

Appendix 8

Department of Water and Energy - Response to Agency



Warner Industrial Park Preferrer Project Report Concept Plan and Project Application

Precinct 14 WEZ

Sparks Rd and Hue Hue Rd

Warnervale

February 2009



**TERRACE
TOWER
GROUP**

Warner Business Park Pty Ltd
Part of the Terrace Tower Group

The following provides the issues raised by the Department of Water & Energy and the Proponent's response to those issues.

ISSUE	AGENCY RESPONSE	PROPONENT'S RESPONSE
Riparian protection	The concept plan for the proposed industrial subdivision provides a variable width riparian corridor associated with Buttonderry Creek (a third order watercourse). There is one proposed crossing of the creek. Whilst this corridor is generally acceptable and affords riparian protection consideration should be given to:	These matters will be addressed in more detail as part of the CC documentation, which will include an Environmental Management Plan for the conservation zone, which will be consistent with Wyong Council's Draft Buttonderry Creek Management Plan.
	<ul style="list-style-type: none"> Section 5(7) Water Management Principles of the Water Management Act 2000 	<p>Section 5(7) Water Management Principles states:</p> <p><i>7) In relation to controlled activities:</i></p> <p><i>(a) the carrying out of controlled activities must avoid or minimise land degradation, including soil erosion, compaction, geomorphic instability, contamination, acidity, waterlogging, decline of native vegetation or, where appropriate, salinity and, where possible, land must be rehabilitated, and</i></p> <p><i>(b) the impacts of the carrying out of controlled activities on other water users must be avoided or minimised</i></p> <p>A plan of management has been prepared for Buttonderry Creek by Wyong Shire Council. Works will be undertaken in accordance with this plan of management. A Vegetation Management Plan has also been prepared for the industrial zoned land, which provides measures to minimise land degradation. Stormwater runoff from the site will be stored and treated onsite prior to being released to Wyong Council's integrated water cycle management scheme, and further design work and management requirements will be undertaken as part of the Construction Certificate documentation.</p>
	<ul style="list-style-type: none"> DWE Guidelines for Controlled Activities (February 2008) in respect of Core Riparian Zones (CRZ) widths, Riparian Corridors, Vegetation Management Plans and Watercourse crossings. 	<p>The 30m wide span bridge crossing at Buttonderry Creek will provide for the natural flow channel of the creek and overbank flood flows on each side of the channel. The road way to the east and west of the bridge will comprise compacted fill material with dense groundcover plantings to stabilise the fill material.</p> <p>This bridge crossing has been located at the most narrow section of Buttonderry Creek. While the core riparian zone retained at the point of the bridge crossing is 30 metres wide the core riparian zone widens out to the north and south of the bridge crossing point to achieve widths of between 90-150 metres within a distance of 200 metres from the bridge crossing point. Therefore, excluding the 30 metre wide core riparian zone at the bridge crossing point, the section of Buttonderry Creek for a distance of 200 metres north and south of the bridge crossing point achieves a core riparian zone with an average width of 120 metres wide.</p> <p>This average width of core riparian (120 metres) excludes areas required for stormwater treatment measures (gross pollutant traps, sediment basins and created wetlands or the like).</p>

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		<p>The footprint of the bridge has been minimised to further reduce its impact on the Buttonderry Creek corridor. This will be subject to more detailed investigation as part of the CC documentation, which will require input from an appropriately qualified ecological consultant.</p> <p>The Guidelines for Riparian Corridors (Department of Water & Energy) identify that the core riparian zone for third order watercourses should be assessed on a merits based approach with consideration of the riparian function, site characteristics and long term land use. These matters are relevant to the proposed bridge crossing of Buttonderry Creek. The bridge design has incorporated stream flow analysis and the findings of the Integrated Water Cycle Management Strategy for the Wyong Employment Zone to ensure that the stream flow characteristics are not significantly affected by the road crossing.</p> <p>The creek crossing has also been included as part of the ecological and threatened species assessments for Precinct 14 and the WEZ lands. These reports actually considered concrete box culverts, not the open bridge design currently proposed. The Biocertification Report and WEZ Ecological Plan of Management (Draft) have been prepared with consideration of the location and constraints of the proposed creek crossing. The long term management of the Buttonderry Creek riparian corridor has been covered in the WEZ Ecological Plan of Management. This Plan details the long term ecological planning objectives and management requirements for the aquatic and terrestrial habitats of the Buttonderry Creek corridor, which included provisions for a crossing of the creek and incorporation of stormwater management measures.</p> <p>Therefore the overall planning (layout) of the Precinct 14 land and ecological provisions for the Buttonderry Creek corridor have been fully integrated into the design of the creek crossing area and adjoining sections of the riparian corridor. These long term conservation outcomes, rehabilitation proposals and management procedures have been developed to ensure that the overall ecological and hydrological integrity of the creek corridor is both maintained and improved</p>
	<ul style="list-style-type: none"> Stormwater detention/capture works and any Asset Protection Zones for bushfire protection should not be located within the CRZs adjacent to Buttonderry Creek (recommended CRZ a minimum width of 30m from the top of each of the banks of Buttonderry Creek). 	<p>Asset protection zones have been identified on the industrial zone land (Refer Figure 1 Bushfire Protection Assessment Report Appendix 12 of the Environmental Assessment).</p> <p>Stormwater detention/capture works have been located outside of the CRZ of 30m. Refer Concept Plan and Water Sensitive Urban Design Plan – Appendices 1 and 17 of the Preferred Project Report. The 30m CRZ should be treated with some flexibility as the riparian zone will be subject to a detailed environmental management plan as part of the Construction Certificate documentation.</p>