# Appendix 1: Supplementary Information

## 1. Site details

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| Site Name: | The London School of Hygiene | Site Address: | The London School of Hygiene and Tropical Medicine,<br>1 Keppel Street<br>London<br>WC1E 7HT |
| NGR: | E: 529802<br>N: 181877 | | |
| Site Ref Number: | 27469 | Site Type: | Macro<br>(Rooftop Upgrade) |

## 2. Pre Application Check list

### Site selection

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|---|---|---|
| Was a planning authority mast register available to check for suitable sites by the operator or the local planning authority? | ~~Yes~~ | **No** |
| if no explain why:<br><br>The proposed scheme involves a rooftop upgrade (existing telecommunications equipment removed to allow for roof repairs to be conducted). New equipment to be installed upon the very same rooftop upon completion of the works. | | |
| Was the industry site database checked for suitable sites by the operator? | ~~Yes~~ | **No** |
| if no explain why:<br><br>As above, the proposed scheme involves upgrading and re-instating a rooftop telecommunications site. | | |

### Annual Area Wide Information to planning authority

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| Date of information submission to planning authority: | |
| Name of contact: | |
| Summary of issues raised:<br><br>Unlikely to have been raised as the proposed scheme involves upgrading and re-instating a former rooftop telecommunications site. | |

**Pre-application consultation with planning authority**

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| Date of written offer of pre-application consultation: | 20th January 2025 | |
| Was there pre-application contact | **Yes** | ~~No~~ |
| Date of pre-application contact | 23rd January 2025 | |
| Name of contact | Ms Rose Todd<br>(Senior Planner) | |

Summary of outcome/Main issues raised:

Consultation was initiated with the local planning authority (The London Borough of Camden Council) on the 20th January, outlining details of the proposed scheme and the need to vacate and re-instate telecommunications equipment upon the rooftop of the London School of Hygiene and Tropical Medicine. The communication was sent by email and included a set of planning drawings and detailed information sheet with further information on the proposal. The detailed information sheet also included maps and imagery. The consultation was intended to provide an opportunity to discuss the development proposal and identify any site-specific issues.

As outlined within the supporting statement, a response was received from the planning department on the 23rd January (received by email). Without prejudice, the Council advised a pre-consultation fee of £1,520.50 would be required before the pre-consultation application could be validated. Due to time constraints and the cost of obtaining pre-application advice, we consider all matters associated with this application can be addressed as part of this submission.

**Ten Commitments Consultation**

| Rating of Site under Traffic Light Model | ~~Red~~ | **Amber** | ~~Green~~ |
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| Outline Consultation carried out:<br><br>Following an assessment of the site against the Traffic Light Rating Form in accordance with the Best Practice on Mobile Network Development, a rating of Amber was applied. The reason for the amber rating is due to the listing of the building in question (Grade II listed), the proximity of the site to other heritage assets and its position within a conservation area (The Bloomsbury Conservation Area).<br><br>In line with the Code of Best Practice, consultation has also been undertaken with the ward councillors for the Bloomsbury Ward, namely Councillor Adam Harrison, Councillor Sabrina Francis and Councillor Rishi Madlani. Separate consultation was also sent to English Heritage. Again, the communication was carried out by email and included a covering letter to explain the proposal, a set of planning drawings and site detail sheet. The emails were sent on Monday 20th January. | | | |
| Summary of outcome/Main issues raised:<br><br>At the time of writing, no formal response has been received to the consultation undertaken. | | | |

**School/College**

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| Location of site in relation to school/college (include name of school/college)<br><br>No school/college has been identified within 500 metres of the proposed site. |
| Outline of consultation carried out with school/college (include evidence of consultation)<br><br>N/a |
| Summary of outcome/Main issues raised<br><br>N/a |

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

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| Will the structure be within 3km of an aerodrome or airfield? | ~~Yes~~ | **No** |
| Has the Civil Aviation Authority/Secretary of State for Defence/Aerodrome Operator been notified | ~~Yes~~ | **No** |
| Details of response:<br><br>No airports or aerodromes have been identified within 500 metres of the proposed site. | | |

## 3.0 Proposed Development

The proposed site

The proposed site is situated upon the rooftop of a four-storey building within central London known as the London School of Hygiene and Tropical Medicine. The building was designed by the architects, Horer & Rees (London) and constructed during the 1920's. Situated within the London Borough of Camden and near to the British Museum, the property was listed in 1982 (Grade II listed).

The surrounding area is well developed with buildings typically finished in traditional materials, namely as brick and stone. Properties are generally formed of between 4-7 storeys. The area is also very leafy and features many recreational spaces and parks.

The London School of Hygiene and Tropical Medicine fronts onto Keppel Street, with the south-western and north-eastern edges which lie adjacent to Gower Street and Malet Street. Sitting opposite the main frontage is the gable end of a residential terrace and a leafy square known as Malet Street Gardens. To the south-west, on Gower Street, there is a brick-built residential terrace. To the north-east, along Malet Street, the Senate building (part of the University of London) stands at over 60 metres in height and overlooks the building.

The proposed scheme includes the installation of 6no. radio antennas and 4no. transmission dishes which will be fixed to three separate tripod support frames, along with ancillary apparatus. Two of the support frames will sit upon a metal grillage along with a small number of cabinets and ancillary apparatus.

The equipment itself is small scale and will be centred around a section of flat roof some 40 metres back from the very front of the building and 10 metres back from the sides of the property, adjacent to Gower Street and Mallet Street. Furthermore, due to the height of the building and developed nature of the surrounding area, it is anticipated that views of the apparatus from street level will be very limited indeed.

As the property is listed and due to the designation as a conservation area, a heritage assessment is included with this planning submission (please see Appendix 2).

Following the removal of the former rooftop telecommunications equipment to allow for unrelated rooftop repairs, (as further explained within the associated supporting statement), the installation is being deployed for the sole purpose of maintaining a telecommunications network.

| Enclose map showing the cell centre and existing sites within the cell and adjoining cells |
| --- |
| The scheme merely involves replacing equipment that was previously deployed upon the London School of Hygiene and Tropical Medicine which was removed to make way for substantial and unrelated building repairs. The new equipment (to be installed upon completion of these works) will maintain a reliable and high-speed telecommunications network within the local area. |

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| Type of Structure (e.g. tower, mast, etc): | |
| Description:<br><br>3no. tripod support frames will accommodate a total of 6no. radio antennas and 4no. transmission dishes (each dish will have a diameter of 0.6 metres). The frames will be positioned on the south-western and north-eastern sides of the rooftop. Two of the frames (on the south-western side of the rooftop) will be situated upon a metal grillage and set alongside 3no. cabinets and ancillary apparatus. | |
| Overall Height: | |
| Height of existing building (where applicable):<br><br>The building has an overall height of 28 metres above ground level. The antennas will be positioned at a mean height of 32 and 34 metres above ground level. | 32 & 34 metres |
| Equipment Housing | |
| Length:<br><br>• MK5B Link AC Cabinet (rooftop – support grillage) =<br>• EE Unilateral Cabinet (rooftop – support grillage) =<br>• H3G Unilateral Cabinet (rooftop – support grillage) = | Metres:<br><br>0.6 Metres<br>0.77 Metres<br>0.77 Metres |
| Width<br><br>• MK5B Link AC Cabinet (rooftop – support grillage) =<br>• EE Unilateral Cabinet (rooftop – support grillage) =<br>• H3G Unilateral Cabinet (rooftop – support grillage) = | Metres:<br><br>1.2 Metres<br>0.77 Metres<br>0.77 Metres |
| Height<br><br>• MK5B Link AC Cabinet (rooftop – support grillage) =<br>• EE Unilateral Cabinet (rooftop – support grillage) =<br>• H3G Unilateral Cabinet (rooftop – support grillage) = | Metres:<br><br>1.6 Metres<br>2.2 Metres<br>2.31 Metres |

| Materials (as applicable) | |
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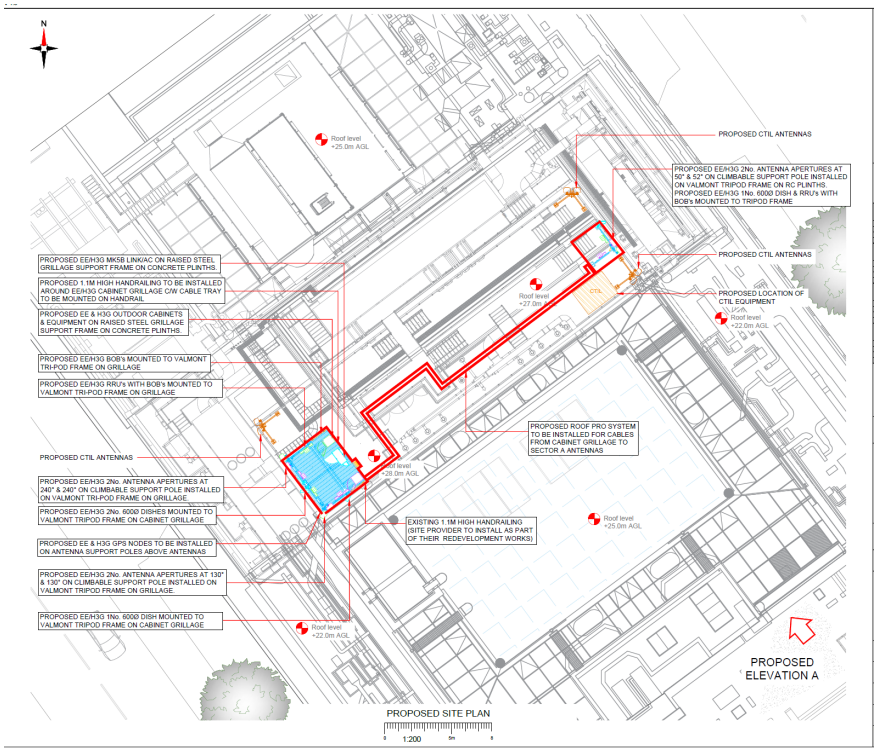
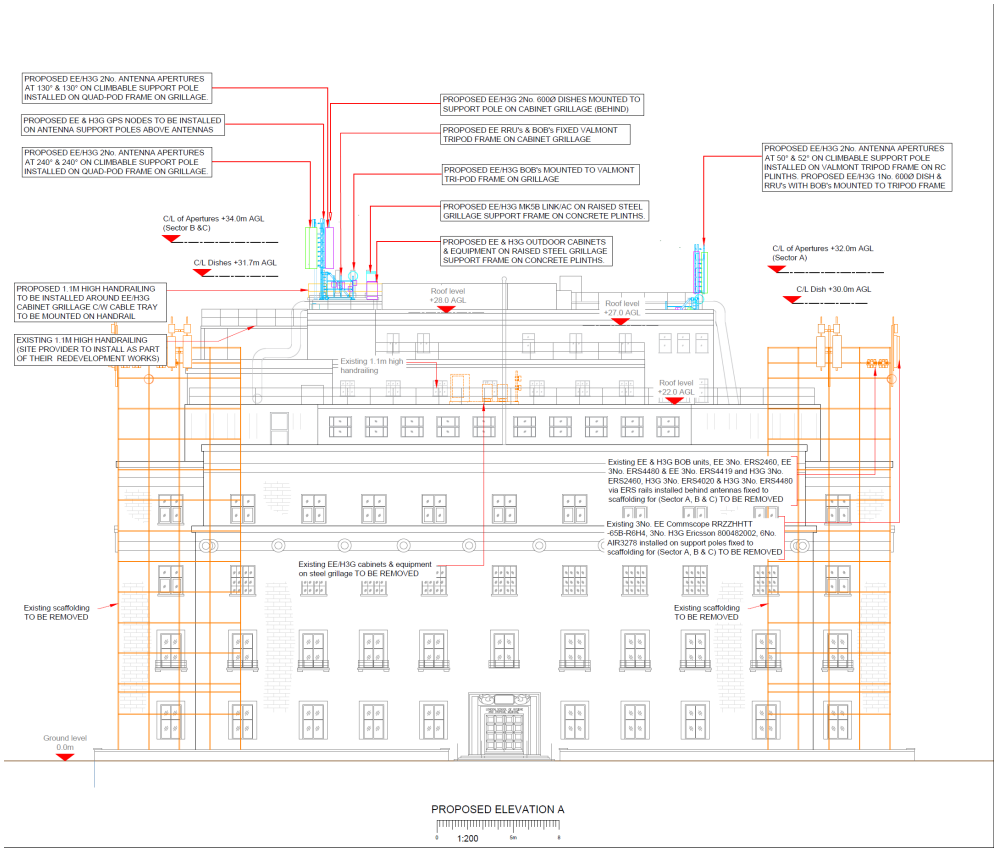
| Tower/mast etc – type of material and external colour:<br><br>• Support frame = galvanised steel / grey in colour | |
| Equipment housing – type of material and external colour:<br><br>• MK5B Link AC Cabinet = Light Grey (RAL 7035)<br>• EE Unilateral Cabinet = Light Grey (RAL 7035)<br>• H3G Unilateral Cabinet = Light Grey (RAL 7035) | |

**Figure 1** – An extract from the Planning Drawings



Reasons for choice of Design

The design has been considerably influenced by the need to support multiple operators (namely EE Limited and H3G 'Three') and an array of telecommunications apparatus including radio antennas and transmission dishes thus maximising opportunities to consolidate the number of base stations needed to maintain connectivity within the local area. As detailed, the installation will replace a former rooftop site upon the same building which had to be decommissioned due to some significant building works.

There are three main elements to a radio base station; the cabinets which contain the equipment used to generate the radio signals, the supporting structure that holds the radio antennas in the air, along with any necessary amplifier or receiver units. The antennas themselves, emit the radio signals which communicate with wireless devices including mobile phone handsets and tablets etc.

Other elements necessary for the base station to function are the links into the network either by fibre cabling or by dish antennas, power source (meter cabinet), feeder cables that link the equipment housing to the antennas and the various fixings, often referred to in general terms as "development ancillary to" the base station.

The type of technology being deployed determines the nature of equipment and antennas required, which in turn impacts upon the type of support structure and or design methods than can be employed at an aesthetic level. In order for the base station to effectively provide coverage to the intended target area and fit with the established network pattern, specific antenna orientations and heights, determined by the Mobile Network Operators radio planner, must be achieved. The radio planner has determined that a mean antenna height of 32 and 34 metres (above ground level) will be required to achieve operational requirements.

As explained in the previous section, the site will comprise of multiple pole mounted antennas and dishes which will be centred around a section of flat roof, along with a small number of cabinets and ancillary apparatus. The installation will sit within a well-developed area which features many large buildings that host other plant and equipment, including the property in question.

The proposed telecommunications equipment is deemed to have a minimal material impact and will maintain connectivity for residents, businesses, visitors and those studying within the local area, which is a material consideration in the judgment of site suitability.

## 4.0 Technical information

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| International Commission on Non-Ionizing Radiation Protection Declaration attached (see below)*<br><br>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.<br><br>When determining compliance, the emissions from all mobile phone network operators on or near to the site are taken into account.<br><br>In order to minimise interference within its own network and with other radio networks, EE (UK) Ltd and H3G (UK) Limited operates its network in such a way the radio frequency power outputs are kept to the lowest levels commensurate with effective service provision<br><br>As part of EE (UK) Ltd and H3G (UK) Limited's network, the radio base station that is the subject of this application will be configured to operate in this way.<br><br>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. | **Yes** | ~~No~~ |

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| The telecommunications infrastructure which is 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. | | |

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| Frequency | 700MHz, 900 MHz, 1800 MHz, 2100 MHz, 3.4 GHz & 3.6 GHz |
| Modulation characteristics[1] | GMSK & QPSK |
| Power output (expressed in EIRP in dBW per carrier)<br><br>In order to minimise interference within its own network and with other radio networks, T-Mobile operates its network in such a way that radio frequency power outputs are kept to the lowest levels commensurate with effective service provision.<br><br>As part of EE (UK) Ltd's and H3G (UK) Ltd network, the radio base station that is the subject of this application will be configured to operate in this way. | 56 dBm |
| Height of antenna (m above ground level) | 32 and 34 metres to the centreline |

[1] The modulation method employed in GSM is GMSK (Gaussian Minimum Shift Keying) which is a form of Phase Modulation.
The modulation method employed in UMTS is QPSK (Quad Phase Shift Keying) which is another form of Phase Modulation.

## 5.0 Technical Justification

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

The National Planning Policy Framework (NPPF) clearly states that authorities should NOT question the need for the service, nor seek to prevent competition between operators. Notwithstanding this, the Applicant considers it important to explain the positive technical justification for the site and how the facility fits into the overall network.

EE/H3G previously had telecommunications equipment which was situated upon the rooftop of the London School of Hygiene and Tropical Medicine which had to be decommissioned, allowing for some unrelated roof works to be carried out. A temporary site to the front of the property is currently being used to maintain coverage and capacity within the area. Once the works have been concluded, EE and H3G plan to relocate back onto the building, providing a long-term solution of maintaining and enhancing network coverage within the area. It is the permanent solution which forms the basis of this application. The proposed scheme is largely similar to the former rooftop arrangement and the equipment hereby proposed is similar in appearance and position.

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**[2] | **Site Name and address** | **National Grid Reference** | **Reason for not choosing**[3] |
|---|---|---|---|
| N/a | N/a | N/a | N/a |

| If no alternative site options have been investigated, please explain why:<br><br>A former rooftop site is to be re-used for the purposes of maintaining and enhancing a telecommunications network within the area of Bloomsbury, London. |
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**2 ETS - Existing Telecomm site, ES - Existing Structure, RT - Roof Top, GF - Greenfield**

3 SP - Site Provider, RD - Redevelopment Not Possible, T - Technical Difficulties, P – Planning O – Other

| **Additional relevant information** |
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| This document should be read in conjunction with the planning statement and heritage impact assessment which forms part of this planning application. |

**Contact Details**

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|---|---|---|---|
| **Name (agent)** | Chris Weir – Dot Surveying | **Telephone** | 0345 340 5456 / 07450 982 496 |
| **Operators** | EE & H3G | **Fax no** | |
| **Address** | Pure Office<br>2 Anderson Place<br>Edinburgh<br>Eh6 5NP | **Email address** | c.weir@dotsurveying.co.uk |
| **Signed** |  | **Date** | 31st January 2025 |
| **Position** | Associate Director | **Company** | Dot Surveying<br>For and on behalf of MBNL (EE (UK) Ltd and H3G (UK) Ltd) |