SUPPLEMENTARY INFORMATION FORM

1. Site Details

Site Name:	QUARRY HOLLOW SW	Site Address:	QUARRY HOLLOW, HEADINGTON, OXFORD, OX3 8GD
National Grid Reference:	455310E, 206899N		
Site Ref Number:	OXD13917	Site Type:[1]	Macro

2. Pre-Application Check List

Site Selection (for New Sites only)

Was a local planning authority mast register available to check for suitable sites by the operator or the local planning authority?	Yes	**No**
If no explain why: A physical search of the area was carried out.		
Was the industry site database checked for suitable sites by the operator?	**Yes**	No
If no explain why:		

Site Specific Pre-application consultation with local planning authority

[redacted]

[1] Macro or Micro

Community Consultation

Rating of Site under Traffic Light Model:	**Red**	Amber	Green
Outline of consultation carried out: Pre-application correspondence was forwarded by email on 5th February 2021 to the Quarry and Risinghurst Ward – Cllr Chewe Munkonge & Cllr Roz Smith. Pre-application correspondence was forwarded by email on 5th February 2021 to Anneliese Dodds MP. There have been a number of comments received – from the Councillors, from the Friends of Quarry and form local residents sent via the Ward Councillors or local MP. All are in opposition to the proposal. The main reasons for opposition reflect the concerns raised by the LPA – impact on residential amenity, impact on the conservation area and the belief that there must be more appropriate sites.			
Summary of outcome/main issues raised (include copies of relevant correspondence): There have been a number of comments received – from the Councillors, from the Friends of Quarry and form local residents sent via the Ward Councillors or local MP. All are in opposition to the proposal. The main reasons for opposition reflect the concerns raised by the LPA – impact on residential amenity, impact on the conservation area and the belief that there must be more appropriate sites. Concerns as to the Health effects have also been raised and an ICNIRP certificate is provided with this application.			

School/College

Location of site in relation to school/college (include name of school/college): Headington Quarry Nursery School & Kiddies Korner Day Nursery within 300m.
Outline of consultation carried out with school/college (include evidence of consultation): Pre-application correspondence was forwarded by email on 5th February 2021.
Summary of outcome/main issues raised (include copies of main correspondence): To date no comments have been received.

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

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

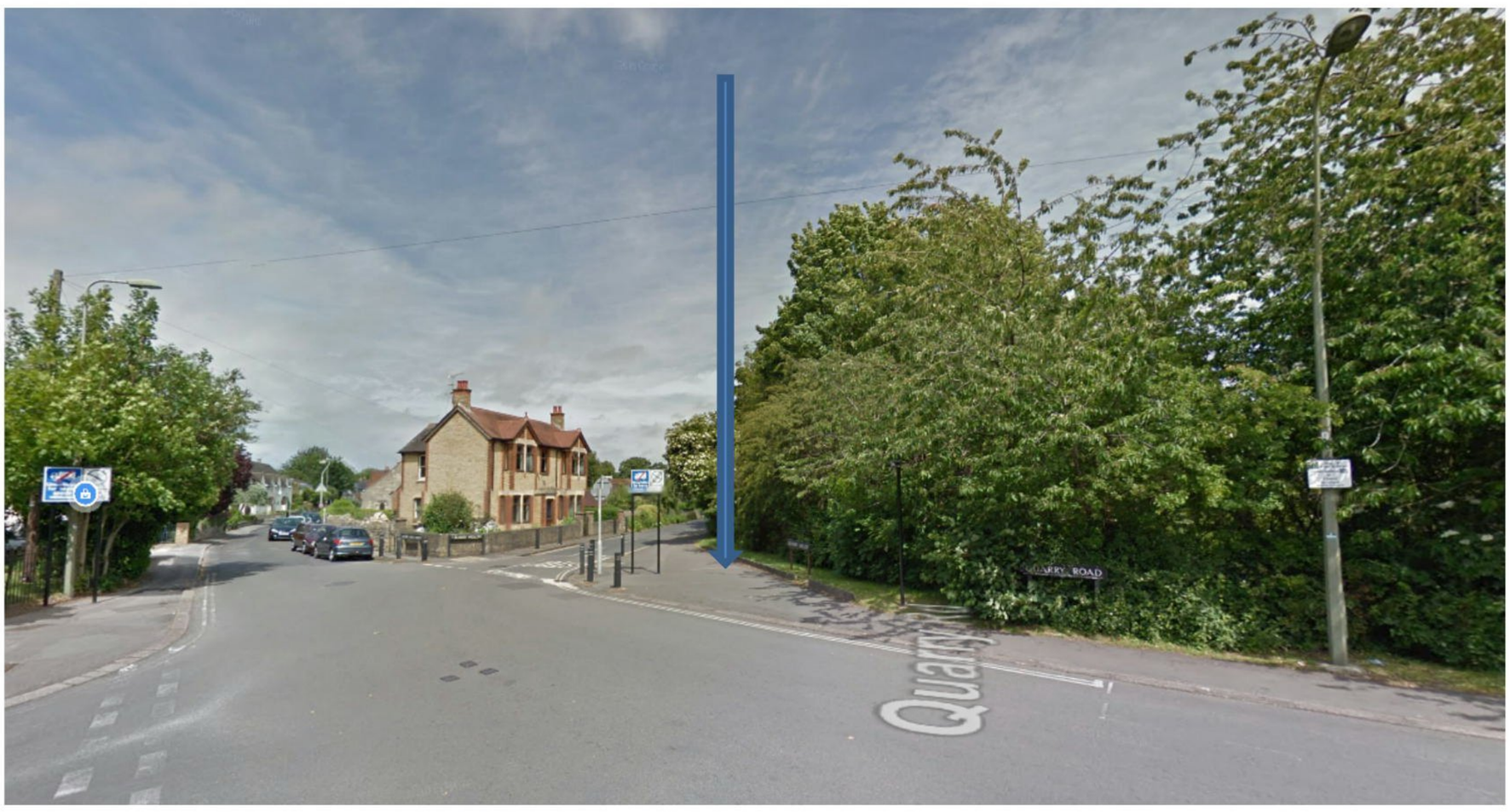
Details of response: Notification was forwarded by email to the estates/facilities/helipad managers at John Radcliffe Hospital Helipad. To date no response has been received.

Developer's Notice

Copy of Developer's Notice enclosed?	**Yes**	No
Date served:	17th March 2021	

3. Proposed Development

The proposed site:
The proposed development is required to provide new infill coverage for the H3G network (known as '3'). The site is primarily required to provide new 5G coverage and capacity to the area surrounding the site. It would also improve 4G coverage and capacity. The proposed site is at the junction between Quarry Hollow and Quarry High St. close to the trees and road signs. This location is considered suitable for the installation and will benefit from the nature of the area– the proposed location is shown on the photograph below:



The site search area is in an entirely residential area and the options for a site are limited. As there were no more suitable locations noted (see discounted options section later in this document) this location was then investigated as there was space for an installation, screening and this was considered more suitable. The proposed site location is within Headington Quarry Conservation Area, this location has a suitably wide enough pavement and is nearer to the Nominal. The development involves the installation of a 20 metre high monopole. The pole would support 6 no. antennas. The three uppermost antennas provide 5G coverage, and the lower set of 3 antennas would provide 4G coverage. The pole would also support 2 no. transmission

dishes below the antennas. These are required to link the site into the wider network. Ancillary equipment cabinets are proposed at ground level adjacent to the pole

Type of Structure *(e.g. tower, mast, etc):*	Monopole
Description: The installation of a 20 metre high monopole supporting 6 no. antennas and 2 no. transmission dishes, 4 no. equipment cabinets and development works ancillary thereto.	
Overall Height:	20 metres
Height of existing building *(where applicable):*	N/A
Equipment Housing:	
Commscope AC Transmission Cabinet: Huawei APM6130 Cabinet: Commscope Bowler Cabinet:	0.6m x 0.5m x 1.585m 0.65m x 0.7m x 0.95m 1.9m x 0.6m x 1.752m
Materials *(as applicable):*	
Tower/mast etc – type of material and external colour:	Steel with a black finish.
Equipment housing – type of material and external colour:	Steel with a black finish.

Reasons for choice of design, making reference to pre-application response:
In designing the proposed installation, the applicant has sought to achieve a balance between technical requirements and minimising environmental impact as far as was practicable. It, however, must be acknowledged that technical constraints heavily influenced the design and limited the scope to alter the appearance of the site to a significant degree. There are three main elements to a radio base station; the cabin or cabinets which contain the equipment used to generate the radio signals, 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 any necessary amplifier or receiver units). Other elements necessary for the base station to function are the power source (meter cabinet or generator where a REC supply cannot be utilised), 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. Of necessity, the mast is located close to the residential area it is designed to serve and is of a height capable of providing comprehensive coverage. The cabinets are of a type commonly seen on the street and are low level structures that when viewed in the context of the street furniture and the foliage in the background will not be obtrusive features as will be painted black. In all aspects of the design now put forward the smallest practical components have been utilised to ensure that the visual impact of the development is kept to the absolute minimum. The proposed development has two main elements, the monopole which would support the antennas, and the radio equipment cabinets located at ground level adjacent to the pole. A slim and unfussy design of support structure has been chosen to minimise impact on the surrounding area. The monopole design of support structure is considered suitable. The finish of the monopole and the equipment cabinets is proposed to be black, the site and the

equipment will blend into the streetscene. Whilst the proposed colour scheme is considered wholly appropriate for this site, the applicant would be willing to adhere to any colour scheme deemed more appropriate by the local authority.

In terms of the height of the proposed structure, it is acknowledged it would be taller than the existing street furniture, and taller than the trees. This is necessary as the site is proposed to provide 5G services and 5G uses higher frequencies which do not propagate through material and potential obstructions as well as lower frequencies, thus there is a need to ensure that the antennas clear local clutter and most of the trees in the wider area.

There are trees and other street furniture close to the site and in the wider surrounding area, which would provide some screening and/or backdrop to the proposed development. The level of screening of the equipment will depend on the specific viewpoint, however, overall, the screening would assist in minimising visual impact to an acceptable level and ensuring impact on residential amenity is kept to an absolute minimum. It is considered the proposed equipment is appropriately located.

It has been possible to devise a scheme which has a minimal visual impact on the surrounding area. The design results in a less intrusive facility than other designs, therefore helping to preserve the character and appearance of the area. It is further considered the proposal strikes an appropriate balance between operational and environmental considerations, and the impact of the development would be outweighed by the significant public benefit of the proposal.

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, Hutchison 3G UK Ltd 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 Hutchison 3G UK 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	**Yes**	No

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

4. Technical Justification

Enclose predictive coverage plots if appropriate, e.g. to show coverage improvement. Proposals to improve capacity will not generally require coverage plots.

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

There is a requirement to upgrade the H3G network in the area to provide improved coverage and capacity, most notably in relation to 5G services, but also in relation to 4G services.

The first generation of services provided voice calls, the second generation (2G) allowed basic data such as texting and the third generation (3G) offered internet access and the development of apps. Since then the smart phone has developed further and the fourth generation has brought video and much faster data speeds allowing the integration of the smart phone into wider use.

The next generation of mobile telephony is 5G which brings greatly increasing data speeds. The advantages this presents range from near-instant downloads of HD films to connected cars, smart medical devices and smart cities. To bring this new technology H3G will need to provide a mix of upgrades to existing sites and the building of new sites. New sites will be needed for many reasons, including that the higher radio frequencies used for 5G do not travel as far as those frequencies currently in use leaving gaps in the network.

Although 5G will undoubtedly bring new opportunities and huge benefits to society, we cannot escape from the requirement that new structures, antennas and ancillary equipment will be needed. It has been acknowledged by Government that we must ensure that we have the infrastructure in place to deliver 5G across our major centres and transport networks. This is one of the many additional structures that will be needed to provide enhanced services.

The higher frequencies that 5G will use can provide more bandwidth and thus greater capacity but the signal will not travel as far as those of previous generations. The implications to the built environment will be that more infrastructure needs to be deployed, as in this case.

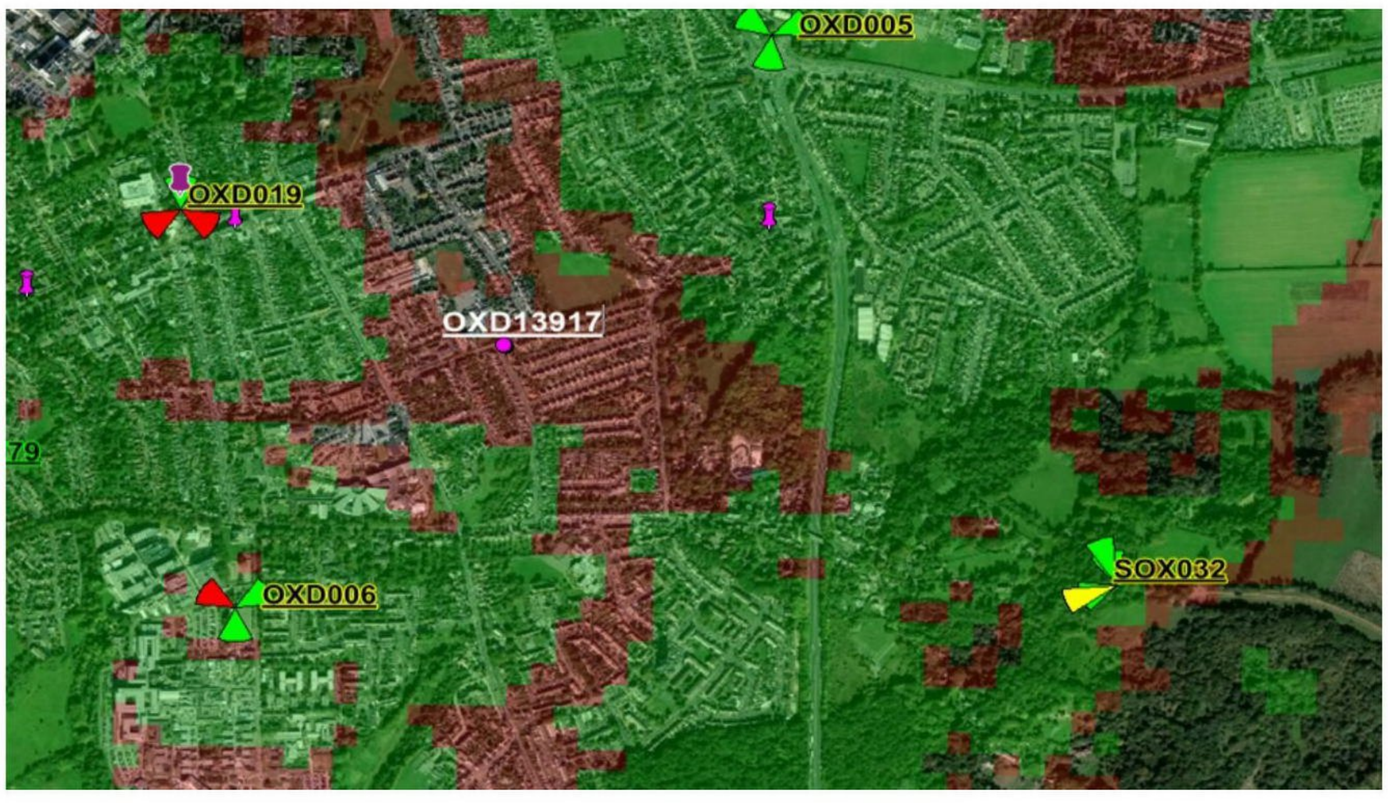
5. Site Selection Process

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)

Site Type	Site Name and address	National Grid Reference	Reason for not choosing site
SF	Old Road, New Headington, Oxford, OX3 8SX	454943E, 206367 N	It would be possible to site an installation here as the pavement is wide enough, however, is located too far south from the Nominal cell and would not provide the required coverage for the targeted area.
SF	Larkfields, Oxford, OX3 8NU	455285E 206577N	There is adequate space for a structure here but it would be located on a grass verge ins a residential street with no natural shielding and was discounted as an option.
SF	York Rd, Oxford, OX3 7DW	455054E, 206529N	Adjacent Rock Edge Local Nature Reserve and with limited screening in an otherwise residential area, discounted in favour of the proposed site.
SF	Eastern By Pass Rd, Oxford, OX3 8RN	455626E, 206376N	There is an existing 3 site to the north near the roundabout by the A40 and a site further south in this location was put forward. The Radio planner advises that a site in this location would not provide the required level of coverage.

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

The map below shows a basic coverage map confirming the area where coverage does not meet service requirements. This particular coverage requirement is based on the annotation ‘OXD13917. There is limited scope to move far from the nominated position.



The ‘cell centre’ is directly outside of Windmill Primary School (annotated by the purple peg), to the south-west of the application site, a mainly residential street with little space for the proposed equipment. As with all 5G infill development this is an extremely constrained cell search area. Moving too far from the optimum cell centre will then potentially interfere with adjoining cells. Options are extremely limited and the most viable solution that minimises amenity issues has been put forward.

Additional relevant information (planning policy and material considerations):

VISUAL IMPACT AND APPEARANCE

Visual impact has been minimised as far as practicable. New 5G coverage, and enhanced 4G coverage, to the area can be achieved with only minimal harm to the surrounding area.

The area is mainly residential with few commercial properties and the site has been carefully sited to ensure the minimal impact possible on residential amenity and with only limited harm to the area. Although the monopole would be taller than the streetscene installations, it will ensure impact on visual surroundings is kept to a minimal level. The site is set within HE.7 - Headington Quarry Conservation Area. Given the coverage requirement area, it is not possible to find a location outside the conservation area.

The minimal footprint of the site and the location adjacent a busy junction, would help to keep impact to an acceptable level with the trees in the area, along with the existing street furniture, would act as either a screen or a backdrop depending on viewpoint. The pole has a slim and unfussy design, would have a black finish and would assimilate into its surroundings. The ancillary equipment cabinets are also proposed to be black in colour.

It is considered that the proposal utilises the most suitable design available to meet coverage demands and to provide suitable coverage to the area. It is important to keep the impact of telecommunications development in the area to a minimum and it is considered this proposal achieves this. The benefits of the proposal also have to be considered. New 5G, and enhanced 4G coverage would be provided to the surrounding area for H3G from the development and it is considered the significant public benefits of the proposal outweigh the minimal impact on visual and residential amenity.

PLANNING POLICY

National Planning Policy Guidance

National Planning Policy Framework (2019) (NPPF)

The new National Planning Policy Framework came into force in July 2018 replacing the guidance published in March 2012. The guidance has subsequently been updated in February 2019. The NPPF sets out the Government’s planning policies for England and how these should be applied.

Paragraph 7 of the NPPF states “*The purpose of the planning system is to contribute to the achievement of sustainable development*”, and in paragraph 10 that “*at the heart of the Framework is a presumption in favour of sustainable development*”. In order to achieve the sustainable development objective, the NPPF has identified 3 overarching objectives (paragraph 8):

"*a)* ***an economic objective*** *– to help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the right places and at the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure;*

b) ***a social objective*** *– to support strong, vibrant and healthy communities, by ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations; and by fostering a well-designed and safe built environment, with accessible services and open spaces that reflect current and future needs and support communities' health, social and cultural well-being; and*

c) ***an environmental objective*** *– to contribute to protecting and enhancing our natural, built and historic environment; including making effective use of land, helping to improve biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy.*"

For **decision-taking** (paragraph 11) this means:

"*c) approving development proposals that accord with an up-to-date development plan without delay; or*

d) 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:
i. the application of policies in this Framework that protect areas or assets of particular importance provides a clear reason for refusing the development proposed; or
ii. 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."

Further to this, paragraph 38 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 brownfield registers and permission in principle, and work proactively with applicants to secure developments that will improve the economic, social and environmental conditions of the area.*"

The proposed development will enable the provision of enhanced mobile communications services to the surrounding area from a single monopole, providing improved services for 4G and 5G technologies, bringing about substantial public benefit both socially as well as the allowing for certain businesses to expand, adapt and thrive as well as access new markets. Reliable wireless technology also allows for home working, particularly important in the current climate, and the creation of the 'virtual office', thus reducing the need to travel and contributing to the sustainability agenda.

Government advice in recent years has been to promote and encourage communications services. Within his presentation to Parliament in July 2015 of the Government report "Fixing the Foundations: Creating a more prosperous nation" the Chancellor of the Exchequer reiterated the importance of a high-speed digital communication infrastructure. *"7.1 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.*

By reducing regulatory 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 in March, of near-universal 4G and ultrafast broadband coverage."

The NPPF (2019) directly addresses the need for enhanced wireless communication services, first mentioned in paragraph 20, which states that an LPA's strategic policies must make sufficient provision for:

"*b) infrastructure for transport, **telecommunications** (our emphasis), security, waste management, water supply, wastewater, flood risk and coastal change management, and the provision of minerals and energy (including heat)"*

Leading on from this, paragraph 112 states that "*Advanced, high quality and reliable communications infrastructure is essential for economic growth and social well-being. Planning policies and decisions should support the expansion of electronic communications networks, including next generation mobile technology (such as 5G) and full fibre broadband connections*".

It should be noted that paragraph 116 states that "*Local planning authorities must determine applications on planning grounds only. They should not seek to prevent competition between different operators, question the need for an electronic communications system, or set health safeguards different from the International Commission guidelines for public exposure*".

The proposal outlined within this document and the supporting enclosures, is in complete accordance with the guidance as set out in the National Planning Policy Framework.

Development Plan Policy

Section 70 of the Town and Country Planning Act 1990 as amended requires planning applications and appeals to be determined having regard to the provisions of the Development Plan and other material considerations, and section 38 of the Planning and Compulsory Purchase Act 2004 requires applications and appeals to be determined in accordance with the Development Plan unless material considerations indicate otherwise.

For the purposes of Section 70, the current adopted Oxford Local Plan 2036 does not have a telecommunication policy, therefore the proposed development is compliant with the relevant policies from the NPPF and CoBP, as outlined within this supporting statement.

The Council has the following statement under the Policy V8 - Utilities:"*Digital Infrastructure comprises physical telecommunications components such as fixed broadband and mobile connectivity, which improves the lives of citizens and business productivity. The NPPF, Future Telecoms Infrastructure Review (FTIR), and other policy documents issued by Building Digital UK (BDUK), all refer to the importance of high-quality digital infrastructure to the UK economy.*

Delivery of full fibre broadband infrastructure, as well as mobile infrastructure including 5G, is a priority to achieve the government's targets set out in the FTIR. The council recognises the

importance of this and has implemented a range of complementary initiatives aimed at achieving government targets for full fibre and 5G coverage."

The site has been sited and designed to minimize its impact within the local streetscene, the support pole and cabinets are proposed to be colored grey to minimize impact – the mast will weather and blend into the background..

There are no existing structures capable of accommodating the new required equipment.

The proposed development is compliant with the relevant policies from the NPPF and Development Plan, as outlined within this supporting statement.

Overall, it is considered the proposal complies with both national and local policy. In terms of national policy, the proposal is sympathetically designed, it minimises the number of installations and has a high quality of design. It would significantly enhance the provision of local community facilities and services and would protect amenity.

Summary

National planning policy is to facilitate the growth of new and existing telecommunications systems, and operators have obligations to meet customer demands for improved quality of service. This development proposes improved coverage to the surrounding area for H3G.

A simple design solution is proposed to mitigate visual impact and prevent harm to the local environment. The minimal impact of the development would be outweighed by the significant public benefits of the provision of enhanced coverage to the area.

The proposed development is compliant with the relevant policies from the NPPF and Development Plan, as outlined within this supporting statement.

The proposal is fully compliant with ICNIRP guidelines and declaration of compliance has been provided.

Confirmation that submitted drawings have been checked for accuracy

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Signed:	[redacted]	Date:	19th February 2021
Position:	Director	Company: (for and on behalf H3G UK Ltd)	Sinclair Dalby Ltd