

**STATEMENT IN SUPPORT
OF
APPLICATION FOR PLANNING PERMISSION
INCORPORATING THE DESIGN AND ACCESS STATEMENT**

February 2016

**Arqiva
Crawley Court, Winchester, Hampshire, SO21 2QA**

Ref: YO012 Westgate Carr Sewage Works

EXECUTIVE SUMMARY

The Proposed Development

This application is for the installation of electronic communications apparatus that forms part of Arqiva's planned Smart Metering network.

Arqiva is a designated Electronic Communications Code Network Operator and has been appointed by the Department of Energy & Climate Change to develop the Smart Meter infrastructure network in the north of England and Scotland.

The Benefits of the Smart Metering Network

Smart metering is a Government programme to roll out, between 2014 and 2020, smart electricity and gas meters to homes and small businesses across Great Britain. The smart meter initiative is a key part of the Government's programme to cut greenhouse gas emissions, decarbonise the economy and support the creation of new green jobs and technologies.

Smart Meters are the next generation of gas and electricity meters. They will offer a range of intelligent functions and provide consumers with more accurate information, bringing an end to estimated billing. Consumers will have near-real time information on their energy consumption to help them control and manage their energy use, save money and reduce emissions.

By providing these benefits it's argued that the development assists in achieving the goals of sustainable development. This is in accordance with the statutory duty placed upon local planning authorities and accentuated by the presumption in favour of sustainable development within the National Planning Policy Framework (NPPF).

Technical and Operational Constraints

The Smart Meter programme, like all electronic communications networks, will need to be supported by an infrastructure of operational sites with the required antennas and other apparatus needed to provide radio coverage to the local area.

As the Smart Meter network must be able to communicate with meters that are typically found in the heart of a property, for example, in an under stairs cupboard, then the sites must be developed in locations that can provide the required level of coverage.

Site Selection

In accordance with best practice, site sharing, utilisation of existing buildings and structures has been explored in a sequential approach to best meet the operational need whilst minimising environmental impact. In this case, it has not been possible to share an existing electronic communications site or install antennas on a tall building or structure. Hence, there is a requirement to develop a new ground based mast.

Pre-Application Consultation

Information on Arqiva's planned Smart Meter network was provided to the Council on 18 December 2013. Pre-application consultation in relation to this particular proposal was undertaken with Ryedale District Council's Planning Department, Councillor Cowling, Councillor Thornton, Councillor Stone and Pickering Town Council.

Miss Charlotte Cornforth of Ryedale District Council kindly replied to advise that she would endeavor to provide a consultation response. Any advice received post-submission will be given due consideration acted upon where appropriate.

Compliance with Planning Policy and other Material Planning Considerations

Policy at national level is set out in the NPPF. The NPPF views high quality communications infrastructure and systems, such as the coverage provided by the Smart Meter network, as essential for achieving sustainable development objectives.

The Development Plan consists of three elements: *The Ryedale Plan*; *the saved Policies and Maps of the Ryedale Local Plan 2002*; and saved policy of the *Regional Spatial Strategy*. In review of these policies, the application demonstrates that the proposal is in accordance with the Development Plan and in particular policy relating to *Policy U8 Telecommunications* (Ryedale Local Plan 2002).

The application site does not fall within any particular environmental designation or land allocation. Regardless, all reasonable steps have been taken to minimise any perceived visual and environmental impact whilst having regard to the need to provide the required level of radio coverage for the network.

With regards to design, layout and scale, this has been guided by the special technical and operational requirements that are associated with electronic communications development. Good practice guidance requires careful consideration of the siting and design to minimise appearance and to ameliorate potential visual impact.

In addition, consideration has been given to the need for the development being in the wider public interest and an appropriate balance has been struck between the objectives of developing new high quality communications infrastructure and environmental considerations. It is considered that on balance the proposal offers greater benefit than harm and therefore should be acceptable in principle.

ICNIRP Compliance

The proposed antennas comply with all relevant health and safety requirements, in accordance with ICNIRP guidelines. A certificate of compliance has been provided with this application.

Servicing and Maintenance

The site will require periodic access for maintenance and servicing visits. This will be restricted to authorised personnel only, and therefore the proposal does not give rise to any issues associated with public access.

In conclusion, the proposed development has been sited and designed with reference to pre-application consultation in order to locate the development as sensitively as practicable. Specific consideration has been given to technical requirements and national and local planning policy. The proposal is supported by both local and national planning policy, and as such it is considered that the application should be looked upon favourably.

1. INTRODUCTION

- 1.1 This statement is submitted in support of an application for planning permission at *Westgate Carr Sewage Works, Westgate Carr Road, Pickering, North Yorkshire, YO18 8DG* as part of Arqiva's planned Smart Metering communications network. Arqiva is a designated Electronic Communications Code Network Operator and has been appointed by the Department of Energy & Climate Change to develop the Smart Meter infrastructure network in the north of England and Scotland.
- 1.2 The development proposed is shown in detail in the drawings submitted. In summary, it involves:
- **Installation of a 21m high lattice-tower supporting 1 No. antenna;**
 - **1 No. Smart Metering equipment cabinet and 1 No. meter cabinet at ground-level;**
 - **Installation of 2.1m high chain-link fence with access gate to form site enclosure;**
 - **Plus associated ancillary development.**
- 1.3 In this statement, which incorporates the design and access statement, we go on to highlight the purposes and benefits of the development proposed, to explain the particular need in this case and to demonstrate compliance with planning policy. We also provide information on health and safety and related issues by way of further reassurance.

2. THE PURPOSE AND BENEFITS OF THE SMART METER NETWORK

- 2.1 Smart Metering is a Government programme to roll out, between 2014 and 2020, smart electricity and gas meters to homes and small businesses across Great Britain. The smart meter initiative is a key part of the Government's programme to cut greenhouse gas emissions, decarbonise the economy and support the creation of new green jobs and technologies.
- 2.2 The Department of Energy & Climate Change has awarded the contract to deliver the radio communications network for Smart Metering to Arqiva and Telefonica. Arqiva will deploy and manage the radio communications network in Scotland and northern England whilst Telefónica will provide the network to the remainder of Great Britain.
- 2.3 This new national smart metering 'Wide Area Network' is a key project in the UK's National Infrastructure Plan and will form part of the UK's Critical National Infrastructure. Its deployment and timely delivery is particularly important to achieving a sustainable economy and meeting key Government priorities enshrined in the Climate Change Act 2008, and thereby support the transformation to a low carbon economy.
- 2.4 In due course, the network will also be available to water utilities and in similar fashion, consumers will be better able to understand and make informed choices about their use of this natural resource.
- 2.5 The proposed development and the wider Smart Metering network will, therefore, make a significant contribution towards sustainable development objectives which will help the UK Government to meet its target of reducing emissions by at least 80% on 1990 levels by 2050 and now set down within the UK Carbon Plan. This is relevant to the statutory duty already placed upon local planning authorities under Section 39 of the Planning and Compulsory Purchase Act 2004 and now accentuated by the presumption in favour of sustainable development

within the National Planning Policy Framework (NPPF). More specifically, it will help to deliver the aspirations set out in Sections 5 and 10 of the NPPF.

2.6 Having regard to the Government's three key dimensions for sustainable development within the NPPF, smart metering will in particular assist in the following ways:

- **An economic role** – smart metering communications will help businesses to be energy conscious, smarter and invest in more energy efficient infrastructure to reduce longer term running costs. Consequential spin offs will, among many, be the creation of new green jobs and technologies, modern and cleaner industries and help stimulate retail sales in more efficient appliances.
- **A social role** - modern smart metering communications will allow consumers to benefit from real time information on their energy consumption, to help them control energy use, save money and reduce emissions. With greater visibility and understanding of their energy consumption, consumers will be able to make more informed choices about which appliances to use and when. For example, a consumer seeing the power consumption of a tumble dryer might be encouraged to use a washing line instead or perhaps to avoid operating it during peak periods of demand when pricing is higher.
- **An environmental role** – smart metering communications will help to reduce energy consumption at homes and premises and allow smarter working practices such as better energy management within larger businesses and incorporation of new efficient infrastructure into new developments. In this way modern smart metering communications will help ensure the prudent use of natural resources, alleviate energy waste, reduce carbon footprints and help the UK Government meet its energy emissions set within the UK Carbon Plan.

2.7 However, in order to make this important contribution to sustainable development objectives, the network has to be developed first and like all electronic communications networks, will need to be supported by an infrastructure of operational sites. This is no different than railway services, for example, being reliant on the associated infrastructure of lines and stations. In the next section, the particular network requirement from which this application stems is explained.

3. THE REQUIREMENT

- 3.1 Arqiva owns and operates the terrestrial radio and television broadcast networks. The company owns most of the tower portfolio originally developed by T-Mobile (now part of Everything Everywhere) and have rights and manage other masts, towers and rooftops, developed or otherwise suitable for use for electronic communications. In total, Arqiva has access to over 16,000 sites around the UK, which is considerably in excess of the numbers available to any other electronic communications operator in the UK. Arqiva is also licensed to use the 412-414MHz spectrum that will be used as part of the Smart Meter network.
- 3.2 Basing the Smart Metering network on this portfolio of existing sites will be a critical element in minimising the potential visual impact associated with the deployment of a new network. This is obviously consistent with longstanding statutory and government policy requirements to use existing sites or other high structures so as to minimise visual impact.
- 3.3 As the network must be able to communicate with meters that are typically found within the heart of a property, for example, in an under stairs cupboard, then the sites must be located so that they can provide an acceptable level of coverage to the properties that they serve.
- 3.4 New installations will be required in some areas for a variety of reasons, for example, the nearest existing sites are too far from certain properties; the signal from the nearest site may be adversely attenuated or affected by topography or natural or man made features such as trees or high buildings; or the fabric of the properties is such that the signals will be unable to penetrate them, for example, because they are old thick walled buildings. Without some new installations a number of homes and businesses would not therefore be able to benefit from smart meters.

Site Selection Process

Radio constraints on site selection

- 3.5 This proposed new installation has to fit in with the overall plan for the network based around Arqiva's existing sites. To help illustrate the context of this application, a computer generated coverage plot is submitted. Its estimate tends to exaggerate true levels of coverage on the ground because the modelling only takes broad account of general topography and manmade features. However, it is a useful tool for explaining how the new installation will fit into the wider network.

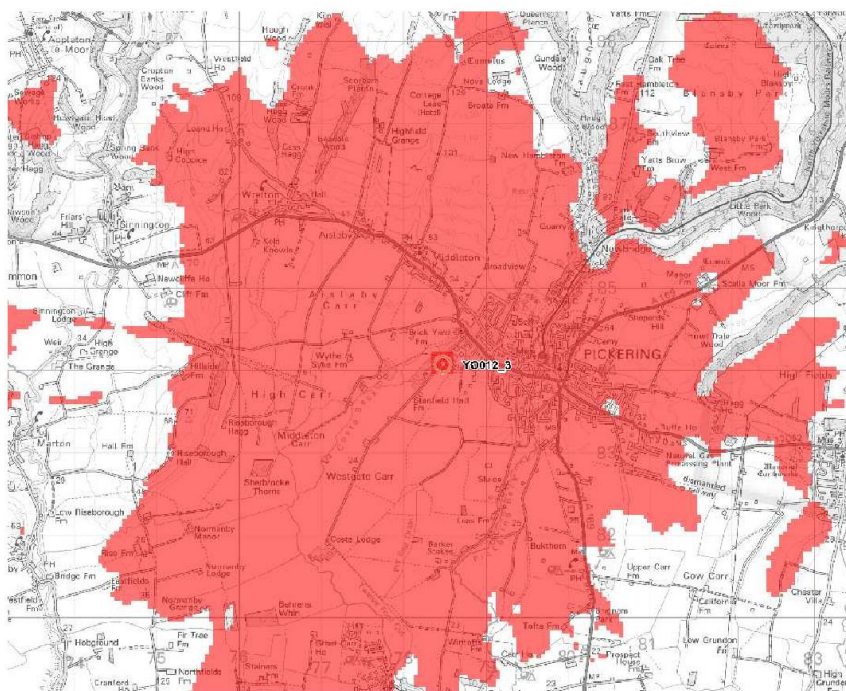


Figure 1. Extract from radio propagation charts showing indicative coverage from proposed YO012.

- 3.6 The area within which a base station can be located must be carefully selected to ensure that base stations compliment and do not interfere with each other. In this instance the proposed cell needs to be close enough to neighbouring cells to enable it to provide them with supplementary coverage while at the same time it needs to be sited at a location that will allow it fill identified gaps in coverage.
- 3.7 The Directed Search Area (DSA) represents the weighted mid points of population density that need to be served. The base station must be located within our client's DSA which the application site falls within.
- 3.8 Any potential sites located outside of the search area may be rejected by our client for radio reasons because they would either be too close to, or too far away from neighbouring cells, and may not provide coverage to all of the targeted area.

Topographical and land use constraints on site selection

- 3.9 Local topography, land uses and other features can often mean that parts of a search area have constraints which make them unsuitable to accommodate a mast.
- 3.10 When establishing a new ground-based telecommunication mast, there is a set of criteria that a site must be assessed against to ensure effective operation, this includes:
- Easy access to a BT hard-wire for data transmission;
 - Installation of apparatus not presenting issues with highway visibility splays;
 - Presence of underground services restricting where can be excavated;
 - Potential for nearby trees and high-buildings to corrupt radio signal.

- 3.11 Another constraint on site selection can be the proximity to residential properties. Sites that are in direct, close and full view of residential properties were treated as less favourable because of the potential impact on the amenity of residents.
- 3.12 Land elevation was also a factor that informed site selection. Siting the proposed mast on land that has a lower elevation than that achieved at the application site may require a compensatory increase in mast height to ensure effective radio operation.
- 3.13 When the application site is assessed against the constraints and criteria discussed in this section, it is found to be acceptable.

Exploring the use of an existing mast, building or other structure

- 3.14 A search of the Sitefinder database, maintained by Ofcom, and the most comprehensive of all electronic communications sites, identified existing telecommunication sites which were investigated for sharing potential:

Site 1: O2 mast, cell ref. 3154, E 479622 N 483791 & **Site 2:** Vodafone mast, Pickering Surgery, E 479543 N 483850

- 3.15 The Smart Metering proposal requires the deployment of an Omni-style antenna that will operate by emitting a signal in a 360 degree direction. This means that the antenna must occupy a position above all supporting infrastructure and surrounding ground clutter in order to avoid signal 'clipping'. The existing and proposed antenna also require a certain vertical separation to prevent cross-signal interference. The required antenna position is unavailable on any of these masts and therefore neither can accommodate the Smart Metering apparatus.
- 3.16 A search was also carried out to establish whether any other high buildings or structures might be used. The following site was identified:

Site 3: St Peter & St Paul Church, E 479879 N 484027

This Grade I listed building was identified during the site search, however on assessment the building's design was found to be incompatible with the apparatus that it would need to host. Furthermore the proposal may have caused harm to the historic fabric of the building.

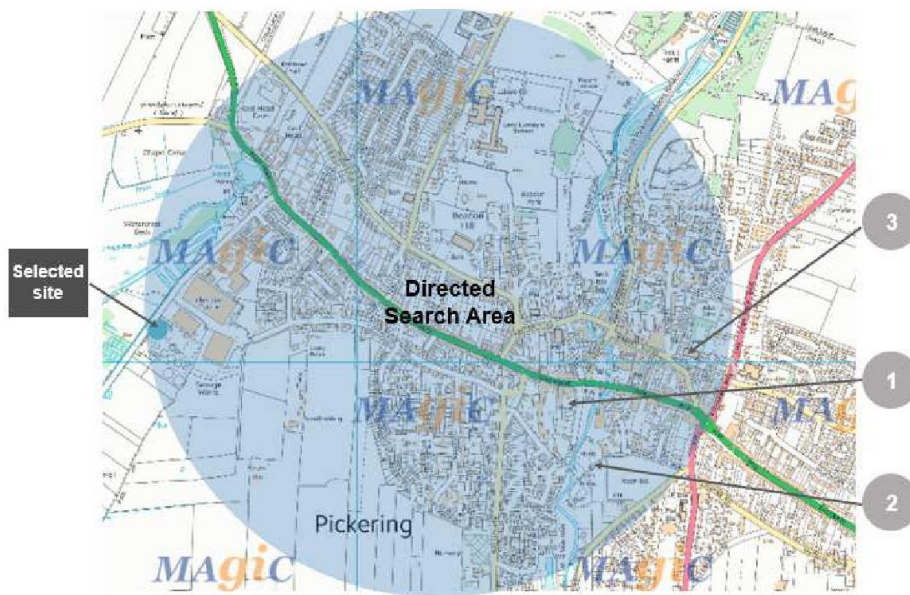


Figure 2. Directed Search Area and discounted site options.

3.17 Our conclusion is that the development of a new mast at the application site strikes the best balance between environmental and operational considerations, including the key requirement for the development to be close to the properties it is intended to serve. This is the reason for the application before you.

4. COMPLIANCE WITH PLANNING POLICY

4.1 The relevant planning policy framework that has been taken into account and in part already alluded to is found principally within:

- The Development Plan
- National Planning Policy Framework (NPPF)
- The Code of Best Practice on Mobile Network Development in England

4.2 These documents provide the overall policy background for electronic communications development, site specific policies and the key considerations relevant to the siting and design of appropriate electronic communications development.

The National Planning Policy Context

4.3 The general policy context can be summarised as follows:

- Government policy within the NPPF is to support high quality communications infrastructure and systems – this is especially relevant to smart metering, which is a Government initiative
- Government policy is to keep the inevitable environmental impact associated with electronic communications development to the minimum
- The best way to minimise environmental impact is to avoid the unnecessary proliferation of new radio masts and sites
- The starting point for planning new networks or the expansion of existing networks is therefore to use existing electronic communications sites
- Where new installations are required, as in this case, operators should look to develop innovatively designed structures, such as those designed to blend in with the street scene

- 4.4 The NPPF as a whole is aimed at encouraging a more positive approach to town planning. While the NPPF builds environmental protection into the definition of sustainable development, there is also a very clear emphasis that local planning authorities should be looking for ways to help development come forward and not reject applications simply on environmental grounds. The NPPF recognises that this is especially relevant where a development might have other significantly important benefits such as being essential to meet, for example, new nationally important infrastructure such as the Smart Meter communications network.
- 4.5 The importance of the proposed development as part of the Smart Meter network is clearly an important material planning consideration as it is precisely the type of new digital infrastructure that the NPPF is seeking to support. Hence, it is important to reflect on some key points within the NPPF which are relevant to the very important development at this site and the general planning principles that should apply when determining the merits of the application:
- a. Paragraph 14 advises that authorities should:
- positively seek opportunities to meet the development needs of their area [as part of plan making];
 - meet objectively assessed needs unless the adverse effects would *“significantly and demonstrably outweigh the benefits”*;
- b. Paragraph 17 advises that planning should *“proactively drive and support sustainable development to deliver the homes, businesses and industrial units, **infrastructure** and thriving local places that the country needs”* [my emphasis];
- c. Paragraph 187, on “decision-taking” states that authorities should *“look for solutions rather than problems, and decision-takers at every level should seek to approve applications for sustainable development where possible”*.

- 4.6 Paragraph 14 of the NPPF further states that the presumption in favour of sustainable development lies at the heart of the planning system and, in respect of decision-taking, this means that development proposals that accord with the provisions of the Development Plan should be approved without delay. In respect of this guidance, the following sections of this statement demonstrate that the proposed development accords fully with all relevant Development Plan and NPPF policies and, therefore, permission should be granted for the development.

Section 5 - Supporting Advanced Communications Infrastructure of the NPPF

- 4.7 The proposal is supported by, and accords with, the guidance in Section 5 of the NPPF, which provides further guidance on the Government's objective of providing high quality communications networks in England.
- 4.8 The NPPF clearly acknowledges the benefits of modern electronic communications and seeks to encourage such development as being essential due to their role in supporting a modern economy, contributing to sustainable objectives, and enhancing local community access to a range of goods and services. Local planning authorities are advised to respond positively to proposals for electronic communications development and this has to include an understanding of the associated special problems and technical needs of developing communications networks such as the Smart Meter network.

Section 7 – Requiring Good Design of the NPPF

- 4.9 Government places great importance on the design of the built environment and paragraph 56 of the NPPF states that this is an integral objective of achieving sustainable development. The careful approach taken to the design and siting of the proposed development complies fully with this general policy objective.
- 4.10 More specifically, the proposal is supported by the guidance in paragraph 65 of the NPPF, which states that:

'Local Planning Authorities should not refuse planning permission for buildings or infrastructure which promote high levels of sustainability because of concerns about incompatibility with an existing townscape, if those concerns have been mitigated by good design (unless the concern relates to a designated heritage asset and the impact would cause material harm to the asset or its setting which is not outweighed by the proposal's economic, social and environmental benefits).'

- 4.11 In respect of this guidance, all reasonable steps have been taken through careful siting and design to minimise the visual impact of the development, so far as the technical and operation constraints allow. The proposal is an acceptable design solution that will not have any impact on a designation heritage asset.

Site Specific Policies

- 4.12 The site is not included within any particular environmental designation or land allocation that needs to be taken into account. *Policy TU8 Telecommunications development* from the *Ryedale Local Plan 2002* is however relevant to the proposal.

Policy U8 -Telecommunications development
Proposals for large-scale telecommunication development such as masts and other aerial arrays will be permitted where:-

(i) It can be clearly demonstrated that there is a need for the development in that particular location;

(ii) There is no reasonable possibility of combining the proposal with existing or committed installations;

(iii) Taking into account technical and operational considerations, the development is designed, sited and, where appropriate, landscaped to minimise its visual impact on the character and appearance of the surrounding area;

(iv) It can be demonstrated that no alternative less-intrusive sites or practicable technical solutions are available.

- 4.13 In reference to Policy U8, the apparatus is needed as part of a new nationwide communications network to support the Government's Smart Metering initiative.

- 4.14 A sequential site selection process has demonstrated that this is the best site available that meets technical requirements without undue environmental impact. This includes identifying and assessing existing telecommunication installations. This process was informed by radio, topographical, and land use constraints (see p10).
- 4.15 The development would be sited amongst utilities infrastructure, remote from residential areas, and at a well screened location behind mature trees so as to protect the visual amenity of the local area.
- 4.18 In summary, the sensitive way the development proposed has been brought forward accords with best practice and forms part of a national important infrastructure project to provide smart metering services to the local area. It accords with the key policy objectives at national level, which are reflected in the relevant policies at local level. The development proposed is therefore acceptable in principle and also accords with the more detailed guidance expressed in local policy.

5. DESIGN AND ACCESS STATEMENT

5.1 The development proposed essentially involves engineering operations and so is arguably exempt from the requirement to provide a design and access statement under Article 8 (1) (b) of The Town and Country Planning (Development Management Procedure) (England) Order 2010. However, to assist your determination this section provides a description of the process adopted in the design of the proposals and explains the access considerations. The significant contribution such development makes towards sustainable development objectives has already been outlined earlier.

Physical Context

5.2 The application site is set within a waste water sewage works amongst typical utilities infrastructure. The site is surrounded by high-level and mature conifer trees, beyond which are agricultural fields and woodlands.



Figure 2. Photograph of application site.

Amount, Design, Layout and Scale of the Development

- 5.3 The scale, layout and design of the development has been guided by the special technical and operational factors affecting the need to provide an acceptable level of coverage to the local area, having regard to the need to minimise visual impact, which have been explained in the previous sections of this statement.
- 5.4 The mast design – a lattice tower – has been chosen to ensure that it will assimilate with the immediate surroundings and the context in which it will be seen. The tower is of the absolute minimum scale to meet radio coverage requirements and its height has partly been informed by the need for the radio signal to clear the surrounding trees.
- 5.5 The number of radio equipment cabinets and their size has been limited to what is required to meet current and foreseeable network requirements. The location of the equipment cabinets, and the electronic communications equipment housed within them, reflects the technical and operational requirement to be in reasonable proximity to the antenna system they support. This avoids exceptionally large runs of feeder cables and associated supporting trays, and the subsequent loss of signals.

Access Considerations

- 5.6 Access to the site will be provided by Westgate Carr Road and onto the existing service roads. Once constructed, the development will be unmanned requiring only periodic visits, typically once every two to three months for routine maintenance and servicing.
- 5.7 In accordance with all relevant health and safety legislation and guidelines, access to the site will be restricted to authorised personnel and the routine maintenance and servicing of the apparatus will only be carried out by properly trained and qualified staff. Electronic communications base stations are specifically designed to prevent unauthorised access by members of the public

and, therefore, there is no requirement to incorporate inclusive access arrangements into the proposed layout and design of the development.

Landscaping

- 5.8 The proposed siting of the development has been very carefully chosen to minimise environmental impact. Any potential impact of the development is principally associated with the mast, which is the most visible component of the base station, and which cannot be fully screened for operational reasons. The height of the mast means that any attempt to screen it in its entirety would be unrealistic in any event.
- 5.9 Visual receptors are small in number and would predominately be the users of the adjoining highway who would only experience transient and partial views of the installation, if any. The site's location ensures that the amenity of local residents, and in particular the outlook from their properties, would not be adversely affected. The site benefits from natural screening in the form of tree planting which would protect the views from surrounding vantage-points. It is considered that the overall visual impact would be low and outweighed by the benefits of the Smart Metering network.
- 5.10 It is considered that the local landscape is of low sensitivity and could accommodate the development proposed. The immediate area around the site is not void of manmade features which includes utilities infrastructure and industrial units. For these reasons, additional landscaping is not considered appropriate and has not been included within the scheme.

Appearance

- 5.11 The lattice tower has a functional and plain design, made from galvanised steel – typical of such infrastructure installed across the country. The equipment cabinets would be coloured dark green or grey.
- 5.12 Insofar as the apparatus may be visible, it will look straight forward in appearance to reflect its function. To that extent it should in time become an

accepted feature of the local landscape as with other forms of communication networks and essential public utility infrastructure.

6. ICNIRP COMPLIANCE

- 6.1 A certificate confirming compliance with the relevant ICNIRP guidelines on public exposure has been supplied with this application. Accordingly, as explained within the NPPF, it is not necessary, to consider further the health aspects and concerns about them, which include the perception of risk.

7. SUMMARY AND CONCLUSIONS

- 7.1 The proposed development forms part of Arqiva's planned Smart Meter network, which is being created as part of the government's initiative to roll out smart electricity and gas meters to homes and small businesses across Great Britain between 2014 and 2020. The network forms part of the UK's National Infrastructure Plan and the information provided by smart meters will help consumers to better manage and reduce energy use and potentially save money. Smart meters will play an important role in the government's policies to achieve a transition to a sustainable and low-carbon economy.
- 7.2 The proposed development is considered to strike the best balance between operational and environmental considerations that apply to its role within the Smart Meter network. The proposed siting and design has been chosen to minimise visual impact and should, therefore, be acceptable.
- 7.3 The proposed antennas will comply with all relevant health and safety requirements and will be compliant with the ICNIRP guidelines. There are no exceptional circumstances in this case and therefore no need to consider health effects and related concerns such as the perception of risk further.
- 7.4 This statement has demonstrated that the proposal is in accordance with local Development Plan policy and national policy set out in the NPPF. In particular, it is a form of development that is specifically encouraged as a matter of principle and in its detail complies with the policy objective of minimising potential environmental impact.
- 7.5 In conclusion, the application merits support and there are no material considerations that indicate otherwise.