

Final Statement of Commitments – September, 2011

No.	Objective	Commitment	Timing	Responsibility
CP1 - General	To ensure that the future development of the site for urban purposes is carried out in accordance with the Concept Plan approval and that the potential environmental impacts are managed.	<p>All future Project Applications are to be prepared generally in accordance with the Environmental Assessment prepared by King + Campbell Pty Ltd and the supporting specialist reports/plans including:</p> <ul style="list-style-type: none"> Exhibit 05A Revision H– Subdivision Concept Plan, King + Campbell Exhibit 05B Revision D – Indicative Staging Plan, King + Campbell Exhibit 06A Revision E – Landscape Concept Plan, King + Campbell Exhibit 06B Revision E – Landscape Concept Plan – Public Access, King + Campbell Exhibit 06C Revision C – Landscape Concept Plan – Hilltop Village, King + Campbell Exhibit 06D Revision E – Landscape Concept Plan – Indicative Edge Treatment, King + Campbell Exhibit 06E Revision C – Western Boundary Edge Treatment, King + Campbell Exhibit 06F Revision B – Cross-Section Western Boundary Edge, King + Campbell Exhibit 07 Revision C – Indicative Hilltop Village Architectural Treatment, King + Campbell Exhibit 08A Revision H – Stormwater Concept Plan, King + Campbell Exhibit 08B Revision D – Indicative South Western Biofiltration Basin Detail, King + Campbell Appendix C - Flora and Fauna Report, Peter Parker Environmental Consultant, July, 2010 Appendix D - Area 14 Stage 1B, Groundwater Study, Amendment 1, Martens & Associates, July 2010 Appendix E - Cultural Heritage Assessment, Jacqueline Collins, February 2003 Appendix F - Noise Assessment, Heggies Pty Ltd, March 2010 Appendix G - Coastal Processes, SMEC, March 2010 Appendix H – Traffic Impact Study, Roadnet, April 2010 Appendix I - Bushfire Risk Management, ABPP Pty Ltd, March, 2010 Appendix J – Flood Assessment, Cardno, July 2010 Appendix K – Coordination Plan for Coastal Walkway and Cycle Trails Appendix O – Geotechnical Assessment, Martens & Associates, July 2010 	Preparation of each Project Application or Development Application	Landowner / Developer

1SURVEYING ARCHITECTURE PLANNING CIVIL ENGINEERING URBAN DESIGN

No.	Objective	Commitment	Timing	Responsibility
		<ul style="list-style-type: none"> Appendix P – Heads of Agreement for VPA between land owners and PMHC (final VPA to be included in PPR). 		
CP2 - Voluntary Planning Agreement (VPA)	To ensure the long-term management and maintenance of areas of open space and conservation.	<p>The landowners are to enter into a Planning Agreement based on the following heads of agreement:</p> <ul style="list-style-type: none"> The establishment of environmental works and beach access as part of the Stage 1 Project Application; The establishment of other open space areas as part of the future stages; The maintenance of these lands in accordance with an approved management plan for ten (10) years; The payment of contributions at the subdivision stage to fund a further ten (10) years maintenance; and The payment of the updated open space roads Section 94 contributions for Area 14. <p>The Planning Agreement will be publicly exhibited with the rezoning Planning Proposal for the land.</p>	In conjunction with the rezoning of the land	Landowner
CP3 - Staging	To ensure development of the site is carried out in stages, to manage environmental impacts in a coordinated manner.	Staging of the development contained in the Concept Plan to be as indicatively outlined in Section 3.4 of Environmental Assessment (EA, September 2010 prepared by King + Campbell) and shown on Exhibit 05B. Staging is to be confirmed by subsequent Project Applications.	Throughout the development	Landowner / Developer
CP4 - Public Consultation	To ensure effective and receptive consultation with the local community and key interest groups	A public meeting with the local progress associations is to be conducted during the exhibition period for the CP to ensure the community are briefed on the content of the CP and PA.	During the CP exhibition period	Landowner / Developer
CP5 - Strategic Planning	To satisfy the statutory requirements of the Area 14 Draft LEP and DCP	All future PAs will comply are to meet the provisions of the Area 14 LEP, DCP and VPAs	Preparation of the PA's for future stages	Landowner / Developer
CP6- Urban Design and Sustainability	To ensure coordination with the development of the Area 14 locality generally.	<p>All future PAs are to demonstrate consistency with:</p> <ul style="list-style-type: none"> The implementation of the services and infrastructure for Area 14, as set 	Preparation of the PA's for future stages	Landowner / Developer

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		<p>out in the VPA between the landowners and PMHC;</p> <ul style="list-style-type: none"> The coordination plan for the coastal walkway and cycle trails; The Area 14 traffic management plan, as set out in the Roadnet Traffic Impact Study; The adjoining development sites, as set out in the MOU with the SVF. 		
CP7 - Visual Impact	To retain and enhance the existing visual and scenic qualities of the site, including the retention of views to the surrounding geographic features.	The future PA's proposed in relation to the Hilltop Village are to ensure the retention of view lines to surrounding geographic features along public streets as per the CP. The PA shall also confirm the findings of this concept application; that the proposed three/four storey buildings are not visible from Rainbow Beach.	Preparation of the PA's for future stages	Landowner / Developer
CP8- Infrastructure	To coordinate with the adjoining proposed urban development, to ensure that the provision of services is cost effective.	<ul style="list-style-type: none"> Sewer – Connection to PMHC's upgraded STP in conjunction with adjoining SVF's land Water – Connection to existing infrastructure on Ocean Drive Recycled water – Connection to existing infrastructure on Ocean Drive all future lots to be provided with dual reticulation water supply Electricity – Connection to existing infrastructure on Ocean Drive Waste Disposal – to be supplied by PMHC Telecommunications - conduits to be laid in all future roads to provide for connection to optical fibre once available to provide for high speed broadband access 	Preparation of the PA's and CC's for future stages	Landowner / Developer
CP9 - Traffic & Access	To coordinate with the adopted Area 14 traffic plan and the adjoining landowner (St Vincent's Foundation)	<p>The future project applications will ensure the provision of the following road and pedestrian networks, as established by the MOU:</p> <ul style="list-style-type: none"> A collector road onto the site through the St Vincent's Foundation land from the new signalised intersection at Ocean Drive and Abel Tasman Drive travelling a north-south direction and connecting back into St Vincent's Foundation land; An east-west "main street" road as part of the Hilltop Village; A public perimeter road, incorporating walking and cycle park, for the full frontage of the rainforest; The restriction of pedestrian access through the rainforest to a boardwalk style path with self closing gate; Provision of public car park and local park adjoining the beach access path; and 	Preparation of the PA's for future stages	Landowner / Developer

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		<ul style="list-style-type: none"> Provision of a link to the existing formed pathway in Ocean Drive and create a new cycleway and pathway in accordance with the coordination plan for the locality. 		
CP10 - Acid Sulfate Soils	To effectively manage PASS.	<ul style="list-style-type: none"> The future PA associated with Duchess Gully shall ensure that works are limited to protection and enhancement associated with Duchess Gully; The biofiltration works adjacent to Duchess Gully shall be designed to avoid the disturbance of ASS by restricting excavation depths to no more than 2m below natural surface levels. Any works as a depth greater than 2m AHD in the Class 4 area will require an ASS management plan. The ASS Management Plan shall be prepared in accordance with ASSMAC Guidelines. 	CC documentation for the area incorporating Duchess Gully	Landowner / Developer
CP11 - Bushfire	To ensure compliance with PfBP 2006 and the protection of the Littoral Rainforest from potential fire.	<ul style="list-style-type: none"> At the issue of subdivision certificate and in perpetuity the developable portion of the site shall be managed as an inner protection area (IPA), as outlined within section 4.1.3 and Appendix 5 of 'Planning for Bushfire Protection 2006' and the NSW Rural Fire Service's document 'Standards for asset protection zones'; A 10m APZ shall be provided within the lots in the north-west of the site, until such time as the threat is extinguished; Water, electricity and gas are to comply with section 4.1.3 of 'Planning for Bushfire Protection 2006'; Roads shall comply with section 4.1.3 (1) of 'Planning for Bushfire Protection 2006'; Landscaping of the site shall comply with the principles of Appendix 5 of 'Planning for Bushfire Protection 2006'. Asset Protection Zones shall be provided to the residential and tourist development from the Littoral Rainforest; Defendable Spaces shall be provided to the commercial development; An 88B Covenant, under the Conveyancing Act 1919, shall be applied to the title of those lots so burdened, to ensure the long term maintenance of the Asset Protection Zones / Defendable Spaces. A hydrant water supply shall be installed in accordance with the specifications of Australian Standard A.S 2419.2 - 2005. Hydrants shall have a flow rate of 10 litres / second and be located on the opposite side 	Preparation of the PA's for future stages	Landowner / Developer

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		<p>of the road from the bushfire threat.</p> <ul style="list-style-type: none"> Blue hydrant markers shall be provided to locate the positions of the hydrants. The markers shall be positioned on the hydrant side of the centreline of the road pavement. <p>General:</p> <ul style="list-style-type: none"> Future DA's/PA's for class 1, 2, 3 and 9 buildings as identified by the Building Code of Australia shall be subject to separate applications under section 79BA and 100B of the EP & A Act and shall address the requirements of 'Planning for Bushfire Protection 2006'. 		
CP12- Geotechnical	To effectively manage any geotechnical limitations of the site.	<p>That construction standard for future roads and buildings, including footings and foundations, be undertaken in accordance with the Good Hill slope Engineering Practices as set out in Australian Geomechanics Vol. 42 No. 1 March 2007.</p> <p>Detailed construction management plans and dewatering assessments are to be provided where excavations are proposed to be undertaken below the permanent groundwater table. These plans are to be provided with the Construction Certificate documentation.</p> <p>The following geotechnical investigations are to be undertaken:</p> <ul style="list-style-type: none"> Boreholes to allow for the characterisation of underlying geology and determination of bed-rock depths; Penetration testings such as Standard Penetration Test (SPT). Dynamic Cone Penetration Test (DCP) and/or Cone Penetration Tests (CPT) to determine strength of sub-surface materials for future footing/foundation design; Californian bearing ration (CBR) lab testing to determine strength of sub-grade material for pavement design; Shrink/Swell and Atterberg Limit lab testings to determine soil reactivity for foundation classification; and Settlement analysis to determine future ground settlements beneath engineered structures (buildings, roads and services). 	With the CC documentation	Landowner / Developer
CP13 - Flooding	To effectively manage flooding,	<ul style="list-style-type: none"> Residential lots shall be filled to a minimum level of RL 5.0mAHd; 	CC documentation	Landowner /

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	including compliance with any future climate change and sea level rise scenarios.	<ul style="list-style-type: none"> Road crossings over flow paths within the proposed development will be designed to provide 100 year ARI (plus climate change) immunity and comply with PMHC's AUSPEC Design Specifications; The minimum floor level of any residential dwelling is to be RL 5.27mAHD; and All future PA's and DA's for the site shall have regard to the provisions of the NSW Coastal Planning Guideline: Adapting to Sea Level Rise (DOP, August, 2010) 	Future PA's/DA's	Developer Landowner / Developer
CP14 - Water Cycle Management (Eastern catchments)	To ensure maintenance of the existing groundwater conditions, to mitigate potential impacts on the Littoral Rainforest	<p>General:</p> <ul style="list-style-type: none"> The Stage 1 Project Application 'Environmental Works' shall provide temporary fencing to delineate the area required for the three (3) biofiltration units adjacent to the littoral rainforest. All stormwater runoff must be adequately treated at its source and/or diverted through the stormwater process designed for the site prior to the stormwater being discharged to surface water and groundwater sources; The final design of the stormwater treatment system shall be forwarded to the LPMA for consideration/information. <p>Additional works:</p> <p>Prior to the preparation of the Stage 2 PA, the following additional groundwater monitoring shall be undertaken, in accordance with Martens, 2010:</p> <ul style="list-style-type: none"> More rigorous geotechnical investigations and design will be required for the design of the recharge pits, including: <ul style="list-style-type: none"> Establish a series of four (4) groundwater bores within the proposed revegetated buffer zone to document sub-surface conditions. At each bore, further testing of saturated hydraulic conductivity in the underlying sand aquifer is to be undertaken. Measurements of storativity/specific yield are to be made in order that the groundwater mounding from recharge pits can be minimised. Each bore shall be instrumented for a period of six (6) months in order that long-term groundwater level fluctuations can be validated and incorporated into the 	<p>Stage 1 works</p> <p>With relevant CC</p> <p>Prior to the preparation of the Stage 2 PA</p>	<p>Landowner / Developer</p> <p>Landowner / Developer</p> <p>Landowner / Developer</p>

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		<p>design of the recharge pits.</p> <ul style="list-style-type: none"> ○ Two (2) of the existing bores at higher elevations shall be instrumented for the same six (6) month period. <ul style="list-style-type: none"> • Establishment two (2) further monitoring bores within the SEPP 26 area (if this is possible) so that the current groundwater model for the study area can be extended to the coast as far as practical. Recommendations include: <ul style="list-style-type: none"> ○ Bores to be located in either sub-catchments C2 or C3; and ○ Bores are to be instrumented for the same six (6) month period as noted above. Bores within the SEPP 26 area may need to be installed by hand or water jetting given the site sensitivity and difficulty of site access. • Undertake further groundwater quality monitoring (notably nutrients) to provide base-line groundwater quality data. This will assist with design of the bio-filtration units. In addition to those parameters already covered by this study, bound and unbound phosphorus levels shall be determined in any future sampling. This will enable improved design of biofiltration units. Two (2) further rounds of water quality sampling shall be undertaken, spaced three to six months apart from established bores. • Groundwater salinity measurements shall be further documented, including continuous monitoring for the six month period noted above at the following three locations: <ul style="list-style-type: none"> ○ Within the SEPP 26 forest; ○ Within the revegetation area; and ○ An existing bore location further upslope. • Surface water sampling shall be undertaken to determine existing surface water nutrient concentrations. A minimum of three rounds of sampling during and following rainfall runoff periods is recommended. This will assist with design of the bio-filtration units. • The Preparation of a report to accompany the Stage Two PA to provide the following: <ul style="list-style-type: none"> ○ An updated groundwater model for the area incorporating the findings of past and on-going groundwater investigations and monitoring. The model should demonstrate that post-development drawdown (-ve or +ve) is minimised or avoided altogether within the SEPP 26 rainforest area. 		

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		<ul style="list-style-type: none"> ○ A more detailed sea level rise groundwater model should be developed which would take into account of any effects of coastal recession. This would enable 'fine tuning' of the design of the groundwater recharge system(s). ○ Confirmation of the design of end-of-line stormwater structures. This should include on a sub-catchment basis, revised OSD requirements and a daily water balance modelling demonstrating that surface moisture conditions within the SEPP 26 rainforest will not be affected by the proposed stormwater management infrastructure. ○ Updated and appropriately supported designs of the stormwater recharge pit system. <p>The design and construction standards of the biofiltration units and road infrastructure for the eastern catchments shall, subject to detailed design generally, satisfy the following, as set out by Martens, 2010:</p> <ul style="list-style-type: none"> • Stormwater discharge control structures to be fitted with variable or exchangeable orifice or weir plates that can be used to adjust flow rates to the recharge pits; • The deep stormwater infiltration pits (or trenches depending on final designs) shall be excavated so that they extend through the surface clay layer and intersect the lower sand aquifer. There should be good connectivity between the infiltration trench bed and the underlying permeable aquifer. The effect of this will be to ensure that surface water is allowed to rapidly enter the local groundwater table without excessively saturating surface soils except during extreme rainfall conditions. This mechanism will have the additional benefit of reducing some of the edge effects of the existing pasture which is likely to have raised surface soil moisture conditions adjacent to the SEPP 26 forest. • Water which does not infiltrate to the deeper groundwater system (ie surcharges from the biofiltration units), is to be evenly distributed as it is released into the planted vegetated buffer area. Further to this, ground within the buffer area should be prepared in such a way so as to ensure maximum infiltration. This can be achieved by way of ground 'riffing' or minor contouring. • Groundwater should not be significantly intersected and hence groundwater flow impeded or redirected. On hillslopes the excavations shall not exceed 2.5m below ground level. If deeper excavations are required, then suitable mitigation measures shall be included to ensure that groundwater flow is not redirected or permanently lowered. • On the lower slopes (below 12.5m AHD, which excludes the majority of 	Details to be provided with the relevant CC documentation	

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		<p>the residential development area), excavations > 1m in depth (other than for the deep infiltration pits) shall be plastic lined and backfilled with low permeability materials.</p> <ul style="list-style-type: none"> Roads in low lying areas (below 12.5m AHD), shall be constructed to enable sufficient durability and bearing pressure under the assumption that the groundwater table may be close to or within the sub-grade materials, or be designed somewhat elevated to ensure that pavement and upper sub-grade materials do not become water logged. OSD structures, including domestic rainwater tanks (where these are installed within the catchments) and other surface storages shall be used to ensure that post-development flow rates approximate as close as possible pre-development flow rates. <p>Groundwater Licences:</p> <ul style="list-style-type: none"> All groundwater licences must be obtained and associated works appropriately authorised prior to works commencing. All works that intersect the aquifer shall be licensed by NOW prior to any work being carried out. This includes groundwater excavations within the groundwater aquifer, which includes, but is not necessarily limited to excavations for on-site detention basins, recharge pits, all monitoring and production bores (if any), wells and spear points. Therefore all Form A's associated with the construction of bores must be submitted to NOW at the time drilling is undertaken. For all area on the site that requires dewatering, a water licence under Part 5 of the Water Act 1912 is to be obtained prior to commencement of work. The water licence application is to be accompanied by a groundwater and excavation monitoring program and acid sulfate soils contingency plan, developed to the satisfaction of NOW. 	Prior to works commencing	Landowner / Developer
CP15 - Water Cycle Management (Western catchments)	To ensure that the post development water quality and quantity satisfy best practice guidelines.	<p>North-western sub-catchment (Lake Innes):</p> <ul style="list-style-type: none"> The stormwater biofiltration and detention basin for the NW sub-catchment is to be located generally as shown on Exhibit 08A. Detailed modelling and design shall be undertaken in accordance with the aims of the IWCMP and Auspec. The facility shall be designed with sufficient capacity to ensure post development flows are attenuated to pre-development levels for all storm events up to and including the 100 year ARI flood event; and 	Details to be provided with the relevant PA and CC documentation.	Landowner / Developer

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		<ul style="list-style-type: none"> The top of water level within the basin is located below the road surface level in Ocean Drive (with allowance for freeboard). <p>South-western sub-catchment (Duchess Gully):</p> <ul style="list-style-type: none"> A groundwater management plan and monitoring plan for the proposal must be prepared to NOW's satisfaction. The biofiltration basin, erosion controls and riparian revegetation for the SW sub-catchment is to be located generally as shown on Exhibit 08A. The Stage 1 Project Application 'Environmental Works' shall provide temporary fencing to delineate the area required for the biofiltration basin, erosion controls and riparian revegetation works. Detailed modelling and design of the biofiltration basin shall be undertaken in accordance with the aims of the IWCMP and Auspec. The outlet structures shall be designed generally in accordance with the 'indicative outlet detail' (DECCW), shown on Exhibit 08B. The riparian revegetation works shall be undertaken in the areas specified on Exhibit 08B. 	Stage 2 PA and future relevant PA and CC documentation.	Landowner / Developer
CP16 - Heritage and Archaeology	To preserve and protect items of Aboriginal significance.	<ul style="list-style-type: none"> The Stage 1 Project Application shall include the temporary exclusion fencing along the western edge of the planted buffer to the Littoral Rainforest, to ensure pedestrian restriction and protection of the identified aboriginal artefact. Temporary fencing shall be erected adjacent to the Duchess Gully vegetated area to preserve any archaeological materials which may be present. Continued consultation with the registered local Aboriginal representatives shall be undertaken in the ongoing management of the Aboriginal Cultural Heritage values. Evidence of this consultation shall be collated and provided to the consent authority upon request. In the event that surface disturbance identifies a new Aboriginal site, all works shall halt in the immediate area to prevent any further impacts to the object(s). A suitably qualified archaeologist and representatives of the local Aboriginal community shall be contacted to determine the significance (cultural and scientific) of the object(s). The site shall be registered in the Aboriginal Heritage Information Management System (AHIMS) (managed by DECCW) and the management outcome for the site included in the information provided to the AHIMS. The proponent shall consult with the Aboriginal community representatives the 	Stage 1 Project Application	Landowner / Developer

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		<p>archaeologist and DECCW to develop and implement management strategies for all objects/sites.</p> <ul style="list-style-type: none"> If human remains are located in the event that surface disturbance occurs, all works shall halt in the immediate area to prevent any further impacts to the remains. The NSW Police shall be contacted immediately. No action shall be undertaken until Police provide written notification to the proponent. If the skeletal remains are identified as Aboriginal, the proponent shall contact DECCW's Enviroline on 131555. No works are to continue until DECCW provide written notification to the proponent. All reasonable efforts shall be made to avoid impacts to Aboriginal cultural heritage at all stages of the development works. If impacts are unavoidable, mitigation measures shall be negotiated with the local Aboriginal community and DECCW. All sites impacted shall have a DECCW Aboriginal Site Impact Recording (ASIR) form completed and submitted to DECCW AHIMS unit within 3 months of completion of the works. An Aboriginal Cultural Education Program shall be developed for the induction of all personnel and contractors involved on the construction activities on site. Records are to be kept of which staff/contractors were inducted and when for the duration of the project. The program should be developed and implemented in collaboration with the local Aboriginal community. 		
CP17 - Flora and Fauna	To minimise and manage any potential impacts on flora and fauna biodiversity.	<p><u>Littoral Rainforest:</u></p> <p>Implement a Vegetation Management Plan as part of the Stage 1 Project Application, in order to :</p> <ul style="list-style-type: none"> Immediately improve the existing condition of the rainforest by the removal of the weeds along its western edge; Provide longer-term enhancement of the existing rainforest by decreasing the edge-to-area ratio through plantings along the western boundary; Restrict and control public access through the rainforest; and Ensure that revegetation works are well established and fenced off prior to the commencement of other stages of the proposed residential, commercial and tourist project. <p>The VMP shall include:</p>	Stage 1 Project Application	Landowner / Developer

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		<ul style="list-style-type: none"> Plantings of coast banksia woodland in the south-east corner into the Littoral Rainforest using additional plantings and bush regeneration techniques and emphasise coast banksias in the landscaping of the site. Properly constructed and managed, this corridor will provide feeding resources for the common blossom bat, assist in fauna passage for the more cryptic animal species and provide a greater biodiversity; An elevated walkway to the beach along the existing pathway and improve drainage or minimize erosion by rip-rap filters or similar structures; and Temporary protective fencing along the western edge of the planted buffer to the Littoral Rainforest. <p><u>Duchess Gully:</u></p> <ul style="list-style-type: none"> Provide a riparian buffer along the water course in the west and work with neighbouring landowners to enhance the riparian connection and widen the wildlife corridor where it passes through the site. Engage bushland regeneration to undertake weed control. Enter into a Planning Agreement with PMHC as per the Heads of Agreement in Appendix D to provide detail of landowner obligations with respect to establishment and maintenance of environmental works over a 20 year period. A Vegetation Management Plan shall be prepared in relation to the buffer area to Duchess Gully. The VMP shall be submitted with the DA/PA for Stage 2. <p><u>Stage 2 VMP:</u></p> <ul style="list-style-type: none"> A Vegetation Management Plan shall be prepared in relation to the 'grassed area' on the western side of the temporary exclusion fence. The VMP shall be submitted with the DA/PA for Stage 2. The Stage 2 VMP shall include details of the permanent protective fencing to the Littoral Rainforest, adjacent to the proposed footpath, to Councils satisfaction. <p><u>Revegetation - general:</u></p> <ul style="list-style-type: none"> Any proposed revegetation must be in accordance with best practice measures, specifications and principles as outlined Nationally accepted 	<p>Stage 2 DA/PA</p> <p>Stage 2 DA/PA</p>	<p>Landowner / Developer</p> <p>Landowner / Developer</p>

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		<p>guidelines (where appropriate) – <i>Flora Bank Guidelines</i> (1998-2000), <i>Germplasm conservation guidelines for Australia</i> (Germplasm Working Group 1997) and revegetation manuals (e.g. Corr & Whyte 2003), using suitable qualified and experienced bush regenerators. Furthermore, any replanting of native species should use stock, seeds or other material of local provenance.</p> <ul style="list-style-type: none"> If seed and/or vegetative material from a threatened species or taxa that constitute an endangered ecological community that is outside the approved development footprint, then a licence under s91 of the Threatened Species conservation Act 1995 will be required. 		
CP18 - Noise	<p>To minimise the impact of road traffic noise on surrounding residents and where necessary, comply with all relevant standards to reduce noise to an acceptable level:</p> <ul style="list-style-type: none"> L Aeq 45dBA daytime internal noise; and L Aeq 40dBA night time internal noise. 	<p>The final acoustic treatment along Ocean Drive will be consistent with the outcomes of the PMHC Ocean Drive Corridor Plan and Area 14 DCP. Noise attenuation measures including buffers, mounds, landscaping and construction standards are to be considered as part of each development application.</p> <p>All proposed dwellings to be located on residential allotments that share a common boundary with Ocean Drive, as indicated on Exhibit 05A, shall be designed to meet the following construction standards:</p> <ul style="list-style-type: none"> Single storey – Category 2 Two storey – Category 2 <p>All proposed dwellings to be located on residential allotments with frontage to the detention basin, as indicated on Exhibit 05A, shall be designed to meet the following construction standards:</p> <ul style="list-style-type: none"> Single storey – Category 2 Two storey – Category 2 <p>All proposed dwellings to be located on all other residential allotments within the site shall be designed to meet the following construction standards:</p> <ul style="list-style-type: none"> Single storey – Category 1 Two storey – Category 1 <p>(The construction categories are outlined in AS 3671-1989, "<i>Acoustics - Road traffic noise intrusion - Building siting and construction</i>", as follows:</p> <ul style="list-style-type: none"> Category 1 – Standard construction; openings, including open windows and doors may comprise up to 10% of the exposed façade; Category 2 – Standard construction except for light-weight elements such as fibrous cement or metal cladding or all-glass facades. 	Details to be provided with the relevant DA documentation.	Landowner / Developer

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		Windows, doors and other openings must be closed).		
CP19-The Environment	To ensure the on-going protection of the environment.	The landowners/developers shall implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the construction, operation, maintenance, decommissioning or rehabilitation of the project	Throughout duration of works	Landowner / proponent
CP20 – Plant and equipment	To ensure the safety of workers on site	All plant and equipment installed at the premises or used in connection with the proposal: <ul style="list-style-type: none"> • Shall be maintained in a proper and efficient condition; and • Shall be operated in a proper and efficient manner. 	Throughout duration of works	Landowner / proponent
CP21 – Air	To protect air quality	All dust generating activities on the site must be managed in a proper and efficient manner to minimise dust emissions from the site.	Throughout duration of works	Landowner / proponent
CP22 - Water	To ensure maintenance of the water quality	Except as may be expressly provide by a licence under the <i>Protection of the Environment Operations Act 1997</i> in relation of the development, section 120 of the <i>Protection of the Environment Operations Act 1997</i> prohibiting the pollution of waters must be complied with on connection with the carrying out of the development. Soil and water management controls shall be employed to minimise soil erosion and the discharge of sediment and other pollutants to lands during construction activities in accordance with the requirements outlined in <i>Managing Urban Stormwater: Soils and Construction</i> (Landcom, 2004)	Throughout duration of works	Landowner / proponent
CP23 – Waste	To ensure the proper disposal of waste	All waste and fill materials, whether imported or generated on site, shall be assessed, classified, managed and disposed of in accordance with the <i>Waste Classification Guidelines</i> (DECC 2008). All waste and fill material removed from the site shall only be directed to a waste management facility lawfully permitted to accept the materials.	Throughout duration of works	Landowner / proponent
CP24 – Street tree planting	To ensure use of appropriate tree species within subdivision.	All future PA's/DA's shall incorporate street trees from the following list:	All future DA's/PA's	Landowner / proponent

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		<ul style="list-style-type: none"> • Tuckeroo (<i>Cupaniopsis anacardioides</i>); • Rosewood (<i>Dysoxylon fraserianum</i>); • Smooth Quandong (<i>Elaeocarpus obovatus</i>); • Broad-leaved Paperbark (<i>Melaleuca quinquinervia</i>); • Beach Alectryon (<i>Alectryon coriaceus</i>); • Coogera (Rose Tamarind) (<i>Arytera divaricata</i>); • Oyster Bay Pine (<i>Callitris rhomboidea</i>); • Hairy Rosewood (<i>Dysoxylon rufum</i>); • Guioa (<i>Guioa semiglaucula</i>); and • Water Gum (<i>Tristania laurina</i>). 		
CP25 – Permanent Fencing	To ensure that the permanent fencing to the revegetation area is installed in stages, to manage environmental impacts in a coordinated manner.	<p>The design details for the permanent fencing adjacent to the revegetation area shall be approved by PMHC. Confirmation of approval shall be provided with the DA for the corresponding adjoining stages; being M2, S2 and S5.</p> <p>The erection of the permanent fence to the Littoral Rainforest buffer, adjacent to the proposed footpath, shall occur at the completion of works for the corresponding adjoining stages; being M2, S2 and S5.</p>	The DA for stages M2, S2 and S5	Landowner / proponent
CP26 – Construction Management	To ensure the appropriate management of potential construction impacts, for the on-going protection of the environment.	All future DA's for works within each stage shall include a Construction Management Strategy.	All future DA's/PA's	Landowner / proponent

No.	Objective	Commitment	Timing	Responsibility
PA1 - General	To ensure that all works associated with Stage 1 are carried out in accordance with the Project Application approval and that the potential environmental impacts are managed.	<p>All works are to be carried out generally in accordance with the Environmental Assessment prepared by King + Campbell Pty Ltd and the supporting specialist reports/plans including:</p> <ul style="list-style-type: none"> Section 6 - Vegetation Management Plan (VMP) – Specification, King + Campbell, in consultation with Wild Things Native Gardens; Exhibit PA05 Revision F (2 sheets) and Exhibit PA06 Revision C (sheet 1) and Revision A (sheet 2) – Vegetation Management Plan and Rainforest Boardwalk, King + Campbell Appendix PA A – Gantt Chart Flora and Fauna Report, Peter Parker Environmental Consultant, July, 2010 (Appendix C) SMEC Coastal Hazard Study (Appendix G) Martens Groundwater Study (Appendix D) VPA between the landowners and PMHC (as included in PPR) 	With CC documentation (boardwalk) and during all works on site	Landowner / proponent
PA2 – Vegetation Management Plan (VMP)	<p>To ensure the long term protection of Littoral Rainforest No.116 for future generations, through specifying the following control measures;</p> <ul style="list-style-type: none"> fencing and vegetation buffering; bush regeneration treatments within and adjacent Littoral Rainforest No. 116, including weed control; and revegetation providing both protection of Littoral Rainforest No.116 as well as a meaningful extension to it. 	<p>All works within the Project Application site boundary shall be carried out in accordance with the VMP specification at Section 6.</p> <p>The Vegetation Management Plan will :</p> <ul style="list-style-type: none"> Immediately improve the existing condition of the rainforest through the removal of weeds along its western edge; Provide longer-term enhancement of the existing rainforest by decreasing the edge-to-area ratio through plantings along the western boundary; Restrict and control public access through the rainforest; and Ensure that revegetation works are well established and fenced off prior to the commencement of other stages of the proposed residential, commercial and tourist project. <p>The VMP will include:</p> <ul style="list-style-type: none"> Plantings of coast banksia woodland in the south-east corner into the Littoral Rainforest using additional plantings and bush regeneration techniques and emphasise coast banksias in the landscaping of the site. 	Stage 1 works	Landowner / proponent

No.	Objective	Commitment	Timing	Responsibility
		<p>Properly constructed and managed, this corridor will provide feeding resources for the common blossom bat, assist in fauna passage for the more cryptic animal species and provide a greater biodiversity;</p> <ul style="list-style-type: none"> • An elevated walkway to the beach along the existing pathway and improve drainage or minimize erosion by rip-rap filters or similar structures; and • Temporary protective fencing along the western edge of the planted buffer to the Littoral Rainforest. 		
PA3 – Voluntary Planning Agreement	To ensure the long-term management and maintenance of areas of open space and conservation.	<p>The VPA in relation to Stage 1 shall provide for the following:</p> <ul style="list-style-type: none"> • The establishment of environmental works and beach access as part of the Stage 1 Project Application; • The maintenance of these lands in accordance with an approved management plan for ten (10) years; and • The payment of contributions at the subdivision stage to fund a further ten (10) years maintenance. 	Stage 1	Landowner / proponent
PA4 – Staging	To ensure potential environmental impacts are managed in a coordinated manner.	<p>Revegetation works are to be undertaken in stages, generally as set out in the VMP and supported by the Gantt Chart (Appendix PA_A), including:</p> <p>Stage 1 – Weeding, establishment of colonising vegetation and feeding resources and erection of temporary fencing;</p> <p>Stage 2 - Ongoing weeding, introduction of long lived rainforest species, construction of pedestrian boardwalk prior to the completion of the second stage of the Concept Plan (either M2 or S2); and</p> <p>Stage 3 –Planting associated with biofiltration pond edges, ongoing rehabilitation of regeneration area.</p>	<p>Stage 1 – within 6 months of project commencement</p> <p>Stage 2 – completed within 3.5 years of project commencement</p>	Landowner / proponent
PA5 - Public Consultation	To ensure effective and receptive consultation with the local community and key interest groups	<p>A public meeting with the local progress associations and LALC is to be conducted during the exhibition period for the CP/Stage 1 Project Application to ensure the local community has the opportunity to be briefed on the extent of the proposed Stage 1 Environmental Works.</p> <p>Signage shall be erected adjacent to the pedestrian boardwalk to advise of the state significance of the rainforest and of its floristic makeup.</p>	During the exhibition period	Landowner / proponent

No.	Objective	Commitment	Timing	Responsibility
		Signage shall be placed at the edge of the littoral rainforest adjacent to each T-intersection to direct the public to the beach access point.		
PA6 - Bushfire	To effectively manage the sites natural hazards.	The proposed revegetation area adjacent to the rainforest shall incorporate rainforest species only, to ensure retention of the rainforest classification for Bushfire buffer purposes.	When undertaking work in accordance with VMP	Landowner / proponent
PA7 - Heritage and Archaeology	To preserve and protect items of Aboriginal significance.	Contractors involved in weed removal, revegetation, fencing and stormwater management shall be advised of their obligations under the NPWS Act 1974 and the NSW Heritage Act 1977. Should artefacts or sites of potential cultural significance be uncovered, work will cease and the NSW DECC will be contacted	Prior to works commencing on site	Landowner / proponent
PA8- Flora and Fauna	To minimise and manage any potential impacts on flora and fauna biodiversity.	All works to be carried out in accordance with the recommendations of the Flora and Fauna Report (Appendix C of the Concept Plan Application) and the Vegetation Management Plan contained in Section 6 of this Application and the Gantt Sheet contained in Appendix PA-A.. A temporary fence will be erected adjacent to the existing vegetation within Duchess Gully for protection from construction activity.	Prior to works commencing on site	Landowner / proponent
PA9 - Water Cycle Management	To clearly define the areas required for future stormwater infrastructure and revegetation works, ensuring the maintenance of the existing groundwater conditions, to mitigate potential impacts on the Littoral Rainforest	Temporary fencing shall be erected around the future biofiltration unit locations to protect the proposed revegetation areas.	Prior to works commencing on site	Landowner / proponent
PA10 – Monitoring of Revegetation / Regeneration Works	To measure the effectiveness of the VMP works by benchmarking against the current condition of the buffer area.	Photo monitoring at the 11 locations shown on the aerial photograph contained in Appendix PA_B is to be undertaken on a six monthly basis during the establishment phase and the five year management phase.	Six monthly from commencement to end of management period.	Landowner
PA11 – Beach	To protect the 'SEPP – Littoral	General:		

No.	Objective	Commitment	Timing	Responsibility
Access / Pedestrian Boardwalk	Rainforest' and 'Littoral Rainforest' EEC and prevent further edge clearing / damage of this environmentally sensitive community.	<p>Development, erection and all works associated with the construction of the pedestrian boardwalk through the mapped 'SEPP 26 – Littoral Rainforest' and 'Littoral Rainforest' EEC must only occur within the existing track footprint (i.e. 2.2m wide track), as shown on Exhibit PA06, sheet 1.</p> <p>Specific Requirements:</p> <ul style="list-style-type: none"> • The boardwalk is to be raised by no less than 0.5m and constructed of hardwood and "Envirowalk mini mesh" treads or equivalent; • The proposed 'board and chain' beach access shall be replaced with holey belt rubber matting and hardwood timber guide rails; • Handrails / barriers shall be provided to the pedestrian boardwalk; and • The detailed design of the beach access shall be agreed to by PMHC prior to the issue of the CC. 	<p>During construction works</p> <p>With CC documentation</p>	<p>Landowner / proponent</p> <p>Landowner / proponent</p>