DESIGN, ACCESS & SUPPORTING STATEMENT

Cell Reference	41299 – Cudworth West		
Site Address	Barnsley Road, near the junction with Rose Tree Avenue, Cudworth, Barnsley, South Yorkshire, S72 8UU		
Easting	438930	Northing	409346
Description of Development	The installation of a radio base station consisting of a 15 metre monopole and ground based equipment cabinet ancillary thereto		

CONTENTS

1.0 General Introduction & Site Details

1.1 Description of Application Site and Surroundings
1.2 Description of Development
1.3 Access Arrangements

2.0 Legal Obligation & Technical Justification

2.1 Legal Obligation to Provide a Service
2.2 Compliance with other Regulations
2.3 Technical Justification

3.0 Site Selection Process

3.1 Annual Rollout Consultation
3.2 Database Searches
3.3 Pre-application Consultation
3.4 Alternative Sites Considered

4.0 Reasons for Selecting the Site and Design

5.0 Planning Policy

5.1 National Policy
5.2 Code of Best Practice
5.3 Local Policy

6.0 Health & Safety

7.0 Summary

Appendices

Appendix A - Discounted Options & Search Area

Appendix B - Technical Justification & Coverage Plots

Appendix C - ICNIRP Compliance Statement

260 Bath Road
Slough, Berks
SL1 4DX United Kingdom

Phone: +44 (0) 1753 565 000
Fax: +44 (0) 1753 565 010
www.o2.co.uk

1.0 General Introduction & Site Details

This supporting statement forms part of an application for prior approval on behalf of Telefónica O2 UK Limited. The application relates to the installation of a radio base station consisting of a 15 metre monopole and ground based equipment cabinet ancillary thereto located at Barnsley Road, near the junction with Rose Tree Avenue, Cudworth, Barnsley, South Yorkshire, S72 8UU.

This supporting statement aims to assist the Local Planning Authority in their evaluation of the telecommunications proposals, stating clearly the facts and issues surrounding this planning application. It takes into account the matters of address relating to a "Design and Access Statement" which is a requirement of s.42 of the Planning and Compulsory Purchase Act 2004. This supporting statement helps to set out the processes that have taken place towards establishing the siting and appearance of the development which now forms part of this planning application.

1.1 Description of Application Site and Surroundings

The application site is located on Barnsley Road, near to the junction with Rose Tree Avenue. Barnsley Road is an 'A' classified road (A628) which runs essentially south-west to north-east, through Cudworth, connecting Barnsley with its outlying suburbs. The town of Cudworth is predominantly residential in character with most of its commercial uses found along Barnsley Road.

The application site itself is found on a wide corner section of pavement and backs onto a small park which is defined by a crossed footpath. The boundary of the park is defined by trees and foliage which range in height and maturity. There are various items of street furniture in the locality of the application site including street lighting columns and road signage.

1.2 Description of Development

The proposed development at this location relates to the installation of a 15 metre high streetworks monopole incorporating three no. 3G antennas found within the upper section of the mast. The antennas will be housed within an integral shroud which will measure 380mm in diameter, stemming down to the main body of the column which measures 324mm in diameter. Equipment cabinet measures 1898w x 798d x 1650h mm and will be sited alongside the proposed installation.

The streetworks monopole in its entirety will be painted black (BS Ref.:- 00 E 53) whilst the equipment cabinet will be painted dark green (RAL Ref.: - 6009) It is noted that the above matters relating to colours are detailed on the plans (Drawing Ref.: - C58602/PL/002) that accompany this prior approval application.

As a licensed Telecommunications Code Systems Operator, the applicant benefits from certain permitted development rights as set out in Part 24 of Schedule 2 to the Town and Country Planning (General Permitted Development) Order 1995 which was amended by the Town and Country Planning (General Permitted Development) (Amendment) (England) Order 2001. Where development exceeds the limits set out in the GPDO or relates to areas where permitted development rights do not apply, then operators are subject to the usual requirement for full planning permission. The proposals in this instance benefit from permitted development rights subject to obtaining the prior approval of the Council in relation to matters of siting and appearance only, in which the legislation does not provide an opportunity for conditions to be attached to a decision.

Nevertheless should the Local Planning Authority be minded to grant prior approval and feel alternative measures of mitigation would help improve the proposed scheme then the applicant would welcome any suggestions during the life of the application so as to prevent any unnecessary informative(s) being attached to a decision.

1.3 Access Arrangements

The proposals will be located on a section of pavement alongside the highway hence there will be no compound enclosure and the development will be accessible within the public realm. Nevertheless the ground based equipment cabinets have an appearance similar to other communications and electrical service boxes found in typical street scenes in which similar access operations can be likened. It is likely that once built, the site will be visited infrequently for maintenance purposes only. Access to the site will be by foot in which the applicant would gain access to the equipment housed within the cabinets. In the event of the antennas within the mast needing to be maintained this will be achieved by siting a cherry picker with a hydraulic platform alongside the base station.

It should be recognised that the siting, design and access to a typical streetworks installation can be constraint by a number of parameters which are explained in section 3.4 of this supporting statement.

2.0 Legal Obligation & Technical Justification

2.1 Legal Obligation to Provide a Service

Telefónica O2 UK Limited is the operator of an electronic communications network. Telefónica O2 UK Limited complies with the Electronic Communications Code as enacted under the Communications Act 2003, which provides the necessary legislative basis to run an electronic communications network. As an electronic communications network operator, Telefónica O2 UK Limited has the benefit of Permitted Development rights under Part 24 of Schedule 2 to the Town and Country Planning (General Permitted Development) Order 1995 (as amended).

2.2 Compliance with Other Regulations

'Please accept this letter and its enclosures as a notification in accordance with regulation 5 of The Electronic Communications Code (Conditions and Restrictions) Regulations 2003 as required by the Communications Act 2003. No fee is required for this notification. Telefónica O2 UK Limited is obliged, under regulation 6(2) to give one calendar month's notice, in writing, to the planning authority of its intention to install electronic communications apparatus. The apparatus to be installed consists of a 15 metre monopole and equipment cabinet ancillary thereto. The apparatus will be installed at Barnsley Road, near the junction with Rose Tree Avenue, Cudworth, Barnsley, South Yorkshire, S72 8UU.'

2.3 Technical Justification

Paragraph 6 of PPG8 states that Local Planning Authorities should not question the need for a telecommunications base station. However, paragraph 5 of PPG8 highlights that in making an application for telecommunications development, operators may be expected to provide evidence regarding the need for the proposed installation. The proposed installation is needed to provide 3G coverage to the residential and commercial properties of Cudworth.

The coverage plots and technical justification, enclosed in appendix A, provide an explanation of the operation of the network and the technical constraints on siting. Telefónica O2 UK Limited (O2) has identified a coverage requirement in this area of Cudworth in which the coverage plots provides an indication of the projected radio coverage provided by the sites surrounding the proposal site if they were all operational. It can be seen from the plots that the coverage is not contiguous and therefore a site is required to fill a gap in coverage. These plots clearly show how the proposed installation would fill an existing coverage gap to enable continuous coverage to be achieved in the area.

A map is also enclosed in appendix A that indicates the extent of the area in which an installation is required for Telefónica O2 UK Limited. The search area within which an installation needs to be established in order to meet the coverage requirement is constrained by the location and extent of the coverage provided by existing installations in the surrounding area. An installation located outside of this search area would not allow Telefónica O2 UK Limited to provide the desired level of coverage and would therefore not adequately fill the current coverage gap.

3.0 Site Selection Process

3.1 Annual Rollout Consultation

Date of last annual rollout information/ submission	09.10.07
Name of contact	Martin Winnard
Main issues/ outcome – General rollout within the authority	

3.2 Database Searches

Was the mast register of the authority responsible for planning used to check for suitable sites by the operator or the authority?	Yes	No
if no explain why		
Was the industry site database checked for suitable sites by the operator?	Yes	No
if no explain why		

3.3 Pre-application Consultation

The Government strongly encourages pre-application discussions between operators and local planning authorities in order to find the optimum solution for the development requirements. Paragraphs 9 – 13 of PPG8 go on to advise that pre-application discussions should also be carried out between operators and other organisations with an interest in the proposed development as well as people likely to be affected by the proposals including schools.

In order to explore the possibilities with regard to this proposal a pre-application consultation exercise has been undertaken. This proposal was given a Green rating when it was assessed against the Traffic Light Rating Model, further details of the Traffic Light Rating Model can be found in Annex D to the Code of Best Practice on Mobile Phone Network Development. Initial pre-application consultation exercise was undertaken with the Local Planning Authority on 6th August 2008, regarding this cell, however no comments have been forthcoming.

3.4 Alternative Sites Considered

In accordance with the licence obligations and advice in PPG8 and the Code of Best Practice the applicant's network rollout team undertook an inspection of the area of search, which investigated the following siting and design options using this sequential approach to site selection:

- Upgrading their own existing base stations;
- Using existing telecommunications structures belonging to another communications operator. I.e. Mast and/ or site sharing, co-location;
- Installations on existing high buildings or structures including National Grid pylons;
- Using small scale equipment; and finally
- Erecting a new ground based mast site – (1st) Camouflaging or disguising equipment. (2nd) A conventional installation e.g. a lattice mast and compound.

The applicant's site selection strategy is to keep the overall environmental impact to a minimum. Mast sharing is always progressed where it is technically and legally possible and where it is the local planning authority's preferred environmental solution. New 'Greenfield' sites are only developed where there are no viable or accessible alternatives or it is the local planning authority's preferred approach. The feasibility of the acquisition, build and maintenance of the site also needs to be taken into account.

A number of sites have been considered prior to the proposal site being selected. These were given careful consideration with regard to the impact of development at each location in terms of visual and residential amenity, other planning issues as well as the technical suitability of each site to O2. In selecting the site and design of the proposed installation the views that have been received as a result of the consultation exercise have been taken into account. The location considered most acceptable in terms of all these factors was then selected.

It should be recognised that a typical cell search area may contain a number of locations where a streetworks type proposal could be installed. Streetworks style installations consist of a slim line pole and an equipment cabinet and are predominantly found on areas of adopted highway land such as a grass verge or pedestrian footpath. However, there are a number of common parameters regardless of the visual prominence of the site that prevent sites from being suitable for streetworks installations. When considering locations for possible streetworks installations it is imperative that the parameters below are given full and proper consideration.

The following parameters have a direct influence over the locations at which a streetworks installation can be proposed, if any one parameter is compromised then the location is unsuitable:

- Land Ownership – It is necessary to have the agreement of the landowner to install equipment on their land. Most land immediately adjacent to a highway will be adopted highway. However, this is not always the case and therefore it would be necessary to seek the consent of the landowner;
- Underground Services – The presence of underground services (such as water and gas pipelines or electricity and telecommunications cables) restrict the ability to install equipment due to the depth of the root foundation required for the pole, which must avoid these services. In addition it is necessary for the utility companies to maintain access to these services;
- Proximity to Overhead Services and existing lighting columns – Sites for streetworks installation can be restricted due to the presence of overhead cables (such as overhead telephone and electricity cables) and the proximity of existing lighting columns. Sufficient vertical and horizontal separation is required to allow the proposed antenna to comply with ICNIRP requirements;
- The Width of Footpath that will be remaining once the equipment is installed – Once the cabinet is installed sufficient space must remain to allow pedestrians to pass safely and without having to step into the adjacent road. Typically, local highways authorities will require 1.8 metres of footpath to allow pedestrians, push chairs and wheel chairs to pass safely;
- Access Requirements – Equipment must not obstruct access to driveways, cycle lanes and pedestrian crossings;
- Visibility Splays – Equipment must be sited in order that it does not have a detrimental impact upon the visibility splays of traffic emerging from road junctions and other access routes.
- Parking for maintenance vehicles – Sufficient space must exist adjacent to a site to allow a hydraulic platform vehicle, often referred to as a 'cherry picker', to park safely. This vehicle is required to allow the antennas at the top of the pole to be accessed and maintained.

The details of alternative sites considered prior to selecting the proposed site and design are contained in the list below and are plotted on the map attached to Appendix A:

List of Sites Considered

	Site Type	Site Name and Address	Reason for Rejection
1	Rooftop	West End Institute, St. Johns Road, Cudworth, Barnsley, South Yorkshire, S72 8DB	The site provider was approached about accommodating a telecommunications installation, however there has been no confirmation of interest. Therefore, this site has to be discounted as the operator does not have the owner's permission to use their building.
2	Rooftop or Greenfield	Dootson Motors, Barnsley Road, Cudworth, Barnsley, South Yorkshire, S72 8UU	The site provider was unwilling to accommodate a telecommunications installation. Therefore, this site has to be discounted as the operator does not have the owner's permission to use their land or building.
3	Rooftop	Star Hotel, Barnsley Road, Cudworth, Barnsley, South Yorkshire, S72 8BX	The site provider was approached about accommodating a telecommunications installation, however there has been no confirmation of interest. Therefore, this site has to be discounted as the operator does not have the owner's permission to use their building.
4	Greenfield	Wilson Motors, 161 Barnsley Road, Cudworth, Barnsley, South Yorkshire, S72 8UL	There is insufficient space available to implement a proposal of this nature. Therefore, this site has to be discounted because the operator can not implement the proposal. Nevertheless should a scheme be achievable it is considered that an installation in this location would be more visually prominent in relation to surrounding land uses than that of the site and proposals selected.
5	Rooftop	Radsden Direct, Barnsley Road, Cudworth, Barnsley, South Yorkshire, S72 8LL	The site provider was approached about accommodating a telecommunications installation, however there has been no confirmation of interest. Therefore, this site has to be discounted as the operator does not have the owner's permission to use their building.
6	Rooftop	Co-op, 244 Barnsley Road, Cudworth, Barnsley, South Yorkshire, S72 8SS	The building is relatively low rise in comparison to immediate clutter therefore a proposal of significant height would be required to meet the operator's technical requirements. Should a proposal of this type come forward it is considered that it would be highly visible and out of keeping with the host building and surrounding uses.
7	Site Share	Vodafone mast (Operator Ref.: - 3064) at Dorothy Hyman Stadium, Snydale Road, Cudworth, Barnsley, South Yorkshire, S72 8LH	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 the operator's technical requirements.
8	Greenfield	Dorothy Hyman Stadium, Snydale Road, Cudworth, Barnsley, South Yorkshire, S72 8LH	This site is found on the outer edge of the search area and given its geographical position would not provide meaningful coverage to the target area. Therefore, this site has to be discounted as it does not meet operator's technical requirements.

4.0 Reasons for Selecting the Site and Design

Given the makeup of the area and lack of alternative sites, it was established that a streetworks type proposal would be the only viable solution which could provide coverage to this area of Cudworth. 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.

Nevertheless conscious of a proposal's proximity to residential properties, every attempt has been made to minimise the visual impact of the scheme towards nearby residential properties by careful siting and design. It is acknowledged that residential properties can be found in the vicinity, however given their orientation within the street scene and positioning of apertures it is considered that the proposal would not significantly affect the outlook from these properties. It is appreciated that the site will be visible to pedestrians and road users, however it is considered that the monopole and equipment cabinets 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 cabinets owing to the base stations positioning set back from the highway. The cabinets and monopole have been sited on a section of grass verge, whereby they are positioned off the pavement so as not to impede pedestrian movements. The proposals will be seen in the overarching context of the highway junction. Allowing for its backdrop of trees and foliage, such features will soften the visual impact of the base station in this environment, whereby it is considered that the identified site presents a feasible context rather than positioning an installation in an isolated and pronounced location.

The technical requirements of mobile communication operators such as applicant are well documented within PPG8 and this policy guidance is clear that telecommunications development may not always reflect immediate land uses. PPG8 recognises that it is the technical requirements of the telecommunications operator that dictate the height of some proposed installations. It would therefore be unrealistic of the Council to expect that an installation could mimic exactly other linear forms in the area; such as street lighting columns or existing telecommunications installations facilitated by other operators.

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 street scene which includes existing lighting columns. Aware that some standard mast designs can appear incongruous, it is highlighted that the antennas would be concealed within an in-line cylindrical shroud and would be integral to the upper most section of the pole. It should be recognised that the use of shrouded antennas would eliminate the large number of bracing components associated with other more prominent and conventional telecommunications installations. Similarly, the applicant has opted to connect the site into the national network via an underground transmission link rather than relying on a transmission dish, which the appellant judged might affect the linear nature of the scheme. It is considered that the mock telegraph design is an appropriate solution as it is camouflaged in appearance and is of the same height as lighting columns and found in the locality.

The proposed equipment cabinet is considered small for a telecommunications development (less than $2.5m^3$) and will be located alongside the monopole. The equipment cabinet has an appearance similar to other communications and electrical service boxes found in the street scene. The proposed equipment cabinet can be painted to the requirements of the LPA, further reducing its prominence. It is considered that the ground based development will not have any detrimental impact upon the visual amenity of the area.

In light of O2's efforts to design the best solution for this particular site so as to minimise the impact of development on the environment, it is considered that the appearance of the monopole and equipment cabinet would not form an obtrusive feature in the street scene. It is considered that the proposal before you strikes a good balance between environmental impact and operational considerations. The proposed height and design represents the best compromise between the visual impact of the proposal on the surrounding area and meeting the technical coverage requirement for the site. Taking all matters into account it is considered that the proposal would not appear out of place at the application site. It is considered that the proposal has been sited in a position which respects the character of the cell as a whole and the general setting of the immediate area.

5.0 Planning Policy

5.1 National Policy

National guidance contained within planning policy guidance notes and Governmental circulars have been determined to be material considerations in determining planning appeals. In this instance, it is our opinion that the following advice is material:

PPG 8 – Telecommunications (2001)

PPG8 'Telecommunications is the national planning document offering guidance to local authorities in the formulation of local plan policy and evaluation of telecommunications developments.

Overall aim of PPG8 is to allow for the growth of new and existing telecommunications networks in conjunction with environmental considerations. Paragraph 1 of PPG8 emphasises the Governments' generally positive approach to telecommunications: - *"The Government's policy is to facilitate the growth of new and existing telecommunications systems whilst keeping the environmental impact to a minimum. The Government also has a responsibility for protecting public health."* Paragraph 1, PPG8

PPG 8 goes further and states that *"The aim of telecommunications policy is to ensure that people have a choice as to who provides their telecommunication service, a wider range of services from which to choose and equitable access to the latest technologies".* Paragraph 2, PPG8

Paragraph 7, advises that each telecommunications system have different antenna types, siting needs and other characteristics. *"Planning Authorities should have regard to any technical constraints on the location and proposed development."*

PPG8 acknowledges the commercial pressures placed of mobile telecommunications systems and that basis of demand for such services, confirming that: - *"These systems are demand-led. Increase in the use of mobile phones has meant that operators are continually expanding their networks to accommodate customer requirements of service and quality. The greatest need for base station sites is usually in built-up areas where there is the greatest density of mobile users, and within a mile or two of the main roads, where the demands on network capacity are greatest."* Paragraph 22, PPG8

With reference design PPG8 confirms that operators should be innovative in their design solutions and should attempt to find solutions that minimise potential amenity and intrusion issues, stating that: - "*The telecommunications industry is encouraged to continue to develop innovative design solutions, in terms not only of the structure of masts and antennas but also the materials and colouring. A number of different design solutions are currently available. These include masts designed to look like trees or street furniture, and the redevelopment or restoration of existing properties to incorporate telecommunications apparatus. Authorities may wish to discuss with operators different design and camouflage options in connection with development proposals. Operators are encouraged to provide examples of different design solutions. It should be borne in mind that some designs may not be suitable for future sharing. Where it is agreed that a site is suitable for future mast sharing, it may be appropriate to install a mast specifically designed to facilitate its redevelopment for sharing."* Paragraph 77, PPG8

5.2 Code of Best Practice on Mobile Phone Network Development

The Code of Best Practice was published in November 2002 and produced jointly by all Mobile Phone Operators, and representatives of Central and Local Government. It provides clear and practical advice to ensure that delivery of significantly better and more effective communication and consultation between operators, local authorities and local residents.

Paragraph 131 acknowledges that overall mast size increases as a result of mast sharing. Due to the character of the cell area being prominently residential, O2 decided against the use of a larger shareable mast, as it is likely that such a proposal may have had an unacceptable visual impact. It is therefore considered that the use of a 15 metre high, slim-line pole would eliminate the large number of bracing components associated with other more prominent installation designs such as lattice structures.

Paragraphs 140 - 145 identify general design principles in which camouflaging or disguising equipment is considered materially appropriate. In reducing the environmental and visual impact of a ground based installation the Code of Best Practice promotes the use of simple and uncomplicated designs. Paragraph 148 recognises that *"Masts which have complex designs are more likely to dominate and be in discord with the landscape and have adverse visual impacts."*

Concerning the erection of new ground based masts, paragraph 148 provides examples of where the environmental and visual impact of the mast can be greatly reduced. Paragraph 148 states:

- *Placing the mast near similar structures. For example, industrial and commercial premises, road signs and lamp posts;*
- *Using simple and unfussy designs. Masts which have complex designs are more likely to dominate and be in discord with the landscape and have adverse visual impacts; and*
- *Appropriate colouring.*

5.3 Local Policy

Section 38 (6) of the Planning and Compulsory Purchase Act 2004 states that *"If regard is to be had to the development plan for the purpose of any determination to be made under the planning Acts the determination must be made in accordance with the plan unless material considerations indicate otherwise"* The development plan framework is provided by the Barnsley Metropolitan Borough Council Development Plan, in which it is acknowledged that there are moves to replace this document with a Local Development Framework. It is considered that the following policy of the Barnsley Metropolitan Borough Council Development Plan are applicable: -

Policy UTL14 - Telecommunications

"Having regard to the special operation needs of licensed operators proposals for telecommunication development including the erection of radio, television, cellular and personal communications masts and antennae will be assessed with regard the following factors:

a) The appropriateness of the specific location having regard to the effect on the landscape/townscape, the visual amenity of the immediate area and the wider area from which the proposal would be visible;
c) The possibility of erecting antennae or other apparatus on an existing building, mast or other structure as a possible alternative to the erection of a large mast;
d) The presence of other telecommunications facilities within and around the site;
e) The need to include additional structural capacity to take account of the growing demands for the network development including that of other operators.

Any development should be sited and designed so as to minimise its visual impact subject to technical and operational considerations."

6.0 Health & Safety

Recent court cases have confirmed that the *public perception* of health risks can be a material consideration within the land-use planning system. The weight to be attached to this issue has to be determined accordingly in each case by the decision maker. It has been generally held, and widely established at planning appeal, that health concerns are not a sufficient basis alone for withholding planning permission providing it has been demonstrated that the proposed installation will comply with the ICNIRP guidelines.

The most recent government advice regarding mobile telephone technology and health issues is outlined within the revised PPG8 (2001) which states: *"it is the Government's firm view that the planning system is not the appropriate mechanism for determining health safeguards. It remains central government's responsibility to decide what measures are necessary to protect public health. In the Government's view, if a proposed development 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."* Paragraph 98, PPG8.

In this instance, Telefónica O2 UK Limited believes that it is not necessary to consider health effects further, as recommended by PPG8. Telefónica O2 UK Limited is committed to ensuring that all new and existing installations are ICNIRP compliant, and consequently it is considered that there is no basis for this application to be refused on health and safety grounds or for reasons relating to public concerns about health and safety. An ICNIRP compliance certificate is enclosed in appendix C. If required, additional information regarding the operation of mobile telephone base stations and health and safety considerations can be provided.

7.0 Summary

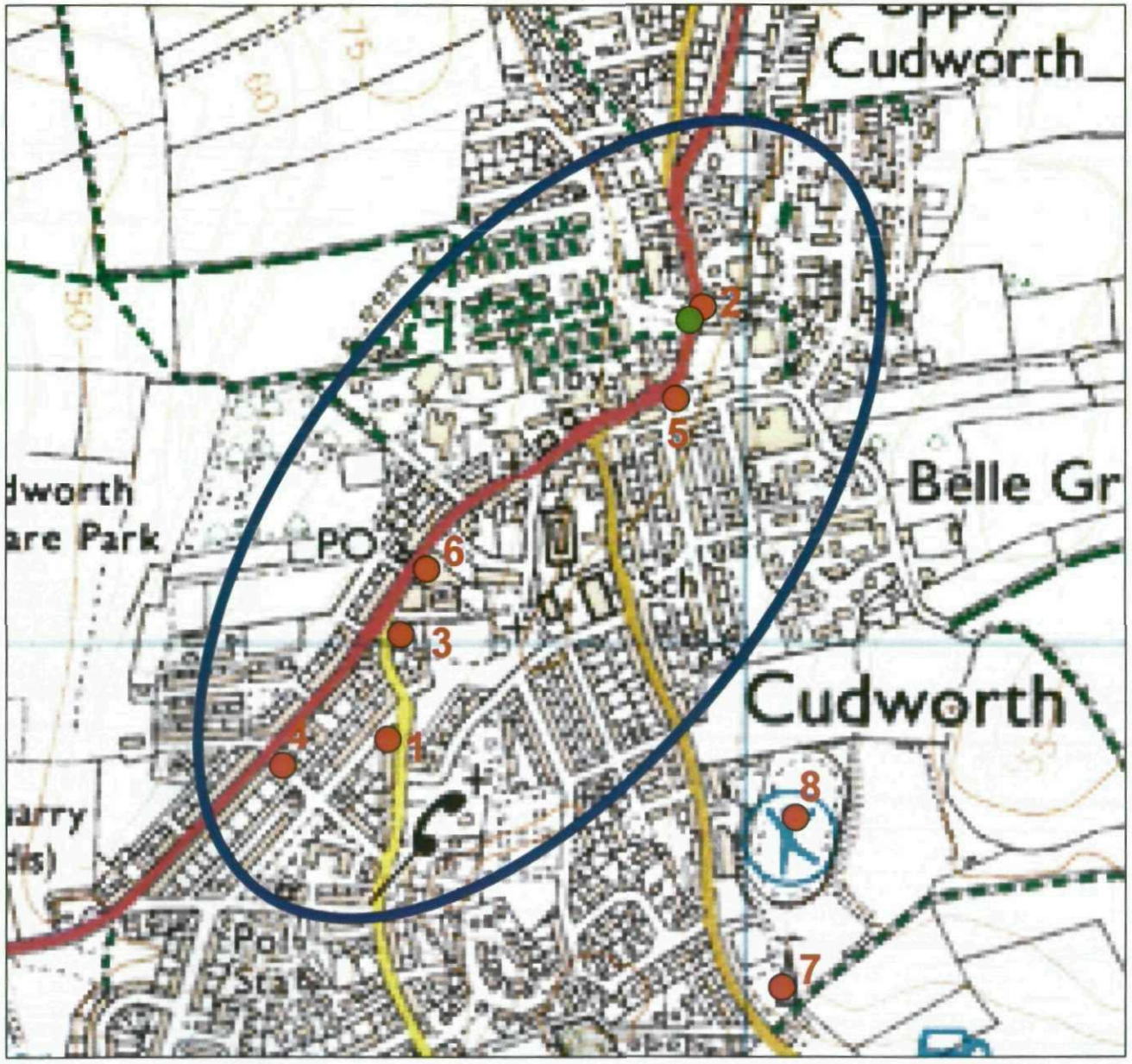
To summarise the case in favour of the proposals the following points are of relevance:

- With specific regard to telecommunications development, the applicants considers that the proposal accords fully with PPG 8, the Code of Best Practice and Policy UTL14 of the Barnsley Metropolitan Borough Council Development Plan;
- Site selection was progressed in accordance with the applicants licence obligations, advice in PPG 8 and the Code of Best Practice and represents the least environmentally intrusive, technically suitable, available option;
- O2's site selection strategy is to keep the overall environmental impact to a minimum through the use of site shares wherever possible. Site sharing is progressed where it is technically and legally possible and the preferred environmental solution. With regards to this nominal, every attempt has been made to accommodate O2 equipment on existing facilities, however no suitable masts were identified within the required coverage area;
- Existing buildings and high structures have been investigated, although there were no appropriate buildings or structures within the vicinity that could be acquired by O2;
- It is of note that the height of the mast (at 15 metres to the top) has been kept to the absolute operational minimum to clear the immediate clutter and provide adequate 3G coverage to the cell area;
- The streetworks monopole in its entirety will be painted black (BS Ref.:- 00 E 53);
- The equipment cabinet will be painted dark green (RAL Ref.: - 6009);
- It is considered that the use of a 15 metre high, slim-line monopole with shrouded antennas would eliminate the large number of bracing components associated with other more prominent and conventional telecommunications proposals;
- O2 have opted to connect the site into the national network via an underground link rather than rely on a transmission dish, which O2 judged might affect the linear nature of the design and increase its prominence;
- The significance of the proposal in the development of the O2 network is a material consideration and this site is required in order to contribute towards O2's obligation to provide coverage to the population.

APPENDIX A – DISCOUNTED OPTIONS & SEARCH AREA

Appendix A includes a map that indicates the extent of the area in which an installation is required for Telefónica O2 UK Limited. The search area within which an installation needs to be established in order to meet the coverage requirement is constrained by the location and extent of the coverage provided by existing installations in the surrounding area. An installation located outside of this search area would not allow Telefónica O2 UK Limited to provide the desired level of coverage and would therefore not adequately fill the current coverage gap. The sites considered in section 3.4 above are also plotted on the attached map.

O2 Ref.: 41299 – Cudworth West — Discounted Options / Search Area O2



	Address
1	West End Institute
2	Dootson Motors
3	Star Hotel
4	Wilson Motors
5	Ramsden Direct
6	Co-op
7	Vodafone (Operator Ref 3064)
8	Dorothy Hyman Stadium

Key: -

	Barnsley Road SW (Application Site)
	Search Area

APPENDIX B – TECHNICAL JUSTIFICATION & COVERAGE PLOTS

As indicated in the supporting statement Appendix B contains technical justification and coverage plots illustrating the operational and technical requirements for the proposed installation.

Telefónica O2 (UK) Ltd

Technical Justification

Site details	
Cell Ref:	41299
Site Name:	Cudworth West
Site address:	Barnsley Road SW
	Cudworth
	South Yorkshire
	S72 8SZ
NGR:	438930, 409346

This summary provides a brief technical justification for the proposed telecommunications installation at 41299 – Cudworth West It is accompanied by radio coverage plots which illustrate the need for the proposed installation.

Site 41299 – Cudworth West is a 3G site and as such is designed to fill a coverage hole that exists between adjacent existing 3G sites.

The search area for a base station was limited due to site to site distance constraints that govern O2's network design.

The level of coverage provided by a particular site is dependant on a number of factors. The key factors are the frequency of the signal emitted (the higher the frequency, the shorter the transmission distance), the height and nature of surrounding "clutter" such as buildings and trees, which can obstruct, absorb and reflect the radio signals. The degradation of the signal by an appreciable amount will result in poor network performance. In order that the radio signal can be transmitted successfully the antennae must also be clear of any close obstructions which will cause "blocking" and "clipping" of the radio signal. The site is intended to provide coverage to the populated area around Cudworth and provide coverage for Cudworth, Belle Green, Upper Cudworth and East of Carlton.

In this instance an overall structure height of at least 15m is required. This will ensure the signal is free from any blocking / clipping as previously mentioned. The attached radio coverage plots are produced using computer modelling software and are intended to give as accurate a representation as possible of proposed coverage. The model does not take into account specific local features such as individual building heights, trees, etc.

The coverage plots show four levels of coverage:

White – Very weak signal / No signal. No coverage guaranteed

Orange – Relatively weak signal. Capable of providing only on-street coverage.

Blue – Moderately strong signal . Will provide coverage in-car and on-street

Green – Strong signal. Will provide coverage in building, in-car and on-street

Plot 1 – Coverage from existing sites without 41299 – Cudworth West

This plot includes coverage with our existing 3G sites in place. As can be clearly seen there is a large coverage hole for in-building (no Green)

Plot 2 – Proposed Coverage with 41299 – Cudworth West

This plot includes coverage from our proposed site. When compared to plot 3 a much greater level of in-building (Green) coverage can be observed.

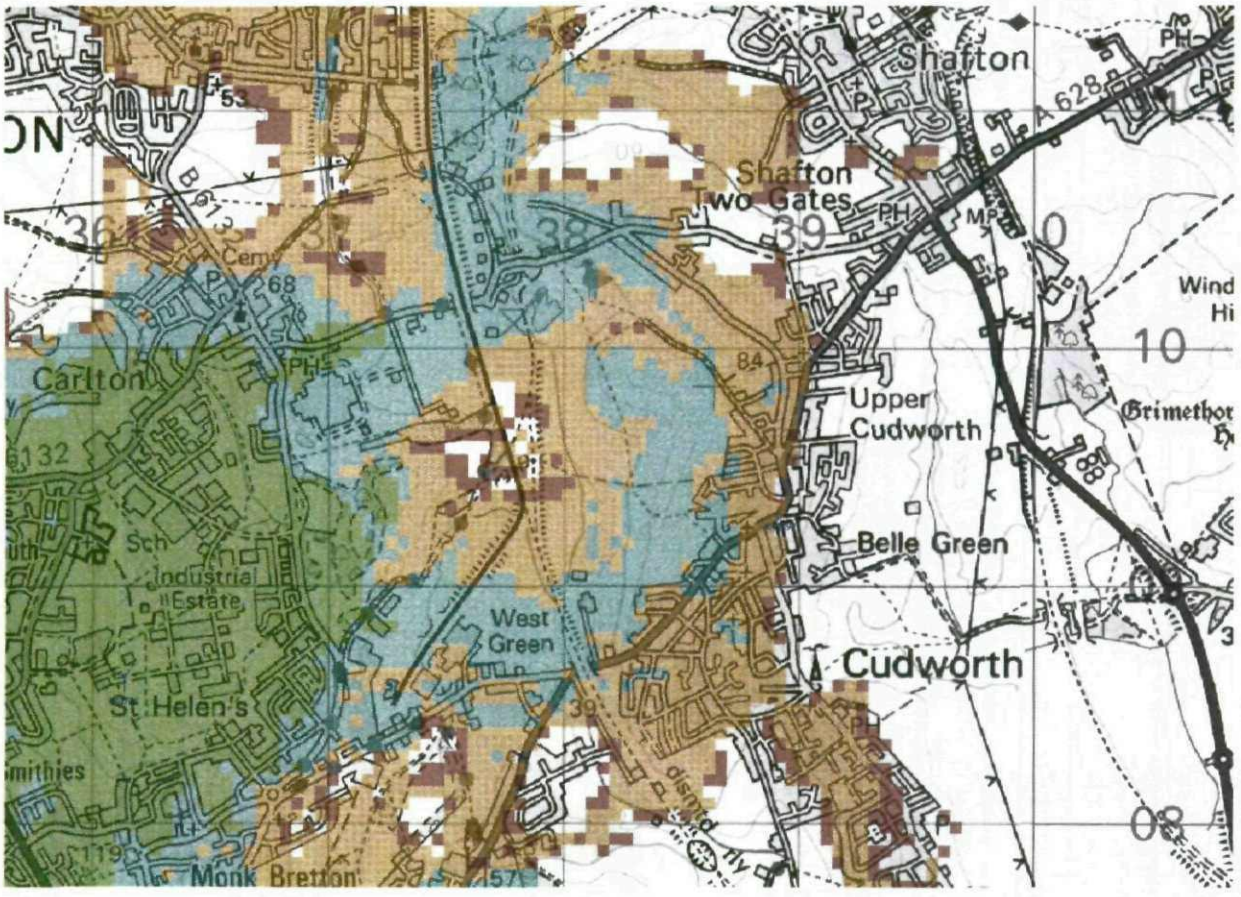
Plot 3 – Proposed coverage with 41299 – Cudworth West in isolation

This plot includes the coverage from our proposed site only. This shows the extent of the 3G service provided by the new site in the required area.

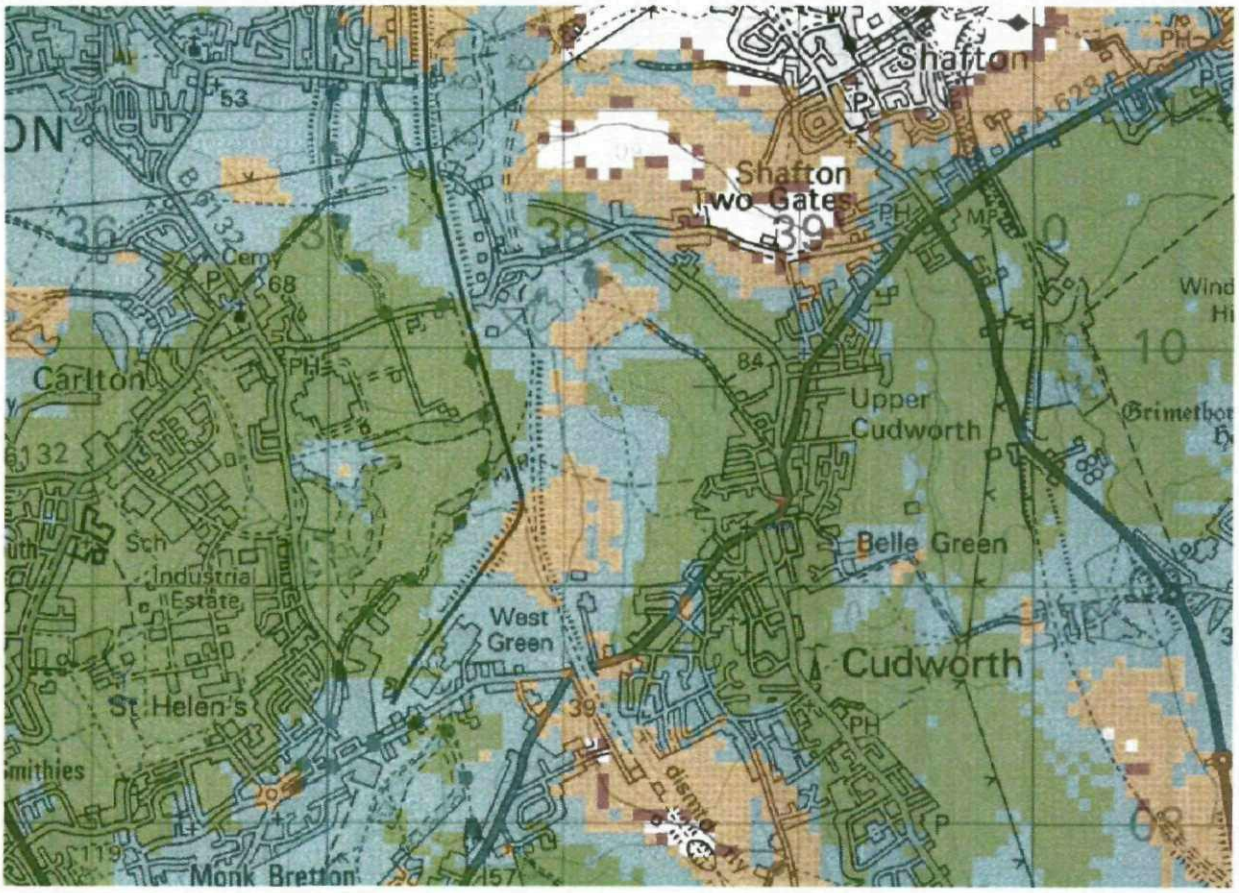
If you require any further information or would like to discuss the above justification please do not hesitate to contact Mono Consultants Ltd who has submitted this application.

Howard Sidery
Radio Planner
Telefónica O2 (UK) Ltd

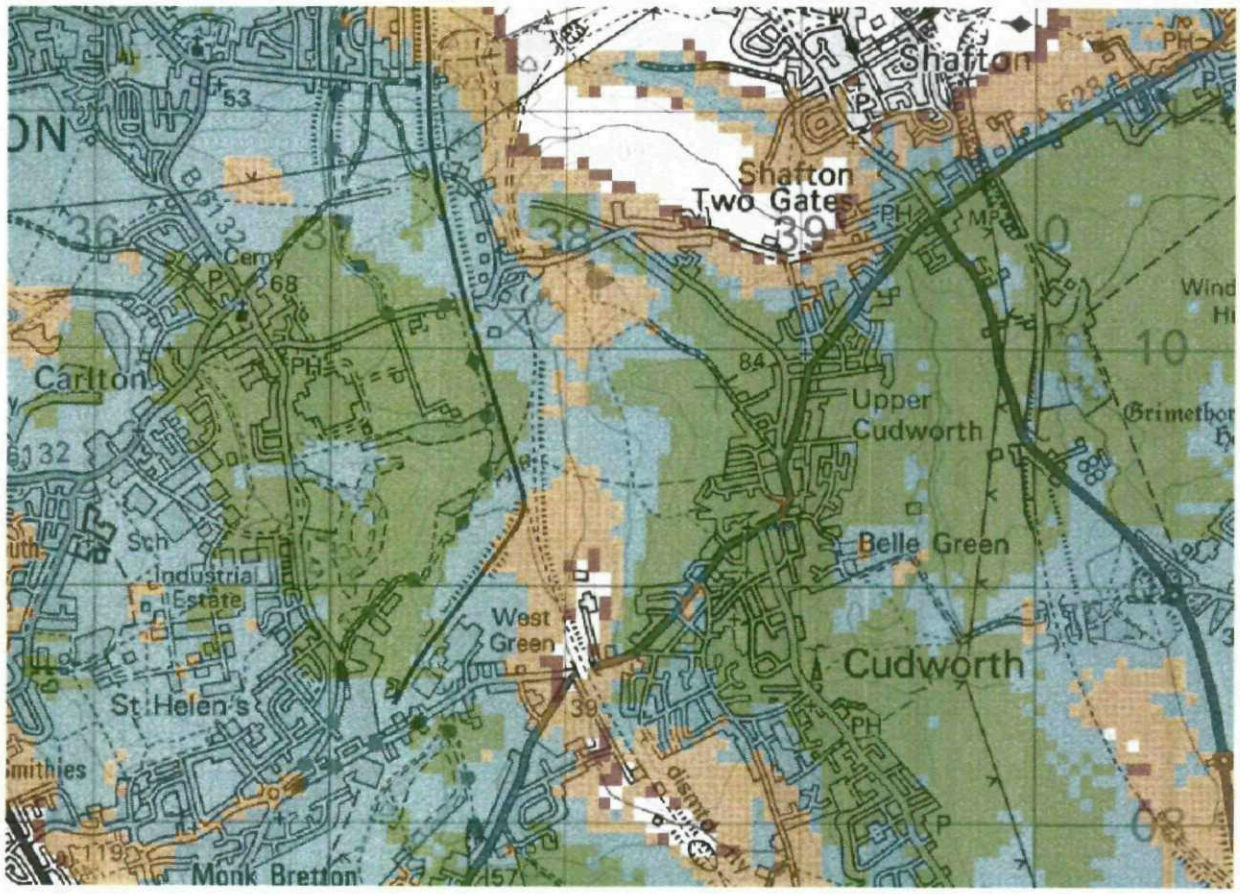
Plot 1 - Existing coverage plot without 41299 – Cudworth West



Plot 2 – Proposed coverage with 41299 – Cudworth West in place



Plot 3 - Proposed coverage with 41299 – Cudworth West only



APPENDIX C – ICNIRP COMPLIANCE STATEMENT

Appendix C contains the ICNIRP Certificate relating to the proposals.

As indicated in the supporting statement national planning policy guidance note PPG8 offers advice to Local Planning Authorities in the determination of telecommunications proposals and the formulation of local plan policies. With reference to health and safety issues PPG8 confirms that the recommendations of the Stewart Report should be adopted in the evaluation of telecommunications developments.

In relation to the increased public perception of risk PPG8 offers the following guidance:

"However, it is the Government's firm view that the planning system is not the place for determining health safeguards. It remains central Government's responsibility to decide what measures are necessary to protect public health. In the Government's view, if a 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." Paragraph 98, PPG8

Declaration of Conformity with ICNIRP Public Exposure Guidelines ("ICNIRP Declaration")

Telefónica O2 (UK) Ltd
260 Bath Road
Slough
SL1 4DX

Certifies that the proposed equipment and installation as detailed in the attached planning / GPDO application at:

Cell Reference – **41299 - Cudworth West**

Site Address – **Barnsley Road**
near the junction with Rose Tree Avenue
Cudworth
Barnsley
S72 8UU

is designed to be in full compliance with the requirements of the radio frequency (RF) public exposure guidelines of the International Commission on Non-Ionising Radiation Protection (ICNIRP), as expressed in EU Council recommendation of 12 July 1999 * "on the limitation of exposure of the general public to electromagnetic fields (0 Hz to 300 GHz)".

* Reference: 1999/519/EC

Date: 23.10.08

Signed:

Name: Howard Sidery

Position: Radio Planner