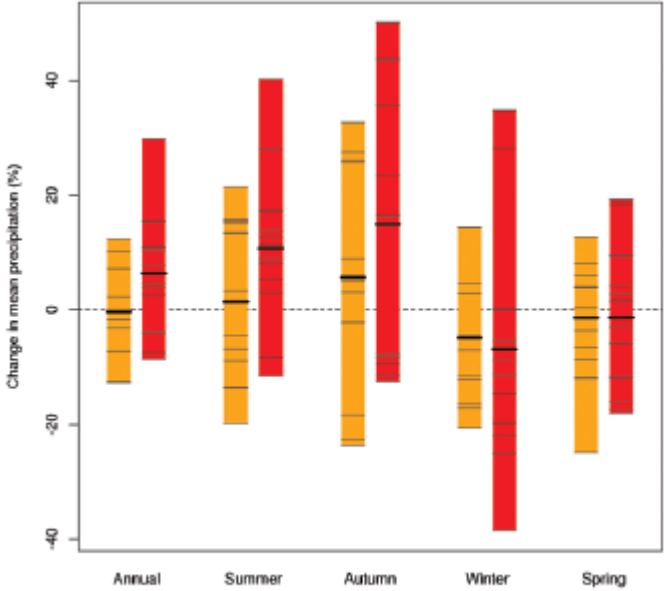


Submission Summary		Proponent Response	
Department of Education (DOE)			
Note advice that the proposed dwelling yield is now 6000 lots			
The proponent’s general response to our submission is that all matters have been “noted” , that further communication will occur between the proponent and the Department concerning the delivery of land for schools under the VPA, and that the design of roads suitable for access schools will be considered in future applications. <b>This approach is acceptable and we will continue to liaise with proponent to ensure the adequate and timely delivery of education land within the project.</b>		Noted. Lendlease and DoE continue to liaise regarding the timing of delivery of the education land.  Lendlease has also development approval for the subdivision of the education precinct land (first primary school and high school) with Shellharbour Council (DA 231/2019).	
DEPARTMENT OF PRIMARY INDUSTRY (DPI) and DPIE – LANDS & WATER			
<b>Crown Lands</b> <ul style="list-style-type: none"><li>The department will not accept the transfer of freehold land from this or adjoining development into the Crown land estate, including Johnsons Spur conservation area and any other proposed land. References to this option should be removed from all report and appendix texts and plans including the Land Ownership Options Plan.</li><li>Both core and non-core areas of this development, and adjoining developments, will increase the use of and maintenance requirements for a piece of Crown road adjoining the Illawarra Highway at the western end of North Macquarie Road. Prior to local government development approvals for development this section of North Macquarie Road should be transferred to the relevant road construction authority, being Shellharbour City Council. An application to transfer the Crown road to Council will need to be made prior to development approval and development taking place.</li></ul>		The Statement of Commitments already allow for alternative landownership options if neither the Crown or Council want to take ownership of these areas.	
DPIE – ENVIRONMENT, ENERGY & SCIENCE (EES)			
The report notes that portions of the proposed high school site are affected by the Probable Maximum Flood (PMF) event and contends that this can be managed through appropriate land use or raising the site. However, no specifics are provided on how this would be achieved. Further details are required to ensure that an appropriate solution is achievable. This should include a description how the high school would be designed to ensure appropriate land use in the probable maximum flood (PMF), modelling of any landform modifications to the site for assessment of flood impacts and an assessment of public safety including flood access and emergency response.		While the high school site is partially flood affected by the PMF event, less than 8% of the school site is affected. A small area is subject to hazard category 3 or above (see figure 8.11 of J. Wyndham Prince WCM plan (April 2019)).  It is important to note that there is no requirement from a flood management perspective for the school site to remain flood free in a PMF event.  The Statement of Commitment from the original Concept approval in 2010 (statement of commitment No 41) stated in part that 1 % AEP flood level plus 500 mm freeboard is the Flood Planning Level for the development and that the “Provision of safe evacuation routes during the 1 % AEP flood event for any development on land located within the PMF”.  Therefore, there is no requirement to have the Education Precinct located above the PMF. The school is adjacent to Escapement Drive which does have the required design standard (i.e. above the PMF level) and will ensure a safe evacuation route can be achieved for the site.  The final design of the school site is yet to be determined (i.e. the location of buildings and other infrastructure as the above application relates to subdivision only), and given the need for open space within any school site, the potentially impacted area during this extreme event could be used as an open space or playing field negating any safety concerns  To further support this position, we have looked into the velocities within the affected area, and these are all less than 0.1m/s, as the flood impacts are mainly caused by backwater effects rather than mainstream flows. Floodwaters within the site also rise slowly with peak water levels occurring approximately two (2) hours from the start of a PMF event. This will easily allow any persons within the affected area to move to flood free land, which is only 70 m to the west of the area of concern.  Therefore, the portion of the site that is flooded during a PMF event is not considered to be detrimental to public safety.	

Submission Summary	Proponent Response
<p>Flood modelling figures provided in Appendix C of the report indicate that areas beyond the educational precinct are also affected by the PMF, including residential lots and roads. As advised previously, this is not consistent with the approved concept, in which all development areas were flood free up to the PMF. The report notes that a 'shelter in place' policy is proposed during extreme flood events, however this approach is only effective where occupants can safely shelter above the PMF. Such an approach typically includes a requirement for raised floor levels (i.e. above the PMF). However, no such confirmation has been provided.</p>	<p>The isolated areas now affected by the PMF are not associated with significant changes in development layout, but rather the difference in the modelling approach used. As discussed in Section 9.1 of JWP's Water Cycle Management Report, PMF flows have increased around 15% between the Reinco 2010 and WMAwater 2017 Assessments, leading to level differences between the models.</p> <p>The difference in flood levels between the 1% AEP and PMF event are mainly due to a change in initial loss parameters. It's important to note that the Flood planning level as present in the statement of commitment No 41 only requires the development to be at 1 % AEP flood level plus 500 mm freeboard. The development as modified satisfies this requirement.</p> <p>Figure 8.04 of the Watercycle Management Strategy report supports that no properties in the 1% AEP flood extent are impacted.</p> <p>The 'shelter in place' policy proposed during extreme flood events, does not require that residents MUST stay in place during a flood event. It only indicates that a regional evacuation strategy with evacuation centres external to the site is not needed. Due to the short duration of the PMF and the extent to which the site is impacted by flooding, this approach is consistent with the Illawarra EMPLAN (Emergency Management Plan), a document committed to by Wollongong, Shellharbour and Kiama Councils in conjunction with the SES which outlines the approach taken for various emergencies in areas across the Illawarra region.</p> <p>Rising grade within the development is also provided from all areas inundated by a PMF to flood free areas.</p> <p>The flooding of residential properties by an event greater than the 1% AEP is a common practice in the North West Growth Centres with the occupation of the floodplain below the PMF standard practice.</p>
<p>It would also require consultation with Council and the State Emergency Service (SES) to establish emergency access requirements and any modifications to the Local Flood Plan. It remains unclear in the documentation as to why development areas which were previously raised above the PMF are now proposed to be flood affected. An outcome where all development areas are flood free (as per the approved concept plan) would be preferable, however, if this is no longer achievable an assessment of the emergency management issues including flood access requirements and emergency response arrangements is required to ensure public safety outcomes</p>	<p>We have reviewed the Illawarra Local Emergency Management Plan, January 2017, Illawarra Local Emergency Management Committee. While the document does acknowledge that some areas within the region are prone to flash flooding, there are no planned evacuation measures currently in place for the Macquarie Rivulet catchment.</p> <p>As many areas outside the CUDP are flooded in a PMF event, and the shelter in place Strategy where resident stay within Calderwood Valley is considered a lower risk strategy in comparison to an evacuation strategy that involves widespread evacuation route through already flooded roads.</p> <p>The use of Shellharbour City Council Macquarie Rivulet model has changed the flood level differences between the 1% AEP and PMF event.</p> <p>As mentioned above, rising grade is provided from all areas inundated by a PMF to flood free areas of the site. Condition 41 of the Statement of Commitments from the concept approval, has been met as the major spine road, Escarpment Drive has been designed to be above the PMF level, and lots are above the 1 % AEP level (see Figure 8.04 of the Watercycle Management Strategy report.</p>
<p>The report advises that safe access for emergency services is provided to all areas of the development, as bridges across the Macquarie Rivulet (constructed) and Marshall Mount Creek (proposed) provide PMF access. However this does not address the concern of whether flood access is available to areas within the development which are now subject to PMF affectation. As previously advised, flood maps indicate depths which are not trafficable for most vehicles and therefore issues relating to public safety remain unaddressed.</p>	<p>As mentioned above, the statement of commitments, No. 41 requires the:</p> <p><i>"Provision of safe evacuation routes during the 1% AEP flood event for any development on land located within the PMF" and the "Design and location of all major spine roads within the development at or above the PMF level"</i> is what is required from a flood mitigation perspective.</p> <p>The rate of rise is also a key factor in determining the safety of resident in a PMF event. Flows in Calderwood Valley generally rise and fall within a three (3) hour period. Given that the maximum distance any resident would need to travel to reach PMF clear land is only 150 m and the average walking speed is between 1-1.5 m/s, it would only take 2.5 minutes for a resident to safely walk to flood free land.</p> <p>Therefore the need to “access” all areas during a PMF is not required. Affected residents can if required, travel out of flood-affected areas to higher ground and remain “safe” from rising flood waters.</p>

Submission Summary	Proponent Response
<p>Climate change modelling has been provided under the assumption of a 15% increase to rainfall intensity. Justification is required as to the appropriateness of this increase and how it was determined.</p>	<p>It is our understanding that climate change requirements are no longer defined at a State Government level, and this responsibility is now the jurisdiction of local Councils to define how they wish to assess climate change impacts.</p> <p>These requirements are often defined by the Local Council's Development Control Plans (DCP). Wollongong City Council's DCP suggests the climate change is covered by freeboard level requirements, while Shellharbour City Council's DCP does not specify any criteria for climate change modelling, either in their Calderwood Site specific DCP, or in the general DCP for the LGA.</p> <p>The previous OEH position, documented in the <i>Practical Consideration of Climate Change</i>, 2007, DECC, suggested that the average increase in extreme rainfall by 2070 in NSW would be between -1% to 15%, while the rainfall increase in the Southern Rivers, which Calderwood Valley is part of, is projected to increase by approximately 5%.</p> <p>The NSW OEH Illawarra climate change snapshot also states that <i>"By 2030, the Illawarra is projected to have little change in annual rainfall. There are projected increases during autumn and decreases during winter and spring."</i> The projected increases in Autumn average is approximately 15%.</p> <p>See extract from this report below.</p>  <p>Figure 13: Projected changes in average rainfall for the Illawarra Region, annually and by season (2030 yellow; 2070 red).</p> <p>We have therefore adopted a "middle ground" approach of a 15% increase in rainfall intensities based on these projections and is, therefore, a suitable climate change consideration given no specific requirements are not listed in either WCC or SHCC control documents.</p>
<p>As the issues regarding large floods and associated impacts including public safety have not yet been addressed we maintain that Planning and Assessment seek clarification on these matters prior to determination. This may require further consultation with Shellharbour and Wollongong City Councils and the SES.</p>	<p>Noted, however, the assessments completed are consistent with the Statement of Commitments and therefore are suitable to support the MOD 4 application.</p>
<p><b>RURAL FIRE SERVICE (RFS)</b></p>	
<p>The NSW RFS have reviewed the RTS and PPR and does not object in principle to the changes proposed</p>	<p>Noted.</p>
<p><b>ROAD AND MARITIME SERVICES (RMS)</b></p>	
<p>The application does not provide enough information to assess the development modification. RMS requires the matters outlines below (Attachment 3) to be addressed:</p>	

Submission Summary		Proponent Response
<b>Illawarra Highway and Broughton Avenue</b> <ul style="list-style-type: none"><li>The proposed phasing at this intersection should be modified to provide diamond operation on Tripoli Way and Broughton Avenue instead of split approach phasing. Diamond operation may provide a more efficient intersection operation and reduce delays on the Illawarra Highway. This will need to be modelled. In addition, the filter option for the right turns from the Illawarra Highway approaches into the side roads needs to be removed from the modelling as it unlikely to be allowed.</li><li>Note:  The diamond operation for the side road approaches would require a realignment of the Tripoli Way approach slightly west. To streamline the process, RMS would be happy to comment on the consultant's revised modelling before the consultant proceeds to preparing updated designs.</li><li>RMS is concerned with the alignment of the Tripoli Way extension with respect to sight lines on the southbound approach to the traffic signals. Sight lines need to be shown on the plan to demonstrate compliance with Austroads standards.</li><li>The layout plan for the proposed treatment for the intersection of the Illawarra Highway, Tripoli Way and Broughton Avenue does not show the road/property boundaries clearly. RMS believes the dotted red line (Proposed site boundary) to be misleading). RMS requests only the property boundaries be shown.</li></ul>		RMS (now TfNSW) have since provided comment on their preferred intersection arrangement, that is the signal phasing is to operate as a double diamond. Refer to TfNSW letter dated 25 <sup>th</sup> March 2020 at <b>Attachment E</b> . Sight distance for the southbound approach are provided and satisfy minimum requirements under AUstroads. Property boundaries are defined as shown in blue in the concept plans.
<b>Calderwood Road and Tripoli Way</b> <ul style="list-style-type: none"><li>The layout plan for the proposed treatment for the intersection of the Tripoli Way and Calderwood Road does not show the road/property boundaries clearly. RMS believes the dotted red line (Proposed site boundary) to be misleading). RMS requests only the property boundaries be shown.</li></ul>		The revised plans are updated to clearly show the property boundaries, marked in blue, refer to <b>Attachment E</b> .
<b>Infrastructure commitment and delivery</b> <p>As previously advised during the meeting held on the 15th August 2019 between Lendlease, Cardno and RMS, once the scope of the upgrades for the above intersections is agreed to, RMS believes the developer's commitments to provision of state road infrastructure, including the nature of the upgrades, the timing and the planning mechanisms, need to be clarified and agreed to (by RMS and DPIE) prior to the proposed modifications to the concept plan. In this regard, and as previously stated, RMS believes strong consideration should be given to opportunities to have these upgrades delivered as a works in kind.</p>		There are already provisions within the State VPA which allows for either a monetary contribution or works in kind to be delivered. Refer to Schedule 4, Clause 6 – works in kind option of the State VPA.
SYDNEY WATER		
<ul style="list-style-type: none"><li>Sydney Water does not object to the modification proposal</li><li>Sydney Water has already prepared a servicing strategy for Calderwood for up to 6,500 dwellings. Sydney Water is carrying out detailed planning and environmental assessments to design &amp; deliver staged provision of required services (trunk infrastructure) within the Calderwood rezoned areas. The proposed increase in growth is accommodated for in the forecast.</li><li>Sydney Water's next stage of trunk services for Calderwood is likely to be delivered in early 2022, subject to funding approval and developer servicing demand. This will include a new SPS1193, sewer rising mains and major water &amp; wastewater carriers and lead in mains.</li><li>The developer will deliver the local lead in/site reticulation mains at the development stage. Sydney Water's Funding Policy will apply to these developer works.</li></ul>		Noted.
TRANSPORT FOR NSW		
P.42 of Appendix A Detailed Response to Submissions: The response provided to the third issue raised says "Refer to Cardno's response at Appendix H". It is noted that the aforesaid response in Appendix H (item 2.1 on p.4) does not refer to or address the same issue. Clarification is required.		Each subsequent stage will require a development application which details the road hierarchy and proposed road design compliant with Council's requirement and the approved DCS. The detailed provision of bus stop locations, and bus routes, will also be identified and the road network can be detailed and assessed accordingly by Council with regard to the design suitability.
Table 1 (P.5) of Consolidated Development Control Strategy: Street Types B1, B2 and B4 are indicated with an annotation "(see Note 6)", however, there is no such reference provided to Table 1. Clarification is required prior to offering further comment. It is not evident that proposed changes have adequately address the previous comment raised in relation to consistency with Section 4.1 of the Guidelines for Public Transport Capable Infrastructure in Greenfield Sites (TfNSW, Jul 2018).		The DCS has been updated and now directs the reader to point 6 on page 2 of the document rather than Note 6. Refer <b>Attachment C</b> .

SHELLHARBOUR CITY COUNCIL RESPONSE



Submission Summary	Proponent Response
<p data-bbox="133 279 1478 329"><b>Shellharbour City Council</b></p> <p data-bbox="133 329 1478 359"><b>Definition of a Dwelling</b></p> <ul data-bbox="133 359 1478 1243" style="list-style-type: none"><li>- Council has primary concern with the introduction of the term ‘Principle Dwelling’ and does not accept the PPR statement identifying the approved dwellings as principle dwellings.</li><li>- Council argues the approval is for the number of dwellings inclusive of secondary dwellings.</li><li>- The definition of a dwelling is inclusive of secondary dwellings. Stating, ‘<i>In this regard, no specific form of dwelling has been excluded from the dwelling count for the purposes of this development.</i>’</li><li>- SSP SEPP 2005 zoning permits secondary dwellings in RU2, R1, R5 and B4 zones and is an expected dwelling type.</li><li>- <i>Secondary dwellings are also specifically referenced in the discussion of dwelling yield and mix throughout the information submitted in support to the original concept application. For example on page 19 of the Consolidated Concept Plan – Calderwood Urban Development Project (JBA Planning, March 2011) it states that “secondary dwellings... are to be included throughout the residential neighbourhoods. Design controls for secondary dwellings are included in the Development Control Strategy”.</i></li><li>- The original assessment specifically references secondary dwellings in the mix, ‘<i>secondary dwellings... are to be included throughout the residential neighbourhoods. Design controls for secondary dwellings are included in the Development Control Strategy</i>’.</li><li>- the provision of secondary dwellings formed part of the assessment of the concept plan as evidenced on Page 36 of the Director general’s Assessment Report under Section 75I of the Environmental Planning and Assessment Act 1979 (dated November 2010) which states “<i>The Department supports the proposal for secondary dwellings for all zones other than B4. However as no controls were proposed in the DCS, it is recommended that design controls be prepared and submitted to the Department of Planning for approval.</i></li><li>- This was then reinforced in Condition B6(10) of the concept approval which states “<i>Design controls shall be prepared for secondary dwellings and submitted to the Department of Planning for approval</i>”</li><li>- <i>The description of the development has changed to reduce the number of dwellings from 6,500 to 6,000 however also now includes the term ‘principal dwelling’. No definition has been provided for this term and there is no definition that can be used in the Act, Regulation, Standard Instrument LEP or SEPPs. Without such a definition it is not possible to determine what dwellings have been included in the dwelling count for the purposes of this proposal. This is particularly problematic for infrastructure considerations as these considerations should be based on the future population of the area and it is not possible, based on the information provided, to determine the quantum of the future population.</i></li></ul>	<p data-bbox="1478 329 2834 390">It is proposed to remove reference to Principal Dwelling. Refer to the updated tracked changes version of the conditions of consent and commitments at <b>Attachment B</b>.</p> <p data-bbox="1478 415 2834 476">The DCS has also been updated to be consistent with the requirements of the Affordable Housing SEPP in respect of secondary dwellings.</p>
<p data-bbox="133 1243 1478 1272"><b>Planning for Infrastructure</b></p> <p data-bbox="133 1272 1478 1333">The information submitted by the proponent relating to infrastructure is not satisfactory as it:</p> <ul data-bbox="133 1333 1478 1514" style="list-style-type: none"><li>• Considers the Calderwood development in isolation to all other development within the area and even components of the development in isolation to others.</li><li>• Seeks to provide only that infrastructure that is required to service the dwellings they wish to have counted towards the development (i.e. principal dwellings) rather than the full range of housing that is expected to be provided.</li><li>• Does not provide any scope for expansion of these facilities to cater for increased demand due to the dwellings they have excluded from the calculations.</li></ul> <p data-bbox="133 1514 1478 1627">Information relating to future infrastructure is not satisfactory. The proponent needs to demonstrate that they have made adequate allowances for the total future population of their development when considering infrastructure. The exclusion of specific dwelling types that are permissible on the land from that calculation could be seen as a deliberate strategy to abrogate their responsibility.</p>	<p data-bbox="1478 1243 2834 1333">CUDP is a state significant precinct, it is also part of the regionally significant release area (refer to page 37 of the Illawarra Shoalhaven Regional Plan). The project has been considered in relation to this context and the broader infrastructure requirements of the area. It is noted that the Regional Plan states the following:</p> <p data-bbox="1478 1333 2834 1478"><i>“Councils are to plan for the mix of housing that suits the projected growth, changing demographics (such as an ageing population) and market demand particular to their area. This means that zonings and planning controls maintain, or in some cases, increase capacity for housing, as well as other Council activities (such as streamlining assessment processes and planning for local infrastructure and town centre revitalisation) to promote development opportunities”.</i></p> <p data-bbox="1478 1478 2834 1577">The development is providing infrastructure such as roads and drainage which will connect into, and coordinate with, the broader regional infrastructure. These will serve the population of the Calderwood Development and other developments in the nearby area which will rely upon the Calderwood Town Centre.</p> <p data-bbox="1478 1577 2834 1675">Community infrastructure is also being provided consistent with the agreed rates established in the Elton Report in the Consolidated Concept Plan.</p> <p data-bbox="1478 1675 2834 1732">As noted above, secondary dwellings are now included in the total dwelling number.</p>

Submission Summary	Proponent Response
<p><b>Open Space</b></p> <ul style="list-style-type: none"><li>- The additional open space being provided to cater for the additional demand from the increased dwelling yield is generally being achieved through the addition of small areas to existing open space or that open space proposed under the current concept approval. It does little to increase the useable open space for future residents.</li><li>- Some of the additional open space proposed is not located so as to be able to service the additional dwellings proposed.</li><li>- The additional open active open space is located in Wollongong City and they have advised that the proposal meets their standards. Notwithstanding this it appears very small, will have limited useability and its ability to meet the additional demand created by the proposed modification is questionable. There is potential for it to add further pressure to the current proposed sportsfields in Calderwood and does not cater for the additional demand created by the proposed modification.</li><li>- Proximity to open space is being used by the proponent as a locational criteria for higher densities. This is regardless of the size or quality of that open space. It is questionable whether proximity to a local park is sufficient justification for increased density.</li><li>- The proponent is seeking to remove the note to C12(b) which states that the ‘area identified as Johnson’s Spur and the ancillary open space areas (made up of drainage reserves and open space corridors reserves) are not to be included in the open space contributions’. They are also seeking in their revised statement of commitments, to include the potential transfer of this land to Council if it is not wanted by Department of Lands. This poses a significant risk to Council as we are likely to be forced into taking on this land as an asset for a purpose for which it is not suitable. This is not satisfactory and Council should be protected from such a risk through both the statement of commitments and the condition. Therefore, the proposed change to Condition C12 to remove the explanatory note and the proposed changes to items 2, 3 and 4 in the Revised Statement of Commitments are not satisfactory and should not be agreed to.</li><li>- Open space is critical to the development of liveable communities. The provision of sufficient appropriate open space to cater for the needs of the development is critical at the initial development stage as, once the land is subdivided and developed, it is difficult and expensive to retrofit additional open space. It is not sufficient to merely seek to meet numerical standards but the land must be appropriately located and fit for purpose. The proponent has not demonstrated this. Of specific concern are the following:<ul style="list-style-type: none"><li>• The proposed additional active open space is not of sufficient size to serve the demand created by the proposed additional dwellings and will place an unreasonable burden on the current proposed Sportsfields.</li><li>• There is a focus on meeting the numerical standards for open space provision with little consideration of the quality of that open space and its ability to serve the additional demand created by the increased dwelling yield.</li><li>• Council’s position regarding the inclusion of Johnson’s Spur and ancillary open space areas (eg drainage, environmentally sensitive lands) as open space contribution has not changed and the proposed removal of the note to C12(b) is not supported.</li></ul></li></ul>	<p>The proposed development meets the accepted standard of 2.38ha per 1,000 people split approximately 50/50 between passive and active open space.</p> <p>The sports fields in Shellharbour are proposed to increase by 5.219ha. New active open space (approximately .9039ha – Sports field S2 located in the Wollongong local government area), within walking distance of the town centre is also proposed.</p> <p>There is also a further 4.0149ha of passive open space proposed across the project in the Shellharbour and Wollongong LGAs.</p> <p>It should be noted that Johnstons Spur area is not, and was never, included in the open space calculations. Only the active and passive open space that is to be dedicated to Council. Notwithstanding, it is proposed to revise these requirements. Refer to the revised conditions and commitments at <b>Attachment B</b> where this condition is no longer proposed to be amended.</p> <p>Each park will be the subject of a detailed DA. At that stage, Council will be able to review the proposed design and will be able to review the proposed design to ensure that it is fit for purpose.</p>
<p><b>Tripoli Way and Calderwood Road Upgrade</b></p> <ul style="list-style-type: none"><li>- The reduction in dwelling yield has, however, been artificially achieved through the exclusion of a particular class of dwellings that are permissible on the land from the calculation.</li><li>- Lendlease are required under the current VPA to contribute towards the provision of the Tripoli Way bypass but only to the extent their development generates demand for that road. If viewed in isolation and based on the artificially reduced dwelling yield, on the surface it would appear that the additional dwellings do not generate demand for the extra two lanes and therefore would not be required to contribute towards their provision. The Calderwood development is, however , not occurring in isolation nor are the dwelling projections being used by the proponent to justify not contributing to the wider road a true picture of the dwellings the Calderwood development are contributing to this area. The Calderwood development is part of a broader greenfield development occurring in that area all of which should contribute to the roads that are required to service the total development in the area.</li><li>- The current revision of the modification seeks to artificially avoid making such a contribution whilst transferring the cost to Council and other developers. This is not reasonable.</li><li>- Council does not agree with this traffic proposal for reasons outlined in a detailed assessment of the Traffic and Transport Report (TTR).</li></ul>	<p>The term principal dwelling has now been removed and the 6,000 dwellings now includes secondary dwellings.</p> <p>The traffic modelling prepared by Cardno has considered all of the Calderwood development and surrounding land release areas in West Dapto, Tallwarra and Tullimbar etc. Refer to Section 1.4.3 of the traffic report which outlines the numbers relied upon for the assessment. Refer to Section 2 of the traffic report for all of the assumptions made for the traffic modelling of the project.</p>

Submission Summary	Proponent Response
<p><b>Implications of excluding secondary dwellings from the dwelling count</b></p> <ul style="list-style-type: none"><li>- Even if the definition of a principal dwelling is limited to the exclusion of secondary dwellings from the dwelling count for the purposes of this proposal, there is still the potential for the significant under estimation of demand for infrastructure.</li><li>- In this regard it should be noted that:<ul style="list-style-type: none"><li>• 450m2 is the minimum lot size for a secondary dwelling as complying development under the Affordable Rental Housing SEPP.</li><li>• 400m2 the minimum lot size for a dual occupancy under the Codes SEPP.</li><li>• Section 1.4.11 of the current Calderwood Urban Design Guidelines sets the minimum lot size for a secondary dwelling as 300m2.</li></ul></li><li>- Based on the lots sizes created to date, these standards would mean that each lot created for a detached dwelling would have the potential to contain a secondary dwelling. Although this extent of development is unlikely to occur, an example of where this has recently occurred is a nearby 36 lot greenfield subdivision. Approval has now been granted to construct 70 dwellings on the original 36 lot subdivision. This is an increase of approximately 100% in the number of dwellings compared to the original number of lots. Allowance must be made for the demand created from this form of development when determining the dwelling thresholds and the infrastructure to be provided.</li><li>- Based on information provided by Ethos Urban, if the same dwelling mix is applied to the modified proposal approximately 90% of dwellings provided in this development will be detached dwellings (this equates to approximately 5,400 dwellings). If 10% of these detached dwellings have a secondary dwelling built on the same site that equates to an additional 540 dwellings. If the definition of principal dwelling excludes a broader range of dwelling types eg dual occupancies, this figure will increase.</li><li>- A clear estimation of the scope of dwellings excluded from the proposal needs to be provided to enable a full and proper consideration of the infrastructure implications of the development in the context of the broader development of the area.</li></ul>	<p>Secondary dwellings are now included in the total 6,000 dwellings. The DCS was also modified in the RTS to be aligned with the Affordable Rental Housing SEPP in terms of minimum lot size.</p>
<p><b>Proposed Changes to Condition C12</b></p> <ul style="list-style-type: none"><li>- The proponent is proposing a number of changes to Condition C12 which relates to the provision of infrastructure. These changes generally reflect the additional infrastructure required to service the proposed dwelling yield of 6,000 dwellings. Of note, however is that the proponent is seeking to remove the note to C12(b) which states that the 'area identified as Johnson's Spur and the ancillary open space areas (made up of drainage reserves and open space corridors reserves) are not to be included in the open space contributions'. They are also seeking in their revised statement of commitments, to include the potential transfer of this land to Council if it is not wanted by Department of Lands. This poses a significant risk to Council as we are likely to be forced into taking on this land as an asset for a purpose for which it is not suitable. This is not satisfactory and Council should be protected from such a risk through both the statement of commitments and the condition.</li><li>- In this regard the proposed change to Condition C12 to remove the explanatory note and the proposed changes to items 2, 3 and 4 in the Revised Statement of Commitments are not satisfactory and should not be agreed to.</li></ul>	<p>Johnstons Spur is not included in the open space areas refer to the open space drawing at <b>Attachment F</b>. The note to condition C12(b) has been reinstated refer to the updated conditions at <b>Attachment B</b>.</p>
<p><b>Proposed Changes to the VPA</b></p> <ul style="list-style-type: none"><li>- Council has not received a draft revised VPA or letter of offer for consideration and no information has been provided regarding any proposed changes to the administrative components of the VPA.</li><li>- Having regard to the lack of definition of 'principal dwelling' it is not possible to determine what the likely future population of the development will be. This is critical to the assessment of the reasonableness of any revised VPA to be provided. The application of a condition requiring a revised VPA to be entered into is not appropriate at this stage.</li><li>- it is also not possible to determine whether the proposed changes to the VPA as outlined in the Statement of Commitments are satisfactory to Council.</li></ul>	<p>A letter of offer has been prepared by Lendlease and has been submitted under separate cover to Council.</p>
<p><b>Proposed use of S7.11</b></p> <ul style="list-style-type: none"><li>- The proponent's statement to include use of s7.11 is incorrectly placed under the heading State Contributions and should rather be under Local Contributions.</li><li>- this is not possible under the current VPA as the provisions of that VPA 'switch off' s7.11 for development within the area to which the VPA applies</li><li>- As there is no sunset clause within the VPA lifting it from the land once the land is subdivided it continues to apply after the subdivision is complete. Council has not seen a revised VPA that addresses this issue and must assume that the current arrangements will remain.</li><li>- Through this single statement which is hidden in information to which it does not relate, the proponent is seeking to abrogate its responsibility to adequately cater for the infrastructure needs of the community it is creating through this development by passing the responsibility to Council.</li></ul>	<p>Lendlease has every intention of providing the local infrastructure required to support the development. A letter of offer has been prepared and has been submitted to Council under separate cover which outlines the infrastructure it will deliver for each dwelling within the development. This will cover the 6,000 dwellings anticipated to be delivered on the site</p>



Submission Summary	Proponent Response
<p><b>Use of the term Works'in'kind</b></p> <ul style="list-style-type: none"><li>- The use of this term implies that these works will be provided in lieu of a monetary payment. This is not the case and the term should be removed from the statement of commitments, as no offset will be provided.</li></ul>	<p>This term was already included in the Statement of Commitments and is not a change that was proposed as part of this application.</p>
<p><b>Low Rise Medium Density Housing Code</b></p> <ul style="list-style-type: none"><li>- The Department is requested consider the following:</li><li>- the design/planning merits or otherwise of the LRMDHC applying at Calderwood in the context of all relevant changes proposed by the Modification application, and</li><li>- the proponents reference to 'Principle Dwellings' and what affect any application of the LRMDHC to Calderwood will have on dwelling yields and the Capped number of dwellings in the Approval, and</li><li>- Clause 3B(f) of Schedule 2 of ENVIRONMENTAL PLANNING AND ASSESSMENT (SAVINGS, TRANSITIONAL AND OTHER PROVISIONS) REGULATION 2017 which reads:<ul style="list-style-type: none"><li>o 3B(f) the provisions of any environmental planning instrument or any development control plan do not have effect to the extent to which they are inconsistent with the terms of the approval of the concept plan.</li></ul></li></ul>	<p>The LRMDHC will continue to apply to the development. There will not be any inconsistency between the SEPP and the development as these forms of development are already permissible with development consent in the B4 mixed use zone where the higher densities are proposed to be located.</p> <p>The Concept Plan will continue to apply to the broader Calderwood Development and the 6,000 dwelling cap would not be overridden by the ability to develop LRMDH under the E&amp;C SEPP.</p> <p>The term principal dwelling has been removed from the proposal.</p>

ISSUE RAISED	COMMENT/DESIGN RESPONSE 1 (May 2019)	SCC RESPONSE to RESPONSE	COMMENT/DESIGN RESPONSE 2 (April 2020)
<b>Land Use Planning</b>			
It is considered that there is no planning justification for the proposed modification. It is not required to meet identified housing supply shortages or deficiencies in housing mix within the local government area or region.	Several justifications for the increased density are included in both the EAR and the Social and Economic Impact Assessment.		

	<p>Based on 2016 Census data, the average rental paid for a 3-bedroom house increased by 25% between 2011 and 2016 (for both LGAs). Even more concerning, NSW Government data indicates that rental growth for 2-bed units continued at 6% in both LGAs during 2017. This modification can also assist the local housing market by providing forms of housing that are more affordable, thereby reducing pressure on rental accommodation. The proposed amendment would allow for a larger number of properties that are attractive to investors, in the form of small lot detached homes and apartments, with density located close to the town centre.</p> <p>Calderwood building approvals have accounted for approximately 40% of additional supply of new detached houses when stock is available. It will continue to play a vital role in the provision of housing in satisfaction of the estimated demand of 1,200 dwellings per year required in the Wollongong and Shellharbour Local Government Areas as outlined in the Illawarra-Shoalhaven Regional Strategy. The proposed increase in dwelling yield will contribute to long-term relief from persistent under-supply of greenfield and infill housing supply. This is particularly true in the next ten – fifteen years where additional density can be delivered in the CUDP whilst other major projects in the West Dapto Urban Release Area seek the relevant planning approvals and implement the infrastructure required to service that development.</p>	<p>The proponent has attempted to address this issue by looking at their contribution to housing supply, mix and affordability for the region. The proponent says that there is a short to medium term regional under supply due to take up rates at West Dapto. There is certainly no housing supply issue in the Shellharbour Local Government Area that the modification needs to address. In the medium to long term, there is no identified housing supply issue that has to be addressed for the region. Monitoring by the Illawarra Shoalhaven Urban Development Program should be referred to in this regard.</p> <p>While this ultimately a matter for the Department, Council maintains its concerns to the increase in development yields while ever the proponent cannot adequately provide the infrastructure needed to support the increased population. In this respect, Council still maintains that on this basis, there is no planning justification for the proposed modification.</p>	<p>On 17 December 2019 Council adopted its housing strategy. This strategy outlines that:</p> <p><i>‘There are a range of opportunities for Shellharbour to meet the demand for dwellings within the LGA. These opportunities are spread across a variety of localities and scenarios, including:</i></p> <ul style="list-style-type: none"> <li><i>• options for infill development within the established suburbs through redevelopment of existing ageing housing stock or development of existing vacant land;</i></li> <li><i>• increasing densities within and around existing employment centres, around key public transport nodes and where there is good access to essential community and social infrastructure (e.g. schools, parks, hospital/health and other community facilities); and</i></li> <li><i>• significant opportunities for greenfield development to continue in the major greenfield estates that have already commenced within Shellharbour.</i></li> </ul> <p><i>The approach of this LHS is to ensure that the land use planning controls and other mechanisms are sufficient to facilitate the achievement of dwelling development to meet the projected needs of the community. Improving and enhancing urban form and liveability through new residential housing development in terms of scale, form, character, open space, connectivity, walkability and the like is also encouraged and presents an opportunity for Shellharbour’.</i></p> <p>The proposed modification is consistent with this approach as it proposes additional density within walking distance of the Calderwood Town Centre. It also proposes to increase densities and dwelling types thereby increasing the diversity of housing within the Shellharbour LGA.</p> <p>Community infrastructure is also being provided consistent with the agreed rates established in the Elton Report in the Consolidated Concept Plan, including additional active and passive open space, additional floor space for the community centre and further contributions towards the Albion Park library. Infrastructure contributions were in the RtS and Preferred Project Report prepared by Ethos Urban (May 2019).</p>
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<p>The proposed modification to the Concept Plan Approval further moves the project away from the State Significant Precincts State Environmental Planning Policy (SEPP) under which the land was zoned for urban development. There will be inconsistencies between the concept plan and the SEPP which will create confusion and derogate the zonings and planning provisions in the SEPP.</p>	<p>Clause 3B(2)(a) and (f) of Schedule 2 of the EP&amp;A (Savings, Transitional and Other Provisions) Regulation 2017 give effect to the approved concept plan. This provision provides that the concept plan prevails over any inconsistency between the concept plan and an environmental planning instrument.</p>	<p>The additional information the proponent has provided does not adequately address the issue. Council maintains its concerns as outlined in the initial response.</p>	<p>No changes are required to the SEPP to accommodate the proposed development. We believe that the modifications remain consistent with the intent of the SSP SEPP and the controls which apply under that SEPP.</p>
<b>Traffic and Transport</b>			
<p>Some fundamental assumptions and outputs of the traffic modelling are questioned and it is considered that the impacts of the proposed modification on the road network are considerably understated. The timing and funding of significant road upgrades is a major concern The impacts on major transport upgrades such as the design of the Albion Park Bypass (Tripoli Way) is a major concern</p>	<p>Refer to the traffic response prepared by Cardno at <b>Appendix I</b>.</p>	<p>In addition to the following comments please also please refer to Attachment 2 for a detailed assessment of Appendix H The Secretary's Environmental Assessment Requirements (SEARs) for Calderwood Concept Plan MP 09-0082 MOD 4 were issued on 1 February 2018. In relation to the transport and accessibility the SEARs required a revised traffic and transport impact assessment which in part required the following</p> <p>an assessment of the impacts on the existing and approved future road network and infrastructure, and use of the Austroads Guidelines to identify mitigation measures. Roads assessed must include, but not limited to, the Illawarra Highway, Princes Highway/Southern Freeway, Tongarra Road, Marshall Mount Road, Yallah Road, the Southern Freeway Corridor between Yallah and Oak Flats <b>and the Albion Park Rail Bypass Project</b></p> <p>The Response to the Secretary's Environmental Assessment Requirements – Traffic and Transport Report (dated 30 May 2019) indicates the following</p> <p><i>The other minor difference is observed at Albion Park Rail Bypass central interchange (northbound direction). The modelling plots indicate the corridor capacity is not exceeded at this location.</i></p> <p><i>As highlighted in the figures below, no substantial change in V/C ratio was observed in the PM peak due to increased CUDP yield except for minor changes at Tongarra Road.</i></p> <p>In terms of addressing the SEARs this is a vague and qualitative statement which fails to quantify or discuss the impacts. The findings do not specifically recommend that any treatment measures are required, however this is at odds with Section 3.2 <i>Infrastructure for Existing Approval</i> which identifies the following upgrade measures to provide a direct connection between Tripoli Way and the Motorway for access to and from the south. It is noted that Upgrades 4 and 5 are no longer feasible in the form identified in the report and following diagram due to changes with the Albion Park Rail Bypass design. However this is not discussed in the report nor are any alternative treatment measures discussed.</p> <p>This demonstrates a major shortcoming of the report and identifies the need for further investigation and assessment on how Upgrades 4 and 5 will be addressed. In this regard the Roads and Maritime Services, Transport for NSW and Council are currently involved in the Albion Park Movement and Place Study which is examining this matter. As such Council requests that the approval of MOD 4 be placed on hold until the Albion Park Movement and Place Study is completed to allow TMAP to be updated accordingly.</p>	<p>The developments impact on the broader road network has been measured against RMS and Austroad based on Level of Service and volume to capacity ratio's.</p> <p>The traffic model is based on the APRB approved model which incorporates north facing ramps at Tripoli Way and south facing ramps at Tongarra Road which were identified to provide sufficient outcomes in replacement of Upgrade 5 &amp; 6.</p> <p>The Mod 4 application, which considers the future infrastructure commitments within the broader Albion Park and Illawarra region, should not be placed on hold in order for State and Local Government agencies to review and potentially seek to revise previously committed infrastructure which is not controlled by Lendlease. It is relevant to note that TfNSW (or previously RMS) have not raised the same concern or request with regard to the Albion Park movement and place study.</p>

Open Space Provision			
The proposed quantum, type, location and quality of additional open space and sporting facilities in its current form is unacceptable	Lendlease has met with Council in respect of the proposed open space and has incorporated a number of amendments into the proposed open space plan to address Council's concerns, including the relocation of the local park (L14) in Stage 5 to make this park more central and accessible. The proposed additional sports fields in the south have also been removed in response to Council's concerns. The majority of the proposed open space and sporting facilities are consistent with the approved Concept Plan. The revised open space plans are provided at <b>Appendix J</b> .	<p>The proponent has not demonstrated that the type, location and quality of the additional open space is acceptable to meet the additional demand created through the increased dwelling yield.</p> <p>The additional open space to be provided has been achieved by adding small amounts of additional land to existing identified open space which does not equate to better open space outcomes for the community.</p> <p>Some of the additional open space is proposed to be added to existing parks that have either been dedicated to Council or have development approval for the creation of the lots and their embellishment. It is not clear how the integration of the additional land it is to be achieved.</p> <p>The useability of the revised Sports Fields SP2 in meeting the sporting needs of the community is questionable.</p>	<p>Refer to the covering letter which details the proposed location and quantity of open space proposed throughout the site. This demonstrate that the open space is appropriately distributed across the site and that sufficient passive and active open space will be provided. The VPA outlines the level of embellishment required which will also ensure that the quality of the open space is delivered to an appropriate level.</p> <p>Wollongong Council has accepted the proposed open spaces in that LGA as being acceptable.</p>
Environment			
The Proponent for the proposed modification has not appropriately addressed the environmental impacts of the proposed changes, especially riparian corridors, threatened endangered communities, and threatened flora and fauna.	Eco Logical undertook an assessment of the 2010 lot layout and the new 2018 lot layout to determine whether any additional impacts on threatened ecological values would be likely. The assessment determined that there would be no additional impacts on riparian corridors, threatened endangered communities, and threatened flora and fauna due to the increase in yield. This was based on examining the change in footprint, the likely indirect impacts and assessing against any mapped riparian corridors, threatened endangered communities and threatened flora and fauna.	<p>The statement in the Ecological Report dated August 2018 in the Executive Summary states, "this report considered potential <u>additional</u> impacts to threatened ecological communities, flora fauna and migratory species listed under the Biodiversity Conservation Act and the Environmental Protection and Biodiversity Conservation Act either known or likely to occur in the study area.</p> <p>This a fundamental flaw in the assessment of EEC/CEEC and threatened/endangered species that has been disregarded in the response to submissions.</p>	<p>The assessment required that the environmental impacts of 'the proposed changes' were to be assessed. The assessment was therefore targeted to 'what if any impacts on the project are due to MOD 4'?</p> <p>Impacts on threatened matters have been assessed and considered. The modified plan was considered against the Approved Concept Plan. Because of MOD4, there were no likely additional significant impacts on threatened matters.</p>
The Proponent has still not identified a clear pathway for the appropriate ongoing sustainable ownership and management of environmental lands	Lendlease is still working to find a suitable solution to the ongoing ownership and management of environmental lands. The solution will be presented to Council in due course.	The additional information the proponent has provided does not adequately address the issue. Council maintains its concerns as outlined in the initial response.	Lendlease is still working to find a suitable solution to the ongoing management and ownership of the environmental lands.
It is considered that the proposal requires referral to the Commonwealth under the Environmental Protection and Biodiversity Conservation Act.	Commonwealth matters are a separate jurisdiction and Lendlease is making its own assessment consistent with the guidelines.	<p>The statement in the Ecological Report dated August 2018 in the Executive Summary states, "this report considered potential <u>additional</u> impacts to threatened ecological communities, flora fauna and migratory species listed under the Biodiversity Conservation Act and the Environmental Protection and Biodiversity Conservation Act either known or likely to occur in the study area.</p> <p>The failure to revisit and assess the project as a whole is considered to be a fundamental flaw in the assessment of EEC/CEEC and threatened/endangered species that has been disregarded in the response to submissions.</p>	Commonwealth matters are a separate jurisdiction and Lendlease is making its own assessment consistent with the guidelines and based on the advice it has received from specialist consultants.
Water Cycle and Flood Management Strategy			



<p>The proposed modification has potential flooding impacts for areas already subdivided within the project area (roads and private property) as well as land downstream from the project area.</p>	<p>There are no additional flood impacts as a result of Mod 4. Refer to the JWP report at <b>Appendix F</b>.</p>	<p>Council has reviewed the JWP Report and wishes to offer the following comments:</p> <p>-Council maintains that the adopted fraction impervious percentage of 50- 60% used for residential areas is too low.</p>	<p>60% impervious has not been used for residential areas, but rather <u>residential lots</u>, and only in areas prior to the density uplift. Which is consistent with observed lot product used in completed stages of CUDP.</p> <p>50% imperviousness has only been used for the “homestead lots”, the individual landholders who remain on the site on the 1 ha blocks of land.</p> <p>The 60% impervious applied was used considering the average lot size and the potential for secondary dwellings to be constructed within each lot. Many of the lots are located within steep portions of the catchment. These “slope sensitive general residential” areas are comprised of larger lots than those on the flatter areas of the site, and 60% is considered a conservative estimate for those areas.</p> <p>All roads are considered 90% impervious and represent approximately one-third of the catchment draining to each device, the overall imperviousness for all catchments is, therefore, closer to 70%.</p> <p>Once the density uplift has been applied, each lot area is modelled as 75% impervious, so each catchment has an overall impervious percentage of approximately 80%.</p>
<p>Some fundamental assumptions contained in the flood modelling are questioned including impervious to non-impervious ratios, which may have an impact on flooding behaviour.</p>	<p>Refer to detailed response letter prepared by JWP at <b>Appendix F</b>. It is noted that Cardno has peer reviewed the flood assessment and concurs with its conclusions and recommendations (see <b>Appendix G</b>).</p>	<p>In response to Chapter 8 of the JWP Report- Council refutes the statement made by JWP re notes and quotes claimed to be made by Council regarding the existing developed areas and what would be considered acceptable flood impacts</p>	<p>Please see J. Wyndham Prince letter dated 18 March 2020 that provided a copy of the minutes that is a record these comments. Both parties were issued these minutes following the meeting that occurred on 24 April 2018.</p> <p>JWP uphold that this quote as it is representative of the discussion held with Council.</p>
		<p>- HPC TUFLOW model was used - was a check done to confirm that flood levels produced by the HPC were equivalent to the CPU model results?</p>	<p>A comparison was undertaken between various versions of TUFLOW, including:</p> <ul style="list-style-type: none"> <li>- 2013 Classic (Oldest version used for the model)</li> <li>- 2018 Classic</li> <li>- 2018 HPC</li> </ul> <p>No observable difference were found between 2013 Classic and 2018 Classic. There were also no significant differences between 2018 Classic and 2018 HPC.</p> <p>A map showing differences between the 2018 Classic and 2018 HPC TUFLOW versions has been provided J. Wyndham Prince letter dated 18 March 2020</p>

		<p>- Why was the previous Reinco models Manning's n roughness schematisation utilised instead of the schemetistaion adopted as part of Councils adopted flood model (ie WMA Water Model)? This has the potential to impact the results significantly.</p>	<p>For areas external to the site, the WMA Mannings value has been used to maintain consistency with the base model and to reflect the calibration undertaken for large areas of the floodplain.</p> <p>For areas within the site, a comparison was undertaken between the Mannings used in both the Reinco model and the WMA model. They were found to be very similar for similar land use. However, the Reinco model used a depth-varying Mannings approach and the WMA model used fixed value. The Mannings value for roads and other development areas are generally interchangeable.</p> <p>As the Mannings values used within the riparian corridor were subject to considerable discussion between SHCC and Lendlease consultant (Cardno) as part of the Mod 1 determination for the southern riparian corridor, it was considered suitable to maintain the Mannings values that had previously been agreed to by Council for all riparian corridors within the CUDP.</p> <p>To summarise:</p> <ul style="list-style-type: none"> <li>- Floodplain and areas outside of the CUDP: WMA Manning used</li> <li>- Developed areas such as roads, parks and lots (generally outside the floodplain except in a PMF): Reinco, although WMA values would not change flows dramatically.</li> <li>- Riparian Corridors: Reinco</li> </ul> <p>A map showing Mannings values use is provided in J. Wyndham Prince letter dated 18 March 2020.</p>
		<p>- Calderwood road - more information is required. The current road has a very low flood immunity and if this flood immunity is proposed to remain the same post CUPD MOD4, it will present a significant flood hazard for the new community as people may become stranded on the road during a flood as there are flood islands that currently occur on the road.</p>	<p>As previously discussed in our response to DPIE, a 'shelter in place' policy is proposed during extreme flood events.</p> <p>The flood impacts upstream of Calderwood Road are minimal as Calderwood Road nor any road within Calderwood Valley except the Escarpment Drive need to have flood immunity in the most extreme PMF event. Rising grade roads and a shelter in place approach is considered to be the lowest flood risk strategy for CUDP.</p>
		<p>- North Macquarie road/Illawarra hwy intersection - The road layout plan indicates this will be a designated access point to the CUDP, however this is via an existing flooded causeway. The Flood mitigation plan needs to identify a road bridge here to address this access issue if is indeed intended to be an access point, as the Illawarra Hwy has a low flood immunity and cannot be relied upon for reliable access during a flood.</p>	<p>This road is not intended to be used for access to CUDP in a flood event as Escapement Drive will be the main access route.</p>

		<p>- Local PMF assessment – Council would like the Department to consider incorporating the minimum subcatchment sizes proposed as part of the updated WCMP into a new flood risk statement of commitment.</p>	<p>Given the variability of the topography on the site, a single maximum sub-catchments size will restrict innovative design.</p> <p>A minimum sub-catchments determined for a “worst-case” scenarios (steep portion of the site) would be unnecessarily restrictive in flatter areas of the development. In some areas of the site, larger catchments may be compliant with Council’s standards even though they are larger than a subcatchment suitable for a steeper catchment.</p> <p>A local assessment and suitable drainage solutions will form part of future Development Application, and any limit to catchment size is unnecessary.</p>
		<p>Notwithstanding the above it is recommended that the DOPI&amp;E only consider approval of the MOD4 subject to an MOU or additional statement of commitment that lendlease will gain approval and construct the 620mm blade wall adjacent to Djindy Bridge and associated flood mitigation required as proposed in the updated Water Cycle Management Plan.</p>	<p>It is agreed that the proposed blade wall should form part of the conditions of consent for Mod 4. This has been included in the updated SoCs.</p>
<b>Assets and Maintenance</b>			
<p>The maintenance by Council of the additional infrastructure required as a result of the modification may be financially unsustainable.</p> <p>The apportionment of costs for the development of the additional infrastructure outside of the project area is unresolved and in its current form is unacceptable.</p>	<p>The additional population will pay additional rates which will contribute towards the ongoing maintenance of the open space provided. Development applications will be lodged for the new parks and Council will be able to have input into the embellishment of the parks such that they are able to influence the ongoing maintenance requirements of such spaces.</p> <p>Any additional infrastructure required as a result of the proposed modification is either provided for in the modification application or will be addressed separately in VPA negotiations. Lendlease is satisfied that adequate provision will be made for any additional infrastructure.</p>	<p>The additional information the proponent has provided does not adequately address the issue. Council does not agree that the additional rate funding will be adequate to maintain the additional infrastructure proposed in the modifications and maintains its concerns as outlined in the initial response.</p> <p>Council is yet to receive a draft revised VPA for review and as such is not able to determine the extent to which external infrastructure requirements have been satisfactorily addressed.</p> <p>As this external infrastructure will impact on the broader community the proponent should provide sufficient information to enable Council to be certain it has been adequately addressed</p>	<p>A letter of offer has been prepared by Lendlease and has been submitted to Council under separate offer. It is noted that it is open to the Department to condition contributions.</p> <p>Council has already accepted parks that are larger than the areas required under the VPA (ie, areas greater than 0.2ha for local parks).</p> <p>Local parks 8 and 11 have been dedicated to Council and were larger than required. There is precedent for this to occur. Refer to Section 2.1.4 of the Response to Submissions and Preferred Project Report (PPR) prepared by Ethos Urban for more detail on the delivery of the first two local parks in Stage 1 that exceeded the minimum VPA requirements.</p> <p>Further the PPR clearly outlines the additional infrastructure required to support MOD 4 in relation of open space community and transport infrastructure.</p>
<b>Voluntary Planning Agreement</b>			
<p>The existing voluntary planning agreement between Council and Lendlease does not contemplate the magnitude of the proposed changes.</p>	<p>A letter proposing entering into a new VPA in respect of additional contributions as a result of the modification application will be submitted to Council under separate cover.</p>	<p>No letter of offer to enter into a new VPA has been submitted to Council by Lendlease</p>	<p>A letter of offer has been prepared by Lendlease and has been submitted to Council under separate cover.</p>

While Lendlease have indicated their willingness to review the current voluntary planning agreement, Council is currently uncertain as to whether the appropriate type and level of community infrastructure required will be provided for	Refer to <b>Section 2.1.7</b> and <b>Appendix M</b> of the RTS/PPR report.	The proponent is yet to submit a draft revised VPA or define the total dwelling yield. The introduction of the term “principle dwelling” into the description of development without clarification of the dwelling types this will exclude makes it difficult to properly address the infrastructure required	The term principal dwelling has been removed from the application and the conditions and commitments have been updated to reflect this. The application thus captures all dwellings now proposed and the community infrastructure proposed is adequate to serve the future community.
Statement of Commitments			
The proposed modifications to Lendlease’s Statement of Commitments cannot be supported in their current form.	The majority of the proposed modifications seek to update the reference to the revised documents but do not seek to change the intention of the commitment.	The additional information the proponent has provided does not adequately address the issue. Council does not agree that the proposed modifications are administrative only and maintains its concerns as outlined in the initial response.	Refer to the updated commitments at <b>Attachment B</b> which resolve the issues identified by Council.
Land Use Planning			

<p>1.1 Justification</p> <p>Council does not consider that the proposed modifications are justifiable on planning grounds. The application is supported by an Environmental Assessment Report (EA) prepared by Ethos Planning.</p> <p>Council Officers have reviewed this report and would like to make the following comments:</p> <p>a) The EA supporting the application states:  <i>There are two main reasons for Lendlease proposing to modify the Approved Concept Plan. The first is to enable the delivery of more housing to meet strong demand for new housing in the Wollongong and Shellharbour council areas. The second is to enable Lendlease to continue to deliver more diverse housing types and houses on a greater range of lot sizes, to respond to changing homebuyer preferences and assist with easing housing affordability pressures that are particularly acute in the Illawarra. The increased residential capacity will also ensure that the existing area of urban zoned land at Calderwood is efficiently used for the continued supply of a range of housing types.</i></p> <p>With regards to enabling the delivery of more housing to meet strong demand for new housing in the Wollongong and Shellharbour council areas. Council does not believe that the increase in dwellings is necessary to meet the demand for housing from a strategic regional planning perspective. This is supported by the Illawarra/Shoalhaven Regional Plan which states:  <i>"The major regional release areas of West Lake Illawarra and Nowra-Bomaderry will continue to be the long term focus for Greenfield housing in the region. Other established and smaller release areas will add to the diversity of supply such as Shell Cove, Tullimbar, Haywards Bay, South Kiama, West Culburra, Vincentia, Sussex Inlet, Manyana and Milton-Ulladulla. West Lake Illawarra and Nowra- Bomaderry alone have a combined capacity of 37,600 lots, representing a 30- to 40-year supply of housing. This means that Wollongong, Shellharbour and Shoalhaven Councils have the capacity to meet their projected housing needs for Greenfield land supply well beyond 2036."</i></p> <p>The EA also states that:  <i>the shortages of housing supply across the Illawarra region remain in place, particularly for new small lot detached houses that represent affordable price points. The proposed amendment in project yield will contribute to long-term relief from persistent undersupply of Greenfield and infill housing supply. This is particularly true in the next ten – fifteen years where additional density can be delivered in the CUDP whilst other major projects in the West Dapto Urban Release Area seek the relevant planning approvals and implement the infrastructure required to service that development.</i></p> <p>Council does not agree with this position.</p>	<p>The EAR as submitted has adequately addressed the Illawarra/Shoalhaven Regional Plan. Calderwood is identified within the plan as one of the key opportunities for new homes within the Illawarra. The outlook for the next ten years is not expected to be as strong and, as the property cycle weakens, supply is expected to drop well below the target average of 1,200 dwellings per annum for the combined Shellharbour and Wollongong region. The proposed increase in project yield will be critical to achieving the Strategy target in the next ten-fifteen years.</p>	<p>The additional information the proponent has provided does not adequately address the issue. Council maintains its concerns as outlined in the initial response.</p>	<p>Council has now adopted a Housing Strategy in December 2019. This identifies that the dwelling projections for Shellharbour LGA suggest the need for around 10,625 new dwellings over the 25 year period to 2041. Almost half of these new dwellings are projected to be located in the Rural Balance area, which includes Calderwood) (around 4,900 dwellings), with large numbers also projected in Blackbutt- Shellharbour City Centre (around 1,440 dwellings) and Shell Cove (around 1,400 dwellings).</p> <p>One of the recommendations of the housing is strategy is:  <i>The drafting of the LSPS vision and planning priorities and future LEP amendments are to acknowledge the importance of facilitating increased housing densities in appropriate locations within the City, subject to meeting the following principles:</i></p> <ul style="list-style-type: none"> <li><i>a. the increase in residential density is in an appropriate location, relative to existing services, employment and/or key public transport nodes; and</i></li> <li><i>b. the increased densities are capable of addressing key site-specific constraints; and</i></li> <li><i>c. potential amenity impacts can be satisfactorily mitigated; and</i></li> <li><i>d. the use maintains and/or contributes to the existing or proposed character of the area in which it is to be developed and is of a scale, bulk and height that is commensurate with the surrounds;</i></li> <li><i>e. the use is capable of being adequately serviced and is not out-of-sequence*; and</i></li> <li><i>f. the use contributes to the consolidation of residential densities and directly contributes to the provision of housing products that meet the needs of the community.</i></li> </ul> <p><i>*"not out-of-sequence" means not resulting in unreasonable costs for extending infrastructure and/or not being located in isolation from those areas that already have provision of services, or which are more easily able to be serviced, relative to its location to existing infrastructure.</i></p> <p>Providing additional density within the Calderwood development is consistent with the above strategy noting that:</p> <ul style="list-style-type: none"> <li>• The increase in density is proposed predominantly in walking distance of the town centre;</li> <li>• The EAR has demonstrated that the additional density can be accommodated within the sites constraints and that potential amenity impacts can be satisfactorily mitigated;</li> <li>• The density will be consistent with the character areas identified in the DCS;</li> <li>• The development can be adequately</li> </ul>
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			<p>served and would not be out of sequence; and</p> <ul style="list-style-type: none"> <li>The proposal will result in an increased range of housing types and housing diversity within Calderwood and Shellharbour.</li> </ul>
<p>The Illawarra-Shoalhaven 2017 Monitoring Report, 813 Greenfield dwellings were approved in the 2016- 17 year and 2,482 dwellings were supplied in the 2016/17 year. Greenfield housing supply has increased every year over the last five years. As new developments come online in West Dapto, Tullimbar, Shell Cove, Haywards Bay, South Kiama, West Culburra, Vincentia, Sussex Inlet, Manyana and Milton-Ulladulla this is likely to far exceed the requirements for housing. The Implementation plan, when discussing West Dapto, states that “an additional 2,496 lots are now zoned and service ready for development”.</p>		<p>The additional information the proponent has provided does not adequately address the issue. Council maintains its concerns as outlined in the initial response.</p>	<p>See comment above regarding Council's recently adopted housing strategy.</p>
<p>Shellharbour City Council's LEP provides flexibility in the residential zones in the existing parts of the LGA that have suitable infrastructure and facilities which are well established. The R2 Low Density Residential zone within the Shellharbour LEP 2013 permits both dual occupancies and multi-dwelling housing developments. As a result of the flexible zoning and large residential blocks in established residential areas, which are close to facilities including rail transport to Sydney, there have been a large number of dual occupancies, secondary dwellings and multi-dwelling housing developments constructed in recent years. This increase is already providing a range of housing types and lot sizes to meet market demand.</p>	<p>The proposed modification to the approved Concept Plan is consistent with these principles and establishes locational requirements to ensure that additional density will achieve a high level of residential amenity and be provided in walking distance to key services.</p>	<p>The additional information the proponent has provided does not adequately address the issue. Council maintains its concerns as outlined in the initial response.</p>	<p>See comment above regarding Council's recently adopted housing strategy.</p>

<p>Shellharbour City Council's current population is predicted to grow from 70,511 (2016) to 87,200 (2036) and 50% of the working population work outside of our Local Government Area. Increasing the population in an area which is poorly serviced by public transport will place an unreasonable impact on the local and regional road network as people will need to travel to their place of employment. The Proponent is proposing an increase in the maximum amount of retail floor space but it has been in ongoing discussions with Council about the provision of mixed use or retail space within the village centre. The Proponent has not proposed any mixed use development within the currently approved village centre, which was to be developed at an early stage, and continues to provide residential development (only) within this space.</p> <p>The village centre was to incorporate a range of "retail, commercial, business, light industrial, education, entertainment, civic, community, recreation, residential, tourist and visitor accommodation and mixed use employment". The environmental arguments that formed part of the concept plan were that "the project makes special provision for home based businesses and working from home .... this will reduce car dependency and trip generation rates". The village centre was to be "located in an early stage of the project to provide a ready supply of local retail and basic temporary community needs".</p> <p>The concern from Council's point of view is that Lendlease appear to be diluting the character and range of uses within the village centre. Council is concerned that, to date, Council has not been presented with an up-to-date plan for the village centre and over time with each approval, there will ultimately be a reduction in the opportunities to provide a village centre. Council is concerned that the village centre will end up being a small-scale supermarket surrounded by residential uses. However, the Proponent is putting forward an argument for increased density based on the presumption that people will be able to work from home or be within walking distance of a range of facilities and uses.</p> <p>However, the Proponent is proposing to remove these live/work options around the village centre. The DAs that are being lodged or pre-DA meetings being lodged with Council are not matching the concept plan.</p>	<p>The proposed modification does not change the approved Concept Plan requirement that the Village Centre will contain a maximum 5,000sqm of retail floor space and approximately 1,000sqm of mixed use floor space.</p> <p>The detailed use of both the town and village centres will be the subject of separate future development consent. We anticipate that the village centre will contain:</p> <ul style="list-style-type: none"> <li>• A supermarket</li> <li>• Child care centre</li> <li>• Specialty shops and services</li> </ul> <p>It is noted that a critical mass of residential development is required before retail becomes viable in the village centre.</p> <p>We note that in response to issues raised in other submissions, the locational criteria for increased density on sites within 400m of the Village Centres has been removed from this application such that increased density is no longer proposed on land within 400m of the Village Centre.</p> <ul style="list-style-type: none"> <li>• Lendlease has also delivered adjacent to the village centre the 37 home display village, the temporary community facility and the Sprout and part of the 3.8 hectare district park (D4).</li> </ul>	<p>The PPR proposes re-definition of Town and Village Centre. These centres currently correlate with the B4 Mixed Use zoned land in the SEPP and equate to approx. 50 ha. The Proposed modification, PPR and response to submissions all now refer to the Town and Village Centres as the areas of B4 land nominated for retail uses only. This is a major change to the Concept Approval as the intended employment lands are proposed to now be utilised for higher density residential uses. This change of definition affects the proposed delivery of a number of pieces of infrastructure which have current delivery times directly related to the delivery of the currently defined Village and Town Centres. (eg improvement of Calderwood Rd, outside of the project area)</p>	<p>Urbis has prepared an economic assessment that demonstrates that the town centre is more likely to be economically successful if the retail and commercial land uses are consolidated to form a commercial core rather than having these land uses spread over a larger physical area.</p> <p>Further it is noted that the amount of employment floorspace is not proposed to be reduced as a result of this modification, rather it is proposed to increase it and consolidate it to try and secure the economic viability of the town centre.</p>
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<p>b) The EA supporting the application states:</p> <p><i>“There is no change proposed to the minimum lot sizes prescribed by the SSP SEPP, Condition B6 and as already prescribed by the DCS.”</i></p> <p>This is not correct. The proposal seeks to amend the criteria for integrated and small lot housing. Condition B6 of the concept plan approval states:</p> <p><i>8) Residential lots less than 300m<sup>2</sup> in area are permitted within the General Residential Area (as outlined in the controls for ‘Integrated Housing’ in the Residential Development Controls table in Appendix G of the PPR) but only where subdivision of these lots occurs after the construction of dwellings and are located where the dwellings directly adjoin or are located directly opposite the following:</i></p> <p><i>a) public parks at least 0.3ha in size, or</i></p> <p><i>b) the Town and Village Centres.</i></p> <p><i>The minimum allotment size can be varied for the subdivision of ‘Integrated Housing’ under the Exceptions to Development Standards – Other Development clause in the Major Development SEPP.</i></p> <p>The proposed modification seeks to make integrated and small lot housing permissible on land being within 800m of the Town Centre and 400m of the Village Centre and also to reduce the public park component to 0.2ha. Therefore, small lot housing may be proposed on a lot 400m away from what may end up being just a small scale supermarket. This proposed change to the minimum lot sizes should be rejected.</p>	<p>The minimum lot size is not proposed to be changed. This remains at 300m<sup>2</sup> in the general residential locations.</p> <p>The modification has been amended and the locational criteria for increased density on sites within 400m of the Village Centres has been removed from this application.</p> <p>The proposed modifications to Condition B6 are detailed in Section 3.3 of the Response to Submissions Report. The amendments proposed in respect of the subdivision of integrated housing are consistent with those occurring within the Sydney Growth Centres.</p>	<p>The removal of the locational criteria for increased density on sites within 400m of the Village Centres is noted.</p> <p>However, Council remains concerned that the proposed condition will lead to fragmented ownership of integrated housing projects and the conflicts that may arise as a result. It is recommended that the Department explore the success or implications arising of this approach where it has been applied in other Greenfield Areas. With that having been said, and given the reasoning put forward by the proponent for the proposed modification to condition B6, to ensure certainty of compliance with the Development Approval, Council would like to recommend that Proposed B6 Clause (8) 7 be amended to the following wording:</p> <p>7. The submission of a survey plan prepared by a Registered Surveyor confirming the location of the dwellings in relation to the proposed subdivision boundaries demonstrating compliance with the issued development consent. All dwellings subject to the Development Approval must be at least partially constructed (whether that be construction of walls to 1 metre, or all boundary walls to be constructed).</p> <p>With regards to Point 5 Condition B6 (8) Council suggests that the condition be amended to include that written confirmation as to payment of developer contributions may also be provided by the Applicant/owner in the form of a receipt.</p>	<p>Lendlease would be happy to accept the proposed amendments to the draft condition. Refer to the updated conditions at <b>Attachment B</b>.</p>
<p>c) The EA supporting the application states:</p> <p><i>“The proposed amendment would allow for a larger number of properties that are attractive to investors, in the form of small lot detached homes and apartments, with density located close to the town centre. This housing would be ideal as a mode for rental properties, to meet the needs of tenants who qualify for rental assistance under FACS social housing programs.”</i></p> <p>Council's concern, as raised earlier, is that the Proponent has been diluting the village centre and may do the same with the town centre, whenever this comes on-line. Currently there is no identified timeline for the establishment of the town centre. The potential for dense low rental housing in an area with potentially limited or non existent retail or community facilities is a major concern for Council.</p>	<p>No modifications to the village centre are proposed as part of this application.</p> <p>It is noted that an Expression of Interest for the Village Centre was released in late 2018 and a due diligence period is underway with a preferred tenderer.</p> <p>Development applications will be lodged in due course for this development.</p>	<p>The additional information the proponent has provided does not adequately address the issue. Council maintains its concerns as outlined in the initial response.</p>	<p>The application does not seek to dilute the town centre and is proposing an increase in the area of retail floor space. As noted above, the Urbis economic assessment demonstrates that the town centre is more likely to be economically successful if the retail and commercial land uses are consolidated to form a commercial core.</p>

<p>e) The EA supporting the application states: “ <i>No substantive changes are proposed to the Approved Concept Plan in respect of approved land uses, the urban structure of the development, the road and pedestrian network within the site, the overall range of minimum lot sizes/dwelling types/lot types to be provided, nor the scope of environmental protection outcomes for the land including the quantum and configuration of riparian and environmental corridor and environmental reserve lands.</i>” Council disagrees with this conclusion. The proposal seeks to create new “land use” concepts such as “village centre – residential” and “town centre – residential”. In essence, what is proposed is a change from the B4 Mixed Use zone to an R3 Medium Density Residential zone. The proposal no longer seeks to create a mix of land use types in these areas, but rather a higher density of residential accommodation. The proposal includes circles on a map to show a 400m radius (village centre) and 800m radius (town centre) walking distance. However, no consideration has been given to the topography in these areas.</p>	<p>MOD 4 does not incorporate any proposed zoning amendments. B4 Mixed Use zone permits low to medium density residential that ensures vibrant and accessible Town and Village Centres. The Calderwood Valley Urban Design Study demonstrates the potential Town Centre development options as the central focus of Calderwood Valley. A radius of 800m is generally accepted as being within ten-minutes walking distance of the centre and placing additional density within walking distance of a Town Centre is a well-established urban design principle. A walkable neighbourhood encourages healthy, active lifestyles and is more likely to result in higher levels of use of sustainable (active) forms of transport such as walking, cycling and use of public transport.</p>	<p>The PPR proposes re-definition of Town and Village Centre. These centres currently correlate with the B4 Mixed Use zoned land in the SEPP and equate to approx. 50 ha. The Proposed modification, PPR and response to submissions all now refer to the Town and Village Centres as the areas of B4 land nominated for retail uses only. This is a major change to the Concept Approval as the intended employment lands are proposed to now be utilised for higher density residential uses. This change of definition affects the proposed delivery of a number of pieces of infrastructure which have current delivery times directly related to the delivery of the currently defined Village and Town Centres. (eg improvement of Calderwood Rd, outside of the project area)</p>	<p>As per previous comments, the study undertaken by Urbis has concluded that the town centre is more likely to be economically successful if the retail and commercial land uses are consolidated to form a commercial core rather than having these land uses spread over a larger physical area.</p> <p>Further it is noted that the amount of employment floorspace is not proposed to be reduced as a result of this modification, rather it is proposed to increase it and consolidate it to try and secure the economic viability of the town centre.</p>
<p>f) The proposal seeks to increase the size of the community facility and provide this in the town centre on a site “that is accessible and visually prominent”. This is supported by Council. However, given that there is no timing around the delivery of the town centre and the community facility will need to be delivered when the 3000th dwelling has a construction certificate or 12 months after the issue of a subdivision certificate (whichever comes first). The community facility may be delivered on an isolated site which is not a good community outcome. Greater clarity and commitment must be given on the timing and delivery by the town centre.</p>	<p>The timing for the delivery of the Community Centre remains consistent with the original approval of the Concept Plan.</p> <p>Lendlease has relocated the community centre to the corner site at the intersection with Escarpment Drive and Calderwood Road near the education precinct, as discussed with Council.</p> <p>At this stage, the town centre is likely to be delivered around 2025.</p>	<p>Council continues to seek clarification that the proponent anticipates that the town centre will be delivered at the completion of the 3000<sup>th</sup> dwelling. Is the delivery of the 3000<sup>th</sup> dwelling anticipated to occur around 2025?</p>	<p>Lendlease previously anticipated that the 3,000<sup>th</sup> dwelling would be delivered around 2025. However, this is now likely to be around 2027 given delays with approvals and also market conditions.</p> <p>Lendlease has relocated the community centre to the corner site at the intersection with Escarpment Drive and Calderwood Road near the education precinct, as discussed with Council. It is a requirement of the VPA to deliver the community centre by the 3,000<sup>th</sup> dwelling and Lendlease is still committed to this.</p>
<p>g) It is unclear how the Department of Education has agreed to the reduction in the school site from 3ha to 2ha and also how the timing being delayed will impact upon traffic during peak hours as people will be travelling outside of the precinct for drop off/pick up. Careful consideration needs to be given to the reduction in space for the school to ensure that this reduction is not reliant on other space within the precinct to provide satisfactory services (e.g. public open space areas, etc.).</p>	<p>The submission made by the Department of Education, in relation to MOD 4 supports this proposed modification, and states: “<i>The department requests that the delivery of land for the schools remain linked to the number of residential allotments released, and not be tied to a specific year. It is acknowledged that in previous discussions with the proponent it was indicated that the new high school may be delivered in or near 2031, however our more recent assessment suggests that it is more prudent to retain the “trigger” based on the number of lots released, but to revise the milestone for school land dedication to 4,500 allotments. This approach allows the site to be acquired with sufficient time for planning and delivery of the high school in response to population growth and demand for government high school teaching space in the wider locality.</i>”</p>	<p>The response given by the proponent does not address Council's concerns regarding the proposed reduction in area of the proposed school site.</p>	<p>Schools are state infrastructure and Lendlease is guided by the Department of Education on this issue. The Department of Education continues to support this proposal.</p>



<p>1.2 Conditions of Approval</p> <p>The following comments specifically relate to the proposed and suggested conditions of the Concept Plan Approval.</p> <p>a) The Proponent is seeking to amend Condition A1 of the Concept Plan approval (on pages 38 and 39 of the Environmental Assessment report) to ensure that residential land uses are identified in the range of permissible uses in the mixed use areas. It is clearly acknowledged by Council that the residential uses are permissible in the mixed use areas. What is not clear is that the Proponent intends to use mixed use areas for increased residential density without providing other uses within these areas. It is not clear how an increase in residential density, at the expense of other land uses (e.g. retail, commercial, etc.) is to be supported without placing pressure on other infrastructure (e.g. road network, community facilities, etc.).</p>	<p>Proposed modifications to Condition A1 (b) are to clearly articulate that mixed use areas can contain a mix of uses and are not exclusive to employment uses. This is consistent with the land uses permissible and the objectives of the B4 Mixed Use Zone.</p>	<p>The additional information the proponent has provided does not adequately address the issue. Council maintains its concerns as outlined in the initial response.</p>	<p>No change is proposed. The amendment to the condition is proposed to make it abundantly clear that residential land use is also a permissible land use.</p>
<p>c) Condition A4 will need to be amended but has not been referred to by the Proponent. An updated concept plan will be required which takes into consideration all of the amendments proposed under MOD 4.</p>	<p>Not required. This condition has been satisfied previously. All amendments made in MOD 4 are consolidated within the application.</p>	<p>A revised consolidated modified approval should be required as condition of any Approval.</p>	<p>Lendlease maintained that this is not required. This has not been required for other major developments such as Barangaroo or the like.</p>
<p>e) The reasoning for the amendment to Condition B6, as stated on page 40 of the EA:</p> <p><i>i. "To provide increased densities (integrated housing and small lot housing on lots less than 300m2) in appropriate/strategic locations and to allow for subdivision certificates to be issued before the completion of dwellings. The amendment to the minimum park size is proposed to reflect the executed agreement with SCC. To make clear that the development standard in respect of minimum lot size is contained in the Concept Plan and a variation request is not required in respect of the minimum lot size control if the development application complies with the development standard contained in condition B6."</i> It is unclear why Council should consider a subdivision certificate before the dwellings are complete. There is no justification provided for this change or why increased density should be considered within 400 metres of a village centre and 800 metres of a town centre. It is unclear where those distances have come from or where they are measured from as the Proponent is proposing parts of the village centre and parts of the town centre only include exclusively residential development.</p>	<p>The early release of the subdivision certificate assists in reducing the construction costs of the dwellings and therefore increases housing affordability.</p> <p>There is criteria contained within condition B6 which gives certainty to Council that an acceptable amenity and urban design outcome will be achieved notwithstanding the early release of the subdivision certificate. It is noted that the Council is still able to apply discretion in the application of this element of the draft condition.</p>	<p>Council is concerned that the proposed condition will lead to fragmented ownership of integrated housing projects and the conflicts that may arise as a result. It is recommended that the Department explore the success or implications arising of this approach where it has been applied in other Greenfield Areas. With that having been said and given the reasoning put forward by the proponent for the proposed modification to condition B6, to ensure certainty of compliance with the Development Approval, Council would like to recommend that Proposed B6 Clause (8) 7 be amended to the following wording:</p> <p>7. The submission of a survey plan prepared by a Registered Surveyor confirming the location of the dwellings in relation to the proposed subdivision boundaries demonstrating compliance with the issued development consent. All dwellings subject to the Development Approval must be at least partially constructed (whether that be construction of walls to 1 metre, or all boundary walls to be constructed).</p> <p>With regards to Point 5 Condition B6 (8) Council suggests that the condition be amended to include that written confirmation as to payment of developer contributions may also be provided by the Applicant/owner in the form of a receipt.</p>	<p>Lendlease is happy to accept the proposed changes to this condition, refer to the amended conditions at <b>Attachment B</b> to reflect this.</p>
<p>f) The Proponent proposes the deletion of the words in Condition B6 which currently states:</p>	<p>It is not considered appropriate to modify the SEPP in this instance.</p>		<p>It is not considered appropriate to modify the SEPP in this instance. Lendlease maintain their position on this proposed amendment. Further it is noted that SEPP 1 has been repealed.</p>



<p><i>“The minimum allotment size can be varied for the subdivision of ‘Integrated Housing’ under the Exceptions to Development Standards – Other Development clause in the Major Development SEPP.”</i></p> <p>It is acknowledged that Clause 3B(2)(f) of Schedule 2 of the Environmental Planning and Assessment (Savings, Transitional and Other Provisions) Regulation 2017 states:</p> <p><i>ii. “the provisions of any environmental planning instrument or any development control plan do not have effect to the extent to which they are inconsistent with the terms of the approval of the concept plan”,</i> However, it is not in the community's best interests to create a situation where the control in a State Environmental Planning Policy no longer continues to apply because a Concept Plan contains separate controls, this only creates confusion. The SEPP should be modified to remove this inconsistency</p>	<p>If a development proposal satisfies the criteria contained within condition B6 then it is considered a waiver under SEPP 1 is not required. The proposed amendment seeks to clarify this.</p>	<p>The additional information the proponent has provided does not adequately address the issue. Council maintains its concerns as outlined in the initial response.</p>	
<p>g) It is unclear how the Department of Education has agreed to the reduction in the school site from 3ha to 2ha and also how the timing being delayed will impact upon traffic during peak hours as people will be travelling outside of the precinct for drop off/pick up. Careful consideration needs to be given to the reduction in space for the school to ensure that this reduction is not reliant on other space within the precinct to provide satisfactory services (e.g. public open space areas, etc.).</p>	<p>The submission made by the Department of Education, in relation to MOD 4 supports this proposed modification, and states:</p> <p><i>“The department requests that the delivery of land for the schools remain linked to the number of residential allotments released, and not be tied to a specific year. It is acknowledged that in previous discussions with the proponent it was indicated that the new high school may be delivered in or near 2031, however our more recent assessment suggests that it is more prudent to retain the “trigger” based on the number of lots released, but to revise the milestone for school land dedication to 4,500 allotments. This approach allows the site to be acquired with sufficient time for planning and delivery of the high school in response to population growth and demand for government high school teaching space in the wider locality.”</i></p>	<p>The Department of Education advice relates to the High School site and does not refer to the reduction in area of the 2<sup>nd</sup> primary school site. The additional information the proponent has provided does not adequately address the issue. Therefore, Council maintains its concerns as outlined in the initial response.</p>	<p>Refer to second submission made by DoE. No objection was raised to the proposed amendments.</p>
<p>It is acknowledged that Clause 3B(2)(f) of Schedule 2 of the Environmental Planning and Assessment (Savings, Transitional and Other Provisions) Regulation 2017 states:</p> <p><i>ii. “the provisions of any environmental planning instrument or any development control plan do not have effect to the extent to which they are inconsistent with the terms of the approval of the concept plan”,</i></p> <p>However, it is not in the community's best interests to create a situation where the control in a State Environmental Planning Policy no longer continues to apply because a Concept Plan contains separate controls, this only creates confusion. The SEPP should be modified to remove this inconsistency.</p>		<p>The proponent has not provided any additional information to address this issue. Council maintains its concerns as outlined in its initial response. The resultant inconsistencies between the Concept Approval and the SEPP continues to be a concern to Council.</p>	<p>Noted, however we consider that modifications to the SEPP are not required.</p> <p>Clause 3B(2)(a) and (f) of Schedule 2 of the EP&amp;A (Savings, Transitional and Other Provisions) Regulation 2017 give effect to the approved concept plan. This provision provides that the concept plan prevails over any inconsistency between the concept plan and an environmental planning instrument.</p>

<p>g) No changes are proposed by the Proponent in relation to secondary dwellings, with Condition B6(10) stating:</p> <p><i>10) Design controls shall be prepared for secondary dwellings and submitted to the Department of Planning for approval</i></p> <p>The controls relating to secondary dwellings need to be carefully considered and controlled.</p> <p>An example of what could happen is provided below. In Stage 3B South, the majority of which is within 400m of the village centre (a part of this stage is within the village centre but is proposed to only be used for residential purposes), the average lot size proposed is 412m<sup>2</sup>. Twenty-eight (28) of the 102 residential allotments have an area of between 400 and 500metres<sup>2</sup>.</p> <p>Pursuant to the amended Condition B6, each of these 28 lots could be further subdivided for the purposes of integrated housing or a dual occupancy. Using a conservative measure of 2 dwellings on each of the 28 lots, the dwelling density could go from 28 dwellings to 56 dwellings, just on the 400 to 500 metres<sup>2</sup> lots within Stage 3B South. If each of the lots above the 400m<sup>2</sup> have dual occupancy proposed, this would increase the project dwelling total from 42 dwellings (one on each lot) to 84 dwellings. Combined with the 60 dwellings on the lots 300 to 400m<sup>2</sup> this is already 144 dwellings. Then there is the super lot which has an area of 1,626.4m<sup>2</sup> and then the B4 zoned lot which has an area of 18,249.8m<sup>2</sup>. It is likely that the 156 anticipated dwellings will be far exceeded under the proposed controls.</p> <p>Secondary dwellings and the possibility of further subdivision of lots within the approved/proposed subdivisions requires careful consideration as it is likely that with the change in controls the anticipated dwellings numbers are incorrect.</p>	<p>The DCS has been amended such that secondary dwellings are now only permitted on lots greater than 450m<sup>2</sup>, this is consistent with the Affordable Rental Housing SEPP.</p>	<p>Noted and please refer to the attached submission letter to see further concerns that Council now have with the proposed introduction of the term 'principle dwelling'.</p>	<p>The term principal dwelling has now been removed.</p>
<p>h) It is questioned whether Condition C12(c) needs to still require consultation with the Department of Planning. Voluntary Planning Agreements (with each Council and the State Government) will need to be in place for the provision of local roads. If VPAs are in place is there a continuing need to consult with the Department?</p>	<p>Given the history of negotiations between Lendlease and Council on this site, it is preferred that the Department continues to be involved in these discussions.</p>	<p>The proponent has not provided any additional information to address this issue. Council maintains its concerns as outlined in its initial response. It should be noted that the Department has not offered any comment when consulted on these issues to date.</p>	<p>Lendlease maintains its position on this issue and requests that the condition remain as currently drafted.</p>

<p>b) Commitment 2 – Council have not agreed to take ownership of the Johnston's Spur Area. Therefore this matter remains unresolved. However, an alternate wording for Commitment 2 is as follows:</p> <p><i>The Proponent will dedicate that part of the Johnston's Spur conservation area identified as Item E2 06 on the Land Ownership Options Plan included at Appendix H of the Consolidated Concept Plan prepared by JBA dated March 2011 (previously referenced as Appendix I of the Preferred Project Report prepared by JBA Urban Planning Consultants Pty Ltd dated August 2010) to the Department of Lands or relevant local council and "under reserve" on a stage by stage basis, subject to the negotiation and agreement of the Department of Lands or relevant Council to take ownership of this land.</i></p> <p><i>If the Department of Lands or Council does not agree to take ownership of this land, the Proponent will identify a suitable alternative public or private land ownership option at the relevant subdivision stage. Any land to be transferred into public ownership in accordance with this commitment will be subject to an identified management regime. The land will only be transferred upon completion of any agreed implementation of a Vegetation Management Plan or other embellishment and a suitable period of maintenance (eg 5 years).</i></p>	<p>Lendlease is still working to find a suitable solution to the ongoing ownership and management of environmental lands. The solution will be presented to Council in due course.</p>	<p>The additional information the proponent has provided does not adequately address the issue. Council maintains its concerns as outlined in the initial response.</p>	<p>Lendlease accepts this alternate wording with the exception of the timing period (3 years is consistent with the other VMPs that have been prepared and accepted by Council and consistent with the current requirement of the various SoCs – 2, 3, 4 and 10), refer to the amended commitments at <b>Attachment B</b>.</p>
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<p>c) Commitment 3 – A new land ownership map should be prepared to accompany MOD 4. The ownership map should only show land that is proposed to be dedicated back to Council and the remainder should be private ownership (i.e. all of the riparian corridors should be shown as purple and not orange or light blue). Also, the colours used should be easier to identify between Shellharbour City Council and Wollongong City Council. These lands will stay in private ownership until or unless agreements are made so the ownership map should show purple (private) unless it relates to a park or a wetland which is required for local drainage.</p> <p>Council have not agreed to take ownership of environmental reserves. Therefore this matter remains unresolved. However an alternative wording for Commitment 3 is as follows:</p> <p><i>The Proponent will dedicate the environmental reserves identified as Items E2 04 and E2 05 on the Land Ownership Options Plan included at Appendix H of the Consolidated Concept Plan prepared by JBA dated March 2011 (previously referenced as Appendix I of the Preferred Project Report prepared by JBA Urban Planning Consultants Pty Ltd dated August 2010) to the Department of Lands or the relevant local council and “under reserve” on a stage by stage basis, subject to the negotiation and agreement of the Department of Lands or relevant Council to take ownership of this land.</i></p> <p><i>If the Department of Lands or Council does not agree to take ownership of this land, the Proponent will identify a suitable alternative public or private land ownership option at the relevant subdivision stage. Any land to be transferred into public ownership in accordance with this commitment will be subject to an identified management regime. The land will only be transferred upon completion of any agreed implementation of a Vegetation Management Plan or other embellishment and a suitable period of maintenance (eg 5 years).</i></p>	<p>Not required. The proposed modifications to this commitment only allows for the potential future transfer of this land to Council in addition to the Department of Lands as currently approved.</p>	<p>The additional information the proponent has provided does not adequately address the issue. Council maintains its concerns as outlined in the initial response.</p>	<p>The current land ownership plan, relevant SoCs (2, 3 and 4) and MOD 2 already address this issue and the Proponent is required to identify a suitable alternative arrangement at the relevant subdivision stage.</p>
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<p>d) Commitment 4 – As per the comment above – this should remain purple as the Proponent has had 8 years to arrange a separate ownership arrangement and this should stay purple (private) until such an agreement is in place. Council have not agreed to take ownership of riparian corridors. However an alternative wording for Commitment 4 is as follows:</p> <p><i>The Proponent will dedicate the riparian corridor and adjoining open space/drainage lands identified as Items E2 01, 02 and E2 03, and RE1 01-02, RE1 04, RE1 09, RE1 12, RE1 15, RE1 22 and RE1 28 on the Land Ownership Options Plan included at Appendix H of the Consolidated Concept Plan prepared by JBA dated March 2011 (previously referenced as Appendix I of the Preferred Project Report prepared by JBA Urban Planning Consultants Pty Ltd dated August 2010) prepared by JBA Urban Planning Consultants Pty Ltd dated August 2010 to the Department of Lands or relevant local council and “under reserve” on a stage by stage basis, subject to the negotiation and agreement of the Department of Lands or relevant Council to take ownership of this land.</i></p> <p><i>If the Department of Lands or relevant local council does not agree to take ownership of this land, subject to the underlying land use zone, the Proponent will identify a suitable alternative public or private land ownership option at the relevant subdivision stage. Any land to be transferred into public ownership in accordance with this commitment will be subject to an identified management regime. The land will only be transferred upon completion of any agreed implementation of a Vegetation Management Plan or other embellishment and a suitable period of maintenance (eg 5 years).</i></p>	<p>Not required. The proposed modifications to this commitment only allows for the potential future transfer of this land to Council in addition to the Department of Lands as currently approved.</p>	<p>The additional information the proponent has provided does not adequately address the issue. Council maintains its concerns as outlined in the initial response.</p>	<p>This issue has been resolved under Mod 2 to the concept plan. Refer to conditions B7 and C3.</p>
<p>e) Commitment 5 – The proposed changes to the commitment are not accepted by Council as they are part of a wider unresolved issue relating to the application of the VPA and the appropriate provision of community infrastructure. The Department should not determine the application until this issue is resolved to the satisfaction of Council.</p>	<p>The proposed amendments to Commitment 5 only relate to the inclusion of non- core landowners.</p>	<p>The proponent has not provided any additional information to address this issue. Council maintains its concerns as outlined in its initial response. A letter of offer to enter into a new VPA which addresses the Non-Core Lands issue has not been received by Council.</p>	<p>A revised letter of offer has been prepared by Lendlease and has been provided to Shellharbour City Council under separate cover.</p>
<p>f) Commitment 6 – Council is currently not in a position to agree with Appendix J as it relates to unsettled issues of open space provisions, embellishment and delivery. The Department should not determine the application until this issue is resolved to the satisfaction of Council.</p> <p>g) Commitment 7 – Council is currently not in a position to agree with Appendix J as it relates to unsettled issues relating to the provision of community infrastructure.</p> <p>h) Commitment 8 – Council is currently not in a position to agree with Appendix J as it relates to unsettled issues relating to the provision of community infrastructure.</p>	<p>The proposed modification to this commitment only relates to the update of documentation associated with the Concept Plan and the inclusion of non-core landowners. These changes are administrative in nature only.</p>	<p>The proponent has not provided any additional information to address this issue. Council maintains its concerns as outlined in its initial response. A letter of offer to enter into a new VPA which addresses the Non-Core Lands issue has not been received by Council.</p>	<p>A revised letter of offer has been prepared by Lendlease and has been provided to Shellharbour City Council under separate cover.</p> <p>Lendlease continues to negotiate with the non-core landowners to resolve the fair payment of contributions between the different landowners. This matter is not relevant to the Mod 4 application.</p>



<p>Commitment 9 – Council is currently not in a position to agree with Appendix J as it relates to unsettled issues relating to the provision of community infrastructure.</p> <p>f) Commitment 19 – The proposed changes to the commitment cannot be accepted as Council has not approved the modified DCS.</p> <p>g) Commitment 20 – The proposed changes to the commitment cannot be accepted as Council has not approved the modified DCS.</p> <p>Commitment 21 – The proposed changes to the commitment cannot be accepted as Council has not approved the modified DCS.</p>			<p>The modified DCS introduces more diverse housing typologies and aligns better with the Affordable Rental Housing SEPP. The changes are considered to result in an improved outcome.</p>
<p>m) Commitment 23 – These measures should be consolidated so readers of the document don't need to look through the old documents to find what the Proponent is required to do.</p>	<p>The proposed modification to this commitment only relates to the update of documentation associated with the Concept Plan. These changes are administrative in nature only.</p>	<p>The proponent has not provided any additional information to address this issue. Council maintains its concerns as outlined in its initial response. A letter of offer to enter into a new VPA which addresses the Non-Core Lands issue has not been received by Council.</p>	<p>This commitment relates to the approved TMAP. No change is proposed to the TMAP.</p> <p>Amendments to the VPAs are being discussed with Council and the non-core landowners as a separate process and do not affect this modification as all of the additional dwellings will be located on Lendlease's land and Lendlease will be entering into a separate agreement with Council in respect of the additional infrastructure requirements generated by the application.</p>
<p>n) Commitment 24 – It is unclear how this be achieved. It is also unclear what "community" this will this apply to. The Proponent has provided a list of initiatives they will be "investigating" but there is no specificity in regards to outcomes. It is also unclear as to whether the star rating applies to the entire precinct or just that part which is constructed after the MOD 4 application is determined.</p>	<p>The Calderwood Valley has achieved a 6-star Green Star Communities Rating and the certificate is appended at <b>Appendix O</b>.</p> <p>All commitments and obligations made in respect of the GreenStar ratings have been made by Lendlease and imposed on Lendlease Communities land. There is no obligation placed on any of the non-core landowners, although it is assumed in the Green Star submissions that Concept Plan sustainability, liveability and urban design requirements are being met by each landowner/developer. We note that the residents who reside within the non-core landholdings will benefit from the initiatives delivered through the environmental rating tool.</p>	<p>A coordinated approach to achieving the commitment across the entirety of the Project Area should be submitted for assessment.</p>	<p>Refer to covering letter. Calderwood Valley has already achieved a 6 star communities green star rating.</p>
<p>o) Commitment 27 – It is unclear whether best practice measures include the adoption of technologies to reduce the demand or need for servicing.</p>	<p>This is not required as the project has achieved certification as 6-star Green Star Communities Rating.</p>	<p>The additional information the proponent has provided does not adequately address the issue. Council maintains its concerns as outlined in the initial response.</p>	<p>Best practice measures have been adopted as part of the Green Star Communities commitments.</p>

<p>The following comments relate to existing statement of commitments that are not proposed to be amended by the proposed modification but should be considered by the Department:</p> <ul style="list-style-type: none"> <li>Commitment 25 – This should be expanded as it is difficult to measure at the subdivision stage as it is difficult to measure compliance with this commitment;</li> <li>Commitment 26 – Dwellings can be subject to CDCs – BASIX is not relevant at the subdivision stage – is this commitment really necessary?</li> <li>Commitments 29 and 30 – The commitments should detail what a “riparian corridor” actually means – it should be provided in accordance with the relevant guidelines produced by NRAR. This includes planting.</li> <li>Commitment 47 – is this required at the DA stage or CC stage?</li> </ul>	No modifications required or proposed.	The additional information the proponent has provided does not adequately address the issue. Council maintains its concerns as outlined in the initial response.	No changes are proposed to Commitments 25 and 26. The riparian corridors are defined in the Approved Concept Plan. Commitment 47 – no change is required. The information will be required at the CC stage as has been the case with development applications made to date.
<b>Water Cycle and Flood Management Strategy</b>			
<p>a) A new flood model – as part of this Mod 4, Lendlease has engaged a new flood consultant to review the flood modelling undertaken as part of the previous approvals. This new modelling is based on Council's Flood Study (adopted in 2017). Lendlease's consultant J. Windum Prince has incorporated as- constructed aspects of the Calderwood development into the model. It is evident from the model results that various points in the statement of commitments are now shown to be inconsistent with respect to flood risk and management of that risk.(e.g. Commitment 41). Specifically, the bridge over the rivulet built as part of stage 1 was intended to be designed such that it would provide flood free access. However, the new modelling indicates that this is not the case (see image below).</p>	A detailed response to these items has been provided by JPW at <b>Appendix F</b> .	<p>The following are comments in response to Appendix F:</p> <ul style="list-style-type: none"> <li>Council still maintains that the adopted fraction impervious percentage of 50- 60% used for residential areas is too low.</li> <li>Chapter 8 - Council refute the statement made by JWP re notes and quotes claimed to have been made by Council regarding the existing developed areas and what would be considered acceptable flood impacts.</li> <li>HPC TUFLOW model was used - was a check done to confirm that flood levels produced by the hPC were equivalent to the CPU model results?</li> <li>Why was the previous Reinco models Manning's n roughness schematisation utilised instead of the schemetistaion adopted as part of Councils adopted flood model (ie WMA Water Model)? This has the potential to impact the results significantly.</li> <li>Calderwood road - more information is required. The current road has a very low flood immunity and if this flood immunity is proposed to remain the same post CUPD MOD4, it will present a significant flood hazard for the new community as people may become stranded on the road during a flood as there are flood islands that currently occur on the road.</li> <li>North Macquarie road/ Illawarra Hwy intersection - The road layout plan indicates this will be a designated access point to the CUDP, however this is via an existing flooded causeway. The Flood mitigation plan needs to identify a road bridge here to address this access issue if is indeed intended to be an access point, as the Illawarra Hwy has a low flood immunity and cannot be relied upon for reliable access during a</li> </ul>	Refer to detailed response in previous section that addresses this matter that was outlined in Council's cover letter. Refer to page 12 of this table.
<p>Council believes that Lendlease must address this issue and provide details regarding what remedial works they propose to undertake in the floodplain to ensure that the flood free access can be met and that all commitments in the statement of commitments are being satisfied. Furthermore, Council is now examining what notations it should be placing on planning certificates whilst this issue is being resolved. This may include placing a notation on those properties that are now identified as flood prone that under the original Flood Management Strategy were not flood affected.</p>			
<p>b) Flood Impacts – It is evident from the flood maps that there may be significant and far reaching flood impacts in some areas downstream of the development.</p>			

<p>c) The Rienco Flood Model – The MOD 4 application proposes to be informed by the new flood modelling (which is based on Council's Adopted Flood Study model). Council is unclear about what this means for the developers within the non-core lands that are currently seeking DA approval for applications that are based on the previous Rienco/Cardno modelling. Are these developers expected to abort all work done using the Rienco model and use only the new JW Prince model that is based on Council adopted flood study? The possible implications of developments currently being assessed should be addressed prior to the determination of the modification to the Concept Plan approval.</p>		<p>flood.</p> <p>- Local PMF assessment – it is recommended that the minimum subcatchment sizes proposed as part of the updated WCMP be a new flood risk statement of commitment?</p> <p>Notwithstanding the above it is recommended that the Department only consider approval of the MOD4 subject to an MOU or additional statement of commitment that the proponent will gain approval and construct the 620mm blade wall adjacent to Djindy Bridge as well as any associated flood mitigation required as proposed in the updated Water Cycle Management Plan.</p>	
<p>d) The Risk-based Framework for Considering Waterway Health Outcomes in Strategic Land-Use Planning Decisions is referenced in the Watercycle and Flood Management Strategy and has been recommended by EPA/OEH. The report incorrectly states that</p> <p><i>performed for the Lake Illawarra catchment and did not indicate expectations that the proponent would develop or apply such a framework to the CUDP."</i></p> <p>Shellharbour and Wollongong Council are working together with OEH to have the Risk based Framework implemented as part of the Draft Lake Illawarra Coastal Management Program (CMP). The Department needs to consider how the Risk Based Framework will be enforced when the Lake Illawarra CMP is approved by the Minister.</p>		<p># Sentence unfinished in Point i)</p>	
<p>e) It's unclear whether Council can reasonably manage the large increase in Stormwater treatment devices that will be handed over to Council as a result of the MOD4. (proposed total of 27 wetlands which is an increase of 15 wetlands compared to the existing approval) It is likely to have a large impact on Council ability to be Fit For the Future. Comments from the EPA suggest options for ongoing maintenance of stormwater improvement measures should be investigated, however the report provides no suggested solutions other than Council to manage.</p>			
<p>f) The assumed fraction impervious for residential areas appears to be too low (50-60%) Councils experience in Calderwood is that Residential areas typically have a fraction impervious of 70-80%. This would impact the Stormwater Quality Modelling performed as part of this report.</p>			
<p>g) Although Council has licenced our adopted Macquarie Rivulet Flood Model to JW Prince for the purpose of undertaking this exercise, Council has had no assurance that there has been any quality assurance checks as to the updates made and any changes made to the model to support this application. It is suggested that a quality assurance check be performed by a peer reviewer to ensure that any changes made to the model are in accordance with industry standards and the TUFLOW user manual and guidelines</p>			

h) The flood modelling submitted with the MOD4 does not include any changes to Calderwood Road in terms of alignment (Horizontal and vertical) and form. However, other documentation within the MOD4 indicates that Calderwood road is required to be upgraded to accommodate the new development intensity. Council's knowledge of flooding and the floodplain attributes within Macquarie Rivulet means we have significant concern regarding the impacts detrimental upstream flood impacts that would occur if this road was required to be modified. As a large length of the road currently acts as a significant hydraulic structure, any raising of the road would have a significant and widespread backwater effect and impact on properties outside of the CUDP. This impact must be quantified and additional information can demonstrate how or if those impacts can be managed prior to any determination of this application.			
i) There is little detail in the report about how flood risk above the 1% AEP will be managed and how risk to life is to be mitigated. In this regard, the question arises, will dwellings be subject to unacceptable flood hazard in extreme events and, will they			
j) There appears to be a real opportunity to incorporate Stormwater Harvesting and reuse within the development area, as there are a number of nearby potential users of harvested stormwater for irrigation (eg. Sports fields, schools etc.) This would result in a significant reduction in nutrient load and have a positive impact on the receiving waters including Lake Illawarra.			
<b>Traffic and Transport</b>			
a) The Traffic and Transport Report (T&TR) for Mod 4 uses land use projections for the TRACKS modelling which is consistent with the agreed residential and employment forecasts used in the Albion Park Rail Bypass – Addendum Traffic and Transport Assessment Report September 2017.	A detailed response to these items has been prepared by Cardno at <b>Appendix H</b>	In addition to the following comments please also please refer to Attachment 2 for a detailed assessment of Appendix H The Secretary's Environmental Assessment Requirements (SEARs) for Calderwood Concept Plan MP 09-0082 MOD 4 were issued on 1 February 2018. In relation to the transport and accessibility the SEARs required a revised traffic and transport impact assessment which in part required the following  an assessment of the impacts on the existing and approved future road network and infrastructure, and use of the Austroads Guidelines to identify mitigation measures.  Roads assessed must include, but not limited to, the Illawarra Highway, Princes Highway/Southern Freeway, Tongarra Road, Marshall Mount Road, Yallah Road, the Southern Freeway Corridor between Yallah and Oak Flats <b>and the Albion Park Rail Bypass Project</b>  The Response to the Secretary's Environmental Assessment Requirements – Traffic and Transport Report (dated 30 May 2019) indicates the following  <i>The other minor difference is observed at Albion Park Rail Bypass central interchange (northbound direction). The modelling plots indicate the corridor capacity is not exceeded at this location.</i>	Refer to previous response at page 8.
It is noted that the T&TR is using vehicle trip generation rates that are consistent with those previously used by Cardno in their modelling for other stages in Calderwood. The T&TR indicates that an additional 1645 trips will be generated in the peak hour of which 1316 will be by vehicles. However the actual trips generated in the AM and PM peaks is well below what is expected for an additional 1700 dwellings. Figure 4-10 and Figure 4-11 in the T&TR show that in the AM peak only an additional 525 vehicles are added to the external road network and in the PM peak only an additional 614 vehicles. This is in stark contrast to the Traffic Report submitted with the Stage 1 application (Cardno – 4 March 2010) which indicates that the proposed 442 dwellings would result in an additional 497 vehicles in the AM peak and 519 vehicles in the PM peak on the external road network. On that basis more than half of the claimed vehicle trips are missing from the traffic modelling projections in the T&TR.			



<p>The traffic modelling results appear erroneous and should be reviewed and rerun. One of the most questionable claims of the traffic modelling results shown in Figure 4-11 is that in the AM peak the proposed development of an additional 1700 dwellings will only result in an additional 40 vehicle using the M1, north of Fowlers Road Dapto which is roughly only 3% of the total trips generated. This is contrary to the, Census Journey to Work data provided in the Traffic Impact Assessment Report (Cardno 11 April 2017) submitted with Calderwood Stage 3C which indicated that 40.2% of trips generated using the external road network should be using this section of the M1. Additionally that report indicates 57.8% of external trips would use the Princes Highway south of Tongarra Road (or Albion Park Rail Bypass when completed) yet Figure 4-11 shows only an additional 34 vehicles using this route which represents again only about 3% of the total trips generated. These results question the credibility of the traffic modelling conducted for the T&amp;TR.</p>		<p><i>As highlighted in the figures below, no substantial change in V/C ratio was observed in the PM peak due to increased CUDP yield except for minor changes at Tongarra Road.</i></p> <p>In terms of addressing the SEARs this is a vague and qualitative statement which fails to quantify or discuss the impacts. The findings do not specifically recommend that any treatment measures are required, however this is at odds with Section 3.2 <i>Infrastructure for Existing Approval</i> which identifies the following upgrade measures to provide a direct connection between Tripoli Way and the Motorway for access to and from the south. It is noted that Upgrades 4 and 5 are no longer feasible in the form identified in the report and following diagram due to changes with the Albion Park Rail Bypass design. However this is not discussed in the report nor are any alternative treatment measures discussed.</p> <p>This demonstrates a major shortcoming of the report and identifies the need for further investigation and assessment on how Upgrades 4 and 5 will be addressed. In this regard the Roads and Maritime Services,</p>	
<p>b) The T&amp;TR indicates that the only necessary network upgrades required are the provision of 4 travelling lanes on Calderwood Road and the installation of traffic signals at the intersection of Calderwood Road and Tripoli Way in place of a roundabout. Again this is in stark contrast the Traffic Impact Assessment Report (Cardno 11 April 2017) submitted with Calderwood Stage 3C which identified that the intersection of Tongarra Road, Calderwood Road and Macquarie Street needed to be upgraded. The report draws the following conclusion.</p> <p><i>The Illawarra Highway / Calderwood Road / Macquarie Street will require optimisation of its existing phasing sequence and upgrades to the intersection configuration to accommodate the additional traffic generated by the CUDP Stage 3C development.</i></p>			
<p>c) The T&amp;TR also indicates that an upgrade of the Illawarra Highway, Yellow Rock and Escarpment Drive intersection is not required. Again this is in stark contrast to Traffic Report (prepared by Cardno 12 July 2018) in support of a proposal for the development of an additional 275 lots in Tullimbar which indicated.</p> <p><i>By 2026 and with all the Tullimbar development in place, the intersections of Illawarra Highway / Yellow Rock Road and Tongarra Road / Broughton Avenue will fail. SIDRA results indicate that both intersections will be overcapacity and oversaturated, operating at a level of service of F in both peak periods.</i></p>			
<p>d) Whilst not directly related to the T&amp;TR, Mod 4 does not propose alternative access arrangements in place of the existing Illawarra Highway and North Macquarie Road intersection. A recent assessment in conjunction with a development application for non-core land in the CDUP identified that the existing junction could not be upgraded to meet the necessary AUSTROAD alignment and sight distance design criteria. In the assessment of Mod 4 an alternative the Illawarra Highway and North Macquarie access point needs to be investigated and an alternative solution found.</p>			



e) Council is of the opinion that details of the required upgrade of the following intersections must be provided prior to any determination of the application  i) Tongarra Road, Calderwood Road and Macquarie Street intersection ii) The Illawarra Highway, Yellow Rock and Escarpment Drive intersection.		Transport for NSW and Council are currently involved in the Albion Park Movement and Place Study which is examining this matter. As such Council requests that the approval of MOD 4 be placed on hold until the Albion Park Movement and Place Study is completed to allow TMAP to be updated accordingly.	Refer to previous response
f) The illustrated additional collector road between the Broughton Avenue and Escarpment Drive roundabouts has not been mentioned in any document.			
g) There is also no mention of the required North Macquarie Road / Illawarra Highway intersection upgrade, which has been determined during the assessment of current development applications.			
Environment			

<p>4.1 General Comments:</p> <p>a) The Biodiversity Report prepared by Ecological states that 'Significant impacts on Illawarra and South Coast Lowland Forest and Woodland are unlikely'. Full surveys detailing the extent of EPBC Act listed matters are required to support this statement and to Council's knowledge they have not been conducted.</p> <p>It is proposed to remove over 11 hectares of potential Illawarra and South Coast Lowland Forest and Woodland and cause habitat disturbance to both The Australian Painted Snipe and Swift Parrot. Referral to the Commonwealth regarding EPBC is required as these species have been listed since the original concept plan. EPBC listing is retrospective and impacts on Matters of National Environmental Significance must be considered prior to any works commencing.</p>	<p>A detailed response to these items has been prepared by Ecological and is submitted at <b>Appendix K</b></p> <p>Additional information, including explanatory diagrams, is submitted in the updated Calderwood Valley Public Domain Report and Open Space Plan at <b>Appendix J</b></p>	<p>The proponent has not addressed the concern regarding the need to liaise with the Office of Environment and Heritage to provide an offset strategy and the significance of the listing as Critically Endangered Ecological Community under the Federal legislation as part of the Secretary's Environmental Assessment.</p> <p>It appears that the proponent has not involved the DPIE (formally OEH) in creating an offset strategy as required under the DGR's other than providing indicative offsetting credits.</p> <p>In the Environmental Assessment Report from Ethos Urban dated 9 August 2018, Mitigation measures recommended in respect to biodiversity are:</p> <ul style="list-style-type: none"> <li>New comment to be inserted which requires the preparation of a Construction and Environmental Management Plan to be submitted with each application to address issues of sediment run-off, dust, noise and vibration impacts.</li> <li>Future development applications are required to be accompanied by a Biodiversity Assessment Report carried out in accordance with the BC Act.</li> </ul> <p>The first measure is a standard Condition for a subdivision DA and the second is a requirement under the EP&amp;A Act. These measures are considered to be unsatisfactory..</p> <p>In regards to biodiversity and further assessment as provided in the Ecological statement responding to SCC, Ecological dismiss the requirement to further assess biodiversity issues by stating that no further clearing will be required and providing indicative credit value of offsetting requirements. There is no indication that any further field studies have been undertaken, relying on assessment at DA stage. This is considered inappropriate and short sited for a Major Project on a State Significant Site.</p> <p>The Secretary's Environmental Assessment Requirements dated 1 February 2018 provided-</p> <p>Point 7- Biodiversity:</p> <ul style="list-style-type: none"> <li>Provide an updated assessment of the biodiversity impacts associated with the proposal (particularly impacts on Endangered Ecological Communities located on site) and provide a description of the proposed actions to avoid, minimise potential impacts. For unavoidable impacts, an appropriate offset strategy shall be prepared (in consultation with OEH).</li> <li>Assess any additional impacts of the proposal on groundwater dependent ecosystems.</li> </ul> <p>The statement in the Ecological Report dated August 2018 in the Executive Summary states, "this report considered potential <u>additional</u> impacts to threatened ecological communities, flora fauna and migratory species listed under the Biodiversity Conservation Act and the Environmental Protection and Biodiversity Conservation Act either known or likely to occur in the study area. The failure to revisit and assess the project as a whole is considered to be a fundamental flaw in the assessment of EEC/CEEC and threatened/endangered species that has been disregarded in the response to submissions.</p>	<p>Lendlease has consulted with the former OEH (now EESG) to develop an offset strategy as required by the SEARs.</p> <p>The OEH submission stated the following: <i>'We note that the proposed modification is supported by a biodiversity assessment to meet the SEARs. The assessment outlines a comparison of vegetation clearing of the approved and proposed Concept Plan layouts, and the impact of the proposed modification appears minimal. The report also quantifies the likely impact of proposed future stages in terms of biodiversity credits required for retirement under the BC Act. We are therefore satisfied that the SEAR requiring an updated assessment of biodiversity impacts in the Concept Plan area have been addressed'.</i></p> <p>However as stated previously, offsets under the BC Act are able to be discharged in three ways:</p> <ul style="list-style-type: none"> <li>Establish a Biodiversity Stewardship Site and retire credits</li> <li>Seek, purchase and retire credits from an existing Biodiversity Stewardship Site owner</li> <li>Pay for credits into the Biodiversity Conservation Fund.</li> </ul> <p>All these arrangements are available to any proponent and under the BC Act, there is no requirement to establish a separate Biodiversity Offset Strategy.</p> <p>Surveys of listed matters have been carried out. The SEARs do not require consideration or assessment of EPBC Act listed matters as it is a separate jurisdiction under the Commonwealth. As such, it will be separately addressed if required.</p>
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b) An assessment of the impact of the proposal on DPI Fisheries mapped key fish habitat of Marshall Mount Creek, Macquarie Rivulet and Lake Illawarra is required in accordance with the Policy and guidelines for fish habitat - conservation and management (DPI, 2013) in the Ecological (2018) report.		The additional information the proponent has provided does not adequately address the issue. Council maintains its concerns as outlined in the initial response.	As previously stated, there are not expected to be any significant impacts on Key Fish Habitat. No development within the Key Fish Habitat areas are expected, and the implementation of measures to manage indirect impacts would be implemented. These include the management of water quality, restoration and improvement of riparian vegetation along waterways and removal of significant agricultural nutrient inputs. If any impacts on Key Fish Habitat were to occur, a permit under Section 200 / 201 of the <i>Fisheries Management Act 1994</i> would be required at the DA stage. However, impacts on these habitats are not expected and would be actively avoided to minimise any potential harm to the environment.
<p>d) Impacts on Riparian corridors and ESL by the increasing of flood mitigation has not been adequately assessed. Areas proposed for regrading- decreased elevation, adjacent to ESL require further assessment for impacts on ESL and biodiversity of Riparian River Oak Forest.</p> <p>The removal of Stream Reach 15 has not been addressed. The Proponent states that there is no modification to the Concept Plan Approval Riparian Corridor Network. This is incorrect. The removal of Stream Reach 15 must be included in the Riparian Corridor Network and an updated Riparian Consistency report is required.</p>	Removal of Stream 15 has been considered by Ecological. Refer <b>Appendix K</b>	It is noted that only a small section of Stream Reach 15 is proposed to be removed.	We assume that this is now acceptable to Council.
<p>e) Public Domain Report, New Open Space areas. Figure 4 Calderwood Open Space Design Analysis (MOD 4):</p> <p>CW3- has been moved into Citywide Bushland (from the 2011 Landscape Masterplan), this area is unsuitable for Open Space- Passive due to the steepness of the terrain</p> <p>CW3- extension- Part of Johnson's Spur is proposed to be changed to open space from ESL and E2, E3 to passive open space. This is conflicts with the objectives of ESL and the zoning. The altered management regime to accommodate passive open space requires environmental assessment. The SOC's require Vegetation Management Plans (VMP's) to regenerate these areas, the objectives of which would be inconsistent should the area be passive open space. Additionally, a number of areas have approved VMP's, which are currently being implemented. A change in land use would conflict with the objectives of the VMP's.</p>	<p>e) The relocation of Citywide Park has been endorsed by Shellharbour City Council and the new location has been included in the updated Landscape Masterplan as part of the SHCC VPA, and is reflected in the Public Domain Report Appendix J.</p> <p>CW3 was relocated in recognition that the original approved location of the park was inappropriate due to the sensitive nature of that part of the site, and the fact that it was remote from residential areas with poor accessibility. The Citywide Park 3 desired character and embellishment as defined in the approved Calderwood Valley Landscape Masterplan is focused on environmental values, rehabilitation and a passive recreation trail head that better suits the new location as agreed with Shellharbour City Council.</p>	The suitability and management of the CW3 area will need to be assessed in more detail before the nominated area is confirmed. Agreement of the revised area occurred as part of a better outcomes negotiation and arrangement as part of the Lendlease VPA. The revised location was agreed to subject to the suitability of the site to accommodate the desired outcomes of the Landscape Masterplan	Noted. No further response required.

<p>D4- Non-core Land. This District Park is located in a Riparian Corridor, Evidence as to how this land use aligns to riparian corridor objectives is required.</p> <p>CW2 is located in a water body (see Figure 6- Watercycle Management), which is not consistent with the requirements of passive open space.</p> <p>Link D4 to L11- this is a steep embankment leading to flood runners and unsuitable for passive open space.</p> <p>No areas of ESL should be utilised as public open space. Further assessment is required for any proposed creek/rivulet crossings.</p> <p>It is recommended that further consultation on suitable passive open space locations be undertaken with Council</p>	<p>D4 is not located on Non-Core land, it is located just North of the Village Centre.</p> <p>Linear park links are not incorporated into open space calculations.</p> <p>None of the proposed additional open space is located within the environmentally sensitive lands, the proposed parks have been sited where they will provide a high level of amenity to residents with good accessibility. In respect of existing approved open space, it is noted that there are two parks which are located within environmentally sensitive land. These are City wide Park 3 and Local Park 12. It is proposed to move Local Park 12 slightly north as part of MOD 4, to be located outside of the environmentally sensitive lands.</p>	<p>The reference to D4 in Councils submission should have read D5.</p> <p>Noted</p>	<p>As this park is located within a non-core landowner parcel it will be up to that landowner to demonstrate that a suitable ecological and riparian outcome can be achieved. If this is not achievable then the park will need to be located elsewhere within that landowners land to satisfy Council. This can be addressed at the detailed design and DA stage with negotiations between Council and the relevant landowner.</p>
<p>f) Water Cycle and Flood Management Strategy – further detail is required on the level of cut and fill that is required in order to make a full assessment of the impacts on both Groundwater Dependent Ecosystems and wider biodiversity.</p> <p>Water quality targets outlined in the Risk Based Framework for Water Quality issued by the Office of Environment and Heritage, as included in the Illawarra Shoalhaven Regional Plan must be addressed. Not all ESL has been included in Figure 3 of the Water Cycle and Flood Management Strategy prepared by J Wydham Prince. This figure states it is for Marshall Mount Creek, however it covers the whole of the Concept Plan area including Macquarie Rivulet so all ESL should be illustrated.</p>	<p>Lendlease has undertaken consultation with SHCC and provide a modified response to alleviate councils concerns in the Public Domain Report in Appendix J.</p> <p>JWP has prepared cut and fill details.</p>	<p>The additional information the proponent has provided does not adequately address the issue. Council maintains its concerns as outlined in the initial response.</p>	<p>Section 7.5 JWP's Water cycle Management Strategy provides a detailed discussion on how the MOD 4 caters for and delivers a water quality solution that is consistent with the Risk-Based framework. Note that JWP has prepared cut and fill plans.</p>
<p>g) Concept Plan:</p> <ul style="list-style-type: none"> <li>The proposal intends to remove the green corridor along North Macquarie Road between the Clover Hill development and Stage 3B south. No justification as to the removal is provided in documentation.</li> <li>The proposal increases the width of Calderwood Road from 2 to 4 lanes. No environmental assessment on the impact of this has been conducted.</li> <li>Sports fields &amp; Detention basin – Stage 1. Conflicting land uses are illustrated on various plans. Clarification is sought on the exact proposal in this location.</li> <li>Riparian Corridor SP1 south of Town Centre – School/Residential East. Concept Plan does not illustrate a riparian corridor to the north of proposed sports fields. It is not clear how sports fields can be accommodated in this area. The riparian corridor will be required to be regenerated in accordance with SOC requirements. The riparian corridor must be illustrated on all Concept Plans.</li> </ul>	<p>A detailed response to these items has been prepared by Ecological and is submitted at <b>Appendix K</b>.</p> <p>Calderwood will now remain at 2 lanes. No additional environmental assessment is required.</p> <p>Additional information, including explanatory diagrams, is submitted in the updated Calderwood Valley Public Domain Report and Open Space Plan at <b>Appendix J</b>.</p> <p>Sportsfields and Detention Basin: Lendlease has met with Council in respect of the proposed open space and has incorporated amendments to the proposed open space plan to address Council's concerns. The proposed additional sports fields in the south near stage 1A have also been removed in response to Council's concerns. The majority of the proposed open space and sporting facilities are consistent with the approved Concept Plan including the Sports Fields SP1.</p> <p>The revised open space plans are provided at <b>Appendix J</b>.</p>	<p>The Sports Fields SP2 initially proposed adjacent to Stage 1A have been relocated as requested, however the size of the relocated fields is considered too small to adequately cater for the active recreational needs of the community. This will result in undue pressure being place on existing fields</p>	<p>The application provides active and passive open space at ratios consistent with Council's open space policy. Sports fields are now located within both LGAs and distribute the active open space across the development.</p>



j) It is not clear how non-core land impacts have been considered in the amended proposal	Refer to Section 2.1.8 of the RtS Report by Ethos Urban	The incorporation of the layout of the proposed development of the non-core lands which are the subject of undetermined Development Applications is not appropriate. Current compliance with the existing concept approval of these applications is not a consideration for this modification.	Noted.
<b>Open Space Provision</b>			
<p>5.1 General Comments:</p> <p>a) The proposal modification generates the requirement to provide additional open space. There is a concern that the Proponent has not adequately demonstrated how an additional 14.2ha of both active and passive open space should be and could be incorporated into zones that are zoned for other uses such as environmental and rural zones. In its current form, the modification application appears to be proposing more open space than is needed and is not designated RE1 zoned land. This will place an additional burden on Shellharbour Council with the potential uptake of additional land identified for active and open space, particularly if it were to be located on E3 Environmental Zoned land.</p>	<p>None of the proposed additional open space is located within environmentally sensitive lands, the proposed parks have been sited where they will provide a high level of amenity to residents with good accessibility.</p> <p>Additional information, including explanatory diagrams, is submitted in the updated Calderwood Valley Public Domain Report and Open Space Plan at <b>Appendix J</b>. These diagrams will assist in delineating between approved/delivered open space and the proposed additional areas of open space to be provided as part of MOD 4. The proposed modification, with the reduced yield, requires the provision of an additional 10.61 ha of additional open space (split approximately 50/50 for active and passive). This will increase the overall provision requirement of open space from 33.2ha in the concept plan approval (condition C12) up to a total of 43.81ha.</p>	<p>Although the revised open space provides sufficient additional land to meet the numerical standards that apply, this has been achieved by adding small areas to existing identified parks. In this instance compliance with the numerical standards does not equate to better open space outcomes to the community.</p> <p>The proponent is now seeking to have certain dwelling forms excluded from the dwelling count for the purposes of this proposal and they have also been excluded from the open space calculations. The proponent should demonstrate how this additional demand from uncounted dwellings can be accommodated. Local Park L6 – this additional open space is tacked onto the existing historical cemetery. It needs to be demonstrated how this is an appropriate location and will serve additional demand for useable open space</p> <p>Local Park L14 The slope analysis in Appendix C indicated it is outside the required slope gradient of 1:10 or less. This needs to be addressed if this land is to be included in the open space count for the revised development</p> <p>It is noted that the water quality basin has been included in the Local Park L12 which is contrary to the current development consent and means that the level of provision is overstated.</p>	<p>We disagree with Council's comments. The open space delivered to date in the Calderwood Valley development has been to a high standard. Lendlease is committed to continuing this for all of the open space to be delivered, particularly within the Lendlease development areas.</p> <p>We note that the council supports the area of open to space to meet the requirements of the future residents, in terms of the numerical requirements.</p> <p>The term principal dwelling has now been removed.</p> <p>Local Park 6 is located near the Town Centre adjacent to the Marshall Mount cemetery. This is a reflective park that provides passive open space. There is a slight change to the location of the park that has occurred in consultation with members of the Methodist Church, and, the area of the park is proposed to increase too.</p> <p>The grade refers to housing adjacent parks, not to the design of parks. No requirement to limit the grades for parks.</p> <p>The water quality basin is not located in Local Park 12, but adjacent to Local Park 12.</p>
d) The Calderwood Site zoning layer in the SEPP should be updated to adequately identify the open space allocation, the Proponent should also demonstrate that the additional 14.2ha of suggested additional land contains an acceptable level of purpose for recreational users or standards of provision. In this regard, it is considered that the provision of open space could be in a less environmental significant zone such as Residential. The existing Landscape master plan should be reviewed and indicate suitable embellishment	We disagree. As the location of open space may change during the detailed subdivision design we believe that it is better to leave the controls as they are currently drafted such that a flexible outcome can be achieved at the DA stage over the life of the project. The Landscape Masterplan will be updated to reflect MOD4 proposed open space structure	The proponent has not satisfactorily addressed the ability of the open space to provide an acceptable level of purpose of recreational users	Council will be the consent authority for each of the parks within the development and will therefore have the ability to ensure that all of the open space is provided to a level that is acceptable for the identified purpose.
e) There is an additional 0.4173ha of additional passive open space identified to be provided in Local Park 11 and Local Park 8. These parks have already been delivered. The Proponent should be required to demonstrate how these parks can be increased in size when they already take up the land that was required for open space. The Proponent should also address what implications this may have in regards to the existing VPA between Council and Lendlease.	A plan demonstrating the location of delivered and approved open space, in relation to the proposed additional open space is included in the Open Space Plans at <b>Appendix J. Section 2.1.4</b> of the RTS provides further detail.	The plan referred to shows the location of the additional land but does not demonstrate how this additional land will be incorporated in to the design/layout of the existing park. This issue has not been adequately addressed	<p>As noted, Local Parks 8 and 11 are built and embellished, and have achieved practical completion. The parks are operational and as noted exceed the minimum areas of 0.2ha as required under the VPA.</p> <p>The detailed design of each park has never been a component of the concept plan. This detail will come with the relevant development applications for the construction of each future park.</p>



f) Proposed additional open space that is located within the non-core lands (Local Park 13, Local Park 7, District Park 2 and District Park 5). The proponent should be required to demonstrate how they can provide certainty with regards to the provision of the land on the non-core land site, particularly when the increase in lot yield is proposed on the Lendlease land.	The open space shown on the non-core lands is consistent with that proposed in the various development applications by the non-cores..	Although there is some open space located within the non-core lands in the Concept Approval, the proponent is seeking to extend this land to meet the additional demand they are created on land that is not in the non-core lands. The proponent will need to demonstrate that this additional land will be provided as it is outside of their control as they do not own the land nor do they have current development rights over that land.	The open space shown in each of the non-core lands is consistent with the development applications that have been lodged with Council. It is noted that the open space shown is still not sufficient in terms of sqm to provide sufficient active and passive open space for the number of dwellings proposed in each of those developments and that all of the non-core landowners will be relying on Lendlease to deliver a proportion of the open space that their respect development requires. This is addressed by way of the VPA that already exists. Further, the non-core landowners will need to demonstrate that any development they undertake on their land will be consistent with the modified concept plan.
5.2 Existing Sports Ground SP1 and proposed Sports Ground SP2 The application proposes additional active open space in the existing SP1 Sports Fields by encroaching into the land zoned E3 to the west. This poses the question about suitability of land for a district sporting field, as it would appear that the proposed SP2 is insufficient in area for a sports field in accordance with the requirements of the Open Space, Recreation and Community Needs study 2010 (the study) of 1.7ha per 1000 people. Further, Council taking on the future management of E3 land is not supported.	There is no change to the current sports fields noted as SP1. The SHCC VPA notes facilities to include that ornamental and water quality lakes, retention of vegetation where appropriate, landscaping and tree planting. Land noted as E3 zone to the west of the proposed sporting fields is not included in open space calculations.	The relocation of Sports Fields SP2 is noted however the usability of this land for active recreational purposes eg organised sports is questionable due to its size	Sports field S2 is 0.9039ha and is co-located with a 1ha District Park. The sports field could include a modified sports field, hard courts, a modified bmx track or the like. The detailed design will be developed in consultation with Wollongong City Council.
The study also requires that sports fields require appropriate design, solar orientation, wind protection, desire lines and safety/traffic implications, useability, and maintenance. Other considerations include parking, amenities, all-inclusive, gradient, flooding requirements. The Proponent must demonstrate the reasoning and benefits of including E3 zones land in a sports field site, as well as how the proposed sports fields in SP2 can meet the requirements ie, flooding. The current bulk earth works DA being assessed by Council indicated a detention basin in the location of the proposed additional sports fields, The Proponent should be required to demonstrate that these use are co compatible	The previously proposed additional sports fields near Stage 1A have now been removed. The VPA states that this park will contain sports fields, playground and other appropriate supporting infrastructure as well as ornamental and water quality lakes, retention of existing vegetation where appropriate, landscaping and tree planting where appropriate so as to respond to the different characteristics of the park.	Noted. Concerns remain about the useability of the relocated sports field SP2	As noted above, SP2 can accommodate a range of active uses. It is noted that Wollongong has accepted this additional open space within its LGA and has not objected to the size or its location.
<b>Assets and Maintenance</b>			
<b>Issue Raised</b>	<b>Comment/Design Response</b>	<b>SCC Response to Response</b>	
6.1 Necessary Additional Road Upgrades Required Based on the revised traffic modelling, the following additional road upgrades are considered necessary to mitigate the impacts of the CUDP Yield Review: <ul style="list-style-type: none"> <li>- Widen Calderwood Road from two lanes to four lanes between Tripoli Way and the eastern boundary of the CUDP. It is recommended that the Calderwood Road upgrade is completed on the opening of the town centre (retail) and completion of the Tripoli Way bypass, which is anticipated to occur around 2026- 2028.</li> <li>- Upgrade Illawarra Highway / Broughton Avenue from roundabout to signalised intersection.</li> <li>- Upgrade Calderwood Road / Tripoli Way from roundabout to signalised intersection.(Cardno, 2018)</li> </ul>	Only the intersection upgrades are required. With the reduction of additional dwellings (ie only a total of 6,000 principal dwellings) Calderwood Road is able to remain at a two lane two way road width. See <b>Appendix H</b> .	Council maintains its concerns as outlined in its initial response. Please refer to the detailed assessment and supporting information found in Attachment 2.	As the term principal dwelling has been removed and the total dwelling cap remains at 6,000 dwellings there is no need to increase Calderwood Road beyond a two-lane road.  The resultant traffic generation and trip distribution to Calderwood Road has been demonstrated to be within the road capacity for a two lane carriageway based on Austroads and TfNSW Guidelines.

Further to these upgrades, Council believe that the following are as a result of the yield increase, and disagree with some of the findings of the modification. Council would like to work with the Department as well as Lendlease to ensure that all requirements as a result of the modification are fully met, and that fairness is ensured to all parties including the residents of Shellharbour. Noted within the EA is that Lendlease will negotiate with Council in good faith, Council believes given the above discrepancies, these negotiations must be completed and agreed to prior to any approval of the modification.	Noted.	Council maintains its concerns as outlined in its initial response. A letter of offer to enter into a new VPA which also addresses the Non-Core Land issues has not been received by Council.	A revised letter of offer has now been prepared by Lendlease and has been submitted under separate cover.
a) Calderwood Road The need to upgrade to four lane is more than just widening of the road within the confines of the existing road reserve and will require realignment and land acquisitions. This is especially pertinent at the location of the bridge over the Macquarie Rivulet. As the bridge needs to be widened, to reinstate on the current angle would create an unsafe bend immediately South of the bridge. As a flow-on effect, the intersection with Tripoli Way may need to be relocated westward, and require signalisation of the Calderwood Road and Tripoli Way intersection earlier than both adopted and draft Council concepts designs. This is especially problematic as it will require further multiple land acquisitions and costly redesign of Tripoli Way. These changes are not recognised within the findings of the Traffic and Transport assessment undertaken, or the Environmental Assessment (EA) for the modification.	See previous comment, Calderwood Road is no longer required to be widened to a four lane road, and as such the bridge over the Macquarie Rivulet is not required to be widened. Refer to Cardno's response at <b>Appendix H</b> .	Council maintains its concerns as outlined in its initial response. Please refer to the detailed supporting information found in Attachment 2.	As the term principal dwelling has been removed and the total dwelling cap remains at 6,000 dwellings there is no need to increase Calderwood Road beyond a two-lane road.  The resultant traffic generation and trip distribution to Calderwood Road has been demonstrated to be within the road capacity for a two lane carriageway based on Austroads and TfNSW Guidelines.
b) Tripoli Way Tripoli Way will require four lanes for the full length by 2026-28 based on the Traffic and Transport Report. It is unclear whether, if this assumption was not made, could suitable performance of the local traffic network be achieved. This is different to the original TMAP with regards to timing, as well as previous Council concept designs. The statement "the design of Tripoli Way (Albion Park bypass) is consistent with Council's current preferred configuration" is incorrect. The original 2007 Albion Park Traffic Study assumed one lane in each direction, and since that time, Council has not endorsed any concept to the contrary. Council can provide a timeline of the Tripoli Way Design if required. The latest concept plans currently being developed in conjunction with Cardno, also only cater for four lanes East of Calderwood road, yet the four lane requirement were only identified due to updated modelling from Cardno, for both Calderwood Concept Approval and the SPIR model, in lieu of widening Tongarra Rd identified within the APTS. Prior to this, endorsed plans from Council were for two lanes only.	Refer to Detailed response to submissions – Traffic and Transport at <b>Appendix H</b> .	Council maintains its concerns as outlined in its initial response. Please refer to the detailed assessment and supporting information found in Attachment 2.	Tripoli Way between Illawarra Highway and Calderwood Road has been assessed as one lane in each direction. East of Calderwood Road, Tripoli way is assessed as being four lanes. This is consistent with the current Council Tripoli Way Extension project. Refer to Shellharbour Council's recently exhibited Tripoli Way Extension Project (Lets Chat), <a href="https://letschatshellharbour.com/tripoli-way-extension-project">https://letschatshellharbour.com/tripoli-way-extension-project</a>

Based on the most recent draft concept plans developed for Council by Cardno in 2017, Tripoli Way only required two lanes (one each way) for the section between the Illawarra Highway and Calderwood Road. Contained within the Traffic and Transport Report is the assumption of four lanes for this section. This has major implications for possible land acquisitions, land contributions, and the construction cost of Tripoli Way. Council is willing to share these models with the Department to confirm the discrepancy.	Refer to Detailed response to submissions – Traffic and Transport at Appendix H.	Council maintains its concerns as outlined in its initial response. Please refer to the detailed assessment and supporting information found in Attachment 2.	Tripoli Way between Illawarra Highway and Calderwood Road has been assessed as one lane in each direction. East of Calderwood Road, Tripoli way is assessed as being four lanes. This is consistent with the current Council Tripoli Way Extension project.
To construct four lanes on this section would materially alter the alignment and width of the proposed land to be contributed as part of the existing VPA. Currently a 50m corridor has been nominated, however this may be need to be widened in the order of 10-20m to accommodate the extra width. Furthermore, it requires compulsory land acquisitions of private land to Lot: 1 DP: 559819. It is unclear as to how this would be enabled and whether it would add further costs to Council to undertake.	Calderwood Road is no longer required to be widened to a four lane road. Refer to Detailed response to submissions – Traffic and Transport at AppendixH.	Council maintains its concerns as outlined in its initial response. Please refer to the detailed assessment and supporting information found in Attachment 2.	Tripoli Way between Illawarra Highway and Calderwood Road has been assessed as one lane in each direction. East of Calderwood Road, Tripoli way is assessed as being four lanes. This is consistent with the current Council Tripoli Way Extension project.
c) Update of the Voluntary Planning Agreement In general, Lendlease propose to update the VPA, and Council support this to achieve a fair and equitable outcome. Though in the Environmental Assessment it is undefined as to the exact changes that will happen, simply that “Lendlease will negotiate in good faith with Shellharbour Council to deliver these works to coincide with opening of retail component of the Calderwood Town Centre and Tripoli Way works” – Appendix J – Updated Schedule of Local Contributions.	A letter proposing entering into a new VPA in respect of additional contributions as a result of the modification application will be submitted to Council under separate cover.	Council maintains its concerns as outlined in its initial response. A letter of offer to enter into a new VPA which also addresses the Non-Core Land issues has not been received by Council.	A revised letter of offer has now been prepared by Lendlease and has been submitted under separate cover.
The current VPA determined a contribution amount for Tripoli Way. This was based on the findings of the Stage One court approval, and apportionment within the TMAP. Council believe contributions should be calculated and determined prior to the approval to specify the true contributions required as a result of the modification. This should include provisions for widening of Tripoli Way to four lanes, relocation of the Tripoli Way and Calderwood Road intersections, and costs associated with extra widening into private lands.	Noted. Lendlease has made provision for road upgrades in the modification application where appropriate. A letter proposing entering into a new VPA in respect of additional contributions as a result of the modification application will be submitted to Council under separate cover.	Council maintains its concerns as outlined in its initial response. Please refer to the detailed assessment and supporting information found in Attachment 2. In addition, a letter of offer to enter into a new VPA has not been received by Council.	A revised letter of offer has now been prepared by Lendlease and has been submitted under separate cover.
d) Contribution towards maintenance costs: Any proposed revised or new VPA must contain provisions for maintenance of the surrounding local road network as a result of the increase. An agreement outside of the VPA was previously reached with Lendlease regarding the maintenance of Calderwood Road from the development to the intersection with Tripoli Way, this has now ceased. Until such time as Calderwood Road is widened and Tripoli Way is constructed, Council believe that the developers of the land should contribute to the local road maintenance associated with the increase in traffic and particularly additional truck movements. This is also true for the extra open spaces, reserves, wetlands and stormwater infrastructure associated with the modification.	Lendlease has made provision for road upgrades in the modification application where appropriate. A letter proposing entering into a new VPA in respect of additional contributions as a result of the modification application will be submitted to Council under separate cover.	Council maintains its concerns as outlined in its initial response. Please refer to the detailed assessment and supporting information found in Attachment 2. In addition, a letter of offer to enter into a new VPA has not been received by Council.	A revised letter of offer has now been prepared by Lendlease and has been submitted under separate cover.



e) Greater Certainty Required on the Design of Calderwood Road and Tripoli Way as a result of the Modification Yield Increase Council believes that there needs to be certainty of the design of Calderwood Road and Tripoli Way to better assess the impacts of the modification. This would enable Council to progress further with the design of Tripoli Way and avoid costly redesign. Council has already spent significant amounts of public funds on the design of Tripoli Way, as well as previously engaged in land acquisitions that may now be inadequate and require further negotiations as a result of the modification. Furthermore, the delays to the project as a result of the modification and redesigns caused by the upgrades required are future costs not recognised within the EA.	Refer to Detailed response to submissions – Traffic and Transport at Appendix H.	Council maintains its concerns as outlined in its initial response. Please refer to the detailed assessment and supporting information found in Attachment 2. In addition, a letter of offer to enter into a new VPA has not been received by Council.	The upgrade of Calderwood Road has been identified when the Town Centre and Tripoli Way Extension is delivered, c 2027-2028. <i>Shellharbour City Council Local Infrastructure Contributions Plan 2019</i> notes the by-pass delivery year as 2027-2028.  The two-lane profile will limit the impact on adjoining properties and is consistent with the 2010 TMAP.
f) Proposed Mechanisms for Land Acquisitions Council would like to see greater certainty of the proposed mechanism for land acquisition for the required upgrades. It is well established within the EA and Traffic and Transport Report that land acquisitions are required:  <i>“It is recommended to upgrade Calderwood Road section between Tripoli Way and eastern boundary to a four-lane road, two in each direction. The profile and cross section of this road is yet to be determined. It may be desirable to reduce the overall carriageway width on the widened section of Calderwood Road to limit third party land acquisition.” (Cardno, 2018)</i>	Calderwood Road is no longer required to be widened to a four lane road.	Council maintains its concerns as outlined in its initial response. Please refer to the detailed assessment and supporting information found in Attachment 2. In addition, a letter of offer to enter into a new VPA has not been received by Council.	A revised letter of offer has been submitted to Council. Should acquisition of land be required to deliver the upgraded Calderwood Road, Council has the ability to compulsorily acquire such land in conformance with the <i>Land Acquisition Just Terms Compensation Act</i> .
Council questions the mechanisms for undertaking this. Should negotiations with adjoining landowners fail, Lendlease will be unable to undertake the required upgrades. Council have previously commence negotiations with adjoining landowners who have been reluctant to provide land. It is assumed that Council must undertake the land acquisitions as its role as the Local Roads Authority, therefore Council would requires recognition of all associated costs. These costs must be identified, and an agreement with Council in place prior to any approval, and must borne by the developers of the land. How this will be achieved must also be addressed prior to determination of the modification application.	Calderwood Road is no longer required to be widened to a four lane road. Refer to Detailed response to submissions – Traffic and Transport at <b>Appendix H</b> .	Council maintains its concerns as outlined in its initial response. Please refer to the detailed assessment and supporting information found in Attachment 2. In addition, a letter of offer to enter into a new VPA has not been received by Council.	The upgrade of Calderwood Road has been identified when the Town Centre and Tripoli Way Extension is delivered. The two-lane profile will limit the impact on adjoining properties and is consistent with the 2010 TMAP.  Should acquisition of land be required to deliver the upgraded Calderwood Road, Council has the ability to compulsorily acquire such land in conformance with the <i>Land Acquisition Just Terms Compensation Act</i> .
<b>Voluntary Planning Agreement</b>			
7.1 General comments The proposed modification involves a significant intensification of the development, which can only be supported if there is sufficient assurance that the extra dwellings are accompanied by appropriate local infrastructure. At this stage, Council does not have this assurance. Whilst the assessment report submitted by Lendlease includes a number of recommendations to amend the Planning Agreement with Council, these have not been discussed or presented to Council and therefore Council cannot advise that it is satisfied that the proposed additional infrastructure will be adequate.	A letter proposing entering into a new VPA in respect of additional contributions as a result of the modification application will be submitted to Council under separate cover	The proponent has not provided any additional information to address this issue. Council maintains its concerns as outlined in its initial response. A letter of offer to enter into a new VPA which also addresses the Non-Core Land issues has not been received by Council.	A revised letter has now been prepared by Lendlease and has been submitted under separate cover. It is requested that the matter of contributions be conditioned.

Therefore, Council is of the opinion that if the Department were of a mind to approve the proposed modification that any approval for the modification be withheld pending further discussions with Lendlease about the matters to be included in the VPA. In particular it is recommended that approval should not be granted until either a Deed of Variation to the VPA has been exhibited or a formal Letter of Offer has been submitted and agreed to by Council and has been exhibited to seek community feedback.	A letter proposing entering into a new VPA in respect of additional contributions as a result of the modification application will be submitted to Council under separate cover	Council maintains its concerns as outlined in its initial response. A letter of offer to enter into a new VPA which also addresses the Non-Core Land issues has not been received by Council.	A revised letter has now been prepared by Lendlease and has been submitted under separate cover. It is requested that the matter of contributions be conditioned.
Issue Raised	Comment/Design Response	SCC Response to Response	
7.2 The Need for a Formal letter of Offer As noted above the proposed modification involves a significant intensification of the development to which the executed VPA applies. A Deed of Variation (DoV) to the existing VPA will be needed. The EA states (pge 71) that a letter of offer will be provided and which would detail the amendments to be made to the VPA. It is however important that the letter and any amendments to the Draft VPA be fully resolved and agreed to before any approval is given to the modification. Whilst the EA includes an Appendix (Appendix J – Updated Schedule of local Contributions) which provides some information about the additional local infrastructure that will be provided, this needs to be filled out with a lot more detail before it can form the basis of a Letter of Offer for the DoV. This will require significant negotiations with Lendlease to resolve the infrastructure that is needed to support the development.	A letter proposing entering into a new VPA in respect of additional contributions as a result of the modification application will be submitted to Council under separate cover	Council maintains its concerns as outlined in its initial response. A letter of offer to enter into a new VPA which also addresses the Non-Core Land issues has not been received by Council.	A revised letter of offer has now been prepared and has been submitted under separate cover.
7.4 Open Space Additional open space will be required for the development. It is essential that the land provided be unencumbered and fit for purpose. A revision of the Landscape Masterplan, which currently forms part of the existing VPA between Council and Lendlease, must be included in any letter of offer to amend the VPA. The revised Landscape Masterplan must demonstrate how the proposed areas are fit for purpose.	A letter proposing entering into a new VPA in respect of additional contributions as a result of the modification application will be submitted to Council under separate cover.	Council maintains its concerns as outlined in its initial response. A letter of offer to enter into a new VPA which also addresses the Non-Core Land issues has not been received by Council.	A revised letter of offer has now been prepared and has been submitted under separate cover. The same landscaping principles will apply to the additional parks/open space.
Issue Raised	Comment/Design Response	SCC Response to Response	
7.5 Social Infrastructure Additional social infrastructure will be required for the development. The extent of what is required is set out in Appendix S. The works proposed include an expansion of the onsite multipurpose community facility and a further increase of the floor space for Albion Park Library. As both these will be Council assets it is important that the extent of what is being proposed and whether it can be contained within existing sites etc should be discussed with Council. To date, no such discussions have taken place.	A letter proposing entering into a new VPA in respect of additional contributions as a result of the modification application will be submitted to Council under separate cover.	Council maintains its concerns as outlined in its initial response. A letter of offer to enter into a new VPA which also addresses the Non-Core Land issues has not been received by Council.	Amendments to the VPAs are being discussed with Council and the non-core landowners as a separate process and do not affect this modification as all of the additional dwellings will be located on Lendlease's land and Lendlease will be entering into a separate agreement with Council in respect of the additional infrastructure requirements generated by the application.



<p><b>7.6 Road and Traffic Upgrades:</b> An updated traffic assessment of the increase dwelling yield prepared by Cardno finds that the following additional road upgrades will be required as an outcome of the increased yields from the development:</p> <ul style="list-style-type: none"> <li>a) Widening of Calderwood Rd from two lanes to four lanes between Tripoli way and the eastern boundary of the CUDP</li> <li>b) Upgrade the Illawarra highway/Broughton Ave from roundabout to a signalised intersection</li> <li>c) Upgrade Calderwood Rd/Tripoli Way from roundabout to a signalised intersection including upgrade of the bridge over Macquarie Rivulet</li> </ul>	<p>Calderwood Road is no longer required to be widened to a four lane road. In relation to other road upgrades which are required as a result of the proposed modification, Lendlease has made adequate provision for this in the modification application and a letter of offer to amend the current VPA or to enter into a new VPA will be submitted to Council under separate cover to address these items.</p>	<p>Council maintains its concerns as outlined in its initial response. Please refer to the detailed assessment and supporting information found in Attachment 2. In addition, a letter of offer to enter into a new VPA has not been received by Council.</p>	<p>A revised letter of offer has now been prepared and has been submitted under separate cover.</p>
<p>It is also understood that some of the road upgrades will occur on land located outside the existing road alignment and may require acquisition. This should be at the expense of Lendlease and the lands required for acquisition should be identified and included in the VPA.</p> <p>It is understood that Lendlease will construct the roadworks. However, the timing of all roadworks needs to be resolved as presently it is only vaguely specified. The roadworks need to be done before the nominated stage of the development has been completed.</p>	<p>Calderwood Road is no longer required to be widened to a four lane road. . A letter proposing entering into a new VPA in respect of additional contributions as a result of the modification application will be submitted to Council under separate cover</p>	<p>Council maintains its concerns as outlined in its initial response. Please refer to the detailed assessment and supporting information found in Attachment 2. In addition, a letter of offer to enter into a new VPA has not been received by Council.</p>	<p>A revised letter of offer has now been prepared and has been submitted under separate cover.</p>
<p><b>7.7 Drainage Water Quality and Flooding</b> Clarification is needed whether the water management strategy (quantity and quality) involves dedication to Council of any structures or the land on which they are located. If so they need to be identified and included in the VPA.</p> <p>If there are any such structures to be dedicated then as was mentioned in the previous section, they will impose a long-term maintenance liability on Council. The inclusion of a maintenance contribution in the VPA must be considered.</p>	<p>Water quality measures will continue to be addressed and managed at the detailed development application stage. There is no need to include these facilities in the VPA.</p>	<p>The additional information the proponent has provided does not adequately address the issue. Council maintains its concerns as outlined in the initial response.</p>	<p>Refer to JWP response. The proposed development has been designed to comply with Council's water quality treatment controls. The detailed design of this infrastructure will be the subject of detailed DAs to which Council will be the consent authority.</p>
<p><b>7.8 Non-Core Lands</b> Currently there is ambiguity about how the non-core landowners are able to contribute to the local infrastructure requirements. This is a major issue and must be resolved prior to any determination of the application to modify the Concept Plan Approval.</p>	<p>Agreed. Lendlease considers that all non- core landowners should enter into VPAs with the appropriate consent authorities to contribute to the delivery of local and state infrastructure.</p>	<p>Council maintains its concerns as outlined in its initial response. A letter of offer to enter into a new VPA which also addresses the Non-Core Land issues has not been received by Council.</p>	<p>Negotiations are currently occurring between the non-core landowners, Lendlease and council.</p>

## Wollongong City Council Issues

ISSUE RAISED	COMMENT/DESIGN RESPONSE 1	SCC RESPONSE to RESPONSE	COMMENT/DESIGN RESPONSE 2
The report is silent on the potential loss of flood storage for any storm event and also the potential cumulative impacts associated with the proposed land form. These considerations are required as part of undertaking floodplain risk management studies for catchment areas according to the NSW Floodplain Development Manual (2005).	The loss of flood storage is consistent with the approved 2010 Concept Approval assessment. The 2010 concept design approval demonstrated that CUDP does not result in an unacceptable flood impacts downstream of CUDP. The 2010 assessment included similar reduction in floodplain storage which forms part of this modification application. The comprehensive flood assessment completed as part of this modification application demonstrates that the loss of floodplain storage does not result in flood impact in either the 1% AEP and PMF event. J. Wyndham Prince Consulting Civil Infrastructure Engineers & Project Managers Document: 3154001_1_Addisons edits - 110073-07-Submissions Response Letter. JWP response.docx 7 of 24 Furthermore, the NSW Floodplain Development Manual (2005) discusses the	The current report indicates that the loss of flood storage for this modification is consistent with the 2010 concept approval and that it does not result in flood impact in either the 1% AEP and PMF. However, the latest report is silent on the potential cumulative impacts of the CUDP and other nearby developments on flooding as required by the NSW Floodplain Development Manual 2005. <b>This comment is not resolved.</b>	The previous 2010 Concept approval was granted while considering the potential cumulative impacts of the CUDP with other nearby developments. The loss of flood storage in this modification is consistent with the approved 2010 Concept Approval assessment. Therefore this modification does not look to amend or increase the approved loss of floodplain storage.
	definition of flood storage as “those parts of the floodplain that are important for the temporary storage of flood waters during a passage of a flood”. The manual also mentions that the loss of floodplain storage can also cause a significant redistribution of flood flows. The WCFM Strategy demonstrates that the proposed loss of floodplain storage does not result in a redistribution of flood flows, nor results in flood impacts outside of CUDP in excess of that which has already been approved under the court approved Concept Plan and the Stage 1 Project Approval (NSW Land and Environment, Matter No. 10492 of 2012). Thus, the assessments are compliant with the NSW Floodplain Development Manual (2005). The assessment has considered the impacts of loss of floodplain storage by modelling the change in landform in the model and modelling the hydrograph from the WBNM model (not a steady state flow). The resultant flood level changes are included in Appendix C and show there are no adverse impacts predicted.		
Figure 3 of the report indicate areas of proposed cut and fill across the site, however does not indicate the maximum depths of cut/fill. In this respect, it is unclear whether the proposal satisfies item 9 of the SEARS relating to potential visual impacts associated with the amount of cut/fill proposed.	A comprehensive landscape/restoration plan will form part of the future DA for WCC's consideration. A cut and fill plan has been provided as part of the revised WCFM which indicates locations and depths of the proposed cut and fill. Refer to Figure 8.10 for details. Any visual impacts of the proposed cut/fill will be addressed as part of future DA assessments.	The current report indicates that a visual impact relating to the cut/fill on site will be addressed as part of future DA assessments. This would be contrary to item 9 of the SEARS which requires the visual impacts of the proposed MOD against the concept approval to be addressed as part of the current MOD. <b>This comment is not resolved.</b>	A cut and fill plan was provided as part of the revised WCFM which indicates locations and depths of the proposed cut and fill. The cut and fill areas proposed are similar to those indicated in the previously approved concept plan.  The visual impact assessment required by the SEARS was from key vantage points around the development. This was undertaken as part of the original development application documentation and the SEARS were satisfied in this regard. The visual impact of cut and fill will be addressed at the detailed DA stage where Council is the consent authority and will be able to ensure that the visual impacts of cut and fill are satisfactory.
Figure 8 of the report indicates significant flood affectation in the 1% AEP over a road in Stage 5 north. It is unclear how future residents in this location will achieve 1% AEP flood free access during this storm event and compliance with item 41 of the statement of commitments.	As mentioned above, the surface information has been updated as part of the revised WCFM strategy report which has resolved any impacts surrounding Stage 5.	This item has not been addressed, however the area of concern should be Stage 7B and not Stage 5 north. <b>This comment is not resolved.</b>	There are no lots that are impacted by floodwater during the 1% AEP (Figure 8.04). Furthermore, the depth of the water within a small portion of Stage 7B during a PMF event is not hazardous (Figure 8.11) and will not result in a risk to life.

			<p>The short distance (less than 100m) would allow a potentially affected resident to move to flood free land without increased risk.</p> <p>The assessment to date does not include existing or upgrade culvert crossing information within Calderwood Road.</p> <p>As the development of the CUDP evolves, and Calderwood Road is progressively upgraded, appropriate culverts assessment will be undertaken to support the various development applications and ensure compliance with SHCC requirements. i.e. 500mm freeboard in the 1% AEP event to the upgraded road level.</p>
<p>Figures 8 and 13 of the report indicate significant increased flood affectation (&gt;0.4m) downslope of the CUDP for both the 1% AEP and PMF events, with no explanation on how these impacts will be managed. This is contrary to item 11 of the SEARS.</p>	<p>Flood affectation downstream of CUDP for both 1% and PMF events is consistent with the original concept approval that indicated that flood impacts downstream of the site are between 0.02 – 0.2 m. Flood affectation in PMF downstream of CUDP is illustrated in Figure 8.08 of the WCFM strategy and complies with the MOD 3 Terms of approval for the Stage 1 Project application: Part B of Condition B26.1, which states to “minimise off-site impacts in the PMF event such that the maximum increase does not exceed 0.3 m”. As this document sets the conditions of consent for the precinct, compliance with these terms is appropriate for the Mod 4 approval.</p>	<p>Figure 8.08 of the current report indicates that flood depth increases greater than 300mm occur at three locations outside of the site boundary, being contrary to condition B26.1 for MOD 3 terms of approval and also section 26 (Flood Planning) parts 1c and 3b of the SEPP. <b>This comment is not resolved.</b></p>	<p>Figure 8.11 shows that the flows are not of a hazardous nature and in the context of a PMF event is a manageable impact.</p> <p>These areas are also flooded in the 1% AEP event and such any development potential would be significantly limited and would require a broader floodplain management Strategy. This minor impacts in this extreme event are inconsequential across a floodplain like the Macquarie Rivulet.</p> <p>While this assessment has focused on mainstream flooding, these areas would also be impacted by local flood affected areas, particularly the area near stage 9.</p> <p>Therefore, the overarching intent of the current assessment demonstrates our commitment to satisfying condition B26.1 for MOD 3 (Stage 1 Project approval) even though there are a few isolated pockets of impact.</p>
<p>Figure 12 shows between 0.5-1.0m of flood affectation in the PMF to the town centre (east) and residential areas Stage 7A, town centre and stages 4, 8, 9. It is unclear how the flood risk to future development will be managed for this event.</p>	<p>While this is acknowledged that flood impacts are present in the PMF event within Stages 8 and 9, it is important to note that, no formal landform design north of Mount Marshall Creek has been completed. Given the depth of inundation in PMF event is only between 0.5 - 1.0 m, in Stages 8 &amp; 9 located in WCC LGA, conveyance of PMF flows will be managed by an appropriate road and drainage design as the development progresses and will reduce any “extreme event” impacts. Furthermore, adequate 0.5m freeboard will be provided to flood affected properties in the 1% AEP event through site filling. The maximum increase in flood levels for the PMF event are indicated in Figure 8.08 of the WCFM report. We have also prepared a detailed local PMF assessment that demonstrates the management of local PMF flows and this is included in Section 8 of the revised WCFM report. Further refinement has also been completed for surface levels for stages 8 &amp; 9 surrounding Marshall Mount Creek which demonstrates that PMF impacts will be reduced once a detail subdivision design is completed.</p>	<p>Figure 8.07 of the current report indicates areas of flood affectation on lots and roads between 0.5-1.0m and also 1.0- 2.0m deep in Stages 4, 7A and town centre east without realistic mitigation measures to alleviate this flood risk. The proposal to alleviate these depths with appropriate road and drainage design in future applications is considered unacceptable. <b>This comment is not resolved.</b></p>	<p>This flooding only occurs during a PMF event.</p> <p>As the flood planning level for these locations is the 1% AEP flood level plus 500mm consistent with condition 41 of the Statement of commitments and rising grade out of the floodplain will be provided, suitable flood risk management strategy for these areas are provided.</p> <p>The suggestion that these areas need to be flood free is inconsistent with the statement of commitment and the Section 117 direction issued by the then Department of Planning in January 2007 which stated that development control greater than the 1% AEP is only applicable in exceptional circumstances.</p> <p>Given the original concept plan approval and the statement of commitments did not detail a flood planning level above the 1% AEP, the flood impact in a PMF are acceptable with an appropriate raising grade consideration.</p>

Figure 13 shows significant increased flood impacts in the PMF (>0.4m) within the Wollongong LGA, school site, retirement site and town centre east when compared to the existing scenario. It is unclear how flood risk to future development in these areas will be managed for this event. Also it is unclear what the maximum increase in flood levels are within the affected areas.	(see above response)	The proposal to alleviate these depths with appropriate road and drainage design in future applications is considered unacceptable. <b>This comment is not resolved.</b>	See discussion above. Appropriate management consistent with the statement of commitment has been delivered
Figure 14 shows significant increased flood impacts in the PMF, however it is unclear what the maximum increase in flood levels are for the affected areas.	(see above response)	This item has not been addressed. <b>This comment is not resolved.</b>	The purpose of Figure 8.08, which is the equivalent figure to Figure 14 in the most recent iteration of the report, is to identify areas of flood increase greater than 300 mm a PMF event external to the site.  The extent of the increase within the site is inconsequential.
A map should be provided indicating the differences between the 1% AEP and PMF events for the CUDP to identify the potential flood affectation beyond the flood planning level of 1% AEP + 0.5m.	Figure 8.05 and Figure 8.08 provide the 1% AEP, and PMF flood differences maps are provided within the WCFM strategy report. As there is no requirement for lots to be above the PMF, provision of flood affectation maps above the flood planning level is not necessary.	The current report states that this item is not necessary. Council requires this information to be provided to enable a detailed assessment. <b>This comment is not resolved.</b>	The potential flood affectation beyond the 1% AEP plus 0.5 m freeboard is defined by the PMF assessment presented in figure 8.08 of the WCM report.  It is still unclear what WCC need to understand from this difference mapping given that flood related development controls can not be imposed above the flood planning level, which for CUDP is the 1% AEP event plus 0.5 m freeboard.
New Item	N/A	Section 8.2.4 of the current report states that "...there are no impacts greater than 300mm external to CUDP..." However figure 8.08 clearly indicates three areas in the northern portion of the site marked yellow which represents 'area now flood affected by more than 300mm in modelled event' according to the legend. Thus the statement in section 8.2.4 of the report is misleading.	The flood impact assessment has been undertaken to support the CUDP in the context of assessing mainstream flows from the Macquarie Rivulet and Marshall Mount Creek.  The area impacted is limited to isolated pockets of steep land. The sum of the area is comparatively negligible and represents 0.05% of the catchment area.  The purpose of the flood model is to demonstrate that the CUDP is supportable and will not cause far-reaching mainstream impacts. The model provided for use was intended to assess flooding throughout the catchment. Thus, catchment flows are applied to the model in the main watercourses consistent with the original Macquarie Rivulet modelling.
New Item	N/A	Section 8.3 of the current report states that "...during most extreme storm events safe access for emergency vehicles to all points of the CUDP is provided." However, according to figure 8.07, some streets in stage 4 and 7A, town centre east and the Fischl development site have depths in excess of 0.5m depth and up to 2m in the PMF, making it impassable for emergency vehicles. Thus the statement in section 8.3 of the report appears to be misleading.	The isolated pockets of the site that are flooded during the most extreme storm events are generally located on the fringes of the development. As previously mentioned, rise grade will be provided for these areas and will ensure safe management of the future residents in the area together with any need for emergency vehicle need to access these areas provide as per the Statement of Commitments.
New Item	N/A	Section 8.3.1 of the current report states that "...for the whole of the CUDP all houses will not be subject to high hazard flow." However figure 8.11 clearly indicates proposed lots in Stage 4 subject to hazard category 'H5' being 'unsafe for vehicles and people, buildings vulnerable to structural damage...' according to the legend. Thus the statement in section 8.3.1 of the report is misleading and is also contrary to section 26 (Flood Planning) Part 3 of the SEPP.	The affected area represents three lots which are partially affected. It is acknowledged that these lots are impacted and that a future DA stage will modify the lot to reduce the hazard on these three lots.



			With the exception of this isolated area, these high hazard flows are generally confined to roads and are an acceptable management solution.
<b>Transport and Accessibility</b>			
It is difficult to understand the inclusions of the updated Cardno 2036 Tracks models as there are no model network plots or land use zone tables attached to the report. This is especially so for the modelling done to assess the impacts of the proposed yield increase in the 'ultimate' West Dapto development scenario (section 4.3.4 of the report). This clarity should be provided.	<p>The CUDP land use assumptions adopted for the model assessment in the updated T&amp;TR is documented in Table 4-1. Further detail is provided below.</p> <p><b>Land use &amp; 2036 CUDP Proposed Modification</b></p> <p>Residential 6,000 dwellings  Town centre – retail (GFA) – 20,000 sqm 600 jobs  Town centre – other (GFA) – 20,000 sqm 400 jobs  Neighbourhood centre – retail (GFA) – 5,000 sqm 150 jobs  Neighbourhood centre – other (GFA) – 1,000 sqm 20 jobs  2 Public Primary Schools (2,000 students total) 200 jobs  1 Public High School (2,000 students) 200 jobs  Community centre 40 jobs  Town centre – additional retail (GFA) – 5,000 sqm 150 jobs  Aged care 60 jobs  Retirement living 80 jobs  Construction work (civil works and building) 180 jobs</p> <p>The non-CUDP land use is presented in Table 1-2 and is inherited from the APRB TRACKS model provided by RMS. The background and reasoning behind using these updated models are discussed in further detail in Section 1.4.3 and Section 4.1.2 of the updated T&amp;TR.</p>	<p>The explanation from Cardno is very high-level and does not show how the additional land use was distributed over Tracks land use zones according to the MOD4 proposal to allocate additional dwellings to the R1 zoned areas in the CUDP. In their response to Shellharbour Council item 4.1, Cardno state “<i>Most of the additional dwellings proposed in the latest ILP are located in close proximity (or within) the Town Centre, whereby local employment is provided</i>”. Additionally, in section 4.1.3 of the updated Cardno Traffic &amp; Transport Report, it states that “<i>Cardno increased the number of zones in the CUDP to better match the development stages as indicated on the latest yield analysis plans provided by Lendlease</i>”. Without access to model information (network files, land use zone files etc), it is not possible to confirm how/where the land use has been distributed, which has a direct bearing on outcomes for the WDURA. In terms of network, the APRB model (upon which the Cardno model is based), has very simplistic and outdated network arrangements for CUDP and significant broad-scale network changes would be required for the MOD4 analysis (in contrast to Cardno's statement in section 4.1.3 of the revised Traffic Report “<i>Minor changes to the CUDP internal road network were made to reflect infrastructure on the ground and latest road planning information</i>”). Again, provision of the models is important for transparency &amp; to allow Council to assess/confirm impacts as noted by Cardno within the Wollongong LGA, particularly within Stage 5 of the WDURA. In terms of their assessment of impacts at ultimate WDURA development levels (section 4.3.4 of the revised Cardno Traffic Report), Council is seriously concerned that the lack of model information provided does not allow any review of modelling or assessment of the impacts of the additional proposed CUDP yield in the Wollongong LGA, which would appear to be grossly understated (see comments under 3<sup>rd</sup> Transport issue below).</p>	Land use is distributed as per the CUDP staging plan prepared by Lendlease, noting that the internal road network is plotted in the V/C ratio outputs which demonstrates the level of detail provided in the CUDP land.
It is noted that Cardno recommends changing the 2010 TMAP arrangements for the road connection from Calderwood Urban Development Project (CUDP) to the Wollongong Council area (Marshall Mount). Whilst it is acknowledged that the recommended T-intersections would provide priority for the Escarpment Drive/Marshall Mount Road traffic, it appears the two proposed intersections are closely spaced and there may be operational issues under the ultimate development scenario. The Cardno/WCC agreed ultimate development Tracks modelling that was used to inform VPA negotiations shows a daily volume of 27,500vpd on Marshall Mount Rd/Escarpment Dr at this location. At this volume level it is likely there would be interactions between the two intersections (queuing etc.) and consideration should be given to performance of the recommended arrangements under these demands to ensure satisfactory long-term operations.	Cardno assessed two (2) options for the proposed Escarpment Drive / Marshall Mount Road intersections using the operational microsimulation traffic model. The intersection performance of the preferred design (Option B – separate T-intersections) indicate both intersections would operate satisfactorily (and there would be no operational issues) with a LOS B during the AM and PM peak hour in the 2036 CUDP Proposed Modification scenario. Furthermore, the average queue length results (<5 vehicles) indicate queuing from the approaches of either intersection are not at risk of impacting each other. Escarpment Drive and Marshall Mount Road (east) will carry the highest volume and thus should take priority over Marshall Mount Road (west). This assessment is detailed in Section 4.2.3.2.2 of the updated T&TR.	<p>The fact remains that the intersection performance and requirements have not been determined under full development scenario (ie full Calderwood Valley yield plus full WDURA), only at the full CUDP development level (2036). Whilst the existing West Dapto Section 94 Development Contributions Plan (2017) includes signalisation of Nth Marshall Mt Rd/Marshall Mt Rd, the intersection of Escarpment Dr/Marshall Mt Rd will need future upgrading (eg to signals or roundabout) under these full urban development demands. As per previous feedback from Wollongong City Council, the operation of the two closely spaced intersections should be analysed under the full development case, to determine if there are any operational impacts between the two intersections, for example, from queuing. This will avoid any costly complications later on, as noted by Cardno in the SEARs Traffic &amp; Transport Report, section 4.4.2 when referring to Calderwood Rd: “<i>Consideration should be given to the ultimate road infrastructure requirements in this area to avoid expensive reconstruction works</i>”. Additionally, it is considered that as the CUDP urban development is creating the need for this road (Escarpment Dr), then the cost of future upgrading of the Escarpment Dr/Marshall Mt Rd intersection should not be a cost that Wollongong City Council should have to bear.</p>	Refer to letter to RMS that addressed full development at <b>Attachment E</b> .



<p>Section 4.3.4 states 6000 dwellings were modelled for CUDP as part of the VPA work. Assumptions modelled by Council for the Lend Lease development area were 4,800 dwellings, and 7,700 for the whole Calderwood Valley. Council recommends the Department seek clarification of what was modelled for Cardno's analysis in section 4.3.4. No details of model inclusions (land use zone tables etc.) are provided.</p>	<p>The Calderwood Voluntary Planning Agreement (VPA) with Wollongong City Council outlines contribution amounts for road upgrades in the local area. For the purposes of the modelling done as part of the VPA discussions, the CUDP yield was assumed to be 6,000 dwellings. The Calderwood Voluntary Planning Agreement (VPA) executed with Wollongong City Council and Lendlease Communities on 13 December 2017 refers to contributions for up to 6,000 allotments (see Schedule 4 of the VPA). In the previous version of the traffic and transport report, some commentary and analysis was included in Section 4.3.4 to compare the traffic impacts between the scenario modelled at the time (6,500 dwellings) and the scenario adopted in the VPA work (6,000 dwellings). The yield has since been revised to 6,000 dwellings (consistent with the scenario modelled for the VPA) and therefore, the comparison is no longer required.</p>	<p>The statement by Cardno that the modelling done as part of the VPA incorporated a CUDP yield of 6,000 dwellings is incorrect. The modelling for the VPA was jointly carried out and agreed between Cardno (on behalf of Lend Lease) and Wollongong City Council. The model included 4,800 dwellings for the CUDP area and a further 2,900 dwellings in the Calderwood Valley (outside the CUDP area), totalling 7,700 dwellings for the entire Calderwood Valley (as per the Illawarra-Shoalhaven Urban Development Program Update 2016). Cardno state that there is no need to model the impacts of the additional MOD4 yield (refer below item response to WCC) at ultimate development, given that Lend Lease has revised the yield review to 6,000 dwellings. This is also incorrect given that the VPA modelling did not include a 6,000 dwelling yield for the CUDP. Modelling should be completed that determines the impacts of an additional 1,200 dwellings in the CUDP under the full development scenario (ie 4,800 previous + 1,200 new = 6,000 dwellings). This does NOT constitute assuming that the additional 1,200 dwelling yield in CUDP is part of the 2,900 dwellings elsewhere in Calderwood Valley in the Tracks model. The model would need to be run with the 7,700 dwellings for the Calderwood Valley (as identified in the Illawarra- Shoalhaven Urban Development Program Update 2016) <u>PLUS</u> an additional 1,200 dwellings distributed appropriately to the CUDP model land use zones as per the MOD4 proposal. The model should include any updates to the CUDP internal road network and zoning that were carried out for the 2036 model analysis (eg Cardno increased the number of land use zones in the CUDP to better match the development stages according to the latest yield analysis by Lend Lease). The results and any impacts on the West Dapto Stage 5 road network should be documented and addressed. This would allow Council to better understand impacts on the road network of Stage 5, WDURA and assist Council to determine if additional infrastructure funding arrangements would be required (such as review of the planning agreement between WCC and Lend Lease).</p>	<p>As previously noted, the Calderwood Voluntary Planning Agreement (VPA) with Wollongong City Council outlines contribution amounts for road upgrades in the local area. The VPA executed with Wollongong City Council and Lendlease Communities on 13 December 2017 refers to contributions for up to 6,000 allotments (see Schedule4 of the VPA).</p>
<p>There is minimal explanation provided in Section 4.3.4 regarding modelling done to determine impacts at ultimate development. The peak period volume differences shown in Table 4-8 do not show the percentage increase in Calderwood traffic on Yallah Marshall Mount roads, only numerical increases. There is no LOS analysis documented for this assessment – the “relatively minor” increase in volumes may push LOS into an unacceptable category, requiring infrastructure upgrades to address. When considered as percentage, it is found that there are notable increases, for example, Marshall Mount Road (west) of +8%. Further information should be provided regarding the impact of this change on road infrastructure requirements.</p>	<p>See above - This is no longer applicable given Lendlease has revised the yield review to 6,000 dwellings.</p>	<p>See comments under 3<sup>rd</sup> Transport issue above. The revised modelling should clearly identify the changes in traffic demand on WDURA Stage 5 roads, with a Level of Service (LOS) analysis to determine if and where any infrastructure upgrades are required to address LOS issues.</p>	<p>Assessment of road links beyond the CUDP land were provided in Appendix D of the T&amp;TR and identifies there is no additional upgrade required to key roads</p>

<p>The 2010 TMAP included a 10% shift away from private car. It is unclear if the updated 2036 modelling undertaken by Cardno for MOD4 retains this mode shift as the report does not give any details. The applicant should also clarify what mode shift was included for West Dapto development at 2036. If it is 15%, then it is likely underestimating traffic generation, as the 15% mode shift target is long term and based on the final development scenario for West Dapto (circa 2060).</p>	<p>Cardno's approach to the model assessment includes adopting the APRB TRACKS model. Trip generation rates including mode shift, are inherent to the model. Any mode shift % incorporated in the trip generation rate is therefore consistent with previous and other modelling assessments that are based on the outputs of the APRB model and its parent – WOLSH TRACKS model. These include West Dapto, Tallawarra, CUDP (2010), Tullimbar, and has informed infrastructure such as Albion Park Rail Bypass and even S94 contributions plans. It is important to note that mode shares for different transport modes are not coded into the model. Based on land use and transport infrastructure assumptions, the model helps forecast transport demands at a strategic level.</p>	<p>Whilst Cardno states that they have used the APRB model with inherent trip generation rates and mode shift inclusions, it is noted that the model is not strictly the APRB model, as the land use and network were significantly reviewed/changed as part of the preparation of a 2036 (rather than 2041) time horizon (refer section 4.1.3 of the updated Cardno Traffic &amp; Transport Report). As part of this work, it is Council's view that the model mode shift inclusions should have been reviewed in line with the CUDP TMAP (Cardno, 2010) that supported the Concept Plan approval, given their direct influence on traffic demand on the CUDP and surrounding road network, as well as resulting infrastructure requirements.</p> <p>The 2041 APRB model includes a 15% mode shift for West Dapto &amp; Calderwood Urban Release areas and was used for strategic transport purposes. Given a mode shift target of 10% for the CUDP is included in the TMAP and Revised Statement of Commitments (Item 23), it is considered that the 2036 modelling for the MOD4 application should include this mode shift, rather than adopting the 15% mode shift simply because it was inherent in the 2041 APRB model. This is particularly important for internal CUDP trips and determination of road infrastructure requirements. For example, the updated Traffic Report states that as the yield has been revised down from 6,500 to 6,000 dwellings, the previous need to widen Calderwood Rd from 2 to 4 lanes is no longer required. However, under the approved 10% mode-shift scenario the resulting traffic demand on Calderwood Rd may actually require the 4 lane configuration. The 10% mode shift at 2036 should be modelled and used to inform road infrastructure requirements.</p>	<p>It is acknowledged that the 2010 TMAP has the 10% mode shift target built within the 2031 Tracks model, however at the time there was debate and push for higher mode shift to be considered as evidence by the minutes within the TMAP.</p> <p>The WOLSH / APRB modelling is considered more up to date and has been widely used for recent planning of Calderwood Valley, Tallawarra and Tullimbar in order to be consistent with the major road infrastructure currently being delivered.</p> <p>Given much of the density increase is located in or near to the proposed Town Centre, it is not unreasonable that the active and public transport links, in conjunction with the non-car based strategies contained within the TMAP would increase the transport mode shift. In any case, Cardno has not modified the transport mode share built within Council's own WOLSH model.</p>
<p>The ultimate (ie full West Dapto development) scenario context should be considered by the applicant for internal road planning, especially for the roads in the north of the CUDP. The June 2018 rezoning to allow urban development at Yallah-Marshall Mount (Stage 5 of West Dapto Urban Release Area (URA)) is expected to result in circa 4,000 new dwellings, whereas the Cardno 2036 analysis (on which their network performance analysis is based) only considers circa 2,000 dwellings in Stage 5. As an example, Wollongong City Council Tracks modelling shows that the full West Dapto development scenario results in a 29% increase in daily traffic on Escarpment Drive south of Marshall Mount Road, when compared to the 2036 scenario. This would have implications for road type/cross section and intersection requirements and should be considered. The Cardno report recommends priority "T" intersections for Marshall Mount Road/Escarpment Drive and North Marshall Mount Road/Escarpment Drive – this may be acceptable under 2036 demands but the ultimate demands would require intersection upgrades, (signals or roundabouts). The consideration of ultimate Urban Release Area development and its implications for the transport network should be considered. The importance of this is highlighted by Cardno in the SEARs Traffic &amp; Transport Report in section 4.4.2 when referring to Calderwood Road: "<i>Consideration should be given to the ultimate road infrastructure requirements in this area to avoid expensive reconstruction works</i>".</p>		<p>(See WCC responses above for 2<sup>nd</sup> and 3<sup>rd</sup> issues)</p>	<p>See Cardno response above.</p>
<b>Community Facilities &amp; Public Domain</b>			

Section 4.6.1, specifically proposes modification to Condition C12 – Local Infrastructure Contributions but does not provide clarity of proposed changes in the Wollongong LGA. Similarly Section 6.8 Community Facilities and Open Space does not provide clarity on the implications of the increased population on the Wollongong LGA.	As the additional population will be primarily concentrated in Shellharbour LGA, it is appropriate that any changes to community facilities will be primarily focused around the Town Centre which is in Shellharbour LGA. In respect of open space, additional open space is proposed in both the WCC and SCC areas. Lendlease commits to work with WCC at the appropriate time when it comes to designing the open space areas that are located in the Wollongong LGA and are to be dedicated to WCC.	It is noted that 'The Open Space provision is based on applying the 2.83 ha per 1000 people standard'. With the proposed 0.9039 ha new active sport field it is considered that the open space within Wollongong LGA satisfies open space requirements. Clarity of the proposed modification to Condition C12 in relation to the changes within Wollongong LGA is still required. The proposed reduction of the minimum size for a local park (as shown in MOD4 PPR Appendix J <i>Revised Public Domain Report and Open Space Plan</i> - Figure 5.0 on page 8) from 0.3ha to 0.2ha is not supported. The NSW DPE <i>Recreation and Open Space Planning Guidelines for Local Government</i> provide that a local park should be between 0.5ha and 5ha. This standard is reiterated in WCC's <i>West Dapto Vision 2018</i> which also provides that a local park should be between 0.5ha and 2ha. The original Concept Plan application identified that local parks should be a minimum of 0.3ha. The reduction of minimum size standards for local parks outside of existing standards is therefore not supported.	SHCC is generally unwilling to accept local parks greater than 0.2ha, consistent with the executed VPA. However, a number of local parks have been delivered in Shellharbour that are greater than 0.2ha.  It is noted that all local parks in the Wollongong LGA achieve a minimum 0.3ha, refer to Figure 4 Open Space Analysis Plan MOD 4 in the Revised Public Domain Report.
The EA should clarify what the impact of the proposed increase and dwellings and population is expected in the Wollongong LGA component of the Concept Plan and the resulting local infrastructure demand implications. If it is identified that additional active open space is required to service the Wollongong population the EA should demonstrate the useability of the area identified for those active open space outcomes.	As shown on the proposed open space plan at Appendix J, a proportion of the additional open space provided as part of this modification is provided within the Wollongong LGA.	See comments above. The useability of the open space within Wollongong LGA has not been identified.	Local parks in Wollongong will remain at a minimum of 0.3ha. However, in Shellharbour local parks will remain at 0.2ha consistent with the Shellharbour/Lendlease VPA.
<b>Biodiversity</b>			
The Ecological [sic] (2018) desktop assessment of threatened ecological communities has failed to identify MU13 Moist Box-Red Gum Foothills Forest by NPWS (2002) as part of the EPBC Act listed critically endangered ecological community Illawarra and South Coast Lowland Forest and Woodland as described in Section 2.7 of the Environment Protection Biodiversity Conservation (EPBC) Act Approved Conservation Advice (incorporating listing advice) for the Illawarra and South Coast Lowland Forest and Woodland Ecological Community (TSSC 2016).	The Federal Conservation Advice does include MU13, but only part of it. The conservation advice expressly excludes where rainforest species are dominant. Accordingly, areas on site where rainforest species were dominant were excluded from the mapping exercise of EPBC Act listed threatened ecological communities. Where MU13 has been mapped as per the original Concept Plan, there are no impacts on that vegetation type.	No plot based assessment according to Section 2.6 of the Approved Conservation Advice (TSSC 2016) has been carried out. Similarly, no plot based assessment was carried out for the original Concept Plan and where vegetation community and condition mapping was validated only by random meander (Eco Logical Australia, 2010). Further, it's evident from the representative image of MU13 in the CUDP, MU13 has the form of an open woodland dominated by Eucalyptus sp and Acacia sp in the canopy with Lantana in the understory and a grassy groundcover. The 0.06 ha of MU13 identified for removal in Stage 3B North in Table 7 of Eco Logical Australia (2018), is noted.	Full floristic plots can be used to determine if an area of vegetation meets certain condition thresholds. Given that MU13 is part of the recently listed the Illawarra-Shoalhaven Subtropical Rainforest of the Sydney Basin Bioregion .  Where the understory is grassy and the characteristics of the entire patch are consistent with Illawarra and South Coast Lowland Forest and Woodland, that community will be mapped. where the understorey and other elements are consistent with a more mesic community, Illawarra-Shoalhaven Subtropical Rainforest of the Sydney Basin Bioregion will be mapped, so long as all other condition thresholds are met.
Based on the vegetation condition assessment (Section 3.1.3), Fig 5 of Ecological (2018) where all areas of MU13 adjoin or are close to MU23 or MU24, and the absence of detailed assessment including field surveys according to Section 2.6 of the Approved Conservation Advice (TSSC 2016), a precautionary approach requires the inclusion of all MU13 in the study area as EPBC Act Illawarra and South Coast Lowland Forest and Woodland in addition to all MU23 and MU24	Data collected during the Concept Plan field assessments indicated where there was a dominance of rainforest and mesic species contained in the mapping area. These areas therefore do not conform to the EPBC Act threatened matter.	No plot based assessment according to Section 2.6 of the Approved Conservation Advice (TSSC 2016) has been carried out. Similarly, no plot based assessment was carried out for the original Concept Plan and where vegetation community and condition mapping was validated only by random meander (Eco Logical Australia, 2010). Further, it's evident from the representative image of MU13 in the CUDP, MU13 has the form of an open woodland dominated by Eucalyptus sp and Acacia sp in the canopy with Lantana in the understory and a grassy groundcover.	See above.

<p>The suggestion by Ecological (2018) that 'Significant impacts on Illawarra and South Coast Lowland Forest and Woodland are unlikely' are based on general discussion points rather than detailed impact assessment according to EPBC Act MNES Significant Impact Guidelines (DotE 2013) and Section 2.6.5 of the Approved Conservation Advice for the critically endangered ecological community (TSSC 2016). The absence of full surveys and detailed impact assessment, according to the Approved Conservation Advice (TSSC 2016) and legislated process is a failure of the Ecological (2018) report.</p>	<p>The SEARs do not require consideration or assessment of EPBC Act listed matters as it is a separate jurisdiction under the Commonwealth. As such, it will be separately addressed in accordance with the EPBC Act.</p> <p>The area where the proposed yield increase would occur had already been approved for removal under the Concept Plan and subsequent modifications. That is, despite the increase in yield the areas affected had already been approved for clearing. The yield increase would result in smaller lot sizes, more vehicles, a greater number of residents and potentially greater numbers of domestic animals. There would not be an increase in the area of native vegetation or potential threatened species habitat to be removed because of the yield increase.</p> <p>Assessment of indirect impacts included examining the impact of increases in traffic, numbers of people, potential for increases in rubbish and numbers of domestic animals.</p>	<p>According to the SEAR's 'Key Issues' 'Item 7. Biodiversity' the applicant is to -</p> <p><i>Provide an updated assessment the biodiversity impacts associated with the proposal (particularly impacts on Endangered Ecological Communities located on the site) and provide a description of the proposed actions to avoid or minimise potential impacts.</i></p> <p>The reference to 'Endangered Ecological Communities located on the site' neither distinguished between EEC's (or TEC's) listed under the BC Act or EPBC Act. It's unclear how the SEAR's could be misinterpreted in view of:</p> <ul style="list-style-type: none"> <li>• It's conventional and implicit, rather than exceptional, that major projects, SSD, SSI, as well as Part 4 developments and Part 5 activities, will fully assess the potential impacts to threatened biodiversity where its known and there is a potential for impacts.</li> <li>• The Biodiversity Assessment report - Modification to Calderwood Part 3A Concept Plan (Eco Logical Australia, 2018) discusses at Section 4.2 multiple previous impact assessments for EPBC Act MNES in the 2010 flora and fauna assessments and acknowledges the presence of Illawarra and South Coast Lowland Forest and Woodland EPBC Act CEEC and identifies up to 11ha of the CEEC will be directly impacted by forthcoming stages.</li> <li>• On review of several MP, SSD and SSI projects for the locality, conventionally all include full assessment of impacts to all known and observed EPBC Act MNES.</li> </ul>	<p>Lendlease is aware of the requirements of the EPBC Act and is addressing this issue as a separate matter given the separate jurisdiction of the EPBC Act.</p>
		<p>According to the SEAR's 'Consultation' requirements the applicant is 'required to consult with the relevant local, State or Commonwealth Government authorities,...'. The Department of Environment and Energy is the relevant Commonwealth Government authority as it clearly has jurisdiction through the EPBC Act over the MNES in the project area and on the subject site including for those entities that have not been previously assessed.</p> <p>The detailed impact assessment according to EPBC Act MNES Significant Impact Guidelines (DotE 2013) and Section 2.6.5 of the Approved Conservation Advice for the critically endangered ecological community (TSSC 2016) remains outstanding. The absence of full surveys and detailed impact assessment, according to the Approved Conservation Advice (TSSC 2016) and legislated process is a continuing failure of the Ecological Australia (2018) report. The failing has not been satisfactorily justified by Ecological Australia and the supporting studies overlook the implicit intent of the SEAR's and jurisdiction of the Commonwealth Government embedded in the SEAR's.</p> <p>Further, on review of the accompanying documents:</p> <ul style="list-style-type: none"> <li>• There is no updated ecological assessment.</li> </ul> <p>There is no discussion or commitment in the PPR and revised SoC's that the EPBC Act CEEC will be 'separately addressed in accordance with the EPBC Act'.</p>	<p>Lendlease is aware of the requirements of the EPBC Act and is addressing this issue as a separate matter given the separate jurisdiction of the EPBC Act.</p>



<p>The Ecological (2018) report has misinterpreted the definition of an Action under the EPBC Act [see EPBC Act Policy Statement Definition of 'action' DSEWPaC (2013)]. In addition, Ecological (2018) have overlooked the requirement to assess the likely impacts to EPBC Act listed threatened entities prior to an EPBC Act Action commencing (including series of activities in a project) regardless of, and subsequent to, the previous 2010 EPBC Act Referral for the 'Calderwood Urban Development Project' (CUDP). The statement in Section 4.2 that 'The activity to be carried out pursuant to the proposed modification is generally consistent with the action referred to the Commonwealth on 2 March 2010 (EPBC 2010/5381) in terms of area and impacts on the listed matters.' is false as the Action will impact on an additional MNES that have not been previously assessed and are identified in the project site. The Actions associated with the existing approved DA's [sic] where no clearing of the CEEC has yet commenced and current proposed modification is considered a 'new or increased impact' as defined by the Department of Environment and Energy (2017) in Guidance on 'new or increased impact' relating to changes to approved management plans under EPBC Act environmental approvals.</p>	<p>The SEARs do not require consideration or assessment of EPBC Act listed matters as it is a separate jurisdiction under the Commonwealth. As such, it will be separately addressed in accordance with the EPBC Act. See also s158A of the EPBC Act; which provides that the determination that an action is Not Controlled Action can be relied upon, despite subsequent new listings and uplistings. The guideline mentioned by Council refers to plans of management, not planning approvals plans or reports. .</p>	<p>According to the SEAR's 'Key Issues' 'Item 7. Biodiversity' the applicant is to - <i>Provide an updated assessment the biodiversity impacts associated with the proposal (particularly impacts on Endangered Ecological Communities located on the site) and provide a description of the proposed actions to avoid or minimise potential impacts.</i> The reference to 'Endangered Ecological Communities located on the site' neither distinguished between EEC's (or TEC's) listed under the BC Act or EPBC Act. It's unclear how the SEAR's could be misinterpreted in view of:</p> <ul style="list-style-type: none"> <li>• It's conventional and implicit, rather than exceptional, that major projects, SSD, SSI, as well as Part 4 developments and Part 5 activities, will fully assess the potential impacts to threatened biodiversity where its known and there is a potential for impacts.</li> <li>• The Biodiversity Assessment report - Modification to Calderwood Part 3A Concept Plan (Eco Logical Australia, 2018) discusses at Section 4.2 multiple previous impact assessments for EPBC Act MNES in the 2010 flora and fauna assessments and acknowledges the presence of Illawarra and South Coast Lowland Forest and Woodland EPBC Act CEEC and identifies up to 11ha of the CEEC will be directly impacted by forthcoming stages</li> <li>• On review of several MP, SSD and SSI projects for the locality, conventionally all include full assessment of impacts to all known and observed EPBC Act MNES.</li> </ul> <p>According to the SEAR's 'Consultation' requirements the applicant is 'required to consult with the relevant local, State or <b>Commonwealth Government authorities</b>,...'. The Department of Environment and Energy for EPBC Act MNES is a relevant Commonwealth Government authority as it clearly has jurisdiction through the EPBC Act over the MNES in the project area and on the subject site. The detailed impact assessment according to EPBC Act MNES Significant Impact Guidelines (DotE 2013) and Section 2.6.5 of the Approved Conservation Advice for the critically endangered ecological community (TSSC 2016) remains outstanding. The absence of full surveys and detailed impact assessment, according to the Approved Conservation Advice (TSSC 2016) and legislated process is a continuing failure of the Ecological Australia (2018) report. The failing has not been satisfactorily justified by Ecological Australia and the supporting studies overlook the implicit intent of the SEAR's and jurisdiction of the <b>Commonwealth Government</b> embedded in the SEAR's. Further, on review of the accompanying documents:</p> <ul style="list-style-type: none"> <li>• There is no updated ecological assessment.</li> <li>• The there is no discussion or commitment in the PPR and revised SoC's that the EPBC Act CEEC will be 'separately addressed in accordance with the EPBC Act'.</li> </ul> <p>Reference to s158A of the EPBC Act is noted including that an exemption is at the discretion of the Minister, through 'consultation' with the Department of Environment and Energy, as opposed to the perception of the person or entity proposing the Action.</p>	<p>Lendlease is aware of the requirements of the EPBC Act and is addressing this issue as a separate matter given the separate jurisdiction of the EPBC Act. Lendlease is in the process of consulting with the Department of Agriculture, Water and the Environment.</p>
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<p>Recent EPBC Act impact assessments of Illawarra and South Coast Lowland Forest and Woodland CEEC in the locality including the Albion Park Rail Bypass (EPBC Referral No's 2018/8192, 2017/8048 and 2017/7909) which will directly impact areas of much less than that of the of the 'Calderwood Urban Development Project' (CUDP) (see EPBC Referral No 2018/8192), have been found to result in significant impacts and have accordingly been determined by the Department of Environment and Energy as 'Controlled Actions'</p>	<p>Noted. That project is entirely different, and the two projects should not be conflated. EPBC Act matters are a separate jurisdiction to those being assessed here.</p>	<p>It should have been well understood that the direct and irreversible impacts to terrestrial threatened biodiversity such as complete removal of areas of CEEC during construction are substantially equal as opposed to entirely different, regardless of whether it is for infrastructure, industrial, residential, agricultural, etc developments. That is, there is a fundamental baseline equivalency for all actions and activities directly impacting EPBC Act MNES.</p> <p>No projects in the locality (ie EPBC Referral No's 2018/8192, 2017/8048 and 2017/7909) have been conflated with the CUDP. Clearly the references to EPBC Referral No's 2018/8192, 2017/8048 and 2017/7909 are to objectively demonstrate:</p> <ul style="list-style-type: none"> <li>• Following convention, full and proper assessment of the EPBC Act CEEC has been carried for other projects in the locality including one infrastructure (with SEAR's), one industrial and one residential (as nearby as 2km from the CUDP).</li> <li>• Assessment by DoEE that each of the cited Referrals triggered a 'Controlled Action' separately which are impacting on a lesser quantum of Illawarra and South Coast Lowland Forest and Woodland CEEC than the up to 11ha for the CUDP.</li> </ul> <p>As highlighted above, according to the SEAR's 'Key Issues' 'Item 7. Biodiversity' the applicant is to -  <i>Provide an updated assessment the biodiversity impacts associated with the proposal (particularly impacts on Endangered Ecological Communities located on the site) and provide a description of the proposed actions to avoid or minimise potential impacts.</i></p> <p>The reference to 'Endangered Ecological Communities located on the site' neither distinguished between EEC's (or TEC's) listed under the BC Act or EPBC Act. It's unclear how the SEAR's could be misinterpreted in view of:</p> <ul style="list-style-type: none"> <li>• It's conventional and implicit, rather than exceptional, that major projects, SSD, SSI, as well as Part 4 developments and Part 5 activities, will fully assess the potential impacts to threatened biodiversity where its known and there is a potential for impacts.</li> <li>• The Biodiversity Assessment report - Modification to Calderwood Part 3A Concept Plan (EcoLogical Australia, 2018) discusses at Section 4.2 multiple previous impact assessments for EPBC Act MNES in the 2010 flora and fauna assessments and acknowledges the presence of Illawarra and South Coast Lowland Forest and Woodland EPBC Act CEEC.</li> <li>• On review of several MP, SSD and SSI projects for the locality, conventionally all include full assessment of impacts to all known and observed EPBC Act MNES.</li> </ul> <p>According to the SEAR's 'Consultation' requirements the applicant is 'required to consult with the relevant local, State or <b>Commonwealth Government authorities,...</b>'. The Department of Environment and Energy for EPBC Act MNES is a relevant Commonwealth Government authority as it clearly has jurisdiction through the EPBC Act over the MNES in the project area and on the site.</p>	<p>Lendlease is aware of the requirements of the EPBC Act and is addressing this issue as a separate matter given the separate jurisdiction of the EPBC Act. Lendlease is in the process of consulting with the Department of Agriculture, Water and the Environment.</p>
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<p>Based on recent assessments, its [sic] considered that direct impacts (and not accounting for indirect impacts) to close to 11 ha of vegetation equating to EPBC Act Illawarra and South Coast Lowland Forest and Woodland, comprising approximately 36% of all Illawarra and South Coast Lowland Forest and Woodland within the project site, would be assessed by the Department of Environment and Energy as triggering a Controlled Action.</p>	<p>Noted. The SEARs do not require consideration or assessment of EPBC Act listed matters as it is a separate jurisdiction under the Commonwealth. As such, it will be separately addressed in accordance with the EPBC Act. This report does not pre-suppose what the Federal Minister for the Environment would consider as a Controlled Action.</p>	<p>According to the SEAR's 'Consultation' requirements the applicant is 'required to consult with the relevant local, State or <b>Commonwealth Government authorities</b>,...'. The Department of Environment and Energy for EPBC Act MNES is a relevant <b>Commonwealth Government authority</b> as it clearly has jurisdiction through the EPBC Act over the MNES in the project area and on the subject site.</p> <p>Setting aside pre-supposition the clear failing of the report is the impact assessment has not adopted the requirements or intent of SEAR's, followed convention, due diligence and proper process for MNES. It should have been well understood that to suggest 'Significant impacts on Illawarra and South Coast Lowland Forest and Woodland are unlikely' without detailed impact assessment according to EPBC Act MNES Significant Impact Guidelines (DotE 2013) and Section 2.6.5 of the Approved Conservation Advice for the CEEC (TSSC 2016) is premature and that the range of procedural steps prior to a determination of a Controlled Action by the Minister may include;</p> <ul style="list-style-type: none"> <li>• A pre-referral meeting with the Department of Environment and Energy which can be undertaken at any time prior to submitting a referral for an Action that has the potential to result in a 'significant impact' to a MNES. ie consultation with the relevant <b>Commonwealth Government agency</b>.</li> <li>• EPBC Act referral for an Action that has the potential to result in a 'significant impact' to a MNES where there is uncertainty on whether it is important, notable, or of consequence.</li> <li>• EPBC Act referral for an Action that has the potential to result in a 'significant impact' to a MNES after assessment against the relevant guidelines and policy statements.</li> <li>• The Minister 'calling in' a development or activity for assessment of whether or not it would be a Controlled Action, regardless of the referral process.</li> </ul>	<p>Lendlease is aware of the requirements of the EPBC Act and is addressing this issue as a separate matter given the separate jurisdiction of the EPBC Act. Lendlease is in the process of consulting with the Department of Agriculture, Water and the Environment.</p>
<p>In view of Council's comments, and as part of the stakeholder agency consultation, it is recommended that the Department of Planning and Environment invite the Commonwealth Department of Environment and Energy to review and comment on the direct impact to over 10ha of an EPBC Act listed critically endangered ecological community as part of the CUDP.</p>	<p>The SEARs do not require consideration or assessment of EPBC Act listed matters as it is a separate jurisdiction under the Commonwealth. As such, it will be separately addressed in accordance with the EPBC Act.</p>	<p>According to the SEAR's 'Consultation' requirements the applicant is 'required to consult with the relevant local, State or <b>Commonwealth Government authorities</b>,...'. The Department of Environment and Energy for EPBC Act MNES is a relevant <b>Commonwealth Government authority</b> as it clearly has jurisdiction through the EPBC Act over the MNES in the project area and on the subject site.</p> <p>In the absence of the applicant making a reasonable attempt to comply with the SEAR's, it is recommended that the Department of Planning, Industry and Environment invite the Commonwealth Department of Environment and Energy to review and comment on the direct impact to over 10ha of an EPBC Act listed critically endangered ecological community as part of the CUDP.</p>	<p>Lendlease is aware of the requirements of the EPBC Act and is addressing this issue as a separate matter given the separate jurisdiction of the EPBC Act. Lendlease is in the process of consulting with the Department of Agriculture, Water and the Environment.</p>

Ecological (2018) has failed to take into account the need for further specialist studies to assess the impact to groundwater and GDE's[sic] (expressing as aquatic ecosystems) from increased hardstand and impervious surfaces and cut any fill on the alluvial floodplains from the proposed project modification and future development applications. (JWP 2019, Douglas Partners 2010 & 2018, Cardno 2010 and Ethos Urban 2018).	The Douglas Partners report states that there will not be a change in the post-development flows of groundwater compared with the pre-development flows. The extent of impervious surface area is determined by the amount of fill used across the project. The extent of fill is the same proposed by this modification as the area approved previously. The impact on GDEs will be the same. Groundwater infiltration of Marshall Mount Creek at the upstream extent of the project boundary, is shown as being groundwater dependent (Figure 4) and this was confirmed by a site visit on 3 April 2019 by Dr Peter Hancock (Groundwater Ecologist). There will be no increase in impermeable surface area adjacent to this reach, nor in the upstream part if the floodplain, so groundwater recharge will not be affected. Likewise, the reaches of Macquarie Rivulet that are indicated as being groundwater dependent are located adjacent to areas where groundwater infiltration of the shallow alluvial aquifer will be either unaffected or only minimally affected by an increase in impermeable surfaces. One terrestrial GDE is mapped as occurring on the site (Figure 4). A site inspection found that the vegetation community here is unlikely to depend on groundwater. This area will be an environmental reserve (ER4), and the vegetation retained in its current condition.	Additional summary assessment and site inspection noted regarding the terrestrial GDE. However, the additional summary assessment has overlooked impacts GDE's expressing as aquatic ecosystems. The response to Councils submission is unsatisfactory as: <ul style="list-style-type: none"> <li>No specialist studies to assess the impact to GDE's expressing as aquatic ecosystems have been carried out.</li> <li>The summary content falls substantially short of 'a detailed assessment of the potential impacts of the proposal, particularly any additional impacts, beyond those already assessed and approved' as required by the SEAR's.</li> </ul>	Dr Hancock is a specialist in GDE. He carried out an assessment and provided detailed information, which was included in the response.
In view of the significant limitations of BoM Groundwater Dependent Ecosystems Atlas geospatial database 'potential' GDE mapping of 'Aquatic Ecosystems' for the Sydney Basin Bioregion, the Ecological (2018) two paragraph discussion on GDE's is unsatisfactory and not considered to be 'a detailed assessment of the potential impacts of the proposal'	There are three Groundwater Dependent Ecosystems (GDE) mapped in the Project area footprint (Figure 4). A site inspection confirmed that the two river baseflow reaches are likely to be connected to shallow groundwater, as the stream water level corresponded to the approximate water level in nearby bores. It is unlikely that the vegetation community indicated as groundwater dependent and dominated by <i>Eucalyptus tereticornis</i> (ER4) is groundwater dependent. This is because the area is elevated and probably has no connection to the floodplain. A Groundwater assessment (Douglas Partners 2010) was conducted across the entire Project area. The Groundwater Assessment provides further detail on GDE. The assessment concluded that generally, groundwater would be unlikely to present a constraint to development in areas of above RL 20.	Additional summary assessment and site inspection noted regarding the terrestrial GDE. However, the additional summary assessment has overlooked impacts GDE's expressing as aquatic ecosystems. The response to Councils submission is unsatisfactory as: <ul style="list-style-type: none"> <li>No specialist studies to assess the impact to GDE's expressing as aquatic ecosystems have been carried out.</li> <li>The summary content falls substantially short of 'a detailed assessment of the potential impacts of the proposal, particularly any additional impacts, beyond those already assessed and approved' as required by the SEAR's.</li> </ul>	Dr Hancock is a specialist in GDE. He carried out an assessment and provided detailed information, which was included in the response.
The Modification to Calderwood Part 3A Concept Plan Biodiversity Assessment (Ecological, 2018) states it will outline any consultation with relevant government stakeholders including WCC. It is noted that there is no discussion of consultation on biodiversity and riparian matters with WCC in the Ecological (2018) report as none has occurred.	Noted.	Further to the initial and persisting failing to consult with WCC on biodiversity matters, on further review, despite the SEAR's 'Consultation' requirements that the applicant is 'required to consult with the relevant local, State or <b>Commonwealth Government authorities</b> ,...'. such as the Department of Environment and Energy for EPBC Act MNES, the Ecological (2018) report does not discuss consultation Department of Environment and Energy.	Lendlease is aware of the requirements of the EPBC Act and is addressing this issue as a separate matter given the separate jurisdiction of the EPBC Act. Lendlease is in the process of consulting with the Department of Agriculture, Water and the Environment.

#### ADDITIONAL WCC ISSUE RAISED ON ADDITIONAL PROPOSED MODIFICATION (IN RESPONSE TO SUBMISSIONS)

#### Proposed use of the term "principal dwelling"

<p>The amended MOD4 (response to submissions) proposes an additional change that did not form part of the original MOD4 application. The MOD4 Response to Submissions document <i>Response to Submissions and Preferred Project Report_ 31 May 2019</i> (the letter) introduces the term 'principle dwellings'. The use of the term 'principal' dwellings is not supported for the following reasons:</p> <ol style="list-style-type: none"> <li>The term 'dwelling' is used throughout the concept plan approval. The Standard Instrument definition of 'dwelling' includes a secondary dwelling.]</li> <li>On page 16 of the letter it is stated that '<i>The current approved 4,800 dwellings and proposed total of 6,000 dwellings relates to principal dwellings only. As detailed in the Elton report (Appendix R of the Consolidated Concept Plan), the proposed dwelling mix within the CUDP did not comprise secondary dwellings...</i>'. This statement is considered incorrect. Although secondary dwellings are not included as a specific term within Table 4: Proposed dwelling mix and yield (page 17 of the letter), it is considered that this type of dwelling was factored into the overall dwelling yield, just not separately defined. For example, the terms single dwelling, dual occupancy and multi-dwelling housing are also not included in Table 4, however these types of dwellings are expected to occur and are therefore reasonably included within the term 'dwelling'. Therefore, rather than using standard defined terms, Table 4 appears to use colloquial terms for 'dwelling types', and it is reasonable expected that dual occupancies and secondary dwellings (to name a few dwelling types) are reasonably included within the overall term 'dwelling'.</li> <li>Further, it is put forward (see page 16-17) that '<i>if council wishes to levy contributions for secondary dwellings, it would be able to do so via a section 7.11 contributions plan.</i>' This statement is also considered incorrect, as Wollongong City Council has no capacity or authorisation to adopt a contributions plan over the CUDP and levy contributions within the</li> </ol>	The term principal dwellings has been removed from the proposed modification.
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<p>Shellharbour Council LGA, and vice versa.</p> <p>4. Additionally, it is considered unreasonable that any future population that will be housed within secondary dwellings are not adequately planned for and considered in the infrastructure requirements for the overall site. For example, open space requirements have been calculated on a per person (population) basis, however the population of secondary dwellings has not been included.</p> <p>It is suggested that, should MOD4 be approved by the Department, the current approved term being 'approximately 4,800 dwellings' is amended to 'approximately 6,000 dwellings' and the term 'principal dwellings' is not brought into the Concept Plan Approval. This will ensure that all dwelling types, including secondary dwellings, continue to be included in the overall dwelling yield and that adequate infrastructure provision is made for these future residents.</p>	
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PUBLIC SUBMISSIONS

Submission Summary	Proponent Response																																				
Sunglow Australia (on behalf of Calderwood Heights Pty Ltd, 347 Calderwood Road, Calderwood)																																					
Generally supportive of the modification request including the amendments outlined in the Departments letter dated 24 June 2019, subject to the below:																																					
Development Staging of the CUDP The development of the Site is not contingent on the infrastructure delivery committed to by Lendlease and therefore it is not appropriate that the development be constrained by the staging preferences and delivery schedule of Lendlease. Alternately, a Staging Plan should be developed that indicates the non-core land being developed as the logical next stages of development, given this land is subject to development applications now lodged with Council.	A staging plan is required with every DA to demonstrate that development is continuing in an orderly manner across the site (see modification condition C1) . There is no proposal to modify this and it is unlikely that either Shellharbour or WCC would agree to the proposed change. The non-core landowners need to submit staging plans with their development applications to demonstrate that each stage can be serviced, is accessible and provides an update on the likely timing of future stages and infrastructure delivery requirements.																																				
Infrastructure Contributions Infrastructure contributions will be a requirement of any future development consent for the non-core lands. The Developer intends to meet the infrastructure demands of the development of the Site by delivering infrastructure on-site and / or making an appropriate contribution as determined by the future development consent for the Site.	Noted																																				
Apportionment of Concept Plan Obligations The development staging of the individual land holdings needs to be uncoupled for the infrastructure delivery responsibilities to be apportioned to the individual landowners. It is not practical for the development of one landowner to trigger a responsibility for another landowner to perform works. Nor is it practical for the delay of one landowner to deliver infrastructure to constrain the development of another. There remains genuine concern that the non-core landowners may be required to fund infrastructure delivery ahead of delivering lots which generate the sales required to fund the infrastructure. We note that Lendlease have obtained a ‘Clause 8F’ designation which effectively removes the requirement for Calderwood Heights to consent to the modification application. As the modification application directly affects the planning regime for the land at 347 Calderwood Road, Calderwood, we request that any further changes to the application are subsequently notified to all non-core landowners benefitted by the Concept Plan.	The Sunglow application is currently before the Land and Environment Court. Contributions and staging are key matters to be considered. It is noted that this landowner is also subject to the requirements of Condition C12 and must provide local infrastructure consistent with the demand generated by that development (approximately 10%).																																				
Reinco Consulting (on behalf of Joanna knight, 23 Calderwood Road, Albion Park)																																					
Flood level increase impacts in the PMF event Previous comments regarding the PMF flood depths in Figure 11of the July 2018 Wyndham Prince report are not accepted. <ul style="list-style-type: none"><li>It does not make sense for the orange colour coding in Figure 11 to be representative of flood impacts ‘up to (but not greater than) the specific depth shown’. That would make the lightest of the five orange zones (‘up to 0.02m’) non-existent as it would be subsumed into the light grey zone (‘between -0.02m and 0.02m’), yet Figure 11 shows the light grey and lightest colour of orange as two distinct zones. Also, in their other figures (such as Figure 8.09 in the Post Exhibition Report) each blue colour represents a range (eg, 1.0 to 2.0m, 2.0 to 3.0m) with the most intense colour shading described as ‘3.0+’ indicating that flood depths are equal to greater than 3.0m. Wyndham Prince maintains however in Figure 11 that ‘0.4+’ means the opposite to Figure 8.09, in that flood impacts are not more than 0.4m.</li><li>The Wyndham Prince Post Exhibition Report also lacks clarity in response to queries raised on bulk earthworks scenarios used in their flood modelling. They say, ‘the cut and fill plan carried out by J. Wyndham Prince is generally consistent with the bulk earthworks plans submitted to SHCC in support of DA0586-2018 which is currently under assessment’. They purport to offer objective evidence regarding this by stating, ‘Nevertheless, a revised cut and fill plan is present in figure 8.10 the Post Exhibition WCFM report which includes locations and depths of the proposed cut and fill’. Figure 8.10 however doesn’t show any cut/fill at the sports ovals.</li><li>This issue is however further addressed, in part, through the statement that ‘Minor changes on the cut/fill including south of Macquarie Rivulet adjacent to stage 1 have been implemented to facilitate an improved flow management in the corridor which is consistent with the original approval.’ There is no objective evidence however to support the statement that the earthworks changes are minor. As per the sketch below showing the bulk earthworks drawings submitted in support of DA0586-2017 compared with the Flood Mitigation Plan in Appendix C11 of the CCP, the changes to proposed earthworks cannot be described as minor.</li></ul>	DA0586-2017 does not form part of the Mod 4 assessment and is not included under approved development . Therefore any additional comments that relate to DA 0586-2017 are invalid and not applicable to Mod 4. Any changes to Figure 8.10 are unnecessary.  A further clarification of the colour scale is provided below, with the colour in question highlighted. While the maximum value within this range is 0.25, a region inspection was undertaken on the property in question, and the maximum difference was found to be 0.15m. <table><tr><th>&gt;=Value</th><th>&lt;Value</th><th>Color</th></tr><tr><td>-10</td><td>-0.4</td><td></td></tr><tr><td>-0.4</td><td>-0.25</td><td></td></tr><tr><td>-0.25</td><td>-0.1</td><td></td></tr><tr><td>-0.1</td><td>-0.05</td><td></td></tr><tr><td>-0.05</td><td>-0.02</td><td></td></tr><tr><td>-0.02</td><td>0.02</td><td></td></tr><tr><td>0.02</td><td>0.05</td><td></td></tr><tr><td>0.05</td><td>0.1</td><td></td></tr><tr><td>0.1</td><td>0.25</td><td></td></tr><tr><td>0.25</td><td>0.4</td><td></td></tr><tr><td>0.4</td><td>10</td><td></td></tr></table> PMF impacts are less than 0.3m and consistent with Condition B2.6.1 of the court approval for Stage 1.  The assessments presented are suitable to support Mod 4 and any review by Mr Bewsher would be welcome but is not required.	>=Value	<Value	Color	-10	-0.4		-0.4	-0.25		-0.25	-0.1		-0.1	-0.05		-0.05	-0.02		-0.02	0.02		0.02	0.05		0.05	0.1		0.1	0.25		0.25	0.4		0.4	10	
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Submission Summary				Proponent Response	
Wyndham Prince does acknowledge that impacts in the PMF event have increased in comparison to the PMF Impacts for the Stage 1 Project with the lengthened bridge over Macquarie Rivulet (which eliminated the downstream impacts that concerned Drew Bewsher near parts of Tripoli Way and Taylor Road). They have not however commented on Drew Bewsher’s advice to minimise flood level increases in the PMF for urban areas downstream of the project along the fringes of Albion Park township. Clearly the PMF impacts on urban areas downstream haven’t been minimised as they are now more than what was committed to at the Stage 1 Project Approval.				As mentioned above the assessment demonstrates that the PMF impacts are less than 0.3m and consistent with The Statement of Commitment from the original Concept approval in 2010 (commitment No 41). Therefore, any reassessment is not required	
It is suggested that: 1. A corrective version of Figure 8.10 be prepared reflecting the bulk earthworks scheme described on the plans submitted in support of DA0586-2017. 2. A further plan be prepared showing the differences between the corrective version of Figure 8.10 and the approved cut and fill areas on Flood Mitigation Plan at Appendix C11 of the Consolidated Concept Plan. 3. Once the differences are identified it is suggested that either Figure 8.10 be further amended to be consistent with Consolidated Concept Plan Figure C11, or alternatively additional information be submitted by the Applicant justifying the departures from the cut and fill arrangement shown on Consolidated Concept Plan Figure C11. Such justification should include comparative cut/fill volumes, differences in the comparative quantities of topsoil v material suitable for re-use as structural fill generated from the changes, the need for any additional imported fill and the proposed way of dealing with the disposal of any additional quantities of topsoil either on-site or off-site. 4. The flood model is re-run to reflect any changes made in regards to (1), (2) and (3) above, and an updated version of Figure 11 in the Wyndham Prince July 2018 report is prepared with a legend that stipulates the range of depths associated with each colour shading rather than a single value for which it is unclear whether it represents the upper or lower end of the range. 5. Any flood level increase impacts in the PMF event in comparison to the impacts on urban areas agreed for the Stage 1 Project Approval referred to Mr Bewsher for comment on their acceptability.				Given that a detailed explanation of the difference map legend is provided above and the fact that the current assessment is consistent with the Statement of Commitment from the original Concept approval in 2010 (commitment No 41), re-run of the model and any associated remapping is not required.	
Fortnum Property (Benaughton Calderwood Pty Ltd, 128 North Macquarie Road, Calderwood)					
Benaughton are generally supportive of the MOD 4 application, however there are a handful of matters which are yet to be resolved.  The matters raised in the submission are expected to be readily resolved upon update of Appendix M in accordance with CCP Determination 2010, and confirmation of above matters regarding Development Application assessments.				We believe that the submission is relating to Appendix M of the RTS not the CCP.	
<b>Park Land Value</b> We were unable to locate a response to the October 2018 submission within the LL Response. To clarify the D5 park contained within 128 North Macquarie Rd project, as detailed in DA577/2017, is within land zoned E2, E3 and R1, subsequently the below amendments to the schedule are again requested (amendments in blue).				To be consistent with the current VPA approach to delivering parks in Shellharbour, the requirement should be amended to 366 days from the date of the subdivision certificate that creates the 200 <sup>th</sup> dwelling.	
Open Space Number	Type and Detail	Area (HA)	Timing	Status	
D5	<b>District Park in E2, E3 and R1 Zone</b> Recreation range and facilities provision to be considered for provision at detailed design: <ul style="list-style-type: none"><li>•walk / cycle pathways</li><li>• high quality landscape improvements</li><li>• playground</li><li>• signage</li><li>• combined seating, bins, tables, and shade structure</li></ul>	1.00	No later than occupation of 2,000th dwelling if contiguous with adjoining development, or prior to the occupation of the 200 <sup>th</sup> dwelling within 128 North Macquarie Rd project, whichever is later.	District park 5 forms part of DA No 577/2017	
D5	Land value at \$50,000 per hectare (E2/E3 zoned land) and \$3,080,000 (R1 zoned land) dedicated at no cost to Council			District park 5 forms part of DA No 577/2017	

Submission Summary	Proponent Response
<p><b>Required Local Contributions v Lendlease Preferred Items</b></p> <p>It is noted that Appendix M appears to have removed the delineation between works which are proposed by Lendlease in the <i>creation of a master planned community</i>, as opposed to being <i>required by NSW Government Terms of Approval (Modification C12)</i>, this approval being <i>Determination of Major Project No. 09_0082 Concept Plan for Calderwood 8/12/2010</i> ('CCP Determination'). Furthermore it also nominates a number of the LL Preferred Items as "WIK", (Works in Kind), which is a definition typically utilised when describing a required contribution item in which a developer may seek an offset against other local cash contribution requirements, which would be inconsistent with CCP Determination.</p> <p>As non-core developers are in the negotiations to enter VPAs with various authorities based on the CCP Determination 2010, Consolidated Concept Plan 2011 Appendix I, and detailed assessment of Nexus and relevant contributions by relevant authorities, it is deemed important that Appendix M is updated to correctly reflect that of CCP Determination and previous versions of the Local Development Schedules. Specifically, to nominate those items which are not 'required local infrastructure' and/or not to be considered under the S94 framework, now referenced s7.11 per EP&amp;A Act.</p>	<p>All of the infrastructure is required to deliver the Calderwood Development as a whole and it is only fair that each landowner pays their portion of the infrastructure.</p>
<p><b>Current Concept Plan &amp; Non-Core DAs</b></p> <p>We note that in accordance with the approved Concept Plan per <i>75P(2)(a) of the EP&amp;A Act</i> (at the time of CCP determination) <i>the determination of a development application for the project or that stage of the project under Part 4 is to be generally consistent with the terms of the approval of the concept plan</i>.</p> <p>Therefore to ensure timely Development Application assessment by Council, it is requested that either:</p> <ol style="list-style-type: none"><li>1. Mod 4 application is delayed until current non-core DAs, Lendlease DAs, are determined, or</li><li>2. Department of Planning confirm that the determination of Mod 4 will not affect any consistency assessment required by Council per s75P(2)(a) of current DAs.</li></ol> <p>The confirmation of above point 1 or 2 ensure that the Calderwood Precinct continues to be able to be rolled out in an orderly fashion.</p>	<p>We understand that the applications lodged are consistent with Mod 4 as Lendlease has adopted the subdivision layouts as proposed in those applications. There is no requirement to delay determination of MOD 4 and in fact the non-core landowners may rely on the generally consistent requirement of the terms of the concept plan approval.</p>
<b>Clover Hill (RBWI Pty Ltd, Clover Hill Estate, Calderwood)</b>	
<p>Clover Hill Estate is appropriately accommodated in terms of stormwater quality treatment by way of already approved and constructed stormwater quality control devices, this removes the concerns RBWI previously raised in its letter dated 4 October 2018 and <b>RBWI is now generally supportive of Mod 4</b>.</p> <p>Once Appendix M is appropriately updated to reflect the terms of the CCP, then RBWI's concerns are likely to be resolved, particularly with respect to certainty over required contributions. This issue is critical to RBWI and we would request confirmation of the relevant updates to Appendix M prior to determination of Mod 4. Alternatively, to ensure timely Development Application assessment by Council, we would request that determination of the Mod 4 application is delayed until current noncore DAs are determined.</p>	<p>Lendlease is currently negotiating the apportionment of contributions between the different landowners as they apply under the current approved Concept Plan. This is a separate matter not relevant to Mod 4.</p> <p>As noted above, there is no requirement to delay the determination of MOD 4 and in fact the non-core landowners may rely on the generally consistent requirement of the terms of the concept plan approval.</p>
<p>RBWI would like to clarify what it believes are misstatements in the RTS documentation relating to the contributions called for under the Concept Approval (as described further below) and the status of RBWI's DA0569/2017.</p>	
<p><b>Required Local Contributions vs. Lendlease Preferred Items</b></p> <p>Appendix M in the RTS documentation has removed the distinction between works which are proposed by Lendlease in the creation of a master planned community, as opposed to being required by NSW Government Terms of Approval (Modification C12) - this approval being Determination of Major Project No. 09_0082 Concept Plan for Calderwood 8/12/2010 (<b>CCP Determination</b>). As non-core developers, we are in negotiations to enter VPAs with various authorities based on the CCP Determination 2010, the Consolidated Concept Plan 2011 Appendix I, and detailed assessments of nexuses and relevant contributions. It is important therefore that Appendix M is updated to correctly reflect the CCP Determination and previous versions of the Local Development Schedules in nominating those items which are not 'required local infrastructure' and/or not to be considered under the S94 framework, now s7.11 under the Environmental Planning and Assessment Act 1979 (<b>EP&amp;A Act</b>).</p> <p>This will help ensure that development consents granted by Shellharbour City Council (<b>Council</b>) are generally consistent with the CCP, rather than merely the preferred position of the lead developer, LendLease.</p>	<p>These items have always been included in the schedule of local infrastructure contributions and no change has been proposed in respect of the C12 items. The C12 items are essential pieces of infrastructure that are required to deliver all of the new dwellings within the Calderwood development and as such it is only equitable that all of the landowners contribute proportionately to this infrastructure. A number of the items included in Appendix M are also found in the SoCs (eg No 75 Social and Community Initiatives).</p>



Submission Summary	Proponent Response
<p><b>Approval Status of RBWI’s DA0569/2017</b></p> <p>In Ethos Urban’s “Response to Submissions and Preferred Project Report_31 May 2019”, it is suggested that development on the non-core lands as proposed in the development applications that have been lodged with Shellharbour City Council cannot be approved unless Mod 4 is approved - see S2.1.8 (p.17). They offer no explanation however why they hold this view, which would seem to be unfounded from RBWI’s perspective.</p> <p>There is nothing preventing Council from determining the development applications before it, notwithstanding the outcome of Mod 4. A development application must be determined based on the law and the circumstances that apply to the proposed development, as at the date of determination (see Nalor Pty Limited v Bankstown City Council [1980] 2 NSWLR 630; see also Baker v Gosford City Council [2004] NSWLEC 167). Accordingly, if Council determines an application prior to Mod 4 being approved, then the consent will not be inconsistent with the CCP, even if Mod 4 is later approved. Alternatively, if Council determines the application after Mod 4 is approved (if approved) then Mod 4 will apply to the development and any development consent granted.</p> <p>In short, Ethos Urban’s assertion in this regard should have no bearing on the Department’s determination of Mod 4.</p>	<p>Agreed.</p>