

# Supporting Technical Information for **Vodafone**

**Vodafone site VF36725 – Academic House.**

**Date Prepared:** Thursday, 21 August 2014



# 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.



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

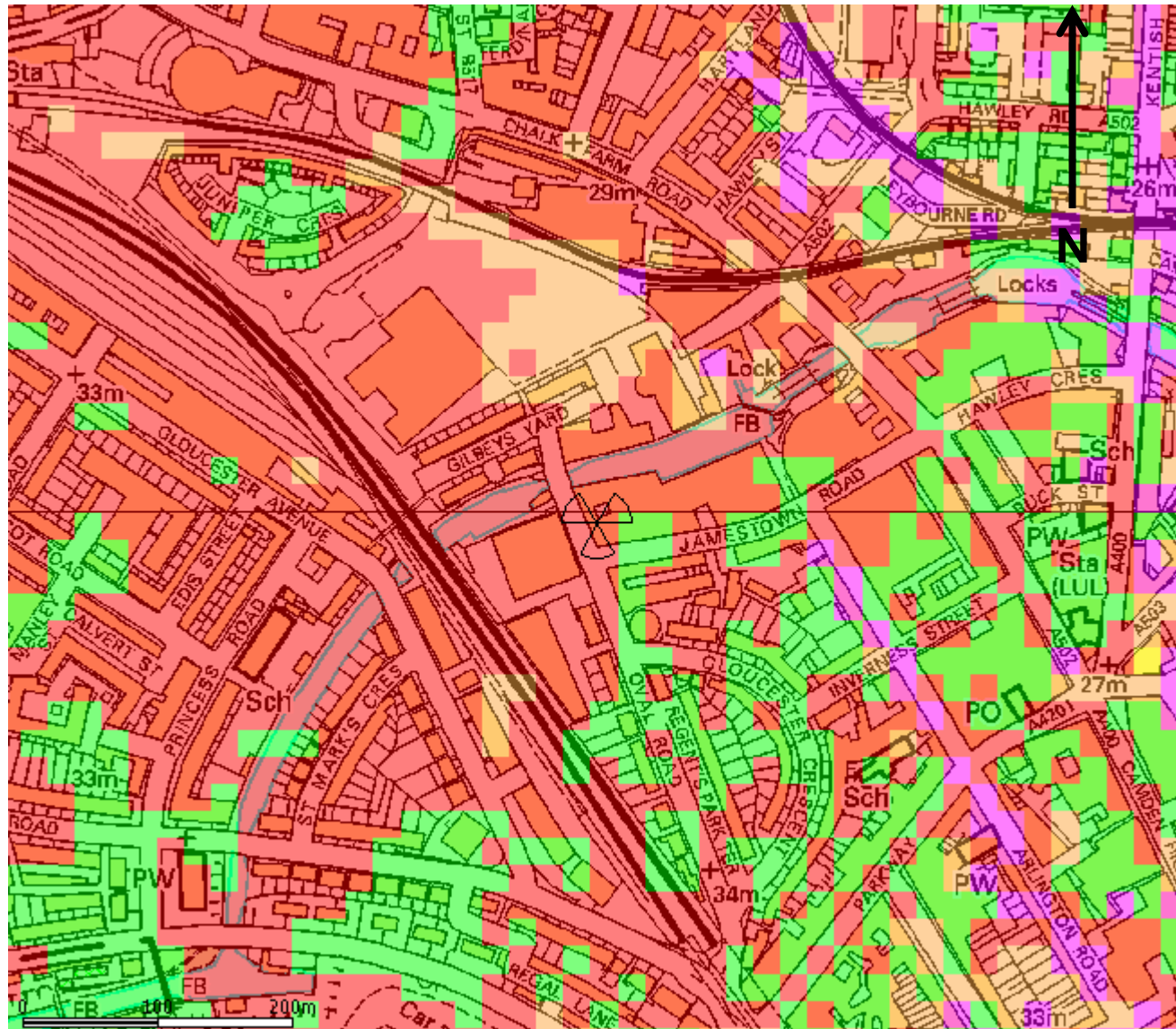
Orange	Sufficient signal strength to provide adequate service for indoor use of a hand portable mobile in urban areas.	Indoor Urban
Blue	Sufficient signal strength to provide adequate service for indoor use of a hand portable mobile in suburban areas	Indoor Suburban
Green	Sufficient signal strength to 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



# Vodafone – Existing 3G coverage without site VF 36725 -Academic House



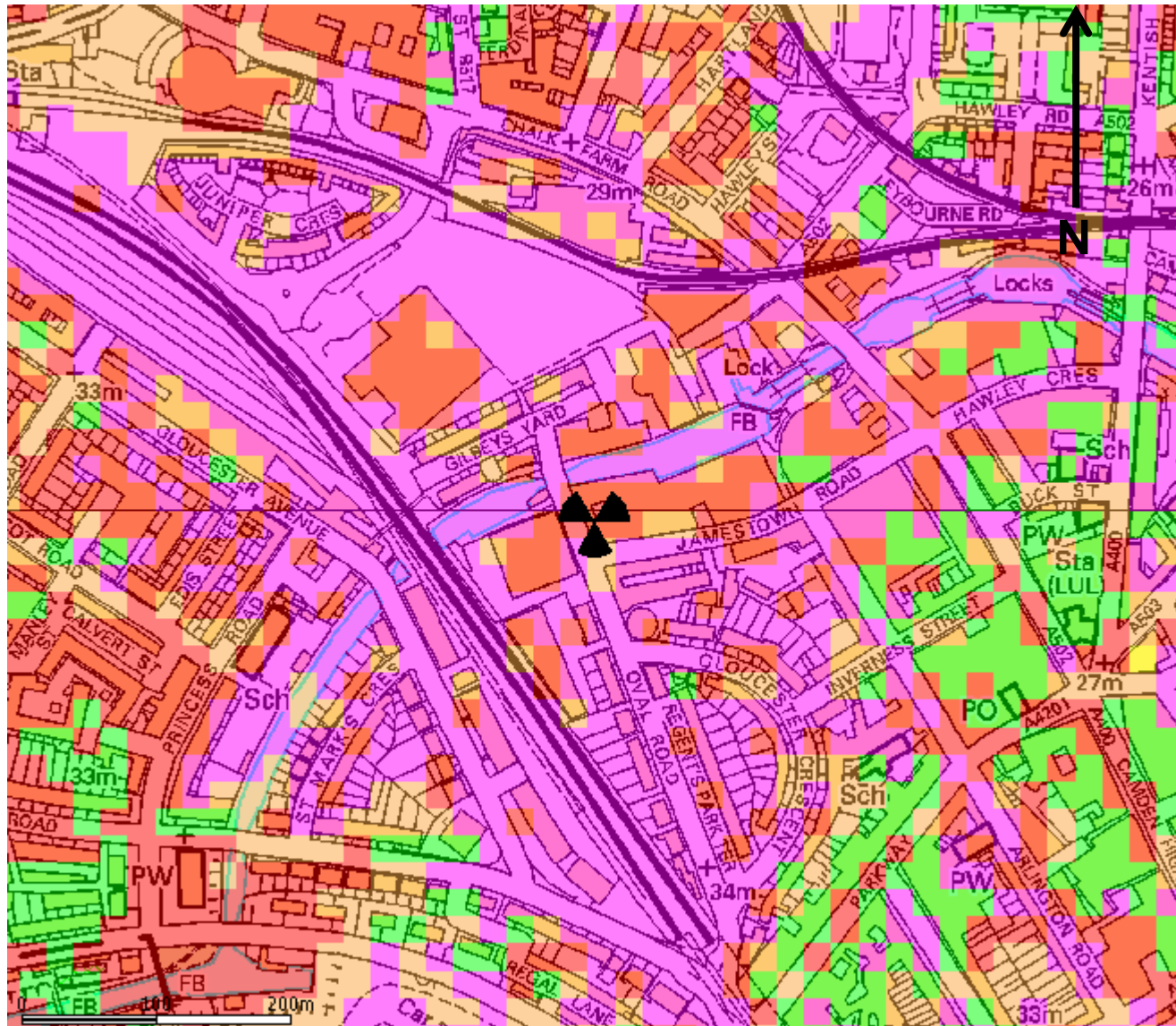
## Legend

UMTS: Coverage by signal level by cell U2100

- Dense Urban
- Urban
- Suburban
- In Car/Rural
- Outdoor



# Vodafone – Existing coverage with site VF 36725 – Academic House



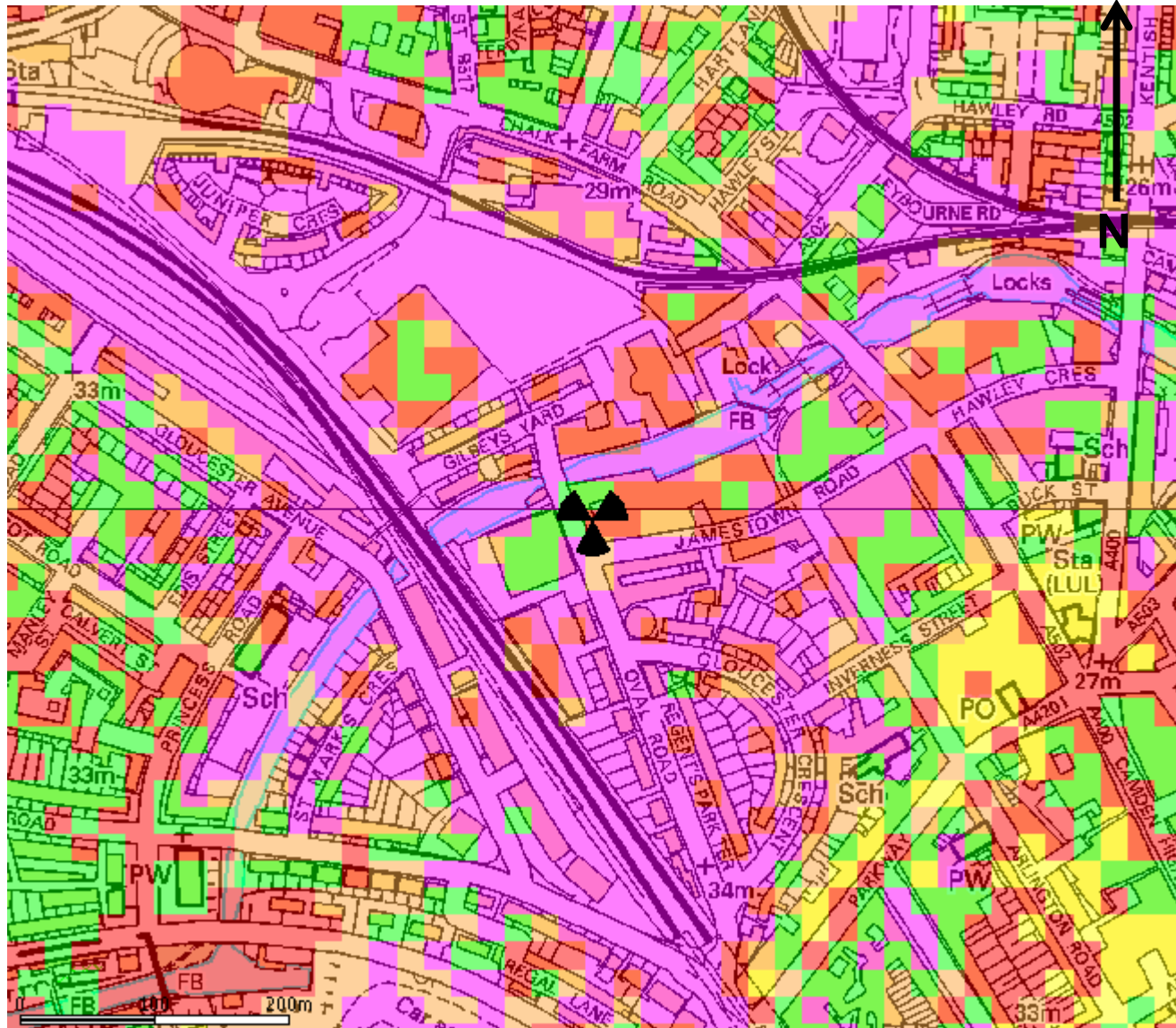
## Legend

UMTS: Coverage by signal level by cell U2100

- Dense Urban
- Urban
- Suburban
- In Car/Rural
- Outdoor



# Vodafone – Coverage provided by site VF 36725 – Academic House in isolation



## Legend

UMTS: Coverage by signal level by cell U2100

- Dense Urban
- Urban
- Suburban
- In Car/Rural
- Outdoor

