SUPPLEMENTARY INFORMATION FORM

1. Site Details

Site Name:	HILLINGDON ROAD STREETWORKS	Site Address:	HILLINGDON ROAD, HILLINGDON, UXBRIDGE, GREATER LONDON, UB8 2DF
National Grid Reference:	505550E, 183832N		
Site Ref Number:	HGN19769	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

Was there pre-application contact:	Yes
Date of pre-application contact:	29th October 2021
Name of contact:	Chief Planning Officer
Summary of outcome/Main issues raised: Pre-application correspondence was forwarded to Hillingdon Council by email on 29th October 2021. No response to date.	

[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 29th October 2021 to the Uxbridge South Ward - Councillors: Farhad Choubedar, Keith Burrows & Judith Cooper. Pre-application correspondence was also forwarded by email on 29th October 2021 to Boris Johnson MP.			
Summary of outcome/main issues raised (include copies of relevant correspondence): No responses have been received to date.			

School/College

Location of site in relation to school/college (include name of school/college): The Kingsborough - Coat of Many Colours Nursery
Outline of consultation carried out with school/college (include evidence of consultation): Pre-application correspondence was forwarded by email on 29th October 2021 to the Nursery Manager.
Summary of outcome/main issues raised (include copies of main correspondence): No response has been received to date.

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

Will the structure be within 3km of an aerodrome or airfield?	**Yes**	No
Has the Civil Aviation Authority/Secretary of State for Defence/Aerodrome Operator been notified?	**Yes**	No
The Uxbridge Business Park Helipad Manager has been notified of the proposal – no response to date.		

Developer's Notice

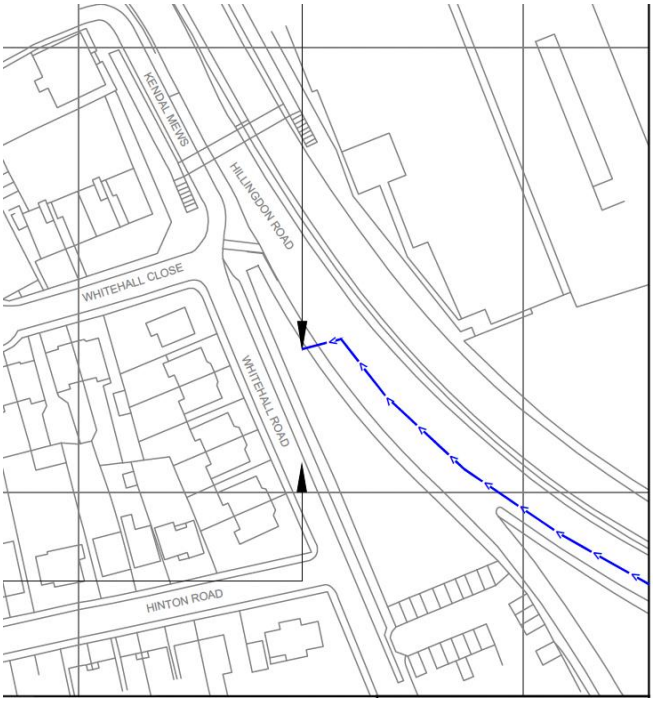
Copy of Developer's Notice enclosed?	**Yes**	No
Date served:	10th November 2021	

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 on the grass verge on the western side of Hillingdon Road, in between Hillingdon Road and Whitehall Road and would be placed so as to take advantage of the screening provided by the trees along the verge that will screen the site from the houses to the west of Whitehall Road. The proposed location is shown below:



The search area is on the boundaries of residential and commercial areas and the options for a site are limited – there are no buildings / existing rooftops in the area capable of accommodating an installation.

The proposed location has been selected due to the available space, the screening provided by the large tree to the rear and the existing street furniture in the form of street lamps and bus stop.

The development involves the installation of an 18 metre 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. 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 an 18 metre monopole supporting 6 no. antennas, 4 no. equipment cabinets and development works ancillary thereto.	
Overall Height:	18 metres
Height of existing building *(where applicable):*	N/A
Equipment Housing:	
Commscope AC Transmission Cabinet: Huawei APM6130 Cabinet: Commscope Bowler Cabinet: Wrap around 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 2.0m x 0.7m x 1.54m
Materials *(as applicable):*	
Tower/mast etc – type of material and external colour:	Steel with a grey finish.
Equipment housing – type of material and external colour:	Steel with a grey 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 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.

In all aspects of the design 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 for this road side location. 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 scene, will not be obtrusive features. The finish of the monopole and the cabinets is proposed to be grey to match the street lamps and to weather and blend into the background of the street scene.

Whilst the proposed colour scheme is considered appropriate for the site context, the applicant would be willing to adhere to any colour scheme deemed more appropriate by the local authority.

Due to technical restrictions, it is necessary for the mast to be located within the area it is deployed to serve and is of a height capable of providing comprehensive coverage. In terms of the height of the proposed structure, it is acknowledged it would be taller than the existing street furniture. This is necessary as the site is proposed to provide 5G services which uses higher frequencies that do not propagate through material and potential obstructions as well as lower frequencies, so the height is required to over-sail adjacent buildings and trees to ensure that the antennas can achieve the requested level of coverage for the target area.

The existing grey street lamps and other street furniture close to the site, and the tall trees in the wider area, will provide screening and/or backdrop to the proposed development, assisting in minimising visual impact to an acceptable level and ensuring impact on amenity is kept low. 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 minor 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, CK Hutchison Networks (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 CK Hutchison Networks (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 systems, other electrical equipment, instrumentation or air traffic systems. The conditions of the licence are mandated by Ofcom, an	**Yes**	No

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	Junction of Trumper Rd and Wellington Rd, Uxbridge, UB8 2AP	505387E, 183842N	This is the nominal location which is on the pavement outside Kwik Fit and opposite housing. This has been discounted due to the proximity to housing and lack of screening provided by the area.
RT	Hertz House, 11 Vine St, Uxbridge UB8 1QE	505586E, 183882N	A commercial building opposite the proposed location – the building is not tall enough to accommodate an installation capable of providing comprehensive coverage to the target area.
RT	Junction, Cowley Rd, Uxbridge, UB8 2XW.	505417E, 183855 N	An office building opposite the nominal – the building is not tall enough to accommodate an installation capable of providing comprehensive coverage to the target area.
RT	The Charter Building, Charter Place, Uxbridge, UB8 1AB	399833E, 278400N	The building is too far from the nominal and it would not be possible to provide coverage to te target area from this location – the roof is also covered with solar panels that limits the available space for an installation.
SF	Trumper Way, Uxbridge, UB8 2AS	505367E, 183912N	A possible SF installation on the grass verge to the southwest of Trumper Way. There is limited natural screening in this location and the site would be very visible from the houses along Hows Close and has been discounted in favour of the proposed option.
OLO	Mast to the rear of Junction, Cowley Rd, Uxbridge, UB8 2XW.	505437E, 183863N	This is a lightweight lattice structure not capable of supporting the heavier 5G equipment in addition to the current apparatus. A redeveloped mast would be a much sturdier structure with 2 headframes stacked on top of each other to ensure vertical separation between the two sets of antennas – discounted in favour of the current proposal which uitilises a slimline monopole design.
SF	Junction of Cricketfield Rd and Hillingdon Rd, Uxbridge, UB8 2NZ	505655E, 183754N	Too far from the target area and an installation in this location would not provide comprehensive coverage to the target area.

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

The map below shows the search area and adjacent sites (the green propellers) providing sufficient coverage to the areas shaded green. Unshaded areas are those lacking in coverage where there is no installation to provide the H3G service. This particular coverage requirement is based on the white pin in the centre of the map, demonstrating the nominal (optimum) location, with the yellow circle denoting the extent of the search area. As you can see, the search radius is very small because there is limited scope to move far from this nominal location.



The nominal is located on Trumper Way to the west of the proposed site. The nominal centre is very close to the housing on this junction and so has been discounted.

The general area is suitable for an installation of this nature given the number of buildings capable of accommodating an installation but, given the very precise nature of the search area, all had to be discounted due to their height or distance from the nominal.

As with all 5G infill development this is an extremely constrained cell search area with little scope to move far from the nominated location. Moving too far from the optimum cell centre could interfere with adjoining cells. Options are extremely limited and the most viable solution we can find that minimises amenity issues/is least overlooked by housing has been proposed in this application.

Additional relevant information (planning policy and material considerations):

RELEVANT PLANNING POLICY

The following documents are considered relevant to the assessment of this application:

- The Town and Country Planning (General Permitted Development) (England) (As Amended) - Schedule 2, Part 16
- National Planning Policy Framework (2021) – Chapter 10
- National Planning Policy Guidance
- Hillingdon Strategic Policies 2012
- Hillingdon Development Management Policies 2020

National Planning Policy Framework (2021)

This is a prior notification application. As such, the only issues that can be considered when assessing this application are the siting and appearance of the proposed telecommunications monopole and cabinet.

Notwithstanding this, it is useful to highlight the following paragraphs of the National Planning Policy Framework:

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 114-118] *(Supporting High Quality Communications)* is most relevant to this application.

Paragraph 114 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 115 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 118** 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"*.

Local Plan Policy

Whilst the Prior Approval process does not require development to comply with the development plan, it is a useful tool to assess and measure the acceptability of siting and appearance.

As above, the current adopted development plan for Hillingdon Council, relevant to the proposal, comprises the Hillingdon Development Management Policies 2020. Most relevant to the proposed development is policy 8DMHB21 which deals specifically with Telecommunications.

For ease of reference the policy is copied below:

Policy DMHB 21: Telecommunications

Telecommunication development will only be permitted where:
i) it is sited and designed to minimise their visual impact;
ii) it does not have a detrimental effect on the visual amenity, character or appearance of the building or the local area;
iii) it has been demonstrated that there is no possibility for use of alternative sites, mast sharing and the use of existing buildings;
v) there is no adverse impact on areas of ecological interest, areas of landscape importance, archaeological sites, Conservation Areas or buildings of architectural or historic interest; and
vi) it includes a Declaration of Conformity with the International Commission on Non Ionizing Radiation.

The policy has been complied with in that:

i) It has been specifically sited to ensure it makes the most use of the natural screening available in the area; the design is of a type commonly seen in the streetscene and comprises a slimline monopole which will not be anomalous feature in the area.
ii) As above – the design and siting ensures a limited impact on the surrounding area and the proposed installation will not have adetrmental impact on the surrounding area or buildings.
iii) As detailed in Section 5 there are no existing masts or buildings capable of being used for this very specific requirement.
iv) The proposal is not within any designated area
v) An ICNIRP certificate is included with this application.

Policy Summary

The proposal complies with the above policies and no conflict with any other aspect of the plan has been identified. The proposal is sympathetically designed, it minimises the number of future installations and has a high quality of design. It would significantly enhance the provision of local community facilities and services and would protect amenity from this location.

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

Planning Assessment
Principle of Development

This is a prior notification application. As such, the only issues that can be considered when assessing this application are the siting and appearance of the proposed telecommunications monopole and cabinet. The principle of development is therefore not an issue of consideration for this prior approval application.

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 search area is very limited and the site has been chosen for the wide grass verge to the rear creating distance from the houses to the west and the extensive tree screening, along with its location on the edge of a wide dual carriageway. The site has been designed to ensure the minimal impact possible on amenity and with only limited harm to the area – as best as

can be achieved within the search area capable of providing coverage to the target residential area.

Although the monopole would be taller than the street-scene installations, it is considered its impact would be not be excessive. The pole has a slim and unfussy design and would have a grey finish to match the existing lamp posts; the ancillary equipment cabinets are also proposed to be grey 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 amenity.

Siting

The rollout of 5G across the country is designed to bring connectivity, in line with Gov't guidelines, to those areas where the provision is substandard and additional capacity is required.

The very nature of 5G coverage with its high data capacity and higher frequency means that the installations have to be located within the areas where the coverage is required.

Previous generations of mobile coverage have been able to provide their coverage from outside the areas. These existing sites are being upgraded to 5G, however the 5G coverage is not reaching into the residential areas that were deliberately avoided before due to technical constraints. As such, new installations must be deployed within the area that the 5G coverage is serving the locality in accordance with customer demand and government aspirations for 5G coverage.

This does mean that new sites are required in residential areas if coverage is to be improved across the country. The site proposed here is within the residential area it is required to serve, however has been located to take advantage of the tree screening to the rear of the site and its location on a wide dual carriageway.

Health And Mobile Phone Base Stations

We recognise that the growth in mobile communication has led, in some cases, to public concern about perceived health effects of mobile technology, in particular about siting masts close to local communities. Quite naturally, the public seeks reassurance that masts are not in any way harmful or dangerous.

Our client is committed to providing the latest independent peer-reviewed research findings, information, advice and guidance from national and international agencies on radiofrequency (RF) electromagnetic fields. Three ensure that our radio base stations are designed and built so that the public are not exposed to radio frequency fields above the guidelines set by the International Commission on Non-Ionizing Radiation Protection (ICNIRP). In fact, radio base stations operate at low power and emit levels of radiofrequency fields many times lower than the ICNIRP general public guidelines.

The World Health Organisation notes that “In the area of biological effects and medical applications of non-ionizing radiation approximately 25,000 articles have been published over the past 30 years. Despite the feeling of some people that more research needs to be done, scientific knowledge in this area is now more extensive than for most chemicals: (http://www.who.int/peh-emf/about/WhatisEMF/en/index1.html).

The scientific community have collated, summarised and assessed these publications into research reviews. The most influential in the UK being the Mobile Phones and Health Report (also known as the Stewart Report). These research reviews are used by Governments to develop policy on exposure to radiofrequency signals.

The Stewart Report concluded that the balance of evidence did not suggest that exposures to radio frequency fields below international guidelines could cause adverse health effects. One of the recommendations of the Stewart report was a research programme to address uncertainties regarding mobile phone base stations and health. This programme was called the Mobile Telecommunications and Health Research (MTHR) Programme. The final report from this programme was published in February 2014. The report noted that the research conducted found no evidence of adverse health effects from the radio waves produced by mobile phones or their base stations.

Since the Stewart Report, over 30 further reviews have been carried out, carefully considering many hundreds of pieces of research. Most have made similar recommendations and have come to comparable conclusions: that research should continue to address any gaps in the knowledge and that overall, the possibility of adverse health effects from mobile communications remains unproven.

In April 2012 the Health Protection Agency’s independent Advisory Group on Non-ionising Radiation (AGNIR) published a report entitled “Health Effects from Radiofrequency Electromagnetic Fields”. This report concluded that there is no convincing evidence that mobile phone technologies cause adverse effects on human health.

The World Health Organisation (WHO) have noted that “A large number of studies have been performed over the last two decades to assess whether mobile phones pose a potential health risk. To date, no adverse health effects have been established as being caused by mobile phone use” WHO factsheet 193: Electromagnetic fields and public health: mobile telephones, 2014.

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:		Date:	12th November 2021
Position:	Director	Company: (for and on behalf H3G UK Ltd)	Sinclair Dalby Ltd