

# Wollongong Local Planning Panel Assessment Report | 17 October 2018

<b>WLPP No.</b>	Item 1
<b>DA No.</b>	DA-2018/689
<b>Proposal</b>	Telecommunications Facility - 25m monopole, six (6) panel antennas, equipment shelter and landscaping
<b>Property</b>	580 Princes Highway Russell Vale
<b>Applicant</b>	CPS Global
<b>Responsible Team</b>	Development Assessment and Certification - City Wide Team (KR)

## ASSESSMENT REPORT AND RECOMMENDATION

### Executive Summary

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#### Reason for consideration by Local Planning Panel

The proposal has been referred to the Wollongong Local Planning Panel **for determination** pursuant to Section 1(a) of Schedule 2 of the Local Planning Panels Direction of 1 March 2018, as the land is owned by Wollongong City Council.

#### Proposal

The proposal is for a Telecommunications Facility - 25m monopole, six (6) panel antennas, equipment shelter and landscaping.

#### Permissibility

The site is zoned RE1 Public Recreation under the Wollongong Local Environmental Plan 2009. The proposed telecommunications facility is permissible under Clause 115(1) of the State Environmental Planning Policy (SEPP) Infrastructure 2007.

#### Consultation

Details of the proposal were publicly exhibited in accordance with Council's Notification Policy. The application received two submissions, including a petition with 116 signatures.

The issues raised are as follows:

1. Poor site location – golf course and adjacent to a residential area.
2. Health concerns – long term effect of exposure to electromagnetic radiation.
3. Impact on house prices.
4. Visual impact - height will dwarf all buildings and structures including electricity poles.
5. Impact on trees.
6. Land instability as the site was a former rubbish tip and mining.
7. Not in the public interest.
8. Will set a precedent.

Council's considerations to identified issues are discussed at section 1.3.

Council's Landscape, Environment, Property, Recreation, Geotechnical and Community Land Management Officer's have reviewed the application and provided conditionally satisfactory referral advice.

### **Main Issues**

The main issues are:

- Suitability of site location
- Visual impact
- Landscaping
- Health standards for exposure to radio emissions

The above issues are considered to have been satisfactorily addressed in the application submission.

### **Likely impacts**

There are not expected to be adverse environmental impacts on either the natural or built environments or any adverse social or economic impacts in the locality.

### **RECOMMENDATION**

It is recommended that DA-2018/689 be approved subject to the conditions provided at Attachment 5.

## 1 APPLICATION OVERVIEW

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### 1.1 PLANNING CONTROLS

The following planning controls apply to the proposal:

Commonwealth Legislation:

- Telecommunications Act 1997

State Environmental Planning Policies:

- SEPP No. 55 – Remediation of Land
- SEPP (Vegetation in Non-Rural Areas) 2017
- SEPP (Infrastructure) 2007

Local Environmental Planning Policies:

- Wollongong Local Environmental Plan (WLEP) 2009

Development Control Plans:

- Wollongong Development Control Plan 2009

Other policies

- Wollongong City-Wide Development Contributions Plan 2018
- Generic Plan of Management for the Community Land of Wollongong City Council 2018.

The proposal is satisfactory with regard to the applicable planning controls as discussed in the body of this report.

### 1.2 DETAILED DESCRIPTION OF PROPOSAL

The proposal comprises the following:

- 25m high concrete monopole with a circular head frame on top;
- Six panel antennas (to an overall height of 26.34m)
- 36 non-EME emitting remote radio units
- Outdoor equipment shelter 3.15m long x 2.38m wide x 2.94m high
- Secure compound area measuring 6.4m x 10.4m enclosed by a 2.4m high fence to match the golf course fence.
- Ancillary equipment including equipment housing, cable trays, cable ladders, cabling, earthing, electrical works and air conditioning equipment.
- Landscaping.
- Tree removal/pruning.

### 1.3 BACKGROUND

- **DA-2017/383** Boundary fence and vegetation removal was approved 26 July 2017.
- **CC-2017/32** Boundary fence and vegetation removal was approved 16 August 2017. The fence has been constructed.

- **RD-2016/1650/A** Telecommunication facility - 25m monopole, equipment shelter and compound was refused 7 September 2017.
- **DA-2016/1650** Telecommunication facility - 25m monopole, equipment shelter and compound, refused on 14 March 2017.
- **PL—2016/84** Construction of a telecommunications facility was held on 11 July 2016. The proposal was for a telecommunications facility in the same location as sought under DA-2018/689, RD-2016/1650 & DA-2016/1650 however it proposed a height of 41.3m. The summary of Council's advice to the applicant contained in the pre-lodgement meeting notes are provided below:

**Meeting Outcomes Summary:**

*Based on the concept plans provided the 41.3m high telecommunications facility would be a visually dominant feature located in a prominent ridgeline location. This would result in a significant negative visual impact on the surrounding low density area which comprises predominately one and two storey dwellings and open recreation lands. The proposal is considered to be an obtrusive feature which would result in poor visual amenity particularly when framed against the backdrop of the Illawarra Escarpment Lands. The height of the facility is considered unacceptable in the locality and would set an undesirable precedent and would not be supported.*

Customer service actions

There are no outstanding customer service requests of relevance to the development.

**1.4 SITE DESCRIPTION**

The site is located at 580 Princes Highway Russell Vale and the title reference is Lot 1 DP 808427. It is part of Russell Vale Golf Course and is owned by Wollongong City Council. The site has an area of 12,825sqm however the proposed tower and equipment shelter is on a portion of land 60sqm in area which is to be leased from Wollongong City Council.

The site is irregular in shape and sloping with a fall of 14m from north to south with a slight cross-fall from north-west to south-east. Site frontage is to Rixons Pass Road (north) with secondary frontage to the Princes Highway (east).

A new fence was recently constructed around the perimeter of the golf course comprising a blue metal palisade fence 2.4m in height.

The locality is characterised by low density residential dwellings in Rixons Pass Road, Princes Highway and the Russell Vale Golf Course.

Adjoining development is as follows:

- North: Residential properties fronting Rixons Pass Road.
- East: Princes Highway and residential properties on the Princes Highway.
- South: Privately owned land – electrical substation
- West: Russell Vale Golf Course

There are several native trees to the immediate side and rear of the proposal as identified in the submitted Arborist Report by Allied Tree Consultancy dated 29 June 2017, see Figure 1. Beyond this there is a stand of vegetation to the south and west of the proposal with some trees approximately 20m in height.



Tree No.	Species	Height (m)
1	<i>Melaleuca linarifolia</i> Narrow Leaf Paperbark	5
2	<i>Melaleuca linarifolia</i> Narrow Leaf Paperbark	4
3*	<i>Melaleuca linarifolia</i> Narrow Leaf Paperbark	5
4	<i>Melaleuca linarifolia</i> Narrow Leaf Paperbark	6
5*	<i>Syncarpia glomulifera</i> Turpentine	8
6	<i>Syncarpia glomulifera</i> Turpentine	7
7	<i>Syncarpia glomulifera</i> Turpentine	6

\*Tree 3 is to be removed and Tree 5 is to be pruned.

**Figure 1: Tree Plan – Excerpt from submitted Arborist Report**

Property constraints

- Council records identify the land as being located within a flood risk precinct.
- Council records identify the land as being unstable land.
- Council records identify the land as containing riparian land.
- Heritage item (nearby) – including a Moreton Bay Fig to the south within the Russell Vale Golf Course and retaining walls within Rixons Pass Road to the west.

There are no restrictions on the title.



**Figure 2: Aerial photograph – site of proposal shown hatched**

### 1.5 SUBMISSIONS

The application was exhibited in accordance with WDCP 2009 Appendix 1: Public Notification and Advertising. This included a notice in The Advertiser on 27 June 2018. Two submissions were received, including a petition with 116 signatures, and the issues identified are discussed below.

**Table 1: Submissions**

Concern	Comment
1. Poor location within the golf course and adjacent to a residential area	<p>Council is satisfied that the proposal has taken into consideration the <i>NSW Telecommunication Facilities Guideline including Broadband (July 2010)</i> (the guideline) as required by Clause 115 (3) of the Infrastructure SEPP in regard to the appropriate location, siting and design of telecommunications facilities.</p> <p>Council is also satisfied that the applicant has applied the 'precautionary approach' in the selection and design of the proposal in accordance with relevant Industry Design Guide. This has taken into consideration the surrounding context, proximity to community sensitive location, coverage objectives, and EME exposure.</p>
2. Health concerns – long term effect of exposure to electromagnetic	<p>Council's Environment Officer has assessed the submitted Environmental EME Report and is satisfied that the levels of radiofrequency (RF) electromagnetic energy (EME) will be well within the guidelines of the Australian Standard.</p>

Concern	Comment
radiation	
3. Impact on houses prices	This is of limited relevance as a statutory planning assessment consideration.
4 Visual impact as height will dwarf all buildings and structures including electricity poles	<p>A Visual Impact Assessment Report was submitted with the application which concluded that views from critical local and regional locations will not be significantly altered by the proposed telecommunications tower. Existing vegetation will screen the development and there is also a number of tall power poles along Rixons Pass Road. The proposed telecommunications tower will not be the only vertical element in the locality, but rather an additional vertical element to the trees and power poles that already exist.</p> <p>Proposed landscape treatment will screen the lower level infrastructure. Council's Landscape Officer has also imposed a condition requiring three street trees in Rixons Pass Road to further mitigate visual impact. Only the upper portion of the proposed tower is likely to be visible from the surrounding area. The tower will be painted pale eucalypt green to ensure it blends into the environment.</p> <p>The upper portion of the tower and circular headframe on top would still be visible particularly when viewed from the golf course and the residential area in Rixons Pass Road however, it is considered the proposed mitigation measures has significantly lessened the visual impact of the proposed facility to an acceptable level.</p>
5 Impact on trees	Only one tree is proposed to be removed and one tree is to be pruned. Landscaping is proposed including a Paperbark tree to compensate for the tree to be removed and screen planting to mitigate visual impact. Council's Landscape Officer has assessed the proposal and is satisfied.
6 Land instability as the site was a former rubbish tip and mining	Council's Geotechnical Engineer has assessed the proposal and is satisfied.
7 Not in the public interest	The application is not expected to have any unreasonable impacts on the environment or the amenity of the locality. It is considered appropriate with consideration to the zoning and the character of the area and is therefore considered to be in the public interest.
8 Will set an undesirable precedent	The proposal will not set a precedent as any Development Applications for other Telecommunications Facilities in the area would also be considered on merit.

## 1.6 CONSULTATION

### 1.6.1 INTERNAL CONSULTATION

Council's Landscape, Property, Community Land Management, Environment, Recreation and Geotechnical Officers have reviewed the application and provided conditionally satisfactory referrals.

Council's Landscape Officer has provided conditions of consent including a condition requiring street tree planting for three *Tristania laurina* 200 litre container size to further mitigate visual impact of the proposal when viewed from the residential area in Rixons Pass Road. Council's Landscape Officer has advised the trees are expected to grow to approximately 5m which would be well below the height of existing powerlines which are at a height of approximately 18m as shown on the Northern Elevation Plan (Attachment 1).

### 1.6.2 EXTERNAL CONSULTATION

None required

## 2 COMMONWEALTH LEGISLATION

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The Telecommunications Act 1997 (the Act) and the Telecommunications (Low-Impact Facilities) Determination 1997 (the Determination), came into effect on 1 July 1997. The Act is federal legislation that provides regulatory framework for telecommunication facilities. The Determination was made under Schedule 3 of the Act and provides for the carrying out of many 'low-impact' telecommunication facilities that are not subject to NSW planning law.

Schedule 3 of the Act authorises a telecommunications carrier to inspect land to determine whether the land is suitable for its purpose and install a telecommunications facility on the land if it is a 'low-impact facility'.

A facility cannot be a low-impact facility unless it is specified in the Determination. A new mobile telecommunications tower is not a 'low-impact facility'. Also, a facility is not a low-impact facility if it is installed in particular areas including a residential area.

In the Statement of Environmental Effects submitted with the application the applicant states that the carrier does not believe the proposal falls within the definition of a 'low-impact facility'.

The proposal is not exempt under the Act and therefore requires development consent from Council.

## 3 STATE LEGISLATION - ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979 – 4.15 EVALUATION

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### 3.1 SECTION 4.15(1)(A)(1) ANY ENVIRONMENTAL PLANNING INSTRUMENT

#### 3.1.1 STATE ENVIRONMENTAL PLANNING POLICY NO. 55 – REMEDIATION OF LAND

##### **Clause 7 Contamination and remediation to be considered in determining development application**

*(1) A consent authority must not consent to the carrying out of any development on land unless:*

*(a) it has considered whether the land is contaminated,*

*(b) if the land is contaminated, it is satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) for the purpose for which the development is proposed to be carried out, and*

*(c) if the land requires remediation to be made suitable for the purpose for which the development is proposed to be carried out, it is satisfied that the land will be remediated before the land is used for that purpose.*

A review of Council records indicate that the site was previously used for landfill however the site was capped and remediated prior to its current recreational use. Only minor earthworks are proposed. A condition will be imposed requiring any fill to be removed to be classified according to the NSW Environment Protection Authority's Waste Classification Guidelines – Part 1: Classifying Waste (2014) prior to being transported from the site and shall be disposed of only at a location that may lawfully receive that waste.

Council's Environment Officer has reviewed the application and is satisfied subject to conditions.

No concerns are raised in regard to contamination as relates to the intended use of the land and the requirements of clause 7.

### 3.1.2 STATE ENVIRONMENTAL PLANNING POLICY (INFRASTRUCTURE) 2007 & TELECOMMUNICATIONS FACILITIES GUIDELINE INCLUDING BROADBAND JULY 2010

The State Environmental Planning Policy Infrastructure 2007 (SEPP Infrastructure) sets out the State wide planning provisions and development controls for telecommunication facilities in NSW.

The SEPP allows telecommunications infrastructure providers to be either exempt from planning approval, or obtain a complying development approval, for telecommunications facilities subject to certain criteria including health and amenity considerations. New telecommunications towers in residential zones do not fall under exempt or complying provisions and therefore require development application consent from Council.

#### Division 21 Telecommunication and other Communication Facilities

Clause 113 defines a telecommunications facility as:

*telecommunications facility means:*

- (a) any part of the infrastructure of a telecommunications network, or*
- (b) any line, cable, optical fibre, fibre access node, interconnect point, equipment, apparatus, tower, mast, antenna, dish, tunnel, duct, hole, pit, pole or other structure in connection with a telecommunications network, or*
- (c) any other thing used in or in connection with a telecommunications network.*

#### Comment:

The proposal is considered to meet the definition of a telecommunication facility.

Clause 115 (1) Development for the purposes of telecommunications facilities, other than development in clause 114 or development that is exempt development under clause 20 or 116, may be carried out by any person with consent on any land.

#### Comment:

The proposed telecommunications facility is permissible under Clause 115(1) of the SEPP Infrastructure 2007 in any zone and does not fall within exempt development.

Clause 115 (3) requires Council to consider telecommunication facility guidelines prior to granting development consent. The *NSW Telecommunication Facilities Guideline including Broadband (July 2010)* (the guideline) has been issued by the Department of Planning. The guidelines provide advice on the location, siting and design of telecommunications facilities and is to be read in conjunction with the relevant Commonwealth legislation and Council's development controls. The Applicant's Table of Compliance with the Telecommunication Guideline including Broadband (July 2010) is provided at Attachment 3.

## Comment

Table 1 of the guideline provides a list of telecommunications facilities that are Exempt or Complying Development in NSW as provided for in Schedule 3A of SEPP Infrastructure. The SEPP provides for additional exemptions than contained in the Determination as well as Complying Development. The proposal does not fall within the exempt or complying development provisions and therefore requires development consent from Council.

The guidelines on the location, siting and design of telecommunications facilities have been taken into consideration in the assessment of the application as follows:

<b>Principal 1: A telecommunications facility is to be designed and sited to minimise visual impact</b>			
		Compliance	
a)	<i>As far as practical a telecommunications facility that is to be mounted on an existing building or structure should be integrated with the design and appearance of the building or structure.</i>	The proposal does not involve mounting a telecommunications facility on an existing building or structure.	N/A
b)	<i>The visual impact of telecommunications facilities should be minimised, visual clutter is to be reduced particularly on tops of buildings, and their physical dimensions (including support mounts) should be sympathetic to the scale and height of the building to which it is to be attached, and sympathetic to adjacent buildings.</i>	<p>A Visual Impact Assessment Report, prepared by Cardno dated 3 October 2018, has been submitted (Attachment 2). The report provides a view impact assessment from several critical viewpoints including local views and regional views including the residential area in Rixons Pass Road, the Russell Vale Golf Course and other key vantage points in the area. The conclusion of the report is summarised below:</p> <ol style="list-style-type: none"> <li>1. <i>The development as proposed is of a comparable scale and design to similar communications tower development in the area, and will not encroach on views from critical viewpoints;</i></li> <li>2. <i>The siting of the proposed tower is appropriate as it is situated on the Russell Vale Golf Course, in an area of the course that features significant existing vegetation. This will ensure that the proposed tower is largely screened from surrounding views. The prepared photomontages demonstrate that views of the site from critical local and regional locations will not be significantly altered by development of the proposed communications tower.</i></li> <li>3. <i>Landscape treatment proposed will screen the lower level infrastructure in close views and also add to vegetation screening in views from more</i></li> </ol>	Yes

	<p><i>distant locations.</i></p> <p>The conclusions of the Visual Impact Assessment Report are concurred. The proposal is considered to have been sited and designed to minimise visual impact as follows:</p> <ul style="list-style-type: none"> <li>- Existing vegetation will screen the development and there is also a number of tall power poles along Rixons Pass Road. The proposed telecommunications tower will not be the only vertical element in the locality, but rather an additional vertical element to the trees and power poles that already exist.</li> <li>- Proposed landscape treatment will screen the lower level infrastructure. Council's Landscape Officer has also imposed a condition requiring three street trees in Rixons Pass Road to further mitigate visual impact.</li> <li>- Only the upper portion of the proposed tower and headframe on top is likely to be visible from the surrounding area. The proposed tower has been designed to be slimline construction and will be painted pale eucalypt green to ensure it blends into the environment.</li> </ul> <p>The proposed mitigation measures has significantly lessened the visual impact of the proposed facility to an acceptable level.</p>	
<p>c) <i>Where telecommunications facilities protrude from a building or structure and are predominantly back grounded against the sky, the facility and their support mounts should be either the same as the prevailing colour of the host building or structure, or a neutral colour such as grey should be used.</i></p>	<p>The proposal does not involve mounting antennas to an existing building or structure.</p>	N/A
<p>d) <i>Ancillary facilities associated with the telecommunications facility should be screened or housed, using the same colour</i></p>	<p>The proposal involves the installation of an equipment cabin measuring 3.15 long x 2.38m wide x 2.94m high and 6.4m x 10.4m secure compound area to be fenced.</p> <p>The fencing is to match the perimeter fencing of</p>	Yes

	<i>as the prevailing background to reduce its visibility, including the use of existing vegetation where available, or new landscaping where practical.</i>	<p>the golf course.</p> <p>Existing vegetation in the vicinity of the proposal will be retained with only minor tree removal and pruning proposed.</p> <p>Landscaping is proposed around the fenced area to screen the development.</p> <p>Council's Landscape Officer has imposed a condition requiring three street trees in Rixons Pass Road to further mitigate visual impact.</p> <p>These mitigation measures will assist in reducing the visibility of the ancillary structures.</p>	
e)	<i>A telecommunications facility should be located and designed to respond appropriately to its rural landscape setting.</i>	The proposed telecommunications facility is not proposed to be located in a rural landscape setting.	N/A
f)	<i>A telecommunications facility located on, or adjacent to, a State or local heritage item or within a heritage conservation area, should be sited and designed with external colours, finishes and scale sympathetic to those of the heritage item or conservation area.</i>	The site is in proximity to heritage items being retaining walls in Rixons Pass Road and a Moreton Bay Fig Tree in the Russell Vale Golf Course. Council's Heritage Officer has assessed the proposal and is satisfied.	Yes
g)	<i>A telecommunications facility should be located so as to minimise or avoid the obstruction of a significant view of a heritage item or place, a landmark, a streetscape, vista or a panorama, whether viewed from public or private land.</i>	<p>The telecommunications facility is to be located in the Russell Vale Golf Course opposite residential properties which would currently have a view of the golf course.</p> <p>The proposal would be largely screened by existing vegetation and proposed landscaping which would mitigate impact on views of the golf course.</p>	Yes
h)	<i>The relevant local</i>	An Arborist Report has been submitted from	Yes

<p><i>government authority must be consulted where the pruning, lopping, or removal of any tree or other vegetation would contravene a Tree Preservation Order applying to the land or where a permit or development consent is required.</i></p>	<p>Warwick Varley Allied Tree Consultancy dated 29 June 2018 (See Figure 1). The proposal involves the removal of one tree (Paperbark) as extensive pruning would be required to retain the tree and it is in a declining state. Pruning is required to Tree No. 5 to accommodate the compound fence.</p> <p>Council's Landscape Officer has considered the tree removal and pruning required and has no objections subject to conditions including a condition for compensatory planting. The Landscape Plan shows that a Paperbark is to be planted in its place as compensatory planting.</p>	
<p><i>i) A telecommunications facility that is no longer required is to be removed and the site restored, to a condition that is similar to its condition before the facility was constructed.</i></p>	<p>A condition will be imposed on any consent to be issued.</p>	<p>Yes</p>
<p><i>l) The siting and design of telecommunications facilities should be in accordance with any relevant Industry Design Guides.</i></p>	<p>Council is satisfied that the applicant has taken into consideration the <i>Industry Code C564:2011 Mobile Phone Base Station Deployment</i> ("the Deployment Code"). The applicant has applied the 'precautionary approach' in the selection and design of the proposal. This has taken into consideration the surrounding context, proximity to community sensitive location, coverage objectives, and EME exposure.</p> <p>The applicant acknowledges that the locality is residential in nature and that some concerns may arise from residents in the area. During the notification two submissions, including a petition, were received. As discussed in Section 1.5 Council is satisfied that the issues raised in the submissions have been adequately addressed in the application submission.</p>	<p>Yes</p>
<p><b>Principle 2: Telecommunications facilities should be co-located wherever practical</b></p>		
<p><i>a) Telecommunications lines are to be located, as far as practical, underground or within an existing underground conduit or</i></p>	<p>Not applicable.</p>	<p>N/A</p>

duct.		
b) <i>Overhead lines, antennas and ancillary telecommunications facilities should, where practical, be co-located or attached to existing structures such as buildings, public utility structures, poles, towers or other radio communications equipment to minimise the proliferation of telecommunication facilities and unnecessary clutter.</i>	The applicant has provided details of a site selection process which demonstrated that no feasible alternative sites were available for co-location of facilities which is accepted.	Yes
c) <i>Towers may be extended for the purposes of co-location.</i>	The proposal does not involve the extension of an existing tower.	N/A
d) <i>The extension of an existing tower must be considered as a practical co-location solution prior to building new towers.</i>	The applicant has provided details of a site selection process which demonstrated that no feasible alternative sites were available for co-location of facilities which is accepted.	N/A
e) <i>If a facility is proposed not to be co-located the proponent must demonstrate that co-location is not practicable.</i>	<p><i>The applicant has provided information detailing consideration of four sites:</i></p> <p><i>Candidate A: Subject site;</i></p> <p><i>Candidate B: Woonona Bulli RSL - rooftop co-location with Telstra. This candidate was discounted as there was insufficient space and would not meet the radio frequency objectives.</i></p> <p><i>Candidate C 417-428 Princes Highway Woonona – Rooftop. This candidate was discounted as it was deemed to be visually intrusive to raise the height of the antennas and would not meet the radio frequency objectives.</i></p> <p><i>Candidate D – 468-476 Princes Highway</i></p>	Yes

	<p>Woonona - new monopole. This candidate was discounted due to significant concerns regarding power supply, construction and access.</p> <p>The preferred candidate was the subject site due to:</p> <ul style="list-style-type: none"> <li>• The site's location in a golf course was deemed to be appropriate;</li> <li>• There is significant vegetation in the golf course that will provide some screening,</li> <li>• The height has been reduced with the locality in mind to be in keeping with the character of the area;</li> <li>• Minimal impact on the character of the escarpment;</li> <li>• No detrimental impact on the objectives of the zone and public land classification and categorisation;</li> <li>• The location would meet the carrier's coverage requirements therefore improving the quality of telecommunications services to the surrounding area while minimising visual impact; and</li> <li>• The ability to secure land tenure.</li> </ul>	
<p>f) <i>If the development is for a co-location purpose, then any new telecommunications facility must be designed, installed and operated so that the resultant cumulative levels of radio frequency emissions of the co-located telecommunications facilities are within the maximum human exposure levels set out in the Radiation Protection Standard.</i></p>	<p>The proposed development is not for a co-location purpose.</p>	<p>N/A</p>
<p><b>Principle 3: Health standards for exposure to radio emissions will be met</b></p>		
<p>a) <i>A telecommunications facility must be designed, installed and</i></p>	<p>Council's Environment Officer has assessed the submitted Environmental EME Report and is satisfied that the levels of radiofrequency (RF)</p>	<p>Yes</p>

	<i>operated so that the maximum human exposure levels to radiofrequency emissions comply with Radiation Protection Standard.</i>	electromagnetic energy (EME) will be well within the guidelines of the Australian Standard.	
b)	<i>An EME Environmental Report shall be produced by the proponent of development to which the Mobile Phone Network Code applies in terms of design, siting of facilities and notifications. The Report is to be in the format required by the Australian Radiation Protection Nuclear Safety Agency (ARPANSA). It is to show the predicted levels of electromagnetic energy surrounding the development comply with the safety limits imposed by the Australian Communications and Media Authority and the Electromagnetic Radiation Standard, and demonstrate compliance with the Mobile Phone Networks Code.</i>	As above.	Yes
<b>Principle 4: Minimise disturbance and risk, and maximise compliance</b>			
a)	<i>The siting and height of any telecommunications facility must comply with any relevant site and height requirements specified</i>	The facility does not penetrate any Obstacle Limitation Surface.	Yes

<p><i>by the Civil Aviation Regulations 1988 and the Airports (Protection of Airspace) Regulations 1996 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 Safety Authority Australia.</i></p>		
<p><i>b) The telecommunications facility is not to cause adverse radio frequency interference with any airport, port or Commonwealth Defence navigational or communications equipment, including the Morundah Communication Facility, Riverina.</i></p>	<p>The structure is not intended to cause any adverse radio interference.</p>	<p>Yes</p>
<p><i>c) The telecommunications facility and ancillary facilities are to be carried out in accordance with the applicable specifications (if any) of the manufacturers for the installation of such equipment.</i></p>	<p>The proposal is capable of complying with this requirement.</p>	<p>Yes</p>
<p><i>d) The telecommunications</i></p>	<p>The facility does not involve an existing building.</p>	<p>N/A</p>

	<i>facility is not to affect the structural integrity of any building on which it is erected.</i>		
e)	<i>The telecommunications facility is to be erected wholly within the boundaries of a property where the landowner has agreed to the facility being located on the land.</i>	The facility is sited wholly within the site.	Yes
f)	<i>The carrying out of construction of the telecommunications facilities must be in accordance with all relevant regulations of the Blue Book – ‘Managing Urban Storm water: Sails and Construction’ (Landcom 2004), or its replacement.</i>	The proposal is capable of complying with this requirement.	Yes
g)	<i>Obstruction or risks to pedestrians or vehicles caused by the location of the facility, construction activity or materials used in construction are to be mitigated.</i>	Existing powerlines along Rixons Pass Road may obstruct construction. Appropriate conditions of consent can be imposed to ensure existing infrastructure is not damaged during construction and that road and pedestrian safety is maintained during installation/construction.	Yes
h)	<i>Where practical, work is to be carried out during times that cause minimum disruption to adjoining properties and public access. Hours of work are to be restricted to between 7.00am and 5.00pm, Mondays to Saturdays, with no work on</i>	A standard condition outlining the permitted construction times will be imposed on any consent to be issued.	Yes

	<i>Sundays and public holidays.</i>		
i)	<i>Traffic control measures are to be taken during construction in accordance with Australian Standard AS1742.3-2002 Manual of uniform traffic control devices — Traffic control devices on roads.</i>	A condition may be imposed on any consent to be issued for a Traffic Control Plan to be submitted prior to commencement of works to demonstrate compliance with AS1742.3-2002 particularly due to the proximity and potential disruption to the Princes Highway and Rixons Pass Road being a residential street.	Yes
j)	<i>Open trenching should be guarded in accordance with Australian Standard Section 93.080 — Road Engineering AS1165 — 1982— Traffic hazard warning lamps.</i>	The proposal is capable of complying with this standard via a condition of consent.	Yes
k)	<i>Disturbance to flora and fauna should be minimised and the land is to be restored to a condition that is similar to its condition before the work was carried out.</i>	Council's Landscape Officer has reviewed the application and is satisfied.	Yes
l)	<i>The likelihood of impacting on threatened species and communities should be identified in consultation with relevant state or local government authorities and disturbance to identified species and communities avoided wherever possible.</i>	There are no threatened species on the land.	N/A

<p>m) <i>The likelihood of harming an Aboriginal Place and / or Aboriginal object should be identified. Approvals from the Office of Environment &amp; Heritage (OEH) must be obtained where impact is likely, or Aboriginal objects are found.</i></p>	<p>Council has no record of any aboriginal heritage items or known items of archaeological significance on the site or in the immediate surrounding area. Council's Heritage Officer has no concerns with the proposal.</p>	<p>Yes</p>
<p>n) <i>Street furniture, paving or other existing facilities removed or damaged during construction should be reinstated (at the telecommunications carrier's expense) to at least the same condition as that which existed prior to the telecommunications facility being installed.</i></p>	<p>Conditions can be imposed to ensure no damage to public infrastructure is to occur.</p>	<p>Yes</p>

Comment:

As required by clause 115(3) Council has taken into consideration the *Telecommunications Facilities Guidelines including Broadband* and it is considered the proposal satisfies the principles concerning site selection, design, construction or operating principles for telecommunications facilities.

**3.1.3 STATE ENVIRONMENTAL PLANNING POLICY (VEGETATION IN NON-RURAL AREAS) 2017**

Under Clause 7 of State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017 a person must not clear any vegetation in any non-rural area of the State to which Part 3 applies without the authority conferred by a permit granted by the council under that Part.

Clause 9 of Part 3 indicates that this Part applies to vegetation in any non-rural area of the State that is declared by a development control plan to be vegetation to which this Part applies.

The subject site is zoned RE1 Public Recreation, a non-rural area. It is considered that the vegetation proposed to be removed is vegetation declared by a development control plan, WDCP 2009 Chapter E17, to which Part 9 would apply.

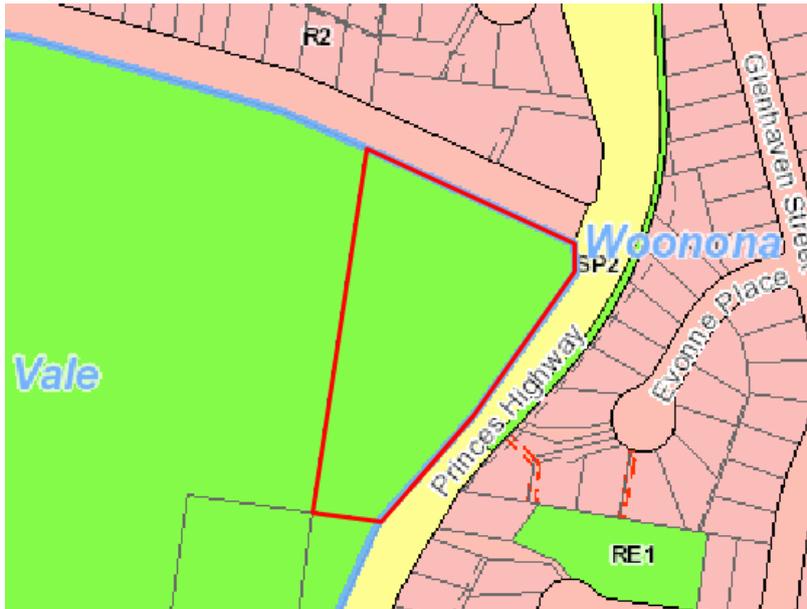
Council's Landscape Officer has reviewed the application submission and conditionally satisfactory referral advice was received for the removal of one tree with compensatory planting.

**3.1.4 WOLLONGONG LOCAL ENVIRONMENTAL PLAN 2009**

**Part 2 Permitted or prohibited development**

Clause 2.2 – zoning of land to which Plan applies

The zoning map identifies the land as being zoned **RE1 Public Recreation**.



**Figure 3: WLEP 2009 zoning map**

Clause 2.3 – Zone objectives and land use table

The objectives of the zone are as follows:

- *To enable land to be used for public open space or recreational purposes.*
- *To provide a range of recreational settings and activities and compatible land uses.*
- *To protect and enhance the natural environment for recreational purposes.*
- *To cater for the development of a wide range of uses and facilities within open spaces for the benefit of the community.*

The proposal will enable the land to continue to be used for the Russell Vale Golf Course. The proposal is not anticipated to interfere with the functioning of the golf course as it is located on a small portion of land at the edge of the course fronting Rixons Pass Road. The proposal will protect and enhance the natural environment as the proposal involves only minor tree removal/pruning and proposes additional landscaping to mitigate visual impact of the proposal.

Permitted with consent:

*Boat sheds; Camping grounds; Caravan parks; Centre-based child care facilities; Community facilities; Environmental facilities; Environmental protection works; Extensive agriculture; Helipads; Information and education facilities; Kiosks; Markets; Recreation areas; Recreation facilities (indoor); Recreation facilities (major); Recreational facilities (outdoor); Respite day care centres; Restaurants or cafes; Roads; Signage; Take away food and drink premises; Water recreation structures*

The proposed telecommunications facility is not permitted in the RE1 Zone. However, the application has been lodged pursuant to Clause 115(1) of the SEPP Infrastructure 2007:

*‘Development for the purposes of telecommunications facilities, other than development in clause 114 or development that is exempt development under clause 20 or 116, may be carried out by any person with consent on any land’*

(Refer to Attachment 3 - Applicant’s Table of Compliance).

Clause 1.4 Definitions

**telecommunications facility** means:

(a) any part of the infrastructure of a telecommunications network, or

*(b) any line, cable, optical fibre, fibre access node, interconnect point equipment, apparatus, tower, mast, antenna, dish, tunnel, duct, hole, pit, pole or other structure in connection with a telecommunications network, or*

*(c) any other thing used in or in connection with a telecommunications network.*

**tower** as defined in the Infrastructure SEPP 2007 means a freestanding ground-based structure that supports a telecommunications facility at a height where it can satisfactorily send and receive radio waves, but does not include the facility.

#### **Part 4 Principal development standards**

##### Clause 4.3 Height of buildings and Clause 4.6 Exceptions to development standards

The proposed height of 26.34m exceeds the maximum building height of 9m permitted on the site. However as the application has been lodged pursuant to the Infrastructure SEPP 2007, it is considered Clause 4.3 and Clause 4.6 do not apply. Height would only be relevant where referenced in the guidelines referred to in clause 115(3) of the Infrastructure SEPP. Clause 115 (3) of the Infrastructure SEPP 2007 requires Council to consider the *NSW Telecommunication Facilities Guideline including Broadband (July 2010)* (the guideline), issued by the Department of Planning prior to granting development consent. While the guidelines provide advice on the location, siting and design of telecommunications facilities it does not impose a maximum height limit for telecommunication facilities.

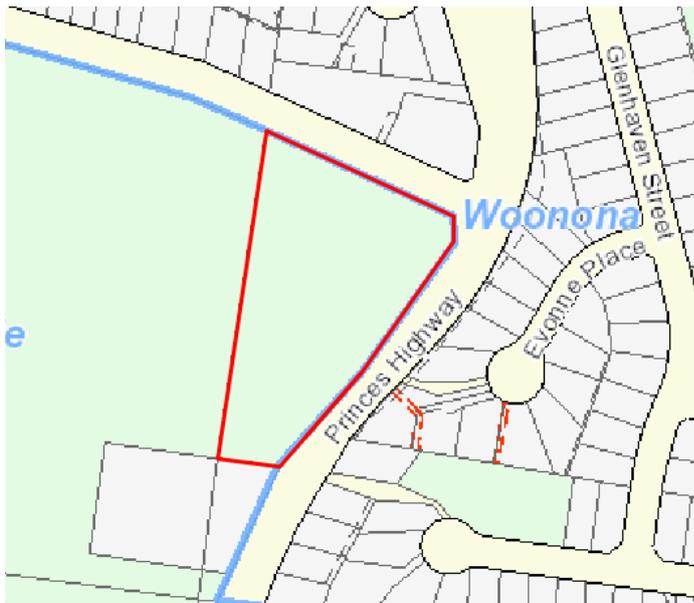
##### Clause 4.6 Exceptions to development standards

As previously identified it is considered Clause 4.3 and 4.6 of WLEP 2009 do not apply. The applicant has, however, provided a Justification Statement addressing the height departure. Council has considered the statement as being appropriately set out in terms of addressing Clause 4.6(3) and is otherwise supportive of the height departure (should the Panel not align with Council's interpretation of the provisions of Clause 115(3) of the Infrastructure SEPP 2009. A copy of the Applicant's Justification Statement is provided at Attachment 4.

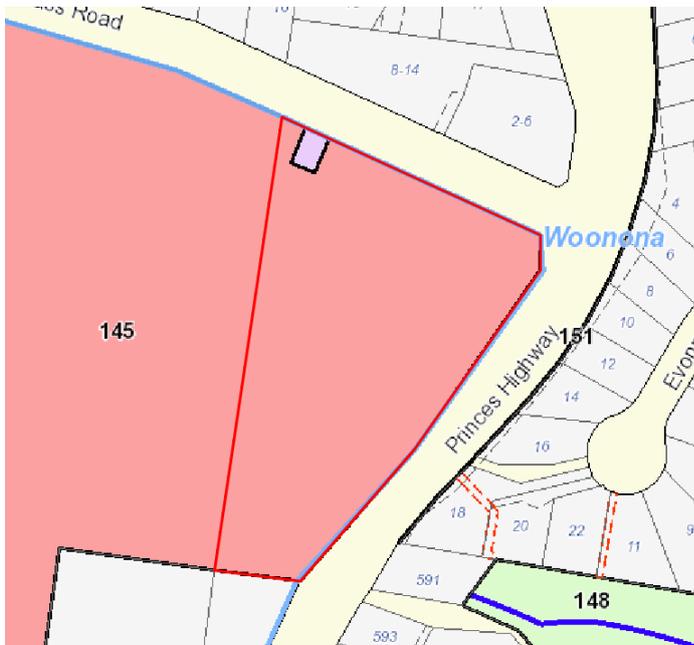
#### **Part 5 Miscellaneous provisions**

##### Clause 5.2 Classification and reclassification of public land

The property is owned by Wollongong City Council and is classified as Community land and categorised as 'general community use'. The categorisation was recently changed (by Council resolution on 7 May 2018) from 'sportsground' to 'general community use' upon request of the applicant. The proposal is considered to be consistent with the classification of community land and categorisation of general community use. Council's Community Land Management Officer has assessed the proposal and is satisfied. See Figures 4 and 5.



**Figure 4: Community Land Classification Map**



**Figure 5: Community Land Category – Pink is ‘sportsground’ and purple is ‘general community use’**

Clause 5.10 Heritage conservation

The site is in proximity to heritage items including a Moreton Bay Fig to the south within the Russell Vale Golf Course and walls within Rixons Pass Road to the west. Council’s Heritage Officer has assessed the proposal and is satisfied.

**Part 7 Local provisions – general**

Clause 7.1 Public utility infrastructure

The development is already serviced by electricity, water and sewage services.

Clause 7.3 Flood planning area

The site is flood affected however the site of the proposed telecommunications facility is located on high ground well above any flood affected portion of the lot.

#### Clause 7.4 Riparian lands

The Riparian Land Map indicates the site contains riparian land, located approximately 140m to the south of the proposal. This is in the form of bank stability and water quality. Council's Environment Officer has reviewed the application in this regard and has not raised any objections subject to appropriate conditions of consent.

#### Clause 7.8 Illawarra Conservation Area Conservation

The site is not located within the mapped Illawarra Escarpment Conservation Area. However the proposal would be visible against the backdrop of the Illawarra Escarpment. The Visual Impact Assessment Report provides an assessment of the view from Hollymount Park facing west towards the Illawarra Escarpment. The report concludes that the view from Hollymount Park and any other distant views to the proposed tower would be minimal as it would be screened by surrounding vegetation with only the top of the tower likely to protrude above the treetop. This has been addressed as the tower is proposed to be finished in a pale eucalypt colour scheme which will reduce visibility of the tower above the tree line, ensuring visibility against the Escarpment backdrop is minimal.

Council's Heritage Officer has assessed the proposal and is satisfied.

### **3.2 SECTION 4.15(1)(A)(II) ANY PROPOSED INSTRUMENT**

None.

### **3.3 SECTION 4.15(1)(A)(III) ANY DEVELOPMENT CONTROL PLAN**

#### 3.3.1 WOLLONGONG DEVELOPMENT CONTROL PLAN 2009

## **CHAPTER A2 – ECOLOGICALLY SUSTAINABLE DEVELOPMENT**

This chapter is noted.

## **CHAPTER C17: TELECOMMUNICATIONS AND RADIOCOMMUNICATIONS FACILITIES**

### **Clause 2 Siting Guidelines:**

<b>Required</b>	<b>Proposed</b>	<b>Compliance</b>
<b>2.1 – Visual Amenity:</b>  1. Carriers are to design antennas and supporting infrastructure in such a way as to minimise or reduce the visual and cumulative visual impact from the public domain and adjacent areas.  2. Infrastructure design must be consistent with the character of the surrounding area.  3. Within the local context, the infrastructure design must take account of:	<p>The proposed monopole is to be 26.34m high and is to be located on public recreational land, opposite a residential area.</p> <p>The applicant states that the proposal has been designed to reduce the impact of visual amenity as follows:</p> <ul style="list-style-type: none"><li>• <i>The site contains existing tall vegetation that will screen the facility.</i></li><li>• <i>Only the headframe will protrude above the tree canopy.</i></li><li>• <i>The facility will be colour matched with the background to blend in with the vegetated background.</i></li></ul>	Yes

<ul style="list-style-type: none"> <li>- Colour</li> <li>- Texture</li> <li>- Form</li> <li>- Bulk and scale</li> </ul> <p>4. Infrastructure must:</p> <ul style="list-style-type: none"> <li>- Be well-designed</li> <li>- Be integrated with the existing building structure unless otherwise justified in writing to Council:</li> <li>- Have concealed cables where practical and appropriate and</li> <li>- Be unobtrusive where possible.</li> </ul> <p>5. Wherever technically feasible, antennas and mast structures should either not be visible, or should be as visually unobtrusive as possible, from the fronting road at pedestrian eye level. Wherever technically feasible they should be located to minimise obtrusiveness. This may for instance result in infrastructure being located towards the rear of a building roof top.</p> <p>6. Wherever possible, towers should be of 'slimline monopole' construction.</p> <p>7. The site must be restored following the construction of the infrastructure.</p> <p>8. Infrastructure must be removed when no longer being used.</p>	<ul style="list-style-type: none"> <li>• <i>A Visual Impact Assessment Report has been submitted.'</i></li> </ul> <p><u>Comment:</u></p> <p>The proposal is considered to have been sited and designed to minimise visual impact as follows:</p> <ul style="list-style-type: none"> <li>- A Visual Impact Assessment Report was submitted with the application which concluded that views from critical local and regional locations will not be significantly altered by the proposed telecommunications tower.</li> <li>- Existing vegetation will screen the development and there is also a number of tall power poles along Rixons Pass Road. The proposed telecommunications tower will not be the only vertical element in the locality, but rather an additional vertical element to the trees and power poles that already exist in the area.</li> <li>- Proposed landscape treatment will screen the lower level infrastructure. Council's Landscape Officer has also imposed a condition requiring three street trees in Rixons Pass Road to further mitigate visual impact.</li> <li>- Only the upper portion of the proposed tower and headframe on top is likely to be visible from the surrounding area. The proposed tower has been designed to be slimline construction and will be painted pale eucalypt green to ensure it blends into the environment.</li> </ul> <p>The proposed mitigation measures has significantly lessened the visual impact of the proposed facility to an acceptable level.</p> <p>Conditions may be imposed on any consent to be issued for the site to be restored following the construction and for infrastructure to be removed when no longer being used.</p>	
<p><b>2.2 – Co-location:</b></p> <p>Co-location is the practice of locating a number of different telecommunication facilities often owned by different carriers on one facility to reduce visual impact of a number of different facilities in the area.</p>	<p>The application does not propose co-location.</p>	<p>N/A</p>

<p><b>2.3 – Location:</b></p> <p>1. The applicant should demonstrate that, in selecting a site, it has adopted a precautionary approach and accounted for the principals of ecologically sustainable development in regards to minimising EMR exposures consistent with the Code of Deployment of Mobile Phone Network Infrastructure Australia Communications Industry Forum 2004).</p> <p>Preferred land uses includes:</p> <ul style="list-style-type: none"> <li>- Industrial areas</li> <li>- Rural areas and</li> <li>- Low use open space</li> </ul> <p>2. The applicant should demonstrate particular consideration of likely community sensitive locations including:</p> <ul style="list-style-type: none"> <li>- Where occupants are located for long periods of time (eg residences).</li> <li>- That are frequented by children (eg school, child care centres).</li> <li>- Where there are people with particular health concerns (eg hospitals, aged care)</li> </ul> <p>3. A facility should not be located in a area where in the opinion of Council, the landform, vegetation or features of a proposed location have special aesthetic, architectural, ecological or conservational value, or where such features will not adequately screen or reduce the impact of the facility.</p>	<p>The telecommunications facility is sited in a public recreation zone (Russell Vale Golf Course) and opposite a low density residential zone in Rixons Pass Road.</p> <p>The siting of the proposal is inconsistent with Council’s preferred land uses as identified in Clause 2.3 as preferred land uses include industrial, rural areas and low use open space and the proposal is adjacent to a residential area which is considered to be a community sensitive location as people reside for long periods. However, Council is satisfied appropriate mitigation measures will be in place to minimise the impact of the proposed tower to an acceptable level.</p> <p>The land is classified as Community land under council’s Generic Plan of Management 2018 and categorised ‘general community use’ (see Figure 5 and 6). Council’s Community Land Management Officer has assessed the proposal and has not raised any issues.</p> <p>The existing and proposed vegetation will adequately screen the proposal and minimise visual impact of the facility.</p>	<p>Yes</p>

<p><b>2.4 – Heritage:</b></p> <p>1. The applicant is to have regard to avoiding or minimising the visual impact of any proposed facility in the heritage significance of any adjoining or nearby heritage items and/or contributory items within a heritage conservation area.</p> <p>2. Where a facility is proposed upon land containing an item of environmental heritage or land within a Heritage Conservation Area, a heritage impact assessment report will be required.</p> <p>3. A facility should not be located in a locality where in the opinion of Council the streetscape is dominated by heritage buildings or the heritage significance of adjoining or nearby items of environmental heritage and / or Heritage Conservation Areas may be adversely impacted upon.</p> <p>4. A facility should not be located on roof tops where the building is an item of environmental heritage item or is located within a Heritage Conservation Area as identified in Wollongong LEP 2009.</p>	<p>The proposal does not impact on any listed heritage items or the Illawarra Escarpment Landscape Area. Council’s Heritage Officer has assessed the proposal and is satisfied.</p>	<p>Yes</p>
<p><b>2.5 – Facility Physical Design Controls:</b></p> <p>1. Infrastructure must be of high quality design and construction.</p> <p>2. Proposals should consider the range of available alternate infrastructure including new technologies, to minimise unnecessary or incidental EMR emissions and exposures.</p>	<p>The proposed monopole and ancillary at-ground development will be of high quality and construction.</p> <p>The compound will be secured with a fence to prevent unauthorised access.</p>	<p>Yes</p>

<p>The plan for the facility must include measures to restrict public access to the antenna(s). Approaches to the antenna(s) must contain appropriate signs warning of EMR and provide contact details for the owner and / or site manager of the facility.</p>		
<p><b>2.6 – Facility Health Controls:</b></p> <p>1. Documentary evidence is required which proves that the proposed facility complies with the relevant Australian exposure standard as specified by the Australian Communications and Media Authority. Note: The current Australian Standard as specified by the Australian Communications and Media Authority is Australian Radiation Protection and Nuclear Safety Agency (ARPANSA), 2002, ‘Radiation Protection Standard - Maximum Exposure Levels to Radiofrequency Fields - 3kHz to 300GHz’, Radiation Protection Series Publication No. 3, ARPANSA, Yallambie Australia available from <a href="http://www.arpansa.gov.au">http://www.arpansa.gov.au</a>.</p> <p>2. Development Applications in community sensitive locations and that are within 300 metres of existing not low-impact type facilities licensed by the Australian Communications and Media Authority are to be accompanied by an EMR assessment in accordance with the ARPANSA prediction methodology and report format demonstrating that the development is not subject to exposure standards above that specified by the Australian Communications and Media</p>	<p>Addressed in Section 2.1.3 NSW Telecommunications Facilities Guideline Including Broadband July 2010 above. Council’s Environment Officer has assessed the submitted Environmental EME Report and is satisfied that the levels of radiofrequency (RF) electromagnetic energy (EME) will be well within the guidelines of the Australian Standard.</p>	<p>Yes</p>

<p>Authority.</p> <p>3. The Development Application must also be supported with a map which analyses the cumulative effect of the proposal and shows the proposal's EMR levels, bearing in mind the relevant Australian exposure standard.</p> <p>4. The choice of site should also take into account likely future adjoining land uses.</p> <p>5. In determining the above criteria (sections 2.1 to 2.7 inclusive), the applicant must undertake a site/locality analysis according to the application lodgement checklist (see Appendix 4).</p>		
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#### **CHAPTER D1 – CHARACTER STATEMENTS**

##### Russell Vale

Russell Vale is a low density residential suburb. The proposal is likely to have minimal impact on the character of the area.

#### **CHAPTER E6: LANDSCAPING**

A Landscape Plan has been submitted (Attachment 1). Landscaping is proposed to screen the outdoor equipment shelter and lower portion of the tower comprising a continuous surrounding row of *Syzygium austral* 'Northern Select' or 'Scrub Cherry' which typically grows to 5m high. One tree *Melaleuca linafornia* typically known as 'Narrow Leaved Paper Bark' which typically grows to 10m is proposed to be planted as compensatory planting. Council 's Landscape Officer has assessed the proposal and is satisfied.

#### **CHAPTER E7: WASTE MANAGEMENT**

A condition will be imposed on any consent for a waste receptacle to be provided on site to store waste during construction.

#### **CHAPTER E11 HERITAGE CONSERVATION**

The site is in proximity to heritage items including a Moreton Bay fig to the south within the Russell Vale Golf Course and walls within Rixons Pass Road to the west and would be visible against the backdrop of the Illawarra Escarpment.

There are no known items of Aboriginal heritage located within the site.

Council's Heritage Officer has assessed the application and is satisfied.

## **CHAPTER E17 PRESERVATION AND MANAGEMENT OF TREES AND VEGETATION**

Council's Landscape Officer has reviewed the application submission and provided conditionally satisfactory referral advice.

## **CHAPTER E19 EARTHWORKS (LAND RESHAPING WORKS)**

Council's Geotechnical Engineer has assessed the proposal and has provided conditionally satisfactory advice.

## **CHAPTER E20 CONTAMINATED LAND MANAGEMENT**

No concerns are raised in regards to land contamination.

## **CHAPTER E22 SOIL EROSION AND SEDIMENT CONTROL**

Conditions of consent are recommended in regard to appropriate sediment and erosion control measures to be in place during works.

## **CHAPTER RIPARIAN LAND MANAGEMENT**

The Riparian Land Map indicates the site contains riparian land, located approximately 140m to the south of the proposal. This is in the form of bank stability and water quality. Council's Environment Officer has reviewed the application in this regard and has not raised any objections.

### **3.3.2 WOLLONGONG CITY-WIDE DEVELOPMENT CONTRIBUTIONS PLAN 2018**

The estimated cost of works is >\$100,000 (\$200,000) and a levy of 1% is applicable under this plan as the threshold value is \$100,000.

### **3.4 SECTION 4.15(1)(A)(IIIA) ANY PLANNING AGREEMENT THAT HAS BEEN ENTERED INTO UNDER SECTION 7.4, OR ANY DRAFT PLANNING AGREEMENT THAT A DEVELOPER HAS OFFERED TO ENTER INTO UNDER SECTION 7.4**

There are no planning agreements entered into or any draft agreement offered to enter into under S7.4 which affect the development.

### **3.5 SECTION 4.15(A)(IV) THE REGULATIONS (TO THE EXTENT THAT THEY PRESCRIBE MATTERS FOR THE PURPOSES OF THIS PARAGRAPH)**

There are no prescribed conditions.

### **3.6 SECTION 4.15(A)(V) ANY COASTAL ZONE MANAGEMENT PLAN (WITHIN THE MEANING OF THE COASTAL PROTECTION ACT**

REPEALED

### **3.7 SECTION 4.15(1)(B) THE LIKELY IMPACTS OF DEVELOPMENT**

#### Context and Setting:

The proposal is considered to be appropriate in the context and setting of the area. Council is satisfied that the applicant has sited and designed the proposal to minimise visual impacts to an acceptable level.

Access, Transport and Traffic:

Access to the leased area will be via a gate off Rixons Pass Road as shown on the Landscape Plan. There would be limited vehicle access during installation of the facility and on-going maintenance. The applicant has advised that once the facility is operational it will be unmanned and will only require regular maintenance approximately three times per year. No road closures will be required. Consequently, there will be minimal impact on access, transport or traffic in the surrounding area.

Public Domain:

The proposal will involve a new gate to be provided on the existing boundary fence of the golf course on Rixons Pass Road frontage. A condition will be imposed for any fencing and gate to match the existing fence. A Visual Impact Assessment has been undertaken and is considered satisfactory. The proposed telecommunications facility will have minimal impact on the public domain.

Utilities:

The proposal is not envisaged to place an unreasonable demand on utilities supply. Existing utilities are adequate to service the proposal.

Heritage:

The site is in proximity to heritage items including a Moreton Bay fig to the south within the Russell Vale Golf Course and walls within Rixons Pass Road to the west.

There are no known items of Aboriginal heritage located within the site.

The site is not located in the Illawarra Escarpment Conservation Area however it is visible against the backdrop of the Illawarra Escarpment.

Council's Heritage Officer has assessed the application and is satisfied.

Other land resources:

The proposal is not envisaged to adversely impact upon any valuable land resources.

Water:

The site is presently serviced by Sydney Water. The proposal is not envisaged to have unreasonable water consumption.

Soils:

There will be no adverse impact on the soils of the subject site or surrounding area.

Air and Microclimate:

The proposal is not expected to have negative impact on air or microclimate.

Flora and Fauna:

The likely impact on native flora and fauna is considered minimal. Minor tree removal/pruning is sought. Council's Landscape Officer has assessed the proposal and is satisfied.

Waste:

A condition will be attached to any consent granted that an appropriate receptacle be in place for any waste generated during the construction.

Energy:

The proposal is not envisaged to have unreasonable energy consumption.

Noise and vibration:

There will be no adverse impact by way of noise or vibration associated with the proposal. Conditions imposed in relation to construction noise.

Natural hazards:

Council records list the site as flood affected (uncategorised) however the location of the proposal is outside of the flood affected area.

Council records list the site as being unstable land affected and the proposal has been reviewed by Council's Geotechnical Engineer who is satisfied subject to conditions.

Technological hazards:

Council's Environment Officer has assessed the submitted Environmental EME Report and is satisfied that the levels of radiofrequency (RF) electromagnetic energy (EME) will be well within the guidelines of the Australian Standard.

Safety, Security and Crime Prevention:

The application does not result in opportunities for criminal or antisocial behaviour.

Social Impact:

The proposal will not create negative social impact.

Economic Impact:

The proposal is not expected to create negative economic impact.

Site Design and Internal Design:

The application does not result in any departures from development standards or Council's development control plans as outlined above.

Whilst the proposal exceeds the maximum building height permitted on the site under Clause 4.3 of the WLEP 2009, the application has been lodged and is considered to be compliant with the provisions of the Infrastructure SEPP 2007, and therefore Clause 4.3 (and Clause 4.6 Exceptions to development standards) do not apply. Height would only be relevant where referenced in the guidelines referred to in clause 115(3) of the Infrastructure SEPP – see Section 3.1.2.

Construction:

Conditions of consent are recommended in relation to construction impacts such as hours of work, erosion and sedimentation controls, excavation, demolition and use of any crane, hoist, plant or scaffolding.

A condition can be attached to any consent granted that all works would need to be in compliance with the Building Code of Australia.

Cumulative Impacts:

The proposal in its current form is not expected to have negative cumulative impacts.

**3.8 SECTION 4.15(1)(C) THE SUITABILITY OF THE SITE FOR DEVELOPMENT**

Does the proposal fit in the locality?

The proposal is considered appropriate with regard to the zoning of the site and is not expected to have negative impacts on the amenity of the locality or adjoining developments.

### Are the site attributes conducive to development?

There are no site constraints that would prevent the proposal.

### **3.9 SECTION 4.15(1)(D) ANY SUBMISSIONS MADE IN ACCORDANCE WITH THIS ACT OR THE REGULATIONS**

Two submissions, including a petition, were received as discussed in Section 1.3.

### **3.10 SECTION 4.15(1)(E) THE PUBLIC INTEREST**

The application is not expected to have any unreasonable impacts on the environment or the amenity of the locality. It is considered appropriate with consideration to the zoning and the character of the area and is therefore considered to be in the public interest.

The property is owned by Wollongong City Council and is classified as Community land under Council's Generic Plan of Management 2018 (see Figure 5). The land is categorised as 'sportsground' except for a small rectangular portion of the site which was recently changed from 'sportsground' to 'general community use' at Council's meeting on 7 May 2018 (see Figure 6). This was upon request of the applicant to facilitate a commercial lease which was inconsistent while the land was categorised as 'sportsground'. Council's Community Land Management Officer advised that telecommunications leases or license on the portion of the site categorised as 'general community use' is not inconsistent with the core objectives of the general community use category.

## **4 CONCLUSION**

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This application has been assessed as satisfactory having regard to the Heads of Consideration under Section 4.15 of the Environmental Planning and Assessment Act 1979.

Some of the issues identified in submission though technically unresolved, are considered to have been adequately addressed by way of draft conditions. Any remaining issues are not considered to be sufficient to refuse the application.

It is considered the proposed development has been designed appropriately given the constraints and characteristics of the site, is not inconsistent with the existing and desired future character of the locality and is unlikely to result in significant adverse impacts on the amenity of the surrounding area.

## **5 RECOMMENDATION**

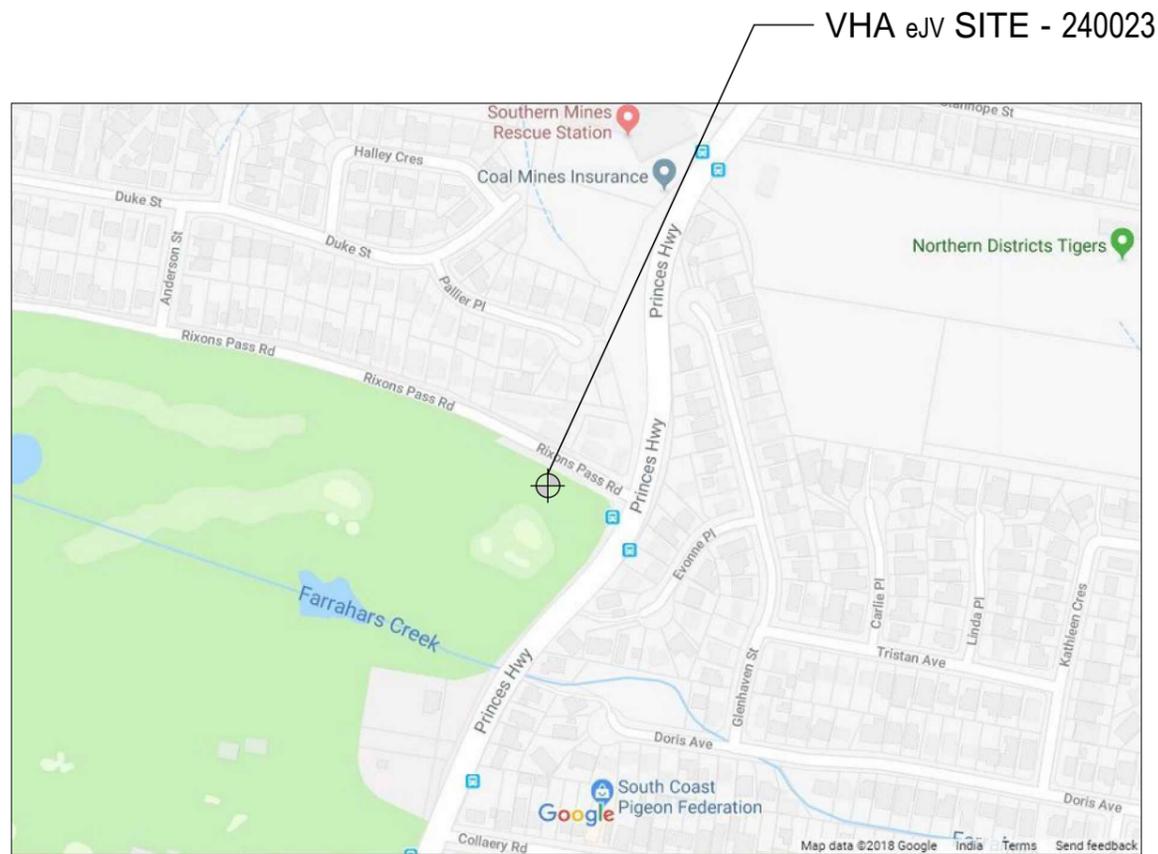
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Development Application DA-2018/689 be approved subject to the conditions provided at Attachment 5.

## **6 ATTACHMENTS**

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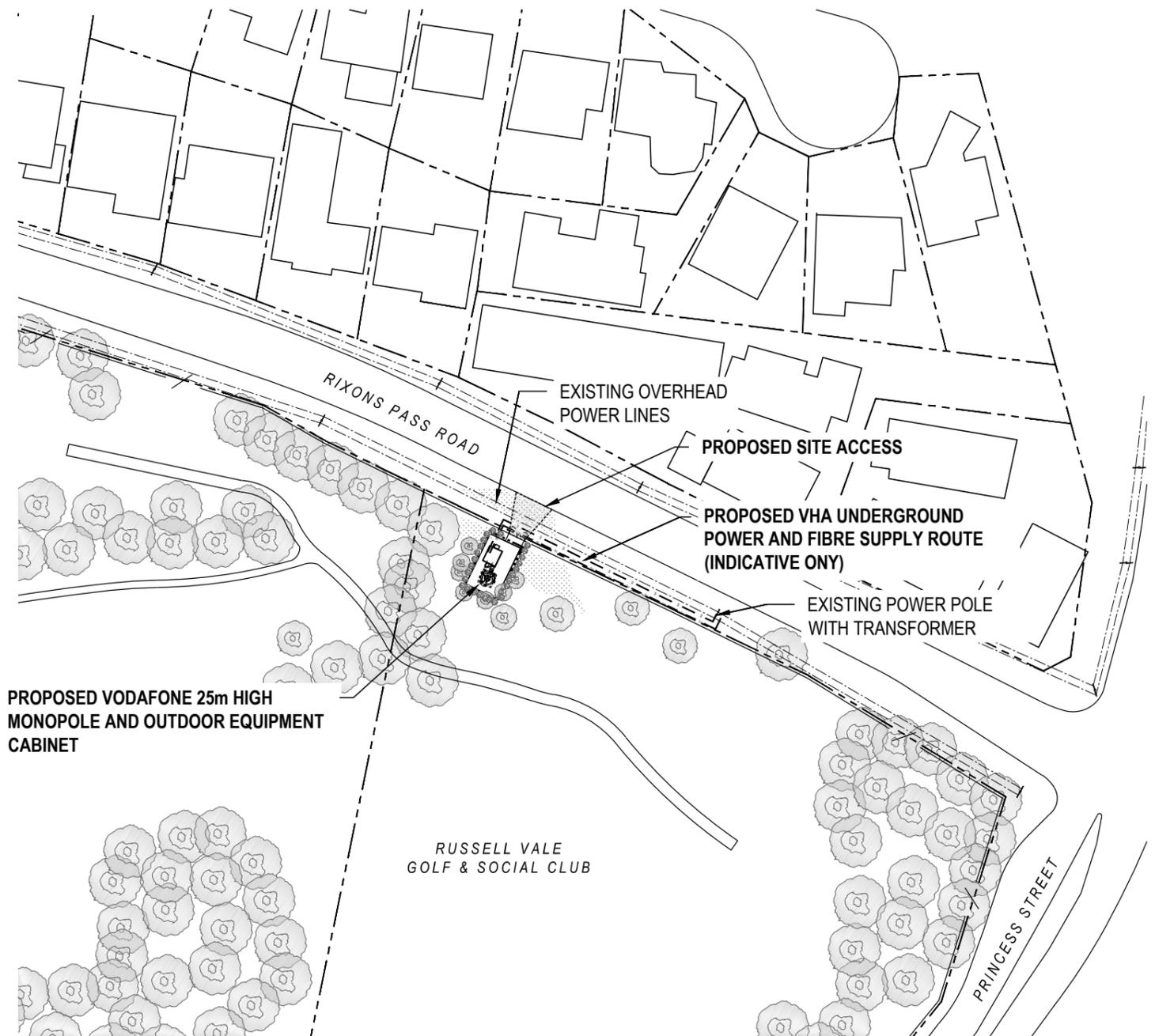
- 1 Plans
- 2 Visual Impact Assessment Report
- 3 Applicant's Table of Compliance with the *Telecommunication Guideline including Broadband (July 2010)* issued by the Department of Planning
- 4 Applicant's Justification Statement Clause 4.6 WLEP 2009
- 5 Conditions of consent



**LOCALITY MAP**  
NOT TO SCALE

SITE LOCATION DATA	
SOURCE : SURVEY	
DATUM : MGA (GDA94)	ZONE : 56
REF. LOCATION : CTR OF MONOPOLE	
EASTING	0 307 008
NORTHING	6 196 701
LATITUDE	-34.353061°
LONGITUDE	150.901608°
WGS84 DATUM - USED BY 'GOOGLE EARTH' AND GPS DEVICES CAN BE CONSIDERED SAME AS GDA94	
SOURCE : 'GEOCENTRIC DATUM OF AUSTRALIA TECHNICAL MANUAL' VERSION 2.3	

WIND ACTION DESIGN CRITERIA	
REGION	(NON CYCLONIC) A2
TERRAIN CATEGORY	2.0
REGIONAL WIND SPEED	V (m/s) 45
SHIELDING MULTIPLIER	Ms 1.0
TOPOGRAPHIC MULTIPLIER	Mt 1.0
WIND DIRECTION MULTIPLIER	Md 1.0



**LOCALITY PLAN**  
SCALE 1:1000

LEGEND:	
---	ACCESS ROUTE
---	U/G POWER SUPPLY ROUTE
---	U/G FIBRE CABLE SUPPLY ROUTE
---	PROPERTY BOUNDARIES

REV	DATE	REVISION DESCRIPTION	CONSULTANT	CAD
C	04.10.18	PRELIMINARY - FENCE AMENDED	CPS GLOBAL	SN
B	17.08.16	PRELIMINARY - POLE HEIGHT AMENDED	CPS GLOBAL	SL
A	15.12.14	ISSUED NOT FOR CONSTRUCTION	FOCUS PLUS	RS

	INITIALS	SIGNATURE	DATE
DRAWING CHECK	MM		17.09.18
DESIGN CHECK	DHL		17.09.18
APPROVED			

**cpsglobal**

CPS GLOBAL  
LEVEL 5, 55 GRAFTON STREET  
BONDI JUNCTION  
NSW 2022  
AUSTRALIA  
TELEPHONE : +61 2 9300 1700

**vodafone**

VHA eJV SITE JS3832  
RUSSELL VALE NORTH - V  
VHA SITE 240023  
HICKS STREET, RUSSELL VALE,  
NSW 2517

**EXPANDED JOINT  
VENTURE GREENFIELD**

TITLE : <b>SITE AND LOCALITY PLAN</b>		
DRAWING STATUS : <b>PRELIMINARY</b>	DRAWING No. <b>240023 - G1</b>	REVISION <b>C</b>



NOTE :  
THIS DRAWING IS DIAGRAMMATIC ONLY AND SHOULD NOT BE SCALED

---	ACCESS ROUTE
-E- -E-	U/G POWER SUPPLY ROUTE
-FC- -FC-	U/G FIBRE CABLE SUPPLY ROUTE
---	PROPERTY BOUNDARIES

**SITE ADDRESS:**  
LOT 1 DP 808427  
HICKS STREET  
RUSSELL VALE, NSW 2517

- NOTES:**
- BASIS OF DESIGN:**
    - SITE INSPECTION 20.11.2014
  - SITE ACCESS:**
    - VIA PROPOSED VEHICLE CROSS-OVER VIA NEW ACCESS GATE OFF RIXONS PASS ROAD
  - PANEL ANTENNAS + ANCILLARY ITEMS:**
    - 2 No. 12 PORT PER SECTOR (EACH 2.68m LONG)
    - SECTOR 1 : 0° AT EL 25.00m
    - SECTOR 2 : 90° AT EL 25.00m
    - SECTOR 3 : 200° AT EL 25.00m
    - PROPOSED INGAL HEADFRAME
    - 12 No. RRU's PER SECTOR
    - 3 No. DIPLEXERS, 2 No. COMBINERS AND 2 No. FIBRE BREAKOUT BOXES PER SECTOR
  - TRANSMISSION:**
    - VIA OPTUS FIBRE - ROUTE TO BE CONFIRMED AT DETAILED DESIGN STAGE
  - EQUIPMENT CABINET:**
    - PROPOSED STANDARD VHA EQUIPMENT SHELTER (3.15m LENGTH x 2.38m WIDTH x 2.94m HEIGHT)
    - STANDARD eJV FITOUT
  - VHA TOWER / MONOPOLE:**
    - PROPOSED 25m HIGH MONOPOLE
  - FEEDER CABLES:**
    - SIZE: FIBRE ONLY
    - LENGTH: 25m (APPROXIMATELY)
  - ANTENNA ACCESS:**
    - VIA EWP BY QUALIFIED PERSONNEL
  - POWER SUPPLY:**
    - PROPOSED POWER SUPPLY FROM ADJACENT POWER POLE AND TRANSFORMER AT RIXONS PASS ROAD.

PROPOSED VHA 2.4m HIGH COMPOUND SECURITY FENCE WITH ACCESS GATES

EXISTING TREES TO BE REMOVED

PROPOSED VODAFONE EQUIPMENT CABIN

PROPOSED VHA 600mm WIDE CABLE LADDER

PROPOSED VODAFONE 25m MONOPOLE

PROPOSED 6 No. eJV 12 PORT PANEL ANTENNAS (2 PER SECTOR) TO BE INSTALLED ON NEW HEADFRAME WITH ADDITIONAL STANDOFF MOUNTS FIXED TO NEW MONOPOLE

MGA ZONE ..... 56  
E ..... 0 307 008  
N ..... 6 196 701  
AT CENTRE OF MONOPOLE

- NOTES:**
- ALL AZIMUTHS ARE IN DEGREES RELATIVE TO 'MGA' NORTH.
  - PROPOSED POWER ROUTE ARE INDICATIVELY DRAWN AND TBC AT DETAILED DESIGN STAGE.
  - PROPOSED EQUIPMENT SHELTER TO BE PAINTED IN PALE EUCALYPT. MONOPOLE AND OTHER ANCILLARIES ARE IN THEIR NATURAL PRODUCT COLOUR (LIGHT GREY)

## PROPOSED SITE SETOUT PLAN

SCALE 1:100

REV	DATE	REVISION DESCRIPTION	CONSULTANT	CAD
C	04.10.18	PRELIMINARY - FENCE AMENDED	CPS GLOBAL	SN
B	17.08.16	PRELIMINARY - POLE HEIGHT AMENDED	CPS GLOBAL	SL
A	15.12.14	ISSUED NOT FOR CONSTRUCTION	FOCUS PLUS	RS

DRAWING CHECK	INITIALS	SIGNATURE	DATE
DRAWING CHECK	MM		17.09.18
DESIGN CHECK	DHL		17.09.18
APPROVED			

**cpsglobal**

CPS GLOBAL  
LEVEL 5, 55 GRAFTON STREET  
BONDI JUNCTION  
NSW 2022  
AUSTRALIA  
TELEPHONE : +61 2 9300 1700

**vodafone**

VHA eJV SITE JS3832  
RUSSELL VALE NORTH - V  
VHA SITE 240023  
HICKS STREET, RUSSELL VALE,  
NSW 2517

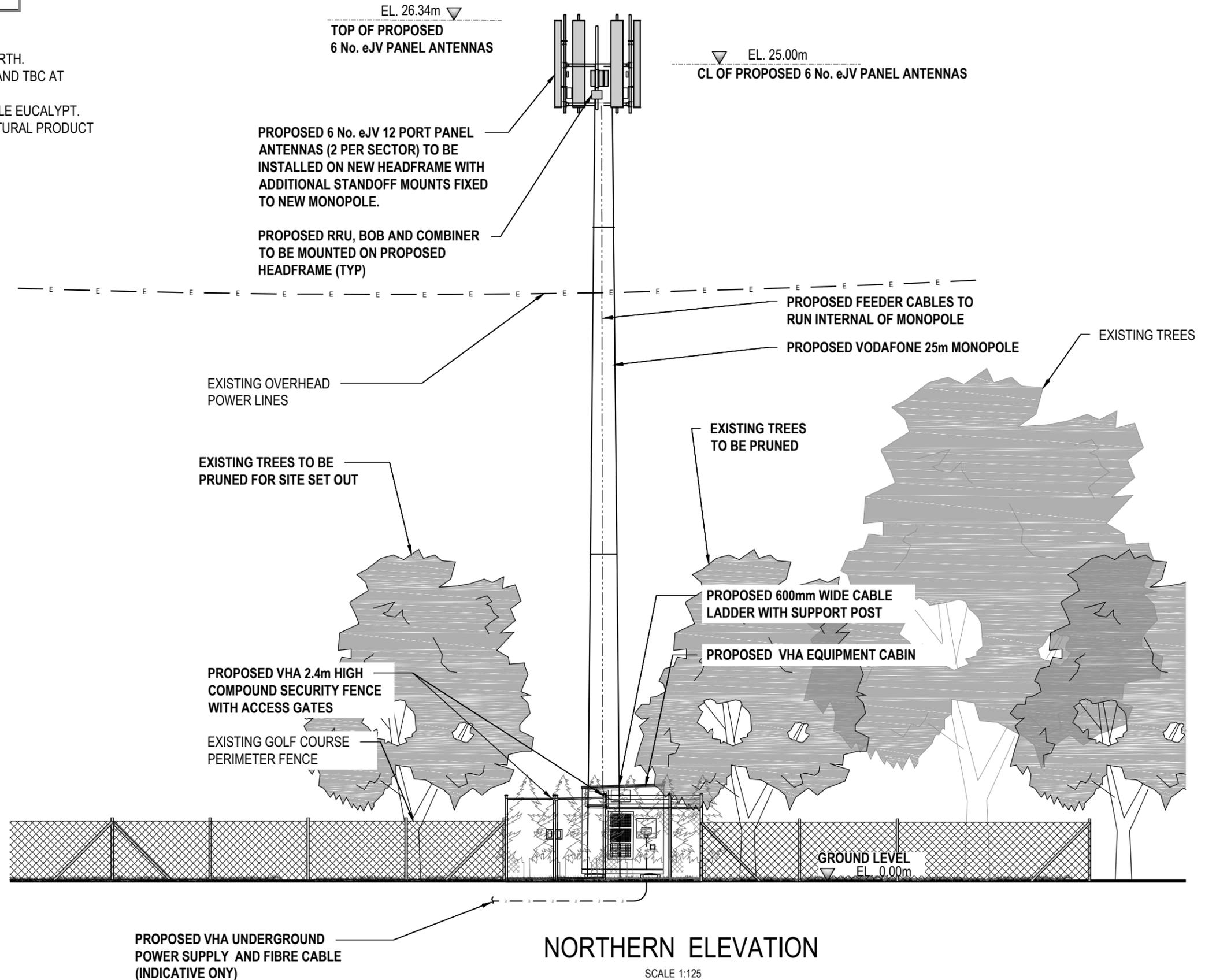
EXPANDED JOINT  
VENTURE GREENFIELD

TITLE: <b>SITE SETOUT PLAN</b>		
DRAWING STATUS: <b>PRELIMINARY</b>	DRAWING No. <b>240023 - G2</b>	REVISION <b>C</b>

NOTE :  
THIS DRAWING IS DIAGRAMMATIC ONLY AND SHOULD NOT BE SCALED

NOTES :

1. ALL AZIMUTHS ARE IN DEGREES RELATIVE TO 'MGA' NORTH.
2. PROPOSED POWER ROUTE ARE INDICATIVELY DRAWN AND TBC AT DETAILED DESIGN STAGE.
3. PROPOSED EQUIPMENT SHELTER TO BE PAINTED IN PALE EUCALYPT. MONOPOLE AND OTHER ANCILLARIES ARE IN THEIR NATURAL PRODUCT COLOUR (LIGHT GREY)



REV	DATE	REVISION DESCRIPTION	CONSULTANT	CAD
C	04.10.18	PRELIMINARY - FENCE AMENDED	CPS GLOBAL	SN
B	17.08.16	PRELIMINARY - POLE HEIGHT AMENDED	CPS GLOBAL	SL
A	15.12.14	ISSUED NOT FOR CONSTRUCTION	FOCUS PLUS	RS

	INITIALS	SIGNATURE	DATE
DRAWING CHECK	MM		17.09.18
DESIGN CHECK	DHL		17.09.18
APPROVED			

**cpsglobal**

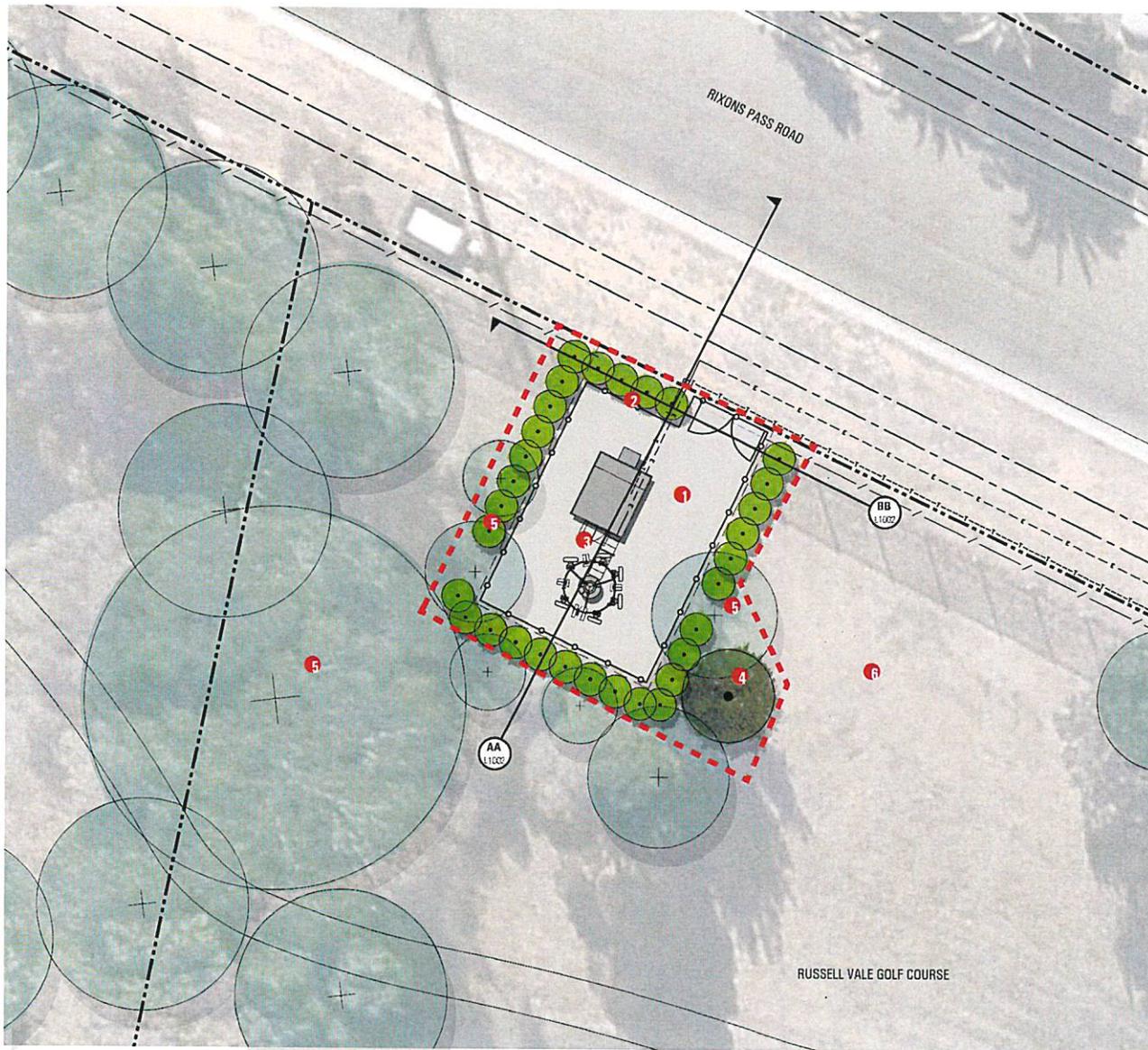
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BONDI JUNCTION  
NSW 2022  
AUSTRALIA  
TELEPHONE : +61 2 9300 1700

**vodafone**

VHA eJV SITE JS3832  
RUSSELL VALE NORTH - V  
VHA SITE 240023  
HICKS STREET, RUSSELL VALE,  
NSW 2517

EXPANDED JOINT  
VENTURE GREENFIELD

TITLE : <b>SITE ELEVATION</b>		
DRAWING STATUS : <b>PRELIMINARY</b>	DRAWING No. <b>240023 - G3</b>	REVISION <b>C</b>



**LEGEND**

- - - - - EXTENT OF LANDSCAPE WORKS
- - - - - LOT BOUNDARY
- - - - - EXISTING OVERHEAD POWER LINES
- - - - - PROPOSED UNDERGROUND POWER SUPPLY
- - - - - PROPOSED UNDERGROUND FIBRE SUPPLY
- - - - - EXISTING GOLF COURSE PERIMETER FENCE
- - - - - PROPOSED FENCE
- - - - - PROPOSED GATE
- + EXISTING TREES TO BE RETAINED
- PROPOSED TREE
- PROPOSED SCREENING SHRUB

**DESIGN NOTES**

- 1 GRAVEL SURFACE TO COMPOUND
- 2 INSTALL ROW OF LARGE SHRUBS TO CREATE A SCREEN AROUND PROPOSED COMPOUND FENCING. SCREENING SHRUBS ARE TO FILL IN THE GAPS BETWEEN THE EXISTING TREES LOCATED AROUND THE COMPOUND
- 3 LOCATION OF VODAFONE MONOPOLE AND EQUIPMENT CABINETS REFER TO DRAWING 240023-02 A PREPARED BY CPS GLOBAL FOR DETAILS
- 4 PROPOSED NATIVE TREE TO REPLACE TREE THAT WAS REMOVED DUE TO FENCE LOCATION
- 5 EXISTING TREES AROUND COMPOUND TO BE RETAINED WHERE POSSIBLE TO ASSIST WITH SCREENINGS OF COMPOUND. EXISTING TREES TO BE PRUNED WHERE NECESSARY AND PROTECTED THROUGHOUT THE CONSTRUCTION WORKS.
- 6 EXISTING TURF OUTSIDE SCOPE OF WORKS TO BE RETAINED. ANY TURF DAMAGED FROM INSTALLATION OF NEW FENCING IS TO BE REPLACED.

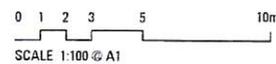
**INDICATIVE PLANT LIST**

Symbol	Botanical Name	Common Name	Size	Mature Height x Spread
<b>SCREENING</b>				
<span style="color: green;">●</span>	<i>Syzygium australe</i> 'Northern Select'	Scrub Cherry	100L	5m x 1.5m
<b>TREES</b>				
<span style="color: green;">●</span>	<i>Melaleuca linanifolia</i>	Narrow Leaved Paper Bark	100L	10m x 4m

LANDSCAPE: CONCEPT PLAN AND INDICATIVE PLANT LIST



landscape architecture  
urban design  
environmental services



CPS Global

**PROPOSED MOBILE PHONE TOWER, VODAFONE SITE 240023**

DATE	PROJECT NO.	DRAWING NO.	ISSUE
14.09.18	80219012-01	L1001	A

# Visual Impact Assessment

Proposed Mobile Phone Tower,  
Vodafone Site 240023

80219012

Prepared for  
CPS Global

3 October 2018



## Contact Information

### Cardno (NSW/ACT) Pty Ltd

ABN 95 001 145 035

Level 9 - The Forum  
203 Pacific Highway  
St Leonards NSW 2065  
Australia

www.cardno.com

Phone +61 2 9496 7700

Fax +61 2 9496 7748

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Author(s):



Shaun Grevler  
Urban Planner

Effective Date 3/10/2018

Approved



John O'Grady  
Manager – Urban Planning

By:

Date Approved 3/10/2018

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# 1 Introduction

---

Cardno (NSW/ACT) Pty Ltd (Cardno) has been engaged by CPS Global to undertake and prepare a Visual Impact Assessment (VIA) to accompany a submission to Wollongong City Council in relation to DA-2018/689 for a telecommunications facility at 580 Princes Highway, Russell Vale NSW.

Specifically, a letter from Council to CPS Global dated 13 August 2018 requested additional information pertaining to the Development Application in the form of a detailed Visual Impact Assessment of the proposed development. Accurate photomontages to demonstrate how the proposal sits in relation to the existing surrounding context were also requested.

This VIA has been prepared in response to Council's request for additional information regarding DA-2018/689.

## 1.1 Aims of this Study

In combination with a range of other specialist studies that inform the design and development of the proposed communications tower, this VIA will:

- > Identify the attributes of the site and its locality that contribute to its visual character; and
- > Assess if the design responds appropriately to the identified visual qualities and values of the locality.

## 1.2 Methodology

The methodology for this VIA involves:

- > Review of relevant background documentation, including local planning controls and strategies to understand the Consent Authority's expectations with regard to protection of local visual and landscape quality;
- > A site and area inspection and photographic record to identify the visual character of the locality and the site within its context, as well as the identified critical view locations;
- > Assessment of the visual character of the locality with regard to:
  - o Land use,
  - o Vegetation cover and open space,
  - o View lines to and from the study area, and
  - o Permissible future development in the vicinity, which may impact on local visual quality.
- > Use of Cardno technology, including GIS mapping, to identify the visual catchment of the proposed pole;
- > Preparation of a detailed VIA of the proposed development that includes:
  - o Assessment of the visual catchment area and identification of critical viewpoints within the catchment;
  - o Photomontages of the proposed design;
  - o Written assessment of the impacts of the proposal on local visual quality and recommendations for mitigation of identified impacts, if required.

## 2 The Site

### 2.1 Site Description

The proposed tower location is situated within Russell Vale Golf Club, in Russell Vale NSW.

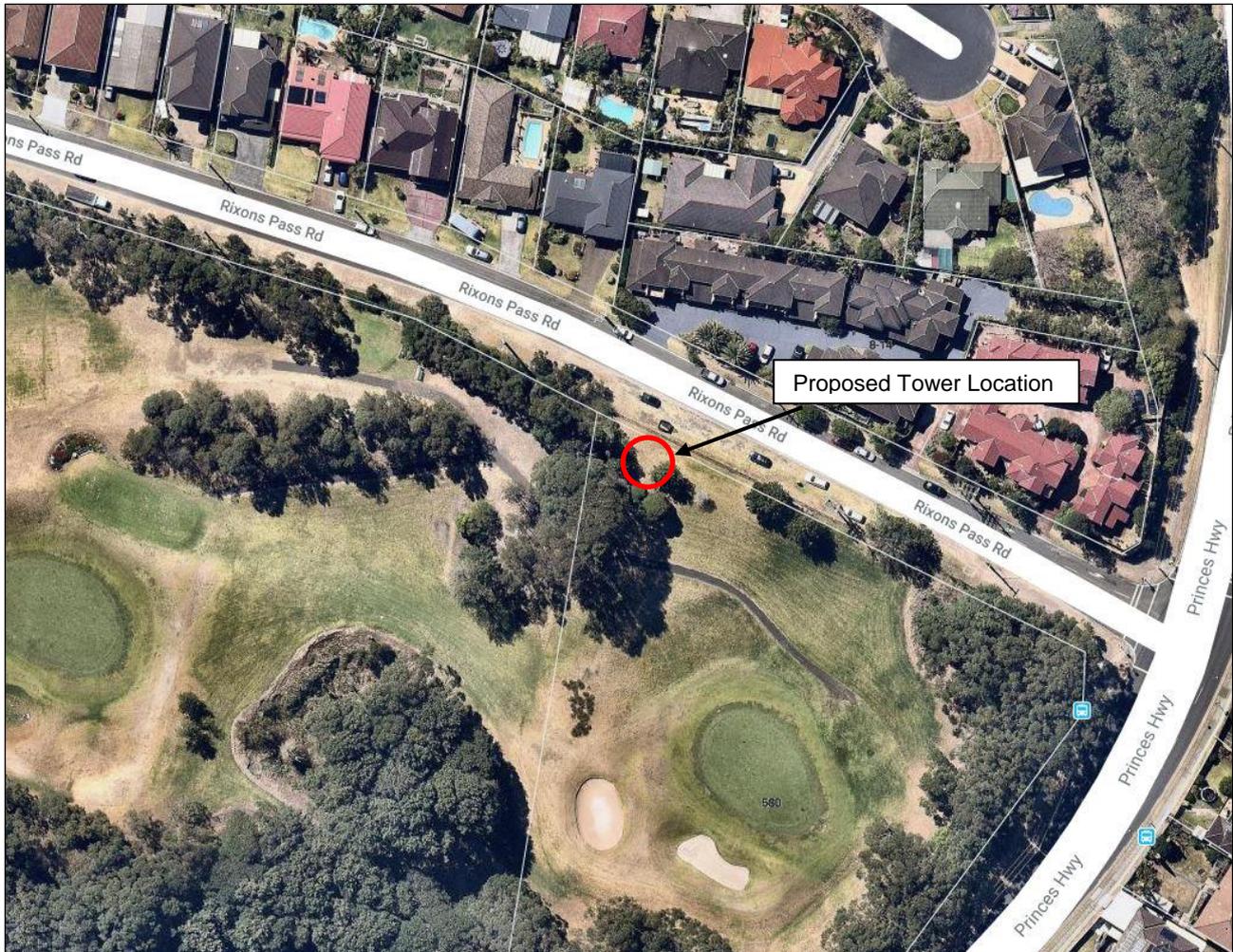


Figure 2-1 Proposed tower location  
Source: Nearmap

The site is described as Lot 1 in DP 808427. It sits alongside the northern boundary of the golf course, adjacent to Rixons Pass Road. The lot as described measures 12,825m<sup>2</sup> (Nearmap), however the proposed tower and associated equipment area covers 60 m<sup>2</sup>.

### 2.2 Site Context

Russell Vale Golf Club is located in the suburb of Russell Vale, approximately 9km north of Wollongong City Centre, and 70km south of Sydney CBD. Land to the immediate north and east of the proposed tower is predominantly occupied by low density residential development. Land immediately south and west of the proposed tower site is occupied by the golf course. Further to the west and south-west is Russell Vale Colliery, and the Illawarra Escarpment running north-south.



Figure 2-2 Site Context  
Source: Nearmap

### 3 Existing Visual Character

The visual character of a locality is generally accepted as being generated by:

- > The type and intensity of human intervention;
- > The juxtaposition between the various built, natural and semi-natural elements of the land; and
- > The topography of the land.

The proposed tower site is located within the existing Russell Vale Golf Course, in the suburb of Russell Vale. Surrounding development includes the golf course spreading to the west and south, with low-density residential development located to the north and east. The surrounding area is predominantly low-density residential in character, with interspersed parkland providing open space and recreational areas.

Other features in the area include the Russell Vale Colliery, and most significantly the Illawarra Escarpment, which provides the primary visual interest from the surrounding residential areas located away from the coast.

#### 3.1 Visual Catchment

The visual catchment of a site is the land from which the site is potentially visible based on topography. Cardno has used GIS data to generate a visual catchment map for the site of the proposed Vodafone pole, which is included at Figure 3-1 below. A 4km radius from the site has been identified as an effective viewing catchment. This is generally accepted practice in visual assessment, the rationale being that at distances greater than 4km, development tends to be part of large panoramic views and is generally not discernible within the landscape.

The purple shaded areas in Figures 3-1 and 3-2 indicate locations surrounding the site from which the proposed tower will be visible.

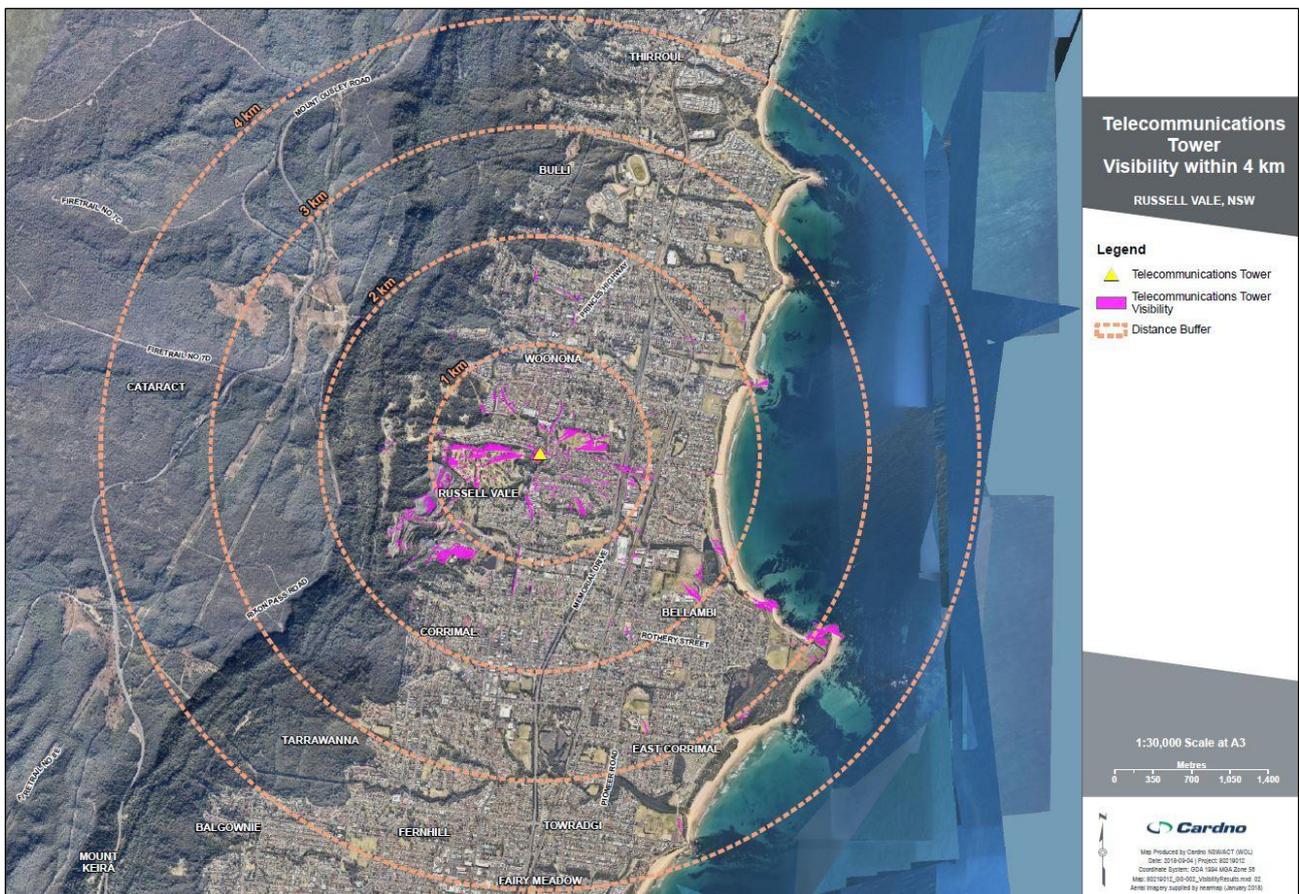


Figure 3-1 Proposed Vodafone Tower 4km Catchment Plan  
Source: Cardno

Figure 3-2 below shows in greater detail views within the 1km catchment area.



Figure 3-2 Proposed Vodafone Tower 1km Catchment Plan  
Source: Cardno

A magnified view of the Catchment Plan shows that the most extensive views of the tower would be from the existing Russell Vale Colliery south-west of the site.

Other views of the proposed tower are largely restricted to areas immediately to the west, south-west, east and north-east of the site. The Catchment Plan indicates that the proposed tower would not generally be visible from private residences in the locality, with visibility primarily from public areas such as parks and local streets. Most views of the tower will be largely intermittent.

The Catchment Plans are included with this report at **Appendix B**.

### 3.2 Critical Viewpoints

The existence of screening factors such as topography, built elements or stands of vegetation in the landscape form part of the visual catchment mapping. It is therefore necessary to obtain a representative sample of viewing locations within the identified visual catchment. From this exercise, a better understanding of the local visual character is gained and a series of locations are identified as representative views towards the site.

Within the identified catchment, views for subsequent testing have been selected on the basis that they are anticipated to be representative of the types of views that would be available from public places in the same vicinity, i.e. public parks or streets.

A series of local and regional views that include the site have been selected for testing in the visual assessment process. In their planning legislation, Wollongong City Council does not stipulate requirements for specific critical viewpoints in the locality.

#### 3.2.1 Local Views

Based on the Catchment Plan in Figures 3-1 and 3-2, local viewpoints were selected to demonstrate the impact of the proposed development. They were taken from the following locations:

- > Viewpoint A – Princes Highway kerbside adjacent to Coal Services, facing south
- > Viewpoint B – Hollymount Park (eastern edge);

- > Viewpoint C – Hollymount Park (northern edge);
- > Viewpoint D – Princes Highway adjacent to Terania Street facing north;
- > Viewpoint E – Russell Vale Golf Course along fairway facing east, and
- > Viewpoint F – Russell Vale Golf Course along northern edge facing east.
- > Viewpoints F1 & F2 – Rixons Pass Road near the site (to the east and west respectively)

The viewpoints have been marked on the map at Figure 3-3 below:

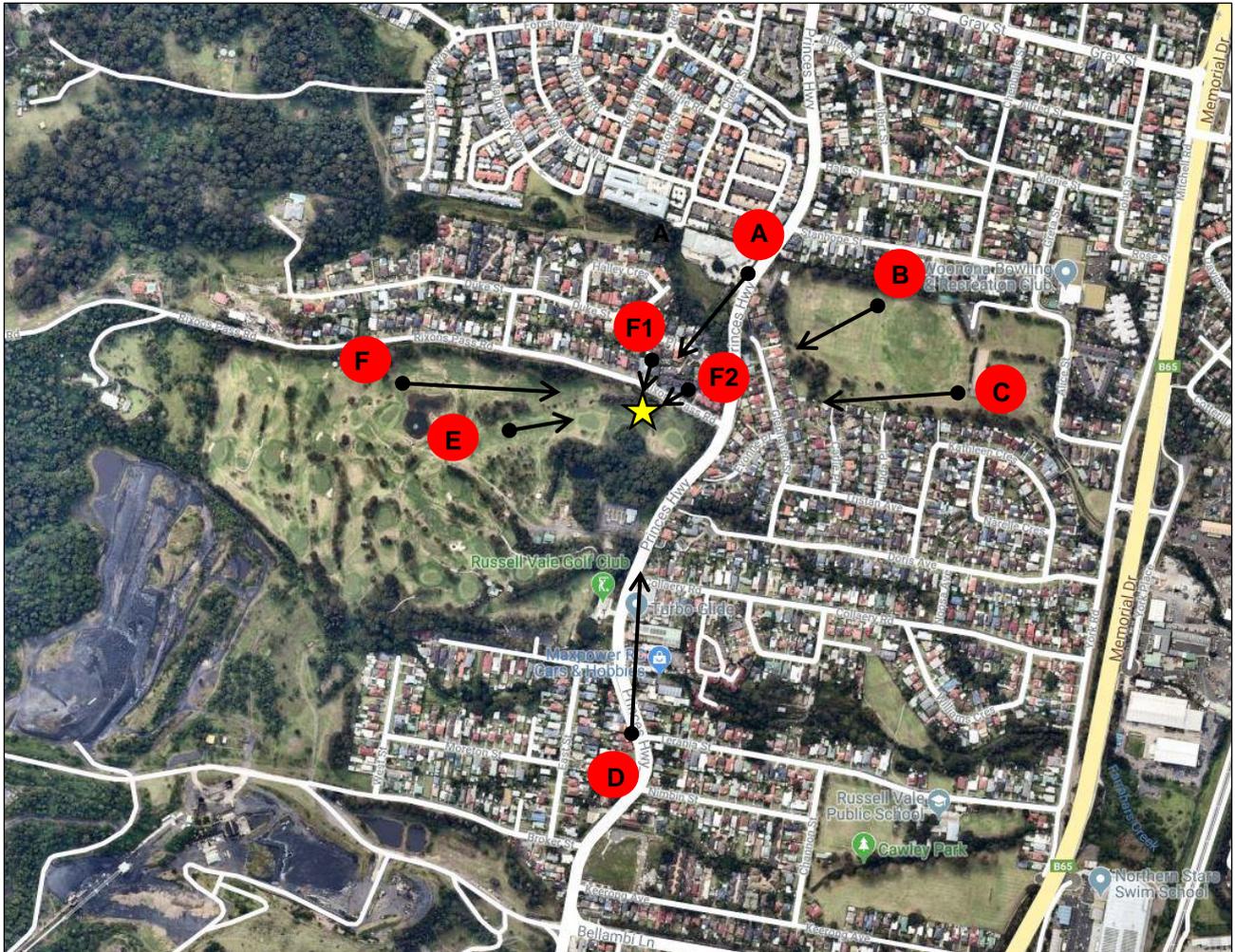


Figure 3-3 Local Viewpoints

### 3.2.2 Distant Views

The key distant views assessed as part of this VIA are from the following locations.

- > Viewpoint G – Bellambi Rock Pool, and
- > Viewpoint H – Bellambi Boat Ramp.

Primary views from these viewpoints are toward the ocean and along the coast, with secondary views toward the Illawarra Escarpment. The distant views assessed as part of this VIA are shown in Figure 3-4 below:

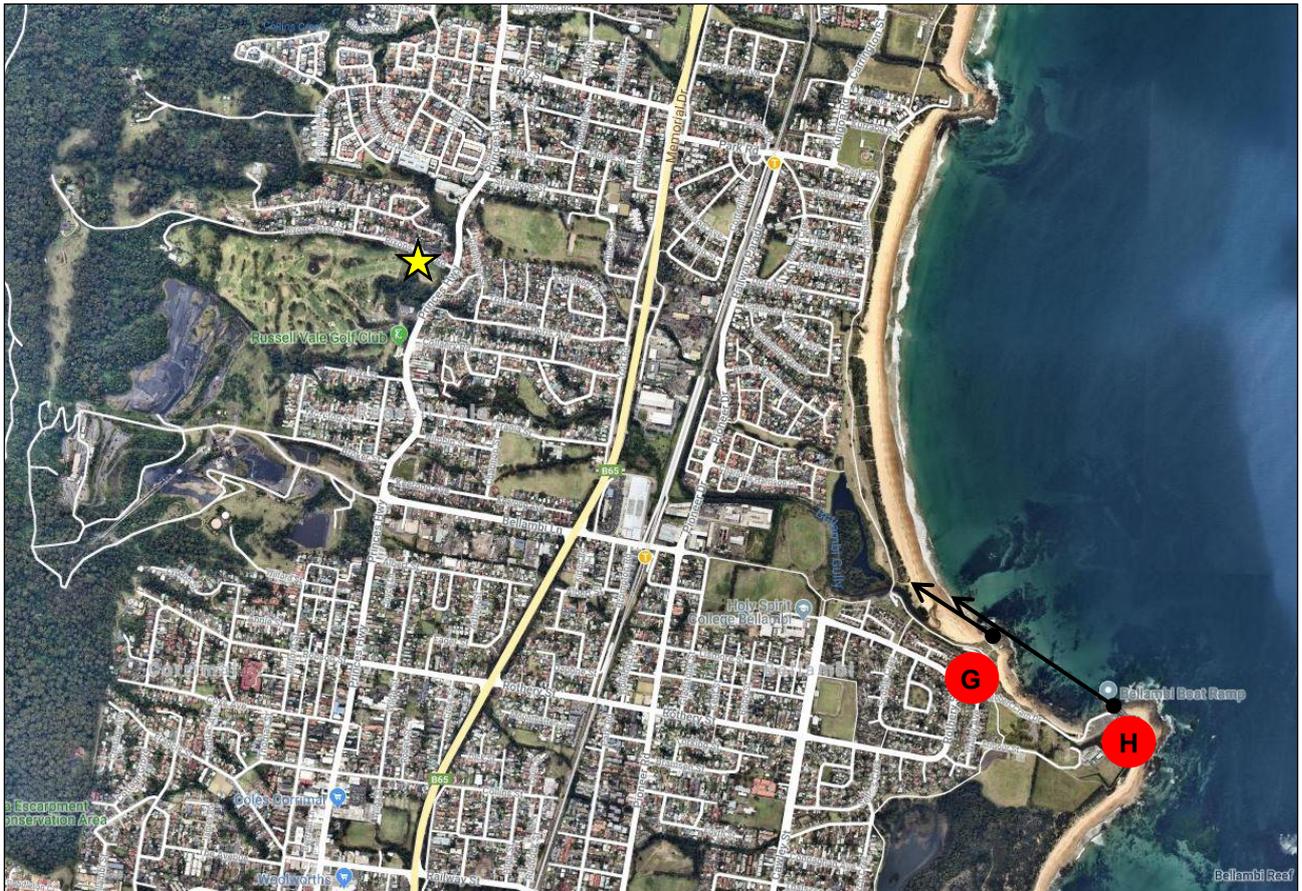


Figure 3-4 Distant Viewpoints

## 4 Details of the Proposed Development

The proposal for VHA Site 240023 includes the following:

- > 24m high Vodafone monopole;
- > Associated headframe to a height of EL 26.34m;
- > Equipment cabin measuring 7.5 m<sup>2</sup> in area, 2.94m high;
- > 2.4m high compound security fence with access gates covering an area of 96m<sup>2</sup>.

The tower and associated cabin are proposed to be painted pale eucalypt in colour.

## 5 Planning Context

The visual planning context is determined by the existing and proposed land uses and policy documents, which provide guidance on the existing and future character of the site.

### 5.1 Wollongong Local Environmental Plan 2009

#### 5.1.1 Zoning

The site is zoned RE1 – Public Recreation under the Wollongong Local Environmental Plan 2009 (the LEP).

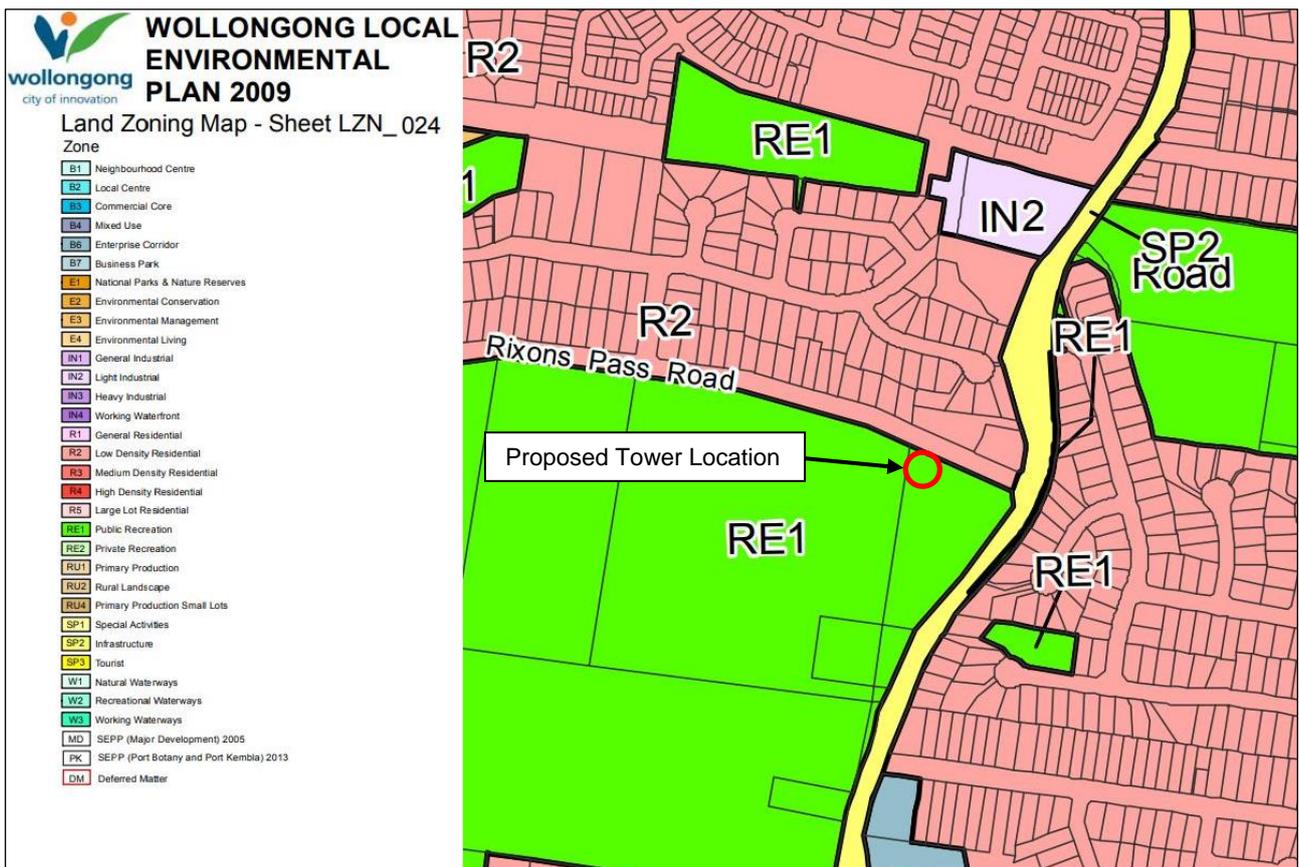


Figure 5-1 Wollongong LEP Zoning Map  
Source: Wollongong LEP

The RE1 zone has the following objectives and permitted and prohibited uses:

#### 1 Objectives of Zone

- > To enable land to be used for public open space or recreational purposes.
- > To provide a range of recreational settings and activities and compatible land uses.

- > *To protect and enhance the natural environment for recreational purposes.*
- > *To cater for the development of a wide range of uses and facilities within open spaces for the benefit of the community.*

### **2 Permitted without consent**

*Nil*

### **3 Permitted with consent**

*Boat sheds; Camping grounds; Caravan parks; Centre-based child care facilities; Community facilities; Environmental facilities; Environmental protection works; Extensive agriculture; Helipads; Information and education facilities; Kiosks; Markets; Recreation areas; Recreation facilities (indoor); Recreation facilities (major); Recreational facilities (outdoor); Respite day care centres; Restaurants or cafes; Roads; Signage; Take away food and drink premises; Water recreation structures*

### **4 Prohibited**

*Any development not specified in item 2 or 3*

With regard to future development on the site, it is considered unlikely that the use will change from the existing recreational purposes in the near or distant future. It is also anticipated that the surrounding residential uses will remain for the foreseeable future and levels of density of development will remain constant.

## **5.2 Wollongong Development Control Plan 2009 (DCP, 2009)**

Chapter C17 – Telecommunications and Radiocommunications Facilities of the Wollongong DCP 2009 is relevant to the visual impact of the proposed Vodafone tower.

Chapter C17 aims to ensure good design for the development of telecommunications infrastructure, and to minimise the public's exposure to electromagnetic radiation. Chapter C17 also addresses requirements for the visual amenity of telecommunications facilities.

Chapter C17 of the DCP is discussed in detail in Section 6.4 of this report.

## 6 Visual Impact Assessment

---

Assessment of the visual impact of the proposal has involved an analysis of the proposed development with regard to the identified critical viewpoints. This includes assessment of:

- > The bulk and scale of the proposed development relative to other development in the area;
- > The extent to which the development would alter views from key viewpoints.

This section of the VIA also includes assessment of the proposed Vodafone tower with regard to the relevantly applicable controls found in the DCP.

### 6.1 Critical Local Views

The critical local views, as mapped in Figure 3-3, have been determined in order to identify generalised views toward the site from close range (within the golf course) and from the surrounding suburban area and local open space areas.

**Viewpoint A** is located alongside Princes Highway, adjacent to the Coal Services complex, approximately 250m from the proposed tower site;

**Viewpoint B** is located at the northern edge of Hollymount Park, approximately 400m from the proposed tower site;

**Viewpoint C** is located at the eastern edge of the cricket field at Hollymount Park, approximately 500m from the proposed tower site;

**Viewpoint D** is located alongside Princes Highway adjacent to Terania Street, approximately 560m from the proposed tower site.

**Viewpoints E & F** are located within the Russell Vale Golf Course, approximately 200m and 440m from the proposed tower site.

**Viewpoints F1 & F2** are located in close proximity to the site in Rixons Pass Road.

The existing views from Viewpoints A, B, C, D, E, F, F1 & F2 are included below, as well as the photomontages prepared for Viewpoints D, E & F1, to demonstrate how the proposed tower will impact on views from public areas including the street and public open space.

All prepared photomontages are also included at **Appendix C**.

### 6.1.1 Viewpoint A – Princes Highway adjacent to the Coal Services complex facing south



Figure 6-1 Viewpoint A – Existing view from alongside Princes Highway adjacent to Coal Services complex facing south

#### Anticipated visual impact:

As demonstrated in the Catchment Plans (Figures 3-1 and 3-2), the proposed tower will be visible along stretches of Princes Highway through Russell Vale and Woonona. The photo at Figure 6-1 taken from Viewpoint A shows that views of the tower will be largely obscured by large foreground trees. Various vertical elements within the view line, such as electricity poles and street lights are also significant components in this view. Only the upper portion of the proposed tower is likely to be visible from the applicable areas along Princes Highway. Furthermore, the pale eucalypt colour scheme will reduce visibility of the tower above the tree line.

The visual impact of the proposed tower on views from Viewpoint A is therefore considered to be minimal.

### 6.1.2 Viewpoint B – North edge of Hollymount Park facing south-west

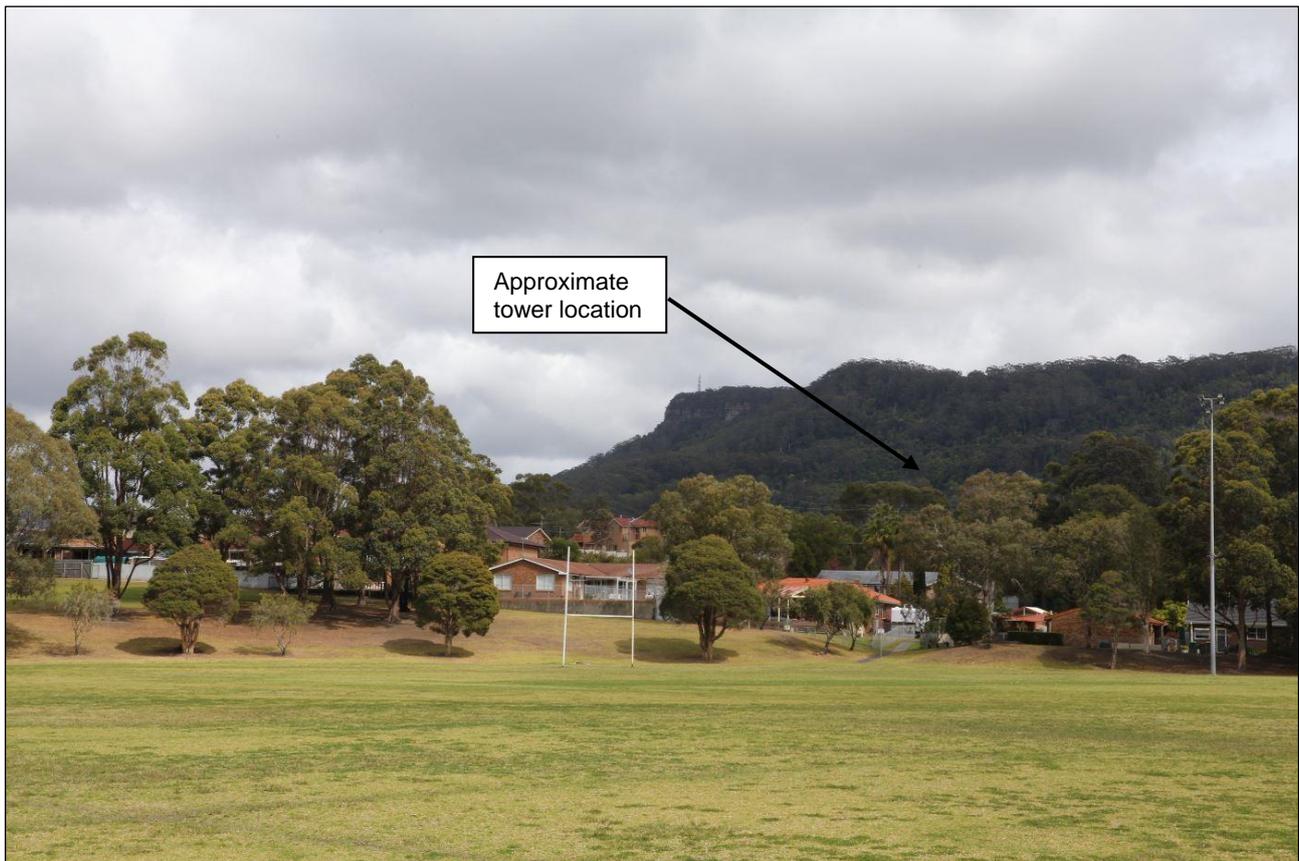


Figure 6-2 Viewpoint B – Existing view from northern edge of Hollymount Park facing south-west

#### Anticipated visual impact:

The photo at Figure 6-2 taken from the northern edge of Hollymount Park shows that views of the proposed tower will be largely obscured by large foreground trees and residential development. Various vertical elements within the view line, such as floodlights and football posts are also significant components in this view. Only the upper portion of the proposed tower is likely to be visible from the applicable areas along Princes Highway. Furthermore, the pale eucalypt colour scheme will reduce visibility of the tower above the tree line, ensuring visibility against the Escarpment backdrop is minimal.

The visual impact of the proposed tower on views from Viewpoint B is therefore considered to be minimal.

### 6.1.3 Viewpoint C – Eastern edge of cricket field at Hollymount Park facing west



Figure 6-3 Viewpoint C – Existing view from eastern edge of cricket field at Hollymount Park facing west

#### Anticipated visual impact:

The photo at Figure 6-3, taken from the eastern edge of the cricket field at Hollymount Park, shows that views of the proposed tower will be largely obscured by foreground trees and residential development. Various vertical elements within the view line, such as football posts and electricity poles are also significant components in this view. Only the upper portion of the proposed tower is likely to be visible from the applicable areas along Princes Highway. Furthermore, the pale eucalypt colour scheme will reduce visibility of the tower above the tree line, ensuring visibility against the Escarpment backdrop is minimal.

The visual impact of the proposed tower on views from Viewpoint C is therefore considered to be minimal.

6.1.4 Viewpoint D – alongside Princes Highway adjacent to Terania Street facing north



Figure 6-4 Viewpoint D – Existing view from alongside Princes Highway adjacent to Terania Street facing north



Figure 6-5 Viewpoint D – Photomontage from alongside Princes Highway adjacent to Terania Street facing north



Figure 6-6 Viewpoint D – Photomontage from alongside Princes Highway adjacent to Terania Street facing north including photo accurate location of the proposed tower (green component visible, red component obscured by foreground trees in this view).

**Anticipated visual impact:**

Figure 6-6 shows that from views along Princes Highway from the south, the upper portion of the tower (shown in green) will be visible above the tree line, and the majority of the tower and associated compound will be screened by the trees (shown in red). Due to the distance from the site, and the pale eucalypt colour scheme, the visible portion of the tower would present as another minor vertical element visible in the streetscape background, along with the existing electricity poles and streetlights.

The visual impact of the proposed tower on views from Viewpoint D is therefore considered to be minimal.

6.1.5 Viewpoint E – Within Russell Vale Golf Course along fairway facing east



Figure 6-7 Viewpoint E – Existing view from within Russell Vale Golf Course along fairway facing east



Figure 6-8 Viewpoint E – Photomontage from within Russell Vale Golf Course along fairway facing east

**Anticipated visual impact:**

The photo at Figure 6-7, and associated photomontage at Figure 6-8, taken from within Russell Vale Golf Course, show that despite the long open views afforded toward the proposed tower location, the tower will be mostly obscured by large foreground trees. Only the upper portion of the proposed tower will be visible. Furthermore, the pale eucalypt colour scheme will reduce visibility of the tower above the tree line.

The visual impact of the proposed tower on views from Viewpoint E is therefore considered to be minimal.

**6.1.6 Viewpoint F – Within Russell Vale Golf Course along northern edge facing east**

Figure 6-9 Viewpoint F – View from within Russell Vale Golf Course along northern edge facing east

**Anticipated visual impact:**

From this distance, (approximately 440m from the site) the proposed tower will present as an additional vertical object that sits in line with the existing trees at the site. Similar to Viewpoint E, visibility of the tower from Viewpoint F will be largely screened by the existing foreground trees, with only the upper portion of the tower likely to be visible.

The visual impact of the proposed tower on views from Viewpoint F is therefore considered to be minimal.

6.1.7 Viewpoint F1 - north east of the site from Rixons Pass Road



Figure 6-10 Viewpoint F1 – View from Rixons Pass Road along northern edge of golf course and site, facing west



Figure 6-11 Viewpoint F1 – Photomontage (pole and cabin equipment painted pale eucalypt green) from Rixons Pass Road along northern edge of golf course and site, facing west.

6.1.8 Viewpoint F2 – north west of the site from Rixons Pass Road



Figure 6-12 Viewpoint F2 – View from Rixons Pass Road along northern edge facing east



Figure 6-13 Viewpoint F2 – Photomontage (pole and cabin equipment painted pale eucalypt green) from Rixons Pass Road along northern edge of golf course and site, facing east.

### Anticipated visual impact

From residences and the street in Rixons Pass Road, the tower will be a new element in the landscape. Its impact on the immediate visual environment will be tempered, however, by the dominance of existing trees along the northern boundary of the Russell Vale golf course with Rixons Pass Road. West of the site (viewpoint F2, for example) the tower would be partially screened by this foreground vegetation along the boundary. This screening effect would increase with movement further to the west along Rixons Pass Road. From views to the east (view point F1, for example), the tower would be more visible as a skyline element but it would occur against the backdrop of existing mature trees on the golf course. Moreover, the foreground trees proposed in the landscape plan that accompanies this report would increasingly screen the lower portion of the tower as they reach maturity. The tower could be painted pale eucalypt green to blend into the surrounding trees and vegetation. As illustrated in Figure 6-13, the tower is not dissimilar in form to the existing power poles located along Rixons Pass Road.

The supporting infrastructure at the base of the tower (fencing and operations shed within the tower compound) would be screened by the proposed mid level shrub and tree plantings indicated on the landscape plan and also by the proposed new trees.

With these measures in place, it is our opinion that the impact of the proposed tower on close views from Rixons Pass Road would be acceptable.

## 6.2 Regional Views

The Catchment Plan (Figure 3-1) indicates that the proposed tower will be visible from some areas along the coast. However, modelling of the tower in this view illustrates that in reality, the entire tower will be screened by foreground vegetation.

### 6.2.1 Viewpoint G – Adjacent to Bellambi Rock Pool and picnic area facing north-west



Figure 6-14 Viewpoint G – Adjacent to Bellambi Rock Pool and picnic area facing north-west



Figure 6-15 Viewpoint G – Photomontage from adjacent to Bellambi Rock Pool and picnic area facing north-west

### Anticipated visual impact:

The proposed tower is shown entirely in bright red in Figure 6-11 above, as it will be fully screened by the existing line of trees fronting the beach. As such, the visual impact of the proposed tower from Viewpoint G, located approximately 2.5km from the site, is non-existent.

### 6.2.2 Viewpoint H – Bellambi Boat Ramp

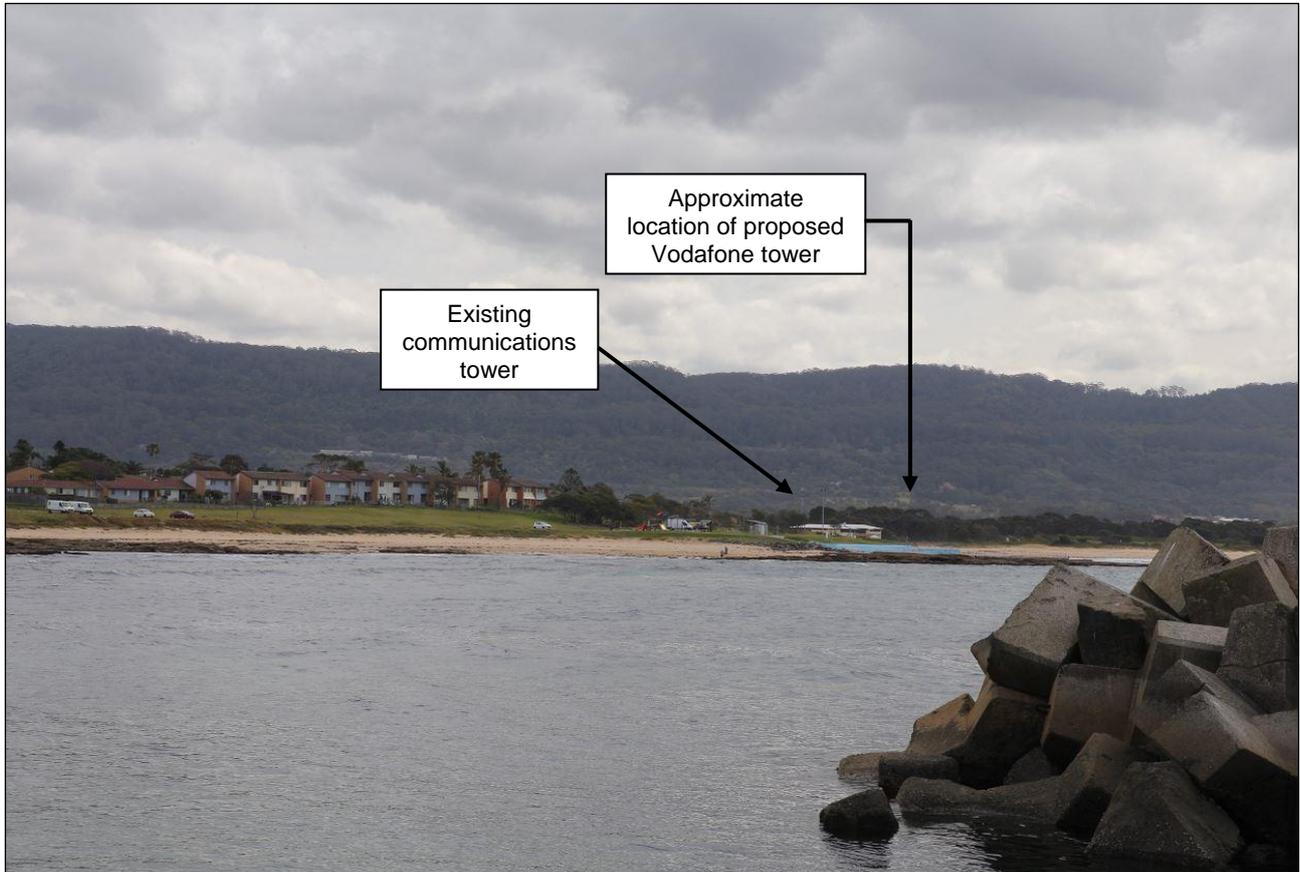


Figure 6-16 Viewpoint H – Bellambi Boat Ramp facing north-west

### Anticipated visual impact:

This viewpoint location is situated a significant distance from the site, that being approximately 3,100m. It is therefore anticipated that, similar to Viewpoint G, the proposed tower will not be visible from this viewpoint.

An existing communications tower located approximately 1,700m from this viewpoint, as pointed out in Figure 6-12, is indistinguishable against the backdrop of the Illawarra Escarpment.

As a result of these factors, it is considered that visibility of the proposed tower from long distances will be minimal, and that any potential visibility of the tower will have minimal impact on the wider views of the town and escarpment.

## 6.3 DCP Visual Impact Criteria

The relevant criteria from the DCP relating to visual impact has been assessed below.

### 6.3.1 Chapter C17 – Telecommunications and Radiocommunications Facilities

Chapter C17 of the DCP outlines the requirements for the construction of telecommunication and radio communication infrastructure. Section 2.1 of Chapter C17 focuses on the visual amenity of the proposed development. That section contains the following controls:

Table 6-1 Visual Amenity – DCP Chapter C17 Criteria

DCP Criteria	Applicant Response
1. Carriers are to design antennas and supporting infrastructure in such a way as to minimise or reduce the visual and cumulative visual impact from the public domain and adjacent areas.	The proposed monopole and associated equipment cabin are to be painted pale eucalypt to ensure they blend in with the surrounding vegetation and golf course landscape to reduce visual impact. Tall trees will screen much of the proposed tower from surrounding views.
2. Infrastructure design must be consistent with the character of the surrounding area.	The proposed tower and equipment cabin are proposed to be painted pale eucalypt to ensure the design will blend in with the surrounding vegetation and golf course landscape.
3. Within the local context, the infrastructure design must take account of: a) Colour b) Texture c) Form d) Bulk and scale	a) The proposed tower and equipment cabin are to be painted pale eucalypt to blend in with the surrounding vegetation and golf course. b) (c), (d) – The texture, form, bulk and scale of the proposed tower and equipment cabin is consistent with other communications towers in the region, and it has been designed to be as unobtrusive as possible from surrounding viewpoints.
4. Infrastructure must: a) Be well-designed b) Be integrated with the existing building structure unless otherwise justified in writing to Council; c) Have concealed cables where practical and appropriate, and d) Be unobtrusive where possible.	The proposed tower and equipment cabin is similar in design to other similar developments in the vicinity of the site. Cables for the development have been concealed where possible, and connect with the existing surrounding cable network to ensure that they are as unobtrusive as possible. Landscape treatment as indicated in the associated landscape plan drawings L1001 and L1002, prepared by Cardno, will screen the lower level infrastructure in close views and also add to vegetation screening in views from more distant locations.
5. Wherever technically feasible, antennas and mast structures should either not be visible, or should be as visually unobtrusive as possible, from the fronting road at eye level. Wherever technically feasible, they should be located to minimise their obtrusiveness. This may for instance result in infrastructure being located towards the rear of a building roof top.	The proposed tower is to be located within the existing golf course, adjacent to existing tall trees, and to be surrounded by landscaped planting and tall trees that will help to screen visibility of much of the tower. The proposed colour finish will further minimise any visual impact of the proposed development.
6. Wherever possible, towers should be of 'slimline monopole' construction.	The proposed tower is of standard monopole design.
7. The site must be restored following construction of the infrastructure.	Noted.
8. Infrastructure must be removed when no longer being used.	Noted.

## 7 Conclusions

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The assessment of the potential visual impacts of the proposal to develop a Vodafone communications tower in Russell Vale, NSW has been carried out via the following process:

- > Review of the Wollongong City Council planning controls and identification of the planning objectives and controls relevant to visual quality;
- > An inspection and photographic survey of the site locality to identify the components of the local landscape that contribute to its visual character and quality;
- > Use of GIS technology to identify the visual catchment of the subject site within a 4km radius;
- > Analysis of photomontages from two key viewpoints illustrating the massing of the proposed development, and
- > Description of the process and its outcomes in this report.

The outcome of the assessment process is:

- > The proposal is considered to be consistent with the Wollongong City Council planning controls of relevance to visual amenity regarding telecommunications facilities. The development as proposed is of a comparable scale and design to similar communications tower development in the area, and will not encroach on views from critical viewpoints;
- > The siting of the proposed tower is appropriate as it is situated on the Russell Vale Golf Course, in an area of the course that features significant existing vegetation. This will ensure that the proposed tower is largely screened from surrounding views. The prepared photomontages demonstrate that views of the site from critical local and regional locations will not be significantly altered by development of the proposed communications tower.
- > Landscape treatment proposed in the associated Landscape Concept Plan and Landscape Cross Sections prepared by Cardno will screen the lower level infrastructure in close views and also add to vegetation screening in views from more distant locations.

Based on the issues addressed in this report, Cardno maintains that the proposed development is suitable for approval by the consent authority.



**VIEWPOINT F2 - ALONG RIXONS PASS ROAD, FACING EAST**  
(REALISTIC PHOTOMONTAGE)



**VIEWPOINT F1 - ALONG RIXONS PASS ROAD, FACING WEST**  
(REALISTIC PHOTOMONTAGE)



**VIEWPOINT D - PRINCES HIGHWAY ADJACENT TO TERANIA STREET, FACING NORTH**  
(REALISTIC PHOTOMONTAGE)



**VIEWPOINT E - RUSSELL VALE GOLF COURSE ALONG FAIRWAY, FACING EAST**  
(REALISTIC PHOTOMONTAGE)

**Attachment 3: Applicant’s Table of Compliance with the NSW Telecommunications Facilities Guidelines including Broadband**

JS3832 Russell Vale North

**7.2 New South Wales Telecommunications Facilities Guideline Including Broadband**

The New South Wales government issued the *New South Wales Telecommunications Facilities Guideline Including Broadband (July 2010)* (“the Guideline”). The purpose of the Guideline is to:

*“Provide a guide to the state wide planning provisions and development controls for telecommunications facilities in NSW contained in the State Environmental Planning Policy Infrastructure 2007 (SEPP Infrastructure)”*

The Guideline outlines a number of key issues for consideration by consent authorities (where relevant) and carriers in the determination of the design and siting of telecommunications facilities including:

- ensuring that certain “guiding principles” relating to the design, siting, and construction of telecommunications facilities are developed and adhered to;
- consideration of visual impact and the need to reduce the impacts on heritage items as well as other items of environmental significance;
- that telecommunications facilities must be designed, installed, and operated to comply with standards relating to human exposure to EME appearing in any applicable code or standard made under any applicable law of the Commonwealth;
- encourage co-location with other facilities; and
- undertake site analysis to respond to site conditions.

These matters have been taken into account as part of the site selection and design for the proposal, these are discussed in more detail below.

**Table 2: Table of compliance with the NSW Telecommunications Facilities Guideline including Broadband.**

<b>Principle 1: A telecommunications facility should be sited to minimise visual impact</b>		
<b>Specific Principles</b>	<b>Compliance</b>	<b>Comment</b>
<p>(a) <i>As far as practical, a telecommunications facility that is to be mounted on an existing building or structure should be integrated with the design and appearance of the building or structure.</i></p> <p>(b) <i>The visual impact of telecommunications facilities should be minimise, visual clutter is to be reduced particularly on the tops of buildings, and their physical dimensions (including support mounts) should be sympathetic to the scale and height of the building.</i></p> <p>(c) <i>Where telecommunications facilities protrude from a building or structure and are predominantly backgrounded against the sky, the facility and their support mounts should</i></p>		<p>(a) – (c) These principles relate to facilities that are located on existing buildings or structures and are not directly applicable to a new free-standing monopole such as the proposed in this instance.</p>

<p><i>be either the same as the prevailing colour of the host building or structure, or a neutral colour such as grey should be used.</i></p> <p><i>(d) Ancillary facilities associated with the telecommunications facility should be screened or housed, using the same colour as the prevailing background to reduce its visibility, including the use of existing vegetation where available, or new landscaping where possible and practical.</i></p> <p><i>(e) A telecommunications facility should be located and designed to respond appropriately to its landscape setting.</i></p> <p><i>(f) A telecommunications facility located on, or adjacent to, a State or local heritage item or within a heritage conservation area, should be sited and designed with external colours, finishes and scale sympathetic to those of the heritage item or conservation area.</i></p> <p><i>(g) A telecommunications facility should be located so as to minimise or avoid the obstruction of a significant view of a heritage item or place, a landmark, a streetscape, vista, or a panorama, whether viewed from public or private land.</i></p> <p><i>(h) The relevant local government authority must be consulted where the pruning, lopping, or removal of any tree or other vegetation would contravene a Tree Preservation Order applying to the land or where a permit or development consent is required.</i></p> <p><i>(i) A telecommunications facility that is no longer required is to be removed and the site restored, to a condition that is</i></p>		<p>(d) The associated equipment will be housed in an equipment cabin. The equipment cabin would be in the standard colour, pale eucalypt and if considered necessary, Council can condition this, and the provision of additional landscaping as part of any development consent. This can be agreed or conditioned by Council as part of any development consent.</p> <p>(e) The facility has been located and designed to respond to its surrounding landscape context. For more detail, please see <i>Section 8.7.1</i> below.</p> <p>(f) The site is not a heritage item, nor within close proximity to a heritage item.</p> <p>(g) The proposed facilities do not occupy a position that will obstruct views or sightline to any heritage item or place, landmark, streetscape, vista, or panorama. For more detail, please see <i>Sections 8.1, 8.2 and 8.7.1</i> below.</p> <p>(h) The proposal involves the removal of one tree. Please see <b>Appendix N</b> for an Arborist Report</p> <p>(i) This aspect could be conditioned as part of any development consent.</p>
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<p><i>similar to its condition before the facility was constructed.</i></p> <p>(j) <i>The siting and design of telecommunications facilities should be in accordance with any relevant Industry Design Guides.</i></p>		<p>(j) The siting and design has taken into consideration the Precautionary Approach. A copy of Precautionary Approach is attached as Appendix K.</p>
<b>Principle 2: Telecommunications facilities should be co-located wherever possible</b>		
<b>Specific Principles</b>	<b>Compliance</b>	<b>Comment</b>
<p>(a) <i>Telecommunications lines are to be located, as far as practical, underground or within an existing underground conduit or duct.</i></p> <p>(b) <i>Overhead lines, antennas, and ancillary telecommunications facilities should, where practical, be co-located or attached to existing structures such as buildings, public utility structures, poles, towers or other radiocommunications equipment to minimise the proliferation of telecommunications facilities and unnecessary clutter.</i></p> <p>(c) <i>Towers may be extended for the purposes of co-location.</i></p> <p>(d) <i>The extension of an existing tower must be considered as a practical co-location solution prior to building new towers.</i></p> <p>(e) <i>If a facility is proposed not to be co-located the proponent must demonstrate that co-location is not practicable.</i></p> <p>(f) <i>If the development is for a co-location purpose, then any new telecommunications facility must be designed, installed and operated so that the resultant cumulative levels of radio frequency emissions of the co-located telecommunications facilities are within the maximum human exposure levels set out in the Radiation Protection Standard.</i></p>		<p>(a) Not Applicable</p> <p>(b) There are no existing facilities within the required search ring that are practical for co-location. Nonetheless, the facility will support infrastructure for two Carriers and would be considered a co-location once operational.</p> <p>(c) Not Applicable</p> <p>(d) Not Applicable</p> <p>(e) For more detail, please see Section 3.0 and Table 1 above.</p> <p>(f) The facility will be in accordance with industry standards on EME. Please see Appendix J for the Environmental EME Report.</p>
<b>Principle 3: Health Standards for exposure to radio emissions will be met</b>		
<b>Specific Principles</b>	<b>Compliance</b>	<b>Comment</b>

<p>(a) A telecommunications facility must be designed, installed and operated so that the maximum human exposure levels to radiofrequency emissions comply with Radiation Protection Standard.</p> <p>(b) An EME Environmental Report shall be produced by the proponent of development to which the Mobile Phone Network Code applies in terms of design, siting of facilities and notifications. The Report is to be in the format prescribed by the Australian Radiation Protection Nuclear Safety Agency. It is to show the predicted levels of electromagnetic energy surrounding the development comply with the safety limits imposed by the Australian Communications and Media Authority and the Electromagnetic Radiation Standard, and demonstrate compliance with the Mobile Phone Networks Code.</p>		<p>(a) The proposed installation will comply with the Australian Communications and Media Authority (ACMA) regulatory arrangements with respect to electromagnetic radiation exposure levels.</p> <p>(b) EME Exposure Levels from this site have been calculated in accordance with the ARPANSA prediction methodology and report format. This report is enclosed as <b>Appendix J</b>. For more detail, please see <i>Section 8.7.9</i> below.</p>
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**Principle 4: Minimise disturbance and risk, and maximise compliance**

Specific Principles	Compliance	Comment
<p>(a) The siting the height of any telecommunications facility must comply with any relevant site and height requirements specified by the Civil Aviation Regulations 1988 and the Airports (Protection of Airspace) Regulations 1996 of the Commonwealth. It must not penetrate any obstacle limitation surface show 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 Safety Authority Australia.</p> <p>(b) The telecommunications facility is not to cause adverse</p>	<p>Yes</p>	<p>(a) The proposal is in compliance with the height requirements of CASA.</p> <p>(b) The base station is designed to create no electrical interference</p>

<p><i>radio frequency interference with any airport, port or Commonwealth Defence navigational or communications equipment, including the Morundah Communications Facility, Riverina.</i></p> <p><i>(c) The telecommunications facility and ancillary facilities are to be carried out in accordance with the applicable specifications (if any) of the manufacturers for the installation of such equipment.</i></p> <p><i>(d) The telecommunications facility is not to affect the structural integrity of any building on which it is erected.</i></p> <p><i>(e) The telecommunications facility is to be erected wholly within the boundaries of a property where the landowner has agreed to the facility being located on the land.</i></p> <p><i>(f) The carrying out of construction of the telecommunications facilities must be in accordance with all relevant regulations of the Blue Book – 'Managing Urban Stormwater: Soils and Construction' (Landcom 2004), or its replacement.</i></p> <p><i>(g) Obstruction or risks to pedestrians or vehicles caused by the location of the facility, construction activity or materials used in construction are to be mitigated.</i></p> <p><i>(h) Where practical, work is to be carried out during times that cause minimum disruption to adjoining properties and public access. Hours of work are to be restricted to between 7.00am and 5.00pm, Mondays to Saturdays, with no work on Sundays and public holidays.</i></p> <p><i>(i) Traffic control measures are to be taken during construction in accordance with Australian</i></p>		<p>problems with other radio-based systems and complies with the requirements of relevant Australian Standards.</p> <p>(c) The base station facilities are designed to be installed in accordance with any relevant manufacturer specifications. The proposal will comply with the requirements of all relevant Australian Standards.</p> <p>(d) The facilities are not being erected on any existing building or structure.</p> <p>(e) The location and layout of the facilities reflect discussions with the landowner and will be reflected in any associated lease or licence entered into between the carriers and the landowners.</p> <p>(f) – (k) These matters can be appropriately addressed through the imposition of conditions by Council on any development consent.</p>
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<p><i>Standard S1742.3-2002 Manual of uniform traffic control devices – Traffic control devices on roads.</i></p> <p><i>(j) Open trenching should be guarded in accordance with Australian Standard Section 93.080 – Road Engineering AS1165 – 1982 – Traffic hazard warning lamps.</i></p> <p><i>(k) Disturbance to flora and fauna should be minimised and the land is to be restored to a condition that is similar to its condition before the work was carried out.</i></p> <p><i>(l) The likelihood of impacting on threatened species and communities should be identified in consultation with relevant state or local government authorities and disturbance to identified species and communities avoided wherever possible.</i></p> <p><i>(m) The likelihood of harming an Aboriginal Place and/or Aboriginal object should be identified. Approvals from the Department of Environment, Climate Change and Water (DECCW) must be obtained where impact is likely, or Aboriginal objects are found.</i></p> <p><i>(n) Street furniture, paving or other existing facilities removed or damaged during construction should be reinstated (at the telecommunications carrier's expense) to at least the same condition as that which existed prior to the telecommunications facility being installed.</i></p>		<p>(l) The works will not impact on threatened species and communities.</p> <p>(m) The site is unlikely to contain any Aboriginal artefacts. An AHIMS Basic Search has been conducted and returned no known items of Aboriginal significance. A copy of this the AHIMS Basic Search Result is attached as <b>Appendix O</b>.</p> <p>(n) This can be addressed by Council through the imposition of conditions on any development consent.</p>
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**7.3 State Environmental Planning Policy 55 Remediation of Land**

Clause 7 of the *State Environmental Planning Policy No 55 Remediation of Land* (SEPP 55) outlines consideration with regards to contamination and remediation that is to be considered when determining a development application. In particular whether it has considered the following:



## **Clause 4.6 Variation – Height of Buildings**

Proposed Telecommunications Facility

Clause 4.3 Height of Buildings

Wollongong Local Environment Plan 2009

Lot 1 DP 808427  
580 Princes Highway  
Russell Vale NSW 2517

May 2018

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▪ INFRASTRUCTURE DEVELOPMENT CONSULTANTS ▪ PROPERTY CONSULTANTS & MANAGERS ▪ PROJECT MANAGERS

▪ LEVEL 5, 55 GRAFTON STREET, BONDI JUNCTION NSW 2022 ▪ TELEPHONE (02) 9300 1700 ▪ FACSIMILE (02) 9300 1750

▪ EMAIL [cps@cpsglobal.com](mailto:cps@cpsglobal.com) ▪ WEBSITE [www.cpsglobal.com](http://www.cpsglobal.com) ▪

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MUNRO PROPERTY SOLUTIONS PTY LTD T/A CPS GLOBAL ABN 48 148 905 159

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## Document Controls

Revision	Description	Date	Author	Checked
01	For Review	28 May 2018	EY	KK
02	For Lodgement	31 May 2018	EY	JL

Prepared for	Prepared by
 <p>Vodafone Hutchison Australia</p>	 <p>commercial property solutions</p> <p><b>CPS Global</b>            ABN 48 148 905 159            Level 5, 55 Grafton Street            Bondi Junction 2022            New South Wales</p> <p>Phone: (02) 9300 1700            Email: <a href="mailto:cps@cpsglobal.com">cps@cpsglobal.com</a></p>

*This statement has been prepared as supporting documentation to the Statement of Environmental Effects (SEE) that accompanies the Development Application. CPS Global does not accept responsibility for the use of this statement by any parties other than Wollongong City Council for the assessment of the Development Application.*

## Introduction

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This report forms a request to the variation of the height of buildings as prescribed under the *Wollongong Local Environment Plan 2009* (WLEP 2009) and accompanies a development application. The development application is for a proposed telecommunications facility located on land at Lot 1 DP 808427, 580 Princes Highway, Russell Vale NSW 2517. The proposed structure within the proposed telecommunications facility is a 25-metre monopole which will exceed the standard relevant to Clause 4.3 Height of Buildings under the WLEP 2009.

## The development standard objections

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The proposed telecommunications facility is located on land zoned RE1 Public Recreation under the WLEP 2009. In accordance with Clause 115 of the *State Environmental Planning Policy (Infrastructure) 2007*, telecommunications facilities are permissible in any zone with Council consent.

### Clause 4.3 Height of Buildings

The standard objected to relates to Clause 4.3 Height of Buildings.

- (1) *The objectives of this clause are as follows:*
  - (a) *to establish the maximum height limit in which buildings can be designed and floor space can be achieved,*
  - (b) *to permit building heights that encourage high quality urban form,*
  - (c) *to ensure buildings and public areas continue to have views of the sky and receive exposure to sunlight*
- (2) *The height of a building on any land is not to exceed the maximum height shown for the land on the Height of Buildings Map.*

The permissible height at the subject site is 9 metres.

## The proposed variation assessment

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This Clause 4.6 variation accompanies a development application for the construction of a new telecommunications facility. The development application seeks consent for:

- The installation of a 25.00 metre concrete monopole;
- The installation of a circular headframe atop the monopole;
- The installation of six (6) panel antennas (unpainted and factory light grey in appearance) to an overall height of 26.34 metres;
- The installation of thirty-six (36) non-EME emitting remote radio units (RRUs)
- The installation of an outdoor equipment shelter measuring 3.15 metres (length) x 2.38 metres (width) x 2.94 metres (height). Colour can be conditioned as part of any development consent.
- A new secure compound area measuring 6.4 metres x 10.4 metres, enclosed by a 2.4 metre high fence to match the existing perimeter fence of the golf course;
- Ancillary equipment associated with the safe operation of the facility, including but not limited to, equipment housing, cable trays, cable ladders, cabling, earthing, electrical works, and air conditioning equipment; and

- The installation of additional landscaping where necessary.

### Objectives of the zone

The proposed telecommunications facility is located on land zoned RE1 Public Recreation under the WLEP 2009.

Clause 2.3(2) of the WLEP 2009 states that Council must have regard to the objectives of the development within this zone. The objectives of the zone are as follows:

- *To enable land to be used for public open space or recreational purposes.*
- *To provide a range of recreational settings and activities and compatible land uses.*
- *To protect and enhance the natural environment for recreational purposes.*
- *To cater for the development of a wide range of uses and facilities within open spaces for the benefit of the community.*

The proposed development satisfies the objectives of the RE1 Public Recreation zone as follows:

- The development will enable the continued use of the site as open space or recreational purposes as part of the Russell Vale Golf Course.
- The development will assist in providing an improved telecommunications network coverage in and around the site to the benefit of the community.
- The development will not negatively impact the surrounding or wider natural environment.

The proposed works are not inconsistent with the objectives of the zone and is a permissible land use under the Wollongong City Council Generic Plan of Management for Community Lands, applicable to the site. The site will not have a detrimental impact on the current use of the site nor its operation as a golf course. The facility will be able to provide improved network services to the area that will support visitors, local businesses, and the residential community.

### State or Regional Heritage Significance

The proposed variation to the Height of Buildings control does not raise any matters of State or Regional Significance.

### The objection is well founded

In *Wehbe v Pittwater Council* [2007] NSWLEC 827, the Chief Judge of the Land and Environment Court, Preston J recast the long standing 5-point test for consideration of a *State Environmental Planning Policy 1* objection set out in *Winten Property Group Ltd v North Sydney Council* [2001] NSWLEC 46. The aim of this test is to determine whether requiring compliance with the standard would be unreasonable or unnecessary in the circumstances. The chief judge advised that the requirement to demonstrate that an objection is well founded could be satisfied in any of the following ways.

- (1) *The objectives of the standard are achieved notwithstanding non-compliance with the standard;*
- (2) *The underlying objective or purpose of the standard is not relevant to the development and therefore compliance is unnecessary;*
- (3) *The underlying object of purpose would be defeated or thwarted if compliance was required and therefore compliance is unreasonable;*

- (4) *The development standard has been virtually abandoned or destroyed by the Council's own actions in granting consents departing from the standard and hence compliance with the standard is unnecessary and unreasonable;*
- (5) *The zoning of the particular land is unreasonable or inappropriate so that a development standard appropriate for that zoning is also unreasonable and unnecessary. That is, the particular parcel of land should not have been included in the particular zone.*

The standard objected to relates to Clause 4.3 Height of Buildings. The objective of the standard is to ensure that the height of the development is compatible with adjoining development and the overall streetscape. This clause also ensures that views are maintained, the development does not create unreasonable overshadowing, and ensures the amenity and privacy of adjoining properties.

While the installation of a telecommunications facility meets the definition of a structure in accordance with the WLEP 2009, it cannot be viewed in the same way as other building classifications. A facility is considered a class 10b structure, which is a slim line structure, uninhabited and does not create the same overshadowing and privacy issues as a dwelling, apartment or other class of building. To put it into perspective, a telecommunications facility is considered in the same category as a fence or retaining wall. The development standard and objectives are not practical for such the structure.

The height standard is not practical for the facility for radiofrequency requirements. This, along with justification regarding additional height in terms of visual impact are discussed below.

### **Radiofrequency Objectives**

The proposed facility would not achieve the minimum radio frequency objectives should the development standard height of 9 metres apply. A reduction in height to 9 metres would compromise the efficiency of the telecommunications facility for the following reasons:

**Coverage:** Reduced height will not cover the desired area. This may require additional facilities in the area to supplement the service a lower base station would provide. It is preferable for one facility that addresses the coverage rather than several located at various locations.

**Existing tall elements:** Existing tall vegetation and tall objects within the vicinity such as trees, utility structures and tall buildings restrict the signal. Telecommunications facility must clear trees and other tall elements in the vicinity to work effectively.

**EME compliance:** A reduced height of the proposed telecommunications facility would also result in an increase to electromagnetic emissions (EME) at ground level and increase the number of facilities. While the facility would still comply with the Australian Standards on EME, which has been proven to be safe for all members of the public, it is considered that some residents may prefer that the EME was reduced at ground level if possible.

### **Visual Impact**

The facility has been stepped back as much as possible to meet the minimum radio frequency objectives. The proposal seeks approval for a 25 metre monopole with antennas placed within a circular headframe. The facility uses a slim line pole and a circular headframe that is less bulky than other antenna mounts.

The facility has been situated within the large area of open space of the golf course that is highly tree lined with mature vegetation. The facility may be visible from some residential dwellings along the northern border of the golf club and along the north eastern border. It is

considered that the facility will be viewed in the context of the tall vegetation and other existing utility structures such as light and power poles that also exceed height requirements. The facility may be painted green should Council require so that it blends in with the trees and golf course background.

The slim line structure in this location is not considered to have a negative impact to privacy, view loss or overshadowing. As mentioned a slim line monopole cannot be considered in the same way as a dwelling or building can. The facility is unmanned and will not impact on residential privacy. The slim line structure will not obstruct any existing views, nor will it have a significant overshadowing impact. In this regard the proposal is considered

While the proposed facility exceeds the 9-metre building height standard, the slim line nature of the facility would ensure that the bulk and scale is comparable to other tall elements in the vicinity.

Additional landscaping may be conditioned by Council to further reduce any visual impacts at street level.

### The public interest

In today's modern society mobile phone networks have formed an integral part of society. Technological advances and improvements are constant where there is a demand for greater service and products. The mobile phone with its ability to call and access the internet, amongst other functions, from anywhere is now an everyday necessity with expectations and demands for more network coverage growing every day. This in turn has led to an increased demand for telecommunications infrastructure.

Telecommunications services form an integral component in everyday home and working life therefore it is in the public interest that the telecommunications infrastructure and services are reliable and advancing in line with technological improvements.

As outlined under *Section 8.10 of the Statement of Environmental Effects (SEE)*, the facility would enable efficient service delivery, communication, and productivity to all mobile phone users in all areas.

## Conclusion

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The purpose of this submission is to formally request a variation to the Height of Buildings control pursuant to Clause 4.6 of the Wollongong LEP 2009.

In general terms, the compliance with the Height of Buildings control is unreasonable and unnecessary in these circumstances, and there are sufficient environmental planning grounds to justify the variation to the Height of Buildings control.

We trust this submission is satisfactory, however, please do not hesitate to contact us should you require any further information.

## Attachment 5: Draft Conditions

### Approved Plans and Documents

- 1 The development shall be implemented substantially in accordance with the details and specifications set out on Drawing 240023-G2-C and 240023-G3-C dated 4 October 2018 prepared by CPS Global and Project No 80219012-01 Drawing L1001-A dated 14 September 2018 prepared by Cardno any details on the application form, and with any supporting information received, except as amended by the conditions specified and imposed hereunder.

### General Matters

- 2 **Building Work - Compliance with the Building Code of Australia**  
All building work must be carried out in compliance with the provisions of the Building Code of Australia.
- 3 **Construction Certificate**  
A Construction Certificate must be obtained from Council or an Accredited Certifier prior to work commencing.  
  
A Construction Certificate certifies that the provisions of Clauses 139-148 of the Environmental Planning and Assessment Amendment Regulations, 2000 have been satisfied, including compliance with all relevant conditions of Development Consent and the Building Code of Australia.  
  
**Note:** The submission to Council of two (2) copies of all stamped Construction Certificate plans and supporting documentation is required within **two (2)** days from the date of issue of the Construction Certificate, in the event that the Construction Certificate is not issued by Council.
- 4 **Occupation Certificate**  
An Occupation Certificate must be issued by the Principal Certifying Authority prior to occupation or use of the development. In issuing an Occupation Certificate, the Principal Certifying Authority must be satisfied that the requirements of section 6.9 of the Environmental Planning and Assessment Act 1979, have been complied with as well as all of the conditions of the Development Consent.
- 5 **Geotechnical**  
All work is to be in accordance with the geotechnical recommendations contained in the report dated 31 May 2017 by Martens and any subsequent geotechnical report required to address unanticipated conditions encountered during construction.
- 6 **Tree Retention/Removal**  
The developer shall retain the existing trees indicated in the Arborist Report by Allied Tree Consultancy dated 29 June 2017 consisting of trees numbered T1, T2, T4, T5, T6 and T7.  
  
Any branch pruning, which has been given approval, must be carried out by a qualified arborist in accordance with Australian Standard AS4373-2007.  
  
All tree protection measures are to be installed in accordance with Australian standard AS4790-2009 Protection of Trees on development Sites.  
  
All recommendations in Arborist's Report by Allied Tree Consultancy dated 29 June 2017 to be implemented including and not restricted to: remedial tree pruning, deadwooding, fencing and signage, sediment buffer, stem protection, establishing tree protection zones and watering and root hormone application if required.  
  
This consent permits the removal of tree number T3 as indicated in the Arborist Report by Allied Tree Consultancy dated 29 June 2017. No other trees shall be removed without prior written approval of Council.

7 **Property/Licence Agreements**

Prior to the issue of the Construction Certificate, the applicant must enter into an appropriate licence arrangement with Council. An application for a licence must be made to Council's Property Division for determination at least 50 days prior to the proposed commencement date of the use so that it may be advertised and assessed in accordance with the Local Government Act 1993/Crown Lands Act.

**Prior to the Issue of the Construction Certificate**

8 **Fencing**

The fencing and gate must be designed to match the height, style, colour and materials of the existing fence around the Russell Vale Golf Course.

9 **Present Plans to Sydney Water**

Approved plans must be submitted online using Sydney Water Tap, available through [www.sydneywater.com.au](http://www.sydneywater.com.au) to determine whether the development will affect Sydney Water's sewer and water mains, stormwater drains and/or easements, and if further requirements need to be met.

The Certifying Authority must ensure that Sydney Water has issued an approval receipt prior to the issue of a Construction Certificate.

Visit [www.sydneywater.com.au](http://www.sydneywater.com.au) or telephone 13 20 92 for further information.

10 **Tree Protection and Management**

The existing trees are to be retained upon the subject property and any trees on adjoining properties shall not be impacted upon during the excavation or construction phases of the development. This will require the installation and maintenance of appropriate tree protection measures, including (but not necessarily limited to) the following:

- a Installation of Tree Protection Fencing - Protective fencing shall be 1.8 metre cyclone chainmesh fence, with posts and portable concrete footings. Details and location of protective fencing must be indicated on the architectural and engineering plans to be submitted to the Principal Certifying Authority prior to release of the Construction Certificate.
- b Installation of Tree Protection Fencing - A one (1) metre high exclusion fence must be installed around the extremity of the dripline of the tree/trees to be retained prior to any site works commencing. The minimum acceptable standard is a 3 strand wire fence with star pickets at 1.8 metre centres. This fence must be maintained throughout the period of construction to prevent any access within the tree protection area. Details of tree protection and its locations must be indicated on the architectural and engineering plans to be submitted to the Principal Certifying Authority prior to release of the Construction Certificate.
- c Mulch Tree Protection Zone: Areas within a Tree Protection Zone are to be mulched with minimum 75 mm thick 100% recycled hardwood chip/leaf litter mulch.
- d Irrigate: Areas within the Tree Protection Zone are to be regularly watered in accordance with the arborist's recommendations.

11 **Street Trees**

The developer must address the street frontage by installing street tree planting. The number and species for this development is three (3) *Tristania laurina* 200 litre container size, in accordance with AS 2303:2015 Tree stock for landscape use. Street trees are to be installed in accordance with Wollongong Development Control Plan 2009 – Chapter E6: Landscaping. 'Dial Before You Dig' must be consulted prior to any excavation on site. Pot holing must be carried out to determine service location. Tree pits must be adequately mulched, plants installed and tree guards installed to the satisfaction of WCC Manager of Works. Tree guards to consist of four posts and two rails, minimum post size 150x150mm.

These requirements shall be reflected on the Construction Certificate plans and any supporting documentation.

12 **Dilapidation Survey**

A dilapidation survey and report shall be submitted to the Principal Certifying Authority.

The dilapidation survey and report shall accurately reflect the condition of existing public and private infrastructure in the adjacent street(s) fronting the lots.

The report shall outline measures for the protection of existing public and private infrastructure during the works.

Any damage to infrastructure items and relics which is caused by the developer shall be repaired to the satisfaction of the Principal Certifying Authority prior to the issue of a Certificate of Practical Completion for Subdivision works.

13 **Erosion and Sediment Control Plan (ESCP) – Less than 2500m<sup>2</sup> Disturbance**

An Erosion and Sediment Control Plan (ESCP) must be prepared by a suitably qualified person in accordance with the requirements set out in “Managing Urban Stormwater: Soils and Construction” NSW Dept of Housing, 4th Edition. The plan must be submitted to the Certifying Authority for approval prior to the issue of the Construction Certificate.

14 **Site Environmental Management Plan**

The submission of a detailed Site Environmental Management Plan which addresses the following issues:

- i Environmental monitoring methods involving:
  - a ground and surface waters;
  - b dust generation and mitigating measures;
  - c flora and fauna management (if relevant); and
  - d erosion and sedimentation controls and proposed soil erosion control measures.
- ii On-site materials management including soil conservation;
- iii Emergency/contingency plans; and
- iv Site rehabilitation works.

The Environmental Management Plan is to be submitted to the Principal Certifying Authority for approval prior to the issue of the Construction Certificate.

15 **Development Contributions**

Pursuant to Section 4.17 of the Environmental Planning and Assessment Act 1979 and the Wollongong City-Wide Development Contributions Plan (2018), a monetary contribution of \$1,000.00 (subject to indexation) must be paid to Council towards the provision of public amenities and services, prior to the release of any associated Construction Certificate.

This amount has been calculated based on the estimated cost of development and the applicable percentage rate.

The contribution amount will be subject to indexation until the date of payment. The formula for indexing the contribution is:

$$\text{Contribution at time of payment} = \$C \times (\text{CP2}/\text{CP1})$$

Where:

**\$C** is the original contribution as set out in the Consent

**CP1** is the Consumer Price Index; All Groups CPI; Sydney at the time the consent was issued

**CP2** is the Consumer Price Index; All Groups CPI; Sydney at the time of payment

Details of CP1 and CP2 can be found in the Australian Bureau of Statistics website – Catalogue No. 6401.0 - Consumer Price Index, Australia.

The following payment methods are available:

METHOD	HOW	PAYMENT TYPE
Online	<a href="http://www.wollongong.nsw.gov.au/applicationpayments">http://www.wollongong.nsw.gov.au/applicationpayments</a> Your Payment Reference: 996960	<ul style="list-style-type: none"> <li>• Credit Card</li> </ul>
In Person	Wollongong City Council Administration Building - Customer Service Centre Ground Floor 41 Burelli Street, WOLLONGONG	<ul style="list-style-type: none"> <li>• Cash</li> <li>• Credit Card</li> <li>• Bank Cheque</li> </ul>
PLEASE MAKE BANK CHEQUE PAYABLE TO: Wollongong City Council (Personal or company cheques are not accepted)		

A copy of the Wollongong City-Wide Development Contributions Plan (2018) and accompanying Fact Sheet may be inspected or obtained from the Wollongong City Council Administration Building, 41 Burelli Street, Wollongong during business hours or on Council's web site at [www.wollongong.nsw.gov.au](http://www.wollongong.nsw.gov.au)

### Prior to the Commencement of Works

#### 16 Appointment of Principal Certifying Authority

Prior to commencement of work, the person having the benefit of the Development Consent and a Construction Certificate must:

- a Appoint a Principal Certifying Authority (PCA) and notify Council in writing of the appointment irrespective of whether Council or an accredited private certifier is appointed; and
- b notify Council in writing of their intention to commence work (at least two days notice is required).

The Principal Certifying Authority must determine when inspections and compliance certificates are required.

#### 17 Sign – Supervisor Contact Details

Before commencement of any work, a sign must be erected in a prominent, visible position:

- a stating that unauthorised entry to the work site is not permitted;
- b showing the name, address and telephone number of the Principal Certifying Authority for the work; and
- c showing the name and address of the principal contractor in charge of the work site and a telephone number at which that person can be contacted at any time for business purposes.

This sign shall be maintained while the work is being carried out and removed upon the completion of the construction works.

#### 18 Temporary Toilet/Closet Facilities

Toilet facilities are to be provided at or in the vicinity of the work site on which work involved in the erection or demolition of a building is being carried out at the rate of one toilet for every 20 persons or part of 20 persons employed at the site.

Each toilet provided must be:

- a a standard flushing toilet; and
- b connected to either:
  - i the Sydney Water Corporation Ltd sewerage system or
  - ii an accredited sewage management facility or
  - iii an approved chemical closet.

The toilet facilities shall be provided on-site, prior to the commencement of any works.

- 19 **Structural Engineer's Details**  
Structural engineer's details for all structurally designed building works such as reinforced concrete footings, reinforced concrete slabs and structural steelwork must be submitted to the Principal Certifying Authority, prior to the commencement of any works on the site.
- 20 **Enclosure of the Site**  
The site must be enclosed with a suitable security fence to prohibit unauthorised access, to be approved by the Principal Certifying Authority. No building work is to commence until the fence is erected.
- 21 **Temporary Sediment Fences**  
Temporary sediment fences (eg haybales or geotextile fabric) must be installed on the site, prior to the commencement of any excavation, demolition or construction works in accordance with Council's guidelines. Upon completion of the development, sediment fencing is to remain until the site is grassed or alternatively, a two (2) metre strip of turf is provided along the perimeter of the site, particularly lower boundary areas.
- 22 **Certification from Arborist - Adequate Protection of Trees to be Retained**  
A qualified arborist is required to be engaged for the supervision of all on-site excavation or land clearing works. The submission of appropriate certification from the appointed arborist to the Principal Certifying Authority is required which confirms that all trees and other vegetation to be retained are protected by fencing and other measures, prior to the commencement of any such excavation or land clearing works.
- 23 **Notification to Council of any Damage to Council's Infrastructure**  
Council must be notified in the event of any existing damage to any of Council's infrastructure including, but not limited to the road, kerb and gutter, road shoulder, footpath, drainage structures and street trees fronting the development and any part of the golf course prior to the commencement of work. Adequate protection must be provided to Council infrastructure prior to work commencing and during the construction period. Any damage to Council's assets shall be restored in a satisfactory manner prior to the issue of the Occupation Certificate.
- 24 **Application for Occupation, Use, Disturbance or Work on Footpath/Roadway**  
Any occupation, use, disturbance or work on the footpath or road reserve for construction purposes, which is likely to cause an interruption to existing pedestrian and/or vehicular traffic flows requires Council consent under Section 138 of the Roads Act 1993. An application must be submitted and approved by Council prior to the works commencing where it is proposed to carry out activities such as, but not limited to, the following:
- a Digging or disruption to footpath/road reserve surface;
  - b Loading or unloading machinery/equipment/deliveries;
  - c Installation of a fence or hoarding;
  - d Stand mobile crane/plant/concrete pump/materials/waste storage containers;
  - e Pumping stormwater from the site to Council's stormwater drains;
  - f Installation of services, including water, sewer, gas, stormwater, telecommunications and power;
  - g Construction of new vehicular crossings or footpaths;
  - h Removal of street trees;
  - i Carrying out demolition works.

#### **During Demolition, Excavation or Construction**

- 25 **Piping of Stormwater to Existing Stormwater Drainage System**  
Stormwater for the land must be piped to Council's existing stormwater drainage system.
- 26 **Copy of Consent to be in Possession of Person carrying out Tree Removal**  
The applicant/developer must ensure that any person carrying out tree removal is in possession of this development consent, in respect to the tree which has been given approval to be removed in accordance with this consent.

27 **Restricted Hours of Construction Work**

The developer must not carry out any work, other than emergency procedures, to control dust or sediment laden runoff outside the normal working hours, namely, 7.00 am to 5.00 pm, Monday to Saturday, without the prior written consent of the Principal Certifying Authority and Council. No work is permitted on public holidays or Sundays.

Any request to vary these hours shall be submitted to the **Council** in writing detailing:

- a the variation in hours required (length of duration);
- b the reason for that variation (scope of works);
- c the type of work and machinery to be used;
- d method of neighbour notification;
- e supervisor contact number;
- f any proposed measures required to mitigate the impacts of the works.

Note: The developer is advised that other legislation may control the activities for which Council has granted consent, including but not limited to, the Protection of the Environment Operations Act 1997.

28 **Provision of Waste Receptacle**

The developer must provide an adequate receptacle to store all waste generated by the development, pending disposal. The receptacle must be regularly emptied and waste must not be allowed to lie or accumulate on the property other than in the receptacle. Consideration should be given to the source separation of recyclable and re-usable materials.

29 **Excess Excavated Material – Disposal**

Excess excavated material shall be classified according to the NSW Environment Protection Authority's Waste Classification Guidelines – Part 1: Classifying Waste (2014) prior to being transported from the site and shall be disposed of only at a location that may lawfully receive that waste.

30 The equipment cabin and monopole are to be painted in a pale eucalypt colour to blend in with surrounding vegetation.

**Prior to the Issue of the Occupation Certificate**

31 **Completion of Landscape Works**

The completion of the landscaping works as per the final approved Landscape Plan is required prior to the issue of Occupation Certificate.

32 The developer must make compensatory provision for the trees required to be removed as a result of the development. In this regard, one 100 litre container mature plant stock shall be placed in the general vicinity of the removed tree in consultation with the Russel Vale Golf Course Manager. The suggested species are *Melaleuca linariifolia*.

**Operational Phases of the Development/Use of the Site**

33 **Operational Aspects**

The facility shall be operated in accordance with all statutory requirements and the requirements of:

- Australian Communications and Media Authority; and
- Australian Radiation Protection and Nuclear Safety Agency.

34 **Maintenance of Site and its Facilities**

The site and its facilities shall be maintained in a proper and safe condition at all times throughout its lifespan.

35 **Removal of Facility, if Facility Becomes Redundant**

Should the facility become redundant, the facility shall be removed within thirty (30) days after the cessation of use and the site returned to natural state.

36 **Noise Restrictions**

The noise ( $L_{Aeq (15min)}$ ) emanating from the development must not exceed 5 dB(A) above the background noise level ( $L_{A90 (15min)}$ ) of the area at any boundary of the land.

37 **Loading/Unloading Operations/Activities**

All loading/unloading operations are to take place at all times wholly within the confines of the site or within the road reserve under an approved traffic control plan.

38 **Environmental Monitoring**

Within 3 months commissioning of the facility a report shall be submitted to Council confirming operations are in accordance with the submitted Environmental EME Report and that the levels of radiofrequency (RF) electromagnetic energy (EME) are compliant with the guidelines of the Australian Standard.

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