SUPPLEMENTARY INFORMATION

1. Site details

Site Name NGR	Clennel Farm 392676 607676	Site Address	Clennel Farm, Harbottle, Morpeth, Northumberland, NE65 7BG
Site Ref Number	NHU026	Site Type '	Greenfield

Pre Application Check list 2.

Site selection

Was an LPA mast register used to check for suitable sites by the operator or the LPA?	No
if no explain why	
This is an extension and upgrade of the existing equipment on site	
Was the industry site database checked for suitable sites by the operator?	No
if no explain why	
This is an upgrade of the existing equipment	

Annual roll out consultation with LPA

Date of last annual rollout information/submission	Unknown
Name of contact	
Summary of outcome/Main issues raised	

Pre-application consultation with LPA

Date of written offer of pre-application consultation	22/03/201 8
Was there pre-application contact	YES
Date of pre-application contact	06/03/201 8
Name of contact	Rebecca Adams
Summary of outcome/Main issues raised	

¹ Macro or micro

Ten Commitments Consultation

Rating of Site under Traffic Light Model	Green	Amber	Red
Outline Consultation carried out			
In accordance with the Code of Best Practice the site has to the site not being located in a special area of interest Summary of outcome/Main issues raised	been given	a rating of (Green due
School/College			

Location of site in relation to school/college (include name of school/college)

It was considered that there was no school or college with a direct functional or visual relationship with the proposed.

Outline of consultation carried out with school/college (include evidence of consultation) N/A

Summary of outcome/Main issues raised N/A

Civil Aviation Authority/Secretary of State for the Defence/Aerodrome Operator consultation

(Only required for an application for prior approval)

Yes	Νο
Yes	No

Developer's Notice (Only required for an application for prior approval)

Copy of Developer's Notice enclosed	YES	
Date served	03/04/18	

3. Proposed Development

The proposed site

The proposed site is situated at Clennel Farm in order to use the existing Telecommunications equipment and extend the site into the next field in order to gain the Line Of Sight needed for the dish to work. The site currently serves the emergency services with Telecommunications equipment for the Blue Light radio network. The application is to add 1no 5m timber monopole, 1no 200mm transmission dish and steelwork to provide an improved service to the emergency services in the event of transmission failure. The transmission dish is part of a nationwide program to replace outdated copper ground based technology with transmission dishes by September 2018.Careful consideration has been given to the siting and installation position of this monopole in order to achieve the height needed to give the dish clear Line of Sight whilst also having a minimal impact on the Landscape. Additionally the dish can be if so required colour painted to match surroundings.

Enclose map showing the cell centre and adjoining cells

N/A - the proposed development is not providing radio coverage to a specified area, but is simply connecting existing base station sites via a transmission link.

Type of Structure (e.g. tower, mast, etc):	
Timber Monopole	
Overall Height	5m
Height of existing building (where	n/a
applicable)	
Equipment Housing (New)	
Length	n/a
Width	n/a
Height	n/a
Materials (as applicable)	
	Timber monopole to blend in with
Tower/mast etc – type of material and	surroundings
external colour	
Equipment housing – type of material and	n/a
external colour	

Reasons for choice of design

The choice of the dish size is due to a technical requirement. The dish bearing is dependent upon the location of the target dish at the other end of the link that it is aiming at. The height is dependent on the need to see over intervening obstructions and to give adequate access to enable safe maintenance of the installation.

There is little choice in the aesthetics of the equipment as the dish takes its form as a result from the engineering requirement for the antenna type. Having regard to the above, the design is entirely dependent upon the technical requirements of the network.

4. Technical information

ICNIRP Declaration attached	No
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.	

Frequency	N/A
Modulation characteristics ²	N/A
Power output (Expressed in EIRP in dBw per carrier)	N/A
In order to minimise interference within its own network and with other radio networks Airwave Ltd operates its network in such a way that radio frequency power outputs are kept to the lowest levels commensurate with effective service provision. As part of Airwave Solutions 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)	5.5m

5. Technical Justification

Enclose predictive coverage plots

Reason(s) why site required e.g. coverage, upgrade, capacity (map attached if required)

Although the Airwave service already meets stringent reliability criteria, the Government requires further enhancement, known as Airwave Kilostream Replacement Project (AKRP), to a large percentage of the Airwave base station network. This involves providing a network of radio links between existing base stations using line of sight dish antennas to replace the existing ground based copper cable network links. These dishes are integral to the network as the EE network is not due to take over until at least 2023- therefore a minimum of 5 years worth of Emergency Coverage for the Police would be lost if the proposal is denied

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.

6. Site selection process – alternative sites considered and not chosen

As this is an upgrade of the existing site, there are no discounted sites.

Additional relevant information

Siting and Visual Appearance

The monopole is to be located towards the edge of the field in order to shield the monopole as much as possible with the surrounding trees. The dish and monopole can be colour coordinated to match surroundings. All possible locations have been investigated and this location is best to gain a clear signal therefore this is the best location to suit both the landscape and the technical requirements for the network.

Contact Details

Name Operator	Laura Bonnell Airwave Solutions Ltd	Telephone Fax no	
Address	Nova South 160 Victoria Street London SW1E 5LB	Email address	
Signed Position	Laura Bonnell Acquisition Lead	Date Company (on behalf of the above operator)	03/04/2018 Principal Telecom