Part 1

SITE SPECIFIC SUPPLEMENTARY INFORMATION

1. Site Details 08/02093/PNOT-5. 31 DEC 2008

Site Name:	Cheadle	Site Address:	Brookhouse Way, Cheadle, Stafford, ST10 1QJ
NGR:	E399838 N342774		
Site Ref Number:	63658A	Site Type:[1]	Macro

2. Pre Application Check List

Site Selection

Was an LPA mast register used to check for suitable sites by the operator or the LPA?	Yes	
Was the industry site database checked for suitable sites by the operator:	Yes	

Annual roll out consultation with LPA

Date of last annual rollout information/submission:	04/09/2008
Name of Contact:	Stephen Williams
Summary of outcome/Main issues raised	No response received

Pre-application consultation with LPA

Date of written offer of pre-application consultation:	16 October 2008	
Was there pre-application contact:	Yes	
Date of pre-application contact:	No	
Name of contact:	Stephen Williams	
Summary of outcome/Main issues raised: Further pre application consultation was sent on 16.10.08, providing a list of alternative sites, and a community consultation plan. To date no response has been received.		

Ten Commitments Consultation

Rating of Site under Traffic Light Model:		Amber	

[1] Macro or Micro

Outline Consultation carried out: A community consultation exercise was undertaken with informative consultation letters sent to the ward councillors Ellis and Warrillow 16.10.08.
Summary of outcome/Main issues raised: To date both councillors have responded via email. Cllr Ellis "expressed issues with the proposed location on the edge of an open space detracting from the open space as well as affecting visibility of and from the open space – which may be a hindrance to vehicular and pedestrian movements". Cllr Ellis also stated that he would prefer to see the installation sited on the opposite side of Brookhouse Way. Cllr Warrillow asked questions regarding the proposed location, site sharing and proposed other areas / sites away from the target area. Of note is a question regarding height and the possibility of a reduction in height to the proposal.

School/College

Location of site in relation to school/college: There are no schools or colleges in the near vicinity to consult with.
Outline of consultation carried out with school/college: N/a
Summary of outcome/Main issues raised: N/a

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:	29.12.08.		

3. Proposed Development

The proposed site:
The proposed site is located on Brookhouse Way, Cheadle, Stafford, ST10 1QJ. More specifically the site will be located on a wide section of pavement on Brookhouse Way. The surrounding area is a mix of residential and commercial / industrial properties. To the south and west of the proposed site lie the aforementioned commercial / industrial properties of Brookhouse Industrial Estate. To the north, north east, east and south east are residential properties, with the nearest property roughly 80 yards away and the majority of properties over 100 yards away. In the immediate vicinity there is the main road, Brookhouse Way, which is aligned with existing street furniture in the form of street lights. There is also an area of open space to the north and north east between the proposed site and nearest residential properties with a small landscaped area immediately to the east of the proposed site containing a number of tall mature trees. It is acknowledged that residential properties can be found within the wider vicinity of the proposed site, however given their orientation within the street scene and the positioning of apertures, alongside a landscaped area, it is considered that the proposal would not significantly affect the outlook from these properties. The proposed site is set amongst existing street furniture whilst the trees adjacent to the site will break up the appearance of the streetworks monopole resulting in a minimal impact upon the surrounding amenity. Irrespective of the installation's use as a telecommunications base station, it is highlighted that the introduction of a new item of street furniture within the public realm will always be a noticeable addition. However it should be recognised that visibility or indeed a sites proximity to sensitive designations or land uses does not automatically result in harm occurring. This is argued in the case of the application proposals, whereby it's siting within the constraints and character of the cell area, coupled with its technical limitations should be borne into consideration. It is appreciated that the site will be visible to pedestrians and road users, however it is considered that the monopole and equipment cabinet will soon be seen as a utilitarian feature not uncommon in such a street scene and it will in time be accepted as part of the urban fabric of the area. It is considered that road users will not have their visibility impaired by the proposed monopole or equipment cabinet owing to the base stations positioning set back from the highway. The monopole and equipment cabinet have been sited on a wide pavement, so as not to impede pedestrian movements.

Enclose map showing the cell centre and adjoining cells:
See enclosed coverage plots.

Type of Structure
Description: The installation of a radio base station consisting of a 12 metre high (to the underside of antenna) streetworks monopole that will accommodate 3no 3G antenna. There will also be a ground based equipment cabinet adjacent to the pole. Aware that standard mast design can appear incongruous, it is of note that the monopole benefits from a shrouded antennae rather than a traditional 'head frame' design, which will further mitigate the impact of the proposals. It is highlighted that the monopole and equipment cabinet will be finished in a grey colour to match existing streetlamps however the applicant welcomes any suggestions of the LPA, with regards an appropriate finish. To further reduce the impact of the base station, the applicant have opted to connect the site into the national network via an underground link rather than rely on the usual transmission dish, which Vodafone judged might affect the linear nature of the monopole within the street scene and the context of existing linear features.

Overall Height:	
Height:	14.3 Metres
Equipment Housing:	
Length:	1.58 Metres
Width:	0.38 Metres
Height:	1.35 Metres
Materials:	
Tower/mast etc – type of material and external colour:	Galvanised steel, unless otherwise requested by LPA
Equipment housing – type of material and external colour:	Steel, colour coated grey (RAL 7035), unless otherwise requested by LPA

Reasons for choice of design:
In address of the appearance of the proposal, it is believed that the scheme takes a form which is sympathetic within the context of its immediate locality which includes existing lighting columns and natural screening from the nearby trees. The streetworks monopole is considered less visually intrusive than a larger ground based lattice mast which would be bulkier in appearance than the proposed slim line streetworks monopole. Aware that standard mast design can appear incongruous, it is of note that the monopole benefits from a shrouded antennae rather than a traditional 'head frame' design, which will further mitigate the impact of the proposals. It is highlighted that the monopole and equipment cabinet will be finished in a grey colour to match existing street lighting columns. To further reduce the impact of the base station, the applicant have opted to connect the site into the national network via an underground link rather than rely on the usual transmission dish, which Vodafone judged might affect the linear nature of the monopole within the street scene and the context of existing linear features.

4. Technical Information

ICNIRP Declaration attached ICNIRP 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.	Yes	

Frequency:	2.1 GHZ
Modulation characteristics[2]	QPSK
Power output (expressed in EIRP in dBW per carrier) In order to minimise interference within its own network and with other radio networks, Vodafone 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 Vodafone Ltd's network, the radio base station that is the subject of this application will be configured to operate in this way	
Height of antenna (m above ground level)	12 metres (to underside of antenna)

5. Technical Justification

Enclose predictive coverage plots.

Reason(s) why site required e.g. coverage, upgrade, capacity (map attached if required):
A site is required in this location in order to improve radio coverage and capacity in the surrounding area. A site in this location could also help in the prevention of call dropping. Call dropping occurs due to the inability of adjoining cells to pass on active calls to each other; this will result in the termination of live calls. The minimum level of coverage required is urban coverage. The site is required to increase network capacity and provide 3G coverage to the Cheadle area of Staffordshire. This location currently suffers from low levels of 3G coverage and therefore, a mast is required to bring 3G coverage in the area up to the standards set by Vodafone and requirements of central government.

[2] 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

It should be noted that in densely developed urban environments, or in environments containing robust commercial buildings, the buildings will attenuate signals to a greater extent than in a more open suburban or rural environments. As such there is a need to provide a higher quality of signal in urban environments.

GIS modelling plots illustrating the predicted levels of coverage are included with this application.

Plot 1 – Proposed 3G Coverage from Surrounding Sites

Plot 1 shows the level of 3G coverage expected by the surrounding sites without the proposed installation. The plot shows that the area around the proposed installation does not benefit from good coverage levels. The non coloured areas on the plot show this. There is currently a large area of lower 3G coverage in the search area in particular areas around Cheadle. Due to this poor quality coverage, there are large areas to the north, east south and west of Cheadle which are without the required 'Urban' telecomm coverage.

Plot 2 – 3G Coverage from Surrounding Sites in Conjunction with Proposed Site

Plot 2 shows that the proposed installation will address a large part of the coverage deficiency identified in Plot 1. Plot 2 shows that the proposed mast will provide high quality 'Urban' coverage to an area of housing and major through roads. This plot shows how effective the mast is in conveying its signal over the area, thus bringing coverage in the area up to Vodafone's own high standards and requirements set out by central government.

Further detail regarding the general operation of the Vodafone network can be found in the accompanying document entitled 'General Background Information for Telecommunications Development'. This information is provided to assist the local planning authority in understanding any technical constraints on the location of the proposed development.

6. **Site Selection Process – alternative sites considered and not chosen (Enclose map highlighting all alternatives that have been considered by the operator)**

Site[3]	Site Name and address	Reason for not choosing[4]
ETS	Orange (ref - STA0049) Draycott Cross Farm, Cheadle, Staffordshire, ST10 2NS	This location is too far from the search area to provide the required level of coverage. Therefore, this site has to be discounted as it does not meet Vodafone's technical requirements. This site was also discounted by the radio planner due to the significant ground height in this location. Given the topography it is of note that an installation in its geographical position would not provide meaningful coverage to the target area. Therefore, this site has to be discounted as it does not meet Vodafone's technical requirements.
GF	Klarius Manitube Plant / Factory, Huntley Lane, Huntley, Staffordshire, ST10 1UA	This location is too far from the search area to provide the required level of coverage. Therefore, this site has to be discounted as it does not meet Vodafone's technical requirements.
GF	New Haden Works, Draycott Cross Road, Cheadle, Stoke-on-Trent, ST10 2NP	This location is too far from the search area to provide the required level of coverage. Therefore, this site has to be discounted as it does not meet Vodafone's technical requirements.
GF	Brookhouse Way opposite application site, Cheadle, Stoke-on-Trent, ST10 1SR	A ground based installation could not be accommodated on this stretch of pavement due to the presence of underground services. Therefore a site could not be progressed due to build issues.
GF	Base Body Fitness, Ryandra Business Park, Brookhouse Way, Cheadle, Stoke-on-Trent, ST10 1SR	There is insufficient space available to implement a proposal of this nature. Therefore, this site has to be discounted because Vodafone can not implement the proposal.
GF	Wheel 'N' Tyres, Ryandra Business Park, Brookhouse Way, Cheadle, Stoke-on-Trent, ST10 1SR	There is insufficient space available to implement a proposal of this nature. Therefore, this site has to be discounted because Vodafone can not implement the proposal.
GF	APB Group, Ryandra Business Park, Brookhouse Way, Cheadle, Stoke-on-Trent, ST10 1SR	The site provider was unwilling to accommodate a telecommunications installation. Therefore, this site has to be discounted as Vodafone does not have the owner's permission to use their land or building.
GF	IAE, Ryandra Business Park, Brookhouse Way, Cheadle, Stoke-on-Trent, ST10 1SR	The site provider was unwilling to accommodate a telecommunications installation. Therefore, this site has to be

[3] ETS – Existing Telecomm site, ES – Existing Structure, RT – Roof Top, GF – Greenfield
[4] SP – Site Provider, RD – Redevelopment Not Possible, T – Technical Difficulties, P – Planning, O - Other

		discounted as Vodafone does not have the owner's permission to use their land or building.
GF	Centrewire Ltd, Ryandra Business Park, Brookhouse Way, Cheadle, Stoke-on-Trent, ST10 1SR	The site provider was unwilling to accommodate a telecommunications installation. Therefore, this site has to be discounted as Vodafone does not have the owner's permission to use their land or building.
GF	Steadman Vans & Cars, Ryandra Business Park, Brookhouse Way, Cheadle, Stoke-on-Trent, ST10 1SR	The site provider was unwilling to accommodate a telecommunications installation. Therefore, this site has to be discounted as Vodafone does not have the owner's permission to use their land or building.
GF	Tungate Group, Tungate System, Ryandra Business Park, Brookhouse Way, Cheadle, Stoke-on-Trent, ST10 1SR	The site provider was unwilling to accommodate a telecommunications installation. Therefore, this site has to be discounted as Vodafone does not have the owner's permission to use their land or building.

Additional relevant information:

Siting:

The proposed installation is located on a wide section of pavement along Brookhouse Way. Given the makeup of the area and lack of alternative sites, it was established that a streetworks proposal would be the only viable solution which could provide coverage to this area of Cheadle, Staffordshire. The proposed design of the radio base station is considered to be unobtrusive given the nature of the surrounding area, which has existing street lighting columns in the immediate vicinity.

It is acknowledged that the general cell area is predominantly residential in character; hence Vodafone's decision to locate on a road where the highway and its street furniture provides the overarching context. It is of note that the majority of nearby buildings within the immediate surroundings of the proposed site are industrial and commercial in nature and of a substantial size and mass.

Visual appearance:

The proposed development at this location relates to the installation of a 12 metre high (to underside of antenna) streetworks monopole, incorporating three no. 3G antennas found within the upper section of the mast. An equipment cabinet will be sited alongside the proposed installation.

A streetworks monopole is designed to allow minimal intrusion whilst meeting Vodafone's coverage requirements in the area. The installation is proposed to be sited near to existing lighting columns, helping the installation to assimilate into its surroundings. Furthermore the proposed site is located in and around some natural backdrop such as 7 metre high trees. The point of access will be obtained off Brookhouse Way.

The proposed siting on the footpath of Brookhouse Way adjacent to Glebe Road. This means that the proposed installation is situated away from the majority of Cheadle's residential properties situated to the east. The proposed installation as been sited so that it will not impinge visibility from Brookhouse Way, making it an unobtrusive feature in the area.

Through using a streetworks monopole that is finished in a grey colour similar to that of the existing street lighting columns, it is considered that this will aid the merging of the installation and therefore minimise the visual impact of the installation upon the surrounding amenity. The ground based equipment cabinet will also be grey in colour. The surrounding trees are considered to have a softening effect of the proposed installation upon the surrounding area.

Due to the height of trees in the locality there is a need for the radio signal to clear these obstacles. This means that an installation of the proposed height is necessary in order to address the identified hole in coverage and reach the target area.

There are no other telecom installations near to the proposed installation. The other option would be a ground based lattice mast; however, in order to provide the correct level of coverage to meet Vodafone's technical requirements, a much larger installation would have been necessary. It is considered a bulkier mast in this location would be visually less acceptable than the proposed development on Brookhouse Way, Cheadle, ST10 1QJ.

Policies:

National policy advice on the siting of telecommunications base stations is found within Planning Policy Guidance Note "Telecommunications" (PPG8), August 2001.
The Appendix-Supporting Guidance to PPG8 identifies as an essential and beneficial element of life of the community and in the national economy. It acknowledges that fast, cost effective and reliable communications can attract businesses to an area, encouraging competitiveness and economic growth. In addition, the continuing improvements in all forms of telecommunications systems will encourage more sustainable methods of working such as home working, reduced journeys and therefore reductions in pollutants from vehicle emissions.

Paragraph 5 states "The Government's policy is to facilitate the growth of new and existing telecommunications systems whilst keeping the environmental impact to a minimum." The proposed installation is designed to achieve Vodafone's technical requirements whilst utilising the least intrusive equipment array possible, thereby keeping environmental impact to a minimum.

In view of this policy, authorities are advised in PPG8 to respond positively to proposals for telecommunications developments and to understand the associated special problems and technical needs.

Policy F7 in the Staffordshire Moorlands Borough Council Local Plan may also be considered relevant. Policy F7 concerns telecommunications developments and state:

POLICY F7 TELECOMMUNICATIONS

"LARGE MASTS AND ANTENNAE WILL BE PERMITTED WHERE THE FACILITY HAS A MINIMAL VISUAL IMPACT AND DOES NOT HAVE A SIGNIFICANT ADVERSE IMPACT ON THE AMENITY OF SURROUNDING LAND USES. THIS IS OF PARTICULAR IMPORTANCE IN RELATION TO CONSERVATION AREAS AND IN OPEN COUNTRYSIDE, OR WHERE THERE IS CLEAR EVIDENCE THAT RADIO INTERFERENCE WILL RESULT. EXCEPTIONALLY, SUCH FACILITIES MAY BE PERMITTED IN LESS SUITABLE LOCATIONS WHERE AN APPLICANT CAN DEMONSTRATE THAT THERE ARE NO TECHNICALLY FEASIBLE ALTERNATIVES."

The proposed site is required to provide 3G coverage to the Cheadle area of Staffordshire which has been demonstrated in the enclosed coverage plots, which show a coverage deficiency within the nominal cell area. Therefore it is considered that the proposal complies with Policy F7.

The legal requirements of telecommunications code system operators have been adhered to. Therefore it is considered that the proposal complies with Policy F7.

It is considered that the proposed installation is sited in such a way so as to make use of the existing features such as the established tall trees and street lighting columns which will aid the structure to blend into its setting and assimilate into the environment. The installation is sited designed to appear as an unobtrusive feature upon the highway and as such the development of this site would have a minimal impact on the visual amenity from surrounding view points. It is therefore considered that the proposed installation is in compliance with Policy F7.

A thorough investigation of the surrounding area was carried out and the Local Planning Authority mast register and industry data base were checked for suitable sites by the operator. Although there are other radio base stations within the search area; however, these structures are not available to accommodate a second operator. It is therefore considered that Policy F7 has been adhered to as far as possible.

Health:

Planning Policy Guidance 8 (PPG8) advises, on the issue of health, that:

"Paragraph 98...it is the Government's firm view that the planning system is not the place for determining health safeguards. It remains central Governments responsibility to decide what measure are necessary to protect public health. In the Government's view, if any proposed mobile phone base station meets the ICNIRP guidelines for public exposure it should not be necessary for a local planning authority, in processing an application for planning permission or prior approval, to consider further the health aspects and concerns about them".

The core principle of this principle has recently been challenged in both the High Court and the Court of Appeal (T-Mobile UK Ltd, Hutchinson 3G Ltd, Orange Personal Communications Services Ltd -V- First Secretary of State & Harrogate Borough Council 2004). On both occasions the case was dismissed, thereby confirming that if a proposed mobile phone base station meets the ICNIRP guidelines for public exposure it should not be necessary for a local planning authority to consider further the health aspects and concerns about them.
A declaration of compliance with the ICNIRP guideline for public exposure has been enclosed with this application. RF emissions from the proposed installation will be may times lower than the ICNIRP reference standard in all publicly accessible areas around the installation. In the light of the above information, it is clear that the weight to be given to such concerns should not be so great as to warrant a refusal of the application on health grounds.

Contact Details

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Operator:	Vodafone Ltd	Fax no:	
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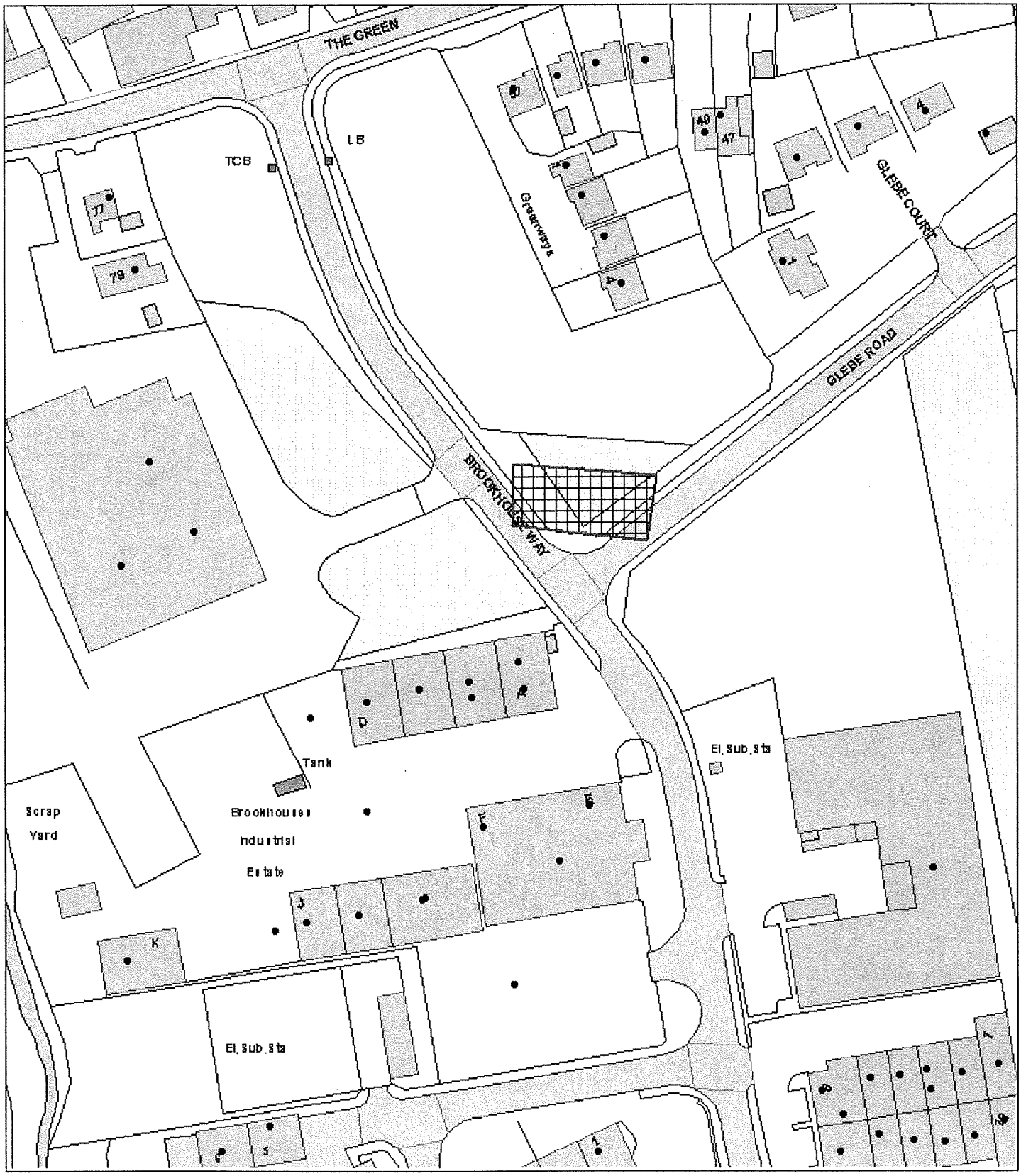
Signed:	KJ	Date:	29.12.08
Position:	Planner	Company: (Agent) (on behalf of Vodafone Ltd)	Mono Consultants Ltd Victoria Buildings 1 – 7 Princess Street Manchester M2 4DF

Reference:	08/02093/PNOT_5 Cheadle



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Organisation	SMDC
Department	Planning
Description	