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Our ref: **CTIL_30292301_TEF_88918**

Cllr Zahra Alijah
Members' Services Office
Manchester City Council PO Box 532
Town Hall Extension
Manchester
M60 2LA
Email: cllr.z.alijah@manchester.gov.uk

VIA EMAIL

16th April 2020

Dear Cllr Alijah

PROPOSED RADIO BASE STATION INSTALLATION AT CTIL_30292301_TEF_88918, SW OUTSIDE ARMITAGE CENTRE, MOSELEY ROAD, MOSELEY, FALLOWFIELD, GREATER MANCHESTER, M14 6PB, N.G.R. E: 386063 N: 393938

Cornerstone Telecommunications Infrastructure Ltd (Cornerstone) is a joint venture company owned by Vodafone Limited and Telefónica UK Limited, commonly known as O2, who manage a single grid network across the UK for these companies. This agreement allows both organisations to pool their basic network infrastructure, while running two, independent, nationwide networks. It maximises opportunities to consolidate the number of base stations and where possible can significantly reduce the environmental impact of network development.

5G rollout has begun and both Vodafone and Telefónica are in the process of upgrading their existing radio base stations in their single grid network wherever possible. As part of this continued network improvement program, there is a specific technical requirement to provide new 5G coverage in this area of Manchester, Greater Manchester. An existing streetworks style base station has been identified in the area, however it can not accommodate for both operators latest requirements. In order to fit in to the operator's single grid network, an additional new streetworks style base station is required for Telefónica service in close proximity of the existing streetworks style base station that will be retained and in due course upgraded with improved Vodafone service.

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

This proposed new site will enable 5G coverage to be provided to this area of Moseley, Fallowfield. The Government recognises that widespread coverage of mobile connectivity is essential for people and businesses. That is why the Government is committed to extending mobile geographical coverage further across the UK, with continuous mobile connectivity provided to all major roads and to being a world leader in 5G. This will allow everyone in the country to benefit from the economic advantages of widespread mobile coverage.

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As well as improved mobile signal, 5G networks are also crucial to drive productivity and growth across the sectors that local areas are focusing on through their emerging Local Industrial Strategies. Enabling and planning for 5G implementation is central to achieving the Government's objective to deliver prosperity at the local level and enable all places to share in the proceeds of growth.

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

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

Please find below the details of the proposed site.

Our technical network requirement is as follows:

CTIL_30292301_TEF_88918, SW OUTSIDE ARMITAGE CENTRE

The site is needed to maintain and improve 2G, 3G, 4G coverage and capacity for Telefónica to ensure that its customers continue to experience access to the latest service provision currently available and have access to a new 5G network. This is because the operator needs to find a replacement for the site it is currently providing 2G, 3G and 4G services from Moseley Road, Fallowfield which cannot be upgraded for Telefonica's technology requirements for technical reasons highlighted above and more fully explained in the discount section below. The new proposed installation will also meet the extra demands on the network in this area as new technologies improve increasing the demand for 4G and new 5G technologies.

A number of options have been assessed in respect of the site search process and we consider the best solution is as follows:

MOSELEY ROAD, MOSELEY, FALLOWFIELD, GREATER MANCHESTER, M14 6PB, N.G.R. E: 386063 N: 393938

The proposed works comprise Installation of a 20m slim-line column supporting 6 no. antennas, 2 no. transmission dishes, 2 no. equipment cabinets and ancillary development thereto including a GPS module, and 3 no. Remote Radio Units (RRUs).

The operator is limited in siting options as there is a requirement to provide equivalent replacement coverage and capacity for this area of Moseley, Fallowfield. The replacement of an existing site means that the operator has to be located as close as possible to the existing installation in order to maintain the provision of equivalent coverage and capacity to the

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surrounding local area. This is the nearest suitable location that the operator is able to position their replacement apparatus.

The proposed height at 20m is essential in order to provide equivalent replacement coverage to the target coverage area. 5G new radio technologies operate in higher frequency bands than older technologies. Since it operates at higher frequencies where attenuation of the radio signal is naturally higher and the effects of clutter are greater it will normally require a higher structure to achieve the same coverage footprint.

In order to minimise the width of the proposed column, the antennas are split in to a dual stack formation where 3 antennas will be located at the top of the column and the other 3 antennas will be located underneath. Thus, if the column were to be any lower, the antennas would not be able to operate effectively nor reach the target coverage area.

The column is a simple, functional, vertical structure necessary to provide replacement and new service provision to Moseley, Fallowfield and the surrounding area. There are other vertical structures in the streetscene which will help it assimilate in to the local environ. The column is proposed to be finished in a grey colour but can be coloured any other colour that the LPA consider appropriate.

The cabinets are designed to appear like other statutory undertakers equipment cabinets. They are small for telecommunications apparatus and are proposed to be coloured green to assimilate with other equipment cabinets commonly found in urban environments. The cabinets can be installed under the operators permitted development rights, but have been included on the plans and in the description in order to remain fully transparent.

The RRUs are designed to make the antennas more efficient and reduce the need for equipment cabinets at ground level, therefore minimising ground level clutter in this area. They are located underneath the lowest set of antennas, out of the natural eye line of the casual passer-by and therefore will not appear prominent in the streetscene.

We have considered alternative site options and discounted as follows:

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Site[3]	Site Name and address		NGR	Reason for not choosing[4]
ES - Existing Structure	Name	Existing VF Streetworks Site (Ref: 44482)		T - Technical Difficulties
	Line 1	Moseley Road	Eastings	The operator has fully investigated upgrading this site to provide the latest technologies for 4G services as well as new 5G coverage / capacity in to the Telefonica network. However, the slim line street furniture base stations that have been inserted into the local street scene are not capable of accommodating all of the differing equipment that is required to meet the site specific demand of both operators and customers for this area from a single street furniture pole, being mindful of the spectrum variations. To this end, many existing shared street-work installations are being removed from the 'single grid', meaning the existing pole will become operator unilateral for 5G provision. This creates the necessity for an additional new street furniture base station in the cell to accommodate the technological requirements of the other unilateral operator – either Vodafone or Telefonica (O2). To continue to share an existing structure at this location would require significant redevelopment of the existing structure to a much more structurally robust mast capable of hosting all the differing antennas and equipment from both operators to address their spectrum variations. This would move away from the relatively uniform and slimline street furniture poles proposed and therefore it is felt that a secondary, more slimline, street-pole is a more appropriate and sensitive solution to 5G service provision whilst minimising impact for a street furniture setting. This existing telecommunications site has been discounted for Telefonica's new technology requirements for this reason. A new replacement site for Telefonica is therefore needed to provide this operator with the latest 2G, 3G 4G and 5G technologies. The existing site will remain in place
	Line 2	Fallowfield	386194	
	Town	Manchester	Northings	
	County	Greater Manchester	393941	
	Postcode	M14 6PB		
GF - Greenfield	Name	SWs Birchfields Road Roundabout		O - Other
	Line 1	Birchfields Road	Eastings	This is outside of the search area; There will also be difficulties with Higways concerns as the footpath is limited whilst also being close to a roundabout. There is a pedetsrian crossing and also entrance/exit from a car garage so cabinets in this location may cause splay issues
	Line 2	Fallowfield	386433	
	Town	Manchester	Northings	
	County	Greater Manchester	393960	
	Postcode	M14 6PE		
GF - Greenfield	Name	SWs Jct with Balmoral Rd &		P - Planning
	Line 1	Moseley Road	Eastings	The footway at this location is too narrow to accommodate the operator's equipment. In addition, an installation at this location is considered to be surrounded by residential properties and other alternatives exist (including the proposed site) which are more appropriate in order to deliver the required coverage to the target area. A site in this location has therefore been discounted for these reasons.
	Line 2	Fallowfield	385999	
	Town	Manchester	Northings	
	County	Greater Manchester	393918	
	Postcode	M14 6WG		
GF - Greenfield	Name	GF at Kwik Fit		T - Technical Difficulties
	Line 1	Belvedere Road	Eastings	An installation at this location is located too far to the East to deliver the required level of coverage to the target area. This site has therefore been discounted for this reason.
	Line 2	Fallowfield	386441	
	Town	Manchester	Northings	
	County		393871	
	Postcode	M14 6PD		
GF - Greenfield	Name	SWs on Lindleywood Road		P - Planning
	Line 1	Lindleywood Road	Eastings	The footway at this location is too narrow to accommodate the operator's equipment. In addition, an installation at this location is considered to be surrounded by residential properties and other alternatives exist (including the proposed site) which are more appropriate in order to deliver the required coverage to the target area. A site in this location has therefore been discounted for these reasons.
	Line 2	Fallowfield	386177	
	Town	Manchester	Northings	
	County	Greater Manchester	393730	
	Postcode	M14 6QL		

The Local Planning Authority mast register and our records of other potential sites have already been reviewed, the policies in the Development Plan have been taken into account and the planning history of the site has been examined.

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All Telefónica installations are designed to be fully compliant with the public exposure guidelines established by the International Commission on Non-Ionizing Radiation Protection (ICNIRP). These guidelines have the support of UK Government, the European Union and they also have the formal backing of the World Health Organisation. A certificate of ICNIRP compliance will be included within the planning submission.

In order to give you time to send your comments or request further information, we commit to allow at least 14 days before an application is submitted to the Local Planning Authority. This 14 day period starts from the date at the top of this letter.

We would also be grateful if you could please advise of any local stakeholders or groups that might like to make comments. For your information pre-consultation letters and a set of plans have been sent to the other local ward councillors for Fallowfield Ward and the local MP Afzal Khan.

We look forward to receiving any comments you may have on the proposal.

Yours sincerely

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(For and on behalf of Cornerstone and Telefónica UK Limited)