

15 November 2013



Mr K Winwood  
NSW Department of Planning and Infrastructure  
GPO Box 39  
SYDNEY NSW 2001

Dear Mr Winwood

**STATE SIGNIFICANT DEVELOPMENT NO.5251 - DUBBO ZIRCONIA PROJECT (DZP), TOONGI, DUBBO LOCAL GOVERNMENT AREA**

I refer to the exhibition of SSD No.5251 – Dubbo Zirconia Project (DZP). Council is very supportive of this project and has been involved in many discussions with the proponent over the past decade or so regarding the project. The DZP has the potential to provide significant economic benefits to Dubbo and the region if it proceeds. It is however, critical that there is an appropriate level of assessment of impacts of the proposal and the infrastructure required to support the project so as to minimise any potential impacts on the Dubbo community.

To this end, the following comments are provided in respect of the project and the Environmental Impact Statement (EIS) on behalf of Dubbo City Council.

**Infrastructure**

1. Council is overwhelmingly supportive of the proposal by Australian Zirconia Ltd (AZL) to reopen the Dubbo-Molong railway line between Dubbo and Toongi for the transport of the estimated 400,000 tonnes per annum of reagents and product. The re-opening of the line should be a priority and be conditioned to include/address the following:
  - (a) Vehicular level crossings at Wingewarra Street, Cobra Street (Mitchell Highway), Boundary Road and Macquarie Street to be controlled by flashing lights, bells and boom gates.
  - (b) Vehicular level crossings on the Obley Road at Cumboogle and Hyandra Creek to be controlled by flashing lights and bells (as a minimum). The road pavement at each crossing to be reconstructed to a suitable horizontal and vertical alignment as part of any reopening of same.
  - (c) A suitable level crossing to be provided at the Dundullimal Historic Homestead tourist attraction (private crossing) just outside of Dubbo on the southern side of the Macquarie River bridge crossing.

**All communications to:**

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CIVIC ADMINISTRATION BUILDING CHURCH STREET DUBBO NSW 2830 ABN 77 296 185 278

- (d) A suitable Stop Sign controlled crossing to be provided at the Bellevue Road (public road) level crossing.
- (e) Whilst the majority of former level crossings can generally be reinstated at a similar vertical elevation to their original, the rail crossing at Macquarie Street in Dubbo will need to match current, developed road levels approximately one metre lower than what existed in 1980 when nearby lands were still rural in nature.

Council has two trial longitudinal sections available demonstrating how the track can be regraded on both sides of the level crossing and will expect the track to be reconstructed accordingly. Option 1 has maximum track grades of 1%, no vertical curves and requires approximately 1,400 metres of track to be lowered; Option 2 has some grades in excess of 1%, vertical curves and requires 1,100 metres of track to be lowered.

- (f) The proponent will be expected to consult effectively with residents in the vicinity of the railway line who have not experienced a train using the track for nearly 30 years. This will be most important in the Margaret Crescent area of South Dubbo.
- (g) Fencing of the railway permanently will be an emotive issue for some community members, especially in the Margaret Crescent area where walking tracks have been established through regular usage by local residents. These walking tracks have been formalised by Council within the last 12 months as shared use pedestrian/cycling paths. The proponent and the Rail Infrastructure Corporation should be required to consult effectively with the local community on this issue.
- (h) Council is aware that major signalling upgrades with an estimated cost in the millions of dollars will be required in and around the 'Railway Triangle' in East Dubbo. Council expects these deficiencies to be addressed and overcome as part of the rail line recommissioning process.

Unacceptable delays are already experienced by motorists in Dubbo because of the non-automation of the existing system where trains transit from west to north via the Triangle, and this will be complicated further by trains having to transit from north to south and vice versa through the Triangle to access Toongi.

The level crossing at Cobra Street is less than one train length south of the Triangle and if trains are forced to stop there by inadequate signalling equipment, then the Mitchell Highway will be cut on a regular basis which is unacceptable to Council and presumably Roads and Maritime Services (RMS).

2. Unfortunately, various comments within the Environmental Impact Statement (EIS) do not give Council confidence that the Rail Line will be re-opened (and/or vigorously pursued by the proponent) which would then place all transport to be 'on-road' (in particular from Council's perspective onto the Obley Road - a Council-owned and maintained road).

In the absence of specific confirmation from the proponent regarding Option A – (Rail to Toongi), it is considered that likely condition(s) will need to be formulated around Obley Road being required to carry all of the transportation requirements for the DZP.

- (a) The EIS is unclear with regard to the total daily truck numbers (and truck movements) associated with Options B and C – Transportation to the site by road.

Throughout the reports, a Table of 'Daily Truck Movements/Numbers' is shown. This Table is then utilised within the EIS to state that *"the 'worst case scenario' of 158 daily heavy vehicle movements . . . ."* has been used. However, it is not known how this figure of 158 was arrived at. This issue requires further clarification and justification.

Section 2.7 gives a detailed list of reagents etc, proposed to be utilised for the DZP. Section 2.7.4 states approximately 16 trucks of limestone per day and Section 2.7.5 states approximately 17 tankers per week of 'quick lime' whilst Section 2.12.3.2 gives the example for delivery of *"the bulk reagents of sulphur, caustic soda, soda ash and hydrochloric acid"* being delivered by rail each week as being three rail movements per week X maximum gross weight per wagon to be 92t X on average 26 wagons, which would average 7,176 t (gross) per week.

Elsewhere within the EIS are figures on the delivery of diesel for the plant and machinery etc. It would be reasonable to expect to have all these deliveries etc tied into the Table of Daily Truck Movements/Numbers and cross-referenced to various sections within the EIS so that the daily heavy vehicle impact on the 'All Road Scenario' on Obley Road can be quantified.

- (b) Option B – Rail (to Dubbo)/Road. It is distinctly likely that B-doubles will be utilised in transportation of reagents to the DZP Site. The issue (number/consequence) of B-doubles being utilised needs to be addressed further in the EIS.
- (c) Whilst it would appear on face-value that substantial work (by the consultants) has been undertaken on the required Obley Road upgrades (bridge upgrades, level crossings, curve realignments, road widening, pavement upgrades and intersection upgrades), it would appear that more 'fine detail' of these works will be required. This was acknowledged by the proponent at a community meeting on 23 October 2013.
- (d) Clarification/details of the content to be contained within the proposed Voluntary Planning Agreement (VPA) – (in particular, the likely dollar contribution amount towards the ongoing maintenance of Obley Road over and above the physical upgrade of this road) is required before Council can give further consideration to this matter.
- (e) *"Implementation of a Construction Traffic Management Plan"*, would need to be fully endorsed (and approved) by Council. The EIS (page 2-85, Table 2.16) has stated that the anticipated daily traffic movements associated with the construction period to be in the order of 400 light vehicles, 18 heavy vehicles and two oversize vehicles per day. Part 11: Traffic Impact Assessment (Specialist Consultant Studies) reinforced this aspect. Section 2.6.1 (page 11-57) states *"There would be an estimated average of nine heavy vehicle deliveries per day for six days per week over an estimated 70 weeks."* This

aspect is likely to have a substantial impact on Obley Road, particularly prior to the proposed 'upgrading' works being undertaken (including the aspect of oversize and overmass delivery loads to the DZP).

- (f) Additional details (numbers and impact(s)) are also required regarding the transportation of reagent and other products to the DZP via roads currently not listed in the EIS (plus supporting consultancy studies), for example, transportation of reagents etc from Newcastle (via the Golden Highway) or from Sydney (via the Mitchell Highway) or from the west via the Mitchell Highway. Impacts of these additional heavy vehicles (number, size and movement of hazardous goods through town etc) must be considered.
- (g) It is highly unlikely that neither Council nor Roads and Maritime Services will support recommendations 4.2.1 and 4.2.2 contained within Part 11: Traffic Impact Assessment (Specialist Consultant Studies) for the 60km/hr speed zone along the Newell Highway to be relocated south of the Obley Road intersection and south of the Dundullimal Homestead access roadway.
- (h) Part 11: Traffic Impact Assessment (Specialist Consultant Studies), Section 4 Recommendations, Section 4.5 (page 11-74), Table 19, dot point 3, highlighted/recommended that a '*Code of Conduct*' be developed for the DZP. This issue is endorsed by Council however, should also extend to all staff (ie all employees) not just the '*contractors/drivers of heavy vehicles*'.

3. Other matters to be included/noted are provided in bold below:

- (a) Page ES-3. Fifth dot point under Approvals Required (and Section 2.1.3, page 2-10).
  - A Section 138 Permit, issued by the Dubbo City Council under the Roads Act 1993, for all works affecting classified roads, namely Obley Road, Toongi Road **and Benolong Road (plus any other public roads)**.

Note: These Section 138 Approval(s) are not only required for the proposed upgrading of Obley Road and Toongi Road but will also be required for any other utilities/infrastructure where crossing over, or under, public roads (ie construction of the gas main, water main etc).
- (b) Page 2-20 (Section 2.2.4.4) Level Crossings at Boundary Road (Dubbo) and Macquarie Street (Dubbo). One lane each way, single track **with a formed pedestrian path crossing**.
- (c) Pages 2-22 and 2-23 (continuation of Section 2.2.4.4), as per previous advice (letter to the NSW Department of Planning and Infrastructure, DG requirements, dated 1 May 2012; Council's Item 1.e), **Macquarie Street is not to be 'raised in elevation'**. Also, central islands and light posts plus pedestrian crib fencing, formed pedestrian paths with 'Red Man' warning lights and sirens etc to be installed at all four Dubbo crossings (this includes Boundary Road and Macquarie Street).

(d) Page 2-24. Cumboogle Road/**Belmont Road**.

(e) Page 2-26 (plus other pages within the EIS). First dot point.

- The pavement seal (Obley Road) would be increased to **10 metres** for the entire length of the road (except where **existing** bridge crossings prevent this).

Council's letter to the NSW Department of Planning and Infrastructure, dated 1 May 2012 (DG requirements), requested Obley Road to be reconstructed as a 10 metre seal, on a 12 metre formation. Within the EIS and Part 11, various suggestions are either an 8.5 metre seal or a 9 metre seal.

Council maintains its request for a 10 metre seal on a 12 metre formation. This width would enable 2 x 3.5 metre-wide sealed travel lanes (one in each direction); 1.5 metre-wide sealed road shoulder either side; plus a 1.0 metre-wide gravel shoulder on either side. Having regards to the aspect that Obley Road is extensively utilised by cyclists, is a school bus route and also acts as a scenic/tourist drive route (Molong-Cumnock-Yeoval-Dubbo), it is considered that a 10 metre seal (on a 12 metre formation) is required.

(f) Page 2-26. Fifth dot point.

- Five 2,400 mm x 1,500mm box culverts would replace the 450 mm reinforced **concrete** pipe at the Twelve Mile Creek crossing.

(g) Page 2-27, (Section 2.2.5.3 Toongi Road, third paragraph). In accordance with the recommended minimum road standard recommended by RMS, Toongi Road would be widened between Obley Road and the DZP site entrance to provide for two sealed lanes at least **four (4) metres wide (total of eight (8) metres sealed width) including the Wambangalang Creek crossing**. This would eliminate the need for traffic to move onto the unsealed shoulder to accommodate oncoming traffic.

In relation to this issue, it is stressed that Toongi Road is to be upgraded by and at full cost to the Applicant/Developer.

(h) Page 2-88 (Contingency Option B – Rail (to Dubbo)/Road (to Toongi). Third dot point.

- Left on Boothenba Road before crossing the **Coonamble** Rail Line at a signalled level crossing.

A general note on relevant parts within the EIS: The Dubbo-Coonamble Rail Line 'runs' roughly south-north, with Boothenba Road being a road crossing. The Dubbo-Merrygoen Rail Line is the line off the Dubbo-Coonamble rail line 'running' roughly west-east which has the Fletcher Railway Interchange spur line.

(i) Page 2-90. Obley Road Daily Truck Movements. Limestone from Geurie/Parkes. Are they shown in Table 2.16?

- (j) Page 2-93, Section 2.12.3.1. Transport Options A and B include a rail . . . . . The description of rail transportation therefore focuses on **Option A** using the upgraded Toongi-Dubbo Rail Line.
- (k) Page 2-101, Section 2.16.2 Public Safety. The Molong Branch Line from Dubbo East Junction is currently unfenced and used by local residents for recreational pursuits such as dog walking, jogging **and cycling**.
- (l) Page 4-236, last paragraph of Section 4.10.3 from previous page.
- The Obley Road Alignment: approximately 22 kilometre long and **27 metre wide** corridor for the proposed realignment of portions of Obley Road between the DZP site and Dubbo. (The 27 metre corridor would refer to inclusion of the 'clear zone.')
- (m) Page 4-262. There are three major creek crossings on Obley Road.
- Hyandra Creek: a 12 metre span, **steel** and concrete bridge providing a low flow crossing.
  - Cumboogle Creek: a **steel** and concrete bridge structure with 7 metre pavement.
- (n) Page 4-263. Second paragraph. Obley Road forms part of the Western Plains Tourist Circuit, is currently used by cyclists (including for annual events) and there is a shared pedestrian/cycleway from the Newell Highway to the **Dundullimal Historic Homestead tourist attraction**.
- (o) Page 4-305. Consultation with the Local Emergency Management Committee (LEMC) in relation to Traffic Incident/Potential Incident(s) etc will need to be undertaken as part of the required 'Transport Route Selection Study' and should be identified as such.
- The 'Transport Hazard' (Transport Route Selection Study) should be addressed as part of this EIS.
- (p) Page 5-18. It is considered that an education program for Staff on 'Fatigue Management' should be addressed as part of the 'Achieve safe and efficient transport operations' Desired Outcome/Action, maybe as part of 14.2.
- (q) Page 5-20. Trained Fire Fighter(s) (staff) including Fire Fighting Equipment should be addressed.
- (r) Closure of the unformed section of Toongi Road prior to commencement of operations of the Extractive Industry is required.
- (s) Pages 11-48 and 11-50 of Part 11 Traffic Impact Assessment (Specialist Consultant Studies) Sections 2.4.2 and 2.4.4 both the Wingewarra Street Rail Crossing and Boundary Road Rail Crossing. The crossings are located within a **50km/hr** speed zone.

## Open Space and Recreation

Council's Parks and Landcare Division has undertaken a detailed assessment of the proposal. Comments provided in relation to the proposal were provided to the NSW Department of Planning and Infrastructure, DG requirements, dated 1 May 2012. It appears that these matters have not been addressed in the EIS.

The comments are as follows:

- (a) The Dubbo – Molong rail corridor has become an important link in the open space network in the urban area of Dubbo. The role of the Dubbo – Molong rail corridor is reflected in the Open Space Master Plan adopted by Council in 2009.

As a result, Council requires on the western side of the rail line the minimum distance possible for safety from the rail track. This will allow the installation of a shared pathway between the road reserve and the fenced portion of the rail reserve. It is Council's preference that the main maintenance track for vehicles be located on the eastern side of the rail line in order for a minimum amount of the rail reserve to remain inaccessible.

Where the dashed line marked 'no. 4' intersects with the dashed line marked '2', Council requires provision of a pedestrian/bicycle crossing. This will allow integration of all pathways within the network and reduce the motivation by the public to damage a fence and access/cross the railway at a number of informal points.

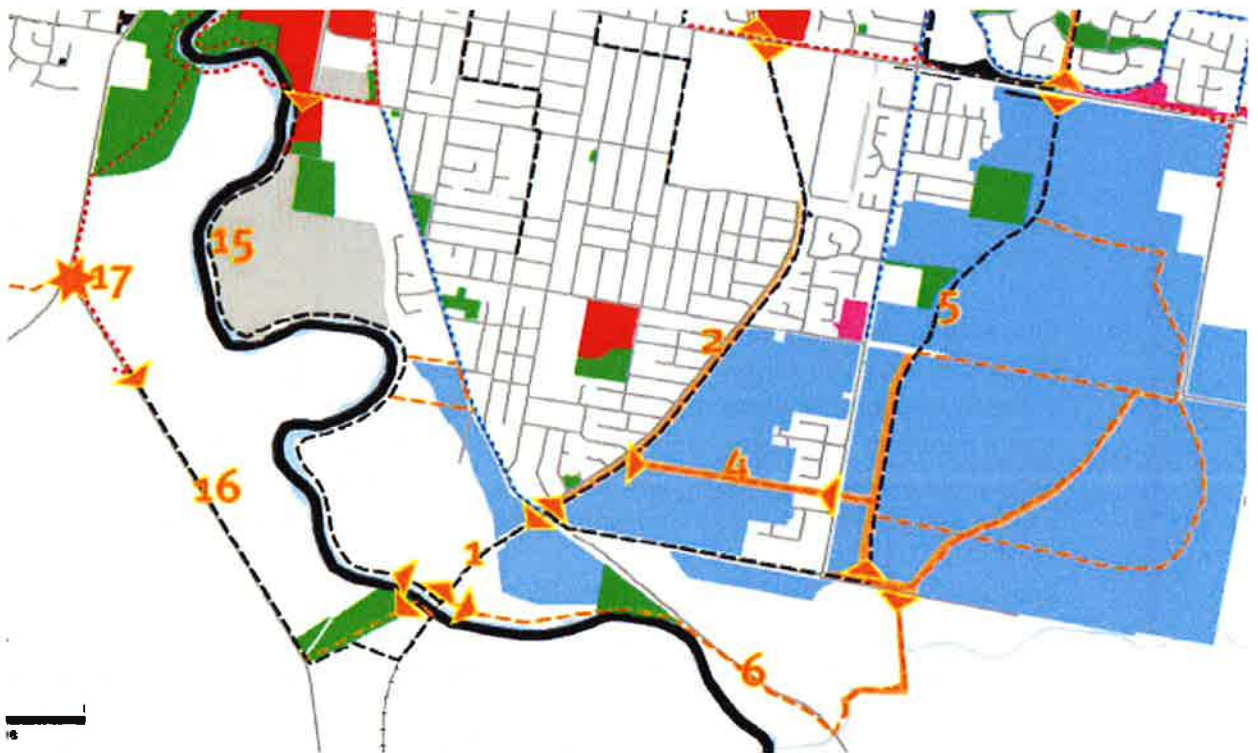


Figure 1: Detail from the Open Space Master Plan adopted by Council 23 March 2009, Volume 2. Map 7: Connectivity Projects (excerpt). The dashed line marked No.2 is defined as a shared pathway along the railway corridor.



- (b) There are two other crossings that exist for pedestrians and bikes. These will need to be formalised (see Figure 2 below) and could potentially be consolidated into one crossing utilising more of the rail corridor for north-south travel after crossing the actual line.



Figure 2: Pedestrian crossings that require formalisation.

- (c) Any fencing of the rail corridor as well as minimising the amount of space taken up to the west of the line should minimise the intrusiveness of the fence line. There are a number of areas in Dubbo where rail lines have substantial fences that are consistently vandalised and open to traversing by the public the majority of the time. A preliminary risk assessment undertaken by the Director Parks and Landcare Services has found that the main risk is small children crossing the rail line without supervision.
- (d) Substantial two metre fences are not required to keep small children out. The experience of Council is that substantial fences designed to prevent any access are easily accessed by children as young as eight years old up to 14 years of age. A preference would be for a 1.5 metre fence to be placed along the rail line on the western side that adjoins the above identified crossings. In relation to the colour of the fence, Council's preference would be for a black fence which would minimise the visual intrusiveness of a new fenceline.
- (e) Pedestrian crossings would require lighting, preferably of an LED low energy use variety.
- (f) Council has a new pathway corridor that runs alongside the rail line from Macquarie Street to the Macquarie River. It is understood that the rail line may require substantial upgrading. Council cannot move the pathway easement and would prefer any works to be restricted to the current extent of the fenced rail corridor in this precinct.
- (g) In the block between Cobra Street and Birch Avenue, there are similar issues with trees and shared pathway crossings. The minimising of enclosure to the west of the rail line should



continue from Margaret Crescent up to and including this block. This will minimise tree loss and will allow the installation of a shared pathway along the Chelmsford Avenue side of the railway corridor (see Figure 3 below). The railway crossings will have to be fenced appropriately as other existing crossings are in the urban area. Apex Oval East Dubbo football complex is a major node in the Open Space network.

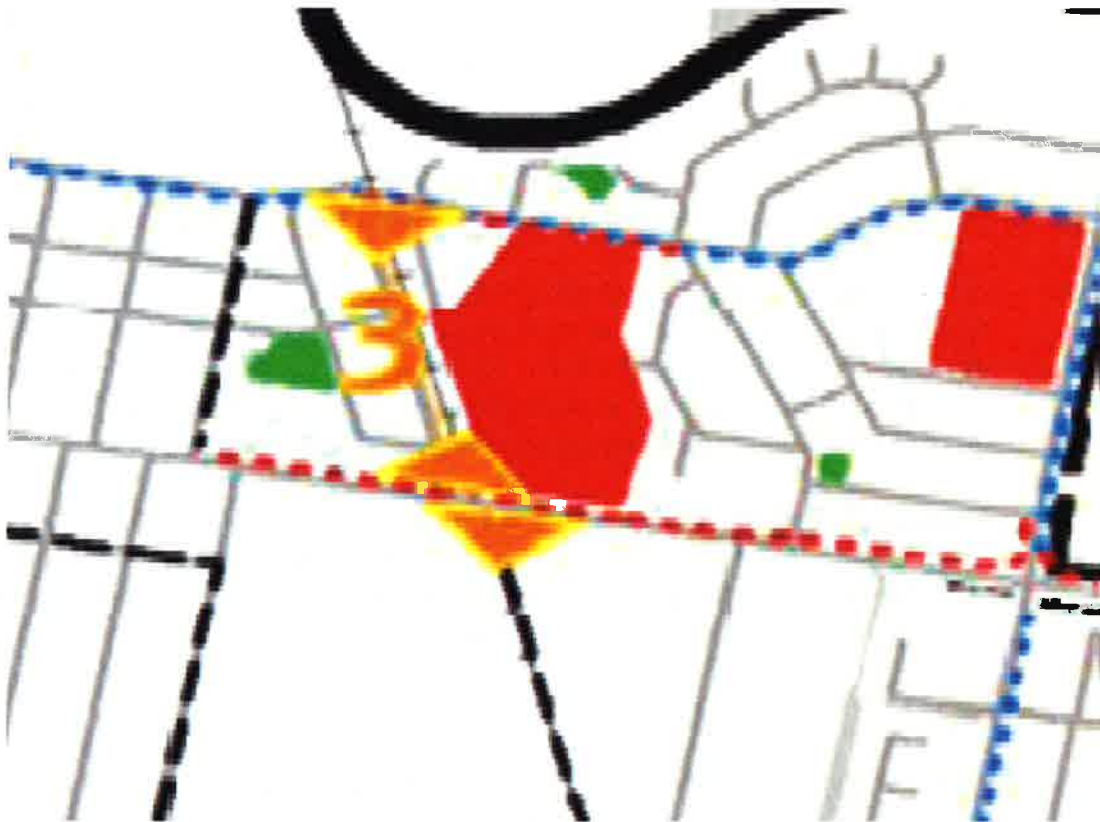


Figure 3: The line marked '3' is defined as a shared pathway link between the shared pathways that run along both Cobra Street and Birch Avenue (Open Space Master Plan Vol 2, Map 7).

### Environmental Impact

The principle environmental concerns raised in respect of the EIS are as follows:

(a) Flora and Fauna

- Fauna species impact, particularly Pink Tailed Worm Lizard, are offset well however, this should not justify a failure to offset vegetation impact to at least Tier 2 "no net loss" of the bio banking protocol. The use of additional fauna offsets within the biodiversity offset calculations was advised against by the Office of Environment and Heritage (OEH), particularly the use of raptors as has been done in the EIS.
- There is significant variation between stated areas and impacts in numerous places throughout the document which makes assessment difficult. The EIS is not consistent and in some areas not consistent with the final consultant's reports. The EIS should be redrafted to ensure internal consistency which may impact on calculations.

- It is clearly stated that the impact offset does not meet either Tier 1 or Tier 2, instead relying on Tier 3 "Approval through negotiation". Council is of the opinion that Tier 2 "no net loss" should be the target offset. This would require either additional lands being placed into the biodiversity offset area, or additional offset areas to be protected.
- Mapping does not appear to match calculated areas ie Map 4.33 compared to Table 2.22 in the EIS document. Examination of Map 4.33 shows an underestimation of CW212 in Table 2.22 of some seven hectares, or 26%. It is considered that this would increase the discrepancy between the proposed offset and that required to reach Tier 2 significantly. Vegetation CW212 is of high conservation significance requiring between six and 16 hectares to be offset for each impacted hectare (see dot point six below).
- All derived grasslands are defined as the less valuable CW213 rather than CW212. This has been explained by the consultant as a direction from OEH but it would be reducing the offset requirements significantly. Accurate accounting of derived grassland sources is impossible but the area of derived grassland could easily have been halved in relation to each vegetation community which would increase the required offset.
- Calculations used to define impact and offset values are inconsistent. A formula has been used to calculate vegetation impact while detailed assessment has been used to calculate offset and this provides dramatically different results for the same ecosystems or vegetation communities in the same landscape.

For instance:

An impact of between 9.3 and six credits per hectare (depending on the offset target, tier 1 or tier 2) is calculated as impact accounting for each of CW213, CW212 CW 138 and CW145.

The offset area is calculated to provide CW212 at 15.88 credits per hectare, CW213 at 10.08 credits/hectare, CW138 at 10.87 credits/hectare, CW143 at 9.29 credits/hectare, CW112 at 9.54 credits/hectare and CW121 at 103.59credits/hectare.

If all ecosystems being offset were calculated at the same level as the impact calculation, the available offset credits would reduce dramatically.

(NB: There is no CW121 being impacted by the project.)

- Environmental impact of widening or straightening 14 kilometres of Obley Road has not been adequately considered. Council's standard for road construction is the AustRoads guidelines which would require a 10 metre clear zone (ie timber free) from the outside edge of each traffic lane (ie 13.5 metres from the centreline on each side). Obley Road is well wooded and consistently one or other of the Grassy Box Gum woodland vegetation communities which are protected as Endangered Ecological Communities. Offsetting this impact has not been considered and will be significant. The option of reducing the speed limit on 14 kilometres of this road in order to reduce the clear zones

is unacceptable to Council or the community. An additional offset area is likely to be required to manage this significant unconsidered impact.

- The proposed offset area will be closed to the public for management purposes. Additional offsetting, which is required as above, at least should target lands adjoining Council's Reserve Estate (such as Gibraltar Rock Reserve or Cumboogie Flora Reserve as examples), which would add to the community estate and amenity while also contributing to project offsetting.
- Local extensions to the currently proposed Biodiversity Offset Area (BOA) are available in contiguous areas of vegetation adjoining the proposed BOA, adding these areas might bring the project up to Tier 2 status (no net loss of habitat being the goal).
- Mapping shows an area within the BOA which is Crown Land. The area in question is approximately 12.5 hectares and appears to be a Trig Reserve. Is this area calculated in the BOA area? If so, that would appear inappropriate as a Crown Reserve is already protected. Inclusion of this area in the offset calculations would significantly increase the calculated available offset credits incorrectly. If this has been done, then the available offset credits would fall further from the desired Tier 2 outcome.
- The proposed final, rehabilitated landscape sees very sparse vegetation (ie 200 metre spacings). Given that this is a 20 year project and while it is understood this is not a final plan within the EIS, it is treated as such. Either the language within the EIS or the reposed Rehabilitation Plan needs to be modified to provide clarity or a better environmental outcome.

**(b) Bushfire Prone Land**

The subject land is designated as being Bushfire Prone Land. As a consequence, the provisions of 79BA of the Environmental Planning and Assessment Act 1979 are invoked. This necessitates assessment of the development under the Planning for Bushfire Protection (2006) publication.

The assessment provided in the EIS (clause 4.14.3.3) appears to be incorrect as it makes references and determinations based on superseded provisions of the 'Planning for Bushfire Protection' publication. Specifically, the EIS makes a bushfire hazard assessment under superseded Appendix 3 of that document which was replaced in 2012. Accordingly, the EIS has failed to establish the Bushfire Attack Level (BAL) applicable to the development.

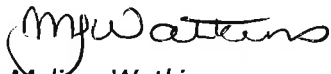
**Voluntary Planning Agreement**

The submitted Environmental Impact Statement makes numerous references to Voluntary Planning Agreement (VPA) and how this will address the additional pressures placed on the local infrastructure. However, Council is yet to view any such VPA which should form part of the current application, nor has it been provided with any details as to what the terms of the VPA are proposed to be.

As the Department would be aware, VPA negotiations can take some time and the outcomes will be critical in mitigating other impacts on Council's infrastructure and services. Accordingly, Council would urge the Department to request that the proponent commence these negotiations with Council as a priority and provide Council with the draft VPA for its consideration prior to development consent being issued.

Council appreciates the opportunity to comment on the proposal. Should you require any further information or clarification, please do not hesitate to contact the undersigned.

Yours faithfully

A handwritten signature in black ink, appearing to read 'Melissa Watkins', written in a cursive style.

Melissa Watkins

Director Environmental Services