

in the phone being passed to GSM mode (3G coverage, 3G quality and 3G capacity being the main reasons).

2.3 Alternative sites considered and the precautionary principle

When looking at alternative sites there is a limit as to how far the 3G mobile base station can be located from the targeted coverage area (in this case the township of Uki). Even though 3G coverage from a mobile station may reach many kilometres out from the actual base station the greater the distance from the base station the greater degradation the 3G signal suffers. Signal degradation leads to commonly experienced problems such as dropping out, poor connectivity etc.

Alternative sites considered – (please refer to Map 1)

Candidate 1 – Lot 1 DP 574910 No 1529 Kyogle Road Uki – Hardings Construction Yard

A telecommunications facility at this location would have been prominent from the main street of Uki.

Candidate 2 – Lot 2 DP 581366 No 22-30 Aulfs Road Uki

Difficulties were encountered in sourcing power to this site. Additionally it was also anticipated that there would be difficulty in getting heavy machinery to the site (for construction) due to the steep gradient of the terrain.

Candidate 3 – Lot 53 DP 755754, Langes Road, Uki

Inability to obtain tenure approval from the property owner.

Candidate 4 – Water Treatment Works, end of Old Convent Road, Uki

As per candidate 1.

Candidate 5 – Water Reservoir at end of Grants Road, Uki

Existing layout of area around water reservoir is problematic. There was difficulty in locating an appropriate area for the facility to be erected.

Candidate 6 – Lot 4 DP 43844 1359 Kyogle Road, Byangum NSW

Insufficient space left on property to appropriately accommodate the proposed facility. Furthermore the existing house is already located in the prime area for any proposed telecommunications facility.

Candidate 7 – Property at end of Sunrise Place, Uki

As per candidate 3.

Candidate 8 – Working Quarry site off Smiths Creek Road, East of Uki

Site was discounted from a radiofrequency perspective because the 3G signal to Uki was blocked by terrain of a greater elevation to the west of the quarry. Basically, the main intended target of the 3G coverage, Uki Village, would have received no coverage from this location. Please see Figure 1 for a 3D illustration. Additionally the quarry is also a working quarry which also makes it difficult to secure an area that will not impede quarry activities now and in the future.

Figure 1. Elevation of quarry site in comparison to the higher elevated terrain located to the west. Location of quarry is indicated by yellow arrow. In comparison the proposed site, indicated by the blue arrow, has unobstructed signal propagation to the main residential areas of Uki in all directions.



Source: Google Earth Feb 2009

Candidate 9 - Site located around Mt Wollumbin

This site was very difficult to access by heavy machinery due to the steep terrain. It is also probable that the creation of a significant power easement (20m wide) requiring tree removal, would have been needed if this site had been progressed.

Candidate 10 – Lot 17 DP 778719, 19 Meadow Place, Uki

Candidate 10 is situated on elevated terrain outside the main Uki village area. This candidate has many attractive features for telecommunications facility siting including access, power and good vegetation cover.

9 December 2009

Tweed Shire Council
PO Box 816
Murwillumbah NSW 2484
Attention Mr Vince Connell – Director Planning & Regulation

Dear Sir,

**Re: Uki proposed Optus Mobile Phone facility - Summary of public meeting held 7 December 2009
6pm-8pm Uki Hotel**

Background

In response to Tweed Council's resolution at its November meeting that "*this application be deferred for presentation at a future Council meeting following the conduct of a public meeting by Optus in the Uki community in order to properly gauge community opinion on this proposal and report the outcome of that meeting to Council.*" Optus conducted a community briefing session on 7 December 2009 between the hours of 6pm to 8pm at the Uki Hotel.

Optus attendees were Howard Game (National Site Acquisition/Environment Manager) and Peter Collie (Project Manager). Petra Kovacs (Town Planner) from Daly International was also in attendance. In total, it was estimated that approximately 30-35 people visited the session. Barry Longland, Tweed Shire councillor, also attended the session briefly.

Material supplied by Optus included computer modelled radio frequency plots, 3D terrain maps, line of sight photographs, alternative site maps and information packs.

Both objectors and supporters voiced opinion about the Optus proposal on the night.

As requested the main issues discussed on the night are summarised below.

Key Issues

Venue location and date of session

Optus first requested the possibility of Council providing a venue however it was suggested that a private venue be first sought.

A complaint was made regarding the venue chosen by Optus which was the Uki Hotel. In endeavouring to find a suitable location Optus contacted the two churches located in Uki, the primary school, the Uki Café and the sporting club, all of which declined to hold the meeting. The Uki Hall of Arts was unavailable on the night. Peter Collie contacted Tweed Council for assistance whereby they suggested the Uki Hotel. The Uki Hotel was contacted and the publican was satisfied to allow Optus to proceed.

Whilst the venue is unusual, and not the usual choice for Optus, it was considered that having any venue in Uki was preferable to having to locate a venue outside of Uki.

One resident indicated that they did not want to attend the session because the venue did not have wheel chair access. It was offered to relay this to the publican who could possibly make access available. In addition it was offered that Optus could meet which this resident or that a teleconference could also be arranged. These options were refused. The reasons for the venue selection were relayed to the resident.

The date of the session, 7 December was chosen because:

- It was a date before Council public access
- It was the only date all Optus and Daly personal were able to attend

An advertisement was taken out in the Tweed Echo on Thursday the 4 December 2009 notifying of the public of the meeting. A mail out was also conducted to the residential areas around the proposed compound site.

Alternate sites

An alternative site was offered by a Uki resident, John Parsons, whose property is accessed off Hazelbrook Road, Uki. Optus generated radio frequency plots based on a 30m monopole simulated from the highest point on the property. Due to terrain factors in the area, the 3G coverage was directed to the south east direction away from the Uki Township. This site does not meet the coverage objectives of Optus. Line of sight to provide a transmission link, was also not achievable from this site. John Parson was present at the session and an explanation of the above was relayed to him.

Judy Magee, a Meadow Place resident, also suggested an area located off Bonnydoon Road, the Universal Peace Retreat Centre. The Ridgeline area of Bonnydoon Road was initially investigated by Optus. The area investigated was Lot 92 DP 755702, and was accessed off a dirt road that leads off Bonnydoon Road after contacting the nearest private landholder for assistance. This site is highly inaccessible to machinery because of the steep terrain. This site was addressed in the reply to submissions to council.

In regard to the Universal Peace Retreat Centre engineers identified the highest point on the property which is located to the north of the house in dense bushland. This highpoint marks the start of the ridgeline and a change in zoning from 1(a) Rural to 7(d) Scenic Escarpment zoning. Council has also mapped this area of bushland as having ecological significance which has severe implications on required tree removal. A high voltage power line will potentially require an easement clearing of 20m. Engineering have conducted preliminary analysis on Line of sight and have identified difficulties due to high terrain to the north west. To further confirm Line of Sight difficulties in this area a Line of Sight analysis was also conducted from the rural residential properties present at the end of Bonnydoon Road. The same constraint was encountered.

The site selection procedures and technological constraints were explained to numerous residents. Some residents indicated an understanding but others refused to acknowledge the constraints present and still insisted on Optus identifying alternative site.

Optus considers the issue of alternate sites as exhausted and consequently cannot reasonably pursue the matter further.

EME Concerns

A resident indicated that conducting an EME survey pre and post construction may assist in alleviating the EME concerns of some of the residents of Meadow Place Road. Optus has agreed to engage RADHAZ to conduct the survey in the event the DA is approved.

We understand that our efforts in relation to the timing and format of the meeting were not to the satisfaction of some residents, we do however feel that given the constraints noted above, the community was able to meet with Optus and a frank exchange of views on the proposal from all points of view was possible

Regards

Peter Collie
Project Manager