

Response to SCC Submission – dated 21/2/17 to assist DPE with finalising the assessment

Issue	SCC Comment	APS Response
VPA Schedule	<p>Several items (1, 2, 3, 4, 5, 6, and 7 of Schedule 1) are included or rather are suggested for inclusion in the VPA. Council is not averse to dealing with these matters as part of the subdivision approval and conditions of consent. We do not typically include pocket parks, parks and other infrastructure in VPAs. The land potentially subject to the 'offsets' is another matter however noting that there will be ongoing cost implications and management regimes.</p> <p>The 'public reserves' identified in Item 8 and 9 are 'biodiversity offsets' in accordance with Part 7A of the Threatened Species Conservation Act and its associated legislation. While Council has no issue with the dual function of the areas (reserve / stormwater and offset) how will this arrangement work?</p> <p>What exactly are the long term management implications of the 'reserves/offsets', Council as the manager of a new asset expects to make comment on the draft Total Fund Deposit Sheet for the biodiversity offset.</p>	<p>It is APS' understanding that any dedication of land (public reserve or otherwise) is required to be stipulated in a VPA, hence the inclusion of the land dedication in the VPA Schedule. If it can be dealt with as conditions of consent, that would be our preference as well.</p> <p>Please note that OEH is in the process of approving the updated BOS (which was forwarded to SCC on 20 February 2017 for reference). The updated BOS outlines the "impact site" and the "offset site". You will note the drainage basins etc are not part of the offset site but are part of the impact site.</p> <p>It is proposed that the long term management of the proposed offset site will be managed under the biobanking methodology where all funds for the long term management are deposited into the Total Fund Deposit trust account that will allow the owner of the land (Jemalong Pty Ltd initially and then SCC after Stage 11) to manage the land on a cost neutral basis. SCC/OEH will be heavily consulted in the development and preparation of the management regime and cost estimations. This involvement can be included in the VPA if SCC/DPE requires.</p>

	<p>What are the <i>long term</i> financial implications, e.g. on-going maintenance costs of WSUD? How is the finance to be arranged for the management of the 'reserve/offsets' in the long term?</p> <p>Further, staging may be of relevance with respect to the structure of the VPA. Offsets may need to be <i>retired</i> before they are dedicated to Council.</p>	<p>Regarding the long term management cost of WSUD, I can only assume SCC took this into account when they prepared their DCP and requested drainage works to be located in the public domain. Maintenance cost estimates have been provided in previous submissions to DPE for SCC's benefit.</p> <p>It is accepted that staging is an important part of the VPA which is why it has been included. It is agreed that offsets will need to be retired before clearing works commence however it is my opinion that this does not need to be in any agreement between SCC and Jemalong. It is expected that this will form part of a condition of consent from DPE.</p> <p>A meeting has been requested with SCC for 28/2/17 to resolve these issues further.</p>
Shoalwater Issues	SPS location TBC	MP emailed Ljupco Lazarevski at Shoalwater on 16/1/17 for a response – MP contacted Ljupco Lazarevski at Shoalwater again on 3/2/17 (verbally), 6/2/17 (via email) and 21/2/17 (via email). No response on this matter has been received at the time of submission.
TS/BOS Issues	Can the biobank include the OSD basin?	The OSD basin is purely for conservation purposes to protect downstream water quality and forms part of the impact site not the offset site as per the latest BOS in accordance with the OEH requirements. OEH has not raised this as an issue in their multiple reviews of the BOS.
	Clarification of various aspects of the BOS	The BOS has been updated and provided to both SCC and OEH on 20/2/17.
	Ongoing maintenance	Ongoing maintenance will be undertaken by Jemalong until the site is dedicated to SCC. As a biobanking site, maintenance funds will be deposited into the Total Fund Deposit that is administered by OEH which allows the ongoing maintenance costs to be funded in a "cost-neutral" way to the ongoing landowner.
	Funding of maintenance	See comments above.
Bushfire Mitigation	Issues with public reserve in south-west corner	<p>The layout has been modified to reduce the size of the public reserve in the south western corner and to exclude this from the "open space" calculations. The 10m wide public reserve will be maintained as a public pathway and bushfire trail to ensure evacuation options are available and pedestrian connectivity is maintained. The adjacent private property has been enlarged to act as an APZ and to minimise the maintenance burden of the APZ from SCC.</p> <p>A modified layout being APS drawing 25489-11 Rev 15 is attached.</p>

	Relocation of roadway	<p>The roadway of Road 5 in the south-eastern corner cannot be relocated further to the east due to its proximity to the OSD Basins C1 and C2. Pushing Road 5 to the west would push it further down the steep slope which would require additional earthworks and also it would require the relocation of the OSD basins C1 and C2 further down the slope requiring additional clearing of native vegetation. The location of Basin C1 and C2 can be seen on APS drawing 25489-19 which formed part of the previous submission.</p> <p>The issue of vegetation creep and maintenance of the APZ by Council is discussed separately below under comments from the Building Manager.</p>
	Timber bollards	The introduction of timber bollards is accepted and it is requested that this requirement be inserted as a condition of consent that is needed to be shown on a landscape plan that is approved by Council "prior to Construction Certificate" for the appropriate stage.
	No turf	The requirement for no turf in certain areas is accepted and it is requested that this requirement be inserted as a condition of consent that is needed to be shown on a landscape plan that is approved by Council "prior to Construction Certificate".
	Landscape Plan	The requirement for an updated landscape plan is accepted and it is requested that this requirement be inserted as a condition of consent that is needed to be completed and approved by Council "prior to Construction Certificate".
Building Manager	BAL identifying plan	The requirement for a BAL identifying plan is accepted and it is requested that this requirement be inserted as a condition of consent that is needed to be completed and approved by Council "prior to Subdivision Certificate".
	Amalgamation of lot 726 into 725	<p>This request is not accepted.</p> <p>The attached APS drawing 25489-SK08 shows lot 725 along with the required APZ's to the east and south. The site has a building envelope that is 14m wide and in excess of 16m long. This is adequate space to construct a new dwelling on the lot. In addition, the drawing also shows two 4-bedroom – single storey dwellings with outdoor living space that easily fit within the allotment boundaries. The concept design for those project homes is attached and if future residents prefer additional outdoor space, modified house designs or many two-storey options exist.</p>
	Prevent vegetation creep	<p>It is acknowledged that SCC wishes to reduce its maintenance burden in any APZ areas and prior agreement has been obtained from SCC to the APZ areas currently shown in the road reserve (see letter dated 1 May 2015) from Elizabeth Downing.</p> <p>It is accepted that some landscaping treatment can be incorporated into the area between the bioswale</p>

		<p>and the road reserve boundary to minimise maintenance and vegetation creep and it is requested that this requirement be inserted as a condition of consent on the landscaping plan that is needed to be completed and approved by Council "prior to Construction Certificate".</p>
Open Space		<p>Project 01OREC 0014 Mundamia Central Open Space in the SCC Contributions Plan 2013 stipulates that SCC is going to purchase 5,700m² of open space in the central hub area for open space purposes. Contributions to this open space area will be paid by developers in the area as lots are released at the rate of \$1,861.90/lot (16/17 financial year rates). Jemalong will therefore be contributing almost \$600,000 to the purchase and embellishment of open space in the Mundamia URA.</p> <p>The need for this open space is created by the subdivisions of land currently owned by Jemalong, SCC and NLALC.</p> <p>The most up-to-date information shows that the following yield will be realised: Jemalong – 308 lots ie 75% of total yield SCC/NLALC – 103 lots ie 25% of the total yield</p> <p>As Jemalong will be contributing to 75% of the cost of the open space, it is therefore concluded that 75% of the 5,700m² of land being purchased (4,275m²) is attributed to meeting the Jemalong open space requirement.</p> <p>Based on the current lot layout of 346 dwellings at an average 2.5 persons/dwelling and 12m²/person required for open space, there is a requirement for 10,380m² of open space to be made available.</p> <p>As 4,275m² of this requirement is being provided under the s94 CP, there is a shortfall of 6,105m² required which will be provided in the form of 2 reserves >3,000m² each.</p> <p>The proposed subdivision layout has been modified and is attached showing 2 new public reserve areas that will comply with SCC's Open Space Policy. An additional public reserve has been provided in the northern-central portion of the site with an area of 3,056m² and an additional 3,380m² of public reserve has been added to the proposed public reserve in the southern central portion of the site.</p>
Subdivision Engineer	Pedestrian Cycleway along Road 5	<p>The change in location of footpath/cycleway is accepted in the north-east of the site where the change will facilitate the removal of 6 road crossing points. However, in the south-east corner near OSD Basin C1 and C1A there is insufficient space to get a shared footpath/cycleway between the edge of Road 5 and the basins without additional clearing and hence the footpath/cycleway will need to stay</p>

		<p>on the western side of the road in this location. Further, similar consideration has also been given to the footpath location within Road 7 which will allow the removal of an additional 3 road crossing points.</p> <p>An updated footpath/cycleway concept plan is attached on APS drawing 25489-22 Rev 01 showing 7 road crossing points in total, which is comparison to the 13 road crossing points on the previous plan.</p>
	Temporary APZ's	The temporary APZ's are shown in the staging plans provided in the previous submission being APS drawings 25489-18 Sheets 1-11.
	Bioswales in road reserves	<p>Bioswales in the road reserves are as stipulated in DCP Chapter NB1 P22 which states in Acceptable Solution A22.1 which states "<i>Structures/devices, such as roadside bioswales, that promote ground water recharge shall be located in the public domain.</i>"</p> <p>The proposed drainage concept was modified from the concept plans submitted originally at the request of Shoalhaven City Council and more recently to bring them into line with the DCP.</p> <p>It is not accepted that these bioswales should be relocated outside the road reserve as this is what the DCP requires.</p>
	Bioswale design	<p>Again, bioswales are as per requirements of SCC's DCP Chapter NB1.</p> <p>The bioswales shown are indicative/conceptual only and all drainage paths and sub-soil drains and not shown. Additional detail will be provided at Construction Certificate stage which is standard practice for residential subdivisions.</p>
	Roundabout design	<p>A small roundabout design can be accommodated in the location proposed (similar to the design recently approved by SSC and installed at the Dolphin Point subdivision with consent from DPE being MP07-1004). The roundabout can be incorporated with minimal modifications to the road reserve boundaries.</p> <p>A copy of APS drawing 25489-SK07 is attached showing the proposed roundabout design. This design can be required to be inserted as a condition of consent with minimal changes to lot layout at cross intersections as required by SCC. It is suggested that these minor boundary adjustments can be accommodated at CC stage.</p>
	Typical cross sections	The typical cross sections are by their nature "generic" and show general service locations and general bioswale location. They are not detailed plans and so therefore do not show all necessary detail for construction. Services and drainage will be provided in accordance with service authorities requirements and bioswales are detailed in both the

		<p>DCP and the water quality report supporting the development. It is acknowledged that the base of some of the bioswales may be located in rock however this can be easily overcome as sub-soil drainage will be provided as shown in the typical details in the water quality report prepared by Martens.</p>
	Bioswale Issues	<p>As previously stated, the bioswales are required by SCC to be provided in their own DCP.</p> <p>Driveway crossings across bioswales would typically be provided with small diameter culverts to allow stormwater flows above ground to pass beneath the driveway. Whilst on public land, these will be privately owned and maintained as per other driveway crossings. A detail of the proposed driveway crossing can be provided as a condition of consent prior to the Construction Certificate.</p>
	Introduction of additional cul-de sacs	<p>This is not preferred for a number of reasons including inefficient use of land for lots in the end of the cul-de-sac, loss of pedestrian permeability throughout the estate, increased drainage problems due to trapped low points, reduction in garbage truck efficiency and congestion in cul-de-sac heads, efficient escape routes for bushfire evacuation purposes and the fact that the lot layout was originally prepared in accordance the masterplanning guidelines as originally prepared by Council for the Mundamia URA.</p>
	Drainage	<p>The Martens Water Quality report that supports the application discusses minor and major drainage controls for the site.</p> <p>It is acknowledged that not all this detail has been replicated in the most recent submission.</p>
	Basin numbering	<p>Council's comments state that the basins are not numbered but in fact they have always been numbered as per the Martens water quality report that supports the application. This numbering has always been replicated on the layout.</p> <p>It is also worth noting that the OSD basin designs will be refined during detailed design stage based on geotechnical information obtained at that time. Where basins are in rock, opportunities to improve basin geometry will be sought.</p>
	Basin 1	<p>There is no "Basin 1" so it is assumed these comments relate to OSD Basin C2. The sections show that this basin can drain to natural ground level and will not hold water with a low level outlet. A revised Section B is provided on APS drawing 25489-20 showing the location of the outlet and maintenance ramp</p> <p>Maintenance access will be provided from Road 5. Council's concerns regarding this basin are unwarranted.</p>
	Basin 2	<p>There is no "Basin 2" so it is assumed these comments relate to OSD Basin C1. The basin will</p>

		be constructed from reinforced concrete blockwork (with architectural treatment) and/or other earth retaining structures based on the final design. This is outlined in the Martens water quality report that supports the application.
	Basin 3	There is no "Basin 3" so it is assumed these comments relate to OSD Basin C1A. The basin will be constructed from reinforced concrete blockwork (with architectural treatment) and/or other earth retaining structures based on the final design. This is outlined in the Martens water quality report that supports the application.
	Basin 4	<p>There is no "Basin 4" so it is assumed these comments relate to OSD Basin C2A. Drainage will be via stormwater pipes constructed in the ground. It is acknowledged that some rock may be encountered during excavation of the basin and this will need to be addressed at the time. The basin is approximately 1m deep (being 2,900m² in area and 2,500m³ in volume). It is proposed that this basin will be able to be utilised during small rainfall events and will be suitably landscaped and graded to facilitate play areas and open space requirements. Despite this, additional area for open space has been provided to facilitate compliance with Council's open space policy.</p> <p>The basin will be provided with suitable sub-soil drainage to ensure it is adequately drained.</p> <p>The basin will be constructed using architectural retaining walls based on the final detailed design.</p>