

**5G SITE SPECIFIC SUPPLEMENTARY INFORMATION AND PLANNING JUSTIFICATION
STATEMENT PREPARED BY DOT SURVEYING**

1. Site Details

Site Name:	Portobello High Street at Bridge Street Street Works	Site Address:	Portobello High Street, Portobello, Edinburgh, EH15 1AW
NGR:	E: 330289 N: 674108		
Site Ref Number:	EDC19711	Site Type:	Proposed 5G telecoms installation: 20m high Streetpole and 3no cabinets with ancillary works – coloured grey.

2. Pre-Application Check List

Site Selection

Was City of Edinburgh City Council' mast register used to check for suitable sites by the operator or the LPA?		No
If no explain why: It was felt that the industry database was a more up to date source of information.		
Was the industry site database checked for suitable sites by the operator:	Yes	
If no explain why: N/A		

Pre-application consultation with City of Edinburgh Council

Written offer of pre-application consultation:	N/A
Was there pre-application contact:	Yes
Date of pre-application contact:	7 th December 2021
Name of contact: roads@edinburgh.gov planning@edinburgh.gov.uk planning.support@edinburgh.gov.uk	Local Planning Authority and Ward Members – by email

Summary of outcome/Main issues raised:

CK Hutchison Networks (UK) Ltd is committed to providing improved network coverage and capacity, most notably in relation to 5G services. In these unprecedented times of the Covid-19 pandemic, it is recognised that high-speed mobile connectivity is the lifeblood of a Community; facilitating educational benefits, providing access to vital services, improving communications with the associated commercial benefits for local businesses, enabling e-commerce and working from home, as well as enjoying access to social, media and gaming for leisure time activities.

The pre-consultation invited comments within a two-week period and while the merits of high-speed telecommunications are generally recognised; pre-application has identified the need to carefully consider the risk of increased visual amenity to adjoining residential properties through the siting of telecommunications infrastructure within urban settings.

An e-mail was issued to the planning department of City of Edinburgh Council on the 7th December 2021 and included a set of planning drawings, site information sheet and an explanation behind the requirement for a new telecommunications installation. The information sheet also included details of other sites that have been investigated and discounted. Further details of the discounted sites are included within this document. Following the submission of an e-mail to the council's planning department, to be best of our knowledge no formal response has been received.

Ten Commitments Consultation

Rating of Site under Traffic Light Model:	Red
Prior to the submission of this application, pre-consultation was initiated with the local planning authority, providing an opportunity to discuss the development proposal and identify any site-specific issues.	
The site has been given a rating of RED under the Traffic Light Model 'TLR'.	

Summary of outcome/Main issues raised:

Full details of the scheme are outlined within the planning drawings EDC19711_EDC455_84884_EH1015_GA_REV B.

CK Hutchison Networks (UK) Ltd consider a 'Streetworks' installation positioned upon Portobello High Street - adopted highway (footpath), is best suited to extend high-speed mobile coverage to the target community.

School/College

Location of site in relation to school/college: Towerbank Primary school has been identified within a 300m radius of our proposed site.
Outline of consultation carried out with school/college: Towerbank Primary school was issued by email with a copy of the pre-application enquiry – site detail sheet.
Summary of outcome/Main issues raised: To the best of our knowledge no response has 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?	No	
Has the Civil Aviation Authority/Secretary of State for Defence/Aerodrome Operator been notified?	No	
Details of response: N/A		

Developer's Notice

Copy of Developer's Notice enclosed?	Yes	
Date served:	13 th January 2022	

3. Proposed Development

The proposed site: The proposed solution involves erecting a new 20m high H3G Phase 8 Street Pole installation upon the footpath adjacent to Portobello High Street, Portobello, Edinburgh, EH15 1AW. The technical details of this proposal are illustrated within the enclosed application design drawings:- EDC19711_EDC455_84884_EH1015_GA_REV B. It is recognised that the very nature of installing new 5G communications infrastructure within a dense urban setting requires a well-measured balance between the need to extend practical coverage with the risk of increasing visual intrusion. CK Hutchison Networks (UK) Ltd are in the process of building the UK's fastest 5G network and has 140MHz of 5G spectrum (and 100MHz of it contiguous), which means our service will be much faster and shall have the ability to handle more data. In making this technology available to customers, CK Hutchison Networks (UK) Ltd will need to provide a mix of upgrades involving existing sites and the building of new sites. New sites will be needed for many reasons, including the higher radio frequencies used for 5G, which do not travel as far as those frequencies currently in use. In addition, not all existing sites will have the capacity of being upgraded.
--

The very nature of 5G and the network services it provides, means the equipment and antennas are quite different to the previous, and existing, service requirements. In particular, the design of the antennas, and the separation required from other items of associated equipment, is such that we cannot utilise certain structures that provide a means of support for another operator, most notably in a street works or highways environment.

The search process involved an initial 'desk-top' survey to ascertain and identify major constraints and impediments, followed by a physical search of the area. As with all 5G cells, this is an extremely constrained cell search area and options within the area are very limited. Nevertheless, the most viable solution that minimises amenity issues, has been put forward.

The site selection process has also been influenced by the numerous vertical elements of street furniture distributed around the vicinity of the site, including street lighting columns. The height of the pole has been kept to an absolute minimum, allowing the installation to provide this essential new 5G coverage to the intended target area.

The application site is within the vicinity of residential dwellings and the equipment orientation will be very carefully positioned upon a particularly wide area of pavement next to Portobello High Street where there are number of tall lamp posts in situ. The nature of the equipment itself is typical of street furniture found in such urban locations. As a result, the equipment is considered unlikely to have any material impact on the local area, however it should bring significant connectivity improvements, which is a material consideration in the judgment of the site suitability. The cell search area was assessed at the survey stage from the perspective of planning and residential amenity. A detailed site evaluation, in line with the City of Edinburgh Councils Local Development Plan (2016) has also been undertaken.

In this location, existing base stations are not capable of supporting additional equipment to extend coverage across the target area and prospective 'in-fill' mast sites are extremely limited. Other sites have been identified and subsequently discounted (Refer to Section 6). Notwithstanding, there is an acute need for a new telecommunications installation to deliver the required community coverage.

The cell search areas for 5G are very constrained, with a typical cell radius of 50 metres. Due to the operational parameters of 5G, moving the search area or seeking locations a long way from the target/search area is not operationally feasible. Owing to a lack of available options, the application site is situated just outside the target/search area itself.

The application site is therefore considered the single most appropriate location to support service delivery through a 20 metre Streetpole, with equipment cabinets typical of control boxes commonly found upon the adopted highway. To accord with the present street furniture within the vicinity of Portobello High Street, the pole and cabinets will be painted grey (RAL-7035). However, the equipment can be painted to the requirements of the City of Edinburgh Council.

Figure 1 - Site Photograph.
Aspect of street furniture and trees



The proposed site is considered the best available compromise between extending 5G service across the target 'coverage hole' with the selected Streetworks pole height and associated antenna and ground-based cabinets restricted to the absolute minimum, which is capable of providing the required essential coverage.

The site shall be situated upon an adopted public highway, in a position that will not impede pedestrian flow or the safety of passing motorists. The equipment cabinets will be situated at the base of the pole.

Planning Policy Relevant to the Development Site:

Development Plan Policy: Scottish Planning Policy (SPP) & PAN62

Local Plan Policy: City of Edinburgh Council Local Development Plan 2016, Policy RS 7 Telecommunications.

8 Resources and Services

294 The following policies relate to development proposals for the use of natural resources or for provision of certain services. Policies protecting natural resources are in Section 2 – Caring for the Environment. The policy requiring carbon reduction measures and space for recycling in new development is in Section 1 – Design Principles.

Objectives

- To support appropriate energy generation and waste management development to help meet national targets
- To support the provision of other necessary resources and services: mineral extraction, water and drainage and [telecommunications](#).

Telecommunications

Policy RS 7 Telecommunications

Planning permission will be granted for telecommunications development provided:

- a) the visual impact of the proposed development has been minimised through careful siting, design and, where appropriate, landscaping
- b) it has been demonstrated that all practicable options and alternative sites have been considered, including the possibility of using existing masts, structures and buildings and/or site sharing
- c) the proposal would not harm the built or natural heritage of the city.

306 The provision of new telecommunications infrastructure is essential to economic competitiveness. The telecommunications industry must be enabled to expand and diversify, but this must be undertaken sensitively and imaginatively, and with minimum environmental impact. Telecommunications equipment such as antennas, mobile phone masts and base stations can have a significant visual

impact in both urban and rural areas. Telecommunications operators are therefore required to demonstrate that all practicable options to minimise impact have been explored, and the best solution identified.

307 There will be a limited number of locations, including city landmarks such as Arthur's Seat and Salisbury Crags, where the impact of an installation cannot be satisfactorily minimised, and where it will therefore be unacceptable in principle. In other locations, individual proposals may be acceptable but where there is a concentration of these uses, consideration will be given to the cumulative visual impact. Conditions will be imposed on any consent, requiring the removal of any mast or apparatus and the reinstatement of a site to its former condition when it becomes redundant.

308 Edinburgh is one of ten UK cities to receive early delivery of high speed broadband and large areas of wireless connectivity in public areas. The latter will require installation of new equipment, some of which may require planning permission or conservation area / listed building consent. These will be assessed using the above policy if appropriate and a separate non-statutory guideline on telecommunications.

Outcome 1: A successful, sustainable place – supporting sustainable economic growth and regeneration, and the creation of well-designed, sustainable places.”

“14. NPF3 aims to strengthen the role of our city regions and towns, create more vibrant rural places, and realise the opportunities for sustainable growth and innovation in our coastal and island areas.

15. The SPP sets out how this should be delivered on the ground. By locating the right development in the right place, planning can provide opportunities for people to make sustainable choices and improve their quality of life. Well-planned places promote well-being, a sense of identity and pride, and greater opportunities for social interaction. Planning therefore has an important role in promoting strong, resilient and inclusive communities. Delivering high-quality buildings, infrastructure and spaces in the right locations helps provide choice over where to live and style of home, choice as to how to access amenities and services and choice to live more active, engaged, independent and healthy lifestyles.”

“This SPP introduces a presumption in favour of development that contributes to sustainable development.

29. This means that policies and decisions should be guided by the following principles;

- ***giving due weight to net economic benefit;***
- ***responding to economic issues, challenges and opportunities, as outlined in local economic strategies;***
- ***supporting good design and the six qualities of successful places;***
- ***supporting delivery of infrastructure, for example transport, education, energy, digital and water***

The Adopted Roads Register shows that the proposed location falls within adopted Highway.

In this instance, a new 20m high H3G Phase 8 Streetpole with associated 3no. equipment cabinets (colour GREY RAL-7035) are to be positioned upon the adopted public highway, to reduce visual impact in a residential setting. Please note that the mast and cabinets are to be coloured grey, to further add the assimilation of the mast to the area, however the mast can be painted to the specification of The City of Edinburgh Council. For the reasons listed above, the proposed site and scheme is not considered to pose an undue onerous material consideration and favourable determination is invited.

The design of the proposed antenna and ground-based cabinets is considered to be the least visually intrusive option available, benefiting from an array of nearby street lighting. Whilst it is accepted that there will be a localised visual increase through the installation of additional apparatus, it is considered that this will not overly detract from the character of the existing streetscape or indeed, the wider area. As a consequence, the proposed site and scheme is not considered to pose an undue onerous material consideration and favourable determination is invited.

The proposed site will also assist with The Scottish Government’s objectives of ensuring people across Scotland have access to 5G as outlined within a recent publication ‘Forging Our Digital Future with 5G – A Strategy for Scotland’ (published August 2019).

Type of Structure	
Description:	
Proposed Phase 8 Monopole c/w wraparound Cabinet at base.	
Overall Height:	20m AGL
Height of existing building	N/A
Equipment Housing:	
Length:	See drawings
Width:	See drawings
Height:	See drawings
Materials	
Tower/mast etc. - type of material and external colour:	Phase 8 Monopole, colour GREY RAL-7035
Equipment housing - type of material and external colour:	Profile steel cladding, colour GREY RAL-7035

Reasons for choice of design:
The proposed installation is an H3G LTE Phase 8 Monopole which will facilitate educational benefits, providing access to vital services, improving communications with the associated commercial benefits for local businesses, enabling e-commerce and working from home, as well as enjoying access to social, media and gaming for leisure time activities.

4. Technical Information

<p>ICNIRP Declaration attached</p> <p>ICNIRP (International Commission on Non-Ionizing Radiation Protection) aims to protect people and the environment against adverse effects of non-ionizing radiation (NIR). 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 the site are taken into account.</p>	Yes	
--	-----	--

5. Technical Justification

<p>Reason(s) why site required</p> <p>The site is required to provide new 5G coverage for CK Hutchison Networks (UK) Ltd, improving service in and around the Portobello area. The cell search areas for 5G are extremely constrained with a typical cell radius of approximately 50m. In general, it would not be feasible to site the installation too far from the target locale (Refer to Figure 4).</p>
--

6. Site Selection Process – alternative sites considered and not chosen

<p>Discounted Options</p> <p>In accordance with the sequential approach outlined in the NPPF, the following search criteria have been adopted. Firstly, consideration is always given to sharing any existing telecommunication structures in the immediate area, secondly; consideration is then given to utilising any suitable existing structures or buildings and thirdly, sites for freestanding ground-based installations are investigated.</p> <p>This sequential approach is outlined below:</p> <ul style="list-style-type: none">a) Mast and Site Sharingb) Existing Buildings Structuresc) Ground Bases Installations <p>In compliance with its licence and the sequential approach to site selection, all attempts to utilise any existing telecommunication structures where they represent the optimum environmental solution have been employed. The Mast Data register is always examined prior to the submission of a planning application.</p>
--

Discounted Options and National Planning Policy:

Typical to most 5G cell site deployment within the urban environment, this is an extremely constrained cell search area. It is recognised that the very nature of installing new 5G mast infrastructure within a dense urban setting requires a well-considered balance between the need to extend practical coverage with that of increasing risk of visual intrusion. A Street Pole with associated cabinets is deemed to be the only and most appropriate solution available. The DSA (Designated Search Area) is illustrated in Figure 4, together with site locations that were investigated and subsequently discounted.

Discounted Options:

Site Reference	Reason why discounted
D1 – Bridge Street	Discounted due to pavement and grass verge not being wide enough
D2 – Brickfield	Narrow pavement , Residential street along here would be directly in front of housing
D3 – Harbour Road	discounted due to proximity to residential property
D4 – Portobello High Street	pavement is wide enough but visibility splay concerns.

Figure 2 - Proposed Site Location: 100m DSA (Desired Search Area) shown circled



7. Additional Relevant Information

Background to the Proposal

CK Hutchison Networks (UK) Ltd supports the Scottish Government's aspirations to strengthen digital communications capacity and expand its mobile network coverage across the country.

Modern mobile phone base stations operate on a low power and accordingly, need to be located within close proximity to the areas they are required to serve. Increasingly, people are also using mobile devices in the home which requires the installation of base station infrastructure closer to such residential areas.

The proposed scheme has been designed to ensure the fundamental principles of good siting and appearance are adhered to. The overall impact of the installation on the environment is therefore considered limited when viewed in the context that high-speed mobile connectivity is the lifeblood of a Community.

DEVELOPMENT PLAN POLICY:

Scottish Planning Policy

The document Scottish Planning Policy (SPP), published by the Scottish Government in June 2014, details The Scottish Government's national planning policy guidance in respect of digital infrastructure.

SPP sits alongside other Scottish Government planning policy documents.

NATIONAL PLANNING POLICY:

The National Planning Framework (NPF) provides a statutory framework for Scotland's long-term spatial development. The NPF sets out the Scottish Government's spatial development priorities for the next 20 – 30 years. The SPP sets out policy that will help deliver the objectives of the NPF.

Scottish Planning Policy (SPP) at paragraph 292 details how it will Support Digital Connectivity. NPF highlights the importance of digital infrastructure, across towns and cities, and in particular Scotland's more remote and island areas. Scotland's economy and social networks depend heavily on high-quality infrastructure. To facilitate investment across Scotland, planning has an important role to play in strengthening digital communications capacity and coverage across the country.

“Policy Principles

292. NPF3 highlights the importance of our digital infrastructure, across towns and cities, and in particular our more remote rural and island areas. Our economy and social networks depend heavily on high-quality digital infrastructure. To facilitate investment across Scotland, planning has an important role to play in strengthening digital communications capacity and coverage across Scotland.

293. The planning system should support:

- ***Development which helps deliver the Scottish Government's commitment to world-class digital connectivity;***

- *The need for networks to evolve and respond to technology improvements and new services;*
- *Inclusion of digital infrastructure in new homes and business premises; and*
- *Infrastructure provision which is sited and designed to keep environmental impacts to a minimum.*

Development Planning

294. Local development plans should reflect the infrastructure roll-out plans of digital communications operators, community groups and others, such as the Scottish Government, the UK Government and local authorities.

295. Local development plans should provide a consistent basis for decision-making by setting out the criteria which will be applied when determining planning applications for communications equipment. They should ensure that the following options are considered when selecting sites and designing base stations:

- *mast or site sharing;*
- *installation on buildings or other existing structures;*
- *installing the smallest suitable equipment, commensurate with technological requirements;*
- *concealing or disguising masts, antennas, equipment housing and cable runs using design and camouflage techniques where appropriate; and*
- *installation of ground-based masts.*

296. Local development plans should set out the matters to be addressed in planning applications for specific developments, including:

- *an explanation of how the proposed equipment fits into the wider network;*
- *a description of the siting options (primarily for new sites) and design options which satisfy operational requirements, alternatives considered, and the reasons for the chosen solution;*
- *details of the design, including height, materials and all components of the proposal;*
- *details of any proposed landscaping and screen planting, where appropriate;*
- *an assessment of the cumulative effects of the proposed development combination with existing equipment in the area;*
- *details of the design, including height, materials and all components of the proposal;*
- *a declaration that the equipment and installation is designed to be in full compliance with the appropriate ICNIRP guidelines for public exposure to radiofrequency radiation¹³¹; and*
- *an assessment of visual impact, if relevant.*

297. Policies should encourage developers to explore opportunities for the provision of digital infrastructure to new homes and business premises as an integral part of development. This should be done in consultation with service providers so that appropriate, universal and futureproofed infrastructure is installed and utilised.

Development Management

298. Consideration should be given to how proposals for infrastructure to deliver new services or infrastructure to improve existing services will contribute to fulfilling the objectives for digital connectivity set out in the Scottish Government's World Class 2020 document. For developments that will deliver new connectivity – for example, mobile connectivity in a “not spot” – consideration should be given to the benefits of this connectivity for communities and the local economy.

299. All components of equipment should be considered together and designed and positioned as sensitively as possible, though technical requirements and constraints may limit the possibilities. Developments should not physically obstruct aerodrome operations, technical sites or existing transmitter / receiver facilities. The cumulative effects of equipment should be taken into account.

300. Planning Authorities should not question the need for the service to be provided nor seek to prevent competition between operators. The planning system should not be used to secure objectives that are more properly achieved under other legislation. Emissions of radiofrequency radiation are controlled and regulated under other legislation and it is therefore not necessary for planning authorities to treat radiofrequency radiation as a material consideration.”

Conclusion

The Town and Country Planning (Scotland) Act 1997 – Section 25 – requires decisions to be made in accordance with Development Plans unless material considerations indicate otherwise.

Scottish Planning Policy was published in 2014. This SPP introduces a presumption in favour of development that contributes to sustainable development.

The SPP also affirms the Scottish Governments commitment to ‘world-class’ digital connectivity.

The Scottish Government considers that high-speed mobile connectivity is the lifeblood of a community. CK Hutchison Networks (UK) Ltd is committed to providing improved network coverage and capacity, most notably in relation to 5G services.


This application is for a new 5G streetworks installation to improve connectivity in and around the Portobello area.

We consider the proposal is in accordance with both National and Local Planning Policy.

The use of the public highway to accommodate a new telecommunications installation complies with government and local planning policy guidance, where the underlying aim is to provide an efficient and competitive telecommunication system for the benefit of the community, while minimising visual impact. Considering the site-specific factors and technical constraints, available options and planning constraints, it is considered that the proposed site and design clearly represents the optimum environmental solution to extend coverage to the target Community.

In accordance with a recognised need to expand and promote telecommunications networks across the region, it is considered that the proposed scheme fully accords with the National Planning Framework, Scottish Planning Policy and should be approved by the Council.

Contact Details

Name: (Agent)	Hannah Gibson BSc (Hons)	Telephone:	07428 015034
Operator:	CK Hutchison Networks (UK) Ltd	Fax no:	N/A
Address:	Dot Surveying, The Bonds (Suite 31), 2 Anderson Place, Edinburgh EH6 5NP	Email Address:	h.gibson@dotsurveying.co.uk
Signed:		Date:	13 th January 2022
Position:	Planner	Company:	Dot Surveying
		(on behalf of above operator)	