1. Site Details

Site Name:	SW OUTSIDE THE DOLPHIN P.H.	SITE ADDRESS:	AVONMOUTH ROAD, SUNDERLAND, TYNE AND
National Grid	436633E, 553489N		WEAR, SR3 3HY
Reference:			
Site Ref	11492922	Site Type:1	MACRO
Number:			

2. Pre Application Check List

Site Selection (for New Sites only)

(Would not generally apply to upgrades/alterations to existing site including redevelopment or replacement of an existing site to facilitate an upgrade or sharing with another operator)

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:		
No register exists. This Application also relates to a si the Principle of locating a telecommunications m accepted.	ite upgrade / alterat hast in this location H	tion and therefore has already been
Were industry site databases checked for	Yes	No
If no explain why: N/A		

Site Specific Pre-application consultation with local planning authority

Was there pre-application contact:	No
Date of pre-application contact:	N/A
Name of contact:	N/A

¹ Macro or Micro

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Summary of outcome/Main issues raised:

A pre-application submission pack containing a description of the proposal, drawings and a consultation plan was sent to the Local Planning Authority on 12th August 2021 for comment. No response was received.

Community Consultation

Rating of Site under Traffic Light Model:	Red	Amber	Green
Outline of consultation carried out:			

A written description of the proposal and drawings was sent to the Chad's Ward Councillors - William Blackett, Dominic McDonough & Chris Burnicle on 12th August 2021.

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

No comments or responses were received.

School/College

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

Farringdon Community Academy within 300m.

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

A written description of the proposal and drawings was sent to the Headteacher and Chair of Governors on 12th August 2021.

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

No comments or responses were received.

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

Yes	No
Yes	No
	Yes

Developer's Notice

Copy of Developer's Notice enclosed?		Yes	No
Date served:		N/A	

3. Proposed Development

The proposed site:

The site is located on the southern side of Avonmouth Road at the junction with Ashdown Road – a road within a mainly residential area. The monopole is located close to The Dolphin Pub, with the cabinets tucked under the high green fence.

The surrounding area is predominantly residential with the mast located within the area it is designed to serve in a location where it is not directly adjacent any houses.

There is an existing Telefonica mast and associated cabinets in this location. This Application seeks to remove the existing 15m Telefonica monopole and 1 no. equipment cabinet to allow for upgraded equipment which will provide 5G coverage to the area.

This proposal is made as part of a continued network improvement program and technical requirement to provide new 5G coverage to the Sunderland area. A sequential approach has been taken to ensure that existing masts and equipment are used where possible. Following technical assessment however, the existing streetworks installation cannot accommodate the operators latest technical requirements. As such a new higher and stronger streetworks installation is required for this upgrade to the Telefonica network.

The upgraded mast is proposed at a height of 20m and has been designed in a streetworks design. It will support 6 no. antennas, 2 no. 0.3m dishes and ancillary equipment which will deliver 5G signal to the surrounding area. An existing cabinet is to be replaced with an upgraded version which will support the new 5G mast. The location of the equipment will be broadly similar to that which already exists although the proposed mast will be located slightly further west to allow for continued coverage when building the new mast and switching from the old installation to the new.

Please see section below for the proposed dimensions, materials and colours.

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

N/A – existing mast location.

Type of Structure (e.g. tower, mast, etc):

Description:

The proposal includes the removal of the existing 15m monopole and its replacement with a 20m monopole supporting 6No. antennas, 2No. transmission dishes. The removal and replacement of 1No. equipment cabinet and the development and installation of ancillary equipment.

Overall Height:			20 Metres
Height of existing building (where applicable):			N/A Metres
Equipment Housing: York Cabinet			
Length:			1.90 Metres
Width:			0.66 Metres
Height:			1.75 Metres
Tower/mast etc – type of material and	Monopole - metal – f	finished grey	
external colour:			
Equipment housing – type of material	Cabinet - metal – fini	ished green	
and external colour:			

Reasons for choice of design, making reference to pre-application responses:

The proposed development has two main elements, the monopole which supports the antennas and the microwave dishes, and the ancillary equipment (including equipment cabinets). All are required to successfully deliver mobile phone signal to a locality.

The design and type of equipment to be deployed in this case has been chosen specifically to take account of and minimise the impact of the installation on the locality.

With regards to form and scale, a relatively slimline streetworks installation with stacked antennas has been chosen over a wider, standard mast with an open headed bracket and level antennas. In all aspects of the design the smallest practical components have been utilised to ensure that the visual impact of the development is kept to a minimum and to streamline the design as much as possible.

It is acknowledged that the proposed mast is of a slightly larger form and scale than the existing. This is as a result of 5G equipment being heavier than previous telecoms equipment and requiring a stronger, wider, installation to accommodate it.

A higher mast has also been proposed to provide improved coverage to the locality. In addition, 5G signal is particularly susceptible to clipping and is more prone to be obstructed by trees or taller structures. Therefore, the height of the mast has been increased to take account of this susceptibility and to ensure that the 5G antennas oversail any intervening clutter to fully service the target area and provide the required 5G coverage.

Whilst it would be preferable to upgrade the existing mast or replace the mast on a like for like basis, these technical requirements mean that this change to the form and scale of the mast is required to successfully deliver 5G coverage to the area. It is acknowledged that the proposed design would result in a visual change to the streetscene, however it is not considered that this change would result in any significant harm or adverse impact. The mast is otherwise similar to the one it replaces and the changes made will have only a minor impact on the area with regard to visual amenity. When weighed against the benefits of providing 5G signal to the locality, the proposed design should be considered favourably in the planning balance.

The proposed design has therefore sought to strike an appropriate balance between operational, environmental and planning considerations.

International Commission on Non-Ionizing Radiation Protection Declaration attached (see below)	Yes	No
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 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's network, the radio base station that is the subject of this application will be configured to operate in this way.		
All operators of radio transmitters are under a legal obligation to operate those transmitters in accordance with the conditions of their licence. Operation of the transmitter in accordance with the conditions of the licence fulfils the legal obligations in respect of interference to other radio systems, other electrical equipment, instrumentation or air traffic systems. The conditions of the licence are mandated by Ofcom, an agency of national government, who are responsible for the regulation of the civilian radio spectrum. The remit of Ofcom also includes investigation and remedy of any reported significant interference.		
The telecommunications infrastructure the subject of this application accords with all		

relevant legislation and as such will not cause	
significant and irremediable interference with	
other electrical equipment, air traffic services or	
instrumentation operated in the national	
interest.	

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

An upgraded base station is required in this location to provide improved network coverage using the latest technology for Telefonica. The new installation will introduce 5G coverage to the area.

The very high level of mobile phone use and ownership within the UK population is a very clear indication of the public's overwhelming acceptance of the benefits of mobile communications, which requires the installation and maintenance of base stations to provide the necessary connection between the mobile phones and the UK telecommunications network.

Base stations use radio signals to connect mobile devices and phones to the network, enabling people to send and receive calls, texts, emails, pictures, web, TV and downloads. Without base stations, mobiles will not work. They are made up of three main elements. The cabinets which contain the equipment used to generate the radio signal. The supporting structure such as a mast, which holds the antennas in the air and the antennas themselves. Only the antennas emit radio signals.

Many other everyday items also use radio signals to send and receive information, such as television and radio broadcasting equipment and two-way radio communications. Base stations are connected to each other and telephone exchanges by cables or wireless technology such as microwave dishes, to create a network. The area each base station covers is called a cell. Each cell overlaps with its neighbouring cells to create a continuous network. The size and shape of each cell is determined by the features of the surrounding area, such as buildings, trees and hills, which can block signals. When people travel between cells, the signal is transferred between base stations without a break in service. Each base station covers a certain area only and can only handle a limited number of calls at once. As mobile phones and devices become more popular more base stations are needed to ensure continuous coverage.

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 local planning authority in understanding any technical constraints on the location of the proposed development.

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

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

This application seeks to upgrade an existing site which has been positioned to ensure the most effective delivery of mobile phone signal to the locality. As such, no alternative site options have been investigated.

Environmental Information:

No relevant environmental considerations.

Land use planning designations:

No relevant land use planning designations.

Additional relevant information (include planning policy and material considerations):

Relevant Planning Policy:

National Planning Policy Framework (2019) (NPPF)

The NPPF sets out the Government's planning policies for England and how these should be applied. The following paragraphs are considered most relevant to the assessment of this Application:

Paragraph 7 of the NPPF states "The purpose of the planning system is to contribute to the achievement of sustainable development". **Paragraph 10** also states 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), economic, social and environmental.

For decision-taking (**paragraph 11**) requires Councils to approve development proposals that accord with up to date development plans without delay; or where

there are no relevant development plan policies, or policies which are most important for determining the application are out-of-date, granting planning permission (unless there are justified and clear reasons for refusing the proposed development, or there would be any adverse impacts of doing so that would significantly outweigh the benefits when assessed against the Policies contained within the NPPF when taken as a whole). Further to this, **paragraph 38** states that Local planning authorities should approach decisions in a positive and creative way and should work proactively with applicants to secure developments that will improve the economic, social and environmental conditions of the area.

The NPPF directly addresses the need for enhanced wireless communication services, at **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)"

Chapter 10 [Para's 112-116] (Supporting High Quality Communications). Is most relevant to the assessment of this Application.

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".

While supported, the number of base stations is encouraged to be kept to a minimum in which the efficient operation of the network can be provided. **Paragraph 113 states** that "The number of radio and electronic communications masts, and the sites for such installations, should be kept to a minimum consistent with the needs of consumers, the efficient operation of the network and providing reasonable capacity for future expansion. Use of existing masts, buildings and other structures for new electronic communications capability (including wireless) should be encouraged".

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".

Sunderland City Council Core Strategy and Development Plan (January 2020)

Policy BH6 Quality communications

1. Development should include high quality digital infrastructure, providing access to services from a range of providers.

2. Development for the installation of new telecommunications infrastructure must demonstrate that: i. there would be no significant adverse effect on the external appearance of the building or on the space in which they are to be located; ii. there would be no significant adverse impact on the special character and appearance of heritage assets

iii. the applicant has explored the possibility of sharing facilities, such as masts, cabinet boxes, satellite dishes and antennae on existing buildings or other structures;

iv. opportunities to miniaturise and camouflage any telecommunications apparatus have been explored;

v. they are appropriately designed, coloured and landscaped to take account of their setting; and vi. there would be no significant adverse impact on the visual amenities of neighbouring occupiers.

Planning Assessment

Principle of Development

As set out above, **paragraph 112** of the NPPF 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".

The development seeks to replace an existing streetworks phone mast with an upgraded installation to provide 5G coverage to the area. The principle of siting a mobile phone mast in this location has therefore already been established and should be considered acceptable by Officers in planning policy terms.

Notwithstanding this, in supporting the requirement for a new upgraded 5G mast, Matt Warman MP (Minster for Digital Infrastructure) and the Rt Hon Christopher Pincher MP (Minster for housing state) state within the 'Changes to permitted development rights for electronic communications infrastructure: technical consultation' published in April 2021, that:

"Digital connectivity is – now, more than ever – vital to enable people to stay connected and businesses to grow. The demand for mobile data in the United Kingdom is increasing rapidly, and the COVID-19 pandemic has highlighted how important it is that we all have access to reliable, high quality mobile connectivity. We intend to be a global leader in 5G, the next generation of wireless connectivity, and for communities and businesses to benefit from investments in this new technology. The case for 5G is compelling: it will provide faster, more responsive and more reliable connections than ever before. Through our £200 million 5G Testbeds and Trials programme we are already seeing its value to manufacturing, farming, transport networks and healthcare......It is welcome that all four Mobile Network Operators

have started to deploy 5G networks, meaning 5G is now available in over 200 towns and cities across the United Kingdom......We must, however, continue to ensure people have access to fast, reliable digital connectivity and mobile coverage. The planning system plays a key role in delivering the infrastructure that we need as households and businesses become increasingly reliant on mobile connectivity"

As part of their continued network improvement program, Cornerstone and Telefonica have identified a specific technical requirement to provide new 5G coverage in this area of Sunderland. In accordance with the Code of Best Practice (2016), an existing site has been identified on Avonmouth Road that would be suitable for upgrade to accommodate Telefonica's latest requirements. To accommodate the 5G equipment, a new streetworks style base station is required to replace the existing mast and is the subject of this Application.

Para 115 of Chapter 10 of the NPPF states that Applications for electronic communications development should be supported by the necessary evidence to justify the proposed development. This should include:

a) the outcome of consultations with organisations with an interest in the proposed development, in particular with the relevant body where a mast is to be installed near a school or college, or within a statutory safeguarding zone surrounding an aerodrome, technical site or military explosives storage area;

and b) for an addition to an existing mast or base station, a statement that self-certifies that the cumulative exposure, when operational, will not exceed International Commission guidelines on non-ionising radiation protection;

or c) for a new mast or base station, evidence that the applicant has explored the possibility of erecting antennas on an existing building, mast or other structure and a statement that self-certifies that, when operational, International Commission guidelines will be met.

With respect to these criteria, a summary of consultees has been provided within this document in which no responses or comments have been received. A technical assessment has been undertaken by Telefonica which has established that the existing mast cannot accommodate the upgraded 5G equipment and that a new mast is required. An ICNIRP certificate also accompanies this application and certifies that the International Commission guidelines will be met.

The proposal will enable the provision of continued mobile coverage in addition to new reliable 5G mobile communications services to the surrounding area. This will bring about substantial public benefit, socially as well as economically, by allowing for certain businesses to expand, adapt and thrive as well as giving access to new markets in accordance with **Para 112** of the NPPF.

Reliable wireless technology also allows for home working, and the creation of the 'virtual office' which has becoming of increasing importance over the last year and also allows for a reduction in the need to travel which contributes to the sustainability agenda of the NPPF (2019).

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For these reasons, it is considered that the principle of replacing the existing Telefonica Streetworks mast with a new streetworks installation capable of providing 5G coverage should be acceptable in accordance with Local Planning Policy, National Planning Policy and recent government guidance.

Conformity with Policy BH6 of the Sunderland City Council Core Strategy and Development Plan (2020).

Policy BH6 (Quality Communications) subsection 2 applies to the installation of new telecommunications infrastructure. Whilst this application seeks to upgrade an existing site with a replacement mast, it is considered that the criteria contained within this Policy remain somewhat relevant to the assessment of this Application and as such, have been addressed below.

In accordance with Policy BH6, the replacement mast would not have a significant adverse effect on the open space which it is to be located in.

The existing site is located close to the local pub within a residential area, located in such a way that it is at some distance from the nearest residences and separate from them with an element of screening provided by the high green fences.

The design and type of equipment to be deployed in this case has been chosen specifically to take account of and minimise the impact of the installation on the streetscene. Care has been taken to ensure that the proposed replacement mast would integrate into the surrounding environment and would be read in a similar way to the existing.

With regards to form and scale, a relatively slimline streetworks installation with stacked antennas has been chosen however, it is acknowledged that the proposed mast is of a slightly larger form and scale than the existing. This is as a result of 5G equipment being heavier than previous telecoms equipment and requiring a stronger and wider installation to accommodate it.

A higher mast has also been proposed to provide improved coverage to the locality. In addition, 5G signal is particularly susceptible to clipping and is more prone to be obstructed by trees or taller structures. Therefore, the height of the mast has been increased to take account of this susceptibility and to ensure that the 5G antennas oversail any intervening clutter to fully service the target area and provide the required 5G coverage.

Whilst it would be preferable to upgrade the existing mast or replace the mast on a like for like basis, these technical requirements mean that this change to the form and scale of the mast is required to successfully deliver 5G coverage to the area. The proposed design would result in a visual change to the streetscene, however it is not considered that this change would result in significant harm or be detrimental to visual amenity or townscape character. The mast is otherwise similar to the one it replaces and the changes made will have only a minor impact on the area with regard to

visual amenity. When weighed against the benefits of providing 5G signal to the locality, the proposed design should be considered favourably in the planning balance.

As required by Policy BH6, the proposed development is made in accordance with the Telecoms Code of Best Practice (2016) which requires the possibility of mast sharing to be explored. The existing Telefonica site has been technically assessed and found to be the most suitable to meet local need and to allow upgraded 5G coverage to the area. The sequential approach set out in the Code of Best Practice has been followed as set out below:

- **Mast or site sharing** Not possible in this instance as the existing structure is not capable of accommodating the required equipment.
- Installation on existing buildings and structures Not possible in this instance as no suitable structures available in the search area.
- **Camouflaging or disguising equipment** The proposed mast has been designed to minimise its impact on the street scene. The pole will be grey and the cabinet will be painted green in conformity with existing street furniture.
- Using small scale equipment –The installation has been designed as low as possible in order to respect the residential nature of the area but tall enough to provide coverage to the target area.
- Erecting new ground based masts a replacement ground based structure is here proposed.

Associated equipment has also been kept to a minimum with one cabinet being removed and replaced.

In addressing criteria iv of Policy BH6, which requires opportunities to miniaturise and camouflage to be explored, the proposed mast and associated equipment has been proposed at the lowest height and smallest dimensions possible whilst still allowing the apparatus to deliver technically. The mast has been designed to be a relatively slimline streetworks installation with stacked antennas being chosen over a wider, standard mast with an open headed bracket and level antennas.

In all aspects of the design the smallest practical components have been utilised to ensure that the visual impact of the development is kept to a minimum and to streamline the design as much as possible. The mast is located close to the high green fence which is providing a good level of screening for the installation. It is considered that a camouflaged mast would not be appropriate in this location, it is also not technically conducive to delivering effective 5G coverage to the area.

Criteria v requires that telecommunications equipment is appropriately designed, coloured and landscaped to take account of its setting. A mast and cabinets have been proposed which are typically found within the urban streetscene environment, they are proposed in the existing colours (grey and green) which is in keeping with the existing mast and the surrounding area.

Finally in accordance with criteria vi, adequate separation distance has been retained between the replacement mast and residential properties, with no residential properties in close proximity to the site. As such, it is considered that there would be no significant adverse impact on the visual amenities of neighbouring occupiers.

The proposed design has therefore sought to strike an appropriate balance between operational, environmental and planning considerations and is considered to accord with Policy BH6 of the Core Strategy and Development Plan (2020).

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 upgraded 5G coverage to the surrounding area for Telefónica by way of a replacement telecommunications mast.

There is a clear and demonstrable need for the proposal to provide improved electronic communications services. Due consideration has been given to all practicable solutions for providing the required telecommunications service and this proposal has been designed in such a way as to minimise its visual impact upon both local area, with any negative impact outweighed by the benefits of these new electronic communications services.

The proposal represents an appropriate siting and design solution for this area, balancing environmental and planning considerations. 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 new super-fast coverage to the area.

The proposed development is compliant with the relevant policies from the NPPF and CoBP as well as Policy BH6 of the Core Strategy and Development Plan (2020). The proposal is fully compliant with ICNIRP guidelines and declaration of compliance has been provided. As such, we respectfully ask that this Application is approved.

As such, we respectfully ask that this Application is approved.

<u>Practical Applications of 5G Connectivity as Example of Material Soci-Economic</u> <u>Benefit: -</u>

Education:

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

5G's ability to deliver real-time information (low latency), ultra-fast speeds (critical for high definition images and video), increased capacity and heightened security will

also allow learning on the job, thanks to technologies such as Augmented Reality (AR) goggles, which can give engineers real-time instructions on how to fix a machine on a production line, for example.

<u>Health:</u>

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

5G will prove critical in providing the infrastructure required to deliver remote health services over the next decade. By design, 5G's ability to deliver real-time information (low latency), ultra-fast speeds (critical for high definition images and video), increased capacity and heightened security are going to be fundamental in scaling the patient benefits of remote healthcare and keeping medical records secure and private. For instance, trials have shown that connecting ambulance crews to expert resources using 5G allows paramedics to work with doctors and conduct specialist procedures in real time whilst on the road.

Confirmation that submitted drawings have been checked for accuracy

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Signed:	~de	Date:	14 th September 2021
Position:	Associate Director	Company:	Sinclair Dalby Limited
			(on behalf of Cornerstone and the above operator)