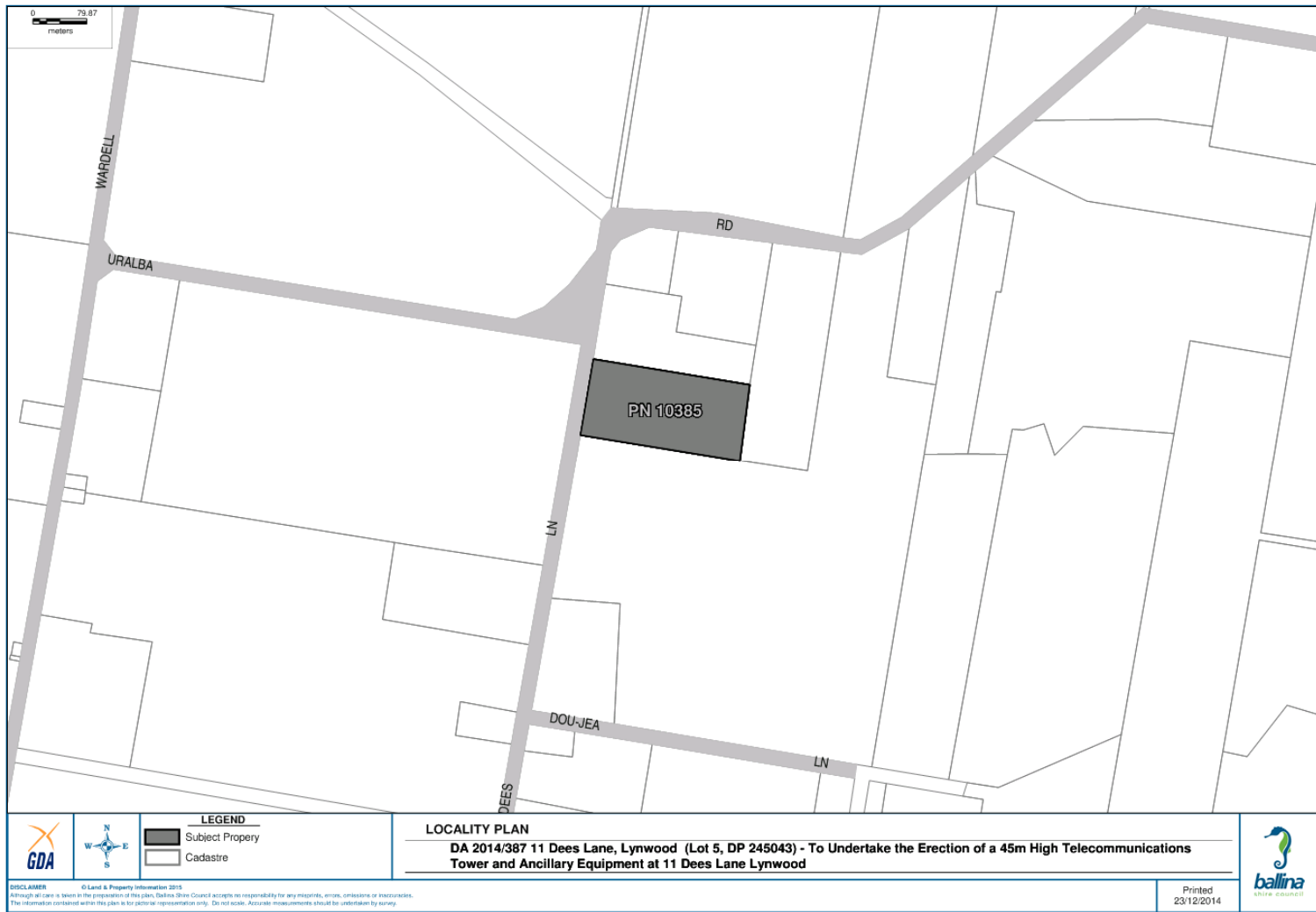


8.3 DA 2014/387 -11 Dees Lane Lynwood - Telecommunications Tower.DOC





Environmental EME Report Uralba 11 Dees Lane, LYNWOOD NSW 2477

This report provides a summary of Calculated RF EME Levels around the wireless base station

Date 6/6/2014

RFNSA Site No. 2477014

Introduction

The purpose of this report is to provide calculations of EME levels from the existing facilities at the site and any proposed additional facilities.

This report provides a summary of levels of radiofrequency (RF) electromagnetic energy (EME) around the wireless base station at Uralba 11 Dees Lane LYNWOOD NSW 2477. These levels have been calculated by Ericsson using methodology developed by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA).

The maximum EME level calculated for the proposed systems at this site is 0.012% of the public exposure limit.

The ARPANSA Standard

ARPANSA, an Australian Government agency in the Health and Ageing portfolio, has established a Radiation Protection Standard specifying limits for general public exposure to RF transmissions at frequencies used by wireless base stations. The Australian Communications and Media Authority (ACMA) mandates the exposure limits of the ARPANSA Standard.

How the EME is calculated in this report

The procedure used for these calculations is documented in the ARPANSA Technical Report "Radio Frequency EME Exposure Levels - Prediction Methodologies" which is available at <http://www.arpansa.gov.au>.

RF EME values are calculated at 1.5m above ground at various distances from the base station, assuming level ground.

The estimate is based on worst-case scenario, including:

- wireless base station transmitters for mobile and broadband data operating at maximum power
- simultaneous telephone calls and data transmission
- an unobstructed line of sight view to the antennas.

In practice, exposures are usually lower because:

- the presence of buildings, trees and other features of the environment reduces signal strength
- the base station automatically adjusts transmit power to the minimum required.

Maximum EME levels are estimated in 360° circular bands out to 500m from the base station.

These levels are cumulative and take into account emissions from all mobile phone antennas at this site.

The EME levels are presented in three different units:

- volts per metre (V/m) – the electric field component of the RF wave
- milliwatts per square metre (mW/m²) – the power density (or rate of flow of RF energy per unit area)
- percentage (%) of the ARPANSA Standard public exposure limit (the public exposure limit = 100%).

Results

The maximum EME level calculated for the proposed systems at this site is 0.69 V/m; equivalent to 1.25 mW/m² or 0.012% of the public exposure limit.

Radio Systems at the Site

There are currently no existing radio systems for this site.

It is proposed that this base station will have equipment for transmitting the following services:

Carrier	Radio Systems
NBN Co	LTE2300 (proposed)

Calculated EME Levels

This table provides calculations of RF EME at different distances from the base station for emissions from existing equipment alone and for emissions from existing equipment and proposed equipment combined.

Distance from the antennas at Uralba 11 Dees Lane in 360° circular bands	Maximum Cumulative EME Level – All carriers at this site					
	Existing Equipment			Proposed Equipment		
	Electric Field V/m	Power Density mW/m ²	% ARPANSA exposure limits	Electric Field V/m	Power Density mW/m ²	% ARPANSA exposure limits
0m to 50m				0.29	0.22	0.0022%
50m to 100m				0.29	0.23	0.0023%
100m to 200m				0.24	0.15	0.0015%
200m to 300m				0.61	1.0	0.01%
300m to 400m				0.69	1.25	0.012%
400m to 500m				0.67	1.2	0.012%
Maximum EME level				0.69	1.25	0.012
	356.075 m from the antennas at Uralba 11 Dees Lane					

Calculated EME levels at other areas of interest

This table contains calculations of the maximum EME levels at selected areas of interest that have been identified through the consultation requirements of the Communications Alliance Ltd Deployment Code C564:2011 or via any other means. The calculations are performed over the indicated height range and include all existing and any proposed radio systems for this site.

Additional Locations	Height / Scan relative to location ground level	Maximum Cumulative EME Level All Carriers at this site Existing and Proposed Equipment		
		Electric Field V/m	Power Density mW/m ²	% of ARPANSA exposure limits
No locations identified				

RF EME Exposure Standard

The calculated EME levels in this report have been expressed as percentages of the ARPANSA RF Standard and this table shows the actual RF EME limits used for the frequency bands available. At frequencies below 2000 MHz the limits vary across the band and the limit has been determined at the Assessment Frequency indicated. The four exposure limit figures quoted are equivalent values expressed in different units – volts per metre (V/m), watts per square metre (W/m²), microwatts per square centimetre (µW/cm²) and milliwatts per square metre (mW/m²). Note: 1 W/m² = 100 µW/cm² = 1000 mW/m².

Radio Systems	Frequency Band	Assessment Frequency	ARPANSA Exposure Limit (100% of Standard)
WCDMA850	870 – 890 MHz	900 MHz	41.1 V/m = 4.50 W/m ² = 450 µW/cm ² = 4500 mW/m ²
GSM900, WCDMA900	935 – 960 MHz	900 MHz	41.1 V/m = 4.50 W/m ² = 450 µW/cm ² = 4500 mW/m ²
GSM1800, LTE1800	1805 – 1880 MHz	1800 MHz	58.1 V/m = 9.00 W/m ² = 900 µW/cm ² = 9000 mW/m ²
UMTS2100, WCDMA2100	2110 – 2170 MHz	2000 MHz	61.4 V/m = 10.00 W/m ² = 1000 µW/cm ² = 10000 mW/m ²

Further Information

The Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) is a Federal Government agency incorporated under the Health and Ageing portfolio. ARPANSA is charged with responsibility for protecting the health and safety of people, and the environment, from the harmful effects of radiation (ionising and non-ionising).

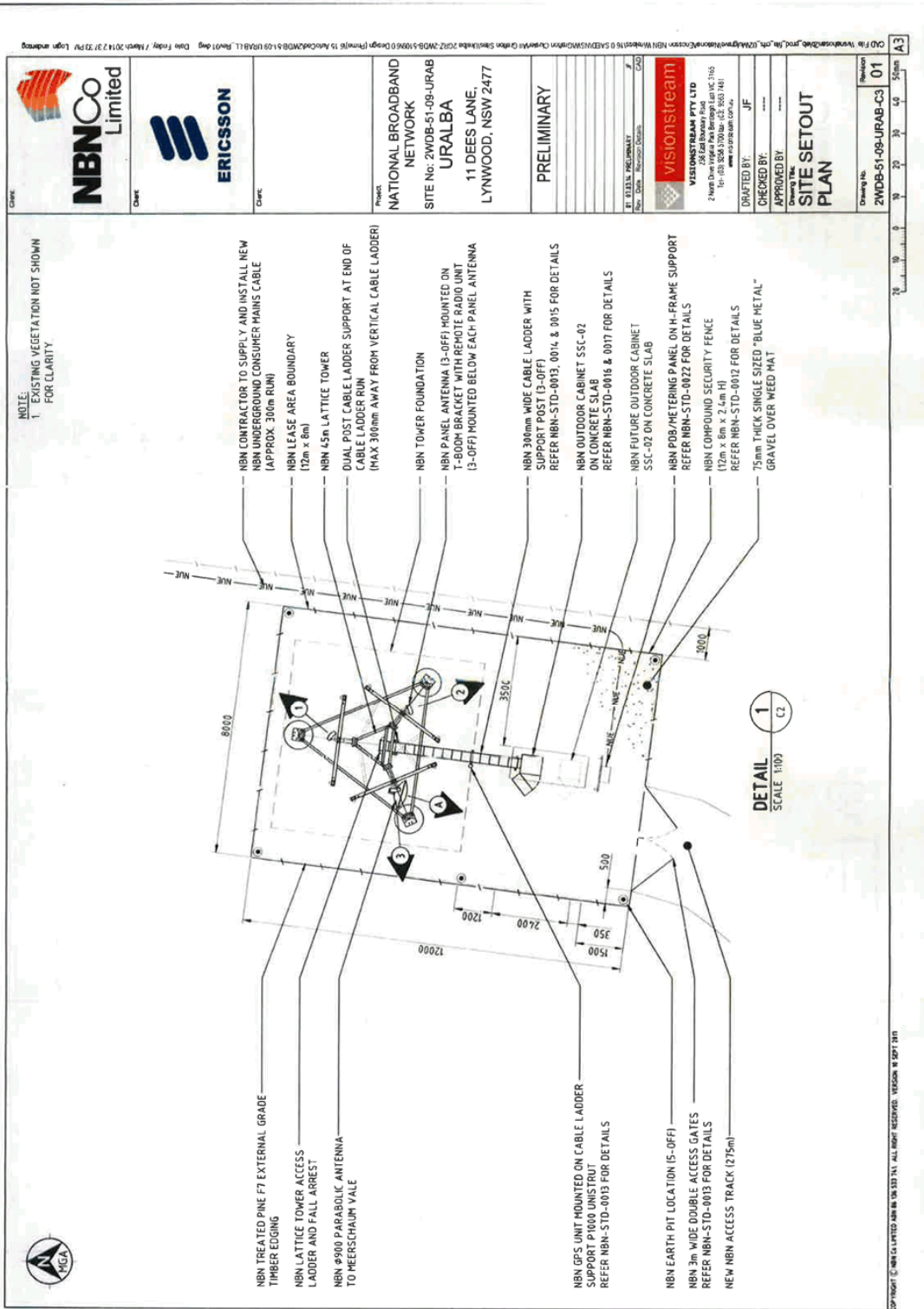
Information about RF EME can be accessed at the ARPANSA website, <http://www.arpansa.gov.au>, including:

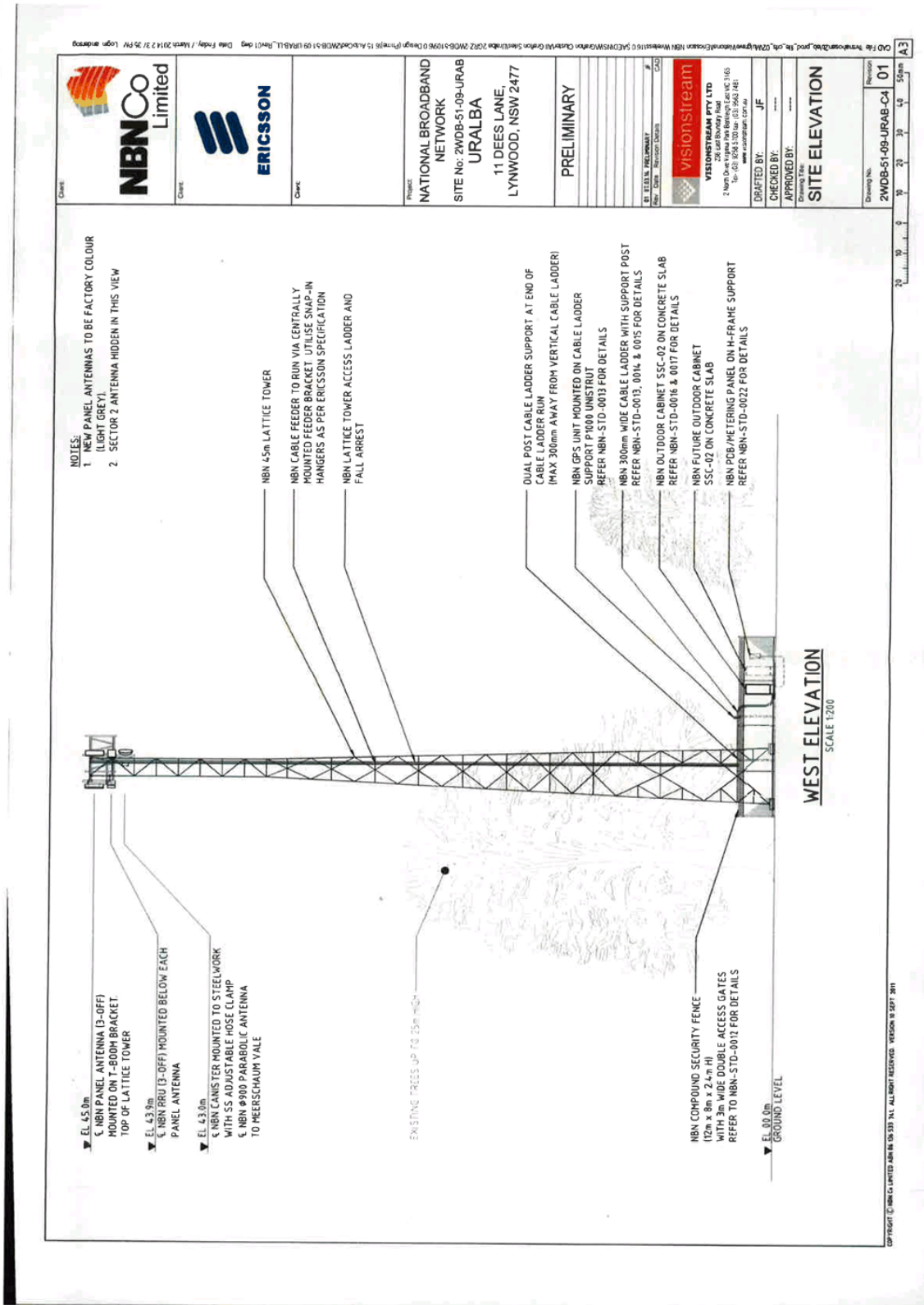
- Further explanation of this report in the document "Understanding the ARPANSA Environmental EME Report"
- The procedure used for the calculations in this report is documented in the ARPANSA Technical Report; "Radio Frequency EME Exposure Levels - Prediction Methodologies"
- the current RF EME exposure standard
Australian Radiation Protection and Nuclear Safety Agency (ARPANSA), 2002, 'Radiation Protection Standard: Maximum Exposure Levels to Radiofrequency Fields — 3 kHz to 300 GHz', Radiation Protection Series Publication No. 3, ARPANSA, Yallambie Australia.
[Printed version: ISBN 0-642-79400-6 ISSN 1445-9760] [Web version: ISBN 0-642-79402-2 ISSN 1445-9760]

The Australian Communications and Media Authority (ACMA) is responsible for the regulation of broadcasting, radiocommunications, telecommunications and online content. Information on EME is available at <http://emr.acma.gov.au>

The Communications Alliance Ltd Industry Code C564:2011 'Mobile Phone Base Station Deployment' is available from the Communications Alliance Ltd website, <http://commsalliance.com.au>.

Contact details for the Carriers (mobile phone companies) present at this site and the most recent version of this document are available online at the Radio Frequency National Site Archive, <http://www.rfnsa.com.au>.





		NATIONAL BROADBAND NETWORK SITE No: 2WDB-51-09-URAB URALBA 11 DEES LANE, LYNWOOD, NSW 2477	PRELIMINARY	
DATE: _____ DRAWN BY: _____ CHECKED BY: _____ APPROVED BY: _____	DATE: _____ DRAWN BY: _____ CHECKED BY: _____ APPROVED BY: _____	DATE: _____ DRAWN BY: _____ CHECKED BY: _____ APPROVED BY: _____	DATE: _____ DRAWN BY: _____ CHECKED BY: _____ APPROVED BY: _____	DATE: _____ DRAWN BY: _____ CHECKED BY: _____ APPROVED BY: _____

Brenda Wright

From: Graeme Gordon <graemeg@ballina.nsw.gov.au>
Sent: Tuesday, 16 December 2014 4:20 PM
Subject: FW: DA2014/387 - PROPOSED TELECOMMUNICATIONS TOWER AT LYNWOOD - BALLINA AERODROME

Dear Andrew and Craig,

Following much discussion between Airport Management, Council, CASA and Aerodrome Consultants regarding the responsibility of the airport operator as regards the airspace around the aerodrome, and development proposals that may encroach the Obstacle Limitation Surface (OLS); I wish to make further belated comment as regards the subject proposed telecommunication tower at Lynwood.

The conceptual surfaces which make up the Obstacle Limitation Surface for an aerodrome, are established in accordance with standards set out in the Manual of Standards Part 139. As stated in my email below the subject proposal is located approximately 11.3 km to the west of Ballina Byron Gateway Airport and would penetrate the horizontal section of the RWY 06 Approach Surface by 17.5m.

The airport's Take-Off/Climb Slope and Approach Slope are obvious critical areas for aircraft activity and safety; and any infringement of these surfaces pose an inherent risk to aviation operations. The aerodrome operator should take all reasonable measures to ensure the full margin of safety for aircraft in these areas and oppose any development that would be likely to infringe the Take-Off/Approach surfaces.

Airport Management must also protect the current and future operational integrity of the airport.

- An infringement in the Approach Slope could result in the installation of a displaced threshold (essentially shortening the runway) which could restrict the current size jet aircraft from using the airport, and in turn would seriously affect the airport business, its financial viability and the flow-on affect to the community as a major attractant for tourism and transport infrastructure.
- Similarly, any plans for the possible lengthening of the runway to cater for larger aircraft in the future, would be severely hampered by such infringement.
- Required Navigational Performance procedures now in place at Ballina Airport and for aircraft carrying the capability have lowered the approach minima to 350ft. It is anticipated with technological advancement the minima could be reduced to 250ft in the future, but this could be jeopardised by the presence of such an obstacle.

Having regard to the above, **IT IS RECOMMENDED** by Airport Management that:

1. Approval for the installation of the Telecommunications Tower as proposed at 11 Dees Lane, Lynwood, NSW, 2477 (Lot 5 DP245043) **BE REFUSED**.
2. Should the proponent wish to install a tower in the general locality, the site be clear of the Take-Off/Approach paths for the Ballina Aerodrome.
3. Should the proponent wish to install a tower at the same site, the height of the tower must be below and not penetrate the Approach Slope for the Ballina Aerodrome.

Regards,

Graeme Gordon
Airport Operations Manager
Ballina Byron Gateway Airport



8.3 DA 2014/387 -11 Dees Lane Lynwood - Telecommunications Tower.DOC

ballina.nsw.gov.au | discoverballina.com | ballinabyronairport.com.au
p: 02 6681 1858 | f: 02 6681 1873 | m: 0415 222 349

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From: Graeme Gordon
Sent: Tuesday, 23 September 2014 3:41 PM
To: Andrew Smith
Cc: Neil Weatherson; kyliel@ballina.nsw.gov.au; Craig Bradridge
Subject: DA2014/387 - PROPOSED TELECOMMUNICATIONS TOWER AT LYNWOOD - BALLINA AERODROME

Dear Andrew,

Refer to DA2014/387 and the General Referral sent to Neil Weatherson on 1 September 2014. I have reviewed the application in so much as it affects the airspace of Ballina Aerodrome. My assessment and conclusions are as follows:

PROPOSED DEVELOPMENT (DA 2014/387)

Construction of a proposed 45m high telecommunications lattice tower, parabolic and panel antennas, equipment shed and ancillary equipment to be erected approximately 11.3 km to the west of Ballina Byron Gateway Airport.

PROPOSED SITE

Private Property Address: 11 Dees Lane, Lynwood, NSW, 2477.
(Lot 5 DP245043).

MGA Co-Ordinates: 543,180 E 6 806 206 N

Latitude / Longitude: -28.87118° 153.44278°

Elevation: The elevation of the site at ground level as determined from the BSC GIS is 164 m ASL (interpolated using the 10m interval contours layer).

The development site is located 11,251 m west of the inner edge of RWY 06 and 747 m south of the extended centreline.

The height of the proposed tower is to be 45m AGL (reduced levels as notated on the drawings provided by the applicant are assumed levels).

The elevation of the proposed tower when erected is to be approx 209 m ASL (Note: SEA LEVEL approx. = 00 AHD).

OBSTACLE LIMITATION SURFACES

The site is located under the RWY 24 Take-Off Surface and the horizontal section of the RWY 06 Approach Surface for the Ballina Aerodrome.

RWY 24 Take-Off Surface - The vertical limit of this surface at the development site has been calculated to be approx 225 m AHD - this slope is clear of the top of the proposed tower by 16 m.

RWY 06 Approach Surface - The vertical limit of the horizontal section of this surface at the development site is 191.5 m AHD – **the proposed tower would penetrate this slope by 17.5 m AHD.**

Shielding - There appears to be no permanent obstacle or terrain within the vicinity to be deemed as shielding the proposed development.

PANS-OPS SURFACES

The proposed development is situated under the RNAV-Z (GNSS) RWY 06; the RNAV-X (RNP) RWY 06 and the RNAV-X (RNP) RWY 24 instrument approach and/or departures surfaces. The proposed development may be situated under the lateral dimensions of the RNAV-Z (GNSS) RWY 24 missed approach surface.

The Visual Segment Slope (VSS) RWY 06; the Circling Areas for Ballina Aerodrome; and the NDB-A surfaces are not affected by the proposed development.

CONCLUSIONS

1. The proposed tower infringes the RWY 06 Approach Surface. The application and the above information is to be referred to the Civil Aviation Safety Authority for further assessment and if permission to proceed is granted, advice regarding measures to mitigate any adverse effects on air navigation.
The District Aerodrome Inspector
Civil Aviation Safety Authority
PO Box 2005
Canberra ACT 2601.
Em. daniel.eatock@casa.gov.au

2. The proposed tower is situated under PANS-OPS Surface for Ballina Aerodrome. Note that PANS-OPS Surfaces cannot be infringed in any circumstances. The application and the above information is to be referred to Air Services Australia for assessment of the proposed development against the PANS-OPS surfaces to determine infringement (if any).
Senior Designer – Procedure Design Section
Aeronautical Information Management
GPO Box 367
Canberra ACT 2601.
Em. Pds.procs@airservicesaustralia.com

3. Notification must be provided to Ballina Airport Management
 - a. at the commencement of works for the erection of the tower on site;
 - b. at least one week prior to the use of any crane erected for use of construction works that exceeds a height of 27 metres above ground level on the site, so an assessment on airport space can be made and a Notice to Airmen prepared and issued; and
 - c. upon completion of works on site.

Regards

Graeme Gordon
Airport Operations Manager
Ballina Byron Gateway Airport



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p: 02 6681 1858 | f: 02 6681 1873 | m: 0415 222 349

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Australian Government
Civil Aviation Safety Authority

AIRSPACE AND AERODROME REGULATION
File Ref: EF12/10657-5

19/12/2014

Mr Rod Wills
Group Manager
Development & Environmental Health
PO Box 450
BALLINA
NSW 2478

email: cbradridge@ballina.nsw.gov.au

Dear Mr Wills

Re: Ballina-Gateway Airport OLS Assessment – Development Application – General Referral.

I refer to the correspondence dated July 1 2014, requesting CASA's assessment of the development planning proposal to erect a Telecommunications facility, at 11 Dees Lane Lynwood.

CASA has assessed the proposed development; the assessment included the consideration of comments from the Ballina/Byron Gateway Aerodrome, Airservices and CASA Flying Operations.

Council has calculated the proposed development, to the nominated maximum height of 225 m Australian Height Datum (AHD), will be a penetration of the of the Ballina/Byron Gateway aerodrome's Obstacle Limitation Surfaces (OLS).

As assessed by the management team of the Ballina/Byron Gateway aerodrome, the Approach Surface contour at this point is 191.5 m AHD, and at this height the development at its highest point will infringe the Approach Surface in excess of 20 m.

CASA has determined that the structure will be a hazardous object under regulation 139.370(1) of the *Civil Aviation Safety Regulations 1998*, because of its height and location within the approach surface.

CASA also supports the assessment that the airport's Take-Off/Climb and Approach Slopes are critical areas for aircraft activity and safety; and any infringement of these surfaces pose an inherent risk to aviation operations.

The aerodrome operator must take all reasonable measures to ensure the full margin of safety for aircraft in these areas, and seriously consider any development that would be likely to infringe the Take-Off/Approach surfaces.

However; if Council considers as part of your own safety and risk management approach that the application is to be approved, CASA recommends that the structure be obstacle lit by a medium intensity flashing red lights at the highest point of the structure. Obstacle lights are to be arranged so as to at least indicate the points or edges of the object to ensure the object can be observed in a 360 radius as per subsection 9.4.3 of the Manual

GPO Box 2005 Canberra ACT 2601 Telephone 131 757
Canberra, Brisbane, Darwin, Cairns, Townsville, Tamworth, Sydney, Melbourne, Adelaide, Perth

of Standards Part 139 - Aerodromes. Characteristics for medium intensity lights are stated in subsection 9.4.6.

(http://www.comlaw.gov.au/Details/F2012C00280/Html/Volume_2);

CASA also recommends that the structure should be obstacle marked in alternating red and white bands of colour in accordance with subsection 8.10.2 of the Manual of Standards (MOS) – Part 139 Aerodromes.

(http://www.comlaw.gov.au/Details/F2012C00280/Html/Volume_1#_Toc324153054).

This assessment does not include any crane activity required during construction if approved. Any such crane activity that exceeds the OLS height of 191.5 m AHD will require a separate assessment.

If obstacle lighting is undertaken as suggested above, then in accordance with regulation 139.350(1) of the CASR 1998 and subsection 7.1.4 and 9.4.10 of the Manual of Standards – Part 139 Aerodromes, Ballina/Byron Gateway Aerodrome is to monitor the ongoing availability of the obstacle lighting.

For detailed requirements for the monitoring of obstacle lights within the aerodrome's OLS refer to subsection 9.4.10 of MOS Part 139.

Yours sincerely,



Danny Eatock
Aerodrome Inspector
Brisbane Office

Brenda Wright

From: Janeane Burke <janeaneb@ballina.nsw.gov.au> on behalf of Ballina Shire Council <council@ballina.nsw.gov.au>
Sent: Tuesday, 25 November 2014 10:17 AM
Subject: FW: AIRSERVICES RESPONSE: DA: 2014/387 - Telecomms facility, 11 Dees Lane, Lynwood (BNA-MA-007)

From: Airport Developments [<mailto:Airport.Developments@AirservicesAustralia.com>]
Sent: Tuesday, 25 November 2014 10:14 AM
To: Ballina Shire Council
Cc: Graeme Gordon
Subject: AIRSERVICES RESPONSE: DA: 2014/387 - Telecomms facility, 11 Dees Lane, Lynwood (BNA-MA-007)

ATT: Craig Bradridge

Good morning Craig,

I refer to your request for Airservices assessment of a comms tower to be located at 11 Dees Lane, Lynwood, NSW.

With respect to procedures designed by Airservices in accordance with ICAO PANS-OPS and Document 9905, at a maximum height of 214m (703ft) AHD the telecommunications tower will not affect any sector or circling altitude, nor any instrument approach or departure procedure at Ballina Airport nor will it adversely impact the performance of any Airservices Precision/Non-Precision Nav Aids, HF/VHF Comms, A-SMGCS, Radar, PRM, ADS-B, WAM or Satellite/Links.

Note: procedures not designed by Airservices at Ballina Airport were not considered in this assessment.

Kind regards

Carly

Carly Fiumara

Airport Development Assistant
Corporate & Industry Affairs
☎ +61 02 6268 4725
✉ carly.fiumara@airservicesaustralia.com

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Brenda Wright

From: Eatock, Daniel <Daniel.Eatock@casa.gov.au>
Sent: Wednesday, 8 April 2015 2:08 PM
Subject: FW: DA 2014/387 - To Erect a Telecommunications Facility Comprising a 45 m High Lattice Tower and Ancillary Equipment [SEC=UNCLASSIFIED]
Attachments: DA 2014387 Letter to CASA regarding aero study report and requesting com.....doc; DA 2014387 - 11 Dees Lane Lynwood Telecommunications Tower Aeronauticalpdf; D14 612869 Obstacle Limitation Surfaces (OLS) assessment - Proposed Telecommunications Tower At Lynwood - Bllina Aerodrome(2).pdf

UNCLASSIFIED

Hi Craig

CASA has already undertaken an assessment for the application to erect a communications tower at 11 Dees Lane Lynwood, and that assessment has not changed. CASA determined that the structure would be a hazardous object under regulation 139.370(1) of the Civil Aviation Safety Regulations 1998, because of its height and location within the approach surface.

Council as the building approving agency must take into account the information provided by the management of the Ballina/Byron Gateway aerodrome, who is responsible to take all reasonable measures to ensure the full margin of safety for aircraft in these areas, and seriously consider any development that would likely infringe the Take-Off/Approach surfaces.

I note that Airservices Australia (AA) has assessed the application, and advised the proposal will not infringe any of the Procedures for Air Navigation Services – Aircraft Operations (PANS-OPS) surfaces, or those surfaces associated with the Required Navigation Performance (RNP) procedures.

As such; if Council considers as part of your own safety and risk management approach after discussions with the management team of the Ballina/Byron Gateway aerodrome, and the review of the aeronautical study by Aviation Projects that the application is to be approved, CASA recommends that the structure be obstacle lit by a medium intensity flashing red lights at the highest point of the structure as per CASA's initial response.

Obstacle lights are to be arranged so as to at least indicate the points or edges of the object to ensure the object can be observed in a 360 radius as per subsection 9.4.3 of the Manual of Standards (MOS) Part 139.

Hope this assist in your discussions.

Regards

Danny Eatock
Aerodrome Inspector
Airspace and Aerodromes
Regulation Group - Brisbane

p> 07 3144 7352 – 131 757
f> 07 3144 7388
e> daniel.eatock@casa.gov.au

PO Box 2005 Canberra ACT 2601

8.3 DA 2014/387 -11 Dees Lane Lynwood - Telecommunications Tower.DOC

www.casa.gov.au

Safe Skies for All

From: Craig Bradridge [<mailto:cbradridge@ballina.nsw.gov.au>]
Sent: Friday, 27 March 2015 8:21 AM
To: Eatock, Daniel
Subject: DA 2014/387 - To Erect a Telecommunications Facility Comprising a 45 m High Lattice Tower and Ancillary Equipment

Hello Daniel

Please find **attached** letter and report regarding the above mentioned application.

Regards

Craig Bradridge
Town Planner
Development and Environmental Health Group



ballina.nsw.gov.au | discoverballina.com
p: 6686 1423 | f: (02)66 867 035

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375 Uralba Road
Alstonville.
NSW, 2477

December 17th 2014
Mr Craig Bradridge
Development Applications,
Ballina Shire Council
P.O. Box 450
Ballina NSW 2478



Dear Craig,
RE: DA 2014/387 – Uralba /Lynwood Tower

Further to various correspondence received from your office and Vision Stream, we wish to express in the strongest terms our concern with the opposition being expressed in relation to the installation of the proposed tower.

It is apparent that the opposition to this tower is misguided and fallacious in a number of respects not to mention the questionable arguments surrounding aesthetic concerns on the part of relatively few.

The simple point is that the rollout by NBN of high speed wireless technology – as opposed to FTTN/H is the only technology on offer and the proposed tower installation is the only way to access it. Failure to do so will mean that residents of the area will not keep pace with increasingly necessary communication technology which as taxpayers we have a right to access.

In the view of the residents at the abovementioned address, the right to access such technology for business and related issues transcends petty aesthetic issues and we believe as longstanding rate payers that Ballina Council is essentially in the role of facilitator of well-orchestrated Australian government policy via the NBN rather than in the capacity of a dispute mediator (in this instance).

Yours sincerely,

A handwritten signature in black ink, appearing to read "A. Heap". The signature is written in a cursive, somewhat stylized font.

Andrew and Jacqueline Heap

375 Uralba Road
Alstonville.
NSW, 2477

December 17th 2014
Mr Craig Bradridge
Development Applications,
Ballina Shire Council
P.O. Box 450
Ballina NSW 2478



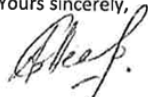
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In the view of the residents at the abovementioned address, the right to access such technology for business and related issues transcends petty aesthetic issues and we believe as longstanding rate payers that Ballina Council is essentially in the role of facilitator of well-orchestrated Australian government policy via the NBN rather than in the capacity of a dispute mediator (in this instance).

Yours sincerely,


Andrew and Jacqueline Heap

Brenda Wright

From: Roger Occomore <occo@ozemail.com.au>
Sent: Monday, 15 September 2014 12:22 PM
Subject: Transmission tower URALBA

DA 2014/387
Ref 010.2014.00000387.001

We strongly support the introduction of fast broadband into the Uralba area. It will bring considerable benefits for education, entertainment, medical services and various other aspects of life. I anticipate that we will see the development of new services through fast broadband that we have not even thought of yet. We strongly urge the Ballina Council to get behind this valuable proposal. If we turn away from it now, we will really regret it in the future.

We have no strong feelings about the location of the tower itself, but we must have the service!

Roger and Jasmine Occomore

Brenda Wright

From: Nicholas De Marco <nickdemarco@hotmail.com>
Sent: Sunday, 31 August 2014 9:32 PM
Subject: DA 2104/387

Dear Ballina Council

This letter is to express our support for the installation of Broadband through the NBN to the Uralba Area.

Whilst Fibre to the node would be the optimal solution to improve internet access, given this is apparently not available, then a Fixed Mobile system would be the next best solution.

Access to these technologies is vital for today's and tomorrow's worlds, especially for our children who need to participate in an increasingly globalised world.

To deny the Uralba community access to the 'highways of tomorrow' would be akin to preventing the rollout of sealed roads or electricity in times past because of the concerns of a few at the time.

In addition it would further restrict economic opportunities in an area that already has a fragile economy,

We trust in your good judgment to make the correct decision for the *whole* community and especially those young people who do not yet have a voice but will be most affected in the future by your decision.

We also support the location of any infrastructure where it is deemed the most effective and cost efficient.

Regards

Drs Nicholas and Alessandra De Marco

Brenda Wright

From: Vince O'Doherty <marvin3848@gmail.com>
Sent: Tuesday, 26 August 2014 9:32 AM
Subject: DA 2014/387 Uralba/Lynwood NBN Tower

As residents of Uralba, Forest Hills Estate, we fully support the application for the construction of the NBN wireless tower at the proposed location. We believe that it is all but essential for the survival & progress of our nation, and in particular our rural areas, to have access to the network and so we should embrace the introduction of this fast broadband into our local area whilst the opportunity is available. We trust that Council will give favourable consideration to the application.
Yours faithfully,
V.B. & M.R. O'Doherty

Brenda Wright

From: Dr James Cowley <crick@ozemail.com.au>
Sent: Monday, 25 August 2014 9:14 AM
Subject: DA 2014/387 Uralba NBN Tower

To: Ballina Council.

DA 2014/387 Uralba NBN Tower

Letter of support (and a suggestion)

As a local resident I strongly support the placement of the NBN Tower on the Uralba Plateau (assuming) it is at a height and location capable of reaching the majority of residences. I assume the proposed location fulfils the NBN requirements and therefore support it but ask that NBN explore if they can ameliorate some of the visual concerns of the closest neighbour located next door (see suggestion below)

In terms of any local resident directly impacted by the tower I trust the Council and NBN can sensitively handle any slight adjustments to the location but at the same time not minimising the reach of the tower to the Uralba Plateau, Forest Hills and South Alstonville, and therefore the potential of this game changing technology for the future of the plateau and other areas. In this respect I understand some nearby residents are concerned about the visual impact. Perhaps (as the base and lower section are shielded by existing trees) a slight realignment could take this out of direct line of site of a bedroom window. Alternatively as it is a light structure (lattice tower) and from my estimate 4 M width at the base, about 3M at avocado tree height and 1.5M at the 25M tree height, for the majority of people they are only going to see the much thinner structure above the 25m tree line. For neighbours to the north of the site perhaps 1-2 fast growing High foliage max 25M trees planted by NBN on the southern side of the affected properties would quickly cover (with existing trees) the bulk of the lower section of the tower and may assist the visual impact. I suspect 25M (and possibly as low as 13Metres,) trees would from such a position on the property block out the majority of the view of the tower. (see calculations below)

I support this as we urgently need fast broadband speeds far greater than currently available in order not to be left behind in the significant changes that are occurring in the economy due to Broadband including:

- a) This area urgently needs new jobs to remain stable and home based, web enabled jobs allow us to attract younger residents (late 20's to mid 50's) who want to run home based businesses. Already there is competition between regions for these people moving from the City and we are losing out. They are the people who will help stabilise the economy here and are very low in infrastructure demands. Without fast Broadband it is a non starter. We know from significant research into areas that are facing economic hardship that potential purchasers in these areas require fast broadband. Areas such as Forest Hills and Uralba Plateau are ideal areas for attracting people in the future who will become good contributors to the local economy. Without the towers this area will become a backwater.
- b) There are many people on the plateau (many who do not realise the size and speed of the changes occurring) who will benefit from all the new services in health care and care of the aged being developed over the internet. The technologies are already being used elsewhere. It is revolutionary in the number of years it can help people stay in their own homes but fast broadband is needed to deliver these services at a time when we have to lower the cost of such services.
- c) Children growing up on the plateau are disadvantaged by not having fast broadband available at home. This will correct the situation.

8.3 DA 2014/387 -11 Dees Lane Lynwood - Telecommunications Tower.DOC

Some opposition has suggested health impacts of fast broadband/towers but there is no evidence of such. In fact the world health organisation in its review of 25,000 research papers on the subject declared they could not find health impacts. I can provide more information if needed on this although I think NBN has it available.

I trust Council will make decisions that are to do with the future and benefit the whole community rather than holding onto the past and small groups of opponents who too often prevent changes that will allow the community to be sustainable in the future, and ensure we are part of the fast broadband network and therefore as a community able to be resilient to the massive changes that are happening as a result of technology and the global economy.

Dr James Cowley B.A. M.Ed. PhD. FAIM. CPM. QPMR. MASMRS.

URALBA.

Note: I have no connection to NBN or telecommunication companies-my support of this is just in respect of fixed wireless fast broadband being essential for our community for our futures.

Some further thoughts on assisting the person most impacted visually:

If you take a straight line from the bedroom window (which seems to be the stated problem)to the location of the tower-it seems to be about 250Metres. Assuming the tower is 45M tall, then if one goes to the southern border of the property in question and take a line from the house to the top of the tower-I calculate that if NBN put in 2-3 high fast growth rainforest high foliage trees (on the affected owners property -south borderline) by the time they reached 13 Metres at that place the tower would not be visible. Obviously this needs a surveyor to check calculations but it may provide a logical solution.

Brenda Wright

From: Veronica <veronica.perko@bigpond.com>
Sent: Friday, 28 November 2014 3:07 PM
Subject: Please forward to Craig Bradridge (Planning Officer)

Dear Mr Bradridge

I am writing to you regarding the proposed NBN Fixed Wireless facility at 11 Dees Lane, Lynwood, NSW 2477.

As a resident of Uralba 35 Davey Rd I am in favour of the NBN Fixed Wireless facility as the current Internet speed is extremely slow.

It is especially frustrating when one needs to follow a web course which has a time limit to complete and the video which features a lecture keeps stopping and starting.

I believe it is important for Uralba to be in line with the technological development happening around the region and not to be left behind as an isolated pocket due to less than satisfactory services.

Especially for the younger generation and those to come as well as those who decide to conduct a home based internet business it seems imperative to stay up to date with the technological developments.

I appreciate your input and thank you for your service.

Yours sincerely

Veronica Perko

Brenda Wright

From: dauidsilvia131415 <dauidsilvia131415@bigpond.com>
Sent: Sunday, 24 August 2014 7:30 PM
Subject: 2014/387

I am in support of the NBN as we have children who are at a stage of their lives that demand fast accessible Internet otherwise they will have to leave the area to further their education. I also love fast Internet as the crappy system we are dealing with now is substandard. I am sending this from my phone because our phone and Internet has been out of service for over a week. I live in Uralba and we are only 1/2 a km from where the proposed tower is to be installed. Bring it on. McDermott family. 23 Davey Rd.

Sent from my GT-N7105T on the Telstra 4G network

Brenda Wright

From: Geoff Jacobs <gajacobs@bigpond.com.au>
Sent: Wednesday, 20 August 2014 11:04 AM
Subject: Telecommunications tower Dees lane

As a resident of Uralba I support the erection of the Tower in Dees Lane at Lynwood(Uralba) to support the NBN Broadband availability in our area.

Geoff Jacobs
70 Platypus Drive,
Uralba

Mirambeena

81 Dees Lane,
Lynwood NSW 2477

T 02 66281464
F 02 66287074

tony@lemlink.com.au

6 May 2015

Ballina Council

re Objection to DA Ref Number: 010.2014.00000387.001
New Utility To Erect a Telecommunications Facility Comprising a 45 m High Lattice Tower and
Ancillary Equipment

Dear Councillors,

As residents of Dees Lane, Lynwood, we object to the proposed DA to build an NBN tower in our street.

We believe that this is an entirely inappropriate development. It is the wrong technology in the wrong place, and it would have a detrimental effect on the use and enjoyment of our land by ourselves and our neighbours.

In making this objection, we note that

- this is not the preferred site for the tower, and we understand that it is only being pursued in this site because many many other landholders and their neighbours in more technically appropriate locations would not consent to it being built proximate to them
- as a result of not being a preferred site, the tower is much higher and more obtrusive than otherwise would be required
- as a result of not being a preferred site, its capacity to offer effective broadband to the Uralba community is constrained, and many will have to resort to a satellite service.
- the tower is vehemently opposed by those who neighbour it directly, causing very high levels of ongoing distress to our neighbours and friends
- Visionstream's environmental impact statement asserted that they would ensure the tower had minimal visual impact. In fact the proposed height and position of the tower at the crest of the plateau, in the flight path, means that CASA has insisted that the proposed tower would require maximum visibility. The original DA was intolerable. The new high-viz 15 story orange and white striped tower surrounded by 24 hour flashing red lights is preposterous in this location, so proximate to many neighbours.

We believe that the Uralba / Lynwood community have a right to high speed broadband. Our preference is for NBN to offer fibre-optic access to this fairly high population density area where trees and hills make wireless technology difficult. If fixed wireless is the only technology to be offered, the current proposal in Dees Lane appears based on expediency rather than technical merit.

The impact of the proposed tower on our neighbours and ourselves is intolerable and we request that the council refuse this DA and suggest to NBN that they pursue a more appropriate solution.

Yours sincerely,



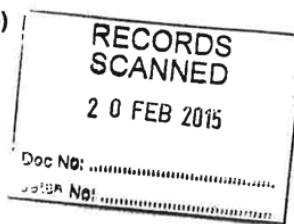
Tony and Cathy Lembke



PARTNERS Robert Warren, Ben Crawford, Guy Latham, Sean Radburn, Ben Robin
ASSOCIATES Claudia Combé, Kate Flanagan, Luke Warren, April Blair, Nathan Job,
Joshua Allan, Emma Babbage, Steve Spinks, Rob Manitta
CONSULTANTS Carolyn Hunt, Dan McOmish, Peter Camont

17 February 2015

Our Ref: PWC:MS:21401388 (Lismore Office)
Your Ref:



The General Manager
Ballina Shire Council
PO Box 450
BALLINA NSW 2478

Dear Sir

RE: Lynwood Residents Group and Proposed NBN Tower

We refer to the report prepared by us in September 2014 on the instructions of one of the objectors to the erection of a 45 meter lattice tower and ancillary equipment at 11 Dees Lane, Lynwood ("Report"). It is our understanding that the Report was made available to Council for consideration when determining the Development Application for erection of the tower and construction of ancillary works. At this time a determination by Council has not been made.

Since the preparation of our Report the affected residents of Lynwood have formed an Incorporated Association known as Lynwood Residents Group for which we now act.

CASA Response

Probably the most significant development since the Report has been the response by the Australian Government Civil Aviation Safety Authority dated 19 December 2014 ("Response") to the effect that the Tower will be "a hazardous object under Regulation 139.370(1) of the Civil Aviation Safety Regulations 1998 because of its height and location within the approach surface."

The Response goes on to say:


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Suite 7, 26-54 River Street, Ballina NSW 2478 PO Box 147
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"CASA also supports the assessment that the airports Take-Off/Climb and Approach Slopes are critical areas for aircraft activity and safety; and any infringement of these surfaces pose an inherent risk to aviation operations."

The Response further says that if despite these facts Council wishes to approve the construction CASA recommends that the Tower be lit by a medium intensity flashing red light and the tower be painted with red and white bands of colour.

It is suggested that Council should not entertain the compromise on the following grounds.

Liability:

The intrusion of the Tower into Take-Off/Approach surfaces is significant. It is an intrusion of in excess of 20 metres in a tower with a height of 45 meters. Nearly half of the Tower intrudes into the approach surfaces. The compromise would see Ballina/Byron Gateway Aerodrome (Ballina Shire Council) assume responsibility to monitor the ongoing availability of the obstacle lighting and presumably the painting of the Tower. This would result in Council assuming a legal liability against which it would need to insure at whatever cost.

Visual Impact:

A strong ground of previous objections was the visual impact of the Tower on nearby residents as close as 143 meters from the site. Visionstream has maintained that the Tower would be painted a non-reflective grey colour to blend in the surrounding foliage. The compromise would see the Tower painted in red and white bands and fitted with medium density flashing red lights providing 360 degree visual access.

Clearly the compromise greatly strengthens the objection on the grounds of a negative visual impact. The compromise would result in the Tower being a focus of visual attention in the area.

Accuracy of Information:

One wonders at the accuracy of information supplied to residents by Visionstream. In a news letter distributed by Visionstream to concerned residents and dated 2 December 2014 under the heading of "Issues Raised in Community Debate" subheading "Lighting" it is stated " ..it (the Tower) does not penetrate the "Obstacle Limitation Surface" (OLS) for aircraft. Because there is no breach of OLS, it is unlikely that safety measures will be deemed necessary".

CASA have stated that the Tower breaches the OLS by more than 20 meters which is nearly half of the Tower height. With a miscalculation by Visionstream to that extent on such an important issue, one must call into question the accuracy of all information provided.

Koala Population:

Mike Fitzgerald of Lynwood Landcare Group has contacted Steven Phillips (Managing Director/Principal Ecologist Biolink Ecological Consultants) enquiring as to the Koala

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population cell in the Dees Lane area. In his survey Dr Phillips defines what he regards as "important population":

- "
1. The locality as you have described it supports the northernmost koala population cell that is within the boundaries of the 'important population' identified by the 2012 Ballina Koala Habitat Study (Fig.6.1 refers). The term 'Important Population' relates to the Federal Government's Environment Protection & Biodiversity Conservation (EPBC) Act 1999. The koala is listed as a vulnerable species for purposes of the EPBC Act and hence any development that has the potential to impact on the viability & survivorship of an important population is of concern to the Commonwealth Department of Environment.
 2. The importance of the Uralba Lynwood population cell is heightened given potential impacts on koalas arising from the construction of Stage 10 (Wardell by-pass) of the Pacific Highway upgrade."

It is suggested that a specific ecological impact study with respect to Koalas should be undertaken as part of the Visionstream DA.

It is our understanding that Council has been provided with a submission dated 8 February 2015 from Lynwood Landcare expressing their concern regarding the impact of the Tower on the Koala population.

Alternate Site:

Our clients are aware of the community benefits of the installation of the Tower. The challenge is to find the most suitable location.

Uralba Nature Reserve:

After significant investigation our clients wish to nominate the Uralba Nature Reserve ("Reserve") as a possible alternate site. The Reserve has an area of 155 hectares within which a suitable site might be found to cater for the needs of all stake holders.

There does not appear to be any legal impediment to the positioning of a telecommunication tower in a nature reserve with the consent of the relevant authorities. It would seem to have been done elsewhere in New South Wales and other States.

This suggestion is, without doubt, one that has significant merit and warrants full investigation.

There is a Plan of Management for the Reserve adopted by the NSW National Parks and Wildlife Service in June 2002. It would seem that the relatively passive operation of the Tower would fit within the objectives of the Plan of Management.

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Fibre optic

It has been suggested that the coverage sought to be obtained from the Tower might be achieved by the use of Fibre Optic cables already installed in the area. This suggestion would seem to have been boosted by the announcements on 14 December 2014 of a "new deal" between Telstra and NBN Co on the use by NBN of Telstra's copper and HFC Networks.

A press release dated 15 December 2014 from Communications Minister, Malcolm Turnbull declared:

"Communications Minister, Malcolm Turnbull, has brokered a new deal between Telstra and the national Broadband Network (NBN) that would see NBN Co gain ownership of the nation's copper and hybrid fibre coaxial (HFC) cable at no additional cost to the tax payer, potentially allowing faster and cheaper roll-out of the NBN.

Back in 2011, the former Labor Government signed an \$11 billion deal with Telstra that required it to decommission its copper and HFC cable network as the NBN was rolled-out. Under Labor's plan, these assets would have been mothballed.

However, under this new plan brokered by Turnbull, instead of Telstra decommissioning its copper and HFC network, it will instead gradually transfer ownership to NBN Co, thereby giving it the option of using the network to deliver the NBN to homes."

The Minister is quoted as saying:

"What this agreement does is ensure that NBN Co's management have the flexibility to choose the right access technology in every particular circumstance"..

This should be seen as a win-win. A win for the taxpayer, a win for the consumers, a win for NBN Co and a win for Telstra shareholders"..

They will ensure that all Australians have access to very fast broadband, much sooner and at much less cost and much more affordably".."

Conclusion:

Whether the answer lies in resiting the Tower or relying on a Fibre Optic solution it is abundantly clear that a lot more work needs to be done by those charged with the task of providing the services of NBN Co to the Uralba/Aistonville area.

Yours faithfully
SOMERVILLE LAUNDRY LOMAX



Peter W Carmont
Nationally Accredited Mediator

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C/- Landcare Network Office
P.O. Box 525
Alstonville NSW 2477

8th February 2015

The General Manager
Ballina Shire Council
Cnr Tamar and Cherry Streets
Ballina NSW 2478

Attention: NBN/visionstream, Andrew Smith, Craig Bradridge, Mayor David Wright and All Councillors etc..

RE: DA 2014/387 Proposed Telecommunication Facility Comprising of 45 Metre High Lattice Tower at 11 Dees Lane Lynwood, being Lot 5 DP245043

Lynwood Landcare Group (LLG) wishes to express significant concern with regard to the proposed 45m NBN Lattice Tower development at Lynwood. The primary concern of LLG relates to the impact on the local koala population of a 45m-lattice tower topped with red and white markings and a medium intensity red flashing light as recommended by the CASA report (19th December, 2014)

The National Landcare Network is a community volunteer organisation established to address strategic and proactive natural resource management and environmental issues. Through collaboration, support and advocacy it aims to foster partnerships with Natural Resource Management and environmental stakeholders, including Government and Industry Groups.

At the outset we commend Ballina Shire Council for its initiative in instigating the Comprehensive Koala Plan of Management prepared under the auspices of State Environmental Planning Policy No 44 (Koala Habitat Protection) in order to influence koala management at the Shire/LGA level.

As you would be aware, koalas are now a nationally threatened species and the local Lynwood population is part of a larger population that is also an important population for the Federal Governments Environmental Protection and Biodiversity Conservation Act (EPBC).

The *Ballina Koala Habitat Study* (2012) identifies the Lynwood koalas as the northernmost population cell within the boundaries of the "important population". Please note the term "important population" refers to koalas listing as a vulnerable species in the Federal Government EPBC Act 1999. Hence any development that has the potential to impact on the viability and survivorship of an "important population" is of concern to the Commonwealth Department of the Environment.

Page 1 of 4

During the 1970's and 80's local landholders planted windrows consisting predominantly of koala food tree eucalypt species, in particular Tallowwoods. Today these trees are mature, at over 20m, and function as concentrated and (almost) contiguous resource corridors providing food and shelter for our local koalas. Such has been the success of this far-sighted initiative that koalas can be seen on a daily basis. The reproductive success of this local population is evidenced by the frequent sighting of young on female koalas backs, juveniles and the loud and distinctive mating calls of males heard commonly at night.

The Lynwood Landcare Group acknowledges that these Tallowwoods are growing on private land that is zoned rural land and thus effectively exempt from SEPP44 type native vegetation/biodiversity legislation. Nevertheless we note that this population cell's status under the Federal EPBC Act can override SEPP44 type legislation.

Key Facts about the Lynwood Koala Population Cell

The Uralba/Lynwood population cell has gained in significance in recent years due to the extent of roadworks in the Ballina Shire. First, there are potential impacts on koalas arising from the construction of Stage 10 of the Wardell by-pass of the Pacific highway upgrade. This habitat loss and disturbance is likely to see a movement of koalas (via the Blackall Range) into the Uralba Valley and up onto the Lynwood plateau windrow habitat. Second, the migration path has become more important since the Bruxner Highway upgrade, some years ago.

The Lynwood population is also important from a genetic diversity perspective in that the cell contains alleles (genes) that are distinct from those present in the southern populations around Wardell. Dr Steve Phillips (Biolink) is currently studying local resident koalas for demographic and genetic profiling to confirm this.

Potential Impacts

1. Increased electromagnetic radiation levels.

A windrow exists of more than 40 Tallowwood koala food trees within 30 metres of the proposed locality. What is the extent of radiation that would be penetrating these trees?

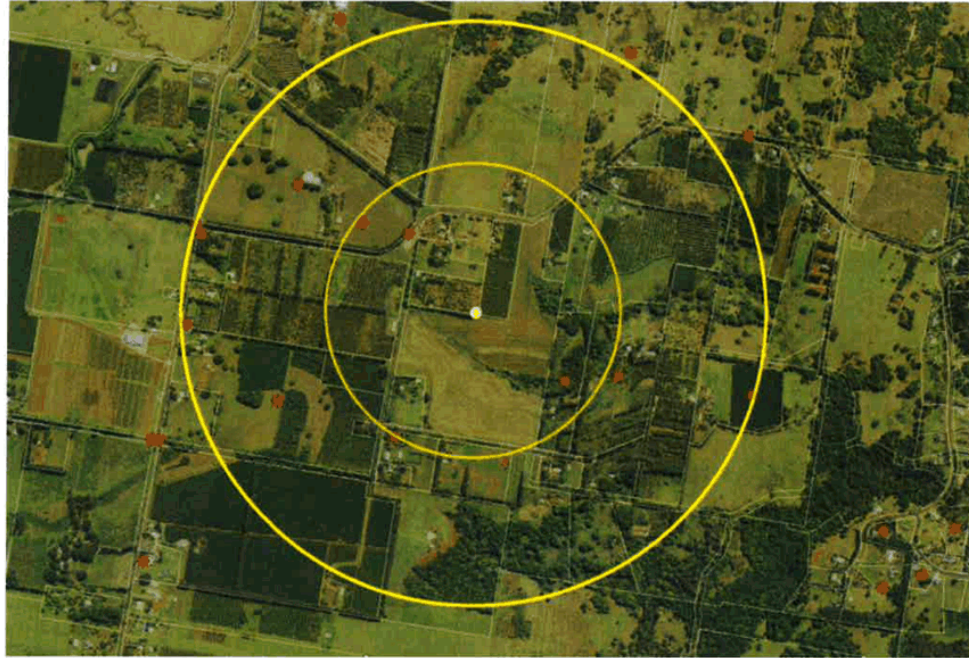
2. Deterrence of koalas from the area.

The second obvious impact is that of visual alarm from the large 45m lattice tower topped with red lights. Koalas are nocturnally active animals and such alarm will likely result in deterrence of koalas from proximity to the tower. The noise of a permanently running air-conditioning system is also likely to deter koalas from the vicinity. In the opinion of Koala expert and researcher Dr Steve Phillips, "the area would be expected to become devoid of koalas over time as they progressively stay away from the area". (pers comm)

In support of our concerns we note the following:

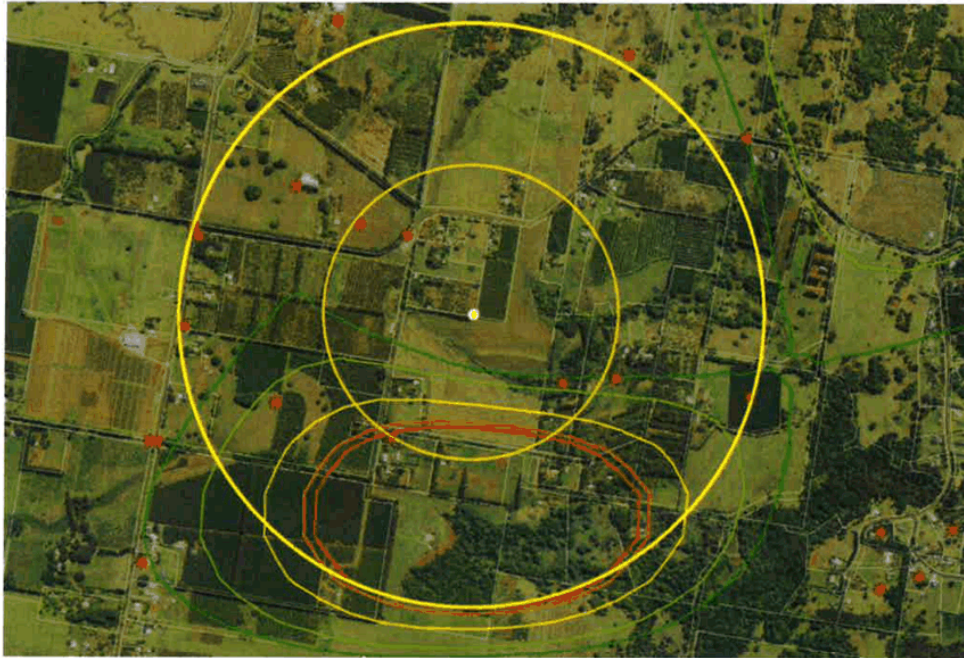
Below are two images showing the relationship of the koala population to the proposed tower. The first of these show records of koala sightings from the NSW Wildlife Atlas and the Friends of the Koala Databases. They are therefore by no means complete and under-represent the actual numbers. The records begin at 1980, and include records till 2012 providing clear evidence of a long history of occupancy by koalas. Note that the 1980 sighting is within 500m of the proposed tower site.

Image 1: Records of koala sightings relative to proposed NBN tower (white dot)



The second image includes the boundaries of the koala population model arising from the Ballina Koala Habitat Study. It should be noted that due to the limitations of that study, the significant activity boundary (yellow line) is conservative and that at a higher resolution of sampling rate, say 250m intervals, the significant activity boundary could confidently be expected to extend over and include the tower site.

Image 2: Activity (proposed NBN tower site - white dot)



Conclusion

In conclusion, Lynwood Landcare affirms the success of the prescient koala food-tree windrow plantings undertaken by local landholders in the 1970's and acknowledges their value as an important resource for our local koala population cell at Lynwood. We oppose any development which may adversely impact this vulnerable and important species. It goes without saying that our local koala population is an ornament and an asset to Ballina Shire, highly valued by residents and visitors to our region.

We respectfully suggest that an alternative location for the NBN tower be found with less direct impact on local koalas.

Yours faithfully

Michael Fitzgerald
Chairman
Lynwood Landcare Group

Nathan & Jessica Russell
355 Wardell Road
Lynwood, NSW, 2477
0402 311 038
jesnafe@gmail.com

16 September 2014

Dear Tony Gibbs, Kevin Hogan, Craig Bradridge, Mayor David Wright, Jeff Johnson, Keith Johnson, Robyn Hordern, Keith Williams, Malcolm Turnbull, Don Page and all other decision makers,

RE: Development Application – 11 Dees Lane, Lynwood, Lot 5 DP245043.

I have just become aware of the proposed erection of a 45 metre tower in Dees lane, not far from our property (perhaps 600m).

I am devastated.

We have only just purchased our property and would have never considered buying it if we were aware of the possibility of a tower so close.

Besides the many concerns addressed by our community (see below) that we also share passionately, we are concerned about our health. There is no conclusive evidence to suggest that broadcast towers don't have health effects on those living nearby. Due to the outrageous size of the proposed tower and its proximity to our property - I have massive concerns that the radiofrequency electromagnetic energy/ radiation will affect us.

The move here was massively stressful with a new baby and the idea of having to sell (after already investing more money than the property is worth) and move again, may well cause us complete ruin... That is if we can find a buyer willing to purchase a property with a massive microwave above their head.

We would have no choice but to move, as you might do yourself, with a new baby and such massive health risks.

Other concerns that we share with our community

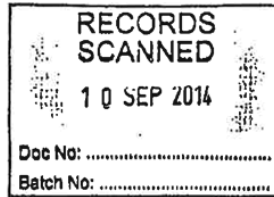
1. Loss of amenity due to negative visual impact
2. Loss of amenity due to negative auditory impact
3. Inappropriate and inferior technology for Uralba
4. Lack of appropriate and lawful community consultation
5. Flawed and inadequate process of decision-making
6. Documentation of the details of the tower lodged for public information are misleading and deceptive

Regards,

Nathan & Jessica Russell

Michael Grant.
350 Uralba Rd
Uralba 2477
6628 6841

To Department of Planning.
Ballina Council.
Re, DA No. 2014/387
Lot 5 DP 245043
Dees Lane
Lynwood.



I am concerned at the level of planning that has gone on with this NBN tower, which is supposed to cover Lynwood and Uralba. I have been told that I should have no problems receiving this signal from my home. But my evaluation shows this will be impossible. This is the same for a number of homes around my location.

I am now retired but have had a lifetime of experience in this field of transmissions. In the 1950's I started with overseas communications, and in the early 60's worked on a number of TV stations, the first rural stations outside the capital cities. I have continued with TV and Radio transmitters for the rest of my career. Sydney had a service area which covered the whole of the Sydney basin, and it was a number of years before we realized that there were many areas with difficult reception. These had then to be covered with additional transmitters to cover those areas. This is an unfortunate result of any type of wireless transmission, and this will also be experienced with this NBN proposal.

I have requested a map showing the service area from NBNco, but to date have not received any reply. This map is essential to evaluate the reception of all properties in this area. The problems that will be shown will be terrain and trees. If it can be shown that 90% of all properties can receive this signal, I will have no problem agreeing that the program should go ahead. However if this figure is lower than this, Ballina Council will need to consider how it will deal with this in the future.

I believe that the trees are going to be the biggest factor, and the following questions need answers from the Council.

1. Will Council allow trees to be removed or lopped for the sake of NBN?
2. How will the Council deal with trees on other properties?
3. How will Council deal with trees on crown land or reserves?
4. Will Council allow towers on private land to overcome the trees?
5. Council considers potential problems with trees growing in the future.

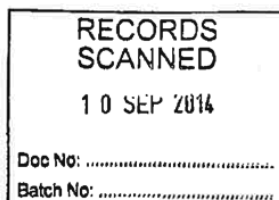
If there is no survey of the service area, I would recommend to Council that a full survey be conducted by NBNco or Council, and that no work continues until that is completed.

Yours sincerely,

Michael Grant.

2014/387

Craig Bradridge (Planning Officer)
Ballina Council
PO Box 450
Ballina
NSW, 2478



5 September 2014

Re: Proposed NBN 45 Meter Tower 11 Dees Lane Lynwood.

Dear Craig Bradridge,

Thank you for taking my call the week of 11th August 2014 & subsequent correspondence surrounding the above proposal. As mentioned to you the first I heard of any proposal was via a notice written by Joel Rodski (NBN Environmental Planner) which had been dropped off in my letter box Thursday 7th August 2014. I attended the NBN information session Wednesday 13th August 2014 at the Meerschaum Vale Hall to get a better understanding of the proposal.

After consideration of the information which NBN Co has provided and after seeking legal advice (see appendix A) I strongly object to the chosen site of this 45 Meter Tower Facility for the following reasons:

1. Lack of Community Consultation

Our community including the people whose land is adjacent to the 5 acres have never had contact from visionstream regarding this proposal in 11 Dees Lane. The first we were informed is when the attached letter (see appendix B) written by Joel Rodski was dropped into our letterboxes Thursday 7th & Friday 8th August 2014 informing us of the proposal to establish a 45M Tower Utility in Dees Lane, however a land agreement has been signed before any consultation has begun. On several occasions the property owner of 11 Dees Lane openly said that the contract has already been signed.

The tower is only 4 metres from other property owners one of whom had been approached by NBN in 2012. It's just come to my attention that all property owners in the area who had previously been approached by the NBN's Property Acquisition Officer for a leasing proposal refused to even consider it as they were well aware of the impact it would have on all the surrounding properties & residents here in Dees Lane, Dou Jea Lane & Uralba Road. On all occasions no other residents living the area were informed by visionstream that they were planning to erect a 45M Tower here.

2. Misleading Information

I question whether the elderly property owners of 11 Dees Lane truly understand the implications of erecting such a tall tower given that they have signed a written consent for a monopole to be erected (see appendix C). The property owner of 11 Dees Lane indicated at the NBN Information Session Wednesday 13th August 2014 Meerschaum Vale Hall that "when it's erected you won't even notice it".

As written in the signed consent form "...NBN & their consultant's visionstream for the construction of a radio network base station comprising a monopole..."

A monopole is not being proposed but rather a Fixed Wireless Facility comprising a new 45 M Lattice Tower, accommodating three (3) panel antennas (1.18 M long), and one(1) parabolic dish antenna (0.9 in diameter). Three (3) remote radio units (0.5 M long) positioned behind the panel antennas & associated equipment housed in two (2) new outdoor cabinets (base are 7.5 m²) located at the base of the Facility. (see appendix D)

The same misleading information was given to Property Owner directly adjacent to the 5 acres of the proposed tower in 11 Dees Lane in 2012 (see appendix E).

3. Negative Visual Impact

Due to the large open field of the neighbouring farm north side & in line with Dou Jea Lane this 45 Meter Tower will have maximum visual impact on the majority of residents' living in Dees Lane, Dou Jea Lane & Uralba road. I consider this tower would be very intrusive to our beautiful country side which currently is accessible to us all - not only the immediate community but the community at large who enjoy their daily walks down Dees Lane & Dou Jea Lane. We all value the rural views which this area has to offer.

4. Obstruction of Tranquil Rural Views

Along the south boundary of the proposed site exists sparsely planted trees offering very little camouflage & small run down avocado trees on the northern boundary wouldn't block the structure out at all.

Tranquil rural views & the beauty of the countryside are the main reason I & the majority of people choose to live here & purchase property in this area. As I have an income producing orchard, I live & work on my property seven (7) days a week. The tower would dominate every aspect of my life 24 hours a day without any escape. This 45 Meter lattice tower facility is unquestionably not in keeping with the rural aspect & the natural beauty of the area.

5. Noise Factor

As this whole community here in Dees lane & Dou Jea Lane is primarily rural & residential there is little to no noise during the day & night. The odd tractor may be heard thru out the crop season & approximately four in-bound flights a day. Outside of this all surrounding residents enjoy the peace & quite which rural life has to offer. I question the size of air-conditioning units & other ongoing operational engine noise or generators in the event of electricity shut downs coming from the proposed utility. Again due to the nature of the open fields any ongoing engine noise would easily be heard particularly thru-out the night. It's a known fact that noise travels at night & in this situation it would be accentuated. Also the noise level would increase markedly with all Northeast & Northwest prevailing winds.

6. Increase Traffic & Traffic Hazards

A proposed new NBN access track 275 M coming in from Dees Lane running the full length of the 5 acre property 11 Dees Lane. All work vehicles' & additional traffic servicing the tower will be seen & heard. We question the size of vehicles & frequency. Due to both the blind corner on entry into Dees Lane from Uralba Road when grass is high increases the risk factor of potential accidents. This is compounded by work vehicles entering & exiting the proposed new road into the tower. Coupled with operating farm machinery either side of the access track creating a real hazard area.

8. Land & Property Value

Can NBN Co substantiate that land & property value would not be affected by the erection of such a high tower in this area? Local Real Estate Agents have advised that there is an impact, especially the market opportunity of a property which is up for sale. Up to 80% of prospective buyers would not even consider viewing a property in close vicinity to a tower.

9. Main Flight Path into Ballina Airport

Dees Lane is on the main flight path into Ballina Airport. Inbound planes flying over Dees Lane have their wheels already dropped preparing for landing. I would imagine an aviation risk assessment has been carried out by the Civil Aviation Safety Authority. What measures have been taken for identified hazards & does that include a safety light on top of the tower? Implications of a safety light would impact on the whole neighbourhood particularly at night.

10. Increase Risk of Lightning Strikes & Electricity Shut Downs

It's a well-known fact that this area is susceptible to direct lightning strikes. As a result electricity is frequently not available. As lightning usually strikes the highest point this newly proposed 45 Meter tower would attract a greater number of strikes subsequently increasing electricity shut downs & increasing danger to surrounding residents.

11. Availability of Services from this Fixed Wireless Tower to Surrounding Community

How many households does this tower actually service & has it been tested. Can NBN Co guarantee reliable delivery?

it's understood for the tower to provide the best outcome there would need to be an unobstructed line of site. The surrounding vegetation in the whole area comprise of many old large/tall trees & forests which would prevent accessibility to this new technology leaving pockets of the community with an unreliable service. Would these existing trees need to be cut down? Likewise the macadamia & avocado growers who often have their house in amongst their tree crop would they also need to remove their crop to access a direct line of sight?

The other hindering factor particular to this area is the elevation profile of the land. Certain households would be blocked from a direct line of site due to the many varying hill heights & valley drops.

Given the hilly topography & vegetation obstacles in this area can NBN Co provide costs involved in providing a reliable service to each household? What are the actual predicted speeds MB/Sec for each household to expect in this area? And finally when would that reliable service be available to each household if the tower was erected?

12. Questionable Benefits from Fixed Telecommunication Technology for Regional Doctors, Educators, Veterinary Surgeons' & All Other Professional Services & Personnel

Given the demographics of this area & the close vicinity to Alstonville could it not be considered to use fibre optic in this area? Vital professional personnel live here just four (4) minutes out of Alstonville & provide the Alstonville Community & surrounding rural areas with their services. After all fibre optic cables have already been laid down along Wardell Road.

SUGGESTED SOLUTIONS: -

I am not saying no to advancing technology but I am saying no to the site selection of the proposed NBN 45 Meter Tower in Dees Lane.

I appreciate the opportunity to have my input & would like to take up the offer made to us at the information session, 13th August 2014 Meerschaum Vale Hall, that NBN Co would consider an alternative site or possibly an alternative technology if the majority of residents' objected to the proposed location of the tower. There is a minimum of twenty five (25) households in close proximity to the proposed site that will be directly & adversely affected by the site selection.

It was muted at the information session when in discussion with our Mayor David Wright that the tower be placed at the end of Forest Road in Uralba up on the nature reserve. Many residents living in both Uralba & Lynwood agreed that this alternative site for the tower would be less intrusive for the community at large...

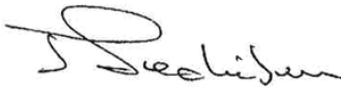
As you are aware the residents of Lynwood & Uralba had a neighbourhood meeting to discuss options. As noted in my email sent to you 22nd August 2014 the meeting had a good outcome in the fact that all residents objecting to the location of the tower are also wishing a favourable solution for all concerned parties. An alternative site would be an agreeable solution & will require effort from NBN Co to carefully select a site away from areas in close proximity to residential localities as written in NBN Co 'Statement of Environmental Effects' (3.3 Candidate Sites).

Fibre optic was also considered offering greater benefits for many residents living here. A number of residents including myself are prepared to group together & help pay for a more efficient technology.

We live in a close community here with an ethos of always being there & helping each other out when in need. Living side by side with large farms, small orchards & residents residing on varying size small acreage requires care & consideration for one another. That level of good community relations doesn't happen overnight.

I would expect from NBN Co to view our concerns earnestly & take a collaborative approach in conjunction with the community members affected to find an amicable solution.

Sincerely



Jill Frederiksen
71 Dees Lane
Lynwood NSW 2477

“APPENDIX A”

Report Regarding Proposed Construction of NBN Tower

Background

NBN Co Limited is engaged in deploying the National Broadband Network in the Northern Rivers area.

Whilst there has been considerable debate regarding connections to users by underground cables, it appears that alternative arrangements are proposed for the less densely populated rural areas. This alternative is a Fixed Wireless Network which provides the service to users by wireless transmission rather than cable. This alternative process requires the erection of towers to facilitate the transmission.

There is a proposal to erect such a tower at Lynwood, which is just south of Alstonville.

A site has been selected by NBN Co and its contractors at 11 Dees Lane Lynwood and arrangements have been made with the owners of that property to permit the erection of that tower.

On or about 31 July 2014 Visionstream lodged an Application for Development Consent ("DA") accompanied by an Environmental Impact Statement ("EIS") with Ballina Shire Council seeking consent to the erection of a 45 metre lattice tower and ancillary equipment.

By letter dated 4 August 2014 NBN Co Limited informed the residents living nearby to the proposed site of the tower of their intentions and invited residents to an Information Session at Meerschaum Vale Hall on 13 August 2014.

We understand that many residents attended the Information Session and have expressed strongly their objections to the NBN Co proposal.

Our Brief

We have been retained by one of the objectors and it is our understanding that our comments will be made available to other objectors and possibly Council.


The Process

NBN Co Limited are implementing a government initiative, as do many government agencies. In the Ballina/Alstonville area in recent years the community has observed the activities of the now Roads and Maritime Authority ("RMA") in the implementation of a government initiative to improve the Pacific Highway.

Older residents will recall the methods used in the past when government agencies simply made their plans and announced them as faits accomplis. In those times there were not even Information Sessions.

It is pleasing that currently, as demonstrated with the Pacific Highway upgrade, the RMA consult extensively before settling their plans.

I hereby certify that this is a true and correct copy of the original which I have sighted

 9.9.14

Natalie Macey JP 110767
249 River Street Ballina NSW 2478

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There is very good reason for this. The construction of a road or the erection of a tower are significant changes for residents who live in the near vicinity and are impacted by the particular change. It is an accepted principle of dispute resolution that a by-product of change is conflict. The challenge for those wishing to make change is to manage conflict. Failure to manage the change may result in most unfortunate consequences. To manage conflict there are essential steps that must be followed including:

- Identifying all stakeholders and making contact with them;
- Identifying issues of concern;
- Exploring possible solutions; and
- If possible, reaching a consensus that all parties can live with.

This is a process which provides procedural fairness and natural justice to those affected and allows the proposer of the change to address the issues which are not resolved.

From the information made available it would seem to us that this proposal has not been advanced in an acceptable process, possibly resulting in a denial of natural justice to the affected residents. On the information made available to us it seems that NBN Co has set about to find a property which is suitable for their purposes and secure it before consulting with stakeholders. In dispute resolution terms such an approach is as archaic as the NBN technology is innovative.

Stakeholders

The proposed site is located in one of the most densely populated rural areas in Australia. This is illustrated in the EIS at page 27, where it shows 9 dwellings within 540 metres to the site, 6 within 400 metres and 3 within 300 metres. Apart from the residents in those dwellings, there are others that consider that they are adversely affected in various ways.

Issues

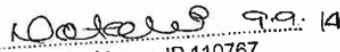
If what we regard as the proper process had been adopted, then the stakeholders, being the residents in the near vicinity as well as the businesses and other activities to benefit from the proposal, would have been identified and invited to participate in discussions from the outset. The discussions would have allowed the issues of concern to be raised and identified.

Instead of this process, the applicant for development approval has purported to identify the issues, without consultation with those potentially affected, and address only those issues which the applicant considers relevant in the EIS.

The effect of this is that there are many issues of concern to stakeholders which are not addressed in the EIS. These issues have been raised at the Information Session which has been held after the DA and EIS have been lodged with Council.

We have been provided with 2 documents, one being what we understand to be a draft Community Objection and the other an objection by our client. (Copies are attached.)

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 Natalie Macey JP 110767
 249 River Street Ballina NSW 2478

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Considering these documents we identify the following issues of concern to the stakeholders as expressed in the documents:

From the Community Objections -

1. Loss of amenity due to negative visual impact
2. Loss of amenity due to negative auditory impact
3. Lack of appropriate and lawful community consultation
4. Flawed and inadequate process of decision-making
5. Documentation of the details of the tower lodged for public information are misleading and deceptive

From the Client Objections -

6. Land and property values
7. Proximity to descending flight path into Ballina
8. Increased risk of lightning strikes and electricity shutdowns
9. Availability of services from the Fixed Wireless Tower to the surrounding community
10. Questionable benefits from Fixed Wireless facilities for doctors, educators, veterinary surgeons and other professionals

We have perused the EIS and offer the following comments:

3. Site Selection

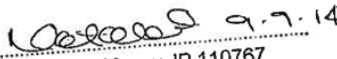
3.2 Site Selection Parameters

In paragraph 3 a number of issues are identified. The input of stakeholders who have significant knowledge of the area would seem to be essential to resolving these issues. This should have been done in initial discussions with stakeholders. Consultation with local residents should have been at the commencement of the process.

3.3 Candidate Sites

These sites are suggested as candidate sites. These sites are said to be within this search area. However, the search area is not identified. It might well be that the stakeholders by use of their local knowledge may identify other candidate sites.

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4. Subject Sites and Surrounds

It would seem that the subject site is located in the middle of the flight path into Ballina Airport. It is noted from page 21 when addressing Principle 4 it is stated that Air Services Australia has been notified of the proposed development and has raised no objection in this location. We would question as to whether Air Services Australia were made aware of the fact that the 45 metre high tower was to be erected in the middle of the descending flight path into Ballina. Surely common sense would demand that if possible it should not be on the flight path. A copy of the aerial photograph provided to us by our client showing the location of the flight path are attached.

5.2 Site Selection

One of the grounds for selecting this site is that it is located in a rural area. The area is rural but it is densely populated by rural standards. Our client estimates that there are some 25 dwellings that will be impacted by the erection of the tower. There appears to be two classifications, Urban and Rural. This area is unique rural area.

6. Section 79C Assessment

6.2.2 NSW Telecommunications Facilities Guideline including Broadband 2010

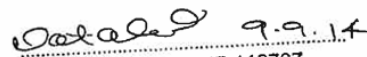
Principle 4: Minimise disturbance and risk maximise compliance

(a) This principle relates to the siting and height of any telecommunications facility and requires that it comply with any relevant site and height requirements specified by the Civil Aviation Regulation 1988 and the Airport (Protection of Airspace) Regulations 1966 of the Commonwealth. It must not penetrate any obstacle limitation surface shown on any relevant Obstacle Limitation Surface Plan that has been prepared by the operator of an aerodrome or airport operating within 30 kilometres of the proposed development and reported to the Civil Aviation Authority Australia.

The applicant concedes in the EIS that the site is located within the Obstacle Limitation Surface Plan of Ballina Shire Council but that Air Services Australia has no objection. Attached is a copy of the Ballina Aerodrome Existing Obstacle Limitation Surfaces. It would appear that the site is virtually in the middle of the designated area to the west of the airport. The area has notations of 150 metres and 191.5 metres. We do not have the expertise to properly interpret the map but again would repeat that placing a 45 metre high tower in this designated area would seem to be something to be avoided.

In this regard see our comments on item 4 in the EIS.

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6.3 Ballina Local Environmental Plan 2012

6.3.1 Provisions of the Ballina LEP

Table 2

7.5 Airspace Operations

This imposes the same basic requirements at 6.2.2 (a).

We would refer to our comments on item 4.

7. Planning Considerations

7.1 Visual Impact

The EIS contains no assessment of the visual impact of the tower. It simply describes that the works involve "the installation of a 45 metre lattice tower". If a proper process had been undertaken, there would be a number of issues to be addressed as outlined in the objections.

7.1.2 Design

The EIS states: "The lattice tower will comprise galvanised steel of a non-reflective grey colour. The grey is expected to blend into the background of the site."

Again this must raise concerns given its location on the flight path. The less obvious an obstacle on the flight path, the more potentially dangerous it must be.

7.9 Social and Economic Impacts

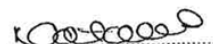
The EIS comments solely on the benefits of the provision of the National Broadband Network. It fails to acknowledge any possible reduction in the value of the surrounding properties. As previously stated, this is one of the most densely populated rural areas in Australia. To date, properties in this area have fetched high prices due to the scenically beautiful area. Many of the residents do not live here to make income from their farming properties but to enjoy the lifestyle and environment. Residents have indicated that enquiries made by them indicate possible substantial reductions in the value of their properties should the tower be erected.

7.11 The Public Interest and the Benefits of Telecommunications

The EIS suggests that the NBSN Co facility will have significant benefits for residents of Lynwood.

The residents suggest that the detrimental issues of concern outlined by them far outweigh the advantages suggested.

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Development application:

The Development Application ("DA") requires the written consent of the owner of the property on which the development is to be constructed.

We have downloaded copies of the DA and consent form. It is noted that the DA seeks approval to construction of a "45m lattice tower", whilst the consent form refers to "a radio network base station comprising a monopole."

There is a distinct difference between a 45 m lattice tower and a monopole as illustrated in the attached drawing.

Matter of importance not canvassed in the EIS:

All of the matters raised in the resident/stakeholder objections are of importance and need to be addressed. In particular, we suggest that the following should have been the subject of discussion with the stakeholders before lodgment of the DA and if consensus was not reached should have been addressed in the EIS:

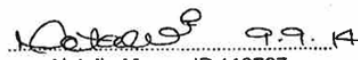
1. Loss of amenity due to negative visual impact. (Item 1 in Community Objection and Item 7 in EIS)
2. Inappropriate and inferior technology for Uralba. (Item 3 in Community Objection).
3. Lack of appropriate and lawful community consultation. (Item 4 in Community Objection, The Process [ante]).
4. Flawed and inadequate process of decision making. (Item 5 in Community Objection, The Process [ante]).
5. Documentation of the details of the tower lodged for public information are misleading and deceptive. (Item 6 in Community Objection, Development Application).
6. Land and property values. (Client Objections, EIS 7.9).
7. Proximity to descending flight path into Ballina Airport. (Client Objections 9, EIS 4, EIS 6.2.2(a), EIS 6.3.1 Table 2 7.5 and 7.1.2)

CONCLUSION:

It is our view that the process followed by NBN Co and its contractions is flawed. It is remarkable that when seeking to introduce change which introduces a most modern technology the process used belongs to a long past age. The most basic flaw is the failure to consult with stakeholders before attempting to implement change.

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 Natalie Macey JP 110767
 249 River Street Ballina NSW 2478

A classic example of the need for such consultation and the potential for unexpected adverse outcomes can be seen in the Bentley display of apparent civil disobedience to require proper consultation, causing the capitulation of the State Government.

The EIS appears to have been hastily prepared, probably to accelerate the process.

It is our view that the process implemented by NBN Co and/or their contractors in attempting to establish a Fixed Wireless Network at Lynwood is so flawed as to represent a denial of natural justice to the stakeholders.

RECOMMENDATIONS:

1. That NBN Co Limited be requested to have a DA 2014/387 lodged on its behalf with Ballina Shire Council withdrawn.
2. That NBN Co Limited be requested to arrange for a proper process to be initiated with a view to obtaining development consent for the establishment of appropriate NBN facilities in the Lynwood/Uralba areas.

Dated this 3rd day of September 2014
Somerville Laundry Lomax

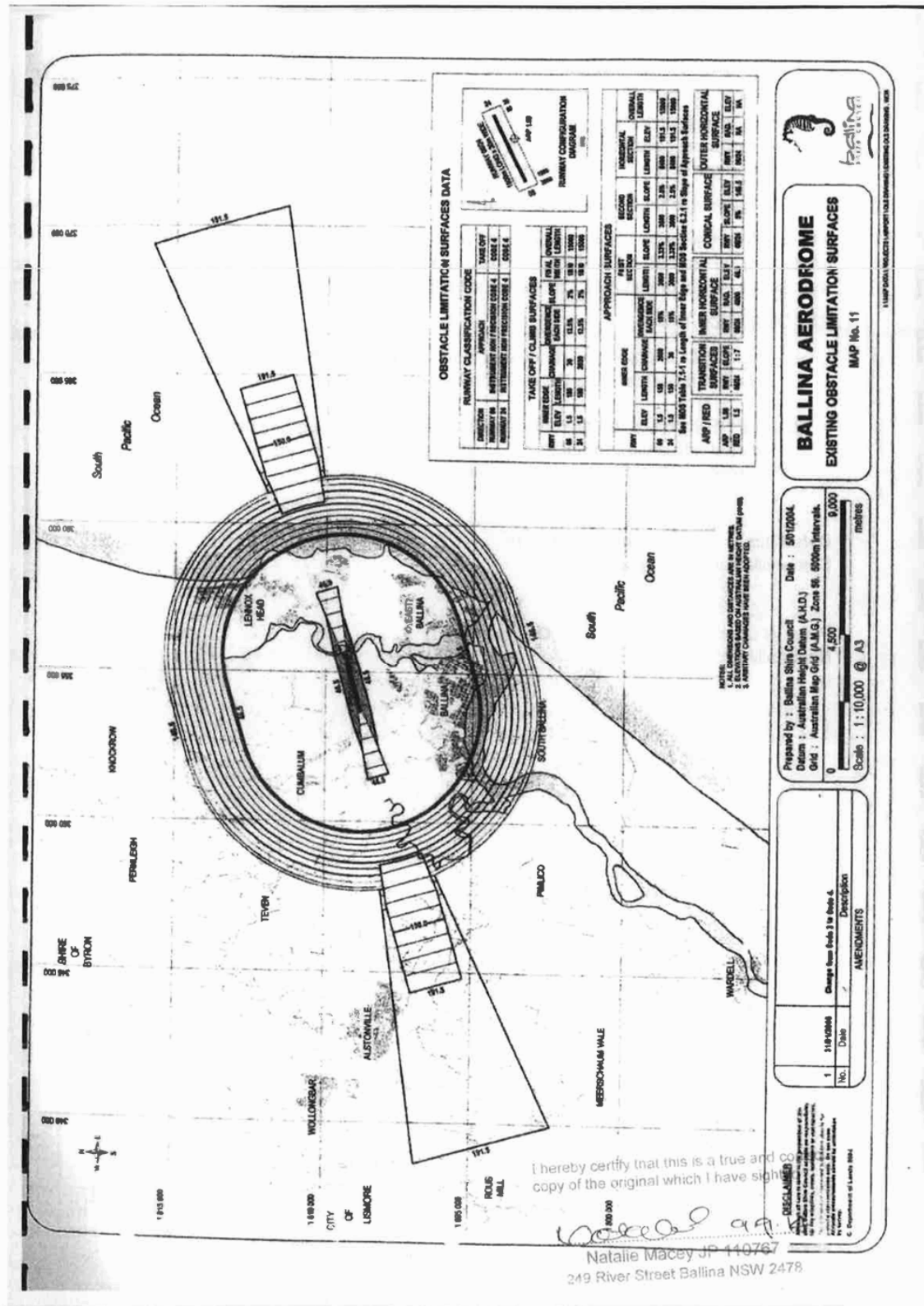
Peter W Carmont LLB (Syd) LLM Dis Res (Bond)
Nationally Accredited Mediator

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29.9.14

Natalie Macey JP 110767
249 River Street Ballina NSW 2478

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OBSTACLE LIMITATION SURFACES DATA

RUNWAY CLASSIFICATION CODE		TAKE OFF	
DIRECTION	APPROACH	HEIGHT IN METRES	HEIGHT IN FEET
AS 13	AS 14	10.0	33.0

TAKE OFF CLIMB SURFACES		FINAL OVERALL SURFACE	
HEIGHT IN METRES	HEIGHT IN FEET	HEIGHT IN METRES	HEIGHT IN FEET
10.0	33.0	10.0	33.0

APPROACH SURFACES		INNER HORIZONTAL SURFACE		CONICAL SURFACE		OUTER HORIZONTAL SURFACE	
HEIGHT	WIDTH	HEIGHT	WIDTH	HEIGHT	WIDTH	HEIGHT	WIDTH
10.0	100.0	10.0	100.0	10.0	100.0	10.0	100.0

BALLINA AERODROME
EXISTING OBSTACLE LIMITATION SURFACES
MAP No. 11



Prepared by: Ballina Shire Council Date: 09/12/04
Datum: Australian Height Datum (A.H.D.)
Grid: Australian Map Grid (A.M.G.) Zone 56, 500m intervals
Scale: 1:10,000 @ A3

No.	Date	Description
1	31/12/04	Change from Sheet 3 to Sheet 4

I hereby certify that this is a true and correct copy of the original which I have signed.

Natalie Macey
Natalie Macey JP 110767
249 River Street Ballina NSW 2478



NATIONAL BROADBAND NETWORK

STANDARD DRAWINGS FOR CONSTRUCTION

DATE: 02/04/14
 CHECKED: DTK
 APPROVED: TS

DESIGNED BY: J. ZAR
 DRAWN BY: J. ZAR
 SCALE: 1:100

PROJECT: NBN-STD-0004
 SHEET: A

GENERAL

1. GENERIC LOADING CONDITIONS ARE TO BE APPLIED AT ALL SITES.
2. SITE DESIGNER SHALL SPECIFY COLLAR MOUNTS OR STRAP MOUNTS.
3. ANTENNA & HEADFRAME LOADINGS SHALL BE APPLIED AT THE HEIGHTS SHOWN ON THE ELEVATIONS.
4. THE TOWER FOUNDATION SHALL BE DESIGNED FOR THE CAPACITY OF THE TOWER SELECTED FOR THE SITE, BASED ON GEOTECHNICAL PARAMETERS.

TOWER SERVICEABILITY LIMIT STATE
 FOR THE TOWER STRUCTURE AND FOUNDATION, THE COMBINED VERTICAL ROTATION AT THE TOP OF THE TOWER SHALL NOT EXCEED 1° FOR BASIC SERVICEABILITY WIND SPEED OF 27 m/s.

TYPE	MOUNT DESCRIPTION
1	TURRET OR SPILAR
2	COLLAR MOUNTS OR STRAP MOUNTS
3	CIRCULAR HEADFRAME
4	TOWER SUPPLIER'S HEADFRAME

T = DESIGN HEIGHT OF TOWER (METRES)

PARABELS (9-0FF)

PARABELS 2 x 40.0m

PARABELS 2 x 40.0m

PARABELS 2 x 40.0m

PARABELS (9-0FF)

PARABELS 2 x 40.0m

PARABELS 2 x 40.0m

PARABELS 2 x 40.0m

PARABELS (9-0FF)

PARABELS 2 x 40.0m

PARABELS 2 x 40.0m

PARABELS 2 x 40.0m

STANDARD MONOPOLE
HIGH CAPACITY TOWER

STANDARD MONOPOLE
HIGH CAPACITY TOWER

STANDARD LATTICE TOWER
HIGH CAPACITY TOWER

STANDARD LATTICE TOWER
HIGH CAPACITY TOWER

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Natalie Macey 9.7.14
 Natalie Macey JP 110767
 249 River Street Ballina NSW 2478

“APPENDIX B”

Ballina Council { Dwayne Roberts - Direct line 66861414
Craig Bradridge - Direct line 66861423



4 August 2014

Dear Sir/Madam,

Proposed National Broadband Network Fixed Wireless Facility at Lynwood

We are writing to advise that NBN Co is proposing to establish a fixed wireless facility at 11 Dees Lane, Lynwood NSW 2477 (Lot 5, DP 245043).

The Lynwood Fixed Wireless Facility comprises a new 45 m lattice tower, accommodating three (3) panel antennas (1.18m long), and one (1) parabolic dish antenna (0.9 m in diameter). Three (3) remote radio units (0.5 m long) will be positioned behind the panel antennas. Associated equipment will be housed in two (2) new outdoor cabinets (base areas less than 7.5m²) located at the base of the facility.

The facility has been proposed as part of the NBN rollout, which is designed to provide access to fast, and reliable, fixed wireless broadband services to the Lynwood and Uralba communities and the rural outskirts to the south of Alstonville.

About the NBN

The National Broadband Network (NBN) is an upgrade to Australia's existing telecommunications network. It is designed to provide Australians with access to fast, affordable and reliable internet services, as quickly and as cost effectively as possible.

NBN Co plans to upgrade the current telecommunications network in the most cost-efficient way using best-fit technology and taking into account existing infrastructure. This will vary from place to place and will include technologies such as Fibre to the Node, Fibre to the Premises, fixed wireless and satellite. Use of fixed wireless and satellite technologies is expected to result in significant improvements compared to services currently available to many Australians living in regional and remote communities.

As part of the fixed wireless component of the network, NBN Co is proposing to establish a series of fixed wireless facilities which are designed to provide fast and reliable wireless broadband services to Australians living in regional and remote areas, including the Ballina Shire Council area.

While NBN Co's fixed wireless service is not a mobile service, it will use cellular technology to transmit signals to and from a small antenna fixed on the outside of a home or business, which is pointed directly towards the fixed wireless facility. NBN Co is designing each fixed wireless facility to serve a set number of premises, which should enable consistency in the speed and quality of services that can be delivered to each home and business receiving the fixed wireless service.

Information Session

NBN Co has lodged a Development Application (DA) with Ballina Shire Council. Before they commence statutory public notification of the DA, we are inviting the community to attend a Community Information Session to find out more about the proposal and to ask any questions.

The Information Session will be held on **Wednesday 13th August 2014 from 3pm-6pm at the Meerschaum Vale Hall, 1 Marom Creek Road, Meerschaum Vale.**

Please find enclosed an invitation to attend. No need to make an appointment, drop in at any time.



VISIONSTREAM PTY LTD ABN 85 093 384 680
236 East Boundary Road
Locked Bag 3, Bentleigh East, VIC 3165
Telephone: 03 9258 5700 Facsimile: 03 9563 7418

I hereby certify that this is true and correct copy of the original which I have sighted



www.visionstream.com.au

Natalie Macey 9.9.14
Natalie Macey JP 110767
249 River Street Ballina NSW 2478

Making a Submission or Inquiry

As above, Ballina Shire Council will shortly commence statutory advertising of this DA, in keeping with NSW planning legislation. Interested residents can make formal submissions to Council once statutory advertising has commenced. Anyone with inquiries about the proposed facility is encouraged to contact me on (03) 9575-4117 or by email to NBNwirelessNSW@visionstream.com.au.

For all other general information call the NBN Co Solutions Centre on 1800 687 626, email info@nbnco.com.au or visit the NBN Co website at www.nbnco.com.au.

Yours Sincerely,



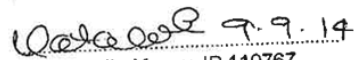
Joel Rodski
Environmental Planner

Attachments

A. Site Plan and Elevation Plan

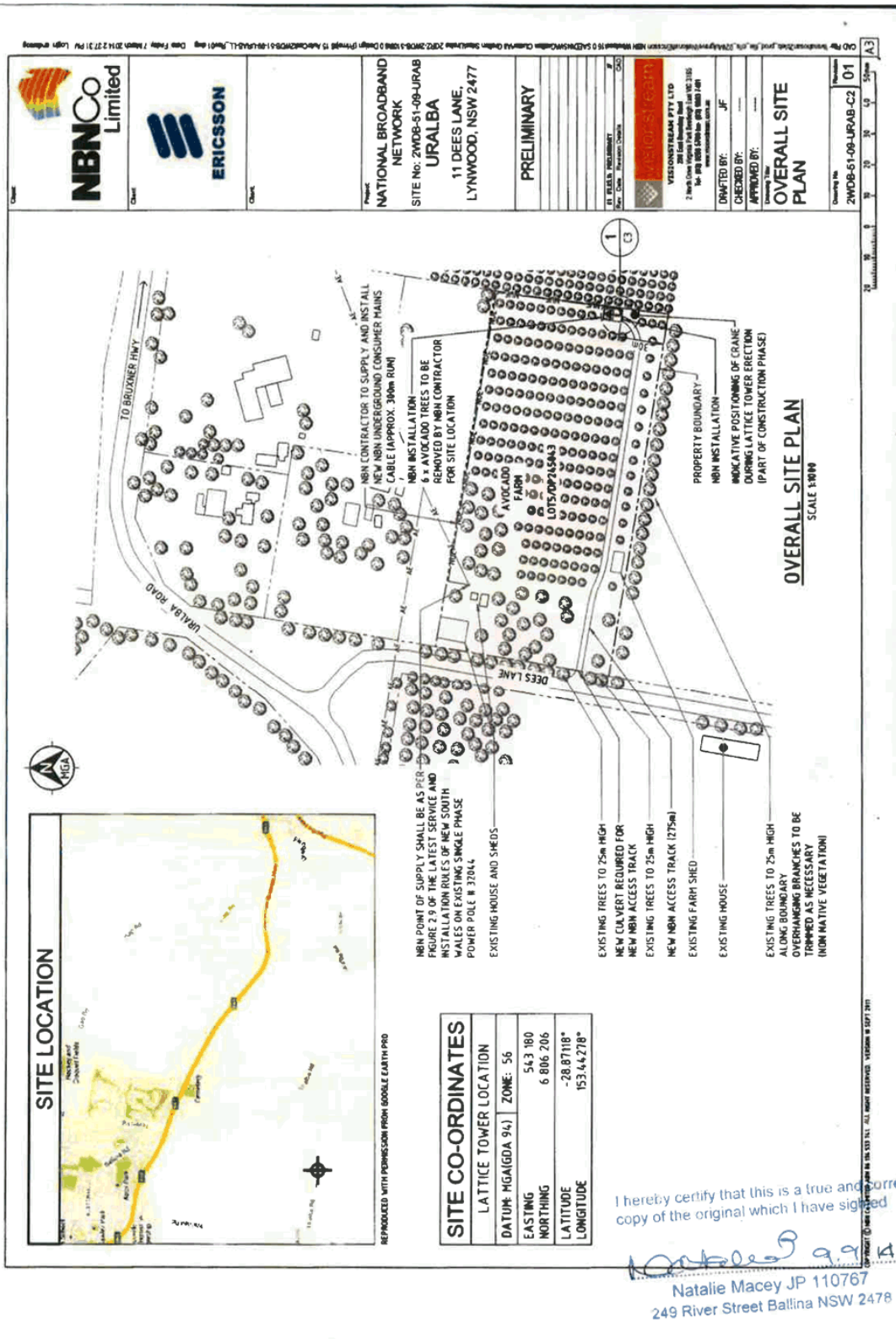
2 pages

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Natalie Macey JP 110767
215 River Street Ballina NSW 2478

Attachment A



“APPENDIX C”

Mr Raymond & Mrs Pamela June Lawty
11 Dees Lane
Lynwood NSW 2477

The General Manager
Ballina Shire Council
PO Box 450
Ballina NSW 2478

Dear Sir

Development Application – 11 Dees Lane, Lynwood NSW 2477– being Lot 5 DP245043 (site location)

As the owner(s) of the above property, ~~I~~we consent to:

- the lodgment of a Development Application [DA] and associated Construction Certificate [CC],
- the lodgment of any subsequent modifications to the DA and CC applications or approvals, and
- the nomination of an Accredited Private Certifier & Principal Certifying Authority

~~by~~ by NBN Co and their consultants Visionstream Pty Ltd for the construction of a radio network base station comprising a monopole and associated equipment and radio facilities on the above property.

we also permit any duly authorised officer of the Council and / or the Principal Certifying Authority to enter the land or premises, with prior notification to carry out inspections and surveys or take measurements or photographs as required for the administration of the relevant Act(s), Regulations or Planning Instruments.

Signature of Owner(s) of Property (if company – print name and title of signatory)

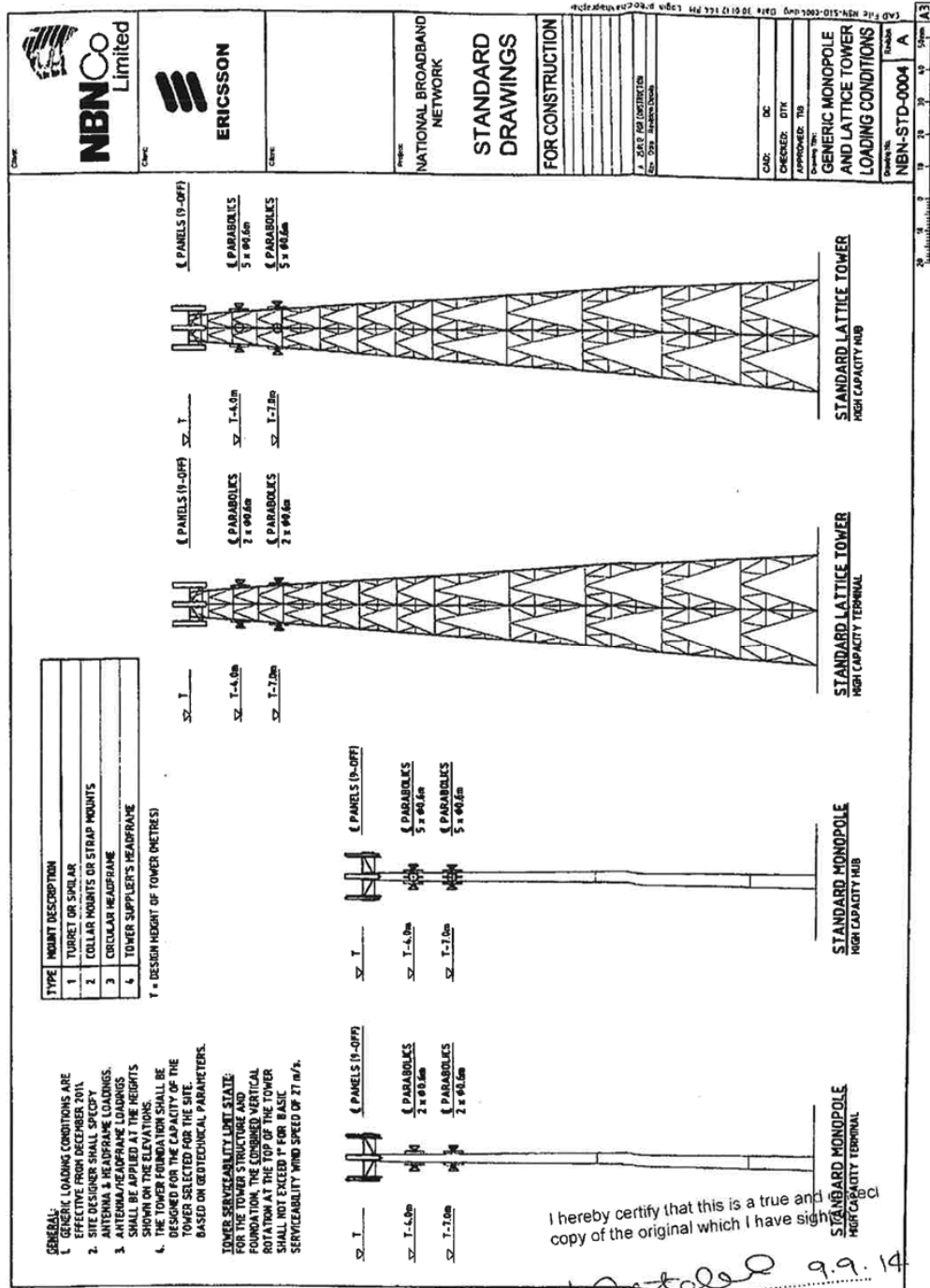
RAYMOND AND PAMELA JUNE LAWTY.

11 DEES LANE LYNWOOD. 2477

Ray Lawty P. Lawty

Date 25.2.2014

“APPENDIX D”



I hereby certify that this is a true and copy of the original which I have sighted

Natalie Macey 9.9.14
 Natalie Macey JP 110767
 249 River Street Ballina NSW 2478

NBN Limited
ERICSSON
 NATIONAL BROADBAND NETWORK
STANDARD DRAWINGS
FOR CONSTRUCTION
 J. JOSE FOR INSTRUTION
 DATE: 29th SEPTEMBER 2014
 CAJ: DC
 CHECKED: DTY
 APPROVED: TB
 GENERIC MONOPOLE AND LATTICE TOWER LOADING CONDITIONS
 Drawing No: **NBN-STD-0004**
 Revision: **A**

“APPENDIX E”



PO Box 1125
 Mascot NSW 1460
 T: (02) 9434 3463
 F: (02) 9469 7601

17 September 2012

To whom it may concern

Our Ref: *Ural 20*

Dear Sir / Madam

Expression of Interest to Lease Land – NBN Network Rollout

As part of the government's initiative and commitment to provide competitive high speed broadband services across Australia, Visionstream have been engaged by Ericsson to deploy the National Broadband Network (NBN) in your region on behalf of NBN Co Limited.

The provision of the service in this area will utilise a state-of-the art fixed wireless technology involving strategically located base station installations. A fact sheet further explaining the proposed fixed wireless network is attached.

During our initial site investigations, we have identified property in your ownership/management as of interest in accommodating a base station installation.

** The proposed installation would entail a freestanding monopole measuring 30-35m in height occupying an approximate ground area of 6m x 10m (example drawing attached). Once established the facility is remotely monitored and ongoing access is rare. The location of the facility of the property is flexible but we ideally need to be relatively close to power and a point of access. **

NBN Co. would enter into a formal tenure agreement with the landowner for the area of land for the facility and pay an annual rental to be negotiated between the parties. I have enclosed the Head of Terms agreement for your information.

If a leasing proposal is of interest to you and you are willing to assist in the deployment of competitive broadband services for the benefit of the wider community, please contact me on **0418 758 616** to further discuss the matter whilst we are in the area. Alternatively please fill in your details below and return this letter to me in the enclosed envelope or scan and send this to my email Jason.roberts@visionstream.com.au or fax to (02) 9469 7601.

Yours Sincerely

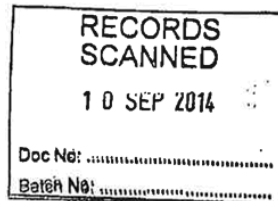
Jason Roberts BProp
 Property Acquisition Officer

Your Phone Numbers	Your Email Address	Your Postal Address
		I hereby certify that this is a true and correct copy of the original which I have sighted <i>Natalie Macey</i> 9.9.12

Natalie Macey JP 110787
 249 River Street Ballina NSW 2478

2014/387

Craig Bradridge (Planning Officer)
Ballina Council
PO Box 450
Ballina
NSW, 2478



5 September 2014

RE: Development Application – 11 Dees Lane, Lynwood, being Lot 5 DP245043.

This letter has been written and is supported by members of the Uralba/Lynwood community (see Appendix "A"), to protest the proposed erection of a 45 metre tower at the address above (see Appendix "B"). Following a community meeting on Wednesday 20th August 2014, and after seeking legal advice (see Appendix "C"), we cite the following reasons for this complaint:

1. Loss of amenity due to negative visual impact

The proposed tower has maximum negative visual impact on the majority of residents living in Dees Lane, Dou Jea Lane and Uralba Roads. The proposed site is surrounded by a large open field and sparsely planted trees. The visual aesthetic of our semi-rural area is a primary consideration for many residents choosing to live here. Apart from the obvious threat to the natural beauty of the area, local real estate agents confirm that the erection of the tower will significantly diminish land and property values.

2. Loss of amenity due to negative auditory impact

The proposed tower is in close vicinity to many residential homes, and increased noise associated with the tower including, for example, from service vehicles and associated machinery (e.g. air conditioning) will impact negatively on local residents.

3. Inappropriate and inferior technology for Uralba

Fixed wireless is inferior to fibre and may be an inappropriate technology for Uralba. Since fibre is already close by, NBNC Co should explain why residents cannot connect to the superior technology. If fixed wireless is demonstrably an appropriate solution (at this stage the benefits of the proposed technology are not been quantified or specified in this particular location) poles should be placed where they are functional but also have the least adverse impacts on residents.

4. Lack of appropriate and lawful community consultation

NBNC Co have not demonstrated that they have any interest in the views of residents, as evidenced by the following: (i) Community consultation in regard to the erection of the tower at the above address, has failed to take place prior to the signing of the contract on 25th February 2014; and (ii) the six month delay in undertaking community consultation following the signing of the contract of agreement between the landholders and NBN and submission of the Development Application to Ballina

Shire Council (8 August 2014) reveals complete disregard for the consultative processes required of NBN.

Most disgraceful is the lack of communication with those landholders living in close proximity to the tower and who will be adversely affected by the proposed structure.

5. Flawed and inadequate process of decision-making

In addition to the lack of appropriate and lawful community consultation, we suggest that the decision-making processes of NBN in relation to the site of the tower are inadequate and deeply flawed. At no stage has evidence been put forward that alternative plans have been considered. Instead, the placement of towers is *ad hoc* based on which members of the community the company can convince, in our case two elderly residents, rather than what is best for the community.

6. Documentation of the details of the tower lodged for public information are misleading and deceptive

Documents lodged by Visionstream, contracted by NBN, include false and misleading information. For example, information in the signed consent form (see Appendix "D") states: "...NBN and their consultant's Visionstream for the construction of a radio network base station comprising a monopole." Yet a monopole is not being proposed, but rather a Fixed Wireless Facility comprising a new 45 M Lattice Tower, accommodating three (3) panel antennas (1.18 M long), and one (1) parabolic dish antenna (0.9 in diameter). Three (3) remote radio units (0.5 M long) positioned behind the panel antennas & associated equipment housed in two (2) new outdoor cabinets (base are 7.5 m²) located at the base of the Facility.

Where to from here?

Our small community is strongly supportive of the development of improved internet services to regional areas. Many of the residents named below stand to benefit significantly from improved data services. For example, Dr Deepak Williams is a vascular surgeon who currently waits 45 minutes for out of hours radiographic images to download to his computer when he is on call. Dr Tony Lembke is at the forefront of designing digital medicine technologies for rural and regional areas as well as participating in numerous web based teleconferences to support his work in general practice. Dr Michael Fitzgerald remote monitors animals in hospital through the internet so as to be able to offer comprehensive out of hours services to the Ballina region. Many other residents offer professional services through skype and/or participate in web based teleconferences.

Despite the significant benefits of improved internet data speeds and bandwidth NONE of the above residents are prepared to pay the price of such a visually obtrusive structure. All are prepared to wait for fibre to the home technology to be made available, even if this means we must wait for several years. To date, this option has also not been offered to us.

We therefore appreciate the opportunity to have our input and take up the offer made to us at the meeting (13th August 2014 Meerschaum Vale Hall) that NBN Co would

consider an alternative site or possibly an alternative technology if the majority of residents' objected to the proposed location of the tower.

Suggestions for alternative options

Fixed wireless is an inappropriate technology for Alstonville.

Fixed wireless at best delivers speeds one quarter that of fibre (25 Mbps vs 100 Mbps). Most people will experience speeds significantly less. It is very dependent on the number of users and physical factors such as topography, rain, trees and distance. Fixed wireless internet is an inappropriate technology to use in a town the size of Alstonville.

Alstonville has three schools, two medical practices, two nursing homes, a vet hospital, a large community of knowledge workers, a large number of retail and banking services, and a large number of elderly and dependent people that increasingly require state of the art broadband connections.

Fixed wireless is an inappropriate technology for Uralba.

Experts tell us that the Uralba area is an inappropriate site for fixed wireless, which at the frequencies proposed relies on line of sight connections. The hilly topography and large number of trees and forests will severely limit the reliability and effectiveness of internet connections.

Fibre optic cables are already available in Alstonville, down Wardell Rd, and we understand down Uralba Rd.

It is unclear why businesses and residents in Alstonville and Uralba cannot avail themselves of the superior, future-proof fibre-optic technology when it is already in the ground.

It was an election promise of Kevin Hogan to halt the rollout of Wireless towers for the National Broadband Network.

"There's a lot of concern in the community about these towers and it seems to me they are running them out very quickly and the consultation is not as good as it could be. I think there needs to be more transparency (about the process of locating towers) but under our plan you would have fibre to the node rather than towers in most locations." Mr Hogan said. We note that NBN Co withdrew its plans for a tower in Macleans Ridges due to its proximity to residents.

Thank you for your consideration. We look forward to hearing from you.

Please address all correspondence to jemmaorchard@bigpond.com or Jemma Orchard, 71 Dees Lane, Uralba, 2477, NSW.

“APPENDIX A”

Development Application - 11 Dees Lane, Lynwood, being Lot 5 DP245043

We, the undersigned, are members of the Uralba / Lynwood community, and wish to add our signature to the attached complaint for the above development application.

Name	Address	Signature
Sill Frederiksen	71 Dees Lane Lynwood	<i>Sill Frederiksen</i>
Philippa Davenport	50 Dou-Jea Lane Lynwood	<i>Philippa Davenport</i>
Mark Goltz	50 Dou-Jea Lane Lynwood	<i>M L Goltz</i>
Karen Rodwell	58 Dou-Jea Ln Lynwood	<i>K Rodwell</i>
GARRY RODWELL	58 Dou-Jea Ln Lynwood	<i>Garry Rodwell</i>
KATE THOMPSON	67 DOU-JEA LANE ALSTONVILLE	<i>M. K. Thompson</i>
CATHY LEMBEKE	81 DEES LANE LYNWOOD	<i>Cathy Lembke</i>
HELEN SAENGER	737 URALBA RD LYNWOOD	<i>Helen Saenger</i>
DR DEEPA WILLIAMS	83 DEES LANE LYNWOOD	<i>Deepa Williams</i>
D. Tony LEMBEKE	81 Dees Lane, Uralba	<i>D. Tony Lembke</i>
Jean Gillies	634 Uralba Road LYNWOOD	<i>J Gillies</i>
JAN FITKEN	633 URALBA, LYNWOOD	<i>J. Fitken</i>
Susan Kohlmetz	655 URALBA RD LYNWOOD	<i>Susan Kohlmetz</i>
DAVID KOHLMETZ	655 URALBA RD LYNWOOD	<i>D Kohlmetz</i>
TOM CURREY	2/643 URALBA RD LYNWOOD	<i>T. Currey</i>
MARGARET CURREY	2/643 URALBA RD LYNWOOD	<i>M. Currey</i>
PAT MANDEVILLE	643 URALBA RD LYNWOOD	<i>Pat Mandeville</i>
Peter Kohlmetz	655 Uralba Rd. Lynwood	<i>P Kohlmetz</i>
MARGARET KOHLMETZ	655 Uralba Rd Lynwood	<i>Margaret Kohlmetz</i>
BRIAN MANDEVILLE	643 URALBA RD, LYNWOOD	<i>Brian Mandeville</i>
Diane Mueller	DEES Lane Lynwood	<i>Diane Mueller</i>
Glenn Callcott	451 Wardell Rd Lynwood	<i>Glenn Callcott</i>
Dale Bevan	577 Wardell Rd	<i>Dale Bevan</i>

I hereby certify that this is a true and correct copy of the original which I have sighted

Natalie Macey 9.9.14
 Natalie Macey JP 110767
 249 River Street Ballina NSW 2478

Development Application - 11 Dees Lane, Lynwood, being Lot 5 DP245043

We, the undersigned, are members of the Uralba / Lynwood community, and wish to add our signature to the attached complaint for the above development application.

Name	Address	Signature
LOIS POTTS	698 VARDEN RD LYNWOOD	L. Potts
ERIC POTTS	" "	E. Potts
Ron + Gwen Helger	281 Wardell Rd Lynwood	R.H.
Luke/Sally Turner	Wardell Rd. Lynwood	[Signature]
Jessica Russell	355 Wardell Rd #	[Signature]
NATHAN RUSSELL	355 WARDEN ROAD LYNWOOD	[Signature]
Jenny Willemse	577 Wardell Rd, Alstonville	J. Willemse
BOB WILLEMSE	" "	[Signature]
Diane Wirth	511 Wardell Rd Dalwood	[Signature]
Lyne Lovell	518 Wardell Rd Alst	[Signature]
B. Love	551 Wardell Rd Alst	[Signature]
Marie-Jane Schulz	532 " " "	[Signature]
Melinda Daley	514 Wardell Rd Alstonville	[Signature]
Robyn Smith	511 Wardell Rd Alstonville	[Signature]
E. G. Heston	518 STONVILLE	[Signature]
R. J. Hey	ALSTONVILLE	R. J. Hey
ROD KINKAD	491 WARDELL RD ALSTONVILLE	[Signature]
MARK SMITH	479 WARDELL RD LYNWOOD	[Signature]
Margie Smith	479 Wardell rd Lynwood	[Signature]
Terry Mortimer	480 Wardell Rd Lynwood	[Signature]
Barbara Mortimer	" "	B. Mortimer
David Mortimer	" "	[Signature]
Clare Mortimer	" "	C. Mortimer

I hereby certify that this is a true and correct copy of the original which I have sighted

Natalie Macey 9.9.14

Natalie Macey JP 110767
249 River Street Ballina NSW 2478

Development Application – 11 Dees Lane, Lynwood, being Lot 5 DP245043

We, the undersigned, are members of the Uralba / Lynwood community, and wish to add our signature to the attached complaint for the above development application.

Name	Address	Signature
Michael Fitzgerald	65 Dees Lane Uralba	<i>[Signature]</i>
R. Ford	65 Dees Lane Uralba	<i>[Signature]</i>
CLEM FITZGERALD	"	<i>[Signature]</i>
Paddy Fitzgerald	65 Dees Lane Uralba	<i>[Signature]</i>
Nadine Miller	68 Dov-Jean Lane, Uralba	<i>[Signature]</i>
MARI GASTEN	51 DEES LANE LYNWOOD	<i>[Signature]</i>
JIM GASTEN	" " " "	<i>[Signature]</i>
IAN GASTEN	23/187 BALLINA RD. A'VILLE	<i>[Signature]</i>
Cheyl Matthews	591 Uralba Rd Uralba	<i>[Signature]</i>
Harry Welch	591 Uralba Rd Uralba	<i>[Signature]</i>
PAUL WELCH	591 Uralba Rd Uralba	<i>[Signature]</i>
Janice Clements	49 Platypus Dr Uralba	<i>[Signature]</i>
JAN DAWSON	605 Uralba Rd, Uralba	<i>[Signature]</i>
RICHARD DAWSON	605 Uralba Rd Uralba	<i>[Signature]</i>
Tamsin Jackson	Sirius Rd Uralba	<i>[Signature]</i>
Jon Jackson	518 Uralba Rd Lynwood	<i>[Signature]</i>
Eryn Jackson	518 Uralba RD Lynwood	<i>[Signature]</i>

BEU DE VERE	233-245 Duck Creek Rd Uralba	<i>[Signature]</i>
Wayne Mewing	64 Dees Lane Lynwood	<i>[Signature]</i>

I hereby certify that this is a true and correct copy of the original which I have sighted

[Signature] 9.9.14
 Natalie Macey JP 110767
 249 River Street Ballina NSW 2478

Development Application - 11 Dees Lane, Lynwood, being Lot 5 DP245043

We, the undersigned, are members of the Uralba / Lynwood community, and wish to add our signature to the attached complaint for the above development application.

Name	Address	Signature
Ben Mortimer	480 Wardell Rd Lynwood	<i>B. Mortimer</i>
Lynn Meyer	472 Wardell Rd Lynwood	<i>L. Meyer</i>
John Meyer	472 Wardell Rd Lynwood	<i>J. Meyer</i>
Kibby West	363 Wardell Rd Lynwood	<i>K. West</i>
Kay Kent	363 Wardell Rd Lynwood	<i>K. Kent</i>
Dwight Murray	357 Wardell rd Lynwood	<i>D. Murray</i>
Peter Crawford	363 Wardell Rd Lynwood	<i>P. Crawford</i>
Alexia Harmon	363 Wardell Rd. Lynwood.	<i>A. Harmon</i>
Geoff Bottomley	368 " "	<i>G. Bottomley</i>
Andrew Leslie	432 Wardell Rd. Lynwood	<i>A. Leslie</i>
Ann Leslie	" "	<i>A. Leslie</i>
Julie Pratten	489 Wardell Rd. Alstonville.	<i>J. Pratten</i>
Gerard Volker	" "	<i>G. Volker</i>
Larry Ralstone	573 Wardell Rd Alstonville	<i>L. Ralstone</i>
Leanne Davis	28 DEES LANE- Lynwood	<i>L. Davis</i>
Courtney West	88 Red lane	<i>C. West</i>
Julie Casey	314 Brady Road	<i>J. Casey</i>
Dave Irving	377 Wardell rd Lynwood	<i>D. Irving</i>

I hereby certify that this is a true and correct copy of the original which I have sighted

Natally Macey 9.9.14

Natally Macey JP 110767
249 River Street Ballina NSW 2478

“APPENDIX B”

Ballina Council { Dwayne Roberts - Direct line 66861414
 Craig Bradridge - Direct line 66861423



4 August 2014

Dear Sir/Madam,

Proposed National Broadband Network Fixed Wireless Facility at Lynwood

We are writing to advise that NBN Co is proposing to establish a fixed wireless facility at 11 Dees Lane, Lynwood NSW 2477 (Lot 5, DP 245043).

The Lynwood Fixed Wireless Facility comprises a new 45 m lattice tower, accommodating three (3) panel antennas (1.18m long), and one (1) parabolic dish antenna (0.9 m in diameter). Three (3) remote radio units (0.5 m long) will be positioned behind the panel antennas. Associated equipment will be housed in two (2) new outdoor cabinets (base areas less than 7.5m²) located at the base of the facility.

The facility has been proposed as part of the NBN rollout, which is designed to provide access to fast, and reliable, fixed wireless broadband services to the Lynwood and Uralba communities and the rural outskirts to the south of Alstonville.

About the NBN

The National Broadband Network (NBN) is an upgrade to Australia's existing telecommunications network. It is designed to provide Australians with access to fast, affordable and reliable internet services, as quickly and as cost effectively as possible.

NBN Co plans to upgrade the current telecommunications network in the most cost-efficient way using best-fit technology and taking into account existing infrastructure. This will vary from place to place and will include technologies such as Fibre to the Node, Fibre to the Premises, fixed wireless and satellite. Use of fixed wireless and satellite technologies is expected to result in significant improvements compared to services currently available to many Australians living in regional and remote communities.

As part of the fixed wireless component of the network, NBN Co is proposing to establish a series of fixed wireless facilities which are designed to provide fast and reliable wireless broadband services to Australians living in regional and remote areas, including the Ballina Shire Council area.

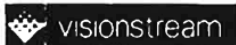
While NBN Co's fixed wireless service is not a mobile service, it will use cellular technology to transmit signals to and from a small antenna fixed on the outside of a home or business, which is pointed directly towards the fixed wireless facility. NBN Co is designing each fixed wireless facility to serve a set number of premises, which should enable consistency in the speed and quality of services that can be delivered to each home and business receiving the fixed wireless service.

Information Session

NBN Co has lodged a Development Application (DA) with Ballina Shire Council. Before they commence statutory public notification of the DA, we are inviting the community to attend a Community Information Session to find out more about the proposal and to ask any questions.

The Information Session will be held on **Wednesday 13th August 2014 from 3pm-6pm at the Meerschaum Vale Hall, 1 Marom Creek Road, Meerschaum Vale.**


Please find enclosed an invitation to attend. No need to make an appointment, drop in at any time.



VISIONSTREAM PTY LTD ABN 85 093 384 680
 236 East Boundary Road
 Locked Bag 3, Bentleigh East, VIC 3165
 Telephone: 03 9258 5700 Facsimile: 03 9563 7418

www.visionstream.com.au

 I hereby certify that this is a true and correct copy of the original which I have sighted


 Natalie Macey JP 110767
 249 River Street Ballina NSW 2478

Making a Submission or Inquiry

As above, Ballina Shire Council will shortly commence statutory advertising of this DA, in keeping with NSW planning legislation. Interested residents can make formal submissions to Council once statutory advertising has commenced. Anyone with inquiries about the proposed facility is encouraged to contact me on (03) 9575-4117 or by email to NBNwirelessNSW@visionstream.com.au.

For all other general information call the NBN Co Solutions Centre on 1800 687 626, email info@nbnco.com.au or visit the NBN Co website at www.nbnco.com.au.

Yours Sincerely,



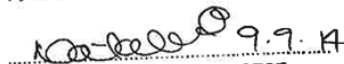
Joel Rodski
Environmental Planner

Attachments

A. Site Plan and Elevation Plan

2 pages

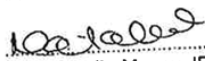
I hereby certify that this is a true and correct copy of the original which I have sighted



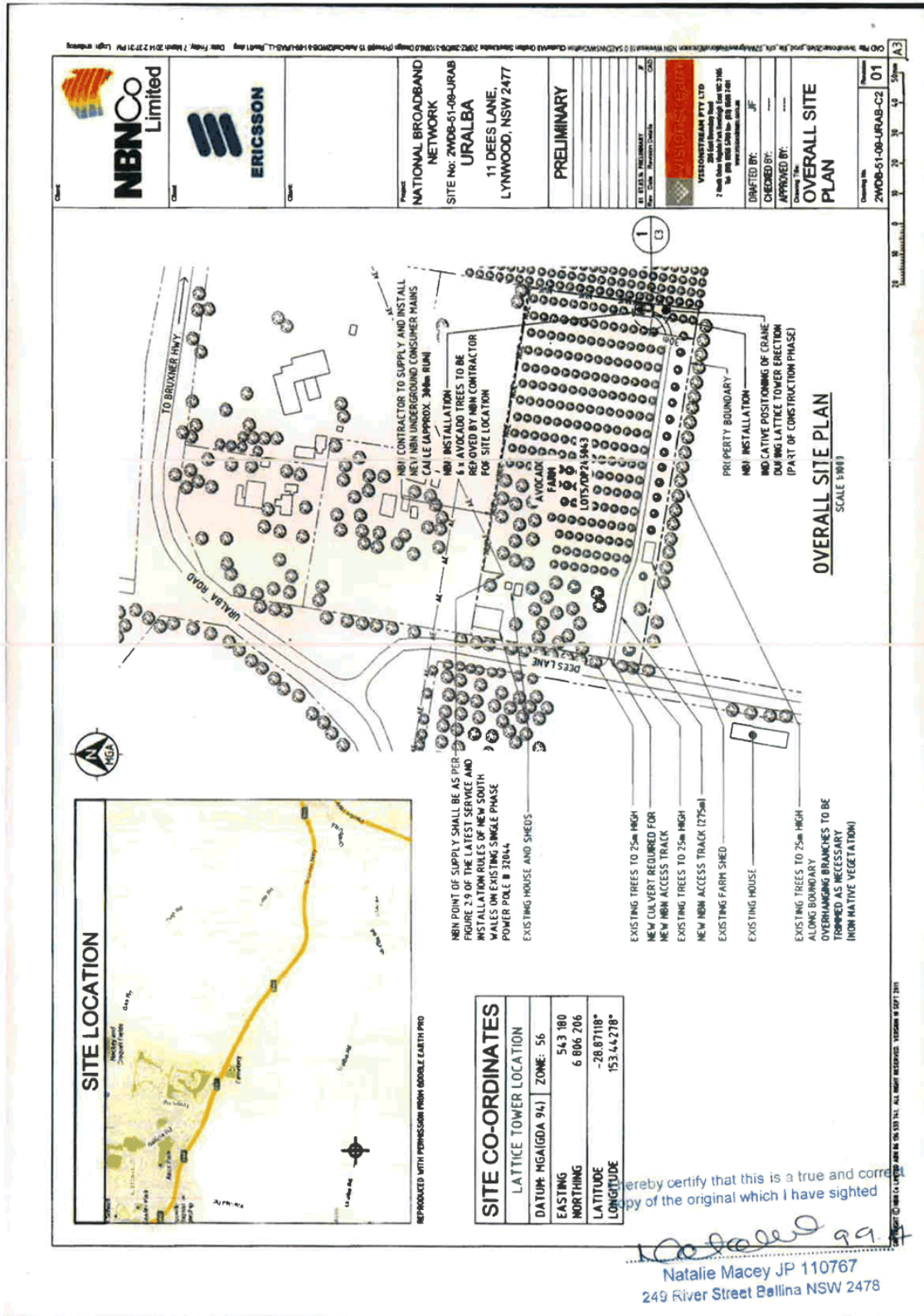
Natalie Macey JP 110767
249 River Street Ballina NSW 2478

Attachment A

I hereby certify that this is a true and correct
copy of the original which I have sighted

 9.9.14

Natalie Macey JP 110767
249 River Street Ballina NSW 2478



“APPENDIX C”

Report Regarding Proposed Construction of NBN Tower

Background

NBN Co Limited is engaged in deploying the National Broadband Network in the Northern Rivers area.

Whilst there has been considerable debate regarding connections to users by underground cables, it appears that alternative arrangements are proposed for the less densely populated rural areas. This alternative is a Fixed Wireless Network which provides the service to users by wireless transmission rather than cable. This alternative process requires the erection of towers to facilitate the transmission.

There is a proposal to erect such a tower at Lynwood, which is just south of Alstonville.

A site has been selected by NBN Co and its contractors at 11 Dees Lane Lynwood and arrangements have been made with the owners of that property to permit the erection of that tower.

On or about 31 July 2014 Visionstream lodged an Application for Development Consent ("DA") accompanied by an Environmental Impact Statement ("EIS") with Ballina Shire Council seeking consent to the erection of a 45 metre lattice tower and ancillary equipment.

By letter dated 4 August 2014 NBN Co Limited informed the residents living nearby to the proposed site of the tower of their intentions and invited residents to an Information Session at Meerschaum Vale Hall on 13 August 2014.

We understand that many residents attended the Information Session and have expressed strongly their objections to the NBN Co proposal.

Our Brief

We have been retained by one of the objectors and it is our understanding that our comments will be made available to other objectors and possibly Council.

The Process

NBN Co Limited are implementing a government initiative, as do many government agencies. In the Ballina/Alstonville area in recent years the community has observed the activities of the now Roads and Maritime Authority ("RMA") in the implementation of a government initiative to improve the Pacific Highway.

Older residents will recall the methods used in the past when government agencies simply made their plans and announced them as faits accomplis. In those times there were not even Information Sessions.

It is pleasing that currently, as demonstrated with the Pacific Highway upgrade, the RMA consult extensively before settling their plans.

I hereby certify that this is a true and correct copy of the original which I have sighted

Natalie Macey 9.9.14

Natalie Macey JP 110767
249 River Street Ballina NSW 2478

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There is very good reason for this. The construction of a road or the erection of a tower are significant changes for residents who live in the near vicinity and are impacted by the particular change. It is an accepted principle of dispute resolution that a by-product of change is conflict. The challenge for those wishing to make change is to manage conflict. Failure to manage the change may result in most unfortunate consequences. To manage conflict there are essential steps that must be followed including:

- Identifying all stakeholders and making contact with them;
- Identifying issues of concern;
- Exploring possible solutions; and
- If possible, reaching a consensus that all parties can live with.

This is a process which provides procedural fairness and natural justice to those affected and allows the proposer of the change to address the issues which are not resolved.

From the information made available it would seem to us that this proposal has not been advanced in an acceptable process, possibly resulting in a denial of natural justice to the affected residents. On the information made available to us it seems that NBN Co has set about to find a property which is suitable for their purposes and secure it before consulting with stakeholders. In dispute resolution terms such an approach is as archaic as the NBN technology is innovative.

Stakeholders

The proposed site is located in one of the most densely populated rural areas in Australia. This is illustrated in the EIS at page 27, where it shows 9 dwellings within 540 metres to the site, 6 within 400 metres and 3 within 300 metres. Apart from the residents in those dwellings, there are others that consider that they are adversely affected in various ways.

Issues

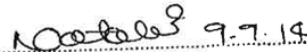
If what we regard as the proper process had been adopted, then the stakeholders, being the residents in the near vicinity as well as the businesses and other activities to benefit from the proposal, would have been identified and invited to participate in discussions from the outset. The discussions would have allowed the issues of concern to be raised and identified.

Instead of this process, the applicant for development approval has purported to identify the issues, without consultation with those potentially affected, and address only those issues which the applicant considers relevant in the EIS.

The effect of this is that there are many issues of concern to stakeholders which are not addressed in the EIS. These issues have been raised at the Information Session which has been held after the DA and EIS have been lodged with Council.

We have been provided with 2 documents, one being what we understand to be a draft Community Objection and the other an objection by our client. (Copies are attached.)

I hereby certify that this is a true and correct copy of the original which I have sighted

 9-7-14

Natalie Macey JP 110767
249 River Street Ballina NSW 2478

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Considering these documents we identify the following issues of concern to the stakeholders as expressed in the documents:

From the Community Objections -

1. Loss of amenity due to negative visual impact
2. Loss of amenity due to negative auditory impact
3. Lack of appropriate and lawful community consultation
4. Flawed and inadequate process of decision-making
5. Documentation of the details of the tower lodged for public information are misleading and deceptive

From the Client Objections -

6. Land and property values
7. Proximity to descending flight path into Ballina
8. Increased risk of lightning strikes and electricity shutdowns
9. Availability of services from the Fixed Wireless Tower to the surrounding community
10. Questionable benefits from Fixed Wireless facilities for doctors, educators, veterinary surgeons and other professionals

We have perused the EIS and offer the following comments:

3. Site Selection

3.2 Site Selection Parameters

In paragraph 3 a number of issues are identified. The input of stakeholders who have significant knowledge of the area would seem to be essential to resolving these issues. This should have been done in initial discussions with stakeholders. Consultation with local residents should have been at the commencement of the process.

3.3 Candidate Sites

These sites are suggested as candidate sites. These sites are said to be within this search area. However, the search area is not identified. It might well be that the stakeholders by use of their local knowledge may identify other candidate sites.

I hereby certify that this is a true and correct copy of the original which I have sighted

Natalie Macey 9.9.14
 Natalie Macey JP 110767
 249 River Street Ballina NSW 2478

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4. Subject Sites and Surrounds

It would seem that the subject site is located in the middle of the flight path into Ballina Airport. It is noted from page 21 when addressing Principle 4 it is stated that Air Services Australia has been notified of the proposed development and has raised no objection in this location. We would question as to whether Air Services Australia were made aware of the fact that the 45 metre high tower was to be erected in the middle of the descending flight path into Ballina. Surely common sense would demand that if possible it should not be on the flight path. A copy of the aerial photograph provided to us by our client showing the location of the flight path are attached.

5.2 Site Selection

One of the grounds for selecting this site is that it is located in a rural area. The area is rural but it is densely populated by rural standards. Our client estimates that there are some 25 dwellings that will be impacted by the erection of the tower. There appears to be two classifications, Urban and Rural. This area is unique rural area.

6. Section 79C Assessment

6.2.2 NSW Telecommunications Facilities Guideline including Broadband 2010

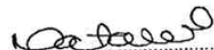
Principle 4: Minimise disturbance and risk maximise compliance

(a) This principle relates to the siting and height of any telecommunications facility and requires that it comply with any relevant site and height requirements specified by the Civil Aviation Regulation 1988 and the Airport (Protection of Airspace) Regulations 1966 of the Commonwealth. It must not penetrate any obstacle limitation surface shown on any relevant Obstacle Limitation Surface Plan that has been prepared by the operator of an aerodrome or airport operating within 30 kilometres of the proposed development and reported to the Civil Aviation Authority Australia.

The applicant concedes in the EIS that the site is located within the Obstacle Limitation Surface Plan of Ballina Shire Council but that Air Services Australia has no objection. Attached is a copy of the Ballina Aerodrome Existing Obstacle Limitation Surfaces. It would appear that the site is virtually in the middle of the designated area to the west of the airport. The area has notations of 150 metres and 191.5 metres. We do not have the expertise to properly interpret the map but again would repeat that placing a 45 metre high tower in this designated area would seem to be something to be avoided.

In this regard see our comments on item 4 in the EIS.

I hereby certify that this is a true and correct copy of the original which I have sighted

 9.9.14

Natalie Macey JP 110767
249 River Street Ballina NSW 2478

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6.3 Ballina Local Environmental Plan 2012

6.3.1 Provisions of the Ballina LEP

Table 2

7.5 Airspace Operations

This imposes the same basic requirements at 6.2.2 (a).

We would refer to our comments on item 4.

7. Planning Considerations

7.1 Visual Impact

The EIS contains no assessment of the visual impact of the tower. It simply describes that the works involve "the installation of a 45 metre lattice tower". If a proper process had been undertaken, there would be a number of issues to be addressed as outlined in the objections.

7.1.2 Design

The EIS states: "The lattice tower will comprise galvanised steel of a non-reflective grey colour. The grey is expected to blend into the background of the site."

Again this must raise concerns given its location on the flight path. The less obvious an obstacle on the flight path, the more potentially dangerous it must be.

7.9 Social and Economic Impacts

The EIS comments solely on the benefits of the provision of the National Broadband Network. It fails to acknowledge any possible reduction in the value of the surrounding properties. As previously stated, this is one of the most densely populated rural areas in Australia. To date, properties in this area have fetched high prices due to the scenically beautiful area. Many of the residents do not live here to make income from their farming properties but to enjoy the lifestyle and environment. Residents have indicated that enquiries made by them indicate possible substantial reductions in the value of their properties should the tower be erected.

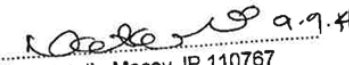
7.11 The Public Interest and the Benefits of Telecommunications

The EIS suggests that the NBSN Co facility will have significant benefits for residents of Lynwood.

The residents suggest that the detrimental issues of concern outlined by them far outweigh the advantages suggested.

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Natalie Macey JP 110767
249 River Street Ballina NSW 2478

Development application:

The Development Application ("DA") requires the written consent of the owner of the property on which the development is to be constructed.

We have downloaded copies of the DA and consent form. It is noted that the DA seeks approval to construction of a "45m lattice tower", whilst the consent form refers to "a radio network base station comprising a monopole."

There is a distinct difference between a 45 m lattice tower and a monopole as illustrated in the attached drawing.

Matter of importance not canvassed in the EIS:

All of the matters raised in the resident/stakeholder objections are of importance and need to be addressed. In particular, we suggest that the following should have been the subject of discussion with the stakeholders before lodgment of the DA and if consensus was not reached should have been addressed in the EIS:

1. Loss of amenity due to negative visual impact. (Item 1 in Community Objection and Item 7 in EIS)
2. Inappropriate and inferior technology for Uralba. (Item 3 in Community Objection).
3. Lack of appropriate and lawful community consultation. (Item 4 in Community Objection, The Process [ante]).
4. Flawed and inadequate process of decision making. (Item 5 in Community Objection, The Process [ante]).
5. Documentation of the details of the tower lodged for public information are misleading and deceptive. (Item 6 in Community Objection, Development Application).
6. Land and property values. (Client Objections, EIS 7.9).
7. Proximity to descending flight path into Ballina Airport. (Client Objections 9, EIS 4, EIS 6.2.2(a), EIS 6.3.1 Table 2 7.5 and 7.1.2)

CONCLUSION:

It is our view that the process followed by NBN Co and its contractors is flawed. It is remarkable that when seeking to introduce change which introduces a most modern technology the process used belongs to a long past age. The most basic flaw is the failure to consult with stakeholders before attempting to implement change.

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 9.9.14

Natalie Macey JP 110767
243 River Street Ballina NSW 2478

A classic example of the need for such consultation and the potential for unexpected adverse outcomes can be seen in the Bentley display of apparent civil disobedience to require proper consultation, causing the capitulation of the State Government.

The EIS appears to have been hastily prepared, probably to accelerate the process.

It is our view that the process implemented by NBN Co and/or their contractors in attempting to establish a Fixed Wireless Network at Lynwood is so flawed as to represent a denial of natural justice to the stakeholders.

RECOMMENDATIONS:

1. That NBN Co Limited be requested to have a DA 2014/387 lodged on its behalf with Ballina Shire Council withdrawn.
2. That NBN Co Limited be requested to arrange for a proper process to be initiated with a view to obtaining development consent for the establishment of appropriate NBN facilities in the Lynwood/Uralba areas.

Dated this 3rd day of September 2014
Somerville Laundry Lomax



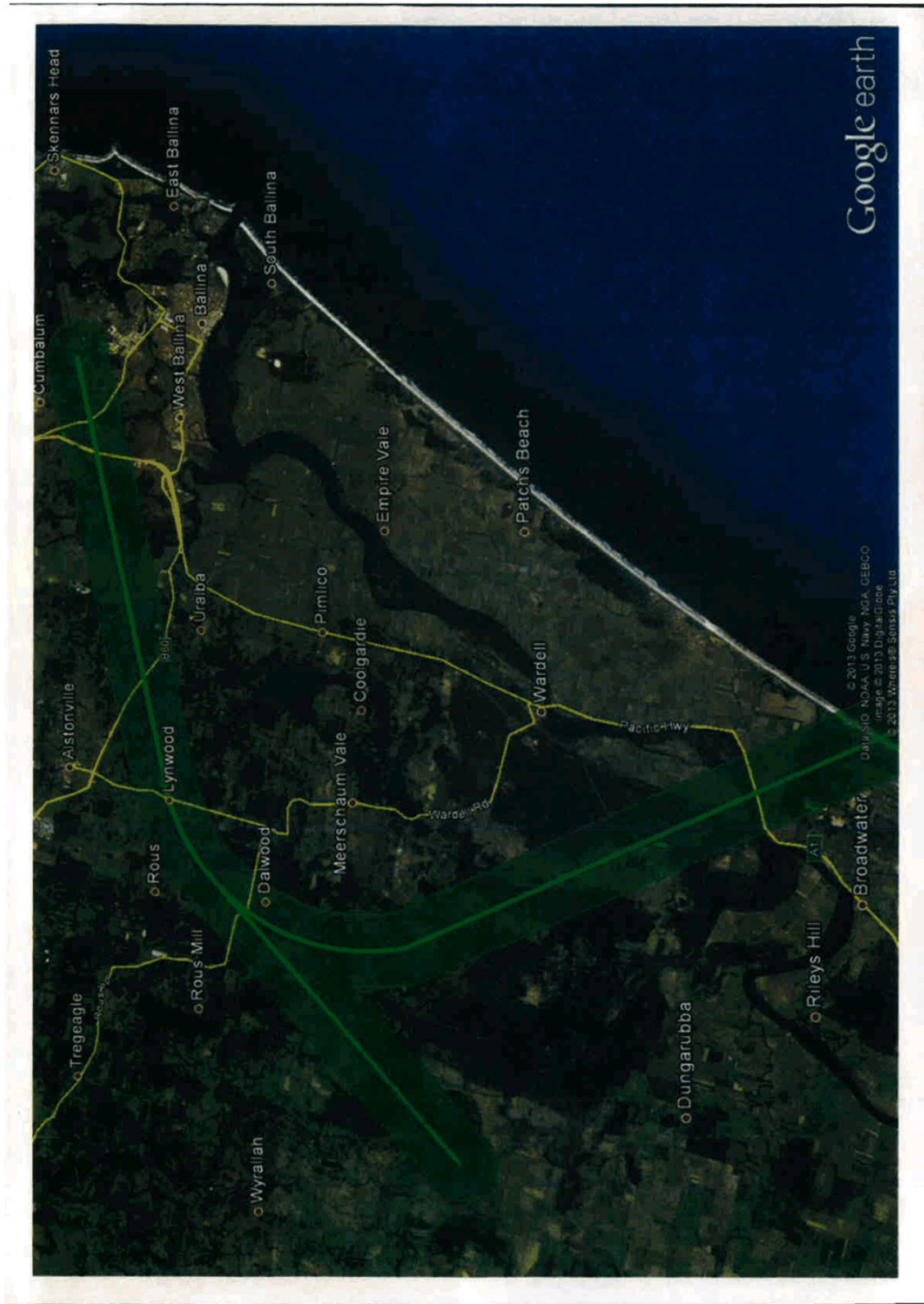
Peter W Carmont LLB (Syd) LLM Dis Res (Bond)
Nationally Accredited Mediator



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Natalie Macey JP 110767
249 River Street Ballina NSW 2478



NATIONAL BROADBAND NETWORK

STANDARD DRAWINGS

FOR CONSTRUCTION

Project: NATIONAL BROADBAND NETWORK

Drawn by: J. MACEY

Checked by: DTK

Approved by: TBS

Scale: 1:1

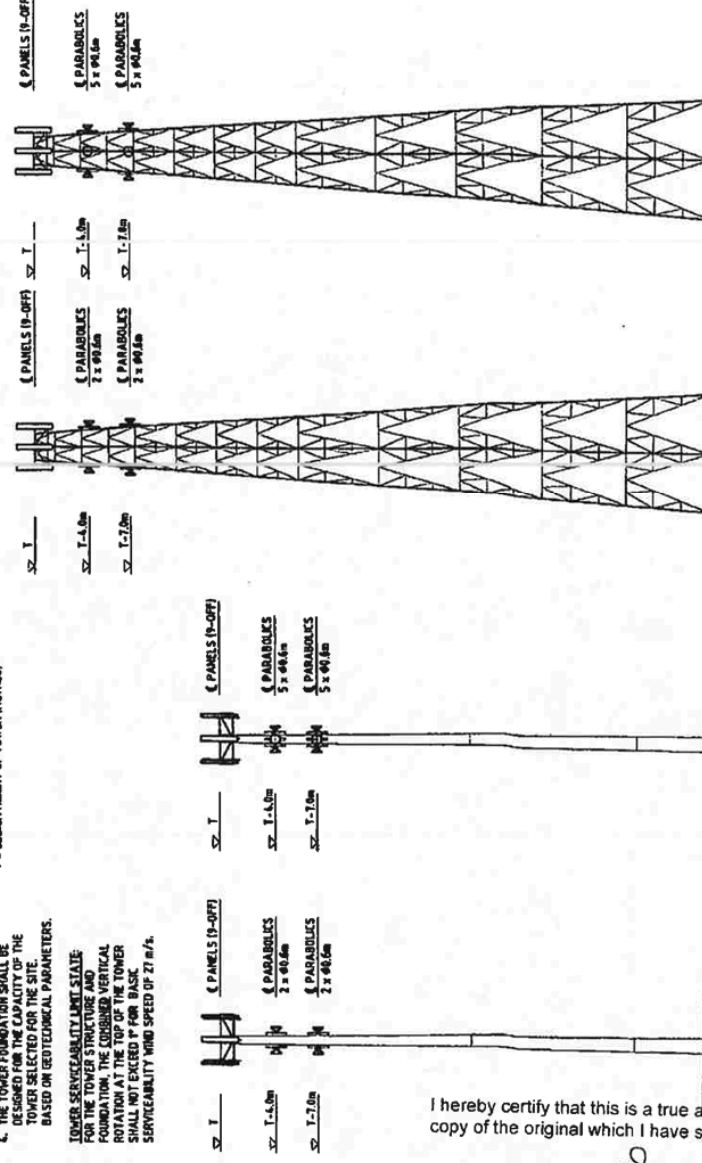
Sheet: 1 of 1

GENERAL:

- GENERIC LOADING CONDITIONS ARE EFFECTIVE FROM DECEMBER 2011.
- SITE DESIGNER SHALL SPECIFY ANTENNA & AIRFRAME LOADINGS.
- ANTENNA & AIRFRAME LOADINGS SHALL BE APPLIED AT THE HEIGHTS SHOWN ON THE ELEVATIONS.
- THE TOWER FOUNDATION SHALL BE DESIGNED FOR THE CAPACITY OF THE TOWER SELECTED FOR THE SITE, BASED ON GEOTECHNICAL PARAMETERS.

TOWER SERVICEABILITY LIMIT STATE:

FOR THE TOWER STRUCTURES AND FOUNDATION THE SERVICEABILITY LIMIT STATE SHALL NOT EXCEED 1% FROM BASE. SERVICEABILITY WIND SPEED OF 27 m/s.



STANDARD MONOPOLE HIGH CAPACITY HUB

ANTENNA HEIGHTS: T-1.5m, T-1.5m, T-1.5m

PARABOLICS: 2 x 60.0m, 2 x 60.0m, 2 x 60.0m

STANDARD MONOPOLE HIGH CAPACITY TERMINAL

ANTENNA HEIGHTS: T-1.5m, T-1.5m, T-1.5m

PARABOLICS: 2 x 60.0m, 2 x 60.0m, 2 x 60.0m

STANDARD LATTICE TOWER HIGH CAPACITY HUB

ANTENNA HEIGHTS: T-1.5m, T-1.5m, T-1.5m

PARABOLICS: 2 x 60.0m, 2 x 60.0m, 2 x 60.0m

TYPE	HEIGHT DESCRIPTION
1	TURRET OR SPILAR
2	COLLAR POINTS OR STRAP POINTS
3	CIRCULAR HEADFRAME
4	TOWER SUPPLIER'S HEADFRAME

T = DESIGN HEIGHT OF TOWER (METRES)

I hereby certify that this is a true and correct copy of the original which I have sighted

Natalie Macey

Natalie Macey JP 110767
249 River Street Ballina NSW 2478

“APPENDIX D”

Mr Raymond & Mrs Pamela June Lawty
11 Dees Lane
Lynwood NSW 2477

The General Manager
Ballina Shire Council
PO Box 450
Ballina NSW 2478

Dear Sir

Development Application – 11 Dees Lane, Lynwood NSW 2477– being Lot 5 DP245043 (site location)

As the owner(s) of the above property, ~~we~~ we consent to:

- the lodgment of a Development Application [DA] and associated Construction Certificate [CC],
- the lodgment of any subsequent modifications to the DA and CC applications or approvals, and
- the nomination of an Accredited Private Certifier & Principal Certifying Authority

by NBN Co and their consultants Visionstream Pty Ltd for the construction of a radio network base station comprising a monopole and associated equipment and radio facilities on the above property.

we also permit any duly authorised officer of the Council and / or the Principal Certifying Authority to enter the land or premises, with prior notification to carry out inspections and surveys or take measurements or photographs as required for the administration of the relevant Act(s), Regulations or Planning Instruments.

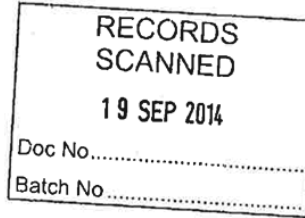
Signature of Owner(s) of Property (if company – print name and title of signatory)

RAYMOND AND PAMELA JUNE LAWTY.
 11 DEES LANE LYNWOOD. 2477
 Ray Lawty P. Lawty

Date 25.2.2014

Craig Bradridge (Planning Officer)
Ballina Council
PO Box 450
Ballina
NSW, 2478

18 September 2014



Re: Proposed NBN 45 Meter Tower 11 Dees Lane Lynwood, DA 2014/387.

Dear Craig Bradridge,

I would like to thank you for granting additional time to allow those residents wishing to add their signatures to the Uralba/Lynwood Communal letter who were not contactable at the time.

Please find enclosed the list of those residents to be included in our Communal Letter (under Appendix A) submitted 9/9/14. Once Appendix A is amended it will comprise 8 pages with a total of 136 residents' signatures.

Sincerely

Uralba/Lynwood Community Members

Please address all correspondence to jemmaorchard@bigpond.com or Jemma Orchard, 71 Dees Lane, Uralba, 2477, NSW.

Development Application - 11 Dees Lane, Lynwood, being Lot 5 DP245043

We, the undersigned, are members of the Uralba / Lynwood community, and wish to add our signature to the attached complaint for the above development application.

Name	Address	Signature
KAY HOUSTON	68 Dou Tea Lane Lynwood 2477	Kay Houston
Jim HOUSTON	68 Dou Tea Lane Lynwood 2477	JJ Houston
IVI LEADBEATER	572 URALBA ROAD LYNWOOD	IVI Leadbeater
M Mukherjee	572 Uralba Rd A'ville	M Mukherjee
Helen Sinkins	577 Uralba Rd Lynwood	Helen Sinkins
Marilyn Walsh	593 URALBA RD Lynwood	Marilyn Walsh
Mandy Thomas	43 PLATYPUS DR URALBA	Mandy Thomas
Peter Thomas	43 PLATYPUS DR. URALBA	Peter Thomas
Paul Thomas	43 PLATYPUS DR URALBA	Paul Thomas
Maria Heaton	128 Platypus Dr Uralba	Maria Heaton
Vernon Ware	126 Platypus Dr Uralba	Vernon Ware
Rosie Willacy	130 Platypus Dr. Uralba	Rosie Willacy
Christine Harvey	110 Platypus Drive	Christine Harvey
Christine Harvey	110 Platypus Drive	Christine Harvey
Lisa Thomas	40 Uralba Cutting Rd, Uralba	Lisa Thomas
Bennard Thomas	40 Uralba Cutting Rd, Uralba	Bennard Thomas
Louise Breckman	210 Uralba Rd Uralba	Louise Breckman
Dolph Breckman	210 Uralba Rd Uralba	Dolph Breckman
Naelene Wilton	21 Longgroves Lane, Uralba	Naelene Wilton
Todd Wilton	21 Longgroves Lane Uralba	Todd Wilton
Mal Wilton	21 Longgroves Lane, Uralba	Mal Wilton
Bridget Harvey	Therapwood Lane Uralba	Bridget Harvey

I hereby certify that this is a true and correct copy of the original which I have sighted

9 May 18-09-2014

Jane Tory JP 129411
Ballina NSW 2478

9 May 18-09-14

Development Application – 11 Dees Lane, Lynwood, being Lot 5 DP245043

We, the undersigned, are members of the Uralba / Lynwood community, and wish to add our signature to the attached complaint for the above development application.

Name	Address	Signature
Steve Hansen	245 Uralba Road Uralba	[Signature]
J.P. [unclear]	1 RALBA RD URALBA	[Signature]
Matt [unclear]	Uralba Road Uralba	[Signature]
J. Conlan	285 Uralba Rd Uralba	[Signature]
W. Rata	116 Bartlett In Mooroomoo	[Signature]
G. Rata	" " " Uralba	[Signature]
R CONLAN	285 URALBA RD URALBA	[Signature]
M. Conlan	9 DEECAN DR ALSTONVILLE	[Signature]
b. Simpson	Uralba Road Uralba	Colin Simpson
b. Simpson	331 Uralba Rd Uralba	b. Simpson
D. Baelz	17 Platypus Dr	D. Baelz
P Leadbeater	432 URALBA RD	P Leadbeater
J Leadbeater	432 Uralba Rd	J Leadbeater
K. Doyle	32 Uralba Rd.	K Doyle
T KRITZ	URALBA ROAD URALBA	[Signature]
J Doyle	32 Uralba Rd	[Signature]
[unclear]	Uralba Rd	[Signature]
Dave London	151 Uralba Rd.	[Signature]
David Simpson	76 Newports Lane Uralba	[Signature]

I hereby certify that this is a true and correct copy of the original which I have sighted

J. Young 18-09-2014

Jrene Tory JP 129411
700 River Street Ballina NSW 2478

9/10/14 18.9.14

Development Application – 11 Dees Lane, Lynwood, being Lot 5 DP245043

We, the undersigned, are members of the Uralba / Lynwood community, and wish to add our signature to the attached complaint for the above development application.

Name	Address	Signature
Suzanne Wright	289 Uralba Rd Uralba	<i>[Signature]</i>
Douglas Wright	289 Uralba Rd URALBA.	D.O. Wright
		I hereby certify that this is a true and correct copy of the original which I have sighted
		<i>[Signature]</i> 18-07-2014
		Irene Torg JP 129411
		11-11 Street Ballina NSW 2478
		<i>[Signature]</i> 18-9-14

Development Application – 11 Dees Lane, Lynwood, being Lot 5 DP245043

We, the undersigned, are members of the Uralba / Lynwood community, and wish to add our signature to the attached complaint for the above development application.

Name	Address	Signature
Ashlie Smallbone	326 Uralba Road	<i>[Signature]</i>
Beverly Maher	189 Uralba Rd	<i>[Signature]</i>
Kirk Trease	189 Uralba Rd.	<i>[Signature]</i>
		<p>I hereby certify that this is a true and correct copy of the original which I have sighted</p>
		<p><i>[Signature]</i> 18-09-2014 <small>John Tory JP 129411 ... Street Ballina NSW 2478</small></p>
		<p><i>[Signature]</i> 18-9-14</p>

Ballina Shire Council,

Ref. D.A. 2014/387

We received a request from NBN Co/Vision Stream during 2012 wishing to erect a wireless tower on our property in Dou-Jea Lane. After speaking with the family I rang NBN Co. and advised them that we were not interested in, and did not want the tower on our property for the following three reasons:-

1. Having heard from Real Estate people that our property would most likely be devalued substantially,
2. Being mindful of our neighbours feelings and concerns and the impact it would have on their properties both visually and economically.
3. The fact that the property has been in my husbands family for 109 years and Dees Lane is named after his family, it would not be a good idea to have the property spoilt with a tower on it.

The proposed position of the tower at 11 Dees Lane, we as a family, feel is not suitable because of its close proximity to our farm. Again I stress the likelihood that our property could be devalued and another aspect is that we could be stopped from using our property as we wish, i.e. growing sugar cane (which has been the main crop there for many years) and especially the burning of the cane as this tower would be only 4 metres from our boundary.

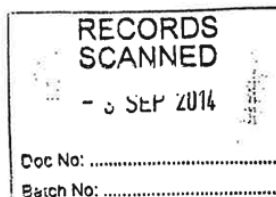
The use of this road in times of construction, and maintenance could also hinder the need for access for the cane harvesters and trucks.

Another cause for concern is that the tower is in the flight path of regular flights to and from Ballina airport on a daily basis.

Our last comment is that we were also, like our neighbours, extremely shocked and surprised to learn about the proposal on about the 7th August 2014 and the meeting on the 13th August when apparently the contract was signed between the parties concerned on the 25th February 2014. This is very bad communication and has also left us with a feeling of being greatly deceived by all concerned.

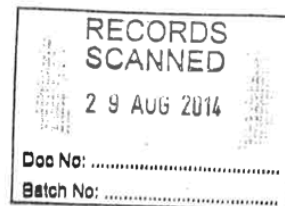
Yours faithfully,

J. Gillies
c.c. NBN Co.



633 Uralba Road
Lynwood 2477

Ballina Shire Council,
Tamar Street,
Ballina N.S.W



Dear Sirs,

Re: D.A. 2014/387

On approximately 7/8/14 I received a letter box drop from NBN Co to attend an information session at Meerschaum Vale on 13/8/14. This was to discuss the proposed erection of a 45 metres lattice tower on a neighbouring property which would be 4 metres from my boundary fence.

This tower will be clearly visible from my kitchen window and if a warning light for aircraft, which frequently fly overhead, is put on top, this will shine directly in my windows. I was also told that some form of cooling would be installed which will also affect me. Having complained to you about the noise from the Summerland House silos I don't want this to happen again.

Essential Energy have informed me that some of my 20 year old macadamia trees will need to be removed which will obviously devalue my property. The erection of this tower will add to the devaluation.

I fail to understand why NBN Co took so long to contact residents when the Lawty family signed the agreement on 25/2/14 and then NO consultation with the rest of us till mid August, AFTER the D.A. had been lodged with you.

I sincerely hope Ballina Council reject this D.A. on the grounds of an unsuitable location for myself and immediate neighbours.

Yours faithfully,

(Mrs) J. Aitken

c.c. NBN Co,

698 Uralba Rd
Lynwood 2477
26th August,2014

Craig Bradbridge
Ballina Shire Council
PO Box450
BALLINA 2478

Dear Sir,

Re Proposed NBN Co Tower at 11,Dees Lane Lynwood DA2014/387

Whilst appreciating the need for fast broadband in the area we wish to lodge our objection to the proposed sight.

As the site selection was apparently finalised in February we resent the delay in consultation with neighbors, even those on whose boundary the tower will stand until after the DA was submitted--only then were we invited to an information session!

As we are on the flight path of planes approaching Ballina we would no doubt also be subject to a warning light atop the tower?

Surely there is some location which would not devalue so many properties and expose so many shocked residents to this 45m tower dominating our rural landscape. Hopefully the safety assurances are more credible than the statement that a few trees will "mitigate the visual impact" of a 45m tower!

Yours faithfully,

Eric & Lois Potts

E. Potts
L. Potts

Natasha Hoye

From: Patricia Mandeville <pmandevi@bigpond.net.au>
Sent: Tuesday, 19 August 2014 12:09 PM
Subject: D.A 2014/387

Pat & Brian Mandeville

643 Uralba Road

Lynwood 2477

We object to the NBN tower proposed to be erected in Dees Lane. When I purchased this property in 1992 the only ugly thing was a transformer in my back paddock, now it is proposed to erect this tower and add to the ugliness. The electricity supplier has erected a row of poles and power lines opposite my home which we had no knowledge of until the deed was done, now it is proposed to add another blot on the landscape. This time we do know about it and object in the strongest terms. Quite a lot of the residents purchased their homes here because of the rural aspect and the beauty of the area. The structure described in the NBN Co letter (ref.2WDB-51-09-URAB) of a 43 m lattice tower, accommodating 3 panel antennas, 1 parabolic dish and 3 remote radio units could only be described as offensive to the eye and certainly not in keeping with the rural aspect and natural beauty of the area.

Apart from it being an ugly structure it will be in a direct line to our bedroom window and back verandah. There is no way that avocado trees will block this structure out. We have quite a lot of the flights in and out of Ballina/ Byron airport fly over our home and if the required authority deemed it necessary, a light would be put on top of this tower which would then shine directly into our bedroom window. I was also told by the Leighton representative at the recent information session that some form of cooling device will also be used, in which case any noise from this unit will be heard by us, particularly as the tower is in a South Eastern direction from our home which is the summer prevailing wind direction.

The proposed area is known as susceptible to many lightening strikes. We have personally had 2 cordless telephone bases that had the transformer blown from the power socket and the electricity sub-station in Wardell Road had a transformer blown.

Several Real Estate Agents have told us that this structure will devalue our property which as you would appreciate is not good news to the householder.

According to a news report in the Norther Star NBN claims that each of these towers erected will service only about 200 premises each, and they need to be in direct line of sight to the tower. What they did not say is that this type of technology is subject to atmospheric conditions so the signal will drop out in inclement conditions.

Ian & Monica Jackson

✉ PO Box 95, ALSTONVILLE 2477

☎ 02 6628 5400

📞 0412 663 130

✉ injackson@optusnet.com.au

RECORDS SCANNED
20 AUG 2014
Doc No.....
Batch No.....

Date: 19 August 2014

Dear Sir/Madam,

Re: proposed NBN tower at 11 Dees Lane, Lynwood 2477.

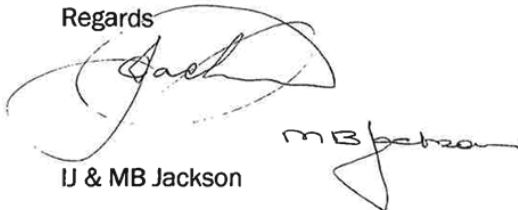
Firstly, we wish to say we agree in principle with a tower being erected on the Alstonville Plateau at this site.

Records will show our property, 617 Uralba Road Lynwood, to be approximately 300m from the proposed structure and a clear line of vision to it from all aspects of our property. With this in mind, we believe the proposed 45m lattice structure to be aesthetically unsuitable for this densely populated rural area.

We believe a more suitable structure would be a reduced size monopole on this site.

Trusting you will give this proposal serious consideration.

Regards



IJ & MB Jackson



AERONAUTICAL STUDY

11 DEES LANE, LYNWOOD NSW
TELECOMMUNICATIONS TOWER

Prepared for Visionstream Australia Pty Ltd





DOCUMENT CONTROL

Document Title: Aeronautical Study – 11 Dees Lane Lynwood NSW Telecommunications Tower
 Reference: 060802-01
 Release Date: 20 February 2015
 Prepared by: L Hodgson
 Reviewed by: K Tonkin
 Released by: K Tonkin
 Revision History: Release

Revision History

<i>Version</i>	<i>Description</i>	<i>Transmitted</i>	<i>Reviewed by</i>	<i>Date</i>
0.1	First Draft	23 January 2015	J Rodski	20 February 2015
1.0	Final for release	20 February 2015		

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060802-01 11 DEES LANE LYNWOOD TELECOMMUNICATIONS TOWER AERONAUTICAL STUDY



AVIATION PROJECTS

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GLOSSARY

AAE	above aerodrome elevation
AGL	above ground level
AHD	Australian height datum
AMSL	above mean sea level
AOPA	Aircraft Owners and Pilots Association
BBGA	Ballina Byron Gateway Airport
CAAP	Civil Aviation Advisory Publication
CAR	Civil Aviation Regulations (1988)
CASA	Civil Aviation Safety Authority
CASR	Civil Aviation Safety Regulations (1998)
DA	Development Application
ERSA	En Route Supplement Australia
ft	feet
OLS	obstacle limitation surface(s)

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 **AVIATION PROJECTS****1. INTRODUCTION****1.1. Situation**

Under Development Application DA 2014/387 dated 8 August 2014 with Ballina Shire Council, Visionstream Australia Pty Ltd (Visionstream) proposes construction of a 45 m high telecommunications lattice tower, parabolic and panel antennas, equipment shed and ancillary equipment at 11 Dees Lane, Lynwood, NSW. The tower will be approximately 11.34 km to the west of Ballina Byron Gateway Airport. Ballina Shire Council has indicated it is unlikely to support the application because of potential impacts on the operational airspace of Ballina Byron Gateway Airport.

Visionstream engaged Aviation Projects to conduct an independent assessment of these potential impacts to inform its options regarding the development application.

1.2. Purpose and scope of task

This assessment involved the following tasks:

- Confirm the height of the tower in relation to aviation surfaces that apply to the airspace over the site;
- Identify the type of aviation surface that applies to the site and the implications of penetrations into this surface;
- Provide an assessment of the risk to aviation from the proposed penetration into the aviation surfaces;
- Assess the impact of any future expansion of the Ballina Airport to the aviation surfaces at the site; and
- Clarify that the advice from CASA does not object to the installation of the tower as proposed at this location.

1.3. Methodology

The task was performed according to the method outlined below:

1. the scope and deliverables were confirmed;
2. a site visit was conducted on 21 January 2015;
3. client material was reviewed;
4. relevant regulatory requirements and information sources including Aeronautical Information Package (AIP) were reviewed;
5. relevant stakeholders as agreed with Visionstream were consulted;
6. a draft aeronautical study report was prepared and presented to the client for discussion/clarification; and

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The logo for AVIATION PROJECTS features a stylized orange and yellow triangle to the left of the text "AVIATION PROJECTS" in a bold, sans-serif font.

7. a final aeronautical study report was prepared for client acceptance.

1.4. Client material

The following material was provided by Visionstream for the purpose of this study:

- *Plan of Level 8 Detail Survey Over Part of Lot 5 on DP245043, 11 Dees Lane Uralba;*
- *Statement of Environmental Effects Proposed Fixed Wireless Facility – 11 Dees Lane Lynwood NSW 2477 (NBN Site Reference 2WDB-51-09-URAB);*
- *Plan 14530-41-4 Plan showing Tree Locations in part of Lot 3 on DP584873 and Lot 2 on DP812537; and*
- *Plan 14530-41-5 Plan showing the Locality of the NBN Site relative to the High stand of Trees along Uralba Road.*

1.5. Stakeholders

During the course of this engagement, informal discussions were held with the following stakeholders:

- Ballina Byron Gateway Airport; and
- Civil Aviation Safety Authority.

1.6. References

References used or consulted in the preparation of this report include:

- Airservices Australia, Aeronautical Information Package (including Departure and Approach Procedures (DAP), En Route Supplement Australia (ERSA) and Runway Distance Supplement (RDS), effective 13 November 2014;
- Ballina Shire Council, DAs online:
<http://da.ballina.nsw.gov.au/Pages/XC.Track/SearchApplication.aspx?id=010.2014.00000387.001>, accessed up to and including 16 January 2015;
- Civil Aviation Safety Authority, *Advisory Circular AC 139-08(0) - Reporting of Tall Structures*, dated 5 April 2005;
- Civil Aviation Safety Authority, *Civil Aviation Regulations 1988 (CAR)*, version 158, dated 13 November 2014;
- Civil Aviation Safety Authority, *Civil Aviation Safety Regulations 1998 (CASR)*, version 237, dated 4 November 2014;
- Civil Aviation Safety Authority, *Manual of Standards Part 139 – Aerodromes*, version 1.12, dated 13 November 2014; and
- OzRunways accessed up to and including 16 January 2015.

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2. BACKGROUND

2.1. Lynwood Telecommunications Tower

As part of the Australian Federal Government's National Broadband Network (NBN) initiative, Visionstream is contracted to construct the telecommunications tower at Lot 5/DP245043, 11 Dees Lane, Lynwood, NSW (NBN Site No. 2WDB-51-09-URAB). The project is subject to Ballina Shire Council's approval of the Development Application DA 2014/387, dated 8 August 2014.

The tower is located at S28.87118 E153.44278 (28° 52.271'S 153° 26.567'E) (UTM zone 56, easting 543180, northing 6806206).

Figure 1 shows the location of the tower relative to surrounding aeronautical features on a World Aeronautical Chart (WAC) extracted from Ozrunways dated 16 January 2015.

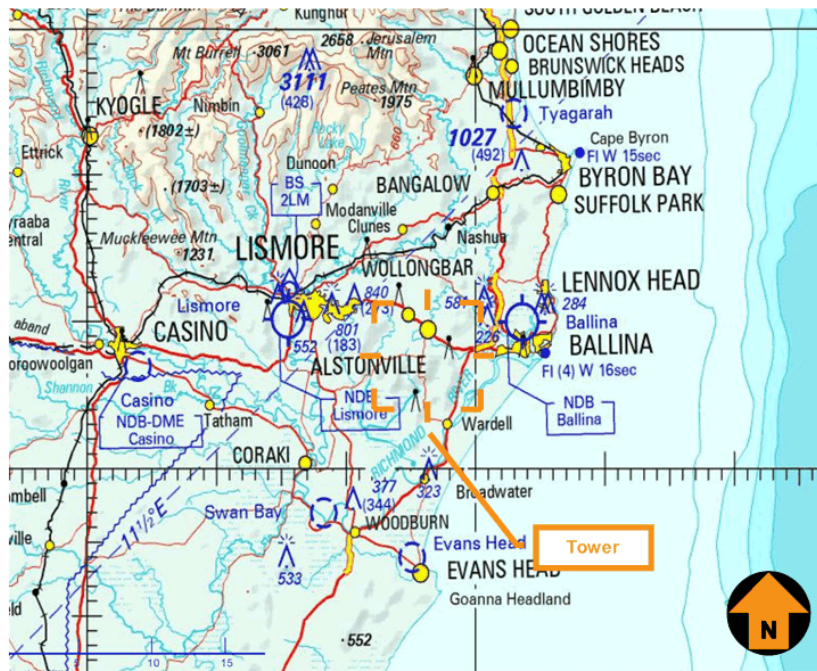


Figure 1 The proposed telecommunications tower and surrounding aeronautical features

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Figure 2, extracted from DA material, shows height details of the proposed tower relative to the ground and Figure 3 shows site elevation details relative to AHD.

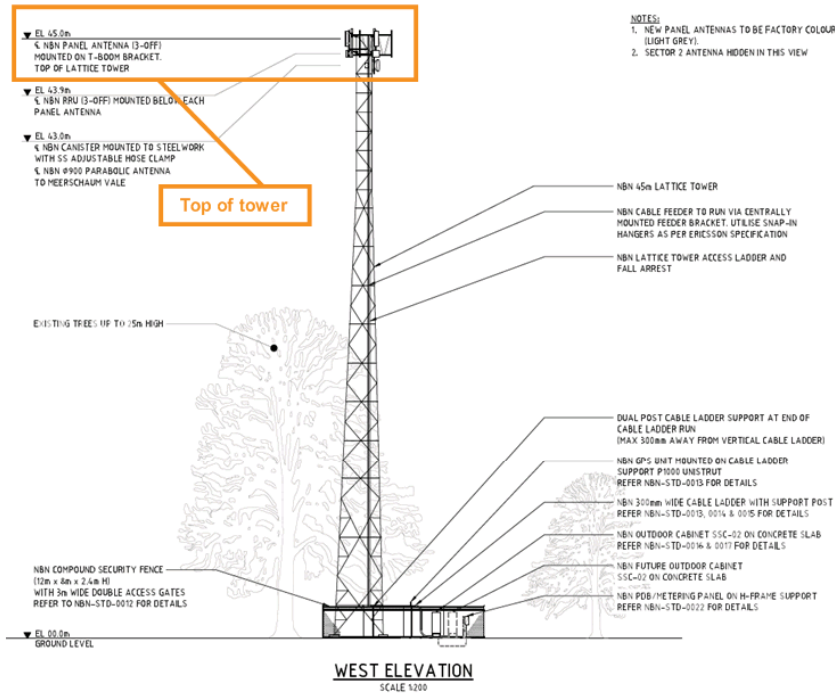


Figure 2 Elevation drawing of proposed tower



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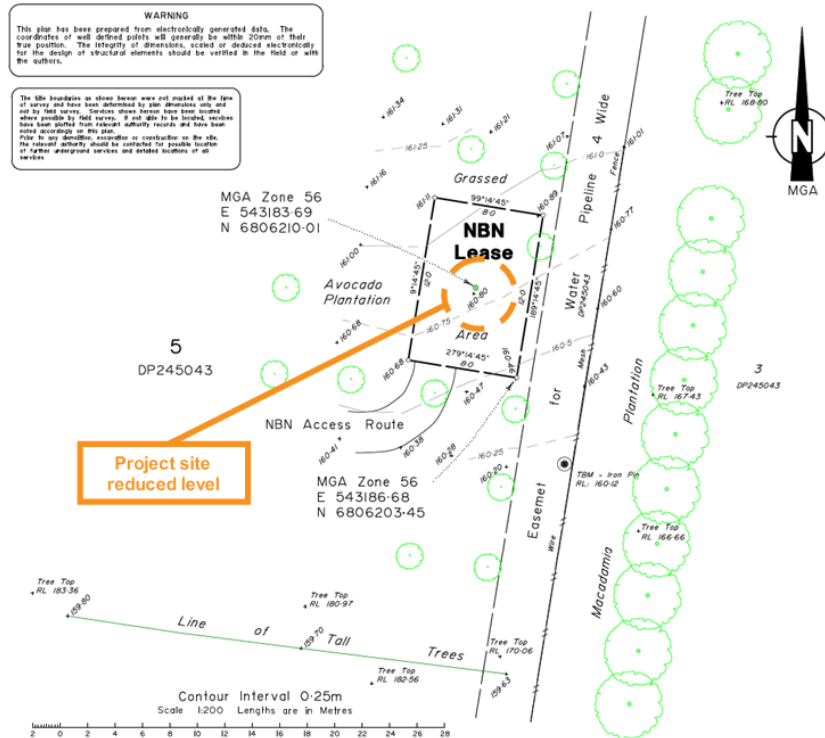


Figure 3 Plan view of proposed tower site showing site RL as 160.8 m AHD

The proposed lattice tower has a height of 45 m (147.64 ft) above ground level (AGL) on a base that has a reduced level (RL) of 160.8 m Australian Height Datum (AHD) (527.56 ft), resulting in an overall height of 205.8 m AHD (675.20 ft).

2.2. Project site surrounding area

The proposed tower is located in an area of grass fields and high trees on undulating terrain. An aerial image with a contour data overlay of the surrounding area of the proposed project site is shown in Figure 4. Note the rising terrain to the northwest.



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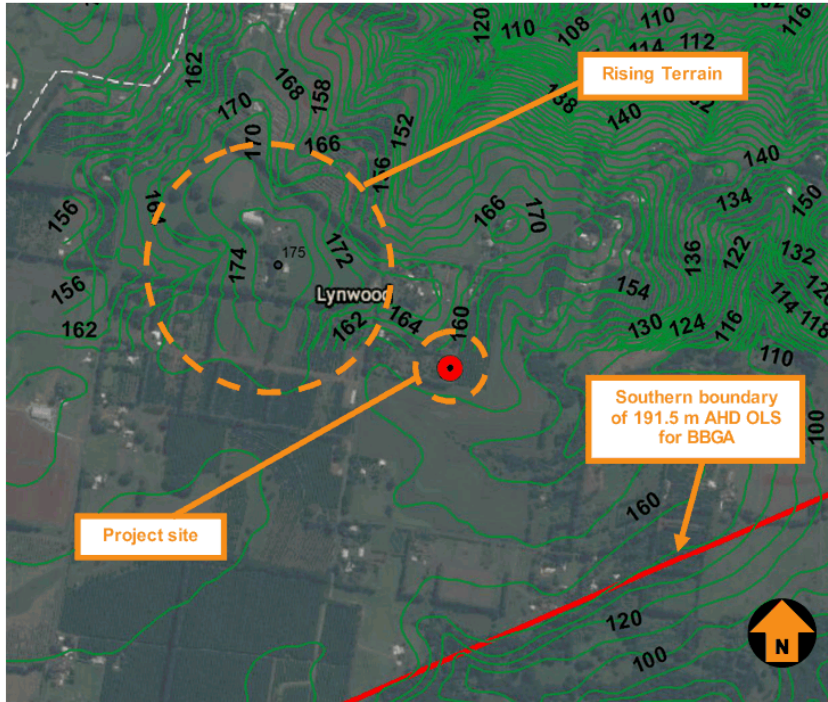


Figure 4 Aerial view of project site area with 2 m and 10 m interval contour data (in m AHD) overlaid

The rising terrain highlighted in Figure 4, on Uralba Road between Dees Lane and Wardell Road, shows the highest contour line of 174 m AHD, indicating that the terrain peaks at a height of at least 174 m AHD. As the proposed tower base elevation is 160.8 m AHD, this terrain is approximately 14 m higher than the tower base.

Preliminary assessment on 21 January 2015 using a TruPulse 200B Laser Rangfinder identified some trees in this area that were estimated to be between 35 m and 40 m high. These trees are located in the highlighted area shown in Figure 5. Note the row of trees that runs in an east-west direction to the north of another row of trees running in a north-south direction are of particular interest.

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Figure 5 Aerial image of project site vicinity highlighting high trees

An example of one tree assessed (based on preliminary assessment) as having a height of approximately 38 m above ground level is located at 28° 52.156'S 153° 26.276'E. The approximate position of the example tree is part of the east-west row of trees mentioned in Figure 5. The tree is on the northern side of Uralba Road between Dees Lane and Wardell Road, as shown in Figure 6.

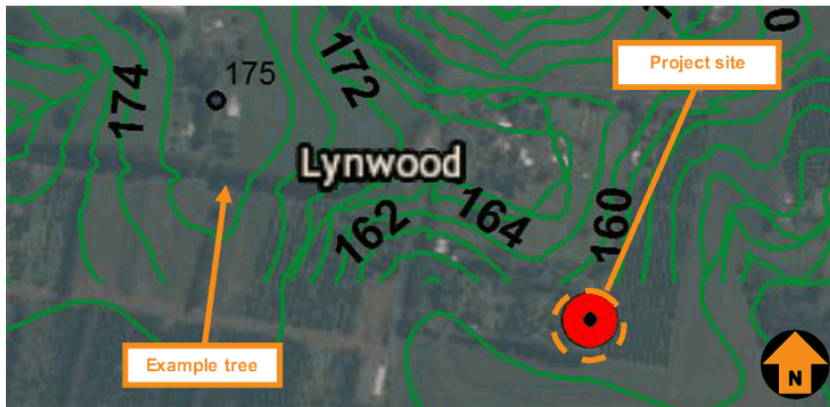


Figure 6 The approximate location of the example 35 m to 40 m tree

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A photo of the tree, which is shown in Figure 7, was taken from 28° 52.16487'S 153° 26.2573'E, approximately 37 m southwest (on the southern side of Uralba Road) from the example tree.



Figure 7 Photo of a tree between 35 m and 40 m high

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Figure 8 shows a row of trees that were measured as being approximately 35 m to 40 m in height. The photo was taken from about the same location as the photo in Figure 7 but facing in a southerly direction. The row of trees makes up the aforementioned row of trees running in a north-south direction as shown in Figure 5.



Figure 8 Photo of a row of trees with heights of approximately 35 m to 40 m

See **Annexure 1** for 2 m interval contour data north of the proposed site, which was the extent of the data available from Land Property Information (LPI) dated 22 January 2015. 10 m interval contour data for the remaining areas of interest was made available from LPI at the time of writing this report.

Based on the preliminary assessment of the project site surrounding area, it was concluded that trees with a height of between 35 m and 40 m are located on terrain with an elevation of at least 174 m AHD, giving a tree height of between 209 m AHD and 214 m AHD.

2.3. LIDAR analysis of existing penetrations of OLS

Following consideration of draft recommendations arising from this study, Visionstream provided additional LIDAR data for analysis.

It was found that there are a number of objects which extend to a height of greater than 206 m AHD (i.e. greater than the height of the proposed tower) within the horizontal section of the runway 06 approach surface. These are shown in the plan at **Annexure 2**.

It was found that there are numerous penetrations of the horizontal section of the runway 06 approach surface. The results of the analysis are illustrated in the plan at **Annexure 3**.

2.4. Instrument survey of trees in area

Following consideration of draft recommendations arising from this study, Visionstream procured an instrument survey of tree canopy heights in the immediate area of interest.

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Goodwin Midson conducted the survey on 5 February 2015. The surveyors identified a number of trees that extend above the height of the horizontal section of the runway 06 approach surface. The highest tree, which is most likely the one pictured in Figure 7, is identified as object 2051, with an overall canopy height of 207.7 m AHD (1.9 m higher than the proposed tower). A number of other trees in the area extend to a height of over 202 m AHD, well above the height of the runway 06 approach surface.

Plans of the survey results are provided at **Annexure 4**.

2.5. Ballina Byron Gateway Airport

Ballina Byron Gateway Airport (BBGA) is the closest registered/certified aerodrome to the proposed tower site and is the only aerodrome that is of concern with regard to the impact on aviation operations as a result of the tower.

BBGA is operated by Ballina Shire Council. BBGA is a certified aerodrome located at S28°50'02" E153°33'45" and has an elevation of 2.13 m (7 ft) AMSL; however, the reference elevation datum of 1.5 m AHD is used for airspace design purposes. BBGA has one main runway, 06/24, with a length of 1900 m and is published in Aeronautical Information Package (AIP) as a code 3 instrument, non-precision runway. The details of the aerodrome are shown in Figure 9 (extracted 16 January 2015).

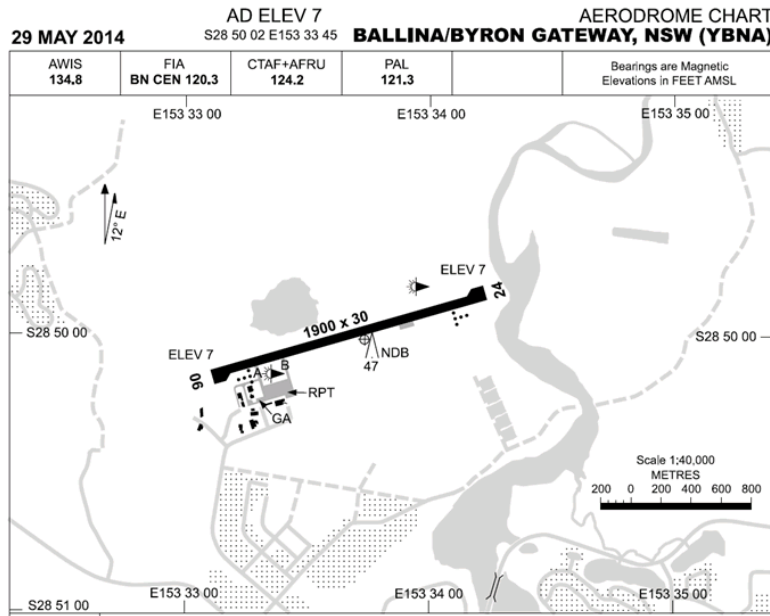


Figure 9 Airservices Australia Aerodrome chart of Ballina Byron Gateway Airport

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The aerodrome supports up to code 4 aircraft including regular public transport (RPT) jet services (B737/A320) provided by Jetstar and Virgin Australia to Sydney and Melbourne. Other aircraft that are supported are Saab 340 turbo prop services to Newcastle and Sydney provided by Rex, Toll provides air freight services with Metro turbo prop aircraft, and various fixed and rotary wing flying training, commercial, general aviation and private operators are located on the airport.

With respect to the relative location of the proposed telecommunications tower, the western threshold of the runway at BBGA is at a bearing of approximately 070°, 11.34 km from the tower. Figure 10 is a Visual Terminal Chart (VTC) extract from Ozrunways dated 16 January 2015, which shows the aerodrome's relative position to the proposed tower.

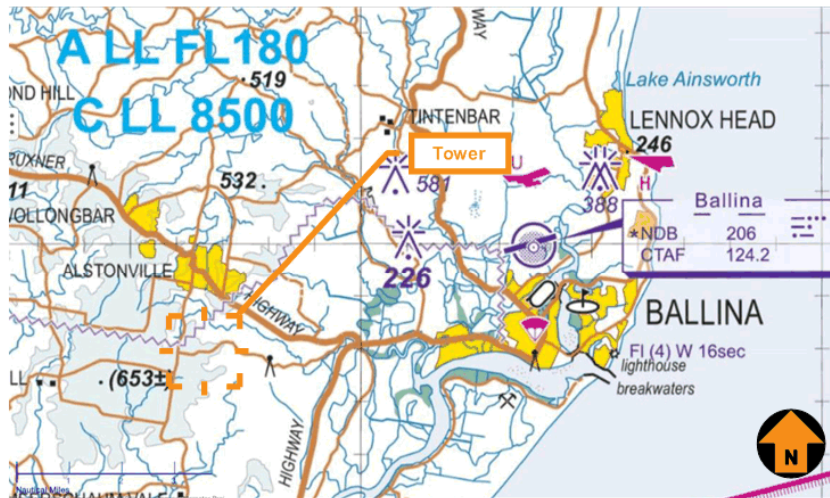


Figure 10 BBGA position relative to the proposed tower

As the height on the proposed tower is 205.8 m (675.20 ft) AHD, and Class G airspace is present up to 2590.8 m (8500 ft) AMSL, it can be concluded that the tower will exist within G Class airspace, which is outside of controlled airspace.

BBGA has published an obstacle limitation surface (OLS) for a Code 3 runway. An extract of the OLS in relation to the proposed tower is shown in Figure 11.

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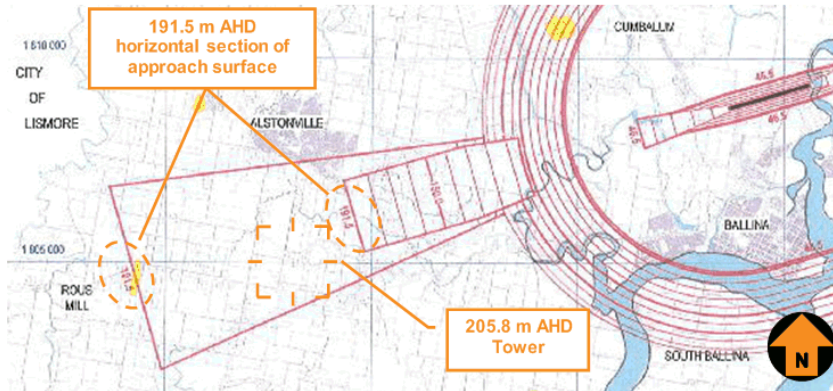


Figure 11 BBGA OLS and proposed tower

As Figure 11 shows, the proposed tower is located under the horizontal section of the approach surface for runway 06 at BBGA, at a height of 191.5 m AHD (628.3 ft).

The standards that apply to an OLS for a Code 3 runway, such as the runway at BBGA are stated in Manual of Standards Part 139—Aerodromes (MOS 139) section 7.1.3.4. The applicable standards are for Code 3 runways are shown in Table 1.

Table 1 Code 3 physical infrastructure and approach/take-off surface requirements

Aspect		Code 3 Instrument Non-Precision
Approach Surface	Width Inner edge	150 m
	Divergence	15%
	Length	15 000 m
	Gradient	3.33% (first section - dist: 3000 m)
		2.5% (Second section - dist: 3600 m)
		Level (third section - dist: 8400 m)
	Dist from threshold	60 m
Take-off Climb Surface	Width Inner edge	180 m
	Divergence	12.5%
	Length	15 000 m
	Gradient	2%


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Note that the horizontal section subsequently has a height of 190 m above the reference elevation datum, which at BBGA is noted at 1.5 m AHD. Based on the distances in Table 1, the calculated distance from the proposed tower to the western edge of the second section is approximately 4740 m.

Based on the height of the proposed tower (205.8 m AHD) relative to the elevation reference datum for BBGA (1.5 m AHD) (i.e. a relative height of 204.3 m), and the distance of the proposed tower to the western threshold of the runway at BBGA (approximately 11.34 km), the gradient of the tower to the western runway threshold at BBGA is approximately 1.80%.

Since the proposed tower will have an overall height of 205.8 m AHD (675.20 ft), the tower will penetrate the third (horizontal) section of the approach surface for runway 06 by 14.3 m (46.9 ft).

Preliminary analysis of the terrain under the horizontal section of BBGA's code 3 OLS (depicted in Figure 11) indicates that there may be terrain that infringes the surface. This analysis was conducted using 10 m interval contour data sourced from Land Property Information (LPI) and geospatial information system (GIS) software. **Annexure 5** shows an image of the findings from this analysis, which highlights the area of terrain (near the western boundary of the OLS) suspected of infringing the OLS.

2.6. Ballina Byron Gateway Airport – future options

BBGA, in its email correspondence to Ballina Shire Council dated 19 December 2014 has implied a desire to retain the potential to upgrade the runway to accommodate larger aircraft, which may include upgrading the operational airspace to Code 4 standards. The design standards applicable to an OLS for a Code 4 runway are shown in Table 2.

Table 2 Code 4 physical infrastructure and approach/take-off surface requirements

Aspect		Code 4 Instrument Non-Precision
Approach Surface	Width inner edge	300 m
	Divergence	15%
	Length	15 000 m
	Gradient	2% (first section – 3000 m)
		2.5% (Second section – 3600 m)
		Level (third section – 8400 m)
	Dist from threshold	60 m
Take-off Climb Surface	Width inner edge	180 m
	Divergence	12.5%
	Length	15 000 m
	Gradient	2%


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Note that the horizontal section subsequently has a height of 150 m above the reference elevation datum, which is noted to be 1.5 m AHD.

If the OLS at BBGA was for a Code 4 runway, the distance from the proposed tower to the western edge of the second section will not change. However, the height of the horizontal section will be lowered to 151.5 m AHD. This is significantly lower than much of the terrain surrounding the proposed tower site. Contour interval data from LPI and GIS software were used in this analysis. The areas of the potential infringements by terrain of the horizontal section of the code 4 OLS are shown as the highlighted areas in **Annexure 6**.

With respect to the possibility of any runway extensions at BBGA and noting the maximum take-off gradient for a code 4 OLS (2%), the runway could be extended by approximately 1125 m assuming the proposed tower was constructed to a relative height of 204.3 m above the reference elevation datum for BBGA (i.e. no runway slope). This would result in an overall runway length of 3025 m (one of the longest in Australia).

Note that, for future considerations, the height limitation imposed by the horizontal section of the approach surface would not change since there is a distance of approximately 4740 m between the proposed tower location and the western edge of the second section of the approach surface in both Code 3 and Code 4 standard OLS designs.

In any case, it should be noted that other existing obstacles and terrain immediately to the west of the runway have not been analysed but most likely would impose greater restrictions than the proposed tower.

2.7. Ballina Shire Council

Ballina Shire Council has in place the Ballina Local Environmental Plan 2012 and is made in accordance with the relevant standard environmental planning instrument under section 33A of the Environmental Planning and Assessment Act 1979 (the Act). This section of the Act allows, among other things, local governments to make a declaration that applicable provisions of a standard instrument (e.g. Ballina Local Environmental Plan 2012) are mandated.

Clause 7.5 of the Ballina Local Environmental Plan 2012 makes provision regarding airspace operations. An extract of the clause is copied below:

7.5 Airspace operations

(2) If a development application is received and the consent authority is satisfied that the proposed development will penetrate the Limitation or Operations Surface, the consent authority must not grant development consent unless it has consulted with the relevant Commonwealth body about the application.

(3) The consent authority may grant development consent for the development if the relevant Commonwealth body advises that:

(a) the development will penetrate the Limitation or Operations Surface but it has no objection to its construction, or

(b) the development will not penetrate the Limitation or Operations Surface.


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(4) *The consent authority must not grant development consent for the development if the relevant Commonwealth body advises that the development will penetrate the Limitation or Operations Surface and should not be constructed.*

(5) *In this clause:*

Limitation or Operations Surface means the Obstacle Limitation Surface or the Procedures for Air Navigation Services Operations Surface as shown on the Obstacle Limitation Surface Map or the Procedures for Air Navigation Services Operations Surface Map for the Ballina Byron Gateway Airport.

Relevant Commonwealth body means the body, under Commonwealth legislation, that is responsible for development approvals for development that penetrates the Limitation or Operations Surface for the Ballina Byron Gateway Airport.

Visionstream submitted Development Application DA2014/387 8 August 2014 to Ballina Shire Council for approval. With respect to DA2014/387, Graeme Gordon (Airport Operations Manager for BBGA) made the following conclusions in an email dated 23 September 2014:

CONCLUSIONS

1. *The proposed tower infringes the RWY 06 Approach Surface. The application and the above information is to be referred to the Civil Aviation Safety Authority for further assessment and if permission to proceed is granted, advice regarding measures to mitigate any adverse effects on air navigation.*
2. *The proposed tower is situated under PANS-OPS Surface for Ballina Aerodrome. Note that PANS-OPS Surfaces cannot be infringed in any circumstances. The application and the above information is to be referred to Air Services Australia for assessment of the proposed development against the PANS-OPS surfaces to determine infringement (if any).*
3. *Notification must be provided to Ballina Airport Management*
 - a. *at the commencement of works for the erection of the tower on site;*
 - b. *at least one week prior to the use of any crane erected for use of construction works that exceeds a height of 27 metres above ground level on the site, so an assessment on airport space can be made and a Notice to Airmen prepared and issued; and*
 - c. *upon completion of works on site.*

Subsequent to the abovementioned email, Graeme Gordon made further conclusions in an email dated 16 December 2014, which are noted as follows:

Following much discussion between Airport Management, Council, CASA and Aerodrome Consultants regarding the responsibility of the airport operator as regards the airspace around the aerodrome, and development proposals that may encroach the Obstacle Limitation Surface (OLS); I wish to make further belated comment as regards the subject proposed telecommunication tower at Lynwood.


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The conceptual surfaces which make up the Obstacle Limitation Surface for an aerodrome, are established in accordance with standards set out in the Manual of Standards Part 139. As stated in my email below the subject proposal is located approximately 11.3 km to the west of Ballina Byron Gateway Airport and would penetrate the horizontal section of the RWY 06 Approach Surface by 17.5m.

The airport's Take-Off/Climb Slope and Approach Slope are obvious critical areas for aircraft activity and safety; and any infringement of these surfaces pose an inherent risk to aviation operations. The aerodrome operator should take all reasonable measures to ensure the full margin of safety for aircraft in these areas and oppose any development that would be likely to infringe the Take-Off/Approach surfaces.

Airport Management must also protect the current and future operational integrity of the airport.

- An infringement in the Approach Slope could result in the installation of a displaced threshold (essentially shortening the runway) which could restrict the current size jet aircraft from using the airport, and in turn would seriously affect the airport business, its financial viability and the flow-on affect to the community as a major attractant for tourism and transport infrastructure.
- Similarly, any plans for the possible lengthening of the runway to cater for larger aircraft in the future, would be severely hampered by such infringement.
- Required Navigational Performance procedures now in place at Ballina Airport and for aircraft carrying the capability have lowered the approach minima to 350ft. It is anticipated with technological advancement the minima could be reduced to 250ft in the future, but this could be jeopardised by the presence of such an obstacle.

Having regard to the above, IT IS RECOMMENDED by Airport Management that:

1. Approval for the installation of the Telecommunications Tower as proposed at 11 Dees Lane, Lynwood, NSW, 2477 (Lot 5 DP245043) BE REFUSED.
2. Should the proponent wish to install a tower in the general locality, the site be clear of the Take-Off/Approach paths for the Ballina Aerodrome.
3. Should the proponent wish to install a tower at the same site, the height of the tower must be below and not penetrate the Approach Slope for the Ballina Aerodrome.

Considerations applicable to each of the issues noted in the email are addressed in this report.

Following the instrument survey of trees in the area of interest and analysis of LIDAR data to identify obstacles that penetrate the OLS, a draft report along with the survey drawings and plans showing objects >206 m AHD and the LIDAR analysis were provided to BBGA representatives for consideration.

Having reviewed this additional information, Graeme Gordon provided further feedback in an email on 16 February 2015 as noted below:

I have spoken to Neil [Ballina Byron Gateway Airport Manager] and he has asked me to respond to your email and your draft recommendations to Visionstream, regarding the construction of the proposed telecommunications tower at Lynwood, as follows:

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1. *It is the opinion of Airport Management that the surrounding trees do not constitute a Permanent Obstacle.*
2. *Regardless of the height of the surrounding trees and given the definitions of the Principles of Shielding (MOS Pt.139 sec 7.4), they would not be deemed as shielding the proposed tower.*
3. *The resolve of Airport Management to see no worsening of the OLS (particularly under the Take Off or Approach gradients), remains unchanged.*
4. *As per the MOS and in terms of the Take-Off/Climb Slope, new objects should be limited to preserve an obstacle free surface or a surface down to a slope of 1.6%.*
5. *Our overall recommendation is in concurrence with your Recommendation 4 that if the approved tower is less than RL 191.5m AHD than it will not be an obstacle with regard to BBGA's OLS; OR SIMILARLY the tower should be sited outside the lateral limits of the OLS.*

Keith, if you need to discuss this further, we should arrange a teleconference to include Neil.

With respect to point 1, it should be noted that any trees that penetrate the OLS must be treated as obstacles (and dealt with in accordance with applicable CASA requirements) until they are trimmed or otherwise lowered below the OLS, or appropriately identified as an aviation hazard. It has been ascertained that none of the obstacles that penetrate the horizontal section of the runway 06 approach surface identified in the course of our analysis are identified by obstacle or aviation hazard lights.

With respect to point 2, it could be argued that the shielding provisions of MOS 139 Section 7.4 are more appropriately applied to sloped sections of the approach surface, as inferred by the associated diagrams in MOS 139 7.4.2.4. Since the proposed obstacle is located 11.3 km from the aerodrome and underneath the horizontal section of the approach surface, the provisions applicable to sloped surfaces have no direct application.

The resolve of Airport Management noted in point 3 is acknowledged.

With respect to point 4, the operational provision from MOS 139 is Note e under Table 7.1-2: *Take-off runways*. The note says:

If no object reaches the 2% take-off climb surface, new objects should be limited to preserve the existing obstacle free surface or a surface down to a slope of 1.6%.

The current Runway Distance Supplement entry for BBGA in ERSA notes a 2.6% take-off gradient for runway 24 at the declared take-off distance available, so the assertion at item 4 is not applicable. The top of the tower would be at a gradient of approximately 1.8%, well below the applicable 2% take-off surface design gradient, which is also nominated on the BBGA OLS drawing.

It should also be noted that the current approach gradient to runway 06 is published in ERSA Runway Distance Supplement as 3.3%.

In a teleconference conducted on 20 February 2015, both BBGA representatives reiterated their strong and principled desire that the tower should be limited to a height not greater than 191.5 m AHD or relocated outside the horizontal extent of the approach surface.

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With respect to Clause 7.5 of the Ballina Local Environmental 2012 Plan and the aforementioned correspondence with Graeme Gordon, it can be concluded that development application DA 2014/378 is not intended to be approved by Ballina Shire Council if the tower, as proposed, will penetrate the BBGA OLS.

2.8. Airservices Australia

Visionstream consulted with Airservices Australia regarding an assessment of the proposed tower with respect to the procedures designed by Airservices at BBGA. Airservices made the following conclusion in an email sent by Carly Flumara (Airport Development Assistant) dated 25 November 2014:

I refer to your request for Airservices assessment of a comms tower to be located at 11 Dees Lane, Lynwood, NSW.

With respect to procedures designed by Airservices in accordance with ICAO PANS-OPS and Document 9905, at a maximum height of 214m (703ft) AHD the telecommunications tower will not affect any sector or circling altitude, nor any instrument approach or departure procedure at Ballina Airport nor will it adversely impact the performance of any Airservices Precision/Non-Precision Nav Aids, HF/VHF Comms, A-SMGCS, Radar, PRM, ADS-B, WAM or Satellite/Links.

Note: procedures not designed by Airservices at Ballina Airport were not considered in this assessment.

There are no procedures at BBGA that are not designed by Airservices Australia.

As a result of this consultation with Airservices, it can be concluded that Airservices has assessed the tower as having no impact on any instrument procedures at BBGA.

2.9. Civil Aviation Safety Authority

The Civil Aviation Safety Authority regulates aviation activities in Australia. Applicable requirements include the Civil Aviation Act 1988 (CAA), Civil Aviation Regulations 1988 (CAR), Civil Aviation Safety Regulations 1998 (CASR), associated Manuals of Standards (MOS) and other guidance material including Civil Aviation Advisory Publication (CAAP) and Advisory Circular (AC). The applicable legislations are extracted below.

2.9.1. Manual of Standards 139–Aerodromes

Chapter 7 of MOS 139 sets out the standards applicable to Obstacle Restriction and Limitation.

7.1.1.2 An obstacle is defined as:

(b) any object that penetrates the obstacle limitation surfaces (OLS), a series of surfaces that set the height limits of objects, around an aerodrome.

7.1.1.3 Obstacle data requirements for the design of instrument procedures need to be determined in liaison with flight procedure designers.

7.1.1.4 Non compliance with standards may result in CASA issuing hazard notification notices as prescribed in CASR Part 139.


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Chapter 9 sets out the standards applicable to visual aids provided by aerodrome lighting. Section 9.4.1 provides some general guidance on obstacle lighting:

9.4.1.2 *In general, an object in the following situations would require to be provided with obstacle lighting unless CASA, in an aeronautical study, assesses it as being shielded by another lit object or that it is of no operational significance:*

(iii) *if the object extends above the applicable inner, conical or outer horizontal surfaces;*

Section 9.4.2 provides guidance on types of obstacle lighting and their use:

9.4.2.1 Three types of lights are used for lighting obstacles. These are low intensity, medium intensity and high intensity lights, or a combination of such lights.

9.4.2.3 *Medium intensity obstacle lights are to be used either alone or in combination with low intensity lights, where:*

- (a) *the object is an extensive one;*
- (b) *the top of the object is 45 m or more above the surrounding ground; or*
- (c) *CASA determines that early warning to pilots of the presence of the object is desirable.*

MOS 139 Section 6.2.1.1 notes:

If obstacles infringe the approach surface, operational assessment may require the threshold to be displaced. The obstacle free approach surface to the threshold is not to be steeper than 3.3% where the runway code number is 4 or steeper than 5% where the code number is 3.

Danny Eatock (Aerodrome Inspector - CASA) notified Ballina Shire Council of CASA's assessment of the proposal in a letter dated 19 December 2014. A summary of the letter is provided below:

CASA has determined that the structure will be a hazardous object because of its height and location within the approach surface.

CASA also supports the assessment that the airport's Take-Off/Climb and Approach Slopes are critical areas for aircraft activity and safety; and any infringement of these surfaces pose an inherent risk to aviation operations.

The aerodrome operator must take all reasonable measures to ensure the full margin of safety for aircraft in these areas, and seriously consider any development that would be likely to infringe the Take-Off/Approach surfaces.

However; if Council considers as part of your own safety and risk management approach that the application is to be approved, CASA recommends that the structure be obstacle lit by a medium intensity flashing red light at the highest point of the structure [to the standards set out in MOS 139].

Based on the guidance of CASA, it can be concluded that the proposed tower may be erected, subject to the approval of Ballina Shire Council, in which case CASA recommends the tower be lit with medium intensity obstacle lighting and marked appropriately.

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3. CONCLUSION

As a result of this aeronautical study, the following conclusions are made:

1. The proposed lattice tower has a height of 45 m (147.64 ft) above ground level (AGL) on a base that has a reduced level (RL) of 160.8 m AHD (527.56 ft above mean sea level), resulting in an overall height of 205.8 m AHD (675.20 ft AMSL). The location of the site is S28.87118 E153.44278 (28° 52.271'S 153° 26.567'E) (UTM zone 56, easting 543180, northing 6806206).
2. BBGA has an OLS designed to the standards set out in MOS 139 for a Code 3 runway of 1900 m in length, which currently supports Code 4 aircraft including B737-800 and A320 aircraft. The western threshold of the runway at BBGA is at a bearing of approximately 070°T, 11.34 km from the proposed tower site.
3. The proposed tower is located under the horizontal section of the BBGA runway 06 approach surface, which is 191.5 m AHD (628.3 ft AMSL). Note that the proposed tower will have an overall height of 205.8 m AHD (675.20 ft AMSL). The proposed tower will penetrate the horizontal section of the approach surface for runway 06 by 14.3 m (46.9 ft).
4. Based on CASA's guidance, it can be concluded that the proposed tower may be erected, subject to the approval of Ballina Shire Council, in which case CASA recommends obstacle marking and lighting in accordance with MOS 139.
5. Based on the results of an instrument survey, there is one tree with a height of 207.7 m AHD (1.9 m higher than the proposed tower) in close proximity to the proposed tower site. There are a number of other trees which extend above 202 m AHD, well above the height of the horizontal section of the runway 06 approach surface.
6. Based on analysis of LiDAR data, there are numerous and extensive penetrations of the horizontal section of the runway 06 approach surface.
7. If referred to CASA, these trees and/or other objects, which penetrate the horizontal section of the approach surface for runway 06 at BBGA, would most likely require obstacle lighting regardless of whether or not the tower was erected.
8. Notwithstanding the provisions in MOS 139 Section 7.4 regarding obstacle shielding, which are not accepted as being directly applicable to the horizontal section of the approach surface, the tower would be lower than existing obstacles within the lateral extent of the horizontal section of the runway 06 approach surface, and would therefore not present any additional aviation safety hazard.
9. The existing runway at BBGA could be extended by up to 1125 m to the west (resulting in a runway that was 3025 m long) and the top of the tower would be at a gradient of 2% (the take-off gradient for both code 3 and code 4 runways) without additional penetration of the OLS.
10. The maximum permissible gradient to an approach threshold is 3.33% for a code 4 OLS and 5% for code 3. The proposed tower (at a gradient of 1.80% to the existing threshold) will not infringe these maximum gradients to the existing runway threshold. The current approach gradient is published as 3.3%.

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11. If BBGA published a code 4 OLS (applicable to the A320 and B737-800 aircraft currently operating at the airport), the horizontal section of the approach surface for runway 06, at a height of 151.5 m AHD, would be substantially infringed by terrain.
12. Airservices Australia has advised that there will be no impact on published instrument procedures. Given the likely presence of existing obstacles that are higher than the proposed tower, it is reasonable to conclude that the proposed tower will not be the critical obstacle that would prevent achievement of a lower approach minima.



4. RECOMMENDATIONS

As a result of this aeronautical study, the following recommendations are made:

1. Since there is at least one tree with an overall height equal to or greater than 205.8 m AHD (and other trees extending to a height of greater than 202 m AHD) within close proximity to the proposed tower, the proposed tower will not be the critical obstacle with respect to BBGA's OLS and the application should not be refused on the basis of aviation safety concerns.
2. Regardless of whether or not there are higher obstacles within close proximity to the proposed tower site, aviation safety concerns associated with the proposed tower can be satisfactorily mitigated in accordance with CASA's recommendations in the letter dated 19 December 2014 regarding obstacle marking and lighting.
3. If the approved tower exceeds 191.5 m AHD, it should be fitted with a medium intensity flashing red obstacle light and marked in accordance with MOS 139 as per CASA's recommendations in the letter dated 19 December 2014.
4. If the approved tower height is less than or equal to 191.5 m AHD then it will not be an obstacle with regard to BBGA's OLS and will not require obstacle marking or lighting.
5. Since an instrument survey has identified a number of trees extending to a height of greater than 191.5 m AHD within the lateral extent of the horizontal section of the runway 06 approach surface, BBGA should consider reporting them to CASA for assessment in accordance with applicable provisions of Civil Aviation Safety Regulations (1998) Part 139—Aerodromes and MOS 139.
6. BBGA should also note the results of our analysis of LiDAR data which identified numerous and extensive penetrations of the horizontal section of the runway 06 approach surface.



ANNEXURES

1. 060802 Lynwood Telecommunications Tower, Terrain Contours Near Proposed Tower Site, 22 January 2015
2. 060802 Lynwood Telecommunications Tower, Objects >206 m AHD Near Tower Site, 29 January 2015
3. 060802 Lynwood Telecommunications Tower, Code OLS penetrations, 18 February 2015
4. Survey plans of trees near site
5. 060802 Lynwood Telecommunications Tower, Code 3 OLS Clearance, 22 January 2015
6. 060802 Lynwood Telecommunications Tower, Terrain Penetrations of Code 4 OLS, 22 January 2015

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**ANNEXURE 1 – TERRAIN CONTOURS NEAR PROPOSED
TOWER SITE**



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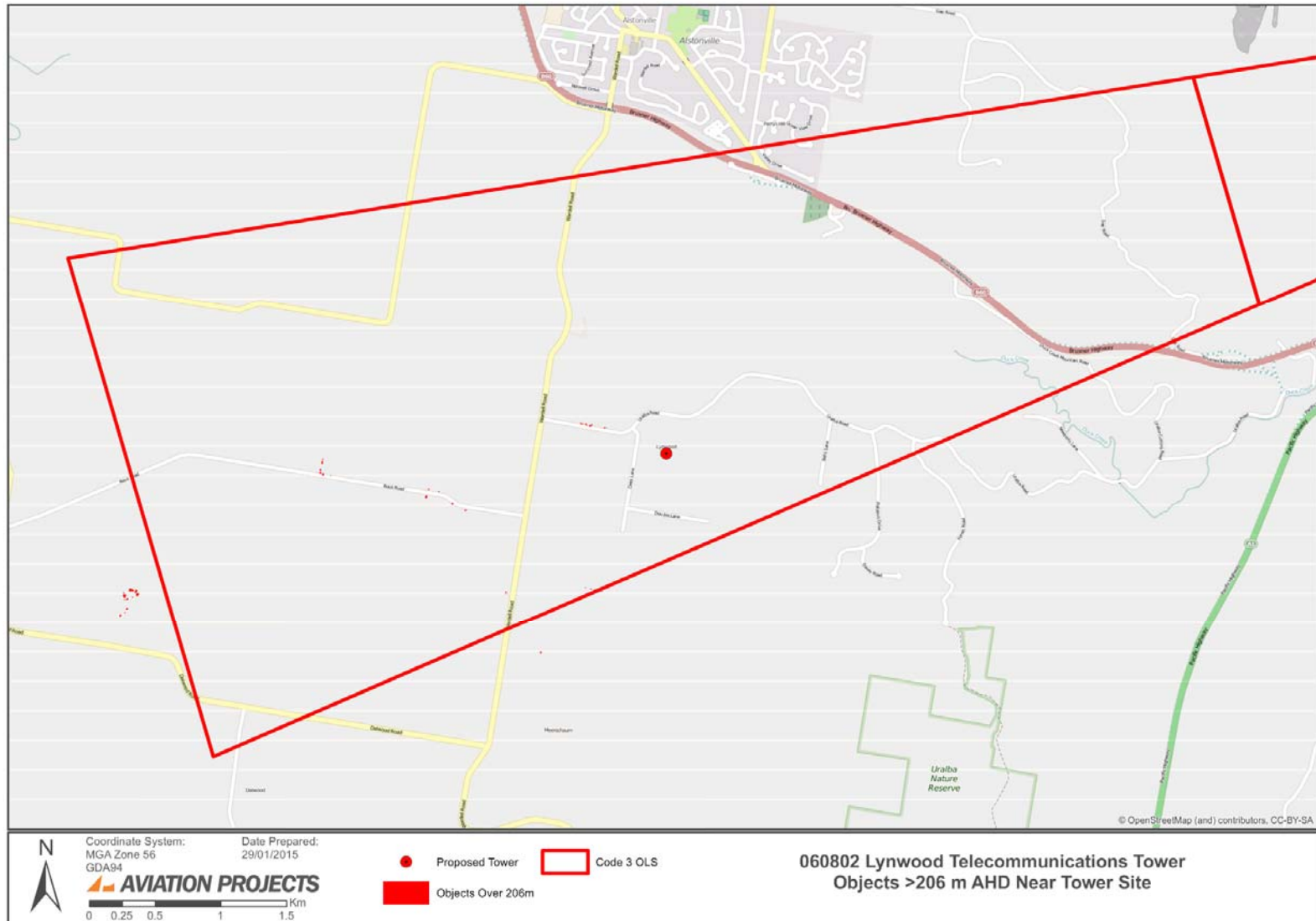
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ANNEXURE 2 – OBJECTS >206 M AHD NEAR TOWER SITE

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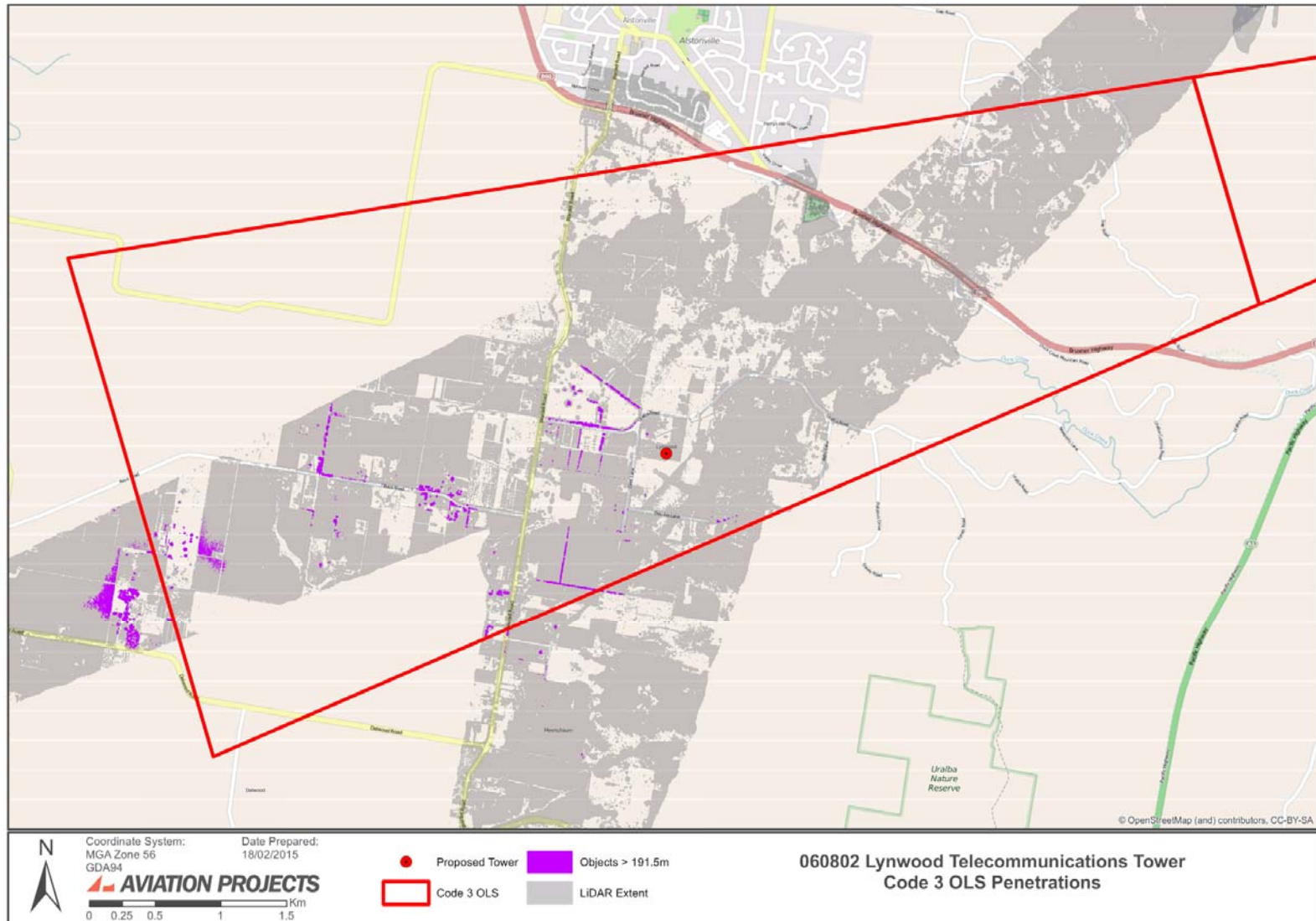
ANNEXURE 3 – CODE 3 OLS PENETRATIONS



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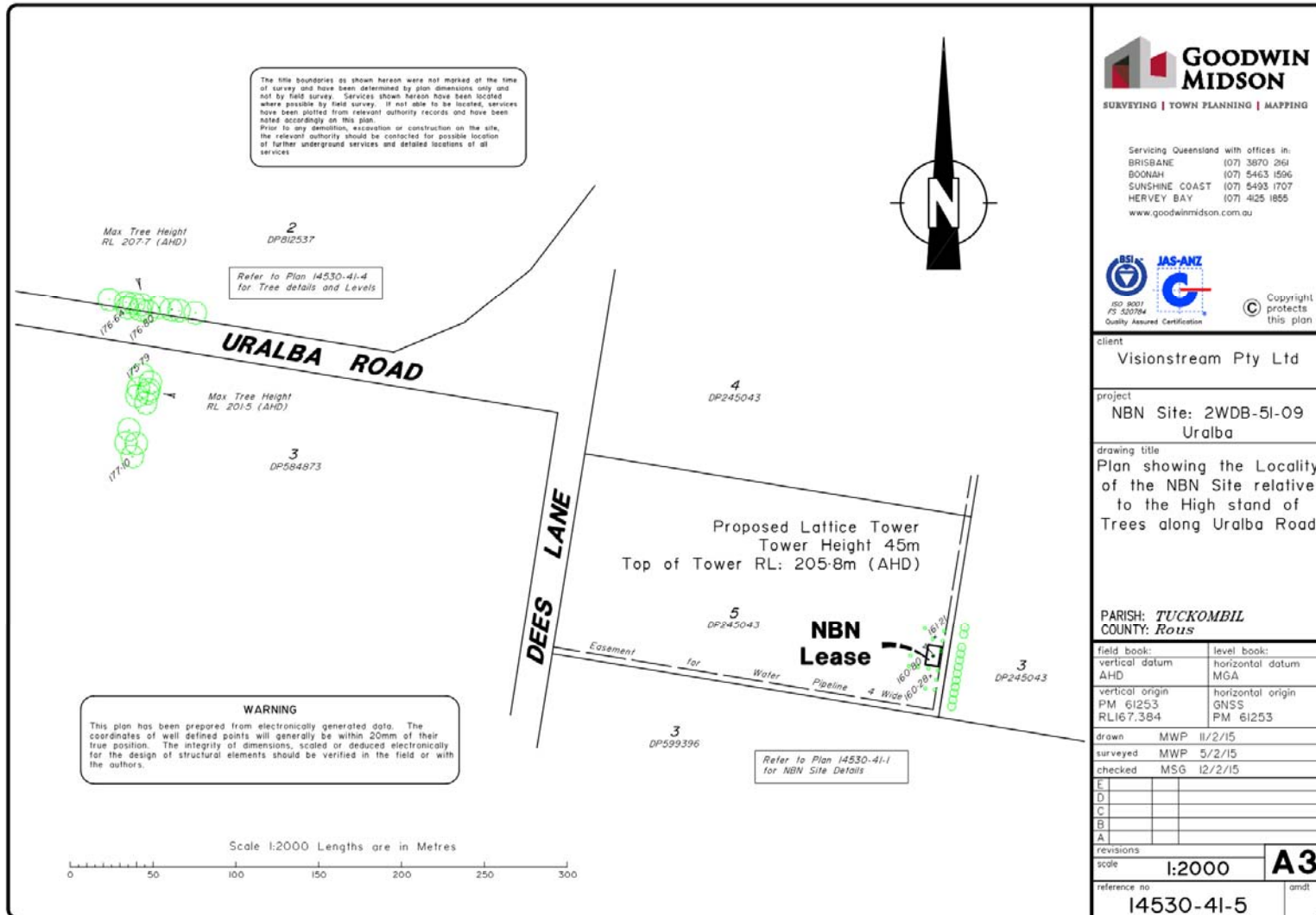
ANNEXURE 4 – SURVEY PLANS OF TREES NEAR SITE

1. Goodwin Midson, 14530-41-4 Plan showing Tree Locations in part of Lot 3 on DP584873 and Lot 2 on DP812537, 12 February 2015
2. Goodwin Midson, 14530-41-5 Plan showing the Locality of the NBN Site relative to the High stand of Trees along Uralba Road, 12 February 2015

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client
 Visionstream Pty Ltd

project
 NBN Site: 2WDB-5I-09
 Uralba

drawing title
 Plan showing the Locality
 of the NBN Site relative
 to the High stand of
 Trees along Uralba Road

PARISH: TUCKOMBIL
 COUNTY: Rous

field book:	level book:
vertical datum AHD	horizontal datum MGA
vertical origin PM 61253 RL167.384	horizontal origin GNSS PM 61253

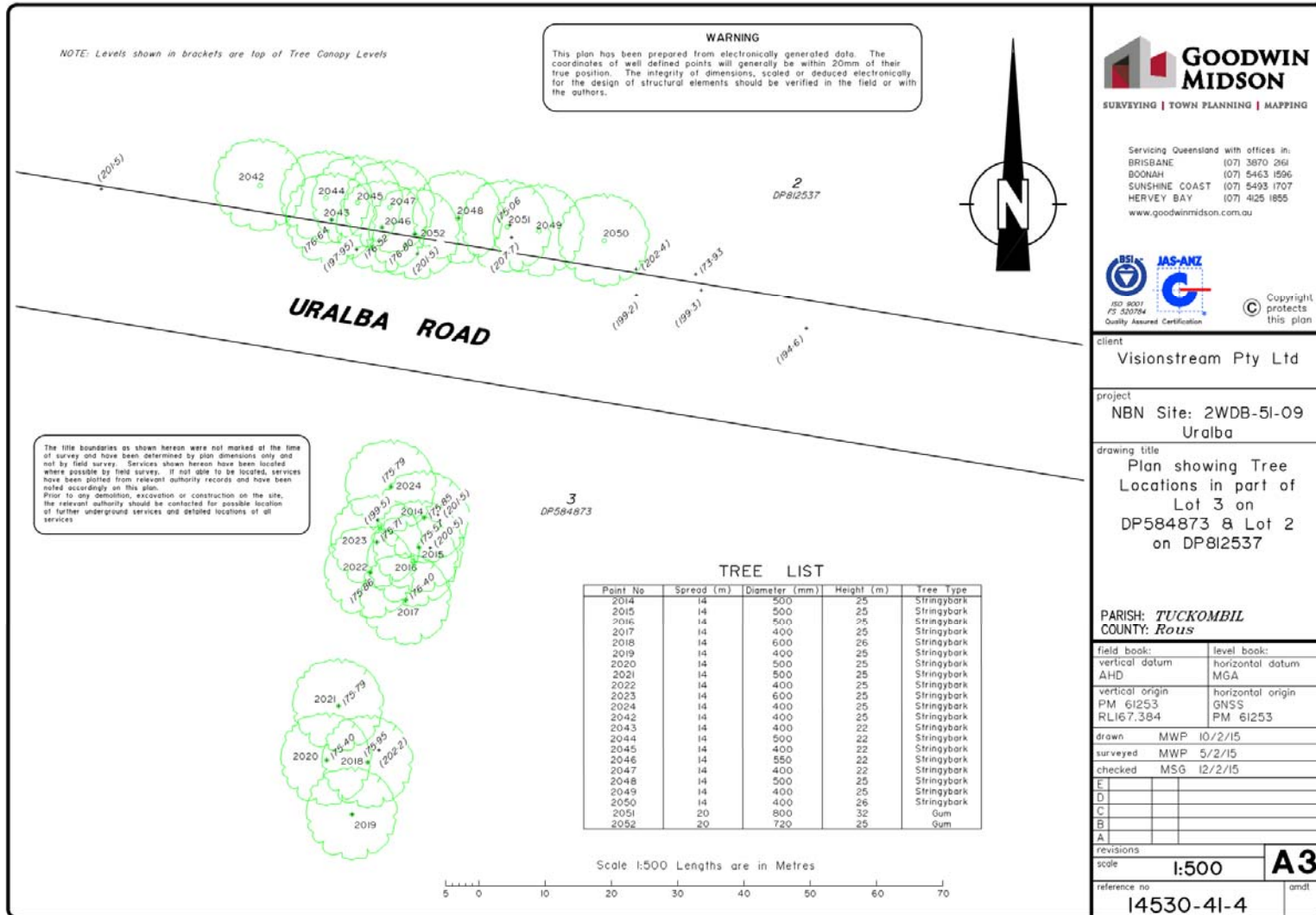
drawn MWP 11/2/15
 surveyed MWP 5/2/15
 checked MSG 12/2/15

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revisions
 scale 1:2000 **A3**

reference no 14530-41-5 amt

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NBN Site: 2WDB-5I-09
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field book:	level book:
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drawn MWP 10/2/15
surveyed MWP 5/2/15
checked MSG 12/2/15

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scale 1:500 **A3**
reference no 14530-41-4 andt



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ANNEXURE 5 – CODE 3 OLS CLEARANCE

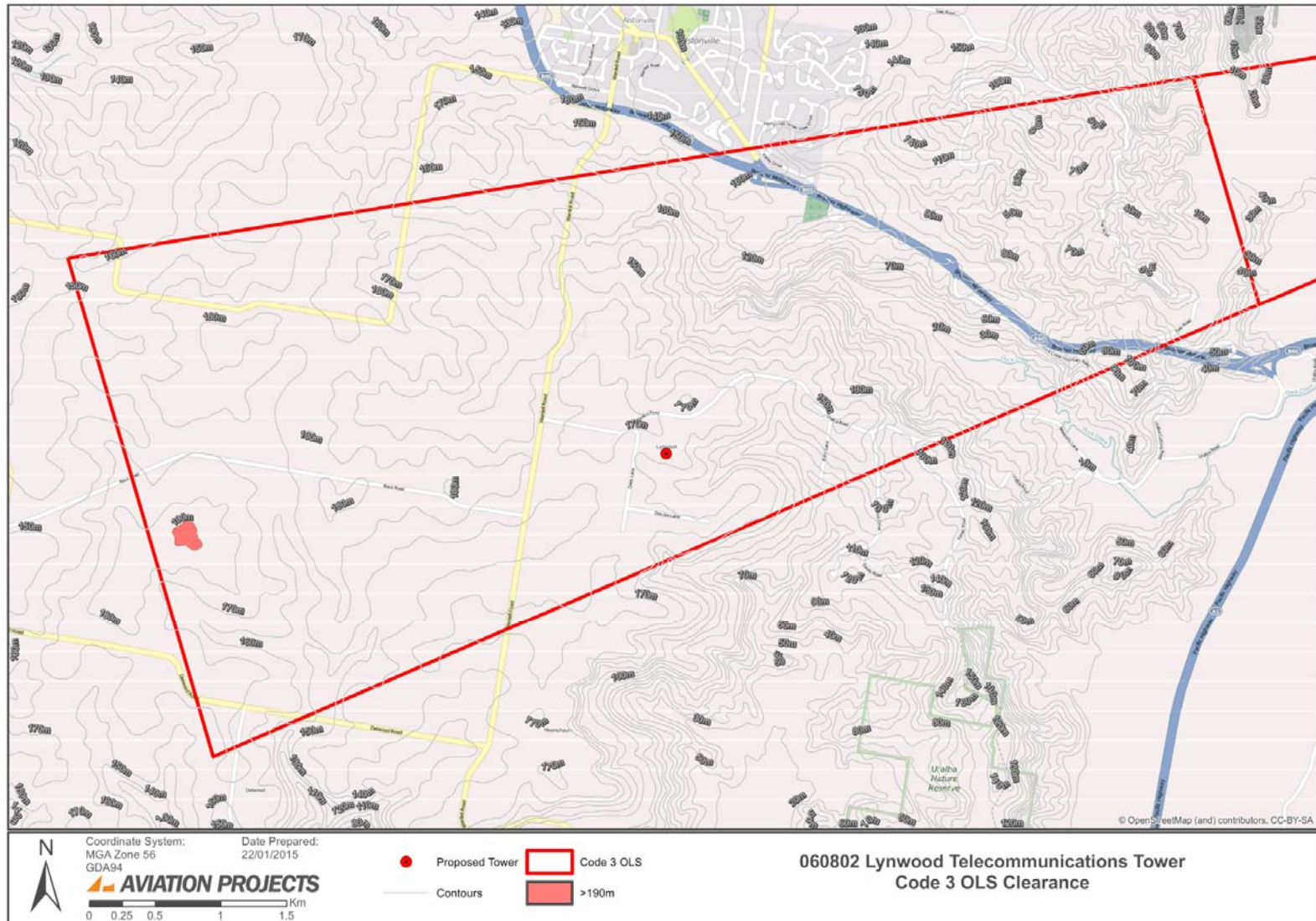


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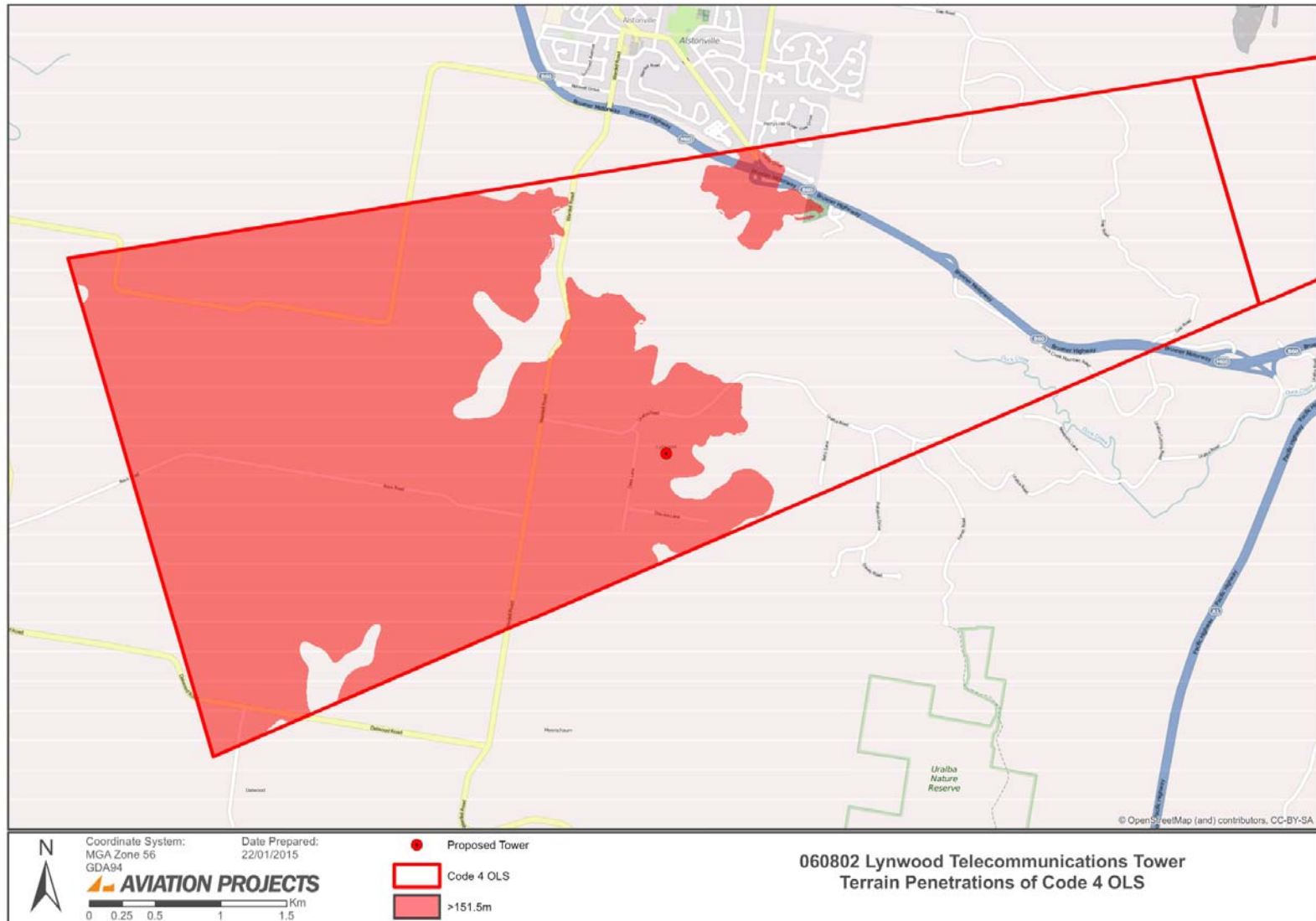
ANNEXURE 6 – TERRAIN PENETRATIONS OF CODE 4 OLS



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