and as such we believe that there are no sequentially preferable locations within the defined site search area.

Although it is accepted that the width will be very marginally increased, it is felt that such a minor increase in the overall bulk of the installation would not detract from the character of the area in which the proposal sits.

Any other proposal to satisfy the identified requirement would result in the addition of a separate ground based column elsewhere in close proximity to the existing structure. In our opinion, such a proposal would, in this instance, unnecessarily add to the clutter in this location and result in a greater visual impact.

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

This can be emailed to the LPA on request.

Type of Structure:

Description:

Proposed 6No Antennas on new Headframe support poles on proposed Tower.

Proposed GPS Module to be mounted on Headload.

Top of proposed Antennas +17.8m AGL.
C/L of relocated Dish +16.8m AGL.
U/S of proposed Antennas +15.3m AGL.
U/S of proposed Antennas +15.8m AGL.

Existing 1No. 300ø Transmission Dish fixed to Yoke Bracket to be relocated onto new Headframe support pole on proposed Tower.

Proposed 15No. RRU's on new Headframe support poles on proposed Tower.

Propsoed 15m High FLI Tower C/W circular Headfrawm on existing concrete base fixed to existing foundation studs.

Existing High Level Cable Gantry and support poles to be utilised for proposed Fibre/DC Cabling.

Existing Equipment Cabin on concrete base to be refreshed internally.

Overall Height: 17.8m AGL	
Height of existing building:	N/A
Equipment Housing:	
Length:	See drawings
Width:	See drawings
Height:	See drawings
Materials:	
Tower/mast etc – type of material and external colour:	See Drawings - Galvanised
Equipment housing – type of material and external colour:	See Drawings - Grey

Reasons for choice of design, making reference to pre-application responses:
The sharing of base stations between multiple operators is one of the key strategic policy principles contained within the NPPF. Telefónica UK Limited has entered into an agreement with Vodafone 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 Ltd (CTIL) which is a joint venture company owned by Telefónica UK Limited and Vodafone Limited.

As stated above the National Planning Policy Framework advocates site sharing, and as such we believe that there are no sequentially preferable locations within the defined site search area.

Technical Information

International Commission on Non-Ionizing Radiation Protection Declaration attached (see below) International Commission on Non-Ionizing Radiation Protection public compliance is determined by mathematical calculation and implemented by careful location of antennas, access restrictions and/or barriers and signage as necessary. Members of the public cannot unknowingly enter areas close to the antennas where exposure may exceed the relevant guidelines. When determining compliance the emissions from all mobile phone network operators on or near to the site are taken into account. In order to minimise interference within its own network and with other radio networks, (Telefónica UK Limited) operates its network in such a way the radio frequency power outputs are kept to the lowest levels commensurate with effective service provision As part of (Telefónica UK Limited)'s network, the radio base station that is the subject of this application will be configured to operate in this way. All operators of radio transmitters are under a legal obligation to operate those transmitters in accordance with the conditions of their licence. Operation of the transmitter in accordance with the conditions of the licence fulfils the legal obligations in respect of interference to other radio systems, other electrical equipment, instrumentation or air traffic	Yes	

systems. The conditions of the licence are mandated by Ofcom, an agency of national government, who are responsible for the regulation of the civilian radio spectrum. The remit of Ofcom also includes investigation and remedy of any reported significant interference. The telecommunications infrastructure the subject of this application accords with all relevant legislation and as such will not cause significant and irremediable interference with other electrical equipment, air traffic services or instrumentation operated in the national interest.		

4. Technical Justification

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

The National Planning Policy Framework clearly states that authorities should not question the need for the service, nor seek to prevent competition between operators. Notwithstanding this fact, the Applicant considers it to be important to explain the technical justification for the site and how the facility fits into the overall network.

In February 2013, Vodafone and Telefónica were successful in their bids for 4G spectrum. 4G (sometimes called LTE (Long Term Evolution)) is the next major enhancement to mobile radio communications networks and will allow customers to use ultra-fast speeds when browsing the internet, streaming videos or sending emails. It also enables faster downloads. To meet this demand and improve the quality of service, additional base stations or upgrades to the equipment at an existing base station may be needed.

The site is required to provide enhanced coverage and capacity for O2. This will improve coverage and capacity in the Leeds area. The cell search areas for 3G and 4G are extremely constrained with a typical cell radius of approximately 250m meaning that it would not be feasible to site the column outside of this locale.

Further detail regarding the general operation of the network can be found in the accompanying document entitled 'General Background Information on Radio Network Development for Planning Applications'. This information is provided to assist the local planning authority in understanding any technical constraints on the location of the proposed development.

The radio coverage plots can be e-mailed to the LPA on request.

RADIO PLANNING AND PROPAGATION

When planning cellular telecommunications networks it is important for engineers to predict, with a high degree of confidence, the behaviour of cellular transmissions. This then enables the operator to calculate how many cell sites are needed to provide the level of coverage required by the services they offer under the terms of their licence.

The strength of radio signals detected at a receiving device naturally reduces the further away it is from the transmitter. In general the reduction (or decay) in signal power is affected by a number of variables. The main factors are

- frequency,
- distance (from transmitter),
- terrain (such as hills),
- clutter (such as buildings, foliage, vehicles, and water)
- and atmospheric conditions (such as rain).

A reduction in the strength of the radio signal increases the likelihood of dropped calls and reduced data rates for internet browsing, for example.

Clutter

Any physical object obstructing the propagation of radio signals causes a reduction in signal strength reaching a customer's device. A common term for these objects is 'clutter'. The more obvious examples are buildings and geographical terrain such as hills and trees.

Buildings cause a varying amount of signal reduction depending on their height, construction, thickness of walls, amount of windows etc. Glass causes a lower reduction in signal than brick/concrete walls.

Customers will inadvertently be aware of this by finding that sometimes they need to go near windows, a higher floor of a building or even outside in order to achieve a stronger signal for their mobile devices.

Tree Clutter

The effects of trees on signal degradation should never be underestimated. Signal absorption and shadowing effects vary according to vegetation and density, and are caused by the main tree trunk, branches and leaves.

Cell sites located in or near trees will have signals significantly reduced. As a result a number of extra sites may need to be built locally in order to counter-effect this.

Signal variation throughout the seasons is also a practical concern. Leaves on trees in the spring and summer can cause shadowing and reduce radio voice quality and increase the number of dropped calls.

As a result the bottom of an antenna should be a) above the top level of the trees, b) allow greater height due to the antenna downtilt at build or for future requirements and c) allow some room for future growth of the trees.

In the case where the cell site utilises point-to-point microwave backhaul transmission the microwave dish should not be obscured at all.

Propagation Models

In essence these are mathematical formulae used to characterise radio wave propagation, in order to determine the received signal strength at a receiving device.

The most well-known propagation model used for mobile telecommunications is 'Okamura-Hata'. More specific studies have been performed to investigate specific clutter and terrain such as dense-urban and urban environments. Resulting from these are propagation models for specific clutter types.

Coverage Planning Tools

Radio planning engineers plan cellular networks using highly sophisticated computer programs that incorporate the above propagation models. Armed with data on cell site location, cell site configuration, maps, terrain etc they are used to predict areas of coverage deficiency (so called 'coverage holes'), new site requirements and configurations.

Network Changes

Over time the topography and clutter in an area is subject to change. For example, building developments, housing and tree growth can all change. As a consequence the signals received from local phone masts can degrade, as they are dependent on these factors. These reasons along with customer complaints, network consolidation (mast sharing) and new technologies (4G) require a re-evaluation of a network operator's telecommunications infrastructure.

Mast sharing can result in some masts no longer being needed. As a result they are decommissioned and physically removed.

Technical surveys undertaken for reasons above may highlight that antenna height increases are required – this is more likely for sites with low antenna heights around 15m AGL, particularly street furniture sites. More details on these reasons below.

While thus far this document is generic to mobile telephony masts it should be noted that each mast has to be dealt with on a case-by-case basis.

Site Height increases

There are a number of reasons why an operator may request a certain height on a proposed structure.

The main ones are described below:

Coverage

The antennas inside, for example, street furniture sites are generally of 2 physical build designs – 'Single Stack' and 'Dual Stack'. The former describes when the set of antennas are all at the same height. The latter describes a site with 2 sets of antennas one above the other.

The 'Dual Stack' is by far the preferred option. This is due to a number of factors including greater flexibility & control for different technologies and providing optimum service performance to customers.

Network Consolidation between Vodafone and Telefonica and new 4G technologies facilitate a Single Stack structure being upgraded to a Dual Stack structure. In a straight swap scenario at equal height the new lower aperture antennas would be lower than they were originally - resulting in significantly reduced coverage.

Clutter changes

A more extreme example is when the local clutter or tree lines have changed, or are such that the mobile signals are blocked, resulting in lower quality calls and downloads for mobile device users. To provide sufficient services to customers height increases on existing masts or additional new masts are required. The former is the preferred option however, in many cases new masts are often required due to clutter issues.

ICNIRP Compliance

The addition of new technologies and mast sharing affects ICNIRP compliance – a higher minimum mast height is required in some cases.

5. Site Selection Process

If no alternative site options have been investigated, please explain why: The Site is an Upgrade.
Environmental Information (refer to Section 2 of Site Finder Report):
Land use planning designations (if Heritage Statement is required then include here or make reference to attached Heritage Statement):
Additional relevant information (include planning policy and material considerations): This specific proposal forms part of an integral requirement for 02 and Vodafone to expand their respective telecommunications network across Cleckheaton specifically in this instance to enhance coverage levels and network capacity within the BD19 area.

Telefónica O2 UK Limited has entered into a network sharing agreement with Vodafone Limited pursuant to which the two companies plan to share network equipment on a number of sites across the UK. A joint project team has been created, called CTIL comprising Vodafone and O2 employees, to oversee these arrangements. This agreement allows both organisations to consolidate the number of base stations required through sharing which is in accordance with Government Policy, and therefore significantly reduce the environmental impact of network development

This partnership has resulted in the development and production of an array of "dual user" structures and cabinets, which have the ability to accommodate both operator's antenna systems and radio equipment.

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.

A further limiting factor is that the position has to be one that fits in with the existing network. Sites have to form a patchwork of coverage cells with each cell overlapping to a limited degree with the surrounding base stations to provide continuous network cover as users move from one cell to the other. However if this overlap is too great unacceptable interference is created between the two cells.

DEVELOPMENT PLAN POLICY.

Development plan considerations have a special significance in law. Section 54A of the Town and Country Planning Act 1990 (The Act), and re-iterated in Section 38 of the Planning and Compensation Act 2004, it is stated that:

"Where in making any determination under the Planning Acts regard is to be had to the Development Plan, determination shall be made in accordance with the Development Plan unless material considerations indicate otherwise."

NATIONAL PLANNING POLICY

The Government remain committed to promoting telecommunications and place emphasis on the importance of telecommunications to the wider economy. The National Planning Policy Framework (NPPF July 2018) sets out the Government's planning policies for England and how these are expected to be applied at the Local level. It provides a framework within which local people and their accountable Councils can produce their own distinctive local and neighbourhood plans, which reflect the needs and priorities of their communities.
The purpose of the planning system is to contribute to the achievement of sustainable development. There are three dimensions of sustainable development, each of which give rise to the need for the planning systems to perform a number of roles including;

- Economic Role – contributing to building strong, responsive and competitive economy;
- Social Role – Supporting strong vibrant and healthy communities; and
- Environmental Role – Contributing to protecting and enhancing our natural, built and historic environment.

The NPPF contains at its core a presumption in favour of sustainable development which runs through both plan-making and decision-making processes. The NPPF recognises the vital importance of high quality telecommunications and dedicates a whole chapter to this. Chapter 10 of the NPPF outlines the Governments support for high quality communications. The paragraphs below clearly outline the overarching support from Central Government for telecommunications and how Local Planning Authorities should embrace this vital infrastructure:

Paragraph 112 states:

"Advanced, high quality and reliable communications infrastructure is essential for economic growth and social well-being. Planning policies and decisions should support the expansion of electronic communications networks, including next generation mobile technology (such as 5G) and full fibre broadband connections. Policies should set out how high quality digital infrastructure, providing access to services from a range of providers, is expected to be delivered and upgraded over time; and should prioritise full fibre connections to existing and new developments (as these connections will, in almost all cases, provide the optimum solution)."

It continues in Paragraph 113

"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." Operators always follow the sequential site selection process. Where an existing site can be shared or upgraded this will always adhered to before a new proposal is put forward for consideration.

The support for telecoms and the need not to constrain Operators is laid out in Paragraph 116

"Local planning authorities must determine applications on planning grounds only. They should not seek to prevent competition between different operators, question the need for an electronic communications system, or set health safeguards different from the International Commission guidelines for public exposure."

LOCAL PLAN POLICY

The relevant Local Plan policies Kirklees Metropolitan Council – adopted Local Plan first review alteration) are highlighted below. The telecoms policies that are not relevant to this application have been removed.

Conclusion

We consider the development complies with both central government and local planning policy guidance where the underlying aim is to provide an efficient and competitive telecommunication system for the benefit of the community while minimising visual impact.

Taking into account the factors of technical constraints, available sites and planning constraints we consider that this site and design clearly represents the optimum environmental solution.

On the basis of a recognised need to expand and promote telecommunications networks across the region, it is considered that the proposal fully accords with the requirements of the National Planning Policy Framework and the Council's Local Plan Policies.

Confirmation that submitted drawings have been checked for accuracy

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