Our Ref: 21086 Warner Industrial Park – Modification Advice – Assessment of potential impacts to biodiversity values
Via: email

Date: 17 December 2021

Attn: Major Projects
Department of Planning,
Infrastructure and the Environment
NSW Government

To whom it may concern,

RE: WARNER INDUSTRIAL PARK – MODIFICATION ADVICE – ASSESSMENT OF POTENTIAL IMPACTS TO BIODIVERSITY VALUES

MJD Environmental has been engaged by Warnervale LF Pty Ltd to prepare advice pertaining to the modification of the Project Approval for the Warner Industrial Park development at Warnervale (Warner Industrial Park Industrial Development – Stage 1 and 2 Project Application – MP07_0162), hereafter referred to as the 'WIP' or 'site'.

Warnervale LF Pty Ltd seeks amendment to the Project Approval to among other aspects update the stormwater and flooding infrastructure in line with current standards and to accommodate Central Coast Council's (CCC) preferred stormwater management strategy, noting this has changed since the original approval. This modification advice will assess the potential impacts that these amendments will have on biodiversity within the Conservation Area which includes the riparian corridor of Buttonderry Creek and the wildlife dispersal corridor along the M1 Motorway.

In order to satisfy that the modification will not increase the impact on biodiversity values within and surrounding the proposed development area of the WIP, the results of this ecological assessment have been presented below and compiled as per "*Attachment A – Information to include with biodiversity development assessment report waiver request – Table 1: Biodiversity development assessment report waiver request information requirements"* (DPIE 2019) – refer to **Table 1** and **2** below.

We note that this appraisal is to be read in conjunction with the Modification report prepared by ADW Johnson. The modification report contains important contextual information and an analysis of the exiting major project approval arrangements as they relate to this biodiversity modification advice.

Table 1 Biodiversity development assessment of potential impacts to biodiversity values information requirements

Admin	
Proponent	Warnervale LF Pty Ltd
Project ID	Warner Industrial Park Industrial Development – Stage 1 and 2 Project Application (**MP07_0162**)

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Person(s) completing Table 2	MJD Environmental (Aust) Pty Ltd: Ross Duncan (B. Env. Sc.); 5 years experience in Ecological consulting assessment; and Matt Doherty (BLMC, BAM Assessor BAAS17044); 20 years experience in environmental assessment.
Site Details	
Site Location	The site is located adjacent to Sparks Road, Hue Hue Road and the M1 Motorway, including Lots 4, 6, 7 & 8 DP239704 and Lots 15, 16, 17, 18, 19, 25 &26 DP259530
LGA	Central Coast
Description of Existing Development Site	The site comprises 104.16ha of gently undulating land with slopes of less than five (5) degrees. The site is bound by Sparks Road to the south-west; Hue Hue Road to the north-west; the M1 Motorway to the south-east; Kiar Ridge Road to the north; and undeveloped vegetated lands to the east. Buttonderry Creek, a third order watercourse, traverses the site in a north west to south east direction crossing under the M1 Motorway via 4200W x 4000H concrete box culverts. The site is located within the IN1 Industrial Zone which contains the proposed subdivision lots and roads and the E2 Environmental Conservation Zone which contains retained ecological lands including a 100m wide rehabilitated corridor across Buttonderry Creek; and a 50m corridor along the M1. Stormwater infrastructure; utilities and a bridge over Buttonderry Creek are also located within the E2 Zone. In order to offset approved ecological impacts from the Project Approval, a combination of land dedication (and improvement) through the abovementioned corridors; and payment of contributions to Council to be used towards the purchase of conservation land and rehabilitation of those lands elsewhere within the Wyong Employment Zone (WEZ), was proposed.
Location and Site Map	Refer to **Attachment 1**
Proposed Development	
Project Description	The proposed development is described as the staged development of the Warner Industrial Park summarised as follows: ▪ Torrens title subdivision to create 90 lots for industrial and ancillary uses; ▪ Bulk earthworks included site preparation, vegetation clearing and site remediation; ▪ Provision of on-site infrastructure including stormwater, roads and service infrastructure; ▪ Landscape works and rehabilitation of conservation areas; ▪ Dedication of conservation lands to Council; ▪ Construction of two site entries at Sparks Road and Hue Hue Road; ▪ Construction of a bridge across Buttonderry Creek; and ▪ Temporary stockpiling.
Existing Approval	The site has an existing development approval (**Ref: MP07_0162 Dated: 27 August 2010**) issued by the Minister for Planning under Section 75J of the Environmental Planning and Assessment Act 1979. A copy of the Project Approval (**Attachment 4**) and Approved Subdivision Plan (**Attachment 2**) has been provided.
Proposed Site Plan	Refer to **Attachment 3**

For Impacts on Biodiversity Values refer to **Table 2** (below) and **Attachments.**

Ecological Appraisal

Notwithstanding the existing Project Approval for the site, the scope of this appraisal is to investigate ecological matters for consideration in relation to the modification of stormwater infrastructure works on site to satisfy that the modification will not increase the impact on biodiversity values. This ecological assessment aims to identify matters potentially applicable to the site under the Biodiversity Conservation Act 2016 (BC Act). The following was informed by desktop research, review of expert reports and a basic onsite assessment to determine the ecological characteristics of the site. Several documents were utilised when preparing this document.

The following synopsis describes the findings of the relevant reports:

Forest Fauna Surveys Pty Ltd and Eastcoast Flora Survey (2007) Ecological Investigations – Wyong Employment Zone (WEZ)

A summary of ecological reporting prepared by Forest Fauna Surveys Pty Ltd and Eastcoast Flora Survey (2007), which covers the entire Wyong Employment Zone (Warnervale Business Park and Airport Lands Precinct 11 & 13 and Precinct 14). The ecological investigations relating to the WIP documented:

- *Grevillea parviflora subsp. parviflora* and *Melaleuca biconvexa* have been previously recorded within the Development Area. *Angophora inopina* was also recorded within the E2 zoned conservation land to the north east of the Development Area;
- Several threatened fauna species have been previously recorded within the Development Area;
- Endangered Ecological Community (EEC) Swamp Sclerophyll Forest, listed under the TSC Act (repealed), now under the BC Act, occurs within the site and will be impacted by the approved project works;
- EEC Alluvial Riparian Blackbutt Forest listed under the TSC Act (repealed), now listed under the BC Act, occurs within the site and will be impacted by the approved project works;
- Threatened flora and fauna species recorded by ecological investigations (Murray & Bell 2007) within the WIP, neighbouring precincts, conservation reserves, or assessed as likely to occur, are considered within this modification advice with respect to potential indirect impacts resulting from project works, namely habitat disturbance within the site;
- Vegetation communities occurring within the site include:
    - MU 20 Alluvial Floodplain Shrub Swamp Forest – EEC
    - MU 28 Narrabeen Buttonderry Footslopes Forest;
    - MU 30 Narrabeen Dooralong Spotted Gum – Ironbark Forest; and
    - MU 43a Alluvial Riparian Blackbutt Forest – EEC.
- Important vegetated corridors exist within the site, the riparian zone of Buttonderry Creek was identified by Smith (2002) as important Squirrel Glider connectivity areas. The vegetated M1 Motorway interfaces also provides a wildlife dispersal corridor that will be consolidated and improved as part of this Project Approval.

Wyong Shire Council (2008) Wyong Employment Zone Ecological Plan of Management – Wyong Employment Zone

This document provides a comprehensive assessment of the rezoning and development of WEZ, exploring protection measures and management strategies for environmental, economic and cultural factors. This includes the retention of the riparian corridor of Buttonderry Creek.

Conacher Environmental Group (2008) Vegetation Management Plan – Precinct 14

A summary of ecological reporting prepared by Conacher Environmental Group (2008), which identifies the flora and fauna characteristics of the proposed Warner Industrial Park based on the previously described *Forest Fauna Surveys Pty Ltd and Eastcoast Flora Survey (2007) Ecological Investigations – Wyong Employment Zone (WEZ).*

Flora

In summarising the findings of ecological reporting prepared for the WIP, the following threatened flora species occur or could potentially occur within the site:

Threatened Flora Likely to Occur

Four threatened species (*Angophora inopina, Grevillea parviflora, Melaleuca biconvexa* and *Tetratheca juncea*) as listed in the Threatened Species Conservation Act (1995) and the Environmental Protection and Biodiversity Conservation Act (1999) were observed within the subject site by Bell and Murray (2007).

It is considered that there is suitable habitat for *Acacia bynoeana, Angophora inopina, Callistemon linearifolius, Caladenia tessellata, Grevillea parviflora* subsp *parviflora, Melaleuca biconvexa, Syzygium paniculatum, Rhizanthella slateri, Rutidosis heterogama* and *Tetratheca juncea* within the WIP.

Vegetation Communities

Vegetation communities occurring on Site were identified and mapped during surveys conducted and reported on by Murray & Bell (2007).

Murray & Bell (2007) determined three vegetation communities to be present within the site. It is to be noted that, for the purpose of this modification advice, mapping undertaken by Bell (Murray & Bell 2007) has been modified in areas where current vegetation conditions no-longer reflect the vegetation described previously within the site. Specifically, in areas previously unclassified due to a lack of canopy species or in areas previously defined as Unspecified Canopy Only, which now appear to be a continuation of surrounding vegetation communities. Vegetation communities are classified in accordance with the Mapping Units (MU) of the Wyong Local Government Area defined by Bell (2002).

MU 30 Narrabeen Dooralong Spotted Gum – Ironbark Forest encompasses the majority of the site, in a mosaic of a fully formed community and regrowth form. Small areas of MU 20 Alluvial Floodplain Shrub Swamp Forest in Canopy Only formation (EEC) and Regrowth formation are also present abutting the historical riparian zone associated with a 2nd order watercourse within the site. Areas of Unspecified Canopy Only are mapped within the northeast of the site, these areas could not be extrapolated into a MU community due to a lack of neighbouring classified vegetation.

Additionally, MU 43a Alluvial Riparian Blackbutt Forest (BC Act EEC – River Flat Eucalyptus Forest on Coastal Floodplains) is associated with the drainage line of Buttonderry Creek and abuts the western boundary of the site. Other surrounding vegetation is continuous of the vegetation communities described within the site.

MU 20 - Alluvial Floodplain Shrub Swamp Forest

Occurs within the broad drainage lines of the tributaries of Buttonderry Creek, supporting vegetation variously dominated by *Eucalyptus amplifolia* subsp. *amplifolia, Eucalyptus robusta, Angophora floribunda* and *Eucalyptus resinifera,* with a sub-canopy of *Melaleuca linariifolia* and *Melaleuca decora.* A small area of the community in a Canopy Only formation exists within the site, where past land use has eliminated the mid-story. This patch is considered part of the Swamp Sclerophyll Forest EEC. An area of the regenerating community exists just north of the canopy-only patch, where previously cleared.

MU 28 - Narrabeen Buttonderry Footslopes Forest

The community occurs in areas of higher elevation within the site, defined by canopy and sub-canopy species *Angophora Costata, Syncarpia glomulifera, Eucalyptus umbra, Melaleuca decora* and *Eucalyptus fibrosa*. Three forms of this community exist within the site:

- the community in its full formation;
- a canopy only formation; and
- and a regrowth formation.

Where present, the understory consists of species such as *Banksia spinulosa, Melaleuca nodosa, Bossiaea obcordata, Epacris pulchella Leptospermum trinervium, Goodenia heterophylla, Lomandra obliqua, Themeda triandra,* and *Entolasia stricta*. A denser cover of *Melaleuca* species is present in areas where clearing or grazing has occurred in the past.

MU 30 - Narrabeen Dooralong Spotted Gum-Ironbark Forest

Defined as an open forest dominated by Spotted Gum (*Corymbia maculata*) and Ironbark's (predominately *Eucalyptus fibrosa*) with a sparse mid-story of shrubs such as *Daviesia ulicifolia* and *Podolobium ilicifolium* and an understory of grasses such as *Themeda triandra, Entolasia stricta, Imperata cylindrica* var. *major,* and *Microlaena stipoides var. stipoides*. Dense thickets of *Melaleuca nodosa* are typical in areas of disturbance, where previous clearing or under-scrubbing has occurred.

MU 43a: Alluvial Riparian Blackbutt Forest

This vegetation community was only found in association with Buttonderry Creek as it flows through the site. Alluvial Riparian Blackbutt Forest equates to the Alluvial Tall Moist Forest of NPWS (2000). Dominant canopy species commonly associated with this vegetation community type include *Eucalyptus pilularis, Corymbia maculata* and in places *Eucalyptus Saligna*, as well as sub-canopy species such as *Melaleuca biconvexa* and *Melaleuca linariifolia*, whilst *Gahnia clarkei was the dominant plant amongst herbs and sedges.* It is noted that this vegetation community is closely associated with major watercourses, generally occupying a limited habitat niche with the area within the site being of better than average condition. This patch is considered part of the River Flat Eucalypt Forest EEC.

Fauna

In summarising the findings of ecological reporting prepared for the WIP, the following threatened fauna species occur or could potentially occur within the site:

Threatened Fauna Likely to Occur

Five threatened species *Calyptorhynchus lathami* (Glossy Black Cockatoo), *Petaurus norfolcensis* (Squirrel Glider), *Miniopterus australis* (Little Bent-wing Bat), *Miniopterus schreibersii oceanensis* (Eastern Bent-wing Bat) *and Scoteanax rueppellii* (Greater Broad-nosed Bat) as listed in the Threatened Species Conservation Act (1995) and the Environmental Protection and Biodiversity Conservation Act (1999) were observed within the site by Bell and Murray (2007), whilst *Crinia tinnula* (Wallum Froglet) was previously described on site.

A summary of previous ecological reporting considered that there is a total of thirty seven (37) threatened fauna species that had the potential to occur within suitable habitat within the site. Investigation of the current BioNet and Protected Matters Search Tool resulted in a total of sixty six (66) threatened fauna species that had the potential to occur within a 10km buffer of the site.

Table 2 Impacts of the proposed development on biodiversity values

Biodiversity Value	Meaning	Relevant	Explain and document potential impacts including additional impacts prescribed under the BC Regulation
Vegetation abundance 1.4(b) BC Regulation	Occurrence and abundance of vegetation at a particular site	Yes	- The modification aims to reduce the impact on native vegetation on the site by reducing the total impact area from the original Project Approval. Further, the Proponent proposes to pay for the biodiversity contributions for Stage 1A, 1B and 1C prior to the Subdivision Certificate for Stage 1A; in essence bringing forward the payment of contributions. - This incorporated with the requirement to update the stormwater and flooding infrastructure to be in line with current standards and to accommodate CCC's preferred stormwater management strategy (noting this has changed since the original approval) has brought about a modification to the original design. - Vegetation on the site is described above in the Ecological Appraisal. Vegetation that will be impacted by the current Project Approval includes two separate EECs (as listed in the Ecological Appraisal) and an area of high quality habitat within the Conservation Area. - This modification would reduce the extent of vegetation disturbance within the Conservation Area by 1.37ha whilst improving the sites stormwater quality and capacity whilst also increasing the width of the wildlife dispersal corridor along the interface with the M1 Motorway. Efforts have been made during the design phase to reduce the biodiversity impacts of the works and minimise the extent of disturbance in line with Conditions 2.37 and 2.38 of the Project Approval (**Attachment 3**). - Two EECs occur within the site; River Flat Eucalypt Forest on Coastal Floodplains and Swamp Sclerophyll Forest on Coastal Floodplains. These areas of EEC were to be impacted as part of the Project Approval, with the overall extent of this impact to be reduced by 0.0613ha as part of this modification.
Vegetation integrity 1.5(2)(a) BC Act	Degree to which the composition, structure and function of vegetation at a particular site and the surrounding landscape has been	Yes	- The Project Approval requires the proponent to demonstrate that the intended works within the Conservation Area minimise the extent of disturbance; whilst also incorporating a requirement for the production and implementation of a Vegetation Management

Biodiversity Value	Meaning	Relevant	Explain and document potential impacts including additional impacts prescribed under the BC Regulation
	altered from a near natural state		Plan (VMP). This VMP shall detail the rehabilitation works within the Conservation Area, the stabilisation of Buttonderry Creek and the management controls during bridge construction. - The VMP will require the ongoing management of native vegetation within the Conservation Area and hence will improve the composition, structure and function of the vegetation and ecosystems within the Conservation Area and the wildlife dispersal corridor. These VMP works will include weed management, stabilisation and revegetation works to ensure that important conservation areas, riparian vegetation and retained attributes of the site are properly protected, managed, maintained and enhanced in a manner that is responsive to impacts associated with the approval. - As discussed in the pre-text, the proposal will lead to a reduction in area of impact, however and importantly, impacts are considered to have been accounted for in the concept approval, with consideration to minimising disturbance within the Conservation Area.
Habitat suitability 1.5(2)(b) BC Act	Degree to which the habitat needs of threatened species are present at a particular site	Yes	- The extent of disturbance for the habitat needs for threatened species and communities within the site will be reduced as part of this modification. In line with Conditions 2.37 and 2.38 of the Project Approval, the proponent must demonstrate that the intended works minimise the extent of disturbance within the Conservation Area and have subsequently revised the original approved concept plan to further reduce the extent of disturbance on both the EECs present and the high quality vegetation as determined by Bell and Murray (2007). - It is likely that the Proposal will have multiple positive impacts on the sites threatened species and / or communities. - The improvement of composition, structure and the function of vegetation on site through the implementation of the VMP within the Conservation Area and the wildlife dispersal corridor. The VMP will ensure that important conservation areas, riparian vegetation and retained attributes of the site are properly protected, managed, maintained and enhanced in a manner that is responsive to impacts associated with the approval in line with the Project Approval. - The improvement and consolidation of the retained vegetation within the wildlife dispersal corridor will aid the movement of threatened species through the surrounding landscape. This area was identified as an important dispersal corridor for the *Petaurus norfolcensis* (Squirrel Glider). The extent of this impact along the M1 Motorway will be reduced by 0.95ha as part of this modification. - The proposed bridge across Buttonderry Creek could also to constitute man-made habitat for threatened species such as Microchiropteran Bats.

Biodiversity Value	Meaning	Relevant	Explain and document potential impacts including additional impacts prescribed under the BC Regulation
			- The stormwater and flooding infrastructure will provide habitat to threatened species and will improve the water quality of stormwater generated by the development. - The Project Approval also requires the installation of nest boxes withing the Conservation Area on a one-to-one basis to offset impacts over the proposed development. These will provide habitat and refuge for species of threatened fauna within the Conservation Area and wildlife dispersal corridor.
Threatened species abundance 1.4(a) BC Regulation	Occurrence and abundance of threatened species or threatened ecological communities, or their habitat, at a particular site	Yes	- It is considered that there is suitable habitat for the following flora within the site: *Acacia bynoeana*, *Angophora inopina*, *Callistemon linearifolius*, *Caladenia tessellata*, *Grevillea parviflora subsp parviflora*, *Melaleuca biconvexa*, *Syzygium paniculatum*, *Rhizanthella slateri*, *Rutidosis heterogama* and *Tetratheca juncea* within the subject site. Four threatened species (*Angophora inopina*, *Grevillea parviflora, Melaleuca biconvexa* and *Tetratheca juncea*) were observed within the subject site by Bell and Murray (2007). These individuals will not be impacted by these modifications. - Two EECs occur within the site; River Flat Eucalypt Forest on Coastal Floodplains and Swamp Sclerophyll Forest on Coastal Floodplains. These areas of EEC were to be impacted as part of the Project Approval, with the overall extent of this impact to be reduced by 0.0613ha as part of this modification. - Thirty seven (37) species of threatened fauna were known to occur within the area as part of previous investigations and reports. Five threatened species *Calyptorhynchus lathami* (Glossy Black Cockatoo), *Petaurus norfolcensis* (Squirrel Glider), *Miniopterus australis* (Little Bent-wing Bat), *Miniopterus schreibersii oceanensis* (Eastern Bent-wing Bat) and *Scoteanax rueppellii* (Greater Broad-nosed Bat) were observed within the subject site by Bell and Murray (2007) and *Crinia tinnula* (Wallum Froglet) was previously described on site. Additionally, two threatened fauna species (*Pteropus poliocephalus* (Grey-headed Flying Fox) and *Mormopterus norfolkensis* (Eastern Freetail Bat) have been detected on nearby or adjoining land during fauna surveys. Current searches of BioNet and the PMST return a total of sixty six (66) threatened fauna species for the area. - The extent of disturbance for the habitat needs for threatened species and communities within the site will be reduced as part of this modification. In line with Conditions 2.37 and 2.38 of the Project Approval, the proponent must demonstrate that the intended works minimise the extent of disturbance within the Conservation Area and have subsequently revised the original approved concept plan to further reduce the extent of disturbance within the Conservation Area including; both the EECs present and an

Biodiversity Value	Meaning	Relevant	Explain and document potential impacts including additional impacts prescribed under the BC Regulation
			area of the high quality vegetation as determined by Bell and Murray (2007). - The modification will have no additional impacts in terms of vehicle strikes, noting that no amendments are proposed to the road or lot layout. - No additional demolition of potential microbat habitats is proposed as part of the modification; with the construction of the bridge and stormwater infrastructure potentially creating habitat for these species. - No additional impacts on threatened species habitat associated with non-native vegetation is proposed as part of the modification. - No additional impacts on threatened species habitat associated with non-natural water bodies is proposed as part of the modification.
Habitat connectivity 1.4(c) BC Regulation	Degree to which a particular site connects different areas of habitat of threatened species to facilitate the movement of those species across their range	Yes	- The proposed modifications will improve the composition, structure and the function of vegetation on site through the implementation of the VMP within the Conservation Area and the wildlife dispersal corridor, as well as the reduction in vegetation impacts described above. The VMP will ensure that important conservation areas, riparian vegetation and retained attributes of the site are properly protected, managed, maintained and enhanced in a manner that is responsive to impacts associated with the approval in line with the Project Approval. - The improvement and consolidation of the retained vegetation within the wildlife dispersal corridor will aid the movement of threatened species through the surrounding landscape. This area was identified as an important dispersal corridor for the *Petaurus norfolcensis* (Squirrel Glider). The extent of this impact along the M1 Motorway will be reduced by 0.95ha as part of this modification. - The construction of a bridge rather than a road and culverts over Buttonderry Creek greatly assists in maintaining fauna passage and maintenance of genetic dispersal as well as greatly reduce the impact of the road and facilitate the movement of threatened species along the Buttonderry Creek riparian corridor within the Conservation Area. Vegetation will be improved as part of the VMP and threatened species will be capable of moving above or below the new bridge Rather than crossing the road.
Threatened species movement 1.4(d) BC Regulation	Degree to which a particular site contributes to the movement of threatened species to maintain their lifecycle	Yes	- The improvement of composition, structure and the function of vegetation on site through the implementation of the VMP within the Conservation Area and the wildlife dispersal corridor. The VMP will ensure that important conservation areas, riparian vegetation and retained attributes of the site are properly protected, managed, maintained and enhanced in a manner that is responsive to impacts associated with the approval in line with the Project Approval. - The improvement and consolidation of the retained vegetation within the wildlife dispersal

Biodiversity Value	Meaning	Relevant	Explain and document potential impacts including additional impacts prescribed under the BC Regulation
			corridor will aid the movement of threatened species through the surrounding landscape. This area was identified as an important dispersal corridor for the *Petaurus norfolcensis* (Squirrel Glider). The extent of this impact along the M1 Motorway will be reduced by 0.95ha as part of this modification. - The construction of a bridge rather than a road and culverts over Buttonderry Creek greatly assists in maintaining fauna passage and maintenance of genetic dispersal as well as greatly reduce the impact of the road and facilitate the movement of threatened species along the Buttonderry Creek riparian corridor within the Conservation Area. Vegetation will be improved as part of the VMP and threatened species will be capable of moving above or below the new bridge Rather than crossing the road.
Flight path integrity 1.4(e) BC Regulation	Degree to which the flight paths of protected animals over a particular site are free from interference	NA	- The modification does not involve infrastructure that would be considered to interfere with flight path integrity of threatened or migratory species.
Water sustainability 1.4(f) BC Regulation	Degree to which water quality, water bodies and hydrological processes sustain threatened species and threatened ecological communities at a particular site.	Yes	- This modification relates directly to the revision of the concept plans and update of stormwater and flooding infrastructure associated with the Project Approval. This modification will bring the infrastructure in line with current standards and to accommodate CCC preferred stormwater management strategy, noting this has changed since the original approval. - These improvements will directly affect the water quality within conserved site areas and surrounding the site thereby increasing the amount and quality of habitat present for threatened species and threatened ecological communities within the Conservation Area. - Consideration also needs to be given to the improvement of composition, structure and the function of vegetation within the Conservation Area on site through the implementation of the VMP. The VMP will ensure that important areas related to water quality and the hydrological process, including riparian vegetation are properly protected, managed, maintained and enhanced in a manner that is responsive to impacts associated with the approval in line with the Project Approval. - Provided that all erosion and sedimentation control plans, environmental management plans and drainage control plans are followed, the proposal to will not impact water quality, water bodies, or hydrological processes.

Conclusion

The modification advice determined that there will be a net reduction in the extent of disturbance on vegetation incorporated within the previous Project Approval. Whilst the modification will impact on vegetation communities (including threatened ecological communities) and habitat for threatened species it will reduce the extent of those impacts with regard to the current Project Approval by 1.37ha.

These impacts are as follows:

- Total vegetation impact reduction overall = ~1.37ha
  - Within the Riparian Corridor = ~0.42ha
  - Within the Wildlife Dispersal Corridor = ~0.95ha
- MU 30 Narrabeen Dooralong Spotted Gum – Ironbark Forest = ~1.28ha
- MU 43a Alluvial Riparian Blackbutt Forest (EEC) = ~0.13ha
- Within these overall reductions, there will be a slight increase to the extent of impact on the MU 20 Alluvial Floodplain Shrub Swamp Forest (EEC) = ~ - 0.07ha to incorporate the stormwater infrastructure connection to Buttonderry Creek.

Table 3 Vegetation disturbance comparison within corridor lands

Vegetation Community	Project Approval Extent	Project Modification Extent	Gain / Loss
MU 20 Alluvial Floodplain Shrub Swamp Forest (**EEC**)	0.122	0.192	~ - 0.070ha
MU 30 Narrabeen Dooralong Spotted Gum – Ironbark Forest	1.324	0.051	~ 1.272ha
MU 43a Alluvial Riparian Blackbutt Forest (**EEC**)	0.168	0.106	~ 0.062ha
Other disturbed Vegetation – Unspecified Regrowth	0.106	0	~ 0.106ha
		Total	~ 1.37ha

Furthermore, the proponent proposes to pay for biodiversity contributions for Stage 1A, 1B and 1C prior to the Subdivision Certificate for Stage 1A; in essence bringing forward their contribution obligations. The proposed modification will therefore have additional beneficial impacts on ecology through the payment of early contributions, which can be used to source offset sites in the immediate future.

Therefore, in assessing this modification and notwithstanding impacts have been accounted for under the terms of the original approval, it has been determined that the impacts to threatened species, ecological communities and / or their habitat are likely to be reduced and the habitat quality improved overall. The occurrence and abundance of vegetation will be increased with the reduced footprint of proposed works, and the composition, structure and function of vegetation will be gradually improved through the implementation of the VMP (that was part of the original Project Approval).

The proposed modification is not considered to impact threatened species abundance, habitat connectivity or flight path integrity, whilst improving the movement of fauna within the site and surrounding area through increases in habitat quality and the overall width of both the riparian corridor associated with Buttonderry Creek and the wildlife dispersal corridor along the M1 Motorway.

Water quality, water bodies and hydrological processes will be increased and improved as part of this modification, although they were also incorporated within the previous Project Approval the review of design and updating of the stormwater and flooding infrastructure in line with current standards and to accommodate Central Coast Council's (CCC) preferred stormwater management strategy (that has changed since the original approval) will increase the quality and functionality of habitat with regard to water sustainability for threatened species and threatened ecological communities.

We trust this is sufficient for your purposes, however, should you require any further information or clarification, please do not hesitate to contact Matt Doherty (Director) or the writer.

Yours sincerely

Ross Duncan
Senior Environmental Consultant
MJD Environmental

Encl: Attachment 1 – Site Location
Attachment 2 – Approved Subdivision Plan
Attachment 3 – Modification Boundary
Attachment 4 – Project approval

Attachment 1 – Site Location

WARNER INDUSTRIAL PARK, WARNERVALE

FIGURE 1: SITE LOCATION

0 170 340 680

Meters

1:10,000

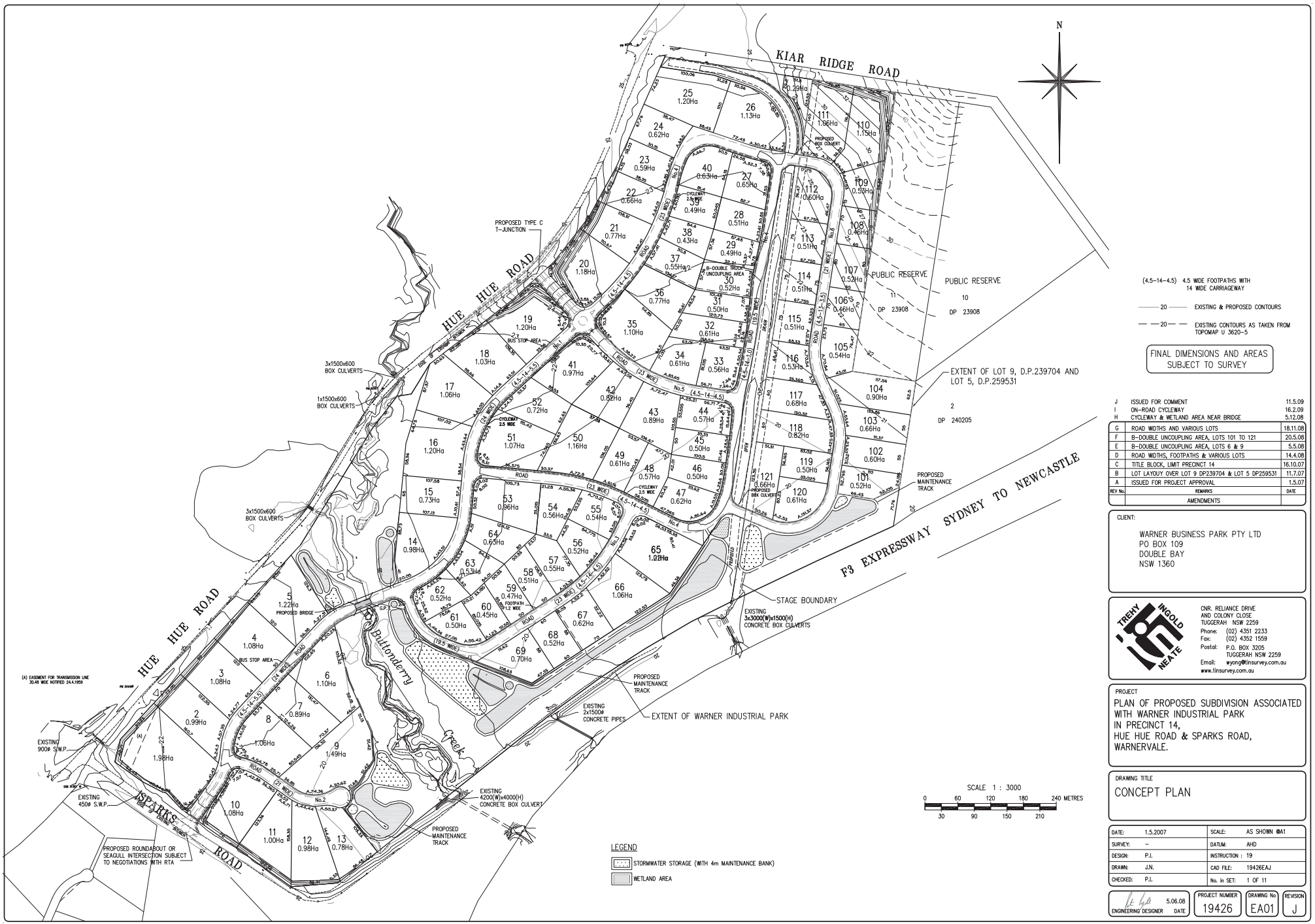
Legend

- Site
- Limit of Works
- Undisturbed
- Area of Clearing Works

MJD Environmental

Aerial: NearMap (2021) | Data: MJD Environmental, ADW Johnson (2021), NSW Spatial Services (2020) | Datum/Projection: GDA 2020 MGA Zone 56 | Date: 9/12/2021| Version 1 | Z:\21086 - Warnervale Industrial Park, Warnervale\21086_Warnervale_20211109.mxd | This plan should not be relied upon for critical design dimensions.

Attachment 2 – Approved Subdivision Plan



(4.5–14–4.5) 4.5 WIDE FOOTPATHS WITH 14 WIDE CARRIAGEWAY

20 EXISTING & PROPOSED CONTOURS

20 EXISTING CONTOURS AS TAKEN FROM TOPOMAP U 3620–5

FINAL DIMENSIONS AND AREAS SUBJECT TO SURVEY

REV No.	REMARKS	DATE
	AMENDMENTS	
J	ISSUED FOR COMMENT	11.5.09
I	ON-ROAD CYCLEWAY	16.2.09
H	CYCLEWAY & WETLAND AREA NEAR BRIDGE	5.12.08
G	ROAD WIDTHS AND VARIOUS LOTS	18.11.08
F	B-DOUBLE UNCOUPLING AREA, LOTS 101 TO 121	20.5.08
E	B-DOUBLE UNCOUPLING AREA, LOTS 6 & 9	5.5.08
D	ROAD WIDTHS, FOOTPATHS & VARIOUS LOTS	14.4.08
C	TITLE BLOCK, LIMIT PRECINCT 14	16.10.07
B	LOT LAYOUY OVER LOT 9 DP239704 & LOT 5 DP259531	11.7.07
A	ISSUED FOR PROJECT APPROVAL	1.5.07

CLIENT:

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PROJECT

PLAN OF PROPOSED SUBDIVISION ASSOCIATED WITH WARNER INDUSTRIAL PARK
IN PRECINCT 14,
HUE HUE ROAD & SPARKS ROAD,
WARNERVALE.

DRAWING TITLE

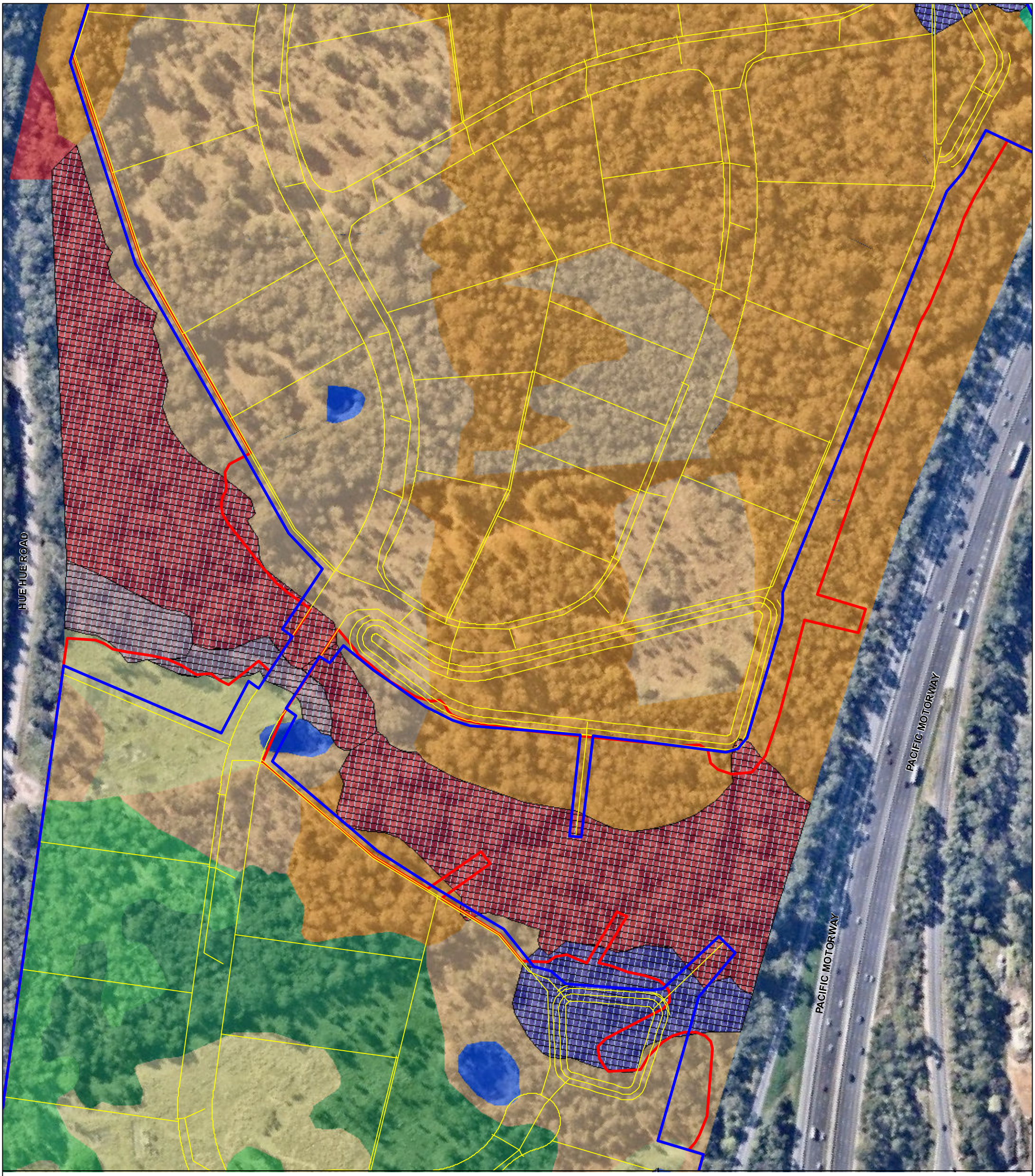
CONCEPT PLAN

DATE:	1.5.2007	SCALE:	AS SHOWN @A1
SURVEY:	–	DATUM:	AHD
DESIGN:	P.I.	INSTRUCTION :	19
DRAWN:	J.N.	CAD FILE:	19426EAJ
CHECKED:	P.I.	No. in SET:	1 OF 11

ENGINEERING DESIGNER 5.06.08 DATE

PROJECT NUMBER	DRAWING No	REVISION
19426	EA01	J

Attachment 3 – Modification Boundary



WARNER INDUSTRIAL PARK, WARNERVALE

FIGURE 3: MODIFICATION BOUNDARY

0 40 80 160

Meters

1:2,500

Legend

- Development Layout
- Concept Approved Impact
- Proposed Modification to Approved Impact

Vegetation

- Endangered Ecological Community

Vegetation Condition

- Alluvial Floodplain Shrub Forest (canopy only)
- Alluvial Riparian Blackbutt Forest (canopy only)
- Alluvial Riparian Blackbutt Forest (type variant)
- Narrabeen Buttonderry Footslopes Forest
- Narrabeen Buttonderry Footslopes Forest (canopy only)
- Narrabeen Buttonderry Footslopes Forest (regrowth)
- Narrabeen Dooralong Spotted Gum-Ironbark Forest
- Narrabeen Dooralong Spotted Gum-Ironbark Forest (regrowth)
- Unspecified Regrowth
- Water

MJD Environmental

Aerial: NearMap (2021) | Data: MJD Environmental, ADW Johnson (2021), NSW Spatial Services (2020) | Datum/Projection: GDA 2020 MGA Zone 56 | Date: 17/12/2021| Version 1 | Z:\21086 - Warnervale Industrial Park, Warnervale\21086_Warnervale_20211109.mxd | This plan should not be relied upon for critical design dimensions.

Attachment 4 – Project Approval

Project Approval

Section 75J of the *Environmental Planning and Assessment Act 1979*

Warner Industrial Park Industrial Development – Stage 1 and 2 Project Application (MP07_0162)

I, the Minister for Planning, under the *Environmental Planning and Assessment Act 1979* (the Act) determine pursuant to section 75J of the Act determine to approve the project application referred to in Schedule 1, subject to the conditions set out in Schedule 2.

Tony Kelly MLC
Minister for Planning

2 7 AUG 2010

Sydney, 2010

SCHEDULE 1

Application No:	MP 07_0162
Proponent:	Warner Business Park Pty Ltd and LG Delahunty
Approval Authority:	Minister for Planning
Land:	Land located adjacent to Sparks Road, Hue Hue Road, Kiar Ridge Road and the F3 Freeway, being Lots 4 ,6,7,8 DP 239704, Lots 15-19, 25-26 DP 259306, Lot 5 DP 259531 and Lot 9 DP 239704.
Project Application:	Project Application for Stage 1 and 2 of the Warner Industrial Park, which includes: • Torrens title subdivision to create 90 lots for industrial and ancillary uses; • Bulk earthworks including site preparation, vegetation clearing and site remediation; • Provision of on-site infrastructure including stormwater, roads and service infrastructure; • Landscape works and rehabilitation of conservation areas; • Dedication of conservation lands to Council; • Construction of two site entries at Sparks Road and Hue Hue Road; • Construction of a bridge across Buttonderry Creek; and • Temporary stockpiling.

SCHEDULE 2

PART A – DEFINITIONS

Act, the	*Environmental Planning and Assessment Act 1979*
APZ	Asset Protection Zone
Conservation Lands	Lands identified in the Concept Plan for transfer to Wyong Shire Council.
Construction	Includes all work in respect of the Project **other than** survey, acquisitions, fencing, investigative drilling or excavation, and building/road dilapidation surveys.
Council	Wyong Shire Council
DECCW	Department of Environment, Climate Change and Water, formerly known as Department of Environment and Climate Change
Department, the	Department of Planning
Director-General, the	Director-General of the Department of Planning (or delegate)
Proponent	Warner Business Park Pty Ltd and LG Delahunty
RTA	NSW Roads and Traffic Authority
Site	Land to which Application MP 07_0162 applies.
annual exceedance probability	The chance of a flood of a given size (or larger) occurring in any one year, usually expressed as a percentage.
Discharge	The rate of flow of water measured in terms of volume over time (i.e. the amount of water moving past a point).
Flood level	The height or elevation of floodwaters relative to a datum (typically the Australian Height Datum).
Floodplain	Land adjacent to a river or creek that is periodically inundated due to floods. The floodplain includes all land that is susceptible to inundation by the probable maximum flood event.
Flood planning levels (FPL)	Flood planning levels selected for planning purposes are derived from a combination of the adopted flood level plus freeboard.
Flood prone land	Land susceptible to inundation by the probable maximum flood event.
Freeboard	A factor of safety usually expressed as a height above the adopted flood level thus determining the flood planning level.
Runoff	The amount of rainfall from a catchment that actually ends up as flowing water in the river or creek.
Channels	Channel B1 - Buttonderry Creek; Channel B2 – Southern Watercourse from Sparks Road; and F1-F2 - flows from Kiar Ridge Road and Buttonderry Creek connect at the F3 Freeway.
Stage 1	As described in the documents listed in condition 1.1 of this approval, being: • earthworks including regrading and filling; • construction of the main intersections at Sparks and Hue Hue Roads; • construction of internal Roads No. 1 – 5 and bridge over Buttonderry Creek; • provision of necessary infrastructure to service lots 1-69; • Buttonderry Creek restoration and rehabilitation works; • provision of stormwater storage and wetland areas located on this landholding; and • construction of open channel adjacent to Road No. 4.
Stage 2	As described in the documents listed in condition 1.1 of this approval, being: 1. earthworks including regrading and filling; 2. construction of internal Road No. 6;

	3. provision of necessary infrastructure to service lots 101 - 121; and 4. provision of stormwater storage and wetland areas located on these landholdings.
SIC	The Special Infrastructure Contributions Plan, Wyong Employment Zone – Special Contributions Area, August 2008.
NDA	Net Developable Area is expressed in hectares and is the area of industrial zoned land excluding land for trunk drainage and roads.

PART B – ADMINISTRATIVE CONDITIONS

1. Terms of Approval

1.1 The Proponent shall carry out the project generally in accordance with the:

a) Concept Plan and Project Application MP 07_0162;
b) Warner Industrial Park Concept Plan June 2008 and Project Application June 2008 (including accompanying appendices) prepared by Peter Andrews and Associates Pty Ltd;
c) Warner Industrial Park Preferred Project Report February 2009 (and including accompanying appendices) prepared by Peter Andrews and Associates Pty Ltd;
d) Warner Industrial Park – Revised Preferred Project Report (including attachments), dated May 2009 and prepared by Peter Andrews and Associates Pty Ltd;
e) Plan of Subdivision of Lots 4 ,6,7,8 DP 239704, Lots 15-19, 25-26 DP 259306, Lot 5 DP 259531 and Lot 9 DP 239704, submitted by Peter Andrews and Associates Pty Ltd (Project No. 19426, Drawing No. EA01 Revision J) and dated 11 May 2009;
f) *Draft Development Control Plan Warner Industrial Park – Sparks Road and Hue Hue Road, Warnervale* prepared by Peter Andrews and Associates Pty Ltd and dated October 2009;
g) the Statement of Commitments (Preferred Project Report, Revision A, May 2009) prepared by Peter Andrews and Associates Pty Ltd; and
h) the conditions of this approval.

1.2 In the event of an inconsistency between:

a) the modifications of this approval and any document listed from clause 1.1 a) to 1.1 g) inclusive of this Instrument, the conditions of this approval shall prevail to the extent of the inconsistency; and
b) any document listed from condition 1.1a) to 1.1 g) inclusive, the most recent document shall prevail to the extent of the inconsistency.

1.3 In the event of an inconsistency between the Statement of Commitments, referenced in condition 1.1 g) and the conditions of this approval, then the conditions of this approval shall prevail to the extent of the inconsistency.

Limits of Approval

1.4 This approval shall lapse five years after the date on which it is granted, unless works the subject of this approval are physically commenced on or before that time

Statutory Requirements

1.5 The Proponent shall ensure that all licences, permits and approvals are obtained as required by law and maintained as required with respect to the project. No condition of this approval removes the obligation for the Proponent to obtain, renew or comply with such licences, permits or approvals.

Staged Development

1.6 The Proponent may stage the construction of the development subject to the Proponent demonstrating compliance with the relevant conditions prior to the issue of the relevant construction certificate.

Dispute Resolution

1.7 Any dispute in respect to the content or application of the plans or strategies listed in this approval, or section 94 contribution matters, is to be referred to the Department and is to be decided by the Director-General of the Department or his delegate. This condition does not

extend to disputes between Council and the Proponent with respect to the dedication of assets or land (excluding land valuations).

2. TERMS OF APPROVAL

Voluntary Planning Agreements

State Infrastructure

2.1 In accordance with section 94EF of the Act, the Proponent shall pay a monetary contribution towards State infrastructure items outlined in the Special Infrastructure Contributions (SIC) Plan (Wyong Employment Zone-Special Contributions Area, August 2008) as follows:

- $60,667 per NDA if paid before 1 July 2011; or
- $91,000 per NDA if paid after 30 June 2011.

This equates to a contribution as follows:

a) Stage 1 (with a NDA of 55.64ha) - $5,063,240; and
b) Stage 2 (with a NDA of 13.35ha) - $1,214,850.

The Proponent shall pay the amount to the Director General specified above prior to the issue of a subdivision certificate of that stage.

In the event that the contribution rate specified in the Special Infrastructure Contributions (SIC) Plan (Wyong Employment Zone-Special Contributions Area, August 2008) is reduced beyond that conditioned above and before payment associated with that stage is made, the Proponent may be entitled to those reduced contributions if agreed to by the Director General in writing.

Local Contributions - Roads

2.2 Prior to the issue of the first subdivision certificate for the Stage 1 or Stage 2, the Proponent shall provide a monetary contribution of $383,169 to Council towards the intersection upgrade at the Hue Hue Road/Sparks Road intersection.

This equates to a contribution of:

a) Stage 1 (with a NDA of 55.64ha) - $ 309,024; and
b) Stage 2 (with a NDA of 13.35ha) - $74,145.

The Proponent may opt to undertake the intersection upgrade as works-in-kind, should an agreement be reached between the Proponent and Council.

Note: This approval only covers site access points onto Hue Hue Road and Sparks Road. This approval does not cover Hue Hue Road/Sparks Road intersection works.

2.3 Prior to the issue of the first subdivision certificate for Stage 1 or Stage 2 of the development, the Proponent shall pay a monetary contribution of $19,647 per hectare (of that stage) to Council towards the Integrated Water Cycle Management Scheme (pipeline). This equates to a contribution of:

a) Stage 1 (with a NDA of 55.64ha) - $1,098,990; and
b) Stage 2 (with a NDA of 13.35ha) - $262,648.

2.4 The Proponent shall connect to the development to the pipeline (or any alternate scheme) once constructed and commissioned by Council. Any connection will be in accordance with any requirements of Council.

2.5 On-site components of the Integrated Water Cycle Management Scheme, in-stream works at Buttonderry Creek and local drainage corridor works for each stage (as detailed in the documentation referenced in condition 1.1 and conditioned in this approval) shall be constructed and completed prior to the issue of the first subdivision certificate for that stage. For Stage 1, this includes the completion of construction of open channel adjacent to Road No. 4.

This infrastructure, and the associated land, shall be dedicated to Council within the agreed maintenance period. Detailed design plans are to be approved prior to the issue of the Construction Certificate.

2.6 Prior to the issue of the first subdivision certificate for the relevant stage, the Proponent shall
(a) provide a monetary contribution (based on the NDA contained within that stage) to Council for the acquisition of environmental lands within the Wyong Employment Zone (a total contribution of $1,771,525 at the completion of the development and at a rate of $25,678 per NDA);
(b) provide a monetary contribution (based on the NDA contained within that stage) to Council for environmental corridor works within the Wyong Employment Zone (a total contribution of $328,702 at the completion of the development and at a rate of $4,764.5 per NDA); and
(c) complete in-stream works within Buttonderry Creek (Stage 1 only).

The contributions specified in 2.6(a) and (b) are to be reduced by on-site environmental land dedications and works-in-kind undertaken by the Proponent for environmental corridor works (at the rate of $13,253 per hectare of environmental land).

Land shall be dedicated to Council upon the issue of the first subdivision certificate for that stage and shall be transferred in a condition acceptable to Council. This includes the completion of works-in-kind environmental corridor works.

At the time of approval, the conservation land to be dedicated (20.58ha) was valued at $340, 428.79 (February 2010). Any change in valuation for land valuation estimates shall only occur with the agreement of both parties. Any dispute relating to land valuation and on-site biodiversity corridor will be resolved through mechanisms provided in condition 1.7 of this approval.

The amount of credit arranged to on-site corridor works shall be determined through the Vegetation Management Plan (condition 2.39).

Note: All figures used in the above conditions were based on a NDA of 68.99 (both stages) and conservation land of 20.58 per ha (both stages).

2.7 Should a section 94 contributions plan come into effect prior to the payment of the above contributions or associated land dedication/works in kind, and the section 94 contribution is the lesser of the two, the Proponent shall pay the contributions rate of the applicable section 94 plan.

2.8 The monetary amount of contribution payable including the value of works in kind and land dedication for the relevant stage under the above conditions is to be indexed at the time of actual payment in accordance with the following:

Cost Indexation Increase

The Construction Cost Index (CCI) will be used to increase contribution rates as follows:
For Monetary Contributions, Items of Work or Credits

$$C \times \frac{CPI\ 2}{CPI\ 1}$$

Where:

C The original value of the Monetary Contribution, Item of Work or Credit identified in this consent.

CPI 2 The Consumer Price Index Number (Sydney – All Groups) last published by the Australian Bureau of Statistics at the time of payment or recognition of the credit amount.

CPI 1 The Consumer Price Index Number (Sydney – All Groups) last published by the Australia Bureau of Statistics at the date of this consent (CPI 1 is May 2010 – 170.5).

Stormwater and Flooding

Freeboard and Final Planning Level

2.9 A minimum freeboard of 300mm above the 1 in 100 year ARI flood level shall be achieved at each developable allotment with the exception of those referred to in Condition 2.9.

2.10 The Proponent shall investigate increasing the final planning level for the industrial estate to afford greater flood immunity in the event of culvert blockage and the effects of climate change and subject to:

a) reaching an agreement with the RTA with respect to any change in flood behaviour including the effects of climate change and other impacts on the F3 Freeway carriageways (including safety, infrastructure and structural integrity and road performance impacts), demonstrating that the structural integrity of the F3 Freeway embankments is protected and the performance of the culverts maintained; and
b) that any resulting increase in active and compensatory storage can be suitably accommodated within the site.

Stormwater Management

2.11 Prior to the issue of a Construction Certificate, the Proponent shall finalise detailed design of the proposed stormwater, flooding and drainage infrastructure, water quality management and stormwater harvesting measures for the estate. The Proponent shall obtain Council's approval for the detailed design of the stormwater/flooding/water quality infrastructure prior to the issue of the Construction Certificate. Detailed designs shall include (but are not limited to) the following specifications:

a) specifications for water management facilities within the floodplain to ensure sufficient protection for embankments and associated basins during flood events. This includes scour protection measures up to the 1% AEP;
b) specifications, detail designs and provision for any additional on-site storage within individual industrial lots to achieve the necessary freeboard and storage requirements as a result of final flood modelling. The detention requirements for individual lots shall be identified within the Warner Industrial Park Design Code for the Site and identified within a section 88B instrument on the titles of relevant allotments;
c) specifications and details on the sizing, position, treatment methods and operation of water management facilities (which include constructed wetlands and stormwater storages which treat and detain stormwater runoff for later pumping around Wyong River) This shall be supported by detailed MUSIC and flood storage modelling to the satisfaction of Council;
e) demonstration of compliance with Council's pollutant removal targets, being 85% reduction in average annual total suspended solids load, 65% reduction in average annual total phosphorus loads, 45% reduction in average annual total nitrogen loads, no visible oils and greases for the 1.5 yr ARI event; and
f) design specifications for the Stream Stability Retardation Storage, Active storage, and associated pumps should demonstrate the following:
    i. the method of the controlled release can achieve the pre-development flow objective for Buttonderry Creek (1.5 yr ARI), including after storm events; and
    ii. retardation storage is to be provided in the stormwater storage basins in addition to active storage required for preserving wetland flows in accordance with the IWCMS Ecological Engineering Report, Nov 2006. Should alternate

methodologies for preserving pre-developed 1.5 yr ARI flows in Buttonderry Creek be proposed, then prior approval from Council is required.

2.12 The above detailed designs shall be accompanied by a revised comprehensive flood, stormwater and water quality modelling and report (including input and output data) to demonstrate that requirements of this approval, the commitments made within documents referred to in condition 1.1 and the following requirements are achieved:

a) the active storage volume for harvesting is provided in accordance with the approved *IWCMS Ecological Engineering* (November 2006);
b) compensatory stormwater retention storage obligations for flood volume displacement generated by the development is accommodated within the site; and
c) no increase in overtopping events during the 1 in 100 year event for the F3 Freeway carriageway (unless agreed to by the RTA).

The flood model shall be provided to and approved by the RTA and Council prior to the issue of the Construction Certificate.

Hue Hue Road

2.13 As part of the requirements of conditions 2.11 and 2.12, the Proponent shall include an assessment on the condition of Hue Hue Road (in proximity to the culverts) to determine the adequacy of the infrastructure (being the road embankment and culvert) to function as a de-facto detention basin for flows upstream of the site.

Buttonderry Creek Bridge

2.14 The internal bridge across Buttonderry Creek shall:

a) be designed in accordance with Australian Standard *AS 5100-2004 Bridge Design* and Council's *Engineering Controls for Development* (DCP2005, Chapter 67);
b) is designed to minimise the extent of disturbance with the 30m Core Riparian Zone on both sides of Buttonderry Creek;
c) include scour protection measures for any embankment or pylon;
d) provide for pedestrian and cyclist movements in accordance with relevant Council policies;
e) have all associated services fixed in the bridge deck;
f) be designed to ensure the minimum height of the underside of the bridge superstructure allows for the 1% AEP flow level and freeboard (including consideration of climate change impacts); and
g) be designed (including embankments) to suitably integrate with road lanes on either side, shall accommodate vehicle travel/turning paths and shall achieve safe vertical sight distance requirements for connecting roads and/or lot access;
h) suitably incorporate features (designed in consultation with a qualified Ecologist) to assist with fauna movement and to reduce mortality.

A construction certificate may only be issued if Council is satisfied with the design of the bridge.

Easements/Drainage Flows
Lot 1

2.15 Prior to the issue of a Construction Certificate for subdivision works (Stage 1), the Proponent shall demonstrate that the overland flow from the catchment draining to the culvert at Hue Hue Road/Sparks Road intersection can be formalised and redirected to the north to the main creek crossing of Hue Hue Road on the western side of Hue Hue Road, and will not result in the overtopping of Hue Hue Road, Sparks Road or flow through Lot 1 of the subdivision (subject to there not being any further impacts as a result of altering catchment).

Any such works will need to suit the future intersection upgrade and be clear of service authority allocations.

If this cannot be achieved, the Proponent shall provide an alternative approach to the stormwater systems within the site, such as creating a drainage easement through Lot 1.

Lot 23

2.16 Prior to the issue of a Construction Certificate for subdivision works (Stage 1), the Proponent shall demonstrate that the stormwater drainage system in proximity to Lot 23 has been designed to consist of a piped system that captures and conveys (from the existing system under Hue Hue Road) the 20yr ARI event with an overland flow path for the 100yr ARI event (using where necessary berms and easement/s to cater for the 100yr ARI event).

The design shall be prepared in accordance Council's Development Control Plan 2005, Chapter No 67 - *Engineering Requirements for Development*. The design plans must be approved by Council prior to the issue of a Construction Certificate

Lot 105-110

2.17 The Proponent shall make suitable arrangements for the capture and safe conveyance of stormwater flows (originating upstream from the site) along and within the rear of Lots 105 to 110 to a suitable discharge point (such as the open drainage channel).

Any such system shall be covered by an easement (created under section 88B of the *Conveyancing Act 1919*) and shall be designed to manage stormwater flows for a range of storm events up to and including the 1% AEP event. In doing so, the Proponent shall also reach agreement with Council (as owner of the Public Reserve) regarding the interface of any such system to ensure the efficient and safe conveyance of flows (such as, ensuring pooling of water within the public reserve does not occur).

The above system shall be agreed to by Council prior to the issue of a Construction Certificate for subdivision works involving Lots 105-110.

Sparks Road

2.18 The Proponent shall ensure that works associated with the development does not result in Sparks Road being overtopped by flows up to the and including the 1% AEP event or that proposed lots are affected by any overtopping of this road.

2.19 If drainage structures need to be upgraded within the classified section of Sparks Road or the F3 Freeway corridor, the Proponent shall obtain approval of Council and/or the RTA as appropriate for the works (including design of the works) prior to the issue of a Construction Certificate and if required by the RTA, the Proponent shall enter into a Works Authorisation Deed for the works prior to the issue of a Construction Certificate.

All other roads

2.20 The velocity depth ratio in all roads shall not exceed 0.4 for all events up to and including the 1% AEP event as stipulated in the *NSW Floodplain Development Manual* April 2005. The detailed design of the road network within the site shall be supported by stormwater calculations demonstrating the above and accompanied by a statement from the Proponent's stormwater design consultant.

2.21 Safety barriers as committed to in Statement of Commitment 6 are to be provided where hazards generate warrants for safety barriers in accordance with RTA or Austroads guidelines. Design plans for the safety barriers are to be submitted and approved by Council prior to issue of the Construction Certificate and completed prior to issue of the Subdivision Certificate for that Stage.

2.22 The provision of the design and construction of the drainage structures and the associated sections of Road No.6 extending to the common boundary between Stage 1 and Stage 2 shall be completed as part of Stage 1. Design details shall include any ultimate or interim treatments with regards to the channel and are to be submitted and approved prior to issue of the Construction Certificate for Stage 1.

Contamination

2.23 Prior to the issue of a construction certificate, a plan of remediation is to be prepared in accordance with DECCW guidelines, implemented and completed in accordance with the plan prior to commencement of bulk earthworks within the site. This shall be supported by the additional investigations recommended within the contamination reports referenced in condition 1.1 of this approval.

2.24 Prior to the issue of a subdivision certificate, the Proponent shall demonstrate to the certifying authority that the site is suitable for the proposed uses. This shall be supported by a validation report and certificate issued by a site auditor accredited by DECCW.

Geotechnical

2.25 Detailed Bulk Earthworks plans, showing the extent of excavation and/or filling (site cross sections, existing and design contours and depth of fill plans) together with details of the method of retaining, draining and stabilising the disturbed areas, are to prepared in accordance with the requirements of Council's Engineering Requirements for Development, and shall be submitted and approved by Certifying Authority prior to the issue of a Construction Certificate for that stage of the development.

2.26 Level 1 testing and Geotechnical controls are to be carried out including the preparation and submission of plans along with lot classifications in accordance with AS 2870 and AS3798. The plans are to identify all test and retest locations ensuring lot sizes are not exceeded and are to be accompanied by the submission of a Report by a Geotechnical Engineer lodged prior to issue of the Subdivision Certificate certifying the suitability and compliance of fill materials and compaction with the approved fill material and the above standards

Bushfire

2.27 All Asset Protection Zones (APZs) shall be designed and maintained in accordance with *Planning for Bushfire Protection 2006.* APZs shall be located outside environmental lands and shall be burdened on the industrial lots or road reserves. The location of APZs shall also be consistent with *Guidelines for Controlled Activities – Riparian Corridors* (February 2008).

2.28 Areas identified as defendable space within the Bushfire Assessment (which forms part of the EA referenced in condition 1.1) shall be managed as inner protection area (IPA) as outlined within section 4.1.3 and Appendix 5 of *Planning for Bushfire Protection 2006* and the NSW Rural Fire Service's document '*Standards for asset protection zones*'.

2.29 Landscaping to the site is to comply with the principles of Appendix 5 of *Planning for Bush Fire Protection 2006.*

2.30 Prior to the issue of a subdivision certificate, a bushfire management plan is to be prepared that addresses the establishment and ongoing maintenance and management responsibilities of all Asset Protection Zones (including temporary Asset Protection Zones) in accordance with *Planning for Bushfire Protection 2006.*

Infrastructure

2.31 The design and specification of all infrastructure that will be dedicated to Council as the future asset owner and Roads Authority shall be approved by Council prior to issue of any Construction Certificate for the relevant stage of the development.

This includes but is not limited to stormwater (including water quality systems, drainage channels, and associated land/corridors), roads, road reserves and site access intersections. With respect to road infrastructure requirements, the following must be provided or demonstrated:

(a) Street lighting to be provided for the development and the entry intersections in accordance with AS 1158. Such lighting is to be designed to ensure overspill lighting doesn't adversely impact adjoining areas of environmental value.
(b) Stage 3 Road Safety Audits (if required by Council) are to be provided for the entry intersections and the internal roundabout with any recommended treatments to reduce or eliminate identified hazards;
(c) The road and intersection network is to be designed to cater for the B-Triple, B-Double and 19.0m semi-trailer as the design vehicles.

Such works shall be completed to the satisfaction of Council as the future asset owner and Roads Authority prior to the issue of the Subdivision Certificate for the relevant stage of the development. The infrastructure items shall be dedicated (at no cost) to Council upon the issue of the Subdivision Certificate or by the end of the maintenance period specified by Council.

Note:
1) Refer to Council's *Development Control Plan 2005, Chapter 67 – Engineering Requirements* for Development for the requirements in seeking Council's approval of the works as executed prior to the issue of the subdivision certificate.
2) Operations and Maintenance Manual for water management facilities is to be provided to Council when infrastructure is dedicated that provides details for maintenance staff in relation to key system components, design and maintenance issues, basic design data etc.

2.32 Prior to the issue of a Construction Certificate for Stage 1, the Proponent shall obtain an approval from the relevant roads authority for the design of the site access intersections from Hue Hue Road and Sparks Road. A subdivision certificate for first stage of the development shall not be issued until the Proponent has completed both site access intersections from Hue Hue Road and Sparks Road to the satisfaction of the relevant roads authority.

2.33 Prior to the issue of a Construction Certificate, the Proponent shall consult and confirm the connection requirements and location of services to be provided or relocated on or adjoining the site with the relevant service provider. This includes sub-stations, transmission lines etc within the development site. The Proponent shall obtain relevant approvals from those service providers prior to the construction of any utilities works within the site.

2.34 Prior to the issue of a construction certificate, the Proponent shall demonstrate to Council that the subdivision plan has been modified to:

a) reflect the location and design of site access intersections that reflects those agreed to by the relevant roads authority, including the Hue Hue Road access point reflecting a seagull arrangement with left turn auxillary lane and the Sparks Road/Road No.1 intersection reflecting a roundabout arrangement;
b) include on Roads 1 and 4 of a shared footpath/cycleway (2.5 metres wide) on one side (as shown previously on drawing EA01 Revision I), with the shared footpath/cycleway connecting to Hue Hue Road and Sparks Road,
c) provide a 1.2 metre wide paved footpaths along one side of all roads;
d) ensure lane discipline at all intersections and on bends in roads;
e) ensure the cul-de-sac head in Road 2 of a minimum of 30 metre diameter between kerbs;
f) include an area for the uncoupling and temporary storage of B-Doubles/B-Triples at the southern end of Road 1 in addition to the existing area at the northern end of Road 4 (unless otherwise agreed by Council).

2.35 All on-site drainage structures on private allotments (that are not to be dedicated to Council) are to be maintained for the life of the development.

Public Transport

2.36 Prior to the issue of a construction certificate for Stage 1, the Proponent shall demonstrate to Council that the internal road network is able to cater for a bus service within the site (should a bus service be required by Transport NSW through the development) and provide details to Council on the potential bus stop locations. Bus shelters shall be required at these locations at full cost to the Proponent.

Flora and Fauna

2.37 The Proponent shall minimise the extent of vegetation clearance within the interface of the development site with Hue Hue Road, Sparks Road, F3 Freeway (including ramps). The Proponent shall demonstrate to the certifying authority prior to the issue of a construction certificate that the final bulk earthworks plans minimise the extent of disturbance in order to maximise the retention of established vegetation.

2.38 Prior to the issue of a construction certificate, the Proponent shall provide a report to the Director General verifying the following to ensure the biodiversity of the conservation land is preserved:

a) that stormwater infrastructure proposed in areas containing Endangered Ecological Communities (EECs) or high quality habitat within the conservation zones has been removed where it cannot be demonstrated that the locations are critical for hydrological performance;
b) the design and location of the stormwater infrastructure within the biodiversity corridors has been minimised by ensuring that a continuous area of vegetation is provided which is 50 metres wide along the Freeway and 100m minimum along the Buttonderry Creek;
c) the works proposed within the wildlife dispersal corridor (located adjacent to the F3 corridor) will simultaneously provide for a functional fauna movement corridor, landscape screening (of the development from the F3) in addition to achieving storm water discharge requirements (associated with the F2 branch);
d) stormwater infrastructure or asset protection zones have been excluded from the 30m Core Riparian Zone; and
e) service infrastructure (including sewage pipelines) proposed within the conservation land has been removed, unless it is demonstrated that the crossings cannot be avoided, have been minimised/consolidated wherever possible and avoids high quality habitat, habitat features and EECs.

The report shall quantify the final extent of losses of high quality habitat or EECs, and shall demonstrate that any additional loss has been adequately offset through the biodiversity contributions.

2.39 Prior to clearing or any other works and the issue of a Construction Certificate, the Proponent is to prepare and implement the following during works:

a) a Vegetation Management Plan (consistent with Council's draft Ecological Plan of Management and the Office of Water's Guidelines for Controlled Activities – Vegetation Management Plans (February 2008)) in consultation with DECCW and Office of Water, and approved by Council. This plan shall detail both rehabilitation works within the conservation lands, the stabilisation works within Buttonderry Creek, and management controls during bridge construction ;
b) a Wildlife Management Strategy for the site to ensure site preparation and construction works are undertaken in a manner that avoids or minimises impacts on fauna (during tree clearing), retained vegetation, water quality and creek stability approved by Council. In addition, nest boxes are to be provided on the Conservation Lands on a one for one basis for any natural hollow removed by the development and are to be constructed of appropriate durable materials.

Rehabilitation and creek stabilisation works identified in the Vegetation Management Plan shall be completed to the satisfaction of Council prior to the issue of the Subdivision Certificate (unless otherwise agreed to by Council), and shall be maintained by the Proponent until the land is dedicated to Council.

2.40 All in-stream works and works within the riparian corridor (including the installation of infrastructure) shall be designed and managed in accordance with relevant Office of Water policies.

2.41 The constructed Water Management System within the Buttonderry Creek Flood Plain and connecting channels (F2 & B2) must be completed, operational and planted out in accordance with the Landscape Plan of the proposed Warner Industrial Park Design Code prior to the issue of a Subdivision Certificate.

2.42 The following permanent site fencing (typical 4 strand stock fence, excluding the use of barbed wire) is to be erected to permanently delineate the extent of any under scrubbing for bushfire management purposes prior to the issue of a Subdivision Certificate:

a) along the north-eastern boundary of proposed Lots 5, 6, 9 and 13 (as shown on the Concept Plan EA01 Revision J);
b) along the western boundary of proposed Lots 14 – 17 (as shown on the Concept Plan EA01 Revision J);
c) along the southern boundary of proposed Lots 69 and 101 (as shown on the Concept Plan EA01 Revision J); and
d) along the eastern most boundary of proposed Lots 65 – 69 and 101 - 110 (as shown on the Concept Plan EA01 Revision J).

This fencing does not include approved access ways.

2.43 Fencing that delineates private property and future public lands shall be located on the private lot and shall be maintained for the life of the development. Fencing (for that stage) shall be erected prior to the issue of the relevant subdivision certificate.

2.44 Fencing between road reserves and conservation lands shall be located on the road reserve and maintained by the Proponent until dedication of these areas to Council. Design of fencing shall reflect the above requirements unless otherwise agreed by Council. All fencing shall be erected prior to the issue of the relevant subdivision certificate.

Landscaping

2.45 The Landscaping Plan is to be modified to remove *Corymbia maculata* and *Eucalyptus saligna* from the Street Tree planting list and replaced with *Eucalyptus paniculata*, *Eucalyptus capitella* and *Glochidion ferdinandi*.

2.46 Prior to the issue of a Subdivision Certificate for the relevant stage of the development, the Proponent will submit to the Principal Certifying Authority certification from a suitably qualified person that site landscaping has been provided in accordance with the approved Landscape Masterplan (Figure L1 of the Design Code, February 2009).

2.47 Any entry statement treatments are to be wholly within the proposed lots and maintained by the proponent/future owner.

Aboriginal Cultural Heritage

2.48 If any previously unidentified Aboriginal cultural object(s) are discovered during construction works, all work likely to affect the object(s) is to cease immediately and the discovery of the objects shall be reported to DECCW. Recommencement of works shall not occur until the requirements of DECCW have been satisfied.

Water and Sewer Supply

2.49 The Proponent shall prepare an application under Section 305 of the *Water Management Act* to Council as the Water Supply Authority for determination of requirements under Section 306 of that Act. The Section 306 Certificate of Compliance is required prior to the issue of the Construction Certificate.

2.50 Prior to the issue of a Subdivision Certificate for each stage, a Section 307 Certificate of Compliance under the *Water Management Act 2000* for water and sewer requirements must be obtained from Wyong Shire Council as the Water Supply Authority. All works for the development must be approved by Council prior to the issue of a Certificate of Compliance.

Construction Noise

Construction Hours

2.51 Construction activities associated with the project shall only be undertaken during the following hours:

a) 7:00am to 6:00pm, Mondays to Fridays, inclusive;

b) 8:00am to 1:00pm on Saturdays; and

c) at no time on Sundays or public holidays.

2.52 Activities resulting in impulsive or tonal noise emission shall be limited to 8:00am to 12:00 midday, Monday to Saturday and 2:00pm to 5:00pm Monday to Friday. The Proponent shall not undertake such activities for more than 3 continuous hours and must provide a minimum one-hour respite period.

Construction Noise Management

2.53 The Proponent shall implement a Construction Noise and Vibration Management Plan, in accordance with *DECCW's Interim Construction Noise Guideline* (2009), and shall implement all feasible noise mitigation and management measures with the aim of achieving the construction noise objective. The Construction Noise and Vibration Management Plan shall be approved by the Certifying Authority prior to the issue of the relevant construction certificate.

Any activities that have the potential for noise emissions that exceed the objective must be identified and managed in accordance with the Construction Noise and Vibration Management Plan.

Construction Traffic

2.54 The Proponent shall obtain the approval of Council should any part of the road reserve or public land is proposed for use as part of the subdivision works. The storage of materials or parking of vehicles associated with the project on the road reserve is not permitted.

2.55 The Proponent shall implement a Construction Traffic Management Plan (CTMP) for the development. The CTMP shall be prepared by a suitably qualified person and shall address, but not be limited to, the following matters:

a) proposals for reducing any impact of the construction site on the adjacent traffic network;
b) traffic management of short term activities such as delivery of materials;
c) accessing, exiting and parking in and near the work site by trucks, tradesmen work vehicles and the like;
d) mitigation measures to ensure that delivery trucks and trade vehicles do not deposit any spoil on public roadways and should this occur, measures are to be imposed to ensure the removal of such materials in a safe manner;
e) loading and unloading, including construction zones,
f) predicted traffic volumes;
g) pedestrian and traffic management methods;

h) public consultation procedures that will be put in place for notification of adjoining residents of the relevant details of the CTMP and details of complaint handling procedures; and
i) Comprehensive Traffic Control Plans (TCP's) for any works altering the safe and pre-existing movement of traffic around and adjacent to the site.

The CTMP shall be approved by the Certifying Authority prior to the issue of a Construction Certificate and prepared in consultation with and approved by Council.

Dilapidation

2.56 The approved haulage route road pavements shall be tested by a practising Geotechnical Engineering Consultant in accordance with *Development Control Plan 2005, Chapter 67 – Engineering Requirements for Development* and Austroads Guidelines. The testing results shall be presented in a Geotechnical Engineering Report including a dilapidation report of affected pavements, and a comprehensive rehabilitation program for all affected haulage route pavements.

2.57 A dilapidation report must be submitted to Council prior to issue of a Construction Certificate for each stage of the development. The report must document and provide photographs that clearly depict any existing damage to the road pavement, kerb, gutter, footpath, driveways, street trees, street signs or any other Council assets in the vicinity of the development and haulage route.

2.58 Any damage not shown in the Dilapidation Report submitted to Council before site works had commenced, will be assumed to have been caused as a result of the site works undertaken and must be rectified at the applicant's expense, prior to release of the Subdivision Certificate.

Soil and Water Management (Construction)

2.59 Prior to the issue of a construction Certificate, the Proponent shall prepare an Erosion and Sediment Control Plan(s) for the control of soil erosion on the site and the prevention of silt discharge into drainage systems and waterways in accordance with *Managing Urban Stormwater: Soils and Construction (Landcom 2004)* and *Wyong Development Control Plan 2005, Chapter 67 – Engineering Requirements for Development.* The design plans must include supporting calculations and details and shall be approved by the Principal Certifying Authority.

2.60 All erosion and sediment control measures are to be installed prior to the commencement of any soil disturbance within the area served by the controls.

2.61 All erosion and sediment control measures are to be effectively implemented and maintained at or above design capacity for the duration of the construction works until such time as all ground disturbed by the works has been stabilised and rehabilitated so that it no longer susceptible to erosion and sedimentation

2.62 Excess spoil, at the completion of the relevant stage of the construction work, shall be removed from the site.

Air Quality (Construction)

2.63 Prior to clearing or any other works, the Proponent shall prepare a Dust Management Plan for the approval of the Certifying Authority. Management measures detailed within the Plan shall be implemented and monitored throughout construction.

2.64 The Proponent shall construct the project in a manner that minimises dust impacts generated by construction works, including wind-blown and traffic-generated dust, on the receiving environment. All construction shall be undertaken with the objective of minimising visible emissions of dust from the construction site.

Waste Management

2.65 All waste materials shall be assessed, classified, managed and disposed of in accordance with *Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-liquid Wastes (*EPA, 1999).

Construction Management

2.66 Prior to the issue of a construction certificate, the Proponent shall prepare to the satisfaction of the Certifying Authority a construction environmental management plan, prepared in accordance with *Guideline for the Preparation of Environmental Management Plans* (DIPNR, 2004), which shall include (but not limited to):

i) a construction noise and vibration mitigation plan;
ii) an air quality and dust management plan;
iii) a soil and water management plan, prepared in accordance with Landcom's *Managing Urban Stormwater: Soils and Construction guidelines*;
iv) a flora and fauna management plan;
v) a waste management plan;
vi) a construction traffic management plan;
vii) measures to address interface issues between the construction site and the neighbouring conservation areas;
viii) a monitoring program detailing how the effectiveness of the controls specified in the above sub-plans would be monitored during the proposed works, and how any non-compliance would be rectified;
ix) a complaints management plan detailing the procedures that would be implemented to receive, handle, respond to and record any complaints that are received.

Prior to the commencement of work, the Proponent shall submit a copy of the approved plan (including all relevant subplans) to the Department and Council if Council is not the Certifying Authority.

2.67 A copy of the approved and certified plans, specifications and documents incorporating conditions of approval and certification shall be kept on the site at all times and shall be readily available for perusal by any officer of the Department, or the Principal Certifying Authority.

Site Safety Preparation and Management

2.68 Building equipment and/or materials shall be contained wholly within the site and shall not be stored or operated on the footpath or roadway, unless specific written approval has been obtained from Council beforehand.

Site Notice

2.69 A site notice(s) shall be prominently displayed at the boundaries of the site for the purposes of informing the public of project details including, but not limited to the details of the Civil Contractor, Principal Certifying Authority and Structural Engineer. The notice(s) is to satisfy all but not be limited to, the following requirements:

a) Minimum dimensions of the notice are to measure 841mm x 594mm (A1) with any text on the notice to be a minimum of 30 point type size;

b) The notice is to be durable and weatherproof and is to be displayed throughout the works period;

c) The approved hours of work, the name of the site/project manager, the responsible managing company (if any), its address and 24 hour contact phone number for any enquiries, including construction/noise complaint are to be displayed on the site notice; and

d) The notice(s) is to be mounted at eye level on the perimeter hoardings/fencing and is to state that unauthorised entry to the site is not permitted.

2.70 The Proponent shall ensure that the 24 hour contact telephone number is continually attended by a person with authority over the works for the duration of the development.

Section 88B instrument

2.71 Copies of any instruments under Section 88B or 88E of the *Conveyancing Act 1919* are to be submitted with the final plan of subdivision, as relevant to any restrictive covenants, easements, rights of way created or affected by this development.

2.72 The plan of subdivision and Section 88B instrument (*Conveyancing Act 1919*) shall establish the following restrictions, with the Council having the benefit of these covenants and having sole authority to release, vary or modify these covenants. Wherever possible the extent of the land affected by these covenants shall be defined by bearings and distances shown on the plan of subdivision.

a) Prohibiting direct vehicular access to proposed Lots 1, 10-12 from Sparks Road;
b) Prohibiting direct vehicular access to Lot 1-5, 17 -25 from Hue Hue Road;
c) Prohibiting direct vehicular access to Lot 1 Road No.1 within 50.0 metres from Sparks Road and lot 10 to be accessed from Road No.2;
d) Prohibiting direct vehicular access to lots 19 & 20 from Road No.5;
e) The creation of "Easements for Support" over excavated batter slopes adjoining the existing or proposed road reserves to benefit the Council;
f) Identifying and maintaining all Asset Protection Zones;
g) The creation of "Easements for Support" over excavated batter slopes adjoining the existing or proposed road reserves to benefit the Council; and
h) Creation of all necessary inter-allotment drainage easements.

2.73 Land is to be dedicated to Council to permit a legal and proper access road connection to the adjoining properties to the east (Lot 9 DP 239704 and Lot 5 DP 259531). If the roads within the development are not public roads then a legal Right of Way (ROW) to Lot 9 DP 239704 and Lot 5 DP 259531 is to be provided.

2.74 All necessary "Easements to Drain Water and for Services" are to be approved by Council prior to issue of the Subdivision Certificate and registered with the plan of subdivision. Note: "Easements to Drain Water" shall be created over the constructed swale drainage system.