

Supporting Technical Information for

CTiL

78705 will provide much needed coverage and capacity to the area of Hampstead Heath where no suitable options have been found to date. Without 78705 Hampstead will continue to suffer from insufficient required levels of coverage/capacity- many buildings will be without indoor coverage and the area will suffer from very poor service and data rates.

Date Prepared: 17/12/2015

KEY TO COVERAGE PLOTS

The enclosed radio propagation plots are based on Ordnance Survey geographical information.

The level of coverage provided by a particular site is dependant on a number of variables. The main factors which determine the extent of coverage are: the frequency of the signal emitted, the height of the antenna above ground level, the characteristics of the surrounding topography and the type and occurrence of ground clutter such as buildings and trees which can cause 'shadows' or reflections and can absorb the signal.

The Radio Planners have produced accurate visual representations of the level of coverage available in this particular area by using advanced computer modelling software based on a Geographical Information System. The programme takes the numerous variables as above into account and can then calculate and plot the strength of the signal.

Existing and proposed sites are indicated by a blue or red circle and dot with the site number. The orientation of the antennas is shown by the arrows.



Site arrows show orientation of antennas

Note on large rooftop sites the antenna can be distributed in different locations from the site location. This is represented by a line extending outwards from the site to the antenna.

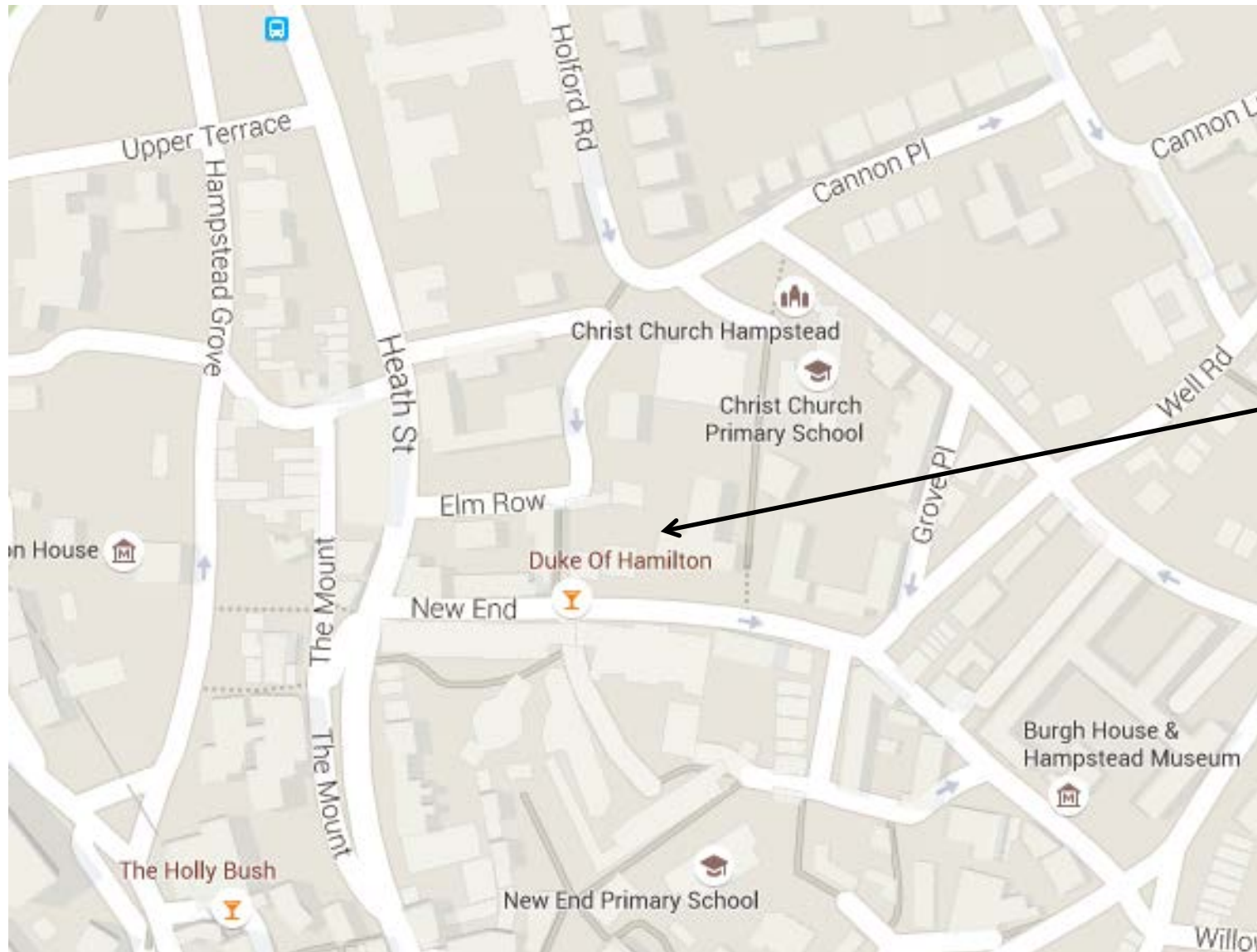
Key for GSM (2G) Plots

Orange	Sufficient signal strength to provide adequate service for indoor use of a hand portable mobile in urban areas.	Indoor Urban
Blue	Sufficient signal strength to provide adequate service for indoor use of a hand portable mobile in suburban areas	Indoor Suburban
Green	Sufficient signal strength to provide adequate service for use of a hand portable mobile in a car	In Car
Yellow	Sufficient signal strength to provide adequate service for outdoor use of a hand portable mobile.	Outdoor
No Colour	Insufficient signal strength to provide reliable service.	No Coverage

Key for UMTS (3G) Plots

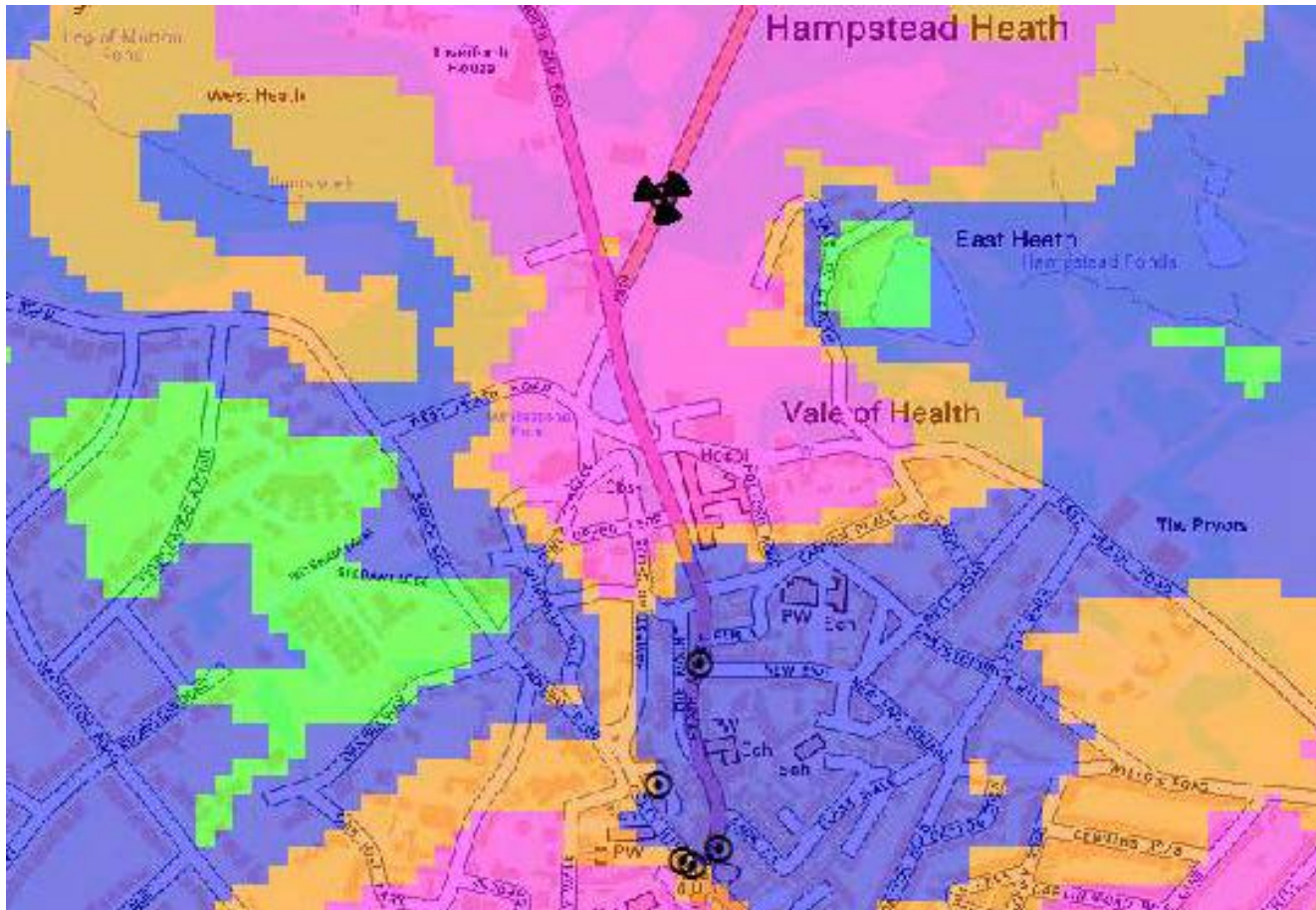
Pink	Sufficient signal strength to provide adequate service for indoor use of a hand portable mobile in urban areas.	Indoor Dense Urban
Orange	Sufficient signal strength to provide adequate service for indoor use of a hand portable mobile in suburban areas	Indoor Urban
Blue	Sufficient signal strength to provide adequate service for indoor use of a hand portable mobile in suburban areas	Indoor Suburban
Green	Sufficient signal strength to provide adequate service for use of a hand portable mobile in a car	In Car
Yellow	Sufficient signal strength to provide adequate service for outdoor use of a hand portable mobile.	Outdoor
No Colour	Insufficient signal strength to provide reliable service.	No Coverage

CTiL – Map of required Coverage Area



Centre of
Search Area

CTiL - Existing UMTS Telefonica (3G) Coverage



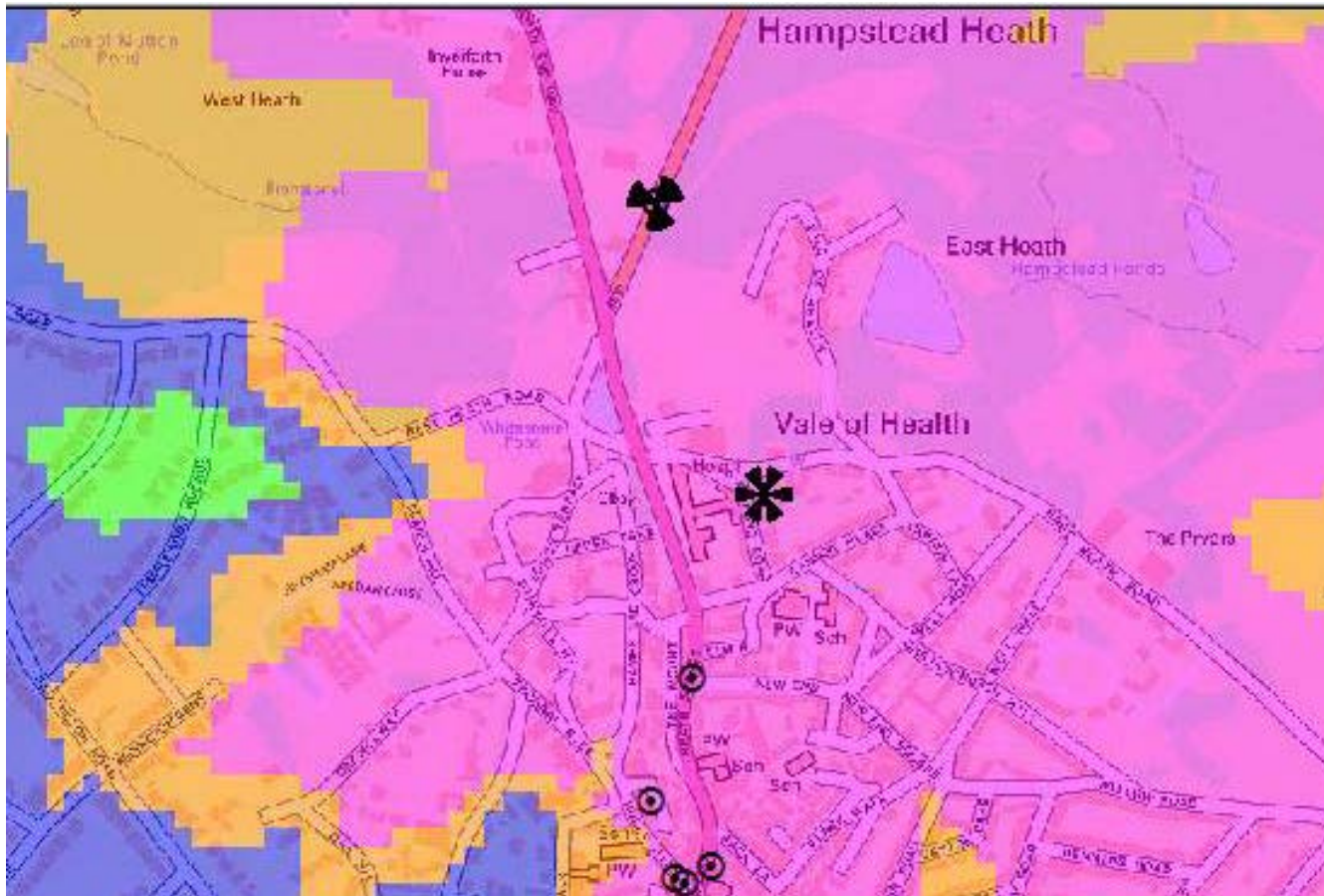
3G Coverage by Signal Level

- Indoor Dense Urban
- Indoor Urban
- Indoor Suburban
- In Car
- Outdoor

Digital Mapping Solutions from Dotted Eyes. © Crown Copyright 2006.
All rights reserved. Licence number 100019918

This coverage plan must be read in conjunction with the key and site specific supplementary information. Each colour block represents 50 metres square.

CTiL - Proposed UMTS Telefonica (3G) Coverage



3G Coverage by Signal Level

- Indoor Dense Urban
- Indoor Urban
- Indoor Suburban
- In Car
- Outdoor

Digital Mapping Solutions from Dotted Eyes. © Crown Copyright 2006.
All rights reserved. Licence number 100019918

This coverage plan must be read in conjunction with the key and site specific supplementary information. Each colour block represents 50 metres square.