

Table 1-1 Summary of State and Local Agency Submissions

AREA OF CONCERN	RAISED BY	SUMMARY OF ISSUE
Precinct Layouts	Roads and Maritime Services	RMS requests that the landscape plans submitted for the central precinct clearly show the current Albion Park Rail bypass project boundaries, show no works associated with the development within the Albion Park Rail bypass project boundaries (i.e. new tree planting, bicycle path linkages, etc) with any calculations relating to areas of opens space in supporting documentation also being amended to exclude the land required for the Albion Park Rail bypass project.
	Wollongong City Council	The strategic intent of the Tallawarra Lands is to be focused on future power generation needs, and employment generation. Concern is raised that increasing residential population will threaten or discourage industrial land uses, or the expansion of power station facilities if needed in the future. Housing should only be permitted where the land is not able to be used for either power generation or employment generation uses and does not require preservation for ecological purposes.
		Height increases proposed within the R2 zone are not consistent with the surrounding strategic planning setting provided for under WLEP 2009.
		Support could be provided for the proposed change in zoning of industrial land from IN1 to IN2. However, it is noted that the proposal also increases the industrial land footprint such that there is a much reduced buffer proposed between the industrial land and residential footprint. The proposed buffer is considered to be insufficient and Council considers that the previous buffer should be retained.
		Additional opportunities should be provided for children and young people in the Northern Precinct. This was a key recommendation for Planning Area 8 in Wollongong's Planning People Places A strategic Framework for Open Space, Recreation Facilities and Community Facilities April 2006.
		Street Trees should be depicted throughout the development. Proposed planting is indicated on the proposed open space plan, but street trees are only shown on Yallah Bay Road.
		Existing vegetation has been indicated in the approved Tallawarra Lands Landscape Plan by Corkery Consulting May 2012 and this information should also be reflected on modified plans submitted.
		Proposed roundabouts in the location of the neighbourhood centre and sports and community facilities should be modified to ensure pedestrian/cycle safety and a suite of street furniture and lighting should be developed with an asset register to ensure integration with facilities with adjacent open space.
		Needs based assessment for social infrastructure, including community facilities, should be carried out and include demand based modelling of building size and land requirements for these uses.
		Council requests the residential component of the development provide for a suitable percentage of affordable housing. In this regard, we have separately requested that the Wollongong Local Government Area (LGA) be included in State Environmental Planning Policy No 70- Affordable Housing (Revised Scheme). Inclusion in SEPP 70 will assist by providing a

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		policy mechanism to ensure affordable housing is a component of new development precincts within the Wollongong LGA, including the Tallawarra Lands precinct.
Legislative requirements	Department of Industry – Crown Lands & Water	The development must not impose liability on the Crown through the use of Crown land under the direct management of the Department of Industry Lands to meet requirements for open space, conservation areas, foreshore or disabled access, or foreshore structures. Recreational requirements cannot be offset onto Crown lands
	Office of Environment and Heritage	Mechanisms for future management and ownership of public open space and environmental lands under the Concept Plan approval should be considered further as part of the proposed modification. The rationale for reducing the quantum of E3 zoned lands should also be revisited.
Traffic and Transport	Transport for NSW	Currently, there are no regular bus services operating in the Tallawarra Lands vicinity and the future provision of public transport to the precinct remains an ongoing concern for TfNSW.
		The increased residential yield may generate additional demand for future public transport services. Further planning work needs to be undertaken with public transport providers to maximise uptake of public transport.
		Options for extending the existing Route 33 and/or 43 services would provide links to nearby centres such as, Dapto and Wollongong. However, these options will require further investigation to ensure the existing customer base is not adversely affected.
		TfNSW maintains that the Modification should retain the north-south link to Howards Bay, accommodating the two way movement of buses.
		The inclusion of a cycleway along the north-south connector to Howards Bay and on the east-west Collector Road, supporting <i>NSW Planning Guidelines for Walking & Cycling (2004)</i> and <i>Wollongong City Council – Bicycle Plan</i> .
		The developer should be advised that satisfactory arrangements for contributions to the provision of state infrastructure must be achieved prior to determination.
		The proponent is advised to ensure the street network layout has been designed to have adequate reservation of space to accommodate potential future bus services and infrastructure. TfNSW is currently preparing <i>Guidelines for Public Transport Capable Infrastructure in Greenfield Sites – a guide to delivering public transport capable road design in greenfield sites</i> . This document is in draft form and under internal review at the moment. It would be a beneficial reference for the design of roads within the subject site. I would be pleased to provide a copy of the guideline once it is public.
	Roads and Maritime Services	<p>RMS requests that the plans submitted (e.g. Figures 3.1, 3.4, 3.5, 5.3, etc) are updated to clearly show the current Albion Park Rail bypass project boundaries so as to demonstrate that all works proposed and required as part of this concept approval are wholly located outside the currently identified/required road reserve area (e.g. local roads, bicycle paths, noise mitigation measures, etc).</p> <p>RMS from reviewing the Traffic Impact Assessment (TIA) prepared by Cardno (Job Ref: 8201714202, Version 02, dated 8 September 2017) provides the following comments:</p> <ul style="list-style-type: none"> No traffic volume changes have been documented. The models provided assess the modified land use scenarios, but nothing has been shown as to how this translated into

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		<p>volume increases across the network. RMS requires additional information to enable it to understand the volume changes resulting from the modification;</p> <ul style="list-style-type: none"> ▪ The Tallawarra Lands development, based on the information in the TIA, will generate an estimated 2,760 jobs (1,640 direct jobs and 1,121 indirect jobs - as noted in the TIA). Only direct jobs have been considered in the updated TIA. While it is noted that the TIA states that “<i>indirect jobs would have been included in the overall regional employment growth applied in TRACKS for the 2026 and 2041 design horizon years</i>”, RMS requires confirmation that this was the case and if not, the modelling for this modification needs to be updated to reflect the traffic impacts for both the direct and indirect employment opportunities; ▪ The updated employment numbers show that in the northern precinct there will be 612 jobs (refer to Figure 3.5 – Employment Distribution revised). Noting that this precinct only contains residential lands and open space/environmental land with no employment lands it is unclear as to how the number of jobs shown in the northern precinct has been determined. RMS requires clarification; ▪ By 2041 there are some Level of Service (LOS) changes as well as intersection capacity issues, particularly in the PM peak at the northbound offload to Princes Highway (LOS B to E). LOS B was with the original approved 1010 lot residential yield. LOS E/F was with the full modified 1494 lots at 2041. RMS notes that this intersection was sensitive to volume changes when the APRB models were being worked on. RMS also notes that this may require an intersection upgrade to roundabout or signals if northern interchange is not built. RMS requires details on any proposal as part of this modification to make improvements at this intersection to ensure it operates at a satisfactory level; ▪ RMS notes that the modification does not propose/identify any upgrade works at the northern interchange of the Albion Park Rail Bypass on its eastern side. RMS is concerned that the intersection of the Princes Highway with Yallah Bay Rd, the Princes Highway with Cormack Avenue and the intersection of the Princes Highway and the M1 northbound offload will require improvements prior to the provision of the northern interchange to operate at a satisfactory level. As such, RMS requires details on what improvements are required as part of this modification at these intersections to ensure they will operate at a satisfactory level for at least 10 years beyond the opening of the development; <p>In addition to the above RMS notes the following:</p> <ul style="list-style-type: none"> ▪ The TIA has been based on the assumption that the northern and central precinct will be fully developed by 2026 and as such these two precincts will contain 1,114 lots. It is therefore unclear why the discussion of each individual scenario in Section 4.4 of the TIA details that the revised lot yield in all the scenario's is 1,494 lots; ▪ The TIA references 'Appendix A' (refer to Section 3.3.3 on Page 3) which has not been included in the provided documentation; ▪ The TIA and separate supporting 'Tallawarra Lands Concept Plan Approval Modification (Job Ref: 82017142-02, Version 5, dated 31 May 2018) reference different total lot numbers. The TIA details a total lot yield of 1,494 lots and the later document details a total lot yield of 1,480 lots; and ▪ There is a number of 'in Error! Reference source not found' notes in the submitted TIA. <p>Previous advice provided by RMS to both the applicant and Department of Planning and Environment has detailed the RMS concerns on the non-provision of connectivity to/from</p>

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Stormwater and Flooding Amenity		Haywards Bay for vehicles (cars, buses, etc), pedestrians and cyclists. With the above advice on the timeframe for future development of the southern/lakeside precinct unlikely by 2041, the proposed non provision of the road link between Haywards Bay and the neighbourhood centre land, industrial land in the central precinct until after 2041 is not supported. RMS maintains that connectivity to Haywards Bay is vital to minimise local trips on the state road network.
	Wollongong City Council	Road connections between the northern and central precinct are not identified. These road connections should be constructed as part of the early provision of infrastructure. A singular access into and out of the northern precinct via Gilba Road is not supported.
	Department of Industry – Crown Lands & Water	Crown Lands are not to be used for the collection, filtration or distribution of stormwater.
		Any approval should include clear and appropriate stormwater quality performance targets. These targets should aim to ensure the development will not result in the degradation of water quality within Lake Illawarra. The department supports the “Neutral of Beneficial Effect on Water Quality” as adopted in the Sydney Drinking Water Catchment.
		Any approval should include a requirement for a long term stormwater quality monitoring program to test and verify the performance of the stormwater controls to be developed at the detailed design phase. In addition, a requirement for independent auditing of the performance of water quality controls used during the construction phase of the development should be included.
	Office of Environment and Heritage	Further assessment of water quality impacts in accordance with the relevant coastal management and regional planning policy frameworks should be undertaken. The additional water quality analysis should aim to determine the extent of how the proposed development densities and boundaries, as modified, will influence the water quality of receiving waters and estuary health of Lake Illawarra.
		<p>The consent authority should seek further clarity on the following floodplain risk management matters, having regard to the increased development extent and densities proposed by this modification:</p> <ul style="list-style-type: none"> ▪ The impact of flooding on the safety of people/users of the development, including issues linked with isolation and accessibility for emergency services for the full range of floods up to the PMF; and ▪ Potential impacts and mitigation of increased peak flows on flooding, scour, erosion and mobilisation of sediments into Lake Illawarra and how these will be managed (eg. peak flow attenuation, rehabilitation of riparian corridors etc).
	Wollongong City Council	The proposed modification to the Industrial Employment Precinct in the Central superlot results in the proposed road and industrial lot being directly within the location of the existing watercourse. The proposed development would appear to be locating industrial lots or the road way (other than bridging of a watercourse) within an area of high flood risk precinct and high hydraulic hazard area. This is contrary to the objectives of Chapter E13 of the Wollongong DCP 2009 and clause 7.3 of the Wollongong LEP 2009. It would be Council's preference that the development be redesigned such that all proposed roads and lots (other than recreation uses) are located wholly outside the areas of high flood risk (either high hydraulic hazard or 10m from top of bank

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		In the northern precinct, it is unclear how flows from the existing watercourse within the centre of the residential lots will be managed. The design of the development should ensure overland flow paths are provided for contributing flows. The flow paths should be designed to ensure flows are not directed through residential lots and that the discharge to Crown land replicates the pre development scenario to ensure no impacts.
		The design of the development should ensure shared paths proposed in watercourse areas are designed to ensure that overtopping/inundation in lower order storm events does not occur so as to limit potential for debris build up and ongoing maintenance.
		Details of PMF flood modelling were not provided with the application. PMF flood modelling should be undertaken to ensure the development complies with Chapter E13 and E14 of the Wollongong DCP 2009.
Noise	Environment Protection Authority	On the basis of a review of the information provided, the EPA does not support the extension of the North Shore Precinct of Central Precinct residential precincts. Any reduction in buffer land will result in residential encroachment, possible land use conflict and potentially significant operational constraints on the power station or adverse noise impacts on residential amenity. The EPA (and other agencies) have provided considerable previous advice in developing the existing noise conditions and associated buffer zones around the North Shore and Central Residential Precincts. These buffers were developed with consideration of the existing site conditions, the operational Tallawarra A Power Station and the approved but yet to be constructed Tallawarra B Power Station. The Noise Impact Assessment (NIA) presented in the proposal does not appear to address these concerns.
	Roads and Maritime Services	RMS notes that as the average annual daily traffic (AADT) along the adjoining section of the Princes Highway is greater than 40,000 vehicles per day (actual AADT in October 2015 was 59,185 vehicles). As per the requirements of Clause 102 of <i>State Environmental Policy (Infrastructure) 2007</i> appropriate measures must be identified that will ensure noise levels as specified by subclause 3 are not exceeded. At this time RMS is concerned that the noise impact from operational traffic noise associated with the Princes Highway and the Albion Park Rail bypass project have not been captured correctly by this development and as such it is unclear as to how the Department of Planning and Environment as the consent authority can be satisfied that the requirements of subclause 3 can be addressed. RMS' Environmental Branch is currently reviewing the information that has been provided in relation to noise. More detailed comments in relation to the noise issue will be provided separately.
	Wollongong City Council	The Noise Assessment prepared by Pacific Environment dated 17 October 2017 identifies that in the Northshore precinct the Modification proposed to locate dwellings where they would experience noise levels of 45-50 dB(A) for the Tallawarra Power Station. This is an undesirable outcome and further reinforces Council concerns with respect to the expanded residential footprint, particularly towards the power plant.
Biodiversity	Office of Environment and Heritage	In light of recent legislative changes under the Biodiversity Conservation (BC) Act 2016, the potential for environmental lands not already secured to be managed as a Biodiversity Stewardship Agreement (BSA) site should be considered at this stage.

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		The extent of additional clearing proposed by the modification, particularly in areas affecting threatened ecological communities, should be quantified to determine the full extent of additional impacts proposed above and beyond the approved Concept Plan layout. An indication of the likely staging and therefore the estimated offsets required for each development application stage would also be beneficial at this stage.
	Wollongong City Council	The Modification propose additional clearing of native vegetation including the Critically Endangered Ecological Community Illawarra and South Coast Lowland Forest and Woodland. The Biodiversity Assessment Report prepared by Ecoplaning dated 11 August 2017 should clarify if the proposal needs to be referred to the Commonwealth Department of the Environment and Energy for potential significant impacts on this Matter of National Environmental Significance
Bushfire	NSW Rural Fire Service	Advised that NSW RFS has no objection to the proposed modification subject to the Concept Plan being amended to provide for a perimeter road around all proposed residential lots in accordance with section 4.1.3(1) of <i>Planning for Bush Fire Protection 2006</i> . If there is no Plan of Management for Lot 1 in DP 588318, the Concept Plan shall be amended to provide a perimeter road between the residential lots situated within the Northern Precinct and Lot 1 in DP 588318
Contamination	Department of Industry – Crown Lands & Water	Further evidence should be provided of the source of heavy metals (including zinc, arsenic and lead) found in the soil on site, and the impact on the groundwater.
	Environment Protection Authority	<p>The existing Conditions 11 & 12 relating to contaminated land management apply (in part) to the residential areas, the most sensitive land use across the Tallawarra Lands area. The scope of the conditions has narrowed through the proposed modification which does not cover the entire Tallawarra Lands area. It is only associated with the North Shore, Central precinct, industrial lands and another small parcel of land.</p> <p>On the basis of a review of the information provided, the EPA does not support the proposed modification of Condition 12. Even with the narrowed scope, the existing conditions and the timing remain relevant and appropriate taking into account the sensitive residential land use, large and complex nature of the site, previous industrial activities and the gaps in some of the contaminant information. There does not appear to be a benefit (in timing or process efficiency) of delaying the implementation of the condition requirements to the subdivision approval stage of the planning process.</p>
Visual and Urban Design	Wollongong City Council	<p>Increased densities on some of the steeper land will also likely have an increased visual impact, as demonstrated by the Visual Impact Assessment. This was a contentious issue throughout the assessment of the Concept Plan. The northern precinct ridgeline was deliberately kept out of development footprints to limit visual impacts.</p> <p>An updated visual assessment prepared by a suitably qualified professional should be provided.</p>
European Heritage	Wollongong City Council	The Heritage Impact Assessment Report prepared by Biosis appears to indicate a downgrading of the potential archaeological significance of a range of identified Archaeological sites detailed in the earlier reporting. Evidence gathered by Council about this estate appears to indicate a significant history of transactions and history that is not reflected in the reporting and which may call into question some of the assumptions and conclusions in the report. Council considers that the Heritage Impact Assessment Report prepared by Biosis should be amended to reflect the substantial additional historical records available to ensure that the conclusions made about potential archaeological sites are properly considered and that the assumptions made in the

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		absence of this evidence are correct. Details of this additional history have been included in this submission at Attachment 2 and can be further clarified by Council's Heritage Coordinator as required.
Aboriginal Heritage	Office of Environment and Heritage	<p>Additional archaeological test excavation and Aboriginal community consultation is required to better inform the impact of this development on Aboriginal heritage. An Aboriginal heritage impact permit (AHIP) under the National Parks & Wildlife (NPW) Act 1974 will be required for both the archaeological test excavation and the proposed development works. A summary of the additional requirements is provided below:</p> <ul style="list-style-type: none"> ▪ Update the consultation section of the reports and maintain consultation with the Registered Aboriginal Parties. ▪ Apply for an Aboriginal Heritage Impact Permit to conduct archaeological test excavation. ▪ Commitment to conserve of the fig tree associated with site 52-5-0615 (Biosis 2017b, pp.36, 38). ▪ Prepare an archaeological technical report in accordance with the Code of Practice. ▪ Submit an AHIP application for harm through the proposed construction after development consent has been approved by Council. ▪ Prepare an AHMP to meet the requirements of the Concept Plan approval MP09_0131 .
	Wollongong City Council	There are concerns that the proposed modification has not been used as an opportunity to avoid significant sites (52-5-052325-5-0223, 52-5-0225, 52-5-0642, 52-5-0643) that have been identified through further archaeological assessment of the site. Council maintains its previous position that post approval management of the development with respect to heritage matters is considered to be inappropriate and that all archaeological assessments recommended for the development site should be undertaken prior to the finalisation of the development plan.
Additional Comments	Office of Environment and Heritage – Heritage Division	The conclusion and recommendations of the Statement of Heritage Impact is supported by the Heritage Division. As the proposal does not impact on any State Heritage Register listed items or potential for historical archaeological relics, no further comments are provided.
	Department of Industry – Crown Lands & Water	References to the NSW Office of Water should be changed to Natural Resources Access Regulator (NRAR).
	Wollongong City Council	A Social Impact Assessment prepared by a suitably qualified professional should be provided.

Table 1-2 Summary of Special Interest Group Submissions

AREA OF CONCERN	RAISED BY	SUMMARY OF ISSUE
Precinct Layouts	National Parks Association	Advocating for a significant part of the Tallawarra Lands to become protected and oppose development that threatens this outcome. Noted that the proposed development includes a reduction in the existing E3 zoned land.
	Illawarra Birders Inc.	Increased density contrary to initial Concept Plan. Move by the developer to increase profits, resulting in a loss of amenity.
		Impacts form increased population and human activity within and around the site. This will reduce foraging land for local bird species
	Save Lake Illawarra Action Group Inc.	Development proposed to encroach on both the RE1 and E3 zoned land
		Extra strain placed on the environment, traffic, noise and pollination through the increased number of dwellings proposed
		Two storey terraces and four storey apartment buildings will impede views to the lake from properties located behind.
		Reduction of Minimum lots sizes across the site is not supported.
		Access to large lots within central precinct not supported from Carlyle Close
		Increase of the FSR and height within the 200m ² lots and within the three apartment lots is not supported.
		Proposed extension of Gilba Road is not supported as it is located outside the site boundary.
		There is a lack of recreational space throughout the site.
		Object to providing Industrial land within the central precinct due to the potential for pollution to affect Lake Illawarra
	Lake Illawarra Estuary Management Committee	Proposed lot orientation will not provided east-west road alignments enabling future housing to benefit from northerly aspects.
		Reduced minimum lot sizes will impact on the health of future generations through a lack of open space.
		Reduction of RE1 land on Tallawarra Point is not supported. The application should include increased recreational space, not a reduction.
		Encroachment into E3 land is not supported as this pasture land is green open space and has amenity and visual values for visitors and residents.
		Additional of housing along the southern side of the northern precinct is not supported as it will impact on the publics access to views across Lake Illawarra
		The modification application falls to detail how greater affordability will be achieved through the modification application. There has been no commitment to providing social or affordable housing.
	The Illawarra Housing Trust	The Housing Trust supports the modification request for the Tarrawarra Lands Concept Plan on the condition that the residential development includes a 15% allocation for affordable rental

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		<p>housing. Contemporary best practice and inclusionary zoning would deliver a 'salt-and-pepper' mixed use development with approximately 5% of the dwellings dedicated to social housing tenants and 10% dedicated to affordable housing tenants.</p> <p>The Housing Trust also considers the site provides an innovative and much-needed opportunity for a shared equity housing solution. This would provide purchasing opportunities for moderate income key workers and other first home buyers.</p> <p>It is not necessary or desirable for the whole site to be developed as single residential lots. The optimal urban design outcome would include single lot single dwellings, townhouses or terraces, and low rise medium density unit blocks. Such diversity in the built form facilitates the success of inclusionary zoning and creates safe, diverse and engaging communities.</p> <p>The land dedicated for affordable housing should be gifted to a registered, not-for-profit Community Housing Provider in a property transfer agreement similar to those implemented elsewhere. In return for the land, Housing Trust would undertake extensive stakeholder consultation, design and construction works. Once tenanted a proven model of integrated support services would deliver the outcomes required in the Government's Future Directions for Social Housing framework.</p>
Legislative requirements	National Parks Association	Management of land along the Lake Illawarra foreshore to remain under the control of Council and excluded from any development.
	Lake Illawarra Estuary Management Committee	The modification application should remain inclusive of the Lakeside precinct to ensure integrated planning.
		Coastal Management SEPP 2018 has not been addressed within the submitted documentation due to sunset clauses being in place. Best practice would be to include an assessment against these requirements.
Traffic and Transport	Save Lake Illawarra Action Group Inc.	Traffic network will not be capable of accommodating the additional traffic generated by both the northern and central precincts.
		There is a lack of proposed public transport throughout the site.
	Lake Illawarra Estuary Management Committee	Increase in density is not supported due to the existing road network not being able to support the additional traffic that will be generated from the site
		Car parking within the two precincts will be severely lacking due to small lot sizes not being able to accommodate cars within the lots.
		No provision of funding for the construction of northbound access ramps to the Princes Motorway. This will result in traffic utilizing the Princes Highway and travelling through the Dapto CBD further increasing congestion in this location.
		Lack of provision for pedestrian and cycle paths through the internal streets of the development.
		The access to the Lakeside Precinct from the Princes Highway needs to be removed to satisfy environmental and safety concerns.
Stormwater and Flooding	National Parks Association	Increased density will result in increased stormwater runoff, potentially resulting in increased sedimentation and changes to the lake ecology
	Illawarra Birders Inc.	Development in close proximity to the lake at risk from flooding impacts

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	Save Lake Illawarra Action Group Inc.	Smaller lots will create more hard surfaces increasing water run-off. Run-off needs to be appropriately treated to ensure any pollutants are trapped prior to entering Lake Illawarra
	Lake Illawarra Estuary Management Committee	Increases in surface runoff from higher density development will further impact Lake Illawarra, increasing pollution and sediment run-off. Stricter water quality targets should be imposed on the site in accordance with the draft measures in development by OEH.
		Development will place increased demand on Council to maintain stormwater infrastructure that will result from the increased development of the site.
Noise	Illawarra Birders Inc	Reduction in buffer zone around power station will increase impacts on residents associated with low frequency noise.
	Save Lake Illawarra Action Group Inc.	Existing residents within Koonawarra and Kanahooka already suffer from noise generated from the power station. Extra dwellings will also be exposed to noise generated from the power station. Will only worsen when second power station is constructed.
	Lake Illawarra Estuary Management Committee	Increasing housing towards the power station within the northern precinct will severely impact residents in regards to noise pollution
Biodiversity	National Parks Association	The buffer zone around the power station forms part of the 'Yallah' corridor detailed within the Illawarra-Shoalhaven Regional Plan. Reduction in buffer lands is not supported.
	Illawarra Birders Inc.	Habitat for water birds reduced in times of flood due to the residential development limiting areas for fauna to retreat too.
		Loss of buffer land resulting in loss of habitat for local bird species
		Impacts on endangered species that are noted to have been observed within the site.
		Establishment of a wildlife corridor that links the Illawarra Escarpment with Lake Illawarra.
	Save Lake Illawarra Action Group Inc.	The health of Lake Illawarra will be further impacted by the increased development of the Tallawarra Lands.
	Lake Illawarra Estuary Management Committee	Habitat for water birds reduced in times of flood due to the residential development limiting areas for fauna to retreat too.
		Impacts on endangered species that are noted to have been observed within the site.
		Establishment of a wildlife corridor that links the Illawarra Escarpment with Lake Illawarra.
Aboriginal Heritage	Lake Illawarra Estuary Management Committee	The increased development footprints will have a direct impact on the native vegetation, threatened species, habitats and the land (i.e. it will destroy Aboriginal heritage/Country). These impacts will directly impact on the education of Aboriginal children.
		Further assessment of Aboriginal Heritage impacts is required in addition to the requirement to prepare an Aboriginal Heritage Management Plan
Utility Servicing	Save Lake Illawarra Action Group Inc.	The existing sewer networks cannot cope with demand. Additional dwellings in the area will further add to this issue.

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	Lake Illawarra Estuary Management Committee	The sewer pump station at Kanahooka is already unable to cope with the demand from existing dwellings in large rainfall events. This is expected to only worsen with the additional development proposed
Additional Comments	Save Lake Illawarra Action Group Inc.	Air Quality – Gas-fired power stations emit heavier than air pollution on start up. What are the impacts on nearby residents when housing is located closer to the power stations.
	Trans Grid	No objections to the proposed modification

Table 1-3 Summary of General Public Submissions

AREA OF CONCERN	RAISED BY	SUMMARY OF ISSUE
	(Department of Planning and Environment numbering)	
Precinct Layouts	273175	Reducing further the limited amount of green space and the buffer area between the residential development and the power station will have an unacceptable impact on the fauna in the area, particularly raptor species
		Reducing further the green area towards the top on Mount Brown will have a serious negative impact on the landscape over a wide area, particularly as viewed from the southern freeway and Lake Illawarra
		Reducing the green buffer between the residential development and the lake foreshore will further erode the precious lake frontage atmosphere
		The introduction of medium density lots in the northern area, far from any services, will create unnecessary extra travel effort which will have unsustainable social, economic and environmental consequences.
	273014	This opportunity to increase housing is viewed by the proponent as an offset for lots no longer available in the lakeside precinct. And to create smaller lots to give higher density living. To achieve this the modification also requires expansion into E3 environmental management lands. I do not support these changes.
		The proposed development will result in smaller lot sizes and higher density living with all the increase pressure on the surrounding area. Such development may be appropriate somewhere else eg within a city environment but in the aesthetically pleasing big open sky location that is Tallawarra it is out of character.
		The expanded development at Tallawarra will bring many more residents resulting in increases in people movement, noise, traffic ,public utilities demand, storm water run off when compared to the previously approved smaller development
	272926	The increase in size for the development goes beyond the boundaries of RE1. This has not been approved. The recreation area along the lake is small and with the proposed increase in population, this area becomes even more important to the lifestyles of future families.
		The increase in size goes beyond the boundaries of E2. This has not been approved.
		The increase of 60% in house on both the northern and central areas will mean a much larger demand on recreational facilities for the health of families. There is no plan for park land or play areas in this change.
		The developers of this area are promoting heathy safe open space lifestyle but this dramatic increase in lot numbers of very small area and a reduction in recreation area are a total contradiction to these statements. I believe that this has the making of a high-priced slum with limited access to what was a wonderful Lake Illawarra.
	275117	The proposed modifications will see the combined dwelling yield of the Northshore and Central precincts increase by over 70% (from 660 to 1144 lots). This is a major change. The suggestion

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		that the increase compensates for the removal of the 350-lot southern Lakeside precinct from the concept plan is not credible: development of Lakeside remains a possibility
		Change to the development footprint of the two precincts is also significant, representing an increase of about 33% and an approximate loss of about 20ha of open space.
		In the EcoLogical Australia's Tallawarra Lands Riparian Assessment 4 Feb 2011, five waterways occur within, or in proximity to, the proposed concept plan modification areas: no.4 (unnamed); no. 5 (Yallah Gully); no. 6 (Brooks Creek); no. 7 (unnamed); and no. 8 (North Shore Creek/Barrons Gully). Of these, no. 4 waterway and its required buffer will be encroached on by the expansion of the industrial area proposed for the Central Precinct. On the northern boundary of the Northern Precinct, the proposed expansion will encroach on the buffer of no. 8 (North Shore Creek/Barrons Gully) and its wetland (Artificial Wetland 10). Likely are indirect impacts (e.g. through edge effects and ground water connections) of Central R5 expansion on no. 5 (Yallah Gully) and no. 6 Brooks Crk and their riparian corridors, and of Northern southern boundary expansion on no. 7 (unnamed) and its corridor.
		NORTHSHORE PRECINCT: Contrary to claims made in the EA, the proposed modifications radically change the concept plan for the Northshore Precinct. The residential footprint is increased by more than half, from 20.61ha to 33.85ha. Loss of open space is more than half, from 24.62ha to 11.59ha. Loss of the north to south landscaped passage dividing the precinct is a drastic reduction in the site's livability and sustainability: lost is the bushland corridor and walk/cycle path connecting foreshore to the precinct's southern open space, replaced by roadway and congested streetscape (please note that loss of this passage does not appear to be included in the calculation for increase in the residential footprint Table 3.1).
		CENTRAL PRECINCT: Changes for the Central Precinct are less radical than those for the north, but equally hard to justify. There is a 3ha increase in industrial land which appears to encroach on the buffer for the mid-precinct waterway, if not the waterway itself. This waterway, which drains into Duck Creek, is designated as 'flood affected' and shows evidence of erosion. Maps (e.g. Fig 3.2 Appendix G of the EA report) appear to show a strip of the EEC Coastal Saltmarsh on its western edge. Besides risks of riparian erosion and waterway sedimentation, the IN2 expansion poses an industrial contamination risk to the waterway and Duck Creek. Also, the environmental buffer that is said to be retained between residences and the industrial area appears very narrow, too narrow for purpose.
		HOUSING AFFORDABILITY: The EA does not make a convincing case for the increase in residential density. The Illawarra is critically short of affordable housing and increasing medium density housing is a major part of the solution—more terraces, duplexes and manor houses—However, the proponent does not/cannot guarantee the prosed increase in medium density will increase affordability. Undoubtedly, the highest price permitted by the market will be sought when lots and dwellings are put up for sale. Further, research reveals that buyer preference for medium density largely rests on it being located in established suburbs with good public transport and access to jobs and services
		BUILT FORM: As discussed above, more medium density housing is undoubtedly needed for the Illawarra. However, its value relies on being in walking distance from major transport and town centre. People need the option to be car-free. At the same time, the Illawarra needs to reduce demands on land and road use created by car dependence.

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	272746	<p>I object to the concept plan variation due to my concerns about the increased density of housing and the taking of small sections of land from that which was on the original concept plan part of the buffer zone between the power station and the residential development as well as from the original proposed green space.</p> <p>I do not see a need for an amendment to the original plan. Increased housing density does not offer open plan easy living as the original plan promised low density housing. The new plan sees a big reduction in the number of larger blocks on offer as well as a decrease in overall residential block sizes. This means more cramped living conditions, greater traffic flow and congestion and a changed and less appealing aesthetic appearance of the residential developments.</p>
	272693	<p>I object to the increase of the footprint of residential development in the Central and North Shore Precincts to increase the overall approved residential yield from 1,010 to 1,480 lots. The increase of houses decreases the open space, why is it we continue to allow this to happen. There are many new developments within the Illawarra that have destroyed lifestyle because of the lack of open space.</p> <p>I object to a reduction of the minimum lot size throughout the R2 zoned land to 299m2 in both the North Shore and Central precincts. And a strip of R2 land along the foreshore of Lake Illawarra be provided with a minimum lot size of 199m2. It is up to us as adults to protect the health and well being of our future generations. We advocate that the Health and well-being of our children must be protected, yet we continue to take away their activity space that allows them a healthy lifestyle. I have witnessed the direct impact of reducing the lot size in residential development. No space to run, play or enjoy outside activity which has a direct impact on the mental health and well being of children and adults.</p>
	270194	<p>There are too many high-density developments being permitted. Whilst these are promoted to support new-home purchases for younger families, in reality, they are more about increasing the income of already wealthy individuals, and the companies they run. Cheaper housing is, in my view, better provided through the incorporation of attached dwellings of two to three floors, which are less expensive to build, into sufficiently large green spaces. Councils and planning agencies have a moral obligation to support all citizens, not just those the wealthy, and also to foster healthy and sustainable environments. Accordingly, such communities should have adequate recreational zones, small businesses, and various community and educational facilities. How have these considerations been incorporated into the planning for healthy communities?</p>
	273356	<p>I request clarification from the developer on the small narrow parcel of land that runs between 2 large blocks that extends from Carlyle Close to the newly indicated road in the new development below. This appears to be an access way joining the new estate to Carlyle Close. What type of access is it? If this is vehicular access then this needs to be included into the traffic study as it will further impact the traffic load on Carlyle Close.</p> <p>There are different layout proposals in the development on exhibition. The Central Precinct layout (Fig 11) on page 14 on the Sears request has the large lots with access to the new road within the new development which differs to the layout proposed in the Visual Assessment that has the large blocks accessing Carlyle Close. Which proposal is correct?</p>

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	273173	I would like to see bigger blocks of land rather than more lots, so object to an increase in the number of lots being increased. I feel that despite what the impact study says there would be significant impact on the environments at mt brown reserve, the lake and the surrounding water ways, as is always the case with human involvement. So I also object to less open space and recreation areas, especially with land sizes so small and houses so big it leaves little space for our kids to play and roam, essential for a happy, well rounded childhood, so open spaces and recreation areas are essential, the bigger the space the better.
	273136	<p>As can be seen from recent smaller lot sizes in West Dapto, Calderwood and Tullimbar developments, the reduction in lot size to 300m2 results in a complete lack of urban greening due to the lack of available space between dwellings to plant trees or large shrubs that provides much needed shade, wildlife habitat and visual amenity.</p> <p>Given that the current land form is open green space with dense plantings around the lake foreshore, a change to completely built form with no urban greening that will result from a minimum lot size of 300m2 will have a detrimental impact on the visual amenity of the existing area, remove any habitat for native birds and animals, and extenuate noise associated with residents in the new development, particularly in the northern precinct.</p> <p>To enable 300m2 lots and preserve both the amenity and habitat of the existing area, green corridors or the like between successive rows of housing should be considered to ensure that urban greening and more sustainable outcomes are achieved.</p> <p>Such green corridors will:</p> <ul style="list-style-type: none"> only marginally impact the total developable area of the site for the proponent establish wildlife corridors throughout the development to promote and preserve native birds and animals and connect Mt Brown reserve to the lake foreshore preserve and enhance the visual amenity of the sites provide shade and stormwater attenuation provide noise attenuation from the new development provide enhanced privacy between back to back residences to counter reduced separation distances from smaller lot size <p>The Department should give consideration to such appropriate controls to promote and enable urban greening if approval is granted for lot sizes of 300m2 for the main residential areas as being proposed in this modification requests.</p>
Traffic and Transport	273014	<p>The transport issue is unresolved as permission for a major interchange at the junction of Yallah Bay Road has not been approved .See point 1.2.5.1.1 in Environmental Assessment Report 001 ver5 Part(1) “ the exclusion of the northern interchange at Yallah Bay Road will lessen the beneficial impacts of this development on the Tallawarra Lands”</p> <p>The Tallawarra site is isolated. The intersection mentioned here is the only major way in and out of the development.</p>
	272926	<p>The small lot size and narrow streets will force cars and trailers to be parked on the footpath making it difficult to walk or cycle in the area.</p> <p>The narrow streets will make access of ambulances, fire and rescue and other emergency services very difficult to service emergencies. This is proving to be a major problem in the close</p>

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		by area of Shell Cove. Shellharbour Council have had to include no parking areas for safe movement of traffic.
	272849	<p>There are great concerns those lots will require access using Carlyle Close. Carlyle Close was never designed to cater for the increased traffic that would be associated with the increase of dwellings as per the lot plan for the Northern & Central Precinct" area.</p> <p>As current residents we are concerned of the increased traffic that would come with accessing those lots on the Northern & Central Precincts will affect children's safety, amenity and lifestyle, already the current increased and increasing traffic loads and the speeds of vehicles in Carlyle Close is stressful and frightening.</p> <p>Their are further concerns if access via Carlyle Close was approved and future subdivision of those ridge top lots would drastically impact residents of Carlyle Close.</p> <p>*Carlyle Close is a extremely narrow Road with no current pedestrian & bicycle paths making it even more of a safety concern. You could almost call it a "one way street" as vehicles often have to pull over on the side of the road to allow on coming traffic pass.</p>
	272693	The more houses the traffic, our roads in this area are already congested. In the mornings and afternoons traffic is already at a standstill in the Mt. Brown/ Tallawarra area. We must stop developers from showing a total lack of regard when it comes to people's well-being. We have enough problems in the Illawarra with skinny streets, small blocks, overcrowding and congestion.
	272845	My concern relates to the traffic management and infrastructure adjacent to the development. The increase in traffic from this development will impact the Princess Hwy down to Fowlers Road, and the increase from 1000 dwellings to 1400 dwellings will make it even worse. Approaches to RMS via the Dapto Neighborhood Forum revealed that the Albion Park Bypass will not have freeway access ramps at Tallawarra/Dapto because they say the traffic load doesn't warrant it. This development along with Calderwood and Marshall Mount will add to the traffic load and ramps will be required. Further to that, I regularly turn right from Huntly Road onto Princess Hwy and it is difficult to find a safe break now, this will become very difficult when more traffic comes from Tallawarra and when there are more cars trying to turn right because of the new residents at Calderwood and Marshall Mount. I believe that a roundabout will be needed. Council should not approve this proposal without this necessary traffic infrastructure being in place,
	272860	This precinct proposal shows no cycle/walkways connecting to existing Dapto residential developments or Lake Illawarra.
	272851	<p>Looking at the changes to the proposal my main concern is that there will be additional traffic on Carlyle Close as a result of the change of access to the blocks that run along Carlyle Close.</p> <p>I could not find any information detailing any studies relating to the impact of additional traffic on this VERY narrow, steep road. If this has been carried out, as one would expect for a development of such size, could it be made available for review and comment?</p> <p>The simplest option to prevent hold ups due to additional studies would be to revert to the original plan and NOT use Carlyle Close. It was never intended to carry traffic from more developments. I am also concerned about future subdivisions which may amplify this impact (although I recognise that this can be controlled in other ways).</p>

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		I am not against the overall project, however I do object to the alteration of the access to the large blocks adjacent to Carlyle Close to use Carlyle Close.
	275063	<p>My question and concern are directed to one of the roads on the southern end of this estate IT seems to connect onto the northern end of Hayward bay drive . From the master plan it is unclear as to is this road only finishing up next to Hayward bay drive or actually connecting onto it. If so that will be a massive change in traffic on this road. If it does what is the reason for the connection. If this road does connect onto haywards bay drive it is a great concern for us that live on this street that from generally around 50 cars a day we might be getting thousands per day. I have small children and most of the residence on this little Street do. One of the main reasons that we purchased our block of land here in Haywards Bay was the secluded family orientated and very minimal traffic estate.</p> <p>Could this possibly become the main road for that whole new area to come through onto the Princes Highway via Haywards Bay Drive. This is a small Road that would not be appropriate to handle all that traffic from 1400 residential blocks Plus. So I'm really hoping that I am wrong.</p>
	273356	<p>I object to the modified development with respect to to the large blocks in the central precinct that run along Carlyle Close to have their access to Carlyle Close.</p> <p>Carlyle Close is a small and narrow road that is difficult to negotiate at certain times already and is still under going further development from the original estate.</p> <p>Carlyle Close was never designed or built with more development in mind. There is no mention of Carlyle Close in the traffic study undertaken by Cardno. It looks at the surrounding areas but has made no assessment of the traffic flow or load on Carlyle Close or the potential for further subdivisions of the large lots.</p> <p>The Traffic assessment should be required to include a detailed study of traffic flow on Carlyle Close to the future growth of the area to yr2041. The study should be carried out by an independent 3rd party not invested by the development.</p>
		The traffic assessment has numerous error messages before each of the scenarios. "outline in Error! Reference source not found". What do the error messages mean and how does it impact the assessment? Is the assessment flawed?
		I seek clarification on the Traffic assessment scenario 1. Modeling has Cormack Ave still in place. How can the traffic flow improve on the Cormack Ave intersection with an extra 400 blocks and no access change has occurred? The rating went from a C to a B.
	273084	<p>I cannot believe that council is considering an application to use Carlyle Close as an entry or exit to an exceptionally narrow road. The road is already congested and building has not finished, with some blocks still to be built on.</p> <p>We all have problems just reversing out of our driveways with some experiencing accidents and near misses on this narrow road.</p> <p>SURELY. - WCC has made plans to send someone experienced in traffic control to assess this for all of our safety!!</p>
	273080	I wish to object to the proposed modification creating an access to the development via Carlyle Close.

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		<p>I believe that the use of Carlyle close to access the development will have a major impact on the amenity of residents in Carlyle close due to increased traffic resulting from the proposed development.</p> <p>The traffic impact assessment included with the proposal makes no reference to the effects on Carlyle close and does not detail this as an access road.</p>
	273173	I would like there to be more pedestrian and cycle pathways so this community can move about without cars where possible, makes it more friendly for all living there with less cars.
Stormwater and Flooding	273014	Some areas of the Central precinct are on steep land. Water in this precinct and possibly other locations will see surface water flow into unnamed water courses and or into Duck Creek and ultimately into Lake Illawarra. This is exactly why Lake Illawarra is so polluted. Bulldozed sites in the preparation of such a large subdivision and ancillary services will result in surface water run off which goes into the lake.
	272926	The large ratio of hard surfaces (buildings, roads) to open land (lawn, gardens) will mean that most rain water will be runoff and not be soaked into the ground. All this water and the pollution will enter Lake Illawarra unless large well-maintained pollution traps are installed.
	275117	<p>LAKE ILLAWARRA: The health of Lake Illawarra and its estuary is at high risk from uncontrolled runoff and sedimentation. Arguably this is the most serious threat facing the Lake. It is the main reason it has been classified as one of NSW's 'sensitive' estuaries (NSW Natural Resources Monitoring, Evaluation and Reporting Strategy 2010-2015). In the Illawarra- Shoalhaven Regional Plan (DP&E 2015), the NSW government undertakes "to protect these sensitive estuaries from inappropriate development that affects water quality or ecological function." The 480 extra dwellings that the proponent seeks approval for would be more appropriately achieved in infill areas of our city. On the other hand, more sedimentation and pollution of the Lake could well create a situation of 'no return'.</p> <p>STORMWATER AND DRAINAGE INFRASTRUCTURE: Among the highest risk to the environmental health of Lake Illawarra is development generated sediment and nutrient input. Expansion and increased density of the two residential precincts will undoubtedly increase the import of sediment and contaminants to the Lake. Of particular concern is the increase in hard surfaces that the modifications will cause and the decrease in the capacity of the sites to accommodate adequate Water Sensitive Urban Design measures (WSUD).</p>
	272860	<p>On the western side of Mt Brown, the catchment into Brooks Creek has a large retention basin in place, presumably to catch excessive rain runoff and more importantly a contingency for a unlikely water storage tank failure.</p> <p>The extension area within the Central Precinct below the water tank is also in danger from a (unlikely) water tank failure and therefore should not be developed.</p>
	273356	Now that the proposal extends the Central Precinct to beneath the water tank there is no information or study that includes outcomes if the water tank has a catastrophic failure. Houses built under the tank could be affected. An independent study should be carried out.
Noise	275117	NOISE: The Tallawarra Power Station Stages A & B poses challenging levels of received noise levels for the proposed residential expansions. According to the Pacific Environment noise assessment (Appendix F), "Modelled noise levels for Tallawarra A and Tallawarra B indicate that received noise levels within the Northshore precinct would be expected between 35 to 45dB(A)"

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Biodiversity		(p26). This result is worse than borderline given the NSW INP Acceptable Noise Level (ANL) for the Northshore Precinct is 37 to 40dB(A) (p22 Table 6.2). The map of recommended buffer zones (Figure 8.1) places most of the Northshore expansion in the zone that recommends “no residential development recommended without further site-specific (dwelling specific) acoustic assessments to confirm suitable dwelling design.”
	272693	The impact the noise levels from the Tallawarra gas Turbine Power Station will have on the residents of this development must be addressed. To live every day with noise well above the accepted levels (EPA) and to say potential buyers will be informed on their title is not good enough. The health and well- being of people /children must be protected.
	272858	Northern Precinct - The water front area of the proposed development is rocky and shallow for some metres off shore. Large numbers of grey mangrove are now growing in Koonawarra Bay and the spread is towards Tallawarra Point which in years to come will make access to the lake impossible around that area.
Biodiversity	273014	<p>Development around Lake Illawarra is almost complete which sadly has lead to pollution and disruption to the waterway resulting in the lakes demise. Tallawarra stands as the last remaining green corridor from lake to the escarpment. It is the last green space if one looks around the lake foreshore. It is an iconic view the land held safe for many years as a buffer zone around the old power station.</p> <p>The corridor gives all native species the opportunity to escape unsatisfactory conditions whatever they may be and move away to another place along the corridor where they have a better opportunity to survive.</p>
	275117	<p>In EcoLogical Australia’s Tallawarra Lands Environmental Management Strategy 4 Feb 2011, which informed the 2013 Concept Approval, it is stated, “The most intact native vegetation occurs in the south-eastern corner of the site with smaller areas in the north with connectivity to the adjoining native vegetation stands in Mt Brown Reserve as well as along the central part of the western boundary of the site” (page 4, my emphasis). A major objective of the strategy is “to ensure connectivity of habitat is maintained and enhanced”, a specific aspect of which is “link retention and restoration of adjacent habitat” including the “consolidation of Mt Brown Reserve”.</p> <p>Mt Brown Reserve to Lake Illawarra riparian vegetation: In Schedule 2 Part B – Modifications of the final PAC Concept Approval (Section 750 of the EP&A Act 1979) 23 May 2013, there is a requirement for an ‘environmental corridor’: “The proposed woodland revegetation along the ridgeline on the southern edge of the Northshore precinct (identified in the Landscape Plan prepared by Corkery Consulting May 2012) shall comprise a continuous vegetated corridor providing ecological connectivity such that the movement of native fauna species between Mt Brown Reserve and the foreshore of Lake Illawarra is facilitated.” This requirement has not been addressed in the modification EA. Proposed increase in residential lots on the southern boundary of the Northshore Precinct would surely encroach on this required corridor. Given the sad lack of connectivity in this proposal, the corridor must be assured a place at this stage of planning.</p> <p>THREATENED PLANT SPECIES: While no threatened plant species have been identified in the modification areas, risks remain. A more precautionary approach needs to be taken. The clearance of the forest and woodland areas discussed above do pose potential loss of three threatened plant species in particular: Illawarra Greenhood Orchid (<i>Pterostylis gibbosa</i>); Eastern</p>

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		Flame Pea (<i>Chorizema parviflora</i> Benth.); Perennial Lespedeza (<i>Lespedeza juncea</i> subsp. <i>serica</i>).
	272364	<p>I wish to voice my protest against the development proposal based on the significant adverse effects the proposed development would have on the natural environment, including but not limited to Lake Illawarra, the Lake's foreshore and Duck Creek - the latter being a significant tributary of the Lake. In addition to these, there are other creek-lines and dams of a reasonable size within the proposed development site. All of these waterways will be adversely impacted by development activities and the resultant infrastructure which is proposed to adjoin and surround them. Waterways provide a vital source of water, food, shelter and habitat for numerous species of animals and birds, including migratory birds.</p> <p>In view of these significant environmental concerns, ideally the proposed development would include substantially-sized buffer zones of vegetation surrounding and so protecting all of the significant waterways within the development zone with the Illawarra Lake foreshore being of particular concern and so requiring a reasonable perimeter of Reserve before building works commence so as to alleviate risk of pollution and degradation of the Lake and foreshore - both being areas of particular environmental significance.</p> <p>In addition to protecting the waterways within the proposed development, protective measures need also to be implemented to preserve three significant areas of woodland in the south-west zone situated either side of Duck Creek and to the south of Wollingurrie Creek; these vegetated areas serving as vital corridors for wildlife as well as providing food, shelter and habitat.</p>
	272746	<p>I am worried about the increased human traffic around the Lake Illawarra foreshores and the impacts this will have on the bird species I have seen using these spaces which are currently very quiet along the Tallawarra Foreshore edges. Royal Spoonbill run their bills through shallow water while standing in shallow water as do Little and Great Egrets as well as White-faced and White-necked Herons. Bar-tailed Godwit, Eastern Curlew and Sandpipers probe their bills into shallow muddy edges. All of these, and many other species of birds will suffer with increased foreshore traffic and stand to be impacted by run-off into the lake waters.</p> <p>Osprey has been breeding on one of the unused power poles and we have heard that one of the future plans is to place power underground with no visible poles. Osprey is only known to breed here in the whole of the Illawarra Region and the breeding records are only for the past 2 years. Increased housing will impact the many raptors recorded on the Tallawarra Lands by reducing further the amount of land these birds have available to hunt and roost.</p> <p>Please consider that Lake Illawarra is a tourism drawcard for the Illawarra and the wildlife that is found there has the potential to be impacted by any new housing development particularly one which is in such close proximity to the foreshore. Increased housing density adds to this potential for harm.</p> <p>I am very concerned that since the original environmental surveys were conducted for this development the birdlife at Tallawarra has changed significantly. I would not wish to see our precious wildlife negatively impacted to add more housing to the original concept plan. I want to see decisions based upon current updated information in relation to the wildlife.</p>
	267599	regarding the modification request by Cardno Pty.ltd to Northern Precinct of the Tallawarra lands. I strongly object to the proposed modification that will impact on the downslope and upslope of the existing forest . (RE 1 &R3 proposed boundary changes) The forest has been a

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		haven and natural habitat for Black cockatoos and other bird life. This proposal would be a negative value impact on the natural native wildlife. The proposal to implement approximately an additional 4.0% of forest and foot hill flora clearing would be shameful.
	272693	This increase has a direct impact on the native vegetation, Threatened species, habitats and the land, we cannot continue to destroy our heritage/Country. The proposed modification to the development will result in the clearing of another 4.24 ha of native vegetation on top of what has already been proposed.
	272860	The Biodiversity Assessment Report (Appendix G) at 3.1 states that no Lowland Dry-subtropical Rainforest is present in the Central Precinct. The aerial image suggests that there is very few eucalypts in these regions and I would suspect that both these habitats are remnant Lowland Dry-subtropical Rainforest (MU4). They would likely be under some level of stress from cattle grazing and lantana, especially the new recruits, shrubs and ground covers. If this is the case then these regions would be a Endangered Ecological Community (EEC) under Threatened Species Conservation (TSC) Act. Fig.3.1 in Appendix G shows some of this endangered community on the Central Precinct
		The original approved concept plan MP09_0131 is already consuming some significant natural flora in two locations near the lake foreshore (see two circled areas). With a small plan adjustment these two habitats could be preserved. Trees in both these areas are mature and fruiting. It would take about 15-20 years for any new plantings to reach this level of maturity. The current proposed modification appears to be consuming a region of mature native trees at the inland site below the farmhouse (see third circle). This entire community should be preserved.
Geotechnical	275117	SOIL INSTABILITY: Cardno's geotechnical assessment for the modification areas is said to rely the Coffey assessment of 22 Dec 2010. In relation to the Central Precinct modification area, the Coffey assessment found: "Upper steep slopes ... with slopes greater than about 10 degrees ... Moderate risk (with some high risk) of landslide in these areas. Further detailed geotechnical assessment works would be necessary to further refine areas suitable for development. Some of this land may be excluded from future development" (Section 3.4.5). Clearly, Cardno's site walkover and 6 hand-augured test pits undertaken for the proposed modified concept plan do not meet the 'detailed geotechnical assessment works' deemed necessary by Coffey. Cardno's confidence in management of the moderate risk (no mention of the high risk) by yet-to-be determined appropriate engineering design appears to be poorly grounded.
	272860	The upper areas of the Central Precinct are quite steep, especially in the proposed extension, on the NE side below the water tank. This area would be more difficult to build on, manage runoff and minimise erosion.
Visual and Urban Design	272849	Another concern is of the loss of South views from the impact of the skyline if tall bushy trees or houses are built at the ridge top not to mention the impact of increased noise and safety concerns when its windy of debris flying north and east. Carlyle Close can be a extremely high windy area more so than other parts of Dapto.
	273356	The Visual assessment acknowledges that houses built on the new large blocks along Carlyle Close negatively impacts the skyline. It indicates that this can be negated by imposing appropriate height and setback restrictions. What is the height restrictions and what are the setbacks proposed on each of the large blocks?

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		The Visual Assessment also recommends that building on the ridge line will be acceptable if 'large forest scale trees' are used along the ridge line. I respectfully request that this does not become a part of the requirement for the development. The intense winds that this area is subjected to on a regular basis (100kmh + gusts) is not only dangerous to life and property but the debris will be a constant nuisance to the residents to the north and west side of Carlyle Close.
Aboriginal Heritage	272693	I object to any modification that impacts directly on the education of our children. This land is of high cultural significance it is a learning space for our children we must protect it. The flora and fauna, wildlife, habitats all contribute to the learning of future generations. We must retain as much open space as we can as adults this should be our first priority.
		Aboriginal Heritage must be protected within the Tallawarra land, it is not good enough to only do a Aboriginal Heritage Management plan at the commencement of the construction phase. We as Aboriginal people should be involved through all levels of the development. Aboriginal Site Officers need to be engaged throughout all the construction for they are the best people to identify our Artefacts/ Sites.
Additional Comments	272858	Although the ash pond site (lakeside precinct) is outside the scope of this submission it is hoped that the Dept of Planning would consider the possibility of an application for a significant wetland reserve in the future and consider the implications of this current determination on such a development.
	275117	BIRD SANCTUARY: The several contaminated Ash Ponds that characterize the Tallawarra Lands are the dubious legacy of the original coal-fired Tallawarra power plant. Something magical has come of this legacy – many bird species, displaced by human activity from traditional habitat, have adopted the ponds as refuges. The area is now in effect a bird sanctuary, considered of high conservation value, and should be formally recognised as such. The Illawarra Birders Inc. have recorded the presence of 173 bird species on these lands, an increase of 103 in five years. Recognition of the Ash Ponds as bird sanctuary should be built into this proposal. Impacts of earthworks and construction, of road building and the increase in human population, including noise, should be assessed and avoided or mitigated.
	272693	An Aboriginal/ Youth Employment Strategy needs to be part of the process in the initial stages of any Development process.
	273356	Potential loss of internet access from new development. My house is a base station for a telecommunications company that requires line of sight to the escarpment, west of my block, arcing to the south through to the southeast across the lake to Oak Flats. Any buildings constructed on the ridge line (or large trees) has the potential to cause interference to the signal thus affecting the company and therefore my internet. I strongly advise the developers to contact the telecommunications company to assess their requirements. Due to my contractual arrangement with the telecommunications company I will be seeking compensation from the developers (Bridge Hill Pty Ltd) if my internet with this telecommunications company is affected by any future development.
	273173	I do however feel the opportunity to add a high school for this area has been overlooked, our current schools are at capacity and there are enough primary schools feeding into them. We

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		really need a High school. Schools like Mt Brown and Lakelands and the new primary school could feed into this taking pressure of Kanahooka and Dapto High schools.

