

Submissions Report for
Concept Plan Approval
(Residential, Commercial / Tourist Development and
Environmental Works); and

Project Application Approval
(Stage 1 'Environmental Works')

Lot 1 DP 374315, Lot 4 DP 615261 and
Part Crown Reserves (R82555 and R754444),
Ocean Drive, Lake Cathie

Application No. MP07_0010

Prepared for:

Milland Pty Ltd and Seawide Pty Ltd (the 'Landowners')

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Attachment S2 –Letter to DoP dated 10 January 2007 seeking Minister's opinion regarding Part 3A.

Attachment S3 –Letter from DoP dated 18 January 2007 confirming applicability of Part 3A.

Attachment S4 –Correspondence from DOP, 17 January 2011.

Attachment S5 –Correspondence to PMHC regarding traffic and access arrangements (2 February, 2011) and email response from PMHC.

Attachment S6 –Section 5 and Sheets 7-12 of Attachment B of the Martens & Associates Report 2010.

Attachment S7 –Correspondence from DoP dated 12 July 2005.

Section 1

Introduction

This Submissions Report ('report') has been prepared following the public exhibition of the Environmental Assessment (EA) for two (2) concurrent applications:

A Concept Plan application for residential, commercial and tourist development and environmental works; and

A Project Application for the Stage 1 'environmental works' associated with the SEPP 26 Littoral Rainforest.

The EA was lodged in November, 2010 for the approval of the Minister for Planning under Part 3A of the Environmental Planning and Assessment Act, 1979. The concurrent applications were then placed on public exhibition from 19 November, 2010 until 20 December, 2010.

During this time a total of 16 submissions were received by the Department, including submissions from State Government agencies, Port Macquarie Hastings Council, the local progress associations and individual members of the local community.

By letter dated 17 January 2011 (refer Attachment S4) the Department has identified six (6) 'key issues' to be addressed, together with a request for additional information/clarification in relation to three (3) matters.

Accordingly, this report provides the following:

Section 2: A summary of all revisions to the Concept Plan and Project Applications, noting that apart from the identified minor amendments the proposed design, layout and general content of both applications remain unaltered;

Section 3: A full description of the Concept Plan and Stage 1 Project Application for which the Ministers approval is now sought;

Section 4: A response in table format to all issues raised during the public exhibition period;

Section 5: A detailed response to the Key Issues and clarification matters identified by the Department in correspondence of 17 January, 2011; and

Section 6: A revised Statement of Commitments

Section 2

Summary of Revisions

The purpose of this section is to provide a summary of the proposed revisions to both the Concept Plan and Stage 1 Project Application.

There are three (3) primary revisions, as follows:

1. Revision to Exhibits:

A new exhibit set has been produced to include three (3) minor revisions to the proposal as follows:

- a. The '*extent of Concept Plan*' boundary and the '*extent of Project Application*' boundary have been revised on exhibits, as required, to include the whole of existing Lot 4 in DP 615261. The boundary had not originally included all of the SEPP 26 Littoral Rainforest on Lot 4. The Concept Plan, Project Application and Vegetation Management Plan have been amended to allow for the inclusion of weeding works within the SEPP 26 rainforest contained on Lot 4 in response to the Port Macquarie Hastings Council (PMHC) summary.

This revision was seen as appropriate to clearly demonstrate that weed removal within that part of the Littoral Rainforest which is currently in private ownership (i.e. Lot 4) will be carried out as part of the proposed Vegetation Management Plan. This is in addition to the 10m wide strip within the Crown Land adjoining Lot 1, the edge of which has been identified to be affected by weeds. This area remains included in the extent of Concept Plan and Stage 1 Project Application works.

- b. An increase to the buffer setback to Duchess Gully has been incorporated on the exhibits. The total buffer width is now on average 30m, in response to the submission by PMHC. The resultant amendment to the road layout is minor.
- c. Additional rainforest revegetation is proposed between the fence and the pathway/cycleway in response to the submission by PMHC. This additional rainforest revegetation is proposed to be undertaken with the construction of the pathway and perimeter road.

The table below sets out new revision numbers for the exhibits.

EA Exhibit number	EA Exhibit description	Revised Exhibit number	Description of Revision
01, rev C	Site Locality and Context Plan	01, rev D	Concept road layout for site updated.
02, rev D	Site Survey	02, rev E	Boundary to ' <i>extent of Concept Plan application</i> ' revised to include the whole of Lot 4 to allow for weeding works within that part of the Littoral Rainforest currently within private ownership.
03, rev C	Aerial Photograph	03, rev D	As above – revision to extent of Concept Plan Application to coincide with boundary of Lot 4.
04A, rev E	Site Analysis	04A, rev F	As above – revision to extent of Concept Plan Application to coincide with boundary of Lot 4; and ' <i>Future road connections</i> ' within the adjoining St Vincent's Foundation land to the west of the site deleted. New notation on plan to recognise that development of this adjoining land will connect to the collector road included as part of this CP proposal.
04B, rev C	Opportunities and Constraints	04B, rev E	As above – revision to extent of Concept Plan Application to coincide with boundary of Lot 4; Realignment of road adjacent to Duchess Gully; and General corrections to minor drafting anomalies.
05A, rev F	Subdivision Concept Plan	05A, rev G	As above – revision to extent of Concept Plan Application to coincide with boundary of Lot 4; Road locations within adjoining property to the west deleted; Realignment of road adjacent to Duchess Gully; and Revegetation strip on western side of exclusion fence to replace 'open grassed area'.
05B, rev B	Indicative Staging Plan	05B, rev C	As above – revision to extent of Concept Plan Application to coincide with boundary of Lot 4; Road locations within adjoining property to the west deleted; Realignment of road adjacent to Duchess Gully; and Revegetation strip on western side of exclusion fence to replace 'open grassed area'.
06A, rev C	Landscape Concept Plan	06A, rev D	As above – revision to extent of Concept Plan Application to coincide with boundary of Lot 4; Road locations within adjoining property to the west deleted; Realignment of road adjacent to Duchess Gully; and Revegetation strip on western side of exclusion fence to replace 'open grassed area'.
06B, rev C	Landscape Concept Detail	06B, rev D	Stage 2 revegetation on western side of exclusion fence to replace 'open grassed area'.

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EA Exhibit number	EA Exhibit description	Revised Exhibit number	Description of Revision
06C, rev C	Landscape Concept Detail	06C, rev C	No revisions
06D	Landscape Concept Detail	06D, rev D	Revegetation strip on western side of exclusion fence to replace 'open grassed area'.
07, rev C	Indicative Hilltop Village Architectural Treatment	07, rev C	No revisions.
08A, rev E	Stormwater Concept Plan	08A, rev F	As above – revision to extent of Concept Plan Application to coincide with boundary of Lot 4; Road locations within adjoining property to the west deleted; Realignment of road adjacent to Duchess Gully; Rainforest revegetation on western side of exclusion fence to replace 'open grassed area'; and Additional revisions –recommendations from pages 49 to 50 of Groundwater Study, Martens and Associates, July, 2010, included on exhibit.
08B, rev B	Indicative South Western Biofiltration Basin Detail	08B, rev C	Exhibit revised to: <ul style="list-style-type: none"> - Provide an average buffer width of 30m to Duchess Gully. This has resulted in a minor realignment to the adjoining road; - Clearly delineate between existing (riparian forest) and proposed revegetation areas.
08C, rev C	Western Catchments Music Model Setup Post Development	08C, rev C	No revisions.
08D, rev C	Western Catchments Drains Model Layout	08D, rev C	No revisions.
08E, rev C	Western Catchments Drains Model Pre Development Input & Outputs	08E, rev C	No revisions.
08F, rev C	Western Catchments Drains Model Post Development Input & Outputs	08F, rev C	No revisions.
08G	Eastern Catchments (Appendix D - sheet 6 of 11, Martens, July 2010)	08G	No revisions.
08H	Eastern Catchments (Appendix D - sheet 7 of 11, Martens, July 2010)	08H	No revisions.
08I	Eastern Catchments (Appendix D - sheet 8 of 11, Martens, July 2010)	08I	No revisions.

EA Exhibit number	EA Exhibit description	Revised Exhibit number	Description of Revision
08J	Eastern Catchments (Appendix D - sheet 9 of 11, Martens, July 2010)	08J	No revisions.
09A, rev C	Photo Locations for View Analysis	09A, rev D	Boundary to ' <i>extent of Concept Plan application</i> ' revised to include the whole of Lot 4 and therefore that part of the Littoral Rainforest currently within private ownership.
09B, rev C, 3 sheets	View Analysis	09B, rev C, 3 sheets	No revisions.
09C, rev D, 4 sheets	View Analysis: Beach Sections and Photos	09C, rev E, 4 sheets	As above – revision to extent of Concept Plan Application to coincide with boundary of Lot 4.
09D, rev C	View Analysis: Panoramic View from Site	09D, rev C	No revisions.
10, rev H	Proposed Zone Plan.	10, rev J	As above – revision to extent of Concept Plan Application to coincide with boundary of Lot 4; and Road locations within adjoining property to the west deleted (note added).
PA01, rev B	Site Context	PA01, rev C	Boundary to ' <i>extent of Project Application</i> ' revised to include the whole of Lot 4 and therefore that part of the Littoral Rainforest currently within private ownership; and Fence line and row of <i>Lomandra longifolia</i> added.
PA02, rev B	Site Survey	PA02, rev C	As above – revision to extent of Concept Plan Application to coincide with boundary of Lot 4.
PA03, rev B	Aerial Photograph	PA03, rev C	As above – revision to extent of Concept Plan Application to coincide with boundary of Lot 4.
PA04, rev C, sheet 01	Site Analysis	PA04, rev D, sheet 01	As above – revision to extent of Concept Plan Application to coincide with boundary of Lot 4.
PA04, rev B, sheet 2	Site Analysis – Baseline Weed Map	PA04, rev C, sheet 02	As above – revision to extent of Concept Plan Application to coincide with boundary of Lot 4.
PA05, rev D, sheet 1	Vegetation Management Plan	PA05, rev E, sheet 1	As above – revision to extent of Concept Plan Application to coincide with boundary of Lot 4. Additional revisions: <ul style="list-style-type: none"> - notation in relation to '<i>extent of weed removal inside SEPP 26 edge</i>' amended; - notation added to require ground ruffling or minor ground contouring within areas of revegetation (consistent with Exhibit 08A).
PA05, rev D, sheet 2,	Vegetation Management Plan	PA05, rev E, sheet 1	As above – revision to extent of Concept Plan Application to coincide with boundary of Lot 4, weed removal notation amended and ground ruffling notation added.

EA Exhibit number	EA Exhibit description	Revised Exhibit number	Description of Revision
PA06, rev A, sheet 1	Rainforest Boardwalk	PA06, rev B, sheet 1	Revisions to design and finish of the boardwalk have been incorporated on the plan, as set out at commitment number PA09.
PA06, rev A, sheet 2	Rainforest Boardwalk	PA06, rev A, sheet 2	No revisions.

2. Revision to description of Concept Plan and Stage 1 Project Application:

The description of the Concept Plan and Stage 1 Project Application for which the Ministers approval is now sought has been revised to clearly describe the content and width of the proposed edge treatment ('buffer') to the Littoral Rainforest and the concept stormwater management regime

3. Revisions to Statement of Commitments:

The Statement of Commitments has been revised to address issues raised during the exhibition period. The following table provides a brief summary of the revisions.

Commitment no.	Description of Revision
CP1	Update of Exhibits as listed above.
CP11	This commitment in relation to Acid Sulfate Soils has been amended in accordance with comments from PMHC.
CP12	The commitments in relation to bushfire have been amended in accordance with the comments from the RFS.
CP14	Additional commitment added at request of the Northern Rivers CMA.
CP15	Additional commitments added in relation to licensing requirements by NOW. Additional general commitment for submission of final stormwater treatment system to the LPMA for consideration/information.
CP16	Additional commitment for monitoring and modelling of SW catchment (Duchess Gully) and detail in relation to NW catchment, at request of PMHC.
CP17	Additional commitments in relation to Aboriginal heritage at request of DECCW.
CP18	Two additional commitments in relation to 'revegetation', at request of DECCW. An additional commitment in relation to the requirement for a VMP for Duchess Gully as part of the Stage 2 works, as requested by PMHC; and An additional commitment in relation to the requirement for a VMP for the 'grassed area' on the western side of the exclusion fence as part of the Stage 2 works, as requested by PMHC.
CP19	Amended to include requirement to consider provisions of Area 14 DCP and Ocean Drive Corridor Plan currently being prepared by PMHC.
CP20 to 24	New general 'administrative' conditions as required by DECCW.
CP25	New commitment to require the use of certain tree species as street trees, at request of PMHC.
PA3	Additional commitment in relation to signage adjacent to the rainforest, at the request of PMHC.

Commitment no.	Description of Revision
PA9	New commitment in relation to position of pedestrian boardwalk, at request of DECCW; Additional commitments in relation to materials and finishes for boardwalk, at request of PMHC; Additional commitment in relation to the provision of handrails, at request of LPMA.

All revisions to the original commitments have been highlighted in **red text** in Section 6 of this report.

Section 3

The Concept Plan and Stage 1 Project Application

The following provides a full description of the Concept Plan and Stage 1 Project Application, for which the Ministers approval is now sought:

2.1 The Concept Plan

2.1.1 The Site

The site, the subject of the Concept Plan, is known as:

- Lot 4 in DP 615261 (16.38 ha);
- Lot 1 in DP 374315 (17.04 ha);
- Part Crown Reserve R82555 (230m²); and
- Part Crown Reserve R754444 (5,595m²);

Ocean Drive, Lake Cathie.

The site has a total combined site area of 34ha.

It is noted that the real property description in the EA (p.37, Section 1.1) included the whole of the site area to Lot 4 (16.38 ha) however the depiction of the extent of the Concept Plan Application excluded the majority of the SEPP 26 Littoral Rainforest based on ecological advice that this area was virtually weed free. The extent of the Concept Plan Application has now been amended in response to the submission by PMHC to coincide with the eastern boundary of Lot 4 and ensure weeding works apply to the whole of the littoral rainforest on Lot 4.

The part of the Crown Reserves to which the Concept Plan applies remains unchanged and is as shown on Exhibit 02 (rev E); the western edge of R754444 within which weed removal works are proposed to be undertaken and that part of R82555 and R754444 occupied by the proposed pedestrian boardwalk.

2.1.2 The Proposal

The purpose of the Concept Plan is to establish a clear vision for development of the site for urban purposes, to ensure integration with the future development of the Area 14 Urban Investigation Area and to ensure the development is sustainable.

The key land use components of the Concept Plan for which the Ministers approval is sought include the following:

- The Environmental Works associated with the SEPP 26 Littoral Rainforest, where all works will be undertaken to satisfy the aims and objectives of SEPP 26.

The environmental works, to be undertaken on part Lots 1 and 4 and part Crown Reserves R82555 and R754444, will occupy approximately 13.03 ha of the subject properties and are proposed to be rezoned from their current rural zoning to E3 Environmental Management and E2 Environmental Conservation (SEPP 26 Littoral Rainforest).

The Environmental Works associated with the SEPP 26 Littoral Rainforest will incorporate:

- 6.62 ha of land to include rainforest revegetation and regeneration works 47m – 67m wide on the western side of the SEPP 26 rainforest, within Lot 1 and 4;
- A 2m high exclusion fence with spiky hedge on the western edge of the Stage 1 rainforest revegetation / regeneration area;
- 2.13 ha of land on the western edge of the rainforest revegetation / regeneration area, incorporating the public cycleway / pathway, public car parking and public perimeter road;
- Weed management works within the rainforest revegetation / regeneration area and within the western edge of the SEPP 26 Littoral Rainforest on part Crown Reserve 754444 (1.26ha) and the SEPP 26 Littoral Rainforest within Lot 4 (3.18ha);
- Formalisation of the existing track to Rainbow Beach with a public boardwalk.

The Environmental Works provide a total buffer width of 65m – 100m between the SEPP 26 Littoral Rainforest edge and the proposed residential / tourist commercial land uses outlined below.

40m – 60m of the rainforest regeneration / revegetation works (6.05ha), together with the 2m high exclusion fence, spiky hedge, weed management works within both the SEPP 26 Littoral Rainforest area and rainforest revegetation / regeneration area and the formalisation of the existing track with a public boardwalk to Rainbow Beach are to be undertaken as the Stage 1 Project Application – Environmental Works.

- An environmental buffer to Duchess Gully (5,610m²) in the south western corner of Lot 1, including its proposed rezoning from rural to E3 Environmental Management. This buffer area will contain regeneration/revegetation works and stormwater quality management facilities.
- Stormwater / groundwater management works to include:
 - Eastern catchments (Littoral Rainforest) - three biofiltration basins within the revegetation/regeneration area to provide water quality treatment and stormwater detention storage. These stormwater management facilities will also incorporate groundwater recharge wells to minimise potential changes to the existing groundwater regime associated with the SEPP 26

Littoral Rainforest;

- South-western catchment (Duchess Gully) – a biofiltration basin within the revegetation/regeneration buffer prior to discharge into Duchess Gully; and
- North-western catchment (Lake Cathie) – a stormwater detention basin incorporating biofiltration facility.
- The subdivision of Lot 1 and Lot 4 to provide for the following land use concepts:
 - Low density residential areas to occupy approximately 14.76ha of Lots 1 and 4, generating approximately 217 residential lots at a density of 13-14 dwellings/ha;
 - Medium density residential areas to occupy approximately 3.27ha of Lots 1 and 4, which at a density of 25 dwellings/ha will generate approximately 82 medium density dwellings;
 - A 'Hill-Top Village', comprising three/four storey part residential, commercial and tourist development to occupy approximately 3ha of Lots 1 and 4. This area also contains the proposed Village Square which occupies a land area of approximately 2,750m² providing an entry statement to the main street of the Hilltop Village. This area is located within the proposed B4 Mixed Use zone and is intended to be dedicated for public uses.

Based on a commercial/tourist floor space at ground level with three storeys of residential/tourist uses above and basement car parking below, yields of approximately 160 residential/tourist apartments and approximately 6,000m² of commercial/residential/tourist uses at the ground floor level in the main street are expected;

 - Open Space works (in addition to the Village Square referred to above) which are proposed to be zoned RE1 Public Recreation including:
 - A Pocket Park (990m²) on the western side of the perimeter road providing a public pedestrian link between the Hilltop Village main street and the beach pedestrian access; and
 - A public carpark and associated landscape works (1,780m²) proposed to be located adjacent to the beach pedestrian access.
 - An access and circulation network of roads and pedestrian / cycle paths.

The site is to be developed in stages. The Project Application represents the first stage of the development, being the environmental works associated with the weed management works and establishing and fencing 6.1 ha of the rainforest revegetation / regeneration area adjacent to the SEPP 26 Littoral Rainforest and formalisation of the existing beach access track with a pedestrian boardwalk.

2.2 The Stage 1 Project Application

2.2.1 The Site

The site, the subject of the Project Application, is known as:

- Part Lot 4 in DP 615261 (6.72 ha);
- Part Lot 1 in DP 374315 (2.48ha);
- Part Crown Reserve R82555 (231m²); and
- Part Crown Reserve R754444 (6,614m²), Ocean Drive, Lake Cathie.

The site is as shown on Exhibit PA 01 (revision D), being the land area bound by the property boundary of Lot 4 to the north, the property boundary of Lot 1 to the south, the property boundary of Lot 4 to the east, a distance of approximately 10m past the eastern boundary of Lot 1 (ie within the SEPP 26 Littoral Rainforest – R754444) and the exclusion fencing to the west. The exclusion fencing incorporates the planting of a row of spiky plants on the western side of a two (2) metre high fence.

The Stage 1 Project Application relates to a total land area of approximately 9.88 ha.

2.2.2 The Proposal

The Stage 1 Project Application for the Environmental Works are associated with the SEPP 26 Littoral Rainforest, where all works will be undertaken to satisfy the aims and objectives of SEPP 26. The Stage 1 Environmental Works represent the immediate works to be undertaken to establish the buffer to the SEPP 26 Littoral Rainforest, which as outlined in the Concept Plan Application will ultimately be 65m - 100m wide.

The Stage 1 Environmental Works will incorporate the following:

- (a) The retention of all native vegetation on the western side of the rainforest (within part Lots 1 and 4), including the removal of all weed species;
- (b) 40-60m of rainforest revegetation and regeneration works on the western side of the rainforest (within part Lots 1 and 4);

- (c) The fencing of the Stage 1 rainforest revegetation/regeneration area and hedging with a spiky hedge to minimise the potential impacts of human intrusion / domestic animals edge effects on the rainforest (within part Lots 1 and 4);
- (d) The removal of weeds and regeneration of rainforest species in the vicinity of the western edge of the SEPP 26 rainforest, generally to a distance of 10m within that part of Crown Reserve R754444 adjoining Lot 1;
- (e) The removal of weed species within that part of the SEPP 26 rainforest located within Lot 4; and
- (f) The provision of a low public impact boardwalk to replace the existing informal pedestrian track through the SEPP 26 Littoral Rainforest to Rainbow Beach (within part Lots 1 and 4 and part Crown reserves).

Section 4

Response to Submissions

No.	Author	Issues / Requirements	Comments
01	Department of Environment, Climate Change and Water	<p>Does not object to the proposal, subject to the proponent addressing certain issues (Attachment A) and with the inclusion of their recommended conditions (Attachment B);</p> <p>Recommends that proponent address outstanding issues in its response to the submissions received, rather than deferring these matters to the post-approval process;</p> <p>ATTACHMENT A (issues):</p> <ol style="list-style-type: none"> 1. Flora and Fauna - Supports revegetation strategies – recommends 2 additional commitments for SOC; <p>EA lacks detail of pre-clearing surveys for fauna and details of what will happen to displaced fauna etc – should be addressed in SOC;</p>	<p>Noted</p> <p>Noted</p> <p>Condition CP18 of the SOC has been amended to include these 2 commitments.</p> <p>Habitat located on the subject properties has been identified by PPEC to be located within the littoral rainforest, forest, woodland and riparian rainforest vegetation communities. The Concept Plan Application does not propose any clearing works in any of these vegetation communities but rather the reinforcement of existing vegetation with revegetation/regeneration works and weed removal. Accordingly these works are not anticipated to result in displaced fauna.</p> <p>The formalisation of the existing track with a boardwalk has been designed to ensure there are no trees removed within the SEPP 26 Littoral Rainforest. Accordingly there will be no removal of habitat trees as a result of the Concept Plan Application or Stage 1 Project Application and pre-clearing surveys for fauna were therefore not considered necessary.</p>

No.	Author	Issues / Requirements	Comments
			Temporary construction fencing will be provided to Duchess Gully, as included in the SOC and immediate permanent fencing of the SEPP 26 Littoral Rainforest will be undertaken as part of the Stage 1 Project Application, as included in the SOC.
		2. Aboriginal Heritage – no objections and recommends conditions in Attachment B;	Noted – conditions included in the SOC.
		3. Effluent Management – proponent to ensure sufficient capacity in local system;	Appendix M to the EA included confirmation in relation to this issue, with PMHC acknowledging that “... <i>there are currently no infrastructure services impediments to the Part 3A Concept Plan or Project Applications proposed by Milland Pty Ltd and Seawide Pty Ltd.</i> ”
		4. Coastal Hazards – assessment by SMEC is appropriate – no further requirements;	Noted
		5. Flooding – minimal fill and insignificant impact on flood behaviour, therefore no concerns/issues raised.	Noted
		ATTACHMENT B (recommended conditions):	
		1. Administrative - general conditions re air, water, fill etc;	New commitments have been included – see CP20 to CP24.
		2. Flora and Fauna –	
		a. 100m buffer required between rainforest and ‘development footprint’.	SEPP 26 does not create a 100m buffer but provides a mechanism for ensuring the protection of littoral rainforest in its natural state and require Council approval and Department of Planning concurrence for any development within 100m of the littoral rainforest.
			The width of the buffer to the SEPP 26 Littoral Rainforest as presented in the EA is 65m to 100m. The vegetated component of this buffer is approximately 47m to 67m (noting that an additional 7m of revegetation has now been provided on the western side of the exclusion fence as requested by PMHC).

No.	Author	Issues / Requirements	Comments
		<p>b. Boardwalk to be confined to existing 2.2m wide track;</p>	<p>The buffer width issue is discussed at length at Section 5.1.1 to this report. We confirm that the content and width of the buffer has been developed over a number of years (since 2002) and in consultation with a number of specialists, PMHC and the Department of Planning. The preliminary investigations identified groundwater as a key issue for the ongoing preservation of the rainforest. Accordingly, PMHC commissioned ecological (Biolink) and groundwater (Martens) investigations to determine both the current and future water needs of the Littoral Rainforest, given the future adjoining urban development and expected changes in rainfall as a result of climate change. The ecological and groundwater investigations support that a vegetated buffer of between 40m – 60m, with specific stormwater management recommendations, is the most appropriate width to achieve this. The perimeter road, parking bays, cycleway and pedestrian pathway comprise the built form component of the buffer, ensuring a clear separation of public and private lands and allowing clear surveillance of the edge to the vegetation.</p> <p>Section 5.1.1 also provides a timeline of the agreed outcomes between the proponent, Council and the DOP, a summary and discussion of the specialist consultant requirements and where departures from their advice have occurred to reinforce the buffer treatment and confirmation in relation to compliance with the conditions of the Gateway Determination for the Area 14 Stage 1B zoning.</p> <p>Section 5.1.1 also confirms the support of PMHC for the buffer design as presented in the EA, as detailed in their report to the Council meeting of 16 February, 2011, in relation to the Planning Proposal for Area 14 Stage 1B and forwarded to DoP to make the LEP.</p> <p>The proposed 1.5m wide boardwalk is to be positioned within the existing 2.2m wide informal walking track. The location and width of this existing track has been confirmed by survey. Requirements in relation to this issue are included in the SOC.</p>

No.	Author	Issues / Requirements	Comments
		<p>3. Aboriginal Culture –</p> <ul style="list-style-type: none"> a. Continued consultation with LALC required; b. Standard conditions regarding findings during surface disturbance; c. Aboriginal Educational Education Program to be developed for the induction of all contractors etc. 	The SOC has been amended accordingly.
02	Office of Water (NOW)	<p>Identified a number of issues that require consideration – as outlined in Attachment A; and</p> <p>Provides recommended conditions for an approval – Attachment B.</p> <p>ATTACHMENT A (issues):</p> <ul style="list-style-type: none"> 1. Groundwater – <ul style="list-style-type: none"> a. It is proposed that the recharge pits be located above the watertable, however in the event that excavation into the permanent water table is required a Part 5 Water Act 1912 licence is required by NOW; b. Prefer that all primary stormwater basins are lined with an impermeable layer to ensure the adequate treatment of stormwater before it is discharged to groundwater; c. All WSUD measures will be required to treat the point source prior to directing stormwater to the proposed recharge pits and potentially into the groundwater table; d. If recharge pit is located above the watertable (above the maximum groundwater level) then a licence under the Act is 	<p>Noted</p> <p>Noted</p>

No.	Author	Issues / Requirements	Comments
		<p>not required;</p> <p>e. Each recharge pit should be investigated by drilling a bore to determine groundwater levels for future project applications.</p> <p>2. Water Licensing –</p> <p>a. Licensing requirements will be governed by the Water Act 1912 until a Water Sharing Plan under the Water Management Act 2000 is gazetted for the area;</p> <p>b. NOW's database reveals no current water licences for the site;</p> <p>c. All proposed monitoring bores will require a licence – if the existing bores on site are currently not licensed then this needs to be obtained now;</p> <p>d. All works that intersect an aquifer require a licence;</p> <p>E. Dewatering of groundwater / for construction of detention basins and pits requires a licence.</p> <p>3. Stormwater Management –</p> <p>a. Point source should be treated with WSUD measures prior to stormwater entering groundwater or surface water;</p> <p>b. All stormwater to be appropriately treated by WSUD measures.</p> <p>4. Acid Sulfate Soils –</p> <p>a. Concern over potential contamination of groundwater and surface water as a result of disturbance to ASS – ASSMP</p>	<p>Noted</p> <p>Noted</p> <p>CP11 of the Statement of Commitments requires the preparation of an ASS Management Plan in accordance with ASSMAC Guidelines.</p>

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		<p>will need to be adequate.</p> <p>5. Cumulative Impacts –</p> <p>a. Concern over intensity of development in Area 14 and cumulative impact on groundwater and surface water resources - therefore cumulative impacts should be addressed by the Department.</p> <p>ATTACHMENT B (recommended conditions):</p> <p>1. General licensing requirements – groundwater / aquifer / dewatering;</p> <p>2. All stormwater to be treated at its source and diverted through treatment process prior to discharge;</p> <p>3. A groundwater management plan and monitoring plan for the development must be prepared to NOW's satisfaction.</p>	<p>The Groundwater Study undertaken by Martens & Associates has considered the potential impacts of the Concept Plan Application and made recommendation to ensure existing groundwater conditions at the SEPP 26 Littoral Rainforest are maintained.</p> <p>CP15 of the SOC has been amended accordingly.</p>
03	Housing NSW	<p>Acknowledges that Housing NSW has no assets affected by the proposal, however notes the following issues:</p> <p>1. There is no provision for affordable housing or a range of housing types –</p> <p>a. Port Macquarie has large numbers of households living in housing stress – CP does not identify a need for affordable housing or for a range of housing types aimed at meeting the housing needs of the existing and future population; and</p> <p>b. The proposal includes a reduction in the medium density footprint from that originally proposed by PMHC and repositioned to areas of high aesthetic and scenic quality –</p>	<p>The role of Housing NSW to provide and to facilitate opportunities for affordable housing at appropriate locations throughout the state is acknowledged. Whilst the CP does not directly provide 'affordable housing' per se, it will provide for a range of housing types/styles on the basis of the three (3) urban zones proposed for the site including, 'low density residential', 'medium density residential' and 'mixed use'.</p> <p>These zonings will allow for single dwellings, dual occupancies, town house / integrated / cluster style dwellings, three storey walk-ups and 'shop top' style accommodation. We acknowledge the 'footprint' reduction in zoned 'medium density' areas, however it is envisaged that the proposed 3 to 4 storey Hilltop</p>

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		<p>this is likely to limit opportunities for smaller more affordable dwellings.</p> <p>2. A Social Impact Assessment has not been submitted –</p> <p>a. Consequently the future social needs of the population have not been addressed;</p> <p>b. No consideration has been given to the implications of the proposed development for community service providers;</p> <p>c. Request the applicant submit an SIA and consideration should be given to the housing needs of the community (including affordable housing) as part of the process.</p> <p>3. Sea Level Rise –</p> <p>a. Housing NSW trusts that due consideration will be given to the impact of sea level rise – in time sea level rises will have implications for housing availability and affordability.</p>	<p>Village will provide two storeys of accommodation above 1 or 2 storey retail/commercial space, thus achieving an appropriate overall density for the site, consistent with the Lake Cathie Bonny Hills Urban Design Master Plan (UDMP).</p> <p>A Social Impact Assessment was included at Section 6.11 of the EA – ‘Socio Economic Impact’. This assessment set out the findings from the previous community consultation undertaken in relation to the UDMP, established the community profile of the existing Lake Cathie / Bonny Hills community, determined a profile for the incoming residents and made an assessment of the likely impacts of the proposed development on the existing community.</p> <p>In relation to the future social needs of the community, it needs to be remembered that the site is only one part of the overall Area 14 release area. Urban infrastructure (water, sewer, stormwater, roads, town centre, regional playing fields, schools etc) will be available as part of the coordinated release of land in Area 14 generally. In addition, a new medical centre has recently opened in close proximity to the site and the regional town centre of Port Macquarie is a 15 minute drive to the north.</p> <p>Appendix G of the EA included a coastal hazard assessment by SMEC (March 2010) of the adjoining coastline which had regard to the implications of sea level rise. Using a combination of worst-case scenario assessment parameters, SMEC predicted that there would be no impact on the proposed development as a result of coastal hazards as the proposed development is located landward of the coastal hazard zones over a 100 year planning period. Additionally, the provision of the 40m – 60m vegetated strip as part of the Stage 1 vegetated buffer to the rainforest will allow the rainforest to ‘creep’ landward as the coast recedes.</p>
04	RTA	<p>Notes that:</p> <p>1. RTA has previously raised a number of significant concerns in relation to the safe and efficient operation of Ocean Drive as</p>	<p>Section 5.1.2 of this report has been prepared in response to the identification of the ‘key issues’ by the Department and deals with all the</p>

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		<p>part of their response to the CP for adjoining lands (St Vincent's Part 3A);</p> <ol style="list-style-type: none"> 2. Significant road infrastructure is required for Area 14 and the Roadnet report highlights potential for impacts on the junction of Pacific Highway and Houston Mitchell Drive – Area 14 model does not explore the impacts on the remaining arterial road network north and south of Lake Cathie; 3. Ocean Drive is a Classified Road and any works will require the concurrence of the RTA – has not been given pending further discussions with PMHC; and 4. Information sought in RTA's letter of 1 May 2007 has not been provided. 	issues raised by the RTA.
05	RFS	<p>Recommends the following conditions:</p> <ol style="list-style-type: none"> 1. Development portion to be managed as an IPA; 2. 10m APZ for lots in north-west of site – until such time that threat is extinguished; 3. Infrastructure to comply with section 4.1.3 of PfBP 2006; 4. Roads to comply with section 4.1.3 of PfBP 2006; 5. Landscaping to comply with principles of Appendix 5 of PfBP 2006; <p>General advice:</p> <ol style="list-style-type: none"> 1. Further DA's of buildings to be subject to separate application 	<p>The SOC has been amended accordingly.</p> <p>The SOC has been amended accordingly.</p>

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		<p>under section 79BA and 100B of the EOP&A Act; and</p> <p>2. 'Forested wetlands' has now been grouped with 'forest' classification under AS3959 – Construction of buildings in bushfire prone areas – a higher attack level may be required.</p>	<p>The proposed setback from the bushfire prone vegetation (revegetation) is approximately 25m. The required minimum setback from 'forest' vegetation is 20m. All future DA's/PA's will require referral to the RFS for compliance with the bushfire requirements.</p>
06	Northern Rivers Catchment Management Authority	<p>Native Vegetation Act:</p> <p>1. Acknowledges that clearing of land will be excluded from NVA, given future zoning of site; and</p> <p>2. Seeks any clearing to be offset at a ratio of 20:1.</p> <p>Littoral rainforest and buffer:</p> <p>1. Seeks recognition of littoral rainforest vegetation areas that are outside the gazetted boundary for SEPP26 – proposed buffer width should then be applied from these areas;</p>	<p>Existing vegetation within the littoral rainforest, woodland, forest and riparian forest vegetation communities identified by PPEC are to be retained and hence no approval for clearing of land will be required.</p> <p>The Concept Plan proposal includes the revegetation/regeneration of approximately 6.62 ha of currently rural zoned lands (6ha adjoining the Littoral Rainforest within the exclusion fence and 5,610m² associated with Duchess Gully).</p> <p>The rezoning associated with the Concept Plan will rezone these revegetation/regeneration areas from their current rural zoning to E3 Environmental Management and importantly, the 3.18ha of gazetted Littoral Rainforest within Lot 4 will be rezoned from its current rural zone to E2 Environmental Protection.</p> <p>It is submitted that there will be a net gain in revegetation/regeneration areas and their protection with appropriate zonings.</p> <p>SEPP 26 does not prohibit development within 100m of the SEPP 26 edge, but it does set out a requirement for the consent of Council and the concurrence of the Department of Planning for any works either within the Littoral Rainforest or within 100m of its gazetted edge.</p>

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		<p>2. <i>'Living and Working in Rural Areas'</i> handbook referenced – CMA seeks application of buffer uniformly along the length of the littoral rainforest; and</p> <p>3. Effects of sea level rise and increased storm surge – appropriate buffer required to provide littoral rainforest with opportunity to migrate landward.</p>	<p>In this instance the width of the buffer and the individual land uses within the buffer has been determined having regard to the objective of SEPP 26 and the recommendations of Dr Peter Brennan. The SEPP requires the preservation of the gazetted littoral rainforest in its natural state. Accordingly, Dr Brennan has determined that the primary objective should be to improve the shape of the Littoral Rainforest and to effectively decrease the edge-to-area ratio.</p> <p>The proposed 'buffer' to the SEPP 26 Littoral Rainforest will comprise a total width of between 65 to 100m, with the vegetated component being approximately 47m to 67m wide. Areas of remnant vegetation adjoining the western edge of the gazetted rainforest, including areas identified by Peter Parker Environmental Consultants as 'littoral rainforest', will be protected and enhanced in the longer term within the vegetated component of the buffer, in accordance with the provisions of SEPP 26.</p> <p>The provision of a wider vegetated footprint as sought by the CMA is not the objective of the SEPP and contrary to the specialist groundwater and ecological investigations undertaken by Marten and Biolink on behalf of PMHC. These investigations support the proposed width of the vegetated component to the buffer and note that any additional vegetation to that proposed by the CP could lead to a reduced groundwater budget due to evapo-transpiration in the system. Key components in the proposed buffer design are the immediate revegetation/regeneration works proposed in the Stage 1 Project Application and the ongoing management via the VPA.</p> <p>A Coastal Hazard Study prepared by SMEC is included at Appendix G to the EA. This study has confirmed that there is an adequate buffer between the existing coastline and the 'worst case' predicted coastal line as a result of sea level rise and climate change to 2100. The vegetated component of the buffer will also enable the landward creep of the rainforest. Once again immediate implementation of development funded revegetation works and the ongoing management provide a pro-active approach to dealing with coastal recession.</p>

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		<p>VMP and 'environmental works'</p> <ol style="list-style-type: none"> Commends VMP and recommends consultation with Landcare groups throughout process. <p>Interpretive signage</p> <ol style="list-style-type: none"> Use of signage commended. <p>Public access management</p> <ol style="list-style-type: none"> Proposed boardwalk should follow existing informal track as closely as possible. <p>Stormwater management</p> <ol style="list-style-type: none"> Best practice WSUD principles to be incorporated in all future development. <p>Acid Sulfate Soils</p> <ol style="list-style-type: none"> ASSMP required prior to development. <p>Flooding and climate change</p> <ol style="list-style-type: none"> Full consideration of climate change impacts on site is required, in accordance with the Department of Planning's NSW Coastal Planning Guideline: Adapting to Sea Level Rise (August 2010). 	<p>Noted – Section 6.1.2.6 of the EA sets out the required consultation with the Bonny Hills Landcare Group, PMHC and the adjoining landowners (St Vincent's Foundation), as part of the VMP process.</p> <p>Noted</p> <p>Noted - The location of the existing informal beach access track to Rainbow Beach and the footprint for the proposed boardwalk have been identified by survey to ensure consistency in location.</p> <p>Noted – The SOC includes this requirement.</p> <p>Noted – suitable commitments are included in the revised SOC.</p> <p>Noted – CP14 amended accordingly.</p>
07	PMHC	<p>Acknowledges:</p> <ol style="list-style-type: none"> Site is part of Area 14 and has been subject to Councils Master 	Noted

No.	Author	Issues / Requirements	Comments
		<p>Planning process;</p> <ol style="list-style-type: none"> 2. Council is progressing the Planning Proposal in parallel with the Concept Plan; 3. Council engaged Biolink and Martens to work collaboratively to determine appropriateness of the 'buffer' treatment and that Council considers the buffer to be adequate; 4. Council generally supportive of both CP and PA submissions; 5. Requests that subsequent applications be delegated to Council to assess under Part 4 of the Act. <p>Specific comments:</p> <ol style="list-style-type: none"> 1. Beach Access: <ol style="list-style-type: none"> a. Raise boardwalk by 0.5m (min) and use hardwood and "Envirowalk mini mesh"; b. Replace boardwalk and chain with holey belt rubber matting and hardwood timber guide rails; c. Satisfied for above to be a condition for CC stage. 2. Acid Sulfate Soils: <ol style="list-style-type: none"> a. Excavation depths adjacent to Duchess Creek be restricted to no more than 2m, or require ASS management plan; b. Requires condition to this effect. 3. Flora and Fauna: <ol style="list-style-type: none"> a. Vegetated buffer to Duchess Creek be increased to 30m 	<p>Noted, commitment PA09 of the SOC has been amended accordingly.</p> <p>Commitment CP11 has been amended accordingly.</p> <p>The proposed width for the vegetated buffer to Duchess Gully was established following advice from Peter Parker Environmental Consultants (PPEC correspondence, 20 June, 2007), stating, "...the main issue arising</p>

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		<p>from top of bank;</p> <p>b. Vegetated buffer to rainforest be established up to the footpath/road edge, with removal of slashed grass areas.</p> <p>4. VMP:</p> <p>a. Update VMP to include removal of grassed area and replace with rainforest species;</p> <p>b. Relocate exclusion fence to alongside pathway;</p>	<p><i>from my flora survey was the need to retain this riparian corridor which protects and enhances this forested remnant and for enrichments plantings to be undertaken within the property for approximately 20m from the stream bank."</i></p> <p>The request by PMHC to now increase this width to 30m has resulted in a minor amendment to the road location adjacent the gully. The total 'buffer' width to Duchess Gully is now an average of 30m (25m – 35m). The revised version of Exhibit 8B attached to this report provides detail of this buffer increase.</p> <p>The inclusion of a 'slashed grass area' as part of the edge treatment ('buffer') to the rainforest has been consistent since the initial recommendations were made by Dr Brennan in 2002. Section 5.1.1 to this report provides the background to establishing the edge treatment land uses/content, as well as detailing the agreed outcomes in this regard. It was the intention that this grass area will support the function of the public edge road in addition to providing a lineal open space network adjacent to the rainforest and proposed walkway/cycleway.</p> <p>Nevertheless this component of the buffer will now be amended to provide for its revegetation with rainforest species. The SOC has been amended to provide for the preparation of a Vegetation Management Plan for this area as part of the 'Stage 2' works.</p> <p>The SOC has been amended to require the preparation of a VMP as part of the Stage 2 works, to revegetate the 'grassed area' with rainforest species, in accordance with this submission.</p> <p>However it is submitted that the exclusion fence, to be provided as part of the Stage 1 works, should be retained in its proposed location adjacent to the Stage 1 revegetation area. The fence will provide an immediate protection to the revegetation area, restrict human and domestic animal intrusion into the rainforest and with its future screening by the Stage 2 revegetation works, will not impact adversely on the character of the future urban streetscape.</p>

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		<p>c. Fence – 1.8m, barb wire at top, 100mm gap at bottom, satisfied for this to be deferred to CC stage;</p> <p>d. Detailed design of the erosion control protection should be required for the gully area (end of beach walkway);</p>	<p>We submit that the proposed fencing combination of the 2m high chainmesh fence and the 'spiky' hedge planting (and the additional Stage 2 revegetation works) will provide the necessary protection to the rainforest from human and domestic animal intrusion. We therefore submit that the addition of a 'barbed-wire' component to the fencing is not justified and will be out of character with the future beach-side residential locality. In addition Council's Planning Proposal for the rezoning of the site has stated that the fence <i>... "will need to contribute to the amenity of the streetscape while providing adequate protection of the rainforest and regeneration area."</i> (p.35)</p> <p>Justification for including a 100mm gap at the base of the fence has not been provided, however, we submit that one of the primary functions of the fence, to provide a barrier for domestic animals, will be compromised should this gap be included.</p> <p>The fence treatment as proposed by the VMP has therefore not been altered.</p> <p>The existing minor erosion adjacent to the proposed walkway / Rainbow Beach was observed by Ms Sue Regan during a site inspection in relation to the positioning of the boardwalk. Section 6.1.3.10 of the VMP was therefore drafted by Ms Regan to specifically address this issue. Section 6.1.3.10 states the following:</p> <p><i>"Prior to Rainforest Boardwalk installation, water flow paths along the existing track are to be interrupted by random log placement. During boardwalk construction overburden is to fill these existing track water flow paths.</i></p> <p><i>Erosion control of the Rainforest minor gully is to include in stream structures such as rock weirs and temporary hay bale silt traps."</i></p> <p>Ms Reagan further confirmed (pers. com.) that the issue is commonly addressed by experienced bush regenerators in the field and that in her view, additional written detail is not required. There will be further</p>

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		<p>e. VMP should be extended to include all of rainforest adjacent to Lot A (Lot 1) and all of rainforest within Lot 4 and the provision of a 30m buffer to Duchess Creek;</p> <p>f. Recommends following conditions for VMP:</p> <ul style="list-style-type: none"> i. Commence all rehabilitation works at the initiation of the VMP – table of defined work zones is to include rehabilitation works, staging and completion dates; ii. Contingency/ follow up plan for failed plantings and poor response of weed control; iii. 6 monthly weed inspection schedule; iv. Signage to direct people to public access 	<p>consultation between the bush regenerators contracted to do the work and PMHC prior to undertaking any work.</p> <p>The '<i>extent of Concept Plan</i>' and '<i>extent of Project Application</i>' boundaries have been revised on all exhibits such that the Littoral Rainforest currently within private ownership (i.e. Lot 4) is included. In so doing, the area the subject of the VMP is now also included. The notation on sheet 2 of Exhibit PA 05 (prepared in support of the VMP) has been revised to ensure that weed removal occurs within the rainforest area located on Lot 4.</p> <p>In relation to the rainforest within the crown land adjoining Lot A (Lot 1), the VMP notes at section 6.1.2.6 of the EA that this area is currently undergoing regeneration / weeding works by the Bonny Hills Landcare Group and so suggest there is currently no need to extend the VMP to include this land .</p> <p>The rehabilitation and revegetation of the buffer area to Duchess Creek along with the additional revegetation work between the exclusion fence and the pathway/cycleway will be undertaken as part of the 2nd stage development, as shown on Exhibit 05B_Indicative Staging Plan. A revision to the Statement of Commitments (CP18) will require the preparation of a VMP as part of this stage.</p> <p>The VMP at Section 6 to the EA was prepared in close consultation with Ms Sue Regan of Wildthings Native Gardens. Ms Regan has been a bush regeneration contractor since 1996. The VMP is particularly detailed in relation to weed eradication, plant establishment and ongoing maintenance. The VMP of the EA is supported by Exhibits PA05 (2 sheets), the Base Line Weed Map at Exhibit PA04, the Gantt Chart at Appendix PA_A and the Photographic Record Sheet at Appendix PA_B. It is the intent of the VMP that the works be initiated immediately and accordingly, the VMP represents the majority of works within the Stage 1 Project Application.</p> <p>The identification and carrying out of this first stage is seen as critical to the overall development of the site. The Stage 1 Environmental Works will result in the immediate protection and enhancement of the rainforest and when</p>

No.	Author	Issues / Requirements	Comments
		<p>point;</p> <p>v. Assessment and compliance of VMP every 6 months;</p> <p>vi. Satisfied that final VMP can be deferred to CC stage.</p> <p>5. Street tree planting – to be in accordance with Councils list:</p> <p>6. Stormwater:</p> <p>a. No objections in principle;</p> <p>b. Queries ability of Duchess Creek to accommodate load – notes this was previously raised by DPI. SOC should include monitoring and maintenance plans and timing for production of these plans;</p> <p>c. Concern over concept modelling for NW catchment and stormwater detention facility design;</p> <p>d. Recommends additional SOC for the NW catchment:</p> <p>i. Stormwater discharge not to exceed pre development flow rates; and</p> <p>ii. Top water level to be below road surface level (with allowance for freeboard).</p> <p>7. Littoral Rainforest – groundwater:</p>	<p>carried out in conjunction with other environmental/ stormwater management/groundwater management works in future stages, will ensure the development overall satisfies the Aims and Objectives of SEPP 26.</p> <p>We therefore submit that the conditions recommended by PMHC (points i, ii, iii, v) in relation to the VMP are not necessary as appropriate monitoring and maintenance scheduling has been incorporated into the VMP and the supporting documents.</p> <p>In relation to point (iv), a suitable commitment has been included at PA3.</p> <p>Noted, the SOC has been amended accordingly.</p> <p>Noted</p> <p>Noted, CP16 of the SOC has been amended accordingly.</p> <p>Noted, CP16 of the SOC has been amended accordingly.</p> <p>As above</p>

No.	Author	Issues / Requirements	Comments
		<ol style="list-style-type: none"> The recommended additional works should be installed immediately – prior to future PA's; and Council notes complexity of water quantity management requirements within the revegetation area and considers these should be done as part of this application. 	<p>Noted - The SOC requires the carrying out of the additional groundwater works prior to the preparation of the Stage 2 PA/DA.</p> <p>The primary objective in relation to the Littoral Rainforest is the establishment of the Stage 1 works to ensure its immediate protection. The scope of works to be undertaken as part for the VMP (being the Stage 1 works), has an overall timeframe of approximately 6 years (see Gantt Chart at Appendix PA_A). The SOC requires the carrying out of the additional groundwater works prior to the preparation of the Stage 2 PA/DA. It is therefore envisaged that the additional groundwater work will be occurring within the timeframe of the Stage 1 works. Accordingly it is not considered necessary to amend the Stage 1 Project Application.</p>
08	Land and Property Management Authority	<ol style="list-style-type: none"> Acknowledges their ownership of the Crown Land; Notes that the Crown land will receive urban runoff from the eastern catchments; Supports conditions as outlined in Section 6.7.4 of EA (additional modelling required etc); Boardwalk to incorporate handrails to restrict access within rainforest; and Crown land not to be used as part of an APZ. 	<p>Noted</p> <p>Noted</p> <p>Noted – CP15 of the SOC has been amended to require submission of the final design of the stormwater treatment system to the LPMA for consideration/information.</p> <p>PA9 of the SOC has been amended accordingly.</p> <p>Noted – the proposed APZ is fully contained within the development footprint and does not rely on Crown Land.</p>
09	Industry and Investment NSW	<ol style="list-style-type: none"> Acknowledges that the EA raises no minerals, forestry or agricultural issues; Notes that the proposed development avoids direct impacts on 	<p>Noted</p> <p>Noted</p>

No.	Author	Issues / Requirements	Comments
		<p>key fish habitats, including Lake Cathie and Duchess Gully;</p> <p>3. Recommends EA adopts a commitment to improve the quality of stormwater discharges presently occurring on the site.</p>	Noted -
10	Bonny Hills Youth and Community Projects Group (David Rogers)	<p>Overall non support for the following reasons:</p> <p>1. Wildlife corridors between rainforest and western vegetated areas not provided for;</p> <p>2. Too dense for area – no parallel infrastructure improvements (roads, water, health emergency services, schools etc)</p> <p>3. Not enough parkland for these residents;</p>	<p>The CP and PA have been prepared having regard to the relevant strategic documents for the locality, in particular the land uses identified by the Greater Lake Cathie Bonny Hills Urban Design Master Plan, the UDMP (Appendix B of EA).</p> <p>This strategic document identifies an open space/drainage/habitat corridor on the lands to the west of the subject site (St Vincent's Foundation lands and Duchess Gully) and habitat lands within the Littoral Rainforest to the east of the subject site. The master plan does not require a specific link between these two areas to be provided on the subject site. However a 100m wide 'buffer' to the sewerage treatment plant will provide a connection from east to west, and connections into both the Littoral Rainforest and Duchess Gully.</p> <p>As with the comments above, the densities proposed for the site are consistent with the UDMP. Water and sewer services have recently been augmented by Council (Sections 6.4.1 and 6.4.2 of EA) and electricity and telecommunications networks are available to the site (Section 6.4.3 of the EA). Upgrades to Ocean Drive in accordance with Roadnet's requirements (Appendix H) will be provided as each stage within the Area 14 release area is developed. Significant land area has also been set aside on the adjoining St Vincent's land to provide for future schools and regional sporting fields.</p> <p>'Parkland' for the subject site has been provided in accordance with the UDMP. Regional sporting fields and an open space corridor adjoin the subject site.</p>

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		<p>4. Conflict of interest re owners (Obeids) / Part 3A process not transparent enough / no public involvement to test proponents application for correctness;</p> <p>5. Existing residents should not be 'worse off';</p> <p>6. Buffer should be 100m, not 65m; and</p> <p>7. Density too great for coast / prime agricultural land with diversity / should be retained / no development should be allowed close to coast until understand global warming and need for agricultural land.</p>	<p>This submission has been made in accordance with Environmental Planning and Assessment Act 1979 and with the detailed requirements of the Part 3A process. Public exhibition and Government stakeholder involvement has been carried out in accordance with this legislation.</p> <p>It is anticipated that the existing residents of Lake Cathie will benefit from the subject proposal, with the enhancement and protection of the Littoral Rainforest and the establishment of a public boardwalk to Rainbow Beach and a coastal foreshore cycleway/pathway linking to Lake Cathie. The adjoining Part 3A proposal will provide additional school sites and a regional open space network. Section 94 contributions from the future residential development of the subject and adjoining sites will allow for improved public roads and infrastructure and importantly, for the long term maintenance of the environmental and open space lands (VPA).</p> <p>The subject proposal provides for a total edge treatment width ('buffer') to the Littoral Rainforest of between 65m to 100m. The individual land uses comprising the buffer were initially identified by Dr Peter Brennan, a rainforest expert in relation to edge effects. This issue is discussed in detail at Section 5.1.1 to this report.</p> <p>The site has been identified for future urban development in a number of State and local strategies, including the Hastings Urban Growth Strategy, the Lake Cathie-Bonny Hills Urban Design Master Plan (UDMP) and the Mid North Coast Regional Strategy. In addition the site is identified as a 'proposed urban area' under the State Governments Mid North Coast Farmland mapping project.</p> <p>In relation to 'global warming', Appendix G of the EA included a coastal hazard assessment by SMEC (March 2010) of the adjoining coastline which had regard to the implications of sea level rise. Using a combination of worst-case scenario assessment parameters, SMEC predicted that there would be no impact on the proposed development as a result of coastal hazards as the proposed development is located landward of the coastal hazard zones over a 100 year planning period. Additionally, the provision of</p>

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			the 40m – 60m vegetated strip as part of the buffer to the rainforest has an added benefit of allowing the rainforest to 'creep' landward as the coast recedes.
11	Tierney Property Services	<p>Submission on behalf of SVF;</p> <p>Acknowledges MOU and ongoing cooperation over a number of years;</p> <p>Submission supports application:</p> <ol style="list-style-type: none"> 1. Significant consultation with Council / community / landowners for Area 14 UDMP; 2. No elements of proposal which will not achieve a satisfactory and environmentally sustainable outcome; 3. Area 14 in UGMS of 15.12.10; 4. Area 14 in Mid North Coast Regional Strategy; and 5. Investment by Council (STP / water) for Area 14. 	Noted
12	Michael Roberts (Abel Tasman resident)	<p>Raises points of concern:</p> <ol style="list-style-type: none"> 1. Visual amenity – should provide open space and landscaping along northern side of hillside / vegetate in front of noise screen and detention basin; 	<p>Land uses on the site have been located in accordance with the UDMP.</p> <p>In relation to 'visual amenity', the existing visual quality of the coastline was recognised as both a constraint to developing the land and as an opportunity to facilitate appropriate built form controls to ensure their retention.</p> <p>The objectives for the CP in relation to the scenic quality of the coastline was to:</p>

No.	Author	Issues / Requirements	Comments
		<p>1. Ensure that development cannot be viewed from Rainbow Beach; and</p> <p>2. Create development opportunities which will enable the existing views to surrounding geographical features to be retained from public vantage points.</p> <p>The CP achieves these objectives through confirming (by survey) that the development will not be visible from Rainbow Beach, that the surrounding geographical features can be viewed from the public domain (Village Square) and that the local roads are oriented east-west to capture view lines to the Littoral Rainforest and ocean.</p> <p>In relation to the detention basin and acoustic wall, the existing remnant vegetation along Ocean Drive will be retained. In addition, the future PA/DA for these areas will require the preparation of a detailed landscape plan for approval.</p> <p>2. Vegetated buffer between rainforest and any works should be 100m to fully minimise any disturbance; and</p> <p>3. Hilltop Village should be restricted to 2 stories to minimise visual intrusion / remove commercial component to retain residential atmosphere / develop a coastal colour scheme / develop a landscape plan.</p>	<p>1. Ensure that development cannot be viewed from Rainbow Beach; and</p> <p>2. Create development opportunities which will enable the existing views to surrounding geographical features to be retained from public vantage points.</p> <p>The CP achieves these objectives through confirming (by survey) that the development will not be visible from Rainbow Beach, that the surrounding geographical features can be viewed from the public domain (Village Square) and that the local roads are oriented east-west to capture view lines to the Littoral Rainforest and ocean.</p> <p>In relation to the detention basin and acoustic wall, the existing remnant vegetation along Ocean Drive will be retained. In addition, the future PA/DA for these areas will require the preparation of a detailed landscape plan for approval.</p> <p>The vegetated component of the buffer is between 47m and 67m in width, this distance providing for an immediate positive impact by decreasing the edge-to-area ratio of the Littoral Rainforest. The total buffer width is between 65m to 100m. The individual land uses comprising the buffer were initially identified by Dr Peter Brennan, a rainforest expert in relation to edge effects. This issue is discussed further at Section 5.1.1 to this report.</p> <p>The UDMP identified a 'hill top village' concept for the site, with land uses to include commercial, retail, tourism and a visitor focus. To achieve residential densities for the site as a whole, it is envisaged that these ground / first floor uses will be supported by 1 or 2 stories of residential above. This issue of height / density is discussed in full in Section 5.1.3 to this report.</p> <p>PMHC is currently preparing a Development Control Plan for Area 14 and it would be within this document that 'colour schemes' should be set out. Future PA's/DA's for the site will also require the preparation of detailed landscape plans.</p>

No.	Author	Issues / Requirements	Comments
13	Penny Marshall	<p>Reservations about supporting <u>Concept Plan</u> for following reasons:</p> <ol style="list-style-type: none"> 1. Building heights will not maintain village atmosphere – should limit Hilltop Village to 3 stories and remainder to 2; 2. Building heights within 100m of rainforest will exacerbate wind turbulence – 100m buffer should be provided; 3. Cannot support density if road infrastructure remains in current condition (Houston Mitchell Drive and Ocean Drive intersection) 	<p>As set out above, to achieve residential densities for the site as a whole, it is envisaged that the ground / first floor commercial / retail uses will be supported by one (1) and two (2) storeys of residential above. This issue of height / density is discussed in full in Section 5.1.3 to this report.</p> <p>Edge effects, including 'wind and salt spray' were initially identified by Dr Brennan as a potential edge effect on the Littoral Rainforest. In particular Dr Brennan noted (PPEC, 2007) that <i>"the construction of buildings taller than the existing rainforest canopy and close to the western edge of the rainforest could cause some turbulence which would lead to an increase in salt deposition along this edge. Since tall buildings are not proposed for the site, there should be no significant increase in salt deposition."</i></p> <p>Additional information was subsequently sought from Dr Brennan in relation to an acceptable distance between a 3-4 storey building and the rainforest edge. By correspondence dated 21 March, 2006 (Appendix C of EA) Dr Brennan advised the following:</p> <p><i>"...I note that no tall buildings will be located within 40 metres of the edge of the existing rainforest. My previous concern was that tall buildings within 40m of the existing edge of the littoral rainforest could create eddies that would bring salt-laden south-east winds back onto the previously protected western edge of the rainforest. I have no concerns that 3 to 4 storey buildings located 70m from the edge could set up an eddy effect that would increase salt deposition in the SEPP 26 rainforest."</i></p> <p>The total 'buffer' width is between 65m to 100m and the individual land uses comprising the buffer were initially identified by Dr Brennan. This issue is discussed further at Section 5.1.1 to this report.</p> <p>The Planning Agreement (VPA) includes a landowner offer to pay contributions determined by PMHC as being sufficient to cater for road and intersection works generated by the development of Area 14.</p>

No.	Author	Issues / Requirements	Comments
		<p>– developer contributions will not be enough to upgrade;</p> <p>Supports <u>Project Application</u> for the following reasons:</p> <ol style="list-style-type: none"> 1. Works are essential to protect rainforest; 2. Gated walkway required to restrict dogs etc; 3. VMP is comprehensive and should be supported – should assure ongoing maintenance by Council. 	Noted
14	Lake Cathie Progress Association (Jack Jones)	<p>Support project as presented by King + Campbell, however concerns with the following broader community issues:</p> <ol style="list-style-type: none"> 1. Upgrade of Ocean Drive through Lake Cathie village is required; 2. Upgrade of Houston Mitchell Drive critical; and 3. Construction of sporting fields on SVF land urgently needed. <p>Issues related to subject proposal:</p> <ol style="list-style-type: none"> 1. Walking / cycle path – terminates at Middle rock and does not proceed to Lake Cathie Village – this should be extended by Council; and 2. Middle Rock road access should be sealed. 	<p>Noted</p> <p>The proposed cycleway/pathway links to the existing concrete pathway in Ocean Drive. The provision of other walking and cycling paths into Lake Cathie Village and the sealing of Middle Rock road are not within the scope of this CP.</p>
15	Bonny Hills Progress Association (Roger Barlow)	<p>Acknowledges that site forms a component of the Area 14 region;</p> <p>Appears that application and experts recognise the main issues – main issues of concern include the following:</p>	

No.	Author	Issues / Requirements	Comments
		<ol style="list-style-type: none"> 1. Absence of 'real detail' as to what development will look like, therefore cannot offer support; 2. Proponents could not provide details at the community meeting as to the 'types of housing', built form of Hilltop Village, nature of new businesses in village, traffic loads, connectively with adjoining SVF land; 3. Infrastructure and services are substandard for existing population therefore no guarantee that it will be OK for more residential development; 	<p>This application in relation to the developable portion of the site was made for Concept Plan approval only; Conceptual details of the built form of the Hill Top Village have been provided in sketch format. The CP submission has identified a 'vision' for the site which is supported by a road hierarchy to clearly define the development 'precincts' (Section 3.3 of EA). This road hierarchy, including 'main street' and 'service lanes' is particularly important for the Hilltop Village.</p> <p>The intent of a main street (25-26m) with a rear service lane (6m) is to ensure that the whole of the Main Street will be given over to pedestrians and parallel parking to encourage the activation of the shop frontages. The rear service lane will allow provision of basement and rear parking thereby ensuring no driveways within the Main Street. The removal of driveways from the Main Street also maximises opportunities for established street tree planting, with seasonal shade and colour. The scale of the established tree planting will complement the building facades and encourage 'spill-out' for cafe style uses.</p> <p>In addition to supporting the function of the Main Street, the rear service lane will serve a dual purpose of supporting the adjoining medium density residential area. The topography of the site together with the street orientation will allow the laneway itself to become a quality space for future residents whilst providing a good separation to the ground floor commercial uses on the Main Street. It is intended that the scale of the laneway will provide a functional and attractive streetscape for the transition to the proposed medium and low density residential zones.</p> <p>It is acknowledged that not all of the above conceptual detail is easily conveyed in the format of a public meeting attended by 50 people.</p> <p>Water and sewer services have recently been augmented by Council (Sections 6.4.1 and 6.4.2 of EA) and electricity and telecommunications networks are available to the site (Section 6.4.3 of the EA). Upgrades to Ocean Drive in accordance with Roadnets requirements (Appendix H) will be provided as each stage within the Area 14 release area is developed.</p>

No.	Author	Issues / Requirements	Comments
		<p>4. Developers will only provide what they have to and even with Section 94 contributions there will be a shortfall;</p> <p>5. Existing state of Ocean Drive is 'abysmal' (north and south of site) and Houston Mitchell is inadequate to handle any increases;</p> <p>6. Traffic lights will cause disruption to the traffic flow – roundabouts will allow traffic to flow;</p> <p>7. Proposed development will not be consistent with the existing densities and heights and will not maintain village atmosphere. Hilltop Village will be clearly visible from surrounding areas and beach;</p>	<p>Significant land area has also been set aside on the adjoining St Vincent's land to provide for future schools and regional sporting fields.</p> <p>The VPA includes an offer to pay Section 94 Contributions at future rates to be determined by PMHC as being sufficient to fund roads and open space infrastructure in Area 14.</p> <p>Houston Mitchell Drive is included in PMHC's roads contribution plans and development in Area 14 will pay contributions towards its upgrade.</p> <p>The Traffic Assessment prepared by Roadnet on behalf of PMHC has identified the need for traffic lights at the corner of Abel Tasman Drive and Ocean Drive, being the access to the subject site. Whilst initially a roundabout was recommended on the basis of traffic generation, Roadnet concluded that the benefits of providing traffic lights in the first instance was preferable for the following reasons:</p> <ul style="list-style-type: none"> - traffic lights require a smaller intersection footprint; - traffic lights will cater for pedestrians and enable ease of access across Ocean Drive for existing residents of Lake Cathie; - signal timing can be optimised with the lights adjacent to the main village centre on Ocean Drive; and - traffic lights will provide for greater capacity for future growth in the locality. <p>To achieve residential densities for the site as a whole as required by the UDMP, it is envisaged that the ground / first floor commercial / retail uses within the Hilltop Village will be supported by one (1) and two (2) storeys of residential above. This issue of height / density is discussed in full in Section 5.1.3 to this report.</p> <p>As previously stated, the CP submission has identified a 'vision' for the site which is supported by a road hierarchy to clearly define the development 'precincts' (Section 3.3 of EA). It is anticipated that this hierarchy will create a village atmosphere where pedestrians are given priority through generous</p>

No.	Author	Issues / Requirements	Comments
			<p>footpath widths, café style development, street landscaping and views to the Littoral Rainforest.</p> <p>In relation to view lines, a visual impact assessment was undertaken as part of the EA submission (Section 6.3). The viewpoint locations were determined on the basis of being a primary public location which may be detrimentally impacted, by way of visual amenity, as a result of the proposal. Whilst development of the site as proposed will be visible from the surrounding road network and existing urban areas, this impact on view quality was considered minimal. The proposed development is residential in character and therefore will be consistent in appearance with the existing residential areas on Ocean Drive. Whilst the view will alter from that associated with a large vacant allotment, the locality can absorb this view change given the existing residential character of the location.</p> <p>The preservation and retention of the existing beach and rainforest areas in their natural state, including the existing view lines onto the site from Rainbow Beach, was considered to be one of the primary objectives of the proposal. Accordingly four view lines from the beach area were surveyed to gauge the impact of the proposed three/four storey development associated with the Hilltop Village (Exhibits 09C - 4 sheets).</p> <p>These sections confirmed that the dune height combined with the height and density of the existing vegetation restricts direct views onto site. The view will remain unaltered and therefore the proposed development will have no impact on the existing natural landscape from Rainbow Beach.</p>
		<p>8. Stage 1 Project Application and VMP are critical and 'it will be critical to get these right';</p> <p>9. Concern over width of 'buffer' to SEPP 26 – legislation indicates this should be 100m;</p>	<p>Noted</p> <p>SEPP 26 does not prohibit development nor create a 'buffer' within 100m of the SEPP 26 Littoral Rainforest edge. The legislation does however require the consent of Council and the concurrence of the Department of Planning for any works either within the Littoral Rainforest or within 100m of its gazetted edge.</p>

No.	Author	Issues / Requirements	Comments
		<p>10. Connectivity with SVF land and existing developments is unclear – may encourage more traffic towards coastline and protection barriers for sand dunes need to be adequate;</p> <p>11. Proposed cycleway and walkways should link with the proposed coastal walkway from Laurieton to Port Macquarie;</p> <p>12. Safety concerns with existing 4 wheel drive beach / dangerous</p>	<p>As previously stated, the total 'buffer' width is between 65m to 100m and the individual land uses comprising the buffer were initially identified by Dr Brennan. This issue is discussed further at Section 5.1.1 to this report.</p> <p>Connectivity between the subject site and the adjoining site to the west (St Vincent's land) is highly desirable and required by the UDMP. The UDMP has identified a requirement for a 'collector' road within the boundaries of the subject site (lot 1 and Lot 4) and for a 'collector' road connection to the west (St Vincent's land).</p> <p>The exhibits accompanying the EA included a concept road layout which included two (2) connections to the adjoining St Vincent's land. The location of these connection points was based on a very preliminary road layout which was provided by the adjoining land owners. However it is noted that their final road layout has not been determined.</p> <p>On the basis of comments received from the Department and to remain consistent with the UDMP, the exhibits for the subject proposal have now been amended to delete the actual location of the connector road(s) to the west and to provide a notation on the plans to acknowledge that the adjoining site will connect with the connector road within the subject properties. Details in relation to the 'actual' connection point(s) will be included with the relevant PA's/DA's.</p> <p>The proposed fencing and spiky hedge planting will ensure that all pedestrians utilise the rainforest boardwalk.</p> <p>This CP submission will provide for cycle ways and pathways within the boundaries of Lot 1 and Lot 4 and for a connection to the existing footpath on Ocean Drive, adjacent to Miala Street and to the St Vincent's Foundation property to the south.</p> <p>This issue is not relevant to the subject CP or PA</p>

No.	Author	Issues / Requirements	Comments
		swimming conditions and more residents.	
16	Albert Johnston	<p>Objects to proposal for following reasons:</p> <p><i>"The stormwater runoff on a large area into a dry retention pond then drain into existing stormwater creek.</i></p> <p><i>With water then running into the creek three or four days after the rain has stopped.</i></p> <p><i>This will erode the existing creek which is in bad need of repair at the moment.</i></p> <p><i>If the creek was to be piped to the existing retention basin it would stop local flooding and take the stormwater from dry retention pond direct to the existing retention basin".</i></p>	<p>This submission is in relation to the north western catchment and the proposed detention pond (including biofiltration) located adjacent to Ocean Drive.</p> <p>The commitments at CP16 have been included to ensure that the post development water quality and quantity satisfy best practice guidelines. The future DA/PA for this area will include detailed modelling and design of the basin, in accordance with the aims of the IWCMP and Auspec. Specifically, this basin will be required to 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 that the top of the water level within the basin is below the road surface level in Ocean Drive.</p>

Section 5

Key Issues

By correspondence dated 17 January, 2011, the Department has identified six (6) 'key issues' to be addressed, together with a request for 'additional information'/clarification in relation to three (3) matters. A full copy of this correspondence is provided at Appendix A.

5.1 Key Issues

5.1.1 Issue 1 - Buffer to SEPP 26 Littoral Rainforest

- *The justification for a buffer width of 40m-60m from the western edge of the SEPP 26 Littoral Rainforest as outlined in the EA is unclear. The reader is reliant on the numerous technical reports contained in the EA Appendices all of which contain differing recommendations with respect to buffer width. A clear summary is required in the body of the EA which demonstrates that the proposed buffer is sufficient for the ecological functioning and preservation of the SEPP 26 Littoral Rainforest taking into consideration the effects of coastal recession, given that a generic 100m buffer is required by SEPP 26 – Littoral Rainforest and is identified in the Greater Lake Cathie Bonny Hills Urban Design Masterplan (May 2003).*
- *The Gateway Determination issued to Council by the Department of Planning in October 2010 to rezone the land at the subject site required a 60m buffer from the western edge of the SEPP 26 Littoral Rainforest. The 60m buffer requirement resulted from a series of ecological and groundwater investigations undertaken by the proponent from 2002 and followed negotiations between agencies and the then Department of Industry, Planning and Natural Resources in 2004. However, this is not clearly outlined in the EA and a summary of key meetings and agreed outcomes should be provided. Any departure from the 60m buffer width is to be justified in detail for any concept plan approval.*

Response to Issues:

The buffer to the SEPP 26 Littoral Rainforest as outlined in the Concept Plan Application has been designed taking into account:

- The legislative requirements of SEPP No. 26 – Littoral Rainforests.
- Initial Ecological Assessment by Peter Parker Environmental Consultants and Dr Peter Brennan in 2002 (Appendix C – EA).
- Initial stormwater and groundwater investigations by Dr Peter Jelliffe in 2002 (Appendix D – EA).
- Review by Port Macquarie Hastings Council (PMHC) in 2006 which identified the need for further more rigorous ecological and groundwater/stormwater investigations to determine the appropriate buffer design.

- Detailed briefings with the Department of Planning (DoP) and PMHC when the draft findings of the PMHC commissioned ecological assessment (Biolink Pty Ltd) and groundwater assessment (Martens & Associates) were presented (December 2006).
- In-principle agreement with the Department of Planning and PMHC reached on the components of the SEPP 26 Littoral Rainforest buffer, the additional ecological/groundwater/stormwater investigations required to confirm the width of the buffer and the appropriate legal mechanisms needed to achieve the various approvals required and deliver the proposed regeneration works as the initial phase of development (December 2006). Refer Attachment S1 being our letter dated 10 January 2007 to the DoP confirming the outcomes of the December 2006 meeting.
- The results of the Biolink Ecological Review (July 2007) (Appendix C – EA) and the Martens groundwater/stormwater studies (July 2007 and July 2010) (Appendix D – EA), the updated ecological assessment by Peter Parker Environmental Consultants (July 2010) (Appendix C – EA) and the Coastal Hazard Study by SMEC (March 2010) (Appendix G – EA).
- The submission made by PMHC during the public exhibition of the Concept Plan and Stage 1 Project Application to extend the revegetation/regeneration area westward to the edge of the cycleway/pathway. This request has generally resulted in an additional 5,700m² of revegetation/regeneration in the buffer area.

The Key Issue raised by DoP is that the various technical reports in the EA Appendices contain differing recommendations with respect to the buffer width and that the proposed buffer should be justified in a clear summary demonstrating that the buffer is sufficient:

- (a) For the ecological functioning and presentation of the SEPP 26 Littoral Rainforest.
- (b) Taking into account the effects of the coast recession.
- (c) Given that a generic 100m buffer is required by SEPP 26 Littoral Rainforest and identified in the GLCBH Urban Design Masterplan (2003).

Dealing with the third issue first we make the following comments:

- As outlined in Section 4.2.5 of the EA, SEPP 26 applies to land either within the Littoral Rainforest boundary or to non-residential land within 100 metres of the Littoral Rainforest boundary (Clauses 4(1)(a) and 4(1)(b)).
- SEPP 26 does not require or create a generic 100 metre buffer, but through Clauses 7(1), (2) and (3) requires the consent of the Council and the concurrence of the Director General for any activity or development relating to land within 100 metres of the littoral

rainforest boundary.

- As outlined in Section 5.1 of the EA, the (then) Department of Infrastructure Planning & Natural Resources (DIPNR) confirmed in correspondence dated 12 July 2005, that "... *land uses within the buffer area may be negotiated, provided the land uses meet the objectives of the SEPP*" and that the issue of "*limited development within the buffer area should be considered by the Council in their environmental study process...*" and that the "*scientific analysis ... undertaken be made available to Hastings Council in the first instance so that a justification can be made (or otherwise) for the extent of development within the buffer area*". (Refer Attachment S7).
- In accordance with the advice from DIPNR the initial scientific analyses (Parker & Brennan 2002, Jelliffe 2002) were submitted to PMHC as part of a draft Local Environmental Study (LES) in 2006. PMHC have subsequently commissioned peer review and more detailed scientific analyses in relation to ecological and groundwater issues (Biolink & Martens 2007, 2010) to ensure the proposed SEPP 26 Rainforest buffer satisfies the objectives of SEPP 26 by preserving the littoral rainforest in its natural state and immediately implementing revegetation/regeneration works to ensure preservation and enhancement of the existing littoral rainforest.
- The current version of the Greater Lake Cathie Bonny Hills Urban Design Masterplan (LCBHUM) was adopted by PMHC in July 2004. The Environmental Study undertaken in the preparation of the LCBHUM related only to Stage 1A of the Area 14 UIA. The 100 metre buffer to the SEPP 26 Rainforest shown in the LCBHUM was a default buffer applied without the normal environmental investigations applicable to a rezoning process.
- PMHC have subsequently (in 2010) prepared a Planning Proposal which included independent scientific investigations to inform the appropriate SEPP 26 buffer design. The PMHC Planning Proposal has been the subject of a Gateway Determination, public exhibition and a subsequent request to the Department of Planning to make the Stage 1B Area 14 LEP in accordance with Section 59(2)(a) of the Environmental Planning & Assessment Act 1979.
- In that regard the SEPP 26 Littoral Rainforest buffer is, pursuant to PMHC's Planning Proposal, intended to be zoned E3 Environmental Management and supersedes the default buffer shown on the 2004 LCBHUM.
- The SEPP 26 Littoral Rainforest buffer contained in the subject Concept Plan Application is consistent with the proposed E3 zone in PMHC's final Planning Proposal and so also supersedes the default buffer shown on the 2004 LCBHUM.

In consideration of the DoP's request for a clear summary to demonstrate that the proposed buffer to the SEPP 26 Littoral Rainforest is considered sufficient for the ecological functioning and preservation of the rainforest, taking into consideration the effects of coastal recession (ie issues 1. and 2. above) we provide the following overview:

- The proposed buffer to the SEPP 26 Littoral Rainforest has been designed after detailed consideration of current and likely future threats to the rainforest, including:

i. Fragmentation of rainforest due to clearing of vegetation

The landward edge of the SEPP 26 rainforest is, particularly on Lot 1, located immediately adjacent to rurally zoned land, which historical photos show has been used for agricultural purposes for many decades.

The proposed buffer design will result in a 47-67m wide vegetated buffer being established adjacent to the SEPP 26 Littoral Rainforest edge. Stage 1 of these works will be undertaken prior to any development proceeding and will result in a fenced 40-60m fenced vegetated buffer being established and weed removal and management works within and adjacent to the SEPP 26 Rainforest. The remainder of revegetation works are proposed to be undertaken in conjunction with the construction of the pathway/cycleway and stormwater management works in Stage 2 of the development.

The immediate establishment of the fenced vegetation buffer and the implementation of weed removal/management works will protect and enhance the existing littoral rainforest in its natural state and improve its current ecological functioning by increasing the width to length ratio and managing the current threats posed by weeds.

ii. Human and domestic animal intrusion impacts

The current threats of impact by human and domestic animal intrusion relate to the existing situation where the subject properties are surrounded by existing residential areas and is already used as a convenient access route to Rainbow Beach.

The future human and domestic animal intrusion impacts are potentially greater on the basis of the increased population and the closer proximity of future residences to the rainforest.

The buffer design in the Concept Plan Application mitigates the potential impacts of current and future human and domestic animal intrusion by:

- Immediate implementation of the revegetation/regeneration and weed management works prior to any development of the site.
- Immediate fencing the revegetation/regeneration area with a 2m high fence edged with a spiky hedge.
- Immediate formalization of the existing track with a pedestrian boardwalk to Rainbow Beach.
- Additional revegetation/regeneration works in Stages M2, S2 and S5.
- Construction of a pathway/cycleway, perimeter road, and car parking spaces in Stages M2, S2 and S5.

In summary the fenced revegetation/regeneration areas will physically reduce the potential for human intrusion in the SEPP 26 Littoral Rainforest. The public boardwalk will provide a convenient pedestrian access to Rainbow Beach thereby reducing the potential of current and future residents making their own tracks through the rainforest. The public cycleway/pathway/carparks/perimeter road provide a clear separation of private and public landuses and facilitates and activated use of the area resulting in greater natural surveillance.

The key benefit to the current ecological function and preservation of the SEPP Littoral Rainforest is the immediate implementation of the Stage 1 works and the further implementation of the remaining SEPP 26 buffer works in Stages M2, S2 and S5. The timing of these development funded buffer works will ensure that the current threat of human and domestic animal intrusion is minimized providing an immediate improvement to the ecological function of the SEPP 26 Littoral Rainforest. The ongoing implementation of the buffer features in the early stages of the proposed development will also ensure that mitigation measures are in place prior to the substantial development occurring.

It is submitted that the benefits associated with the early implementation of the SEPP 26 buffer works would not necessarily apply to a generic or default 100 metre buffer which would more likely be established on an incremental basis.

The SEPP 26 buffer design contained in the Concept Plan Application responds to the particular existing circumstances applicable to the subject properties by implementing immediate works to remove existing weeds adjacent to and within the SEPP 26 Littoral Rainforest and establishing a substantial fenced vegetated buffer and sustainable beach access prior to the commencement of development.

iii. *Groundwater hydrology and stormwater drainage impacts*

The Concept Plan Application includes detailed groundwater modeling and a concept stormwater management plan prepared by Martens & Associates for the sub-catchments draining towards the SEPP 26 Littoral Rainforest.

The Martens report makes a number of recommendations which have been included in the Statement of Commitments for the Concept Plan.

The Martens investigations support the early establishment of an average 40m wide revegetation area, noting that the earlier iteration of this study (2007) had recommended a 30 metre average width of revegetation. Martens also recommend the establishment of deep stormwater infiltration pits to ensure groundwater re-charge occurs and existing groundwater conditions below the SEPP 26 rainforest are maintained. The maintenance of existing groundwater conditions has been identified as being important to ensuring the ongoing preservation of the littoral rainforest in its natural state.

The recommendations of the detailed groundwater investigations undertaken by Martens & Associates have been included in the design of the buffer to the SEPP 26 Littoral Rainforest and the Statement of Commitments and we submit have been demonstrated to be sufficient to ensure the ongoing ecological functioning and preservation of the SEPP 26 Littoral Rainforest.

iv. *Issues Relating to the Ongoing Management of the SEPP 26 Buffer*

The landowners offer to establish the SEPP 26 Littoral Rainforest buffer as the first stage of development has been underpinned by a Planning Agreement with PMHC which will result in:

- The landowners being required to complete environmental lands establishment works in accordance with approved vegetation management plans.
- The landowners maintaining the SEPP 26 Littoral Rainforest within Lot 4 and the buffer area for a period of 10 years after the establishment works have been completed.
- The landowners offering to pay PMHC a Management Contribution for the ongoing management of the SEPP 26 buffer area by PMHC for a further 10 years.

It is submitted that the Planning Agreement established between the landowners and PMHC in relation to the SEPP 26 Littoral Rainforest buffer as proposed in the Concept Plan Application provides certainty with respect to the ongoing management of the buffer area. The immediate implementation and funding of an ongoing management regime will result in the preservation and enhancement of the SEPP 26 Littoral Rainforest in its natural state. This represents a proactive contribution to ensuring the ecological functionality of the littoral rainforest without placing additional financial burden on the existing community. Such an outcome would unlikely be achieved through the application of a generic or default buffer distance.

v. *Effects of Coast Recession*

The Coastal Hazard Study undertaken by SMEC (EA – Appendix G) confirms that *“Despite the conservative (worst case scenario) values of storm erosion chosen for the calculation of hazard lanes, the developed portion of study area would not be at risk nor be subject to reduced foundation capacity within a 100 year planning period.”*

The early implementation of substantial revegetation works 47m-67m wide along the full seaward frontage of the proposed development as outlined in the Concept Plan Application, represents a significant contribution to neutralizing the potential effects of coast recession on this part of the eastern seaboard.

The establishment of a funded management regime for the following 20 years maximizes the potential for the SEPP 26 Littoral Rainforest and buffer area to resist the predicted potential impacts of coastal recession over the next 100 years by ensuring the vegetated areas are maintained at a high standard and as such is considered to be sufficient for the ongoing ecological functioning and preservation of the SEPP 26 Littoral Rainforest.

In summary it is submitted that 65-100m buffer to the SEPP 26 Littoral Rainforest is sufficient for the ecological functioning and preservation of the SEPP 26 Rainforest as it will:

- Achieve the aims of SEPP 26 by implementing works to ensure the preservation and enhancement of the SEPP 26 Littoral Rainforest in its natural state.
- Address current potential human and domestic animal intrusion and weed infestation impacts through the immediate establishment of a 40-65m fenced revegetation/regeneration area and a pedestrian boardwalk access to Rainbow Beach.
- Address future impacts potentially generated by the

proposed development as outlined in the Concept Plan Application on the SEPP 26 Littoral Rainforest through the early implementation of other buffer works including additional revegetation areas, public pathway/cycleway, public carpark and perimeter road, groundwater recharge facilities and stormwater management facilities.

- Establish and fund a 20 year maintenance regime for the SEPP 26 buffer area and the SEPP 26 Littoral Rainforest within Lot 4. The management regime will ensure that substantial additional vegetated areas are immediately established in readiness for potential impacts generated by coastal recession over the next 100 years.

In relation to the second dot point of the DoP's Key Issue No. 1 we make the following comments:

The buffer to the SEPP 26 Littoral Rainforest as outlined in the Concept Plan Application is consistent with the 60m buffer referred on to in the Gateway Determination and publicly exhibited by PMHC with their Planning Proposal in November 2010.

Upon issue of the Gateway Determination by the Department of Planning on 20 October 2010 and discussions between Peter Cameron of PMHC and Jim Clark of DoP on 28 October 2010, PMHC advised the DoP they had widened the E3 zone to incorporate the perimeter road which was "permissible in that zone and reflects the recommendations from the scientific reports" (PMHC, 28 October 2010). The email providing this advice to DoP's Jim Clark was also sent to Joanna Bakopanos of the Part 3A Major Projects Team. The proposed zone map (Exhibit 10) of the Concept Plan Application was also amended prior to exhibition to ensure consistency with Council's Planning Proposal and the Gateway Determination. Accordingly there has been no departure from the 60m buffer width referred to in the Gateway Determination.

As outlined in the EA the proposed buffer to the SEPP 26 Littoral Rainforest is 65m-100m wide (refer Exhibit 10) and contains the following components:

- A revegetation/regeneration area 47m-67m wide proposed to be established in two stages.

Stage 1 of the revegetation/regeneration works is 40m-60m wide and as outlined in the Stage 1 Project Application will be carried out prior to any development occurring. The Stage 1 works include a 2m high exclusion fence and spiky hedge as well as the formalisation of the existing track with a pedestrian boardwalk to Rainbow Beach and all weed removal and weed management works within the SEPP 26 Littoral Rainforest. The extent of the Stage 1 works is detailed in the Stage 1 Project Application.

Stage 2 of the revegetation/regeneration works is 7m wide and be undertaken once the stormwater drainage facilities and pathway/cycleway referred to below are completed.

- Stormwater drainage management facilities incorporating bioretention facilities for the three sub-catchments draining to the SEPP 26 Littoral Rainforest. As outlined in the EA each of the stormwater management facilities will incorporate groundwater recharge wells to be designed to maintain current groundwater conditions under the SEPP 26 Littoral Rainforest. Stormwater management facilities are proposed to be provided in Stages M2 and S2 of the development.
- Public cycleway/pathway, public carparking spaces and public perimeter road providing a clear separation between public and private landuses and better opportunities for natural surveillance of public areas to reduce potential human intrusion impacts. These components of the buffer to the SEPP 26 Littoral Rainforest buffer are proposed to be established in Stages M2, S2 and S5 of the development.

The design of the buffer to the SEPP 26 Littoral Rainforest as described above resulted from detailed ecological and groundwater investigations between 2002 and 2010 and negotiations as outlined below with DoP. All of the components of the buffer to the SEPP 26 Littoral Rainforest are contained within the proposed E3 Environmental Management Zone as shown in PMHC's Planning Proposal which has been submitted to DoP (on 18 February 2011) with a request that the LEP be made pursuant to Section 59(2)(a) of the Environmental Planning & Assessment Act.

As outlined above the buffer to the SEPP 26 Littoral Rainforest contained in the Concept Plan Application is consistent with PMHC's Planning Proposal and contained within a 65m-100m E3 Environmental Management zone thereby complying with the condition attached to the DoP Gateway Determination for a 60m buffer. Section 5.1 of the EA contains a timeline of Strategic Actions, Key Events (reports) and Consultation.

This timeline has been modified below to provide a summary of key meetings and agreed outcomes with respect to the design and implementation of the buffer to the SEPP 26 Littoral Rainforest.

Date	Action
February, 2002	<p>Council at its meeting of 11 February, 2002, resolved:</p> <ol style="list-style-type: none"> 1. To amend HUGS such that the 'buffer' area to the Littoral Rainforest is included within the HUGS Urban Investigation Area; and 2. To prepare an Environmental Study and draft LEP to permit the buffer area to be considered in the context of the Stage 1 release area investigations in Area 14. <p>Through this inclusion it was anticipated that appropriate zonings and land uses could be determined in a manner consistent with the aims and objectives of State Environmental Planning Policy No 26 – Littoral Rainforests;</p>

Date	Action
February, 2002	<p>Hastings Council agreed to King & Campbell preparing and co-ordinating the Local Environmental Study (LES) for the subject properties. The LES was referred to as 'Stage 1B' on the basis that the treatment of the rainforest edge was a particularly important issue to Lot 1 and Lot 4 only.</p> <p>At the time, discussions with ecological and Littoral Rainforest experts confirmed that options other than providing a generic 100m setback could achieve the objectives of SEPP 26. This included a combination of a vegetated buffer to be implemented immediately, land use controls, water quality management and the separation of public and private land uses.</p>
May, 2002	<p>As part of preliminary investigations, ecologists Peter Parker and Dr Peter Brennan (specialist with regard to edge effects and Littoral Rainforests) made a number of recommendations as to the content of an appropriate edge treatment to the Littoral Rainforest.</p>
July, 2002	<p>Council at its meeting of 29 July, 2002, considered a report by the HUGS Implementation Advisory Sub-Committee in relation to the inclusion of the land within 100m of the littoral rainforest within HUGS. The following comments from committee members were noted at that time:</p> <ol style="list-style-type: none"> 1. Mr John Martindale of the NPWS stated that they would be <i>"sympathetic to active management of the buffer if this aids its protection..."</i>, and 2. Ms Jo Gardner of the Department of Planning advised that the Department <i>"would support inclusion of the buffer in the environmental study, as this will enable appropriate zone/s to be determined and applied"</i>.
August, 2002	<p>By letter to Hastings Council dated 26 August, 2002, Planning NSW confirmed that the HUGS be amended to include land within 100m of the Littoral Rainforest edge, to allow its inclusion in the environmental study and to permit the identification of appropriate landuses in a manner consistent with the aims of SEPP 26.</p>
July, 2005	<p>By letter to King & Campbell dated 12 July, 2005, the Department of Infrastructure, Planning and Natural Resources confirmed that land uses within the 'buffer' area may be negotiated, provided the proposed uses meet the objectives of SEPP 26. This letter also confirmed their understanding that consideration was being given to a road as part of the buffer design.</p>
March, 2006	<p>Draft LES completed and submitted to PMHC.</p>
March 2006 – December 2006	<p>PMHC undertake peer review of the draft LES and determine that independent ecological review is required and that detailed groundwater investigations should be undertaken to determine potential impacts on the existing groundwater regime under the SEPP 26 Littoral Rainforest.</p> <p>PMHC engaged Biolink Pty Ltd (ecological) and Martens & Associates (groundwater) to</p>

Date	Action
	undertake additional investigations.
December, 2006 – January 2007	<p>Stakeholder meeting at the Department of Planning attended by the Department of Planning, PMHC and landowner representatives.</p> <p>At this meeting agreement was reached with respect to the width and content of the SEPP 26 buffer (subject to outcomes of the further investigations commissioned by PMHC, see below).</p> <p>At this meeting the DoP was represented by Mr Don Geering and Mr Jim Clark and PMHC was represented by Mr Luke Nicholls and Mr Peter Cameron, ecological consultant Dr Steve Phillips of Biolink and groundwater/stormwater consultant Dr Daniel Martens of Martens & Associates, Landowners represented by King & Campbell, Dr Lindsay Taylor.</p> <p>The outcomes of this meeting were confirmed in correspondence dated 10 January 2007 to DoP which is enclosed as Attachment S1. This correspondence confirmed:</p> <ul style="list-style-type: none"> • The components of the SEPP 26 Littoral Rainforest buffer as outlined in the draft LES; • The preliminary outcomes of the peer review of ecological issues by which at that stage indicated from a groundwater perspective that a 20m-60m width of revegetation was considered to be a conservative maximum although at that point in time groundwater modelling results were not available. • PMHC's Peter Cameron summary that all parties were comfortable with the buffer design subject to more detailed groundwater modelling by Martens & Associates and the subsequent completion of the ecological review by Biolink; • DoP's Don Geering summary that the Department was generally comfortable with the presented approach to the SEPP 26 buffer which were considered ecologically sensible and addressed concerns with groundwater issues. DoP confirmed the outcomes should ensure: <ul style="list-style-type: none"> ○ Excess stormwater levels are as low as possible adjoining the SEPP 26 Littoral Rainforest; ○ Access through the SEPP 26 Littoral Rainforest should be restricted; ○ The overall condition of the SEPP 26 Littoral Rainforest is improved. • In principle agreement with respect to the process for undertaking the buffer works: <ul style="list-style-type: none"> ○ Completion of LES by Council; ○ King & Campbell seek confirmation of the applicability of Part 3A and then submit a Concept Plan Application providing appropriate details of future development; ○ Planning Agreement (VPA) to be prepared by Lindsay Taylor Lawyers in relation to works to be undertaken at the rezoning stage; ○ The LES, Concept Plan Application and VPA to be publicly exhibited concurrently and subsequently adopted simultaneously. • It was agreed the process outlined above would resolve strategic issues relating to SEPP 26 for the Department of Planning at the rezoning stage and provide

Date	Action
	<p>certainty to landowners and the consent authority regarding future development.</p> <ul style="list-style-type: none"> Lindsay Taylor Lawyers to document legal process associated with the in principle agreement. <p>Attachment S1 contained a summary of the legal advice from LTL.</p> <p>The SEPP 26 Littoral Rainforest buffer contained in the Concept Plan Application is consistent with the original buffer design presented to DoP in December 2006 in terms of overall width and components. The further investigations undertaken by Biolink and Martens for PMHC resulted in confirmation of the 40m-60m revegetation/regeneration width and the inclusion of groundwater recharge wells. PMHC's submission during the exhibition period resulted in the extension of the revegetation/regeneration area from the fence to the pathway/cycleway.</p>
10 January, 2007	<p>Correspondence to DoP (refer Attachment S2) seeking the Minister's opinion that the proposed development was a Major Project to be determined under Part 3A of the EP&A Act.</p> <p>The drawings of the proposed development and SEPP 26 buffer design attached to this request were identical to that presented to the DoP meeting in December 2006.</p>
18 January, 2007	<p>Correspondence from DoP (refer Attachment S3) confirming that the proposal is a Project to which Part 3A applies.</p>
19 February, 2007	<p>Submission to DoP of Preliminary Environmental Assessment for Concept Plan Applications and Stage 1 Project Application for the subject development.</p> <p>The drawings of the proposed development and the buffer to the SEPP 26 Littoral Rainforest were identical to that presented to the DoP meeting in December 2006.</p>
July, 2007	<p>Martens & Associates July 2007 Groundwater Study for PMHC completed. This report is contained in Appendix E of the EA. This report by Martens recommended that "... the planted buffer be reduced from the 40m in the structure plan to a mean of 30m." (Martens, July 2007, p38). The reduction was proposed based on potential impacts of climate change on local hydrology conditions.</p> <p>Biolink's Area 14 Stage 1B Ecological Assessment for PMHC completed. Biolink adopted the reduction of the width of revegetation to 30m recommended by Martens & Associates and confirmed the structure and overall width of the proposed buffer to the SEPP 26 Littoral Rainforest.</p>
August, 2007	<p>DoP issue Director General's Requirements. These were subsequently updated in July 2009.</p>
2009	<p>PMHC commission Martens & Associates to undertake further work to:</p> <ul style="list-style-type: none"> Provide further clarity in terms of groundwater impacts and management

Date	Action
	<p>requirements;</p> <ul style="list-style-type: none"> • Provide supplementary information in relation to stormwater management adjacent to the SEPP 26 rainforest and integrating stormwater management systems with groundwater management systems (Martens, July 2010, p6). <p>The July 2010 Martens report concluded that on the basis of an average 40m planted distance there are unlikely to be significant impacts on groundwater conditions below the SEPP 26 forest community (Martens, July 2010, p49).</p> <p>The recommendations of the Martens & Associates July 2010 have been included in the Concept Plan Application and Statement of Commitments.</p>
October, 2010	Gateway Determination by DoP. PMHC amend Planning Proposal to be consistent with Determination. King & Campbell amend Exhibit 10 of Concept Plan Application to be consistent with Planning Proposal.
November, 2010	Concept Plan Application, Stage 1 Project Application, PMHC Planning Proposal and Planning Agreement placed on public exhibition concurrently as per in principle agreement in December 2006.
December, 2010	<p>PMHC make submission supporting Concept Plan and Project Application and confirming adequacy of the buffer to the SEPP 26 rainforest based on the collaborative studies of the two specialist consultants (ie Martens and Biolink).</p> <p>PMHC seek widening of vegetation to the edge of the pathway. The Concept Plan Application has been amended in response to the PMHC submission.</p>

We submit that the above timeline summary provides a clear outline of the steps taken, negotiations between agencies undertaken and the iterative investigative work undertaken by ecological and groundwater specialists over the period 2002-2010 which has resulted in the current proposed buffer to the SEPP 26 Littoral Rainforest. Key correspondence referred to in the above timeline is enclosed for your information.

As previously outlined the 65m-100m wide buffer to the SEPP 26 Littoral Rainforest as proposed in the Concept Plan Application is consistent with the outcomes of the process detailed above, PMHC's Planning Proposal and the DoP's Gateway Determination.

The issues raised in Key Issue 1 have also been considered by PMHC in the preparation and exhibition of their Planning Proposal for the subject lands.

Most recently, PMHC at its meeting of 16 February, 2011, resolved the following in relation to the Planning Proposal for the subject site:

"1. That Council submit the final Planning Proposal to the Department of Planning and request that the Department of

Planning make the LEP in accordance with 59(2)(a) of the Environmental Planning and Assessment Act 1979.

2. That Council delegate authority to the General Manager to enter into and execute the Milland Area 14 Stage 1B Planning Agreement relating to Lot 1 DP 374315 and the Seawide Area 14 Stage 1B Planning Agreement relating to Lot 4 DP 615261, Lake Cathie."

The Concept Plan Application is consistent with PMHC's adopted Planning Proposal.

The Council report and attachment notes the following in relation to SEPP26 issues raised during the exhibition period. These issues have been similarly raised during the exhibition of the subject EA and accordingly it is considered appropriate to include a summary of Councils responses:

Legislative issues raised during exhibition period of Planning Proposal	Response by PMHC
1. Proposed footprint of urban area is contrary to MNCRS mapping and HUGS	<ul style="list-style-type: none"> • MNCRS allows a '<i>reasonable adjustment to a growth area boundary</i>'; • Council confirms that the scientific investigation of the buffer requirements for the SEPP 26 rainforest supports a lesser buffer requirement and therefore a reasonable adjustment to the growth area map boundary is appropriate.
2. Development is within the 100m buffer area.	<ul style="list-style-type: none"> • The Scientific investigations have confirmed that the aims and objectives of SEPP 26 can be achieved within a reduced buffer width; • Councils Urban Growth Management Plan for Area 14 proposes a dwelling yield of around 2700 to house around an expected population of around 6000 people; • A reduced development yield resulting from the arbitrary application of a 100m 'buffer' will bring about a need to investigate additional release areas.

Legislative issues raised during exhibition period of Planning Proposal	Response by PMHC
3. Vegetated buffer of 100m has not been tested	<ul style="list-style-type: none"> • Rather than testing the default 100m in the first instance, Council investigated the actual groundwater conditions that were required to satisfy the water needs of the forest at this current time and into the future given future adjoin urban development and expected changes in rainfall as a result of climate change; • Ecological and groundwater investigations support that a vegetated buffer of between 40-60m with specific stormwater recommendations is the most appropriate width to achieve this; • The aim of SEPP 26 is preserve the rainforest in its natural state and there is evidence that additional vegetation would lead to a reduced groundwater budget due to an increase of evapo-transpiration.
4. Precedent set by a reduction in the statutory buffer width	<ul style="list-style-type: none"> • Council concerned that the application of a default 100m buffer may undermine the protection of the rainforest and other environmental assets by precluding development funded initiatives that result in their restoration, maintenance and protection; • Council's support of the 'reduced' buffer is based on the rigorous and iterative investigation of both the ecological and groundwater characteristics and the demonstration that development can occur within the default 100m while ensuring the maintenance and enhancement of the adjoining SEPP26 rainforest.

Conclusion to Response to Key Issue 1

The changes in zoning proposed by PMHC's Planning Proposal supported by the Concept Plan Application, Stage 1 Project Application and Planning Agreement (VPA) will ultimately lead to the creation of a significant environmental buffer to the SEPP 26 Littoral Rainforest with a funded ongoing management regime for at least 20 years.

The sustainability of the Concept Plan Application is based on the iterative and collaborative scientific investigations undertaken by PMHC which have confirmed the proposed buffer will be sufficient for the ecological functioning and preservation of the SEPP 26 Littoral Rainforest while catering for population growth in the adopted Urban Investigation Area at Lake Cathie Bonny Hills.

The proposed rezoning will result in the creation of E2 and E3 environmental zones to protect the littoral rainforest in its natural state and provide for the establishment of the buffer. The Stage 1 Project Application and VPA will ensure the immediate establishment of a significant vegetated buffer on the western edge of the rainforest and weed removal/management works in accordance with the VMP followed by the ongoing management of the vegetated areas.

The SEPP 26 Littoral Rainforest will be provided further immediate protection in its natural state by the formalisation of the existing track with a pedestrian boardwalk to Rainbow Beach thereby limiting access to the rainforest by humans and predators.

The potential impacts of climate change have been considered in the determination of width of the vegetated component of the buffer and the design of the groundwater recharge wells. The immediate implementation of revegetation/regeneration works as part of the Stage 1 Project Application represent a proactive response to the potential effects of coastal recession over the next 100 years.

5.1.2 Issue 2 – Traffic and Access

- *The EA and Roadnet Area 14 report in Appendix H recommends inter alia the widening of Ocean Drive and the signalisation of the Ocean Drive/Abel Tasman Drive junction to ensure efficient and safe traffic flows in the area in 2019 and 2029. However, these recommended upgrade works are not included as part of any Council road infrastructure improvement program nor are they included within the concept plan proposal. It is recommended that the proponent consult directly with Council on this matter.*
- *As raised in the RTA submission, road and intersection upgrade along Ocean Drive are subject to the RTA's approval, which has not been granted pending ongoing discussions with Council. It is recommended that the proponent consult directly with the RTA on this matter.*
- *The EA implicitly states that sufficient road capacity exists to support the subject Concept Plan proposal within the wider Area 14 development area. A separate statement is required which explicitly states that sufficient road capacity exists on Ocean Drive to support the subject Part 3A proposal, or whether upgrade works would still be necessary without the Area 14 Stage 1A proposals coming forward.*
- *The concept plan proposes two internal access roads which connect the subject site to the St Vincent's Foundation land to the west. The southernmost access along this western boundary crosses sensitive riparian vegetation associated with Duchess Gully. Any concept approval for this access must be supported by an environmental investigation to ensure any detrimental environmental impact is minimised and/or avoided.*

Response to Issue:

In response to this issue a meeting was held on Thursday 27 January, 2011, between Port Macquarie Hastings Council (PMHC) and King + Campbell. The outcome of this meeting was detailed in a letter to the General Manager on 2 February, 2011, a full copy of which is included in Attachment S5 to this report. Following receipt of the letter, Council has now provided confirmation in relation to the issues by email correspondence (Attachment S5).

The following provides a summary of the outcomes from this consultation:

Point 1:

- Council is currently preparing Precinct DCP's for each precinct within Area 14. These DCP's will identify key infrastructure facilities required to be upgraded as part of the Area 14 development. Development Servicing Plans for each infrastructure asset will be developed in parallel with the DCP process.
- All road upgrades to Ocean Drive and associated intersections will be 100% developer funded except for the Houston Mitchell Drive

intersection upgrade which will be part funded by development.

- All landowners in Stages 1A and 1B of Area 14 have entered into Planning Agreements with Council that include provisions for the payment of Section 94 Roads Contributions at the rates to be determined by Council as necessary to fund the Road Infrastructure Improvement program for Area 14. This determination of the updated Roads Contribution will form part of the next review of the Section 94 Roads Contribution Plan prepared in conjunction with the Area 14 Development Control Plan referred to above and be used to make any necessary changes to Council's road infrastructure improvement program.

Point 2:

- PMHC met with the RTA on 18 January, 2011, to discuss the proposed Area 14 Ocean Drive road and intersection upgrades. It is noted that RTA approval is required for signalised intersections and RTA concurrence is required for Ocean Drive road upgrades and upgrades to other non-signalised intersections.
- As a result of these recent consultations PMHC staff advised that any required concurrence or approvals from the RTA at the Concept Plan stage for improvements or upgrades to Ocean Drive will be forthcoming.
- Formal RTA approvals and concurrences are normally provided in conjunction with the issue of the Section 138 Certificate pursuant to the Roads Act 1993. The formal Section 138 Certificate approvals and concurrences are normally issued in relation to the detailed design drawings associated with construction certificate applications which are prepared in accordance with conditions of development consents issued under Part 3A or Part 4 of the EP&A Act.

Point 3:

- PMHC's current Major Roads Plan and related Contribution Plan provides for the ongoing upgrade of Ocean Drive and existing major intersections. Consultation with PMHC has indicated that Ocean Drive as it currently stands has the capacity to support the traffic generated by the subject Part 3A development proposal in isolation.
- However it is not relevant to consider the subject Part 3A proposal in isolation from the rest of Area 14. Exhibit 01 of the EA shows the extent of Area 14 and confirms that most of Area 14 is either:
 - Subject to current applications (the subject application and adjoining St Vincent's Foundation applications);
 - Subject to an existing approval for a manufactured home estate; or

- Already zoned Residential 2(a4).
- In this context and given the advanced planning of the whole of Area 14, the timing and extent of the upgrades to Ocean Drive and its intersections will be determined based on the cumulative impacts of traffic generating development throughout Area 14.
- PMHC, as the road authority, will in consultation with the RTA in their concurrence role, determine the specific road and intersection upgrades warranted at each stage of the development within Area 14. If the intersection upgrades involve traffic signals, RTA approval will also be required.

Point 4:

- This application for concept plan approval does not provide for any approvals or environmental assessment of the adjoining St Vincent's land. The internal access road connections have been located to reflect information provided by representatives of SVF and to conceptually demonstrate expected connectivity.
- The plans will be amended by removing reference to specific internal access road connections into SVF property.
- The subject Concept Plan maximises opportunities for connectivity with the SVF property by providing a public road frontage along the common boundary. Final locations of internal access roads within the SVF property will be determined as part of the determination of applications on that land.

5.1.3 Issue 3 - Building Heights and Densities

- *The Concept Plan proposes medium density residential development at 3-4 storeys and approximately 14.5m in height in connection with the commercial and tourist uses at the proposed Hilltop Village. The preferred design outcome as stated in the Greater Lake Cathie Bonny Hills Urban Design Masterplan seeks 2-3 storey medium density housing at approximately 9m in height in this village centre. An urban design based justification is required to support the proposed increases in height and density over that envisaged by the urban design Masterplan document.*

Response to Issue:

In relation to heights, the UDMP does not distinguish between the 'village centres' and the adjacent medium density residential areas, with a preferred 'height' outcome of 9m (for 50% of the footprint) and 6m (for 50% of the footprint), or 2-3 stories. In addition the UDMP proposes an extensive area of medium density residential adjacent to the Hilltop Village, with small areas low density residential development towards the northern and southern areas of the site.

In determining the precinct details as presented in the EA, regard was given to the following:

- The vision, desired land uses and the preferred outcomes for the required coastal hill top village as set out by the Lake Cathie Bonny Hills UDMP;
- The preferred residential densities for the site, as set out by the UDMP;
- The built form of development, including the relationship of medium density residential areas with the function of the hilltop village;
- Census data and demographics of the existing residential community of Lake Cathie and Bonny Hills; and
- A visual assessment of the Concept Plan including the critical view line from Rainbow Beach to the site and other key locations.

The objectives and permissible uses associated with a B4 zone were seen as best achieving the vision, the desired land uses and the preferred outcomes for the 'Hilltop Village' as included in the EA. In relation to the proposed B4 Mixed Use zone, PMHC's Planning Proposal for the site states the following:

"There is a small village centre proposed within the precinct. The proposed zoning is B4 – Mixed Use to allow a variety of business and residential uses. The purpose of the centre is envisaged as convenience, entertainment and tourist-type boutique shopping given the close proximity of the village centre to the only beach access in the precinct. It is not expected to generate significant levels of the employment opportunities and is not expected to detract from the viability of the Area 14 – Village Centre.

There is concern that the B4 - Mixed use zone will be undermined by residential type uses. It is proposed to address this concern by including DCP provisions to encourage ground floor use or to provide the floor to ceiling height to accommodate future commercial uses in the ground and first floors."

Whilst the proposed subdivision concept plan included in the EA retains the medium density residential areas immediately adjacent to the Hilltop Village, the footprint in this location was reduced. This reduction was based on census data which indicated that 80% of existing Lake Cathie Bonny Hills residents reside in single dwellings and that almost 80% of these households contain children. It was concluded that a substantial medium density area with heights up to 3 stories (and therefore likely to be 3 storey walk-ups), is inconsistent with this existing pattern of development and therefore unrealistic for the type of household likely to reside, or be attracted, to the locality.

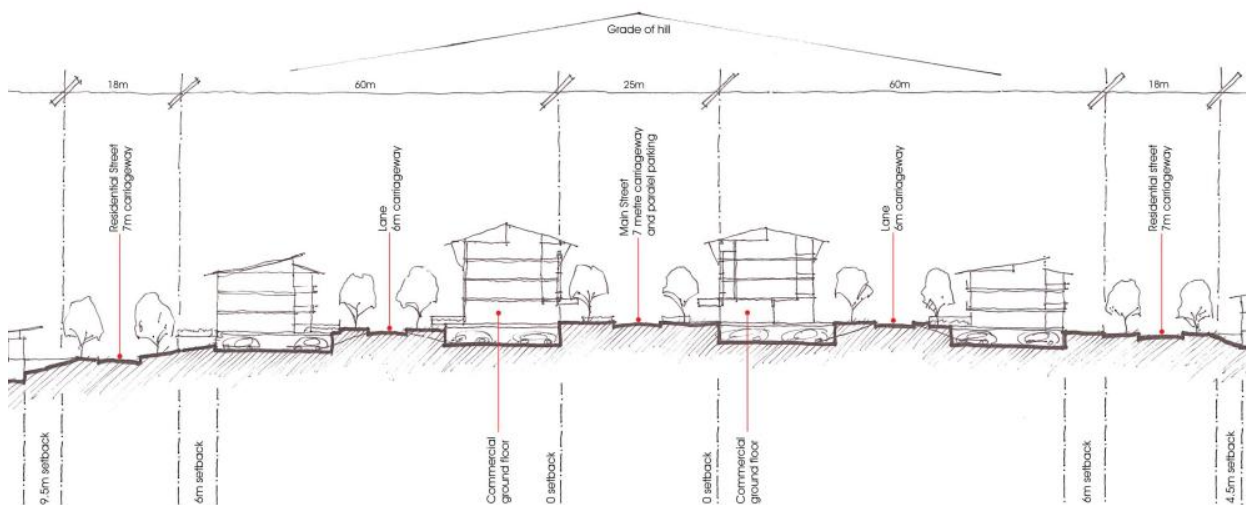
To achieve the desired residential densities as set out by the UDMP it was therefore considered appropriate to increase the heights within the Hilltop Village to allow 1 and 2 stories of retail/commercial space with 1 or 2 storeys of residential /tourist use above. Additional areas for medium density residential were then selected on the basis of their high aesthetic and visual quality, being in close proximity to the rainforest interface and open space network. It is envisaged that these areas will cater for townhouse or cluster style housing (2 storeys only) and also assist to achieve the required densities.

The final consideration for this urban form was to ensure that 3-4 storey heights within the Hilltop Village could not be seen from Rainbow Beach or cause undesirable visual impacts from. This viewpoint location was determined on the basis of being a primary public location which may be detrimentally impacted, by way of visual amenity, as a result of the proposal. The following extract from Section 6.3 of the EA confirms that the proposed 3-4 storey height for the Hilltop Village will not impact on the existing viewlines.

View point	Existing Character	Visual/Absorption Capacity	View Quality	Impact
E, F, G, H	Rainbow Beach directly adjoins the site and the rainforest on its eastern boundary. The beach itself extends from the southern extent of the Lake Cathie residential area south to the Bonny Hills residential area. The beach and the adjoining rainforest area are the most dominant natural features of the locality. These areas are currently undisturbed	<p>Preservation and retention of the existing beach and rainforest areas in their natural state, including the existing view lines onto the site from the public beach, is one of the primary objectives of the subject proposal. Accordingly four view lines from the beach area have been surveyed to gauge the impact of the proposed three/four storey development associated with the proposed 'mixed use' zone (Exhibits 09C - 4 sheets).</p> <p>These sections have confirmed that the dune height combined with the height</p>	The view quality from viewpoint 4 is of a high quality and must be protected.	The view will remain unaltered and therefore the proposed development will have no impact on the existing natural landscape from viewpoints 4.

	and when on the beach in the vicinity of the site the existing nearby residential areas are not visible.	and density of the existing vegetation restricts direct views onto site.		
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The following sketches provide visual confirmation of the positive relationship between the Hilltop Village (3-4 storeys) and the adjacent reduced footprint medium density residential area (2-3 storeys). (It is noted that no such analysis was undertaken as part of LCBH UD Masterplan).



The Hilltop Village concepts, including Main Street with service lanes.

The following extract from the EA (p.61-63) describes the urban design principles for the Hilltop Village and adjacent medium density area:

The Hilltop Village:

The Hilltop Village is positioned on the east-west ridgeline of the site. The location on this ridgeline will ensure that future development provides for the retention of views to the ocean. In addition, its central location on the site will enable future residents to walk to the village and be less reliant on cars for their daily needs. Whilst the buildings are not included as part of this Concept Plan application, it is anticipated that their height (14.5m) will enable ground floor commercial and tourist uses with upper level residential/tourist accommodation uses.

The sketch above provides support for the concepts included as part of this Concept Plan application. These concepts will provide the basis for a future Project Application for the Hilltop Village:

- Main Street (indicative width 25-26m) with rear service lane (6m).

The intent of this concept is that the whole of the Main Street will

be given over to pedestrians and parallel parking to encourage the activation of the street front. A rear service lane will allow provision of basement and rear parking thereby ensuring no driveways within the Main Street. The Hilltop Village will continue to the public interface with the perimeter road adjoining the rainforest buffer area. With an active street frontage to the Main Street, residents and visitors will be encouraged to walk to the designated access point (boardwalk), leading through the rainforest to Rainbow Beach.

- Main Street Landscaping

The removal of driveways from the Main Street also maximises opportunities for established street tree planting, with seasonal shade and colour. The scale of the established tree planting will complement the building facades and encourage 'spill-out' for cafe style uses.

- Village Square

The Village Square will contain the following components:

- Vehicle/pedestrian share zone entry statement;
- Landscaped public domain areas located in a prominent position on the hilltop taking advantage of extensive ocean and hinterland views;
- Potential for integration/activation between the public domain Village Square and ground floor commercial and tourist use at the entry to the Hilltop Village main street.

- Service Lanes

In addition to supporting the function of the Main Street, the rear service lane will serve a dual purpose of supporting the adjoining medium density residential area.

The topography of the site together with the street orientation will allow the laneway itself to become a quality space for future residents whilst providing a good separation to the ground floor commercial uses on the Main Street. It is intended that the scale of the laneway will provide a functional and attractive streetscape for the transition to the proposed medium and low density residential zones.

- Main Street Architectural Concepts

Whilst the Main Street buildings are not included in this Concept Plan application, it is anticipated that the internal road layout will support the general architectural concepts included in sketch 3 and 4 below:

- The facade treatment should embrace the principles of coastal architecture through the provision of broad eaves with a tri-partied composition of base, middle and top. The 'base' zone will provide for an activated street frontage and the 'top' zone will incorporate a light weight roof structure within which the 4th floor will be located. The generous eaves will provide light and shade to the main street buildings.



Main Street Building Character

Indicative Main Street architectural concept.

In conclusion the urban form of the Hilltop Village proposed in the Concept Plan Application is consistent with Council's Planning Proposal and represents a more detailed consideration of the form and functionality of the Hilltop Main Street and surrounding residential areas taking into account:

- The outcomes of a detailed visual impact assessment;
- The results of the Social Impact Assessment undertaken as part of the Concept Plan Application;
- A more detailed analysis of the form and function of the main street including consideration of parking, rear lane access and land use mix;
- Achievement of overall population generated envisaged in the Lake Cathie Bonny Hills UDMP.

5.1.4 Issue 4 – Open Space

- *Further consideration should be given to the provision of additional open space or recreational areas for the benefit of future residents of the development. The Greater Lake Cathie Bonny Hills Urban Design Master Plan envisaged a 'village green' or 'hilltop park' with distinctive landscaping treatments ideally located on places of high amenity on hill tops. Opportunities for casual recreation in high amenity areas are considered important for community function and should be incorporated into the concept plan wherever possible.*

Response to Issue:

The Greater Lake Cathie Bonny Hills Urban Design Master Plan (UDMP) stated in Community Infrastructure (page 28) that:

An active public domain is created on the hill top, that takes advantage of the striking hill top location.

Parks, plazas, squares and greens, each with a different function are incorporated and located on places of high amenity on hill tops and stands of significant vegetation and in close proximity to pedestrian vehicular access routes.

The schematic drawings on page 29 of the UDMP illustrated, by example, a village green connected to open space and the beach environment by a main street.

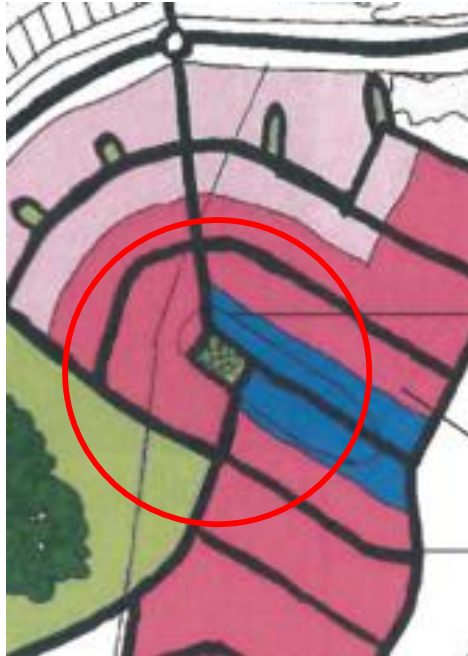
The Concept Plan (CP) is consistent with and has expanded upon the open space recommendations of the UDMP, as follows:

- The CP provides for a significant urban square ('Village Green') of approximately 50 x 55 metres dimension on the hill top. The urban square comprises in small part a shared vehicle / pedestrian space and in large part pedestrian and park function. The urban square has an active urban edge of commercial ground floor space and will provide opportunities for outdoor dining, passive seating, meeting and children's play.
- The CP has also considered the open space context of the urban square, including the connections between open space elements. In this regard, the urban square is connected to a small but important public park linking the eastern end of the main street to the public carpark and boardwalk to Rainbow Beach. In turn this is connected to the public boardwalk to Rainbow Beach, as well as to the significant north / south orientated lineal open space associated with the SEPP26 buffer treatment. Importantly, this open space contains a continuous cycleway and pedestrian facility.

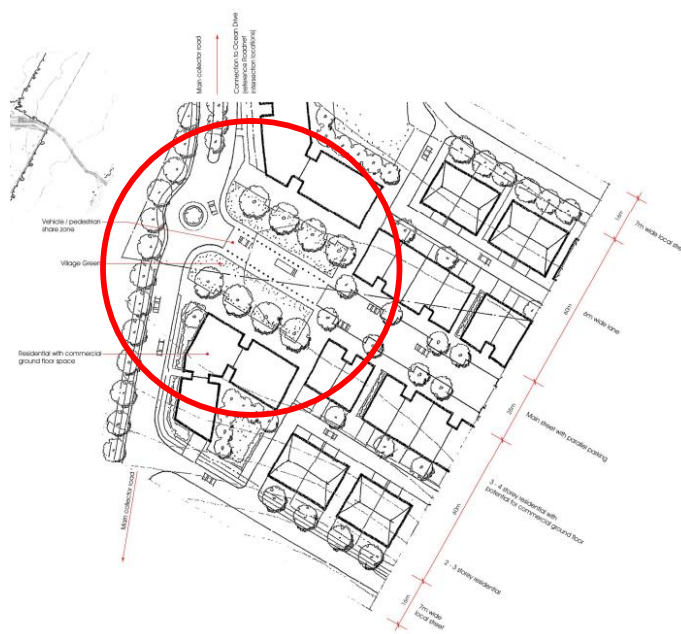
It is also noted that the CP is consistent with Council's Planning Proposal for this part of Area 14. It is noted that Council has not provided for additional land to be zoned for open space purposes.

In summary it is submitted that the Concept Plan does provide

significant opportunity for casual recreation and that the proposed Village Square, as illustrated below, is consistent with the design criteria set out by the UDMP. While the pocket park at the eastern end of the mainstreet is additional to that envisaged in the UDMP it serves the purpose of providing a public pedestrian link between the Hilltop Village and the access to Rainbow Beach.



Extract from GLCBH UDMP (p.29)



Extract from Exhibit 06C of the EA

5.1.5 Issue 5 – Vegetation Management Plan

- *The Ecological Assessment Report for Area 14 Stage 1B in Appendix C recommends on page 25 that a Vegetation Management Plan should be developed for the whole Littoral Rainforest up to the beach foreshore, rather than a part thereof, to increase the efficacy of rehabilitation or revegetation works. This recommendation has not been included in the proposal.*

Response to Issue:

The context in relation to this issue is as follows:

The 'Area 14 Stage 1B Ecological Assessment' prepared by Biolink (June, 2007) was a report commissioned by Port Macquarie Hastings Council as a peer review of the Draft LES documentation and in particular, the 'Flora and Fauna Survey' prepared by Peter Parker Environmental Consultants (PPEC), May, 2002. At the time the 'area' the subject of the Draft LES did not include any lands within the gazetted boundary of the SEPP 26 Littoral Rainforest. Notwithstanding, the survey undertaken by PPEC included a survey of the vegetation within the Littoral Rainforest, where Peter Parker noted:

"It is one of the largest Littoral Rainforest remnants in the local area, is relatively weed free and not impacted by cattle grazing or other significant anthropocentric effects. Littoral Rainforest 116 stands out from many other remnants along the NSW coastline in both its size, species diversity, small mammal assemblages and the virtual absence of rubbish dumping" (PPEC, 2002 p.28);

PPEC and Dr Brennan further reported that the existing western edge of Littoral Rainforest No 116 "..... appears stable and the vegetation along the boundary is in good condition with weed invasion being limited to the first few metres."

A 'Revegetation Management Plan' was prepared as part of the Draft LES documentation. This plan was limited to a total of three (3) pages in length and only applied to the revegetation works adjacent to the Littoral Rainforest, within the private property.

Subsequent to the 2007 Biolink review significant work has been undertaken in relation to the VMP:

The VMP at Section 6 to the EA was prepared in close consultation with Ms Sue Regan of Wildthings Native Gardens who are currently undertaking Bush Regeneration and weed management works. Ms Regan has been a bush regeneration contractor since 1996. The VMP is particularly detailed in relation to weed eradication, plant establishment and ongoing maintenance. The VMP of the EA is supported by Exhibits PA05 (2 sheets), the Base Line Weed Map at Exhibit PA04, the Gantt Chart at Appendix PA_A and the Photographic Record Sheet at Appendix PA_B.

The current VMP notes the following in relation to the crown land adjoining Lots 1 and 4:

"The Bonny Hills Landcare Group is actively working in the Crown Land from Middle Rock south to the Sewage Treatment Plant, including Littoral Rainforest No. 116. A site meeting was held with Bonny Hills Landcare President Fred Love on 9 June 2010.

Wild Things Native Gardens is implementing a Vegetation Management Plan in the property to the south of Lots 1 and 4. This involves extensive revegetation of a number of ecological communities.

PMHC continues to target spray Chrysanthemoides monilifera spp. Rotundata (Bitou Bush) along Rainbow Beach foredunes via helicopter and using 4WD beach access. Previously Council has engaged contractors Hastings Bush Regeneration Services to undertake bush regeneration works on the crown land adjacent lots 1 and 4. Since September 2009 they have their own Bush Regeneration crew who will likely continue this work."

In relation to the existing Littoral Rainforest within Lot 4 the 'extent of Concept Plan' and 'extent of Project Application' boundaries have now been revised on all exhibits such that the Littoral Rainforest currently within private ownership (i.e. Lot 4) is included. In so doing, the area the subject of the VMP is now also included. The notation on sheet 2 of Exhibit PA 05 (prepared in support of the VMP) has been revised to ensure that weed removal occurs within the SEPP 26 Littoral Rainforest area located on Lot 4. The VMP is proposing to ensure the immediate establishment of a substantial buffer to the SEPP 26 rainforest and eradicate and manage the current weed populations along the western edge of the rainforest. The Concept Plan Application does not seek to replace existing management plans and processes for the Rainbow Beach foredunes which given they apply to a much longer foreshore area should be retained. Ongoing management via the VPA will provide certainty of management to the buffer and rainforest area on the subject properties.

5.1.6 Issue 6 – Proposed 2m noise wall

- *Further analysis and investigation is required regarding alternative means of noise mitigation along Ocean Drive. Given their visual impact, noise walls are typically only considered by the Department when a subdivision layout is provided and only when alternative solutions to noise mitigation have been exhausted. Any proposed acoustic barrier along Ocean Drive shall also be in keeping with any proposed edge treatments on the adjoining St Vincent's Foundation site given its cumulative impacts and in this respect the Statement of Commitments should include details to ensure cooperation between the proponent and the adjoining land owner when devising innovative noise mitigation solutions along Ocean Drive.*

Response to Issue:

The Concept Plan has acknowledged that there will likely be a requirement for noise mitigation for a limited 180m frontage of the site as its north-west corner. In this regard a noise wall is shown on the property boundary in this location. This proposal is conceptual however the eventual form of detail of noise mitigation will be the subject of ongoing work by Council in relation to the Ocean Drive corridor and will also be the subject of a further Project Application prior to implementation of acoustic measures.

It should be noted that a 2m acoustic wall is no larger in scale than a regular 1.8m high lapped and capped timber fence on a 200m mound and that it is reasonable to expect that future residents with a rear yard to Ocean Drive will want to fence that boundary.

Council are currently preparing a Development Control Plan (DCP) for Area 14. The DCP is investigating a range of issues associated with the Ocean Drive corridor within Area 14, including noise mitigation and the visual effect of noise mitigation proposals and limited road access. As part of this investigation Council will be considering a range of options, including alternatives that minimise the need for traditional noise wall construction. The final proposals for noise mitigation will be determined by this DCP work and will be presented in detail as part of the future Project Application for the urban development of the subject site.

It is also noted that there is considerable flexibility in terms of being able to accommodate a range of options for noise mitigation. In this regard the Ocean Drive road reservation itself in the subject location is 40m wide. This width is sufficient to accommodate significant road edge treatments outside the road and cycleway carriageways. In addition the depth of residential land in this location is a minimum 38m which provides the opportunity for noise mitigation measures to be located on private land.

In summary we submit that noise mitigation measures are currently being investigated by Council and landowners and will be detailed in the Area 14 DCP and future individual Project Applications by landholders. In the interim we submit that based on Heggies analysis any required noise mitigation will be able to be achieved within the current subdivision configuration.

As noise is an issue which affects all properties within Area 14 PMHC have stated in their Planning Proposal for the rezoning of the subject site the following:

"Council wishes to achieve a corridor that is multi-modal, encourages walking and cycling, responds to its 'tourist route' designation and is safe. A considered and coordinated approach to noise along the corridor is needed to ensure that noise walls are not the only response.

Council is in the process of commissioning consultants to prepare a Corridor Plan to examine a range of issues along the route including noise. The corridor plan will consider all aspirations for Ocean Drive and present a plan that balances noise attenuation with urban design, road safety and function.

The study is expected to be completed by the end of 2010 and its recommendations included as part of the Development Control Plan for the precinct.

In this precinct the 2.0m barrier height and the need for the barrier only partially along the frontage means that noise can be dealt with relatively easily at this location. It is expected that the Corridor Plan will support the partial use of physical barriers where these are low in height and used along part of the corridor.

The Heggies report is consistent with this in this location."

The Statement of Commitments has been amended to include recognition that the acoustic management measures to be placed on the Ocean Drive frontage will have regard to the Area 14 DCP and Ocean Drive Corridor Plan currently being prepared by PMHC. Final details of acoustic management measures will be included in future Project Applications.

5.2 Additional information / clarification

5.2.1 Water Cycle Management

Requirement	Comment
<ul style="list-style-type: none"> • <i>Concept plan proposals for water cycle management in Section 6.7 of the EA are unclear and further information is requested as follows:</i> <ul style="list-style-type: none"> ○ <i>Section 6.7.1, Section 6.7.2 and Section 6.7.3 summarises the recommendations as per the Martens Consulting report (July 2010) however the concept plan proposal is unclear. Martens Consulting recommendations outlined on pages 49-50 should be incorporated as part of the concept plan proposal, and annotated clearly in Exhibit 08A, while the recommendations outlined on pages 51-53 should be contained within the Statement of Commitments;</i> ○ <i>Section 6.7.1 refers to a 'Stormwater Management Plan' however this is not supplied in the documentation;</i> 	<p>The description of the Concept Plan for which the Ministers approval is now sought has been revised to clearly describe the concept stormwater management requirements;</p> <p>Exhibit 08A has been amended to include recommendations from Martens 2010, as outlined on pages 49-50;</p> <p>The recommendations on pages 51-53 are contained within the SOC.</p> <p>In July 2010 Martens and Associates were commissioned by PMHC to more fully document the existing groundwater regime (initially documented in the 2007 report) and to assess the requirements for a suitable buffer design.</p> <p>This 2010 report also includes supplementary Chapter 5 of the Concept Stormwater Management Requirements in relation to the sub-catchments adjacent to the SEPP 26 rainforest and integrating the stormwater management system with the groundwater management systems. However the title of the 2010 report was not updated to reflect this additional stormwater information.</p> <p>In this regard Dr Martens has confirmed (pers. com.) that Section 5 of his 2010 report, together with sheets 7 to 12 (Attachment S6), constitute a 'Stormwater Management Plan' for the site.</p>

Requirement	Comment
<ul style="list-style-type: none"> Attachment B of the Martens Consulting report (July 2010) has not printed legibly, does not contain a 'Concept Stormwater Management Plan' as stated on p158 of the EA and does not contain 'a concept design for the end of line stormwater management structures' as stated on p47 of the report. 	<p>Section 5 and Sheets 7-12 of Attachment B of the Martens & Associate Report dated July 2010 is enclosed as Attachment S6.</p> <p>Sheet 12 within Attachment S6 is the 'concept stormwater management structure', referred to on page 47.</p>

5.2.2 Management of Environmental Lands

Requirement	Comment
<ul style="list-style-type: none"> Clarification of the proposed management period for environmental works is required. The Statement of Commitments for the Concept Plan (page 202 of the EA) and the Statement of Commitments for the Project Application (page 254 of the EA) state that a Planning Agreement will be entered into to establish and maintain environmental works for a period of 20 years. The VPA submitted in connection with Councils Planning Proposal for the subject site proposes only a 10 year management period. 	<p>The VPA provides for:</p> <ul style="list-style-type: none"> Establishment Obligation – to establish the environmental lands in accordance with an approved VMP prior to acceptance of the land as public reserve by PMHC; Management Obligation – the landowner has offered to manage the environmental lands for 10 years after dedication and to bond the value of that work as security; Management Contribution – the landowner has offered to pay a development contribution to fund the management of the environmental lands by PMHC for a further 10 years at the completion of the Management Obligation PMHC have yet to calculate the value of the Management Contribution.

5.2.3 Noise

Requirement	Comment
<ul style="list-style-type: none"> Clarification is required regarding the assumptions made in the traffic noise modelling undertaken by Heggies Pty Ltd with regard to vehicle speeds along Ocean Drive.. 	<p>The vehicle speed modelled by Heggies in their 'Traffic Noise Impact Assessment' included:</p> <ul style="list-style-type: none"> 100km/hour for the 'existing acoustical environment'; and 70km/hour for 'predicted noise levels'.

	<p>Modelling for 70 km/hour was seen as appropriate given the numerous speed restrictions currently applying to Ocean Drive as follows:</p> <ul style="list-style-type: none">• A 50km/hour restriction applies to the Lake Cathie residential area (between Miala Street and the northern extent of the existing village);• An 80 km/hour restriction applies between Miala Street and Abel Tasman Drive (generally adjacent to the site); and• A 90 km/hour restriction commences from Abel Tasman Drive, south to the township of Bonny Hills. <p>In relation to the future speed environment for Ocean Drive in the vicinity of the subject site, Roadnet's Traffic Assessment has advised that a 60 km/hour speed environment will be appropriate for the year 2029. The Heggies report has been based on the ultimate traffic volumes in Area 14 and so should use the speed limits that are reasonably expected to apply at that time.</p>
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Section 6

Revised Statement of Commitments

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 G – Subdivision Concept Plan, King + Campbell Exhibit 05B Revision C – Indicative Staging Plan, King + Campbell Exhibit 06A Revision D – Landscape Concept Plan, King + Campbell Exhibit 06B Revision D – Landscape Concept Detail, King + Campbell Exhibit 06C Revision C – Landscape Concept Detail, King + Campbell Exhibit 07 Revision C – Indicative Hilltop Village Architectural Treatment, King + Campbell Exhibit 08A Revision F – Stormwater Concept Plan, King + Campbell Exhibit 08B Revision C – 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 Appendix P – Heads of Agreement for VPA between land owners and PMHC (final VPA to be included in PPR). 	Preparation of each Project Application or Development Application	Landowner / Developer

No.	Objective	Commitment	Timing	Responsibility
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 five (5) years; The payment of contributions at the subdivision stage to fund a further fifteen (15) 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
CP4 - 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
CP5 - 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
CP6 - 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
CP7 - 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 out in the VPA between the landowners and PMHC; 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; 	Preparation of the PA's for future stages	Landowner / Developer

No.	Objective	Commitment	Timing	Responsibility
		<ul style="list-style-type: none"> The adjoining development sites, as set out in the MOU with the SVF. 		
CP8 - 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
CP9 - 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
CP10 - 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 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. 	Preparation of the PA's for future stages	Landowner / Developer

No.	Objective	Commitment	Timing	Responsibility
CP11 - 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 bioliltration 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
CP12 - 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 of the road from the bushfire threat. 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. 	Preparation of the PA's for future stages	Landowner / Developer

No.	Objective	Commitment	Timing	Responsibility
		<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'. 		
CP13 - 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 ratio (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
CP14 - Flooding	To effectively manage flooding, including compliance with any future climate change and sea level rise scenarios.	<ul style="list-style-type: none"> Residential lots shall be filled to a minimum level of RL 5.0mAHd; Road crossings over flowpaths 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 	CC documentation	Landowner / Developer

No.	Objective	Commitment	Timing	Responsibility
		<ul style="list-style-type: none"> 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	Landowner / Developer
CP15 - 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 design of the recharge pits. 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 	<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>

No.	Objective	Commitment	Timing	Responsibility
		<p>(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:</p> <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. <ul style="list-style-type: none"> • 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. ○ 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 		

No.	Objective	Commitment	Timing	Responsibility
		<p>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.</p> <ul style="list-style-type: none"> ○ 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 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. • Roads in low lying areas (below 12.5m AHD), shall be constructed to enable sufficient durability and bearing pressure under the assumption 	Details to be provided with the relevant CC documentation	

No.	Objective	Commitment	Timing	Responsibility
		<p>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.</p> <ul style="list-style-type: none"> 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
CP16 - 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 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 	<p>Details to be provided with the relevant PA and CC documentation.</p> <p>Stage 2 PA and future</p>	<p>Landowner / Developer</p> <p>Landowner /</p>

No.	Objective	Commitment	Timing	Responsibility
		<p>must be prepared to NOW's satisfaction.</p> <ul style="list-style-type: none"> 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. 	relevant PA and CC documentation.	Developer
CP17 - 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 exclusion fencing to the 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 archaeologist and DECCW to develop and implement management strategies for all objects/sites. 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. 	Stage 1 Project Application	Landowner / Developer

No.	Objective	Commitment	Timing	Responsibility
		<p>No works are to continue until DECCW provide written notification to the proponent.</p> <ul style="list-style-type: none"> 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. 		
CP18 - 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> <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 	Stage 1 Project Application	Landowner / Developer

No.	Objective	Commitment	Timing	Responsibility
		<p>improve drainage or minimize erosion by rip-rap filters or similar structures; and</p> <ul style="list-style-type: none"> 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 exclusion fence. The VMP shall be submitted with the DA/PA for Stage 2. <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 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. 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. 	<p>Stage 2 DA/PA</p> <p>Stage 2 DA/PA</p>	<p>Landowner / Developer</p> <p>Landowner / Developer</p>

No.	Objective	Commitment	Timing	Responsibility
CP19 - 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. The deemed-to-satisfy treatment specified by Heggies will be a 2m high noise wall or fence constructed as the rear boundary fence for all residential allotments that directly adjoin the Ocean Drive road corridor, as indicated on Exhibit 05A.</p> <p>The noise wall/fence shall be continuous for its full length and the nominal mass of the material used in its construction should not be less than 15 kg/m². Final details of the acoustic wall/fence are to be included in the PA/DA for Stage 2</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, "Acoustics - Road traffic noise intrusion - Building siting and construction", 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. Windows, doors and other openings must be closed). 	<p>Construction of the noise wall shall be completed prior to the occupation of the affected residential premises.</p> <p>Details in relation to construction standards shall be provided with the Construction Certificate Application.</p>	Landowner / Developer
CP20 -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

No.	Objective	Commitment	Timing	Responsibility
CP21 – 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
CP22 – 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
CP23 - 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
CP24 – 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
CP25 – 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: <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 quinquinerva</i>); • Beach Alectryon (<i>Alectryon coriaceus</i>); • Coogera (Rose Tamarind) (<i>Arytera divaricata</i>); 	All future DA's/PA's	Landowner / proponent

No.	Objective	Commitment	Timing	Responsibility
		<ul style="list-style-type: none"> • Oyster Bay Pine (<i>Callitris rhomboidea</i>); • Hairy Rosewood (<i>Dysoxylon rufum</i>); • Guioa (<i>Guioa semiglauc</i>); and • Water Gum (<i>Tristania laurina</i>). 		

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 and Exhibit PA06 – Vegetation Management Plan 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. 	Stage 1 works	Landowner / proponent

No.	Objective	Commitment	Timing	Responsibility
		<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. 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 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 Preferred Project Report shall include, as an Appendix, a signed VPA between the landowners and PMHC. With respect to Stage 1 the VPA 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 five (5) years; and The payment of contributions at the subdivision stage to fund a further fifteen (15) years maintenance. 	As part of PPR	Landowner / proponent
PA3 - 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> <p>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.</p>	During the exhibition period	Landowner / proponent
PA4 - 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	When undertaking work in accordance with VMP	Landowner / proponent

No.	Objective	Commitment	Timing	Responsibility
		Bushfire buffer purposes.		
PA5 - Heritage and Archaeology	To preserve and protect items of Aboriginal significance.	<p>The exclusion fencing to the rainforest buffer shall be carried out as part of the first stage works.</p> <p>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</p>	Prior to works commencing on site	Landowner / proponent
PA6 - Flora and Fauna	To minimise and manage any potential impacts on flora and fauna biodiversity.	<p>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..</p> <p>A temporary fence will be erected adjacent to the existing vegetation within Duchess Gully for protection from construction activity.</p>	Prior to works commencing on site	Landowner / proponent
PA7 - 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
PA8 – Monitoring of Revegetation / Regeneration Works	To measure the effectiveness of the VMP works by benchmarking against the current condition of the buffer area.	Photomonitoring 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
PA9 – Beach Access / Pedestrian Boardwalk	To protect the 'SEPP – Littoral Rainforest' and 'Littoral Rainforest' EEC and prevent further edge clearing / damage of this environmentally sensitive community.	<p>General:</p> <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.</p>	During construction works	Landowner / proponent

No.	Objective	Commitment	Timing	Responsibility
		<p>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. 	With CC documentation	Landowner / proponent