

# Concept Plan Approval

## Section 750 of the *Environmental Planning and Assessment Act 1979*

The Planning Assessment Commission (PAC), as delegate of the Minister for Planning and Infrastructure, pursuant to Part 3A of the *Environmental Planning and Assessment Regulation 2000* (the Regulations), determine:

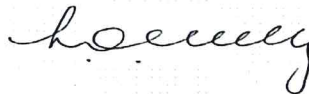
- a. Under Section 750 of the Act, to approve the concept plan referred to in Schedule 1 subject to the modifications in Schedule 2 and the proponent's Statement of Commitments in Schedule 3
- b. Under Section 75P(1)(b) of the Act, that approval to carry out the project, other than 'Stage 1 Environmental Works', be subject to Part 4 or Part 5 of the Act.

These modifications are required to:

- Encourage the orderly future development of the site
- Ensure adequate mitigation of environmental impacts of future development
- Ensure protection of biodiversity
- Maintain the amenity of the local area.



**Emeritus Professor Kevin Sproats**  
Member of the Commissioner



**Lindsay Kelly**  
Member of the Commissioner

Sydney,

28 November 2011

---

### SCHEDULE 1

|                            |  |
|----------------------------|--|
| <b>Application No.:</b>    | 07_0010  |
| <b>Proponent:</b>          | Milland Pty Ltd and Seawide Pty Ltd  |
| <b>Approval Authority:</b> | Minister for Planning and Infrastructure   |
| <b>Land:</b>               | Lot 4 in DP 615261, Lot 1 in DP 374315 and part Crown Reserves R82555 and R754444<br>Ocean Drive, Lake Cathie  |
| <b>Project:</b>            | Development for future residential, commercial and tourist/mixed uses including: <ul style="list-style-type: none"><li>• Environmental works associated with SEPP26 Littoral Rainforest and Duchess Gully</li><li>• Provision of perimeter road, pedestrian, cycle paths and open space and access to Rainbow Beach</li><li>• Provision of associated infrastructure including stormwater, drainage and utilities.</li></ul> |

## DEFINITIONS

In this approval,

**Act** means the *Environmental Planning and Assessment Act 1979*

**Advisory Notes** means advisory information relating to the approved project but do not form a part of this approval

**BCA** means Building Code of Australia

**Council** means Port Macquarie-Hastings Council

**Department** means the Department of Planning and Infrastructure or its successors

**Director-General** means the Director-General of the Department, or delegate

**Environmental Assessment** means the *Environmental Assessment Report* (and all associated Annexures) prepared by King + Campbell Pty Ltd on behalf of Milland Pty Ltd and Seawide Pty Ltd, dated November 2010

**Minister** means the Minister for Planning and Infrastructure, or his delegate

**PCA** means Principal Certifying Authority and has the same meaning as in Part 4A of the Act

**Project** means the project as described in Term A1 to this approval

**Proponent** means Milland Pty Ltd and Seawide Pty Ltd or any party acting upon this approval

**Regulation** means the *Environmental Planning and Assessment Regulation 2000*

**RFS** means the Rural Fire Service

**Site** has the same meaning as the land identified in Part A of this schedule

**Stage 1 Environmental Works** means those works described in the Project Application for environmental regeneration works associated with the SEPP26 Littoral Rainforest

**Statement of Commitments** means the Revised Statement of Commitments dated 31 May 2011

**Submissions Report** means the *Response to Submissions Report* (and all associated Annexures) prepared by King + Campbell Pty Ltd on behalf of Milland Pty Ltd and Seawide Pty Ltd, dated February 2011

## SCHEDULE 2

### MODIFICATIONS AND REQUIREMENTS FOR FUTURE APPLICATIONS

#### PART A – TERMS OF CONCEPT PLAN APPROVAL

##### **A1**      *Project Description*

Concept plan approval is granted for the project generally as described below:

- residential uses for approximately 217 low density dwellings
- residential uses for approximately 82 medium density dwellings
- mixed uses including a 'Hill-Top Village' neighbourhood centre for future commercial and tourist uses for approximately 160 residential/tourist apartments and approximately 6,400m<sup>2</sup> of commercial space, including Village Square of approximately 2,750m<sup>2</sup>
- urban design concepts for low density dwellings up to 2-storeys in height, medium density dwellings up to 3-storeys in height and Hill Top Village up to 4-storeys in height
- environmental works within and adjacent the SEPP 26 Littoral Rainforest including weeding, retention of native species and selective revegetation within rainforest regeneration area
- provision of stormwater infrastructure including six biofiltration/detention basins and three groundwater recharge wells
- erection of 2m high fencing along western edge of revegetation area
- perimeter road and network of access roads and pedestrian/cycle paths

##### **A2**      *Staging*

- a) The project will be undertaken in approximately 10 stages generally in accordance with *Exhibit 5B: Indicative Staging Plan* drawing no. 4898P\_Exhibits.dwg Revision C and as generally described in the Environmental Assessment dated November 2010 and comprises the following:
- 1) Stage PA1 – establishment of 'Stage 1 Environmental Works' associated with SEPP26 Littoral Rainforest and constructing a pedestrian boardwalk through rainforest
  - 2) Stages S2 & M2 – construction of perimeter road and footpath/cycleway adjacent rainforest, erection of 2m high fencing, provision of stormwater and associated infrastructure (water, sewerage, stormwater drainage, electricity, telecommunications), environmental works to Duchess Gully
  - 3) Stages S3 & M3 – low density residential development and associated services
  - 4) Stages S4 & M4 – low density residential development and associated services
  - 5) Stages S5 & M5 – continuation of perimeter road, low density residential development, medium density residential development and associated services
  - 6) Stages S6 & M6 – low density development and medium density development and associated services
  - 7) Stages S7 & M7 – medium density residential development
  - 8) Stages S8 & M8 – 'Hill-Top Village' and medium density residential development
  - 9) Stages S9 & M9 – 'Hill-Top Village' and pocket park and remainder of medium density residential development



- 10) Stage M10 – remainder of 'Hill-Top Village'.

Note: 'S' denotes staging in Seawide Pty Ltd ownership and 'M' denotes staging in Milland Pty Ltd ownership i.e. S2 and M2 relate to distinct areas within the site.

- b) Stage PA1 or 'Stage 1 environmental works' shall be commenced first. The order of subsequent stages is subject to separate approval, and after Stage 2, can be varied subject to market forces.

### **A3 Project in Accordance with Plans**

The project will be undertaken generally in accordance with the following drawings:

| <b>Drawings prepared by King + Campbell Pty Ltd</b> |                 |  |              |
|---|-----------------|--|--------------|
| <b>Drawing No.</b>                                  | <b>Revision</b> | <b>Name of Plan</b>  | <b>Date</b>  |
| 14898_Exhibits_1_Locality_Context.psd               | D               | Exhibit 01: Site Locality and Context  | 10 Feb 2011  |
| 4898P_Exhibits.dwg                                  | E               | Exhibit 02: Site Survey  | 15 Feb 2011  |
| 4898P_Exhibits.dwg                                  | D               | Exhibit 03: Aerial Photograph  | 15 Feb 2011  |
| 4898P_Exhibits.dwg                                  | F               | Exhibit 04A: Site Analysis   | 15 Feb 2011  |
| 4898P_Exhibits.dwg                                  | F               | Exhibit 04B: Site Opportunities and Constraints  | 12 July 2011 |
| 4898P_Exhibits.dwg                                  | H               | Exhibit 05A: Subdivision Concept Plan  | 12 July 2011 |
| 4898P_Exhibits.dwg                                  | D               | Exhibit 5B: Indicative Staging Plan  | 12 July 2011 |
| 4898P_Exhibits.dwg                                  | E               | Exhibit 06A: Landscape Concept Plan  | 12 July 2011 |
| 14898_Exhibit_6B_Public_Access.psd                  | E               | Exhibit 06B: Landscape Concept Plan – Enlarged Plan Section – Public Access  | 29 July 2011 |
| 14898_Exhibit_6C_Hill_Top_Village.psd               | C               | Exhibit 06C: Landscape Concept Plan – Enlarged Plan Section – Hill Top Village   | 7 July 2010  |
| 14898_Exhibit_6D_Edge_Treatment_Reveg.psd           | E               | Exhibit 06D: Landscape Concept Plan – Enlarged Plan Section – Indicative Edge Treatment to Revegetation and SEPP26 Littoral Rainforest | 14 July 2011 |
| 14898_Exhibit_7_Architectural_Concept_Plan.psd      | C               | Exhibit 07: Indicative Hilltop Village Architectural Treatment   | 7 July 2010  |
| 4898P_Exhibits.dwg                                  | H               | Exhibit 08A: Stormwater Concept Plan   | 12 July 2011 |
| 4898P_Exhibits.dwg                                  | D               | Exhibit 08B: Indicative South Western Biofiltration Basin Detail   | 14 July 2011 |

except for:

- (1) any modifications which may be necessary for the purpose of compliance with the BCA and any Australian Standards incorporated in the BCA
- (2) otherwise provided by the terms of this approval.



#### **A4 Project in Accordance with Documents**

The project is to be undertaken generally in accordance with the following documents:

- a) *Environmental Assessment Report* (and all associated Annexures) prepared by King + Campbell Pty Ltd on behalf of Milland Pty Ltd and Seawide Pty Ltd, dated November 2010
- b) *Response to Submissions Report* (and all associated Annexures) prepared by King + Campbell Pty Ltd on behalf of Milland Pty Ltd and Seawide Pty Ltd, dated February 2011
- c) Additional Information (and all associated correspondence and exhibits) prepared by King + Campbell Pty Ltd on behalf of Milland Pty Ltd and Seawide Pty Ltd dated 27 May 2011 and 5 September 2011.

#### **A5 Inconsistencies between documents**

- (1) In the event of any inconsistency between:
  - (a) The terms of this approval and the Statement of Commitments (at Schedule 3), the terms of this approval prevail
  - (b) The terms of this approval and the drawings/documents referred to in Terms A2 and A3, the terms of this approval prevail
  - (c) Any drawing/document listed in Terms A2 and A3 and any other drawing/document listed in Terms A2 and A3, the most recent document shall prevail to the extent of the inconsistency.
- (2) If there is any inconsistency between this concept plan approval and any project approval, this concept plan approval shall prevail to the extent of the inconsistency.

#### **A6 Lapse Provision**

This concept plan approval shall lapse five (5) years after the date this concept plan approval is endorsed by the Director-General, unless works the subject of any other related application are physically commenced, on or before that lapse date.

### **PART B—MODIFICATIONS TO THE CONCEPT PLAN**

#### **B1 Noise Wall**

The 2m high noise wall proposed as the boundary fence for all residential allotments that adjoin the Ocean Drive road corridor (as indicated in Exhibit 5A: Subdivision Concept Plan) is not approved. Justification for the noise wall or other noise mitigation measures is to be addressed in future subdivision development applications.

### **PART C – ENVIRONMENTAL ASSESSMENT REQUIREMENTS FOR FUTURE APPLICATIONS**

Pursuant to section 75P(2)(c) of the Act the following requirements apply, with future stages of the project to be assessed under Parts 4 or 5 of the Act, as relevant:

#### **C1 Acid Sulfate Soils**

Future development applications for environmental works in Stage M2, subdivision in Stage M5 and for medium density development in Stage M7 shall contain a risk assessment of acid sulfate soils prepared by a suitably qualified person(s) in accordance with the *Acid Sulfate Soil Assessment Guidelines* (Acid Sulfate Soil Management Advisory Committee, 1998) to ensure any works associated with Class 4 or Class 5 lands have appropriately considered.

## **C2 Bushfire Risk**

Future development applications for subdivision, medium density superlots and for the 'Hill-Top Village' shall include a detailed bushfire assessment prepared by a suitably qualified person(s) in accordance with the requirements with *Planning for Bushfire Protection 2006* to ensure the protection of property and assets from bushfire.

## **C3 Construction Management**

Future development applications for subdivision, medium density superlots and for the 'Hill-Top Village' shall include a Construction Management Strategy to address the environmental impacts of the proposal during the construction stage of development. The strategy shall include but not be limited to traffic and pedestrian management, noise and vibration management, construction waste management, erosion and sediment control management, dust management and flora and fauna management.

## **C4 Cultural Heritage Management**

Future development applications for subdivision, medium density superlots and for the 'Hill-Top Village' shall include a Cultural Heritage Management Plan prepared by a suitably qualified person(s) that outlines the site specific management strategies relating to items of Aboriginal cultural heritage significance which may be found on site during construction.

## **C5 Flooding and Climate Change**

Future development applications for environmental works in Stage M2, subdivision in Stage M5 and for medium density development in Stage M7 shall include a flood assessment prepared by a suitably qualified person(s) to ensure the protection of life and property during a flood event. The flood assessment shall have regard to the recommendations in Cardno's *Flood Assessment Report* dated 13 October 2010, Council's *Interim Port Macquarie-Hastings LGA Flood Policy 2007* or its successive document and *NSW Coastal Planning Guideline: Adapting to Sea Level Rise 2010*.

## **C6 Geotechnical**

Future development applications for subdivision, medium density superlots and for the 'Hill-Top Village' shall include a geotechnical assessment prepared by a suitably qualified person(s) addressing the potential for slope instability.

## **C7 Infrastructure**

Future development applications for subdivision, medium density superlots and for the 'Hill-Top Village' shall include an Infrastructure Servicing Plan prepared by a suitably qualified person(s) that identifies servicing requirements necessary for the development and upgrades proposed to the existing system.

## **C8 Land Title**

Future development applications for subdivision, medium density superlots and for the 'Hill-Top Village' shall include details of land title e.g. torrens title, community title including any proposals for the dedication of land to Council for ownership and/or management.

## **C9 Noise**

Future development applications for subdivision fronting Ocean Drive must include a Road Traffic Noise Impact Assessment in accordance with relevant guidelines to demonstrate acceptable noise impacts to future occupiers of the development and to determine appropriate noise attenuation requirements within future developments adjacent Ocean Drive. Noise attenuation measures including buffers, mounds, landscaping, and construction standards are to be considered as part of each development application for proposals fronting Ocean Drive.



### **C10     *Riparian Zone Management***

Future development applications for environmental works in Stage M2 shall include a detailed Vegetation Management Plan prepared by a suitably qualified person(s) to ensure the appropriate management of the riparian zone of Duchess Gully. The Vegetation Management Plan shall be prepared in accordance with Council's 'Vegetation Management Plan Requirements' document and shall generally accord with the Stormwater Concept Plan (Exhibit 8A Revision H) to assist in achieving the water quality targets set out in Port Macquarie-Hastings Council's *Area 14 Integrated Water Cycle Management Plan*. The Vegetation Management Plan must address and outline impacts on the surrounding riparian environment, drainage and water quality controls for this south west sub-catchment.

### **C11     *State Public Infrastructure Requirements***

Future development applications for subdivision, medium density superlots and for the 'Hill-Top Village' shall address any potential requirements for state public infrastructure in accordance with Part 6 of the *Port Macquarie-Hastings LEP 2011* (as amended). Development consent shall not be granted by Council for future subdivision development applications unless the Director-General has certified in writing that state public infrastructure requirements have been duly considered.

### **C12     *Stormwater and Groundwater Management***

Future development applications for subdivision, medium density superlots and for the 'Hill-Top Village' shall include a detailed Stormwater Management Plan that is generally in accordance with the Stormwater Concept Plan (Exhibit 8A Revision H). Stormwater Management Plans shall demonstrate that water quality targets set out in Port Macquarie-Hastings Council's *Area 14 Integrated Water Cycle Management Plan 2006* will be achieved or exceeded. Each stormwater management plan must address impacts on the surrounding environment and water quality controls for the relevant sub-catchment at construction, maintenance and operational stages.

Each stormwater management plan is to include groundwater considerations, a detailed design layout plan for the preferred stormwater treatment train showing location, size and key functional elements of each part of the system. MUSIC modelling, or equivalent, must be undertaken to demonstrate appropriate water quality objectives can be achieved. A Groundwater Management and Monitoring Plan shall be prepared in accordance with Council's *Area 14 Integrated Water Cycle Management Plan 2006*.

### **C13     *Traffic Management***

Future development applications for subdivision, medium density superlots and for the 'Hill-Top Village' shall contain a Traffic Assessment to demonstrate that traffic generated does not exceed the predicted traffic volumes outlined in Roadnet's *Traffic impact study Area 14 urban investigation area 2010*. Each traffic assessment must take into account traffic movements from the project and in the wider Area 14 area. Any traffic assessments that reveal impacts on the road network shall include mitigation strategies including road and/or junction upgrades for consideration by the RTA for approval.

### **C14     *Urban Design***

Future development applications for the medium density superlots and 'Hill-Top Village' shall include a detailed urban design analysis to ensure the future built form is in keeping with its local context and coastal setting. Each urban design analysis shall be presented having regard to the *Coastal Design Guidelines for NSW*, the *Greater Lake Cathie and Bonny Hills Urban Design Master Plan* and the *Port Macquarie-Hastings DCP 2006*. All future applications are to provide plans which:

- (1) Demonstrates the implementation of the levels of accommodation provided for in the approved concept plan
- (2) Presents the architectural aims and objectives of each stage
- (3) Presents the proposed architectural and urban design details and construction materials for its buildings
- (4) Details the number, size of dwellings and density of each stage.



### **SCHEDULE 3**

### **STATEMENT OF COMMITMENTS**

## Final Statement of Commitments – September, 2011

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

[illegible]



[illegible]

| No.                       | Objective  | Commitment   | Timing  | Responsibility        |
|---------------------------|--|--|---|-----------------------|
|                           |  | <ul style="list-style-type: none"> <li>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.</li> </ul>   |   |                       |
| CP10 - Acid Sulfate Soils | To effectively manage PASS.  | <ul style="list-style-type: none"> <li>The future PA associated with Duchess Gully shall ensure that works are limited to protection and enhancement associated with Duchess Gully;</li> <li>The biofiltration works adjacent to Duchess Gully shall be designed to avoid the disturbance of ASS by restricting excavation depths to no more than 2m below natural surface levels. Any works as a depth greater than 2m AHD in the Class 4 area will require an ASS management plan.</li> <li>The ASS Management Plan shall be prepared in accordance with ASSMAC Guidelines.</li> </ul>   | CC documentation for the area incorporating Duchess Gully | Landowner / Developer |
| CP11 - Bushfire           | To ensure compliance with PIBP 2006 and the protection of the Littoral Rainforest from potential fire. | <ul style="list-style-type: none"> <li>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';</li> <li>A 10m APZ shall be provided within the lots in the north-west of the site, until such time as the threat is extinguished;</li> <li>Water, electricity and gas are to comply with section 4.1.3 of 'Planning for Bushfire Protection 2006';</li> <li>Roads shall comply with section 4.1.3 (1) of 'Planning for Bushfire Protection 2006';</li> <li>Landscaping of the site shall comply with the principles of Appendix 5 of 'Planning for Bushfire Protection 2006'.</li> <li>Asset Protection Zones shall be provided to the residential and tourist development from the Littoral Rainforest;</li> <li>Defendable Spaces shall be provided to the commercial development;</li> <li>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.</li> <li>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</li> </ul> | Preparation of the PA's for future stages                 | Landowner / Developer |

| No.                | Objective   | Commitment  | Timing                    | Responsibility        |
|--------------------|---|---|---------------------------|-----------------------|
|                    |   | <ul style="list-style-type: none"> <li>of the road from the bushfire threat.</li> <li>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.</li> </ul> <p>General:</p> <ul style="list-style-type: none"> <li>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 &amp; A Act and shall address the requirements of Planning for Bushfire Protection 2006.</li> </ul>  |                           |                       |
| CP12- Geotechnical | To effectively manage any geotechnical limitations of the site. | <p>That construction standard for future roads and buildings, including footings and foundations, be undertaken in accordance with the Good Hill slope Engineering Practices as set out in Australian Geomechanics Vol. 42 No. 1 March 2007.</p> <p>Detailed construction management plans and dewatering assessments are to be provided where excavations are proposed to be undertaken below the permanent groundwater table. These plans are to be provided with the Construction Certificate documentation.</p> <p>The following geotechnical investigations are to be undertaken:</p> <ul style="list-style-type: none"> <li>Boreholes to allow for the characterisation of underlying geology and determination of bed-rock depths;</li> <li>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;</li> <li>Californian bearing ration (CBR) lab testing to determine strength of sub-grade material for pavement design;</li> <li>Shrink/Swell and Atterberg Limit lab testings to determine soil reactivity for foundation classification; and</li> <li>Settlement analysis to determine future ground settlements beneath engineered structures (buildings, roads and services).</li> </ul> | With the CC documentation | Landowner / Developer |
| CP13 - Flooding    | To effectively manage flooding,                                 | <ul style="list-style-type: none"> <li>Residential lots shall be filled to a minimum level of RL 5.0mAHd;</li> </ul>  | CC documentation          | Landowner /           |

SUBMITTING

APPROVAL

DRAWING

DATE ENG. REVIEW

DESIGN DESIGN



| No.   | Objective  | Commitment   | Timing   | Responsibility   |
|---|--|--|--|--|
|   | including compliance with any future climate change and sea level rise scenarios.                                      | <ul style="list-style-type: none"> <li>Road crossings over flow paths within the proposed development will be designed to provide 100 year ARI (plus climate change) immunity and comply with PMHC's AUSPEC Design Specifications.</li> <li>The minimum floor level of any residential dwelling is to be RL 5.27mAHN; and</li> <li>All future PAs 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)</li> </ul>   | Future PA's/DA's   | Landowner / Developer  |
| CP14 - Water Cycle Management<br>(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"> <li>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.</li> <li>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.</li> <li>The final design of the stormwater treatment system shall be forwarded to the LPMA for consideration/information.</li> </ul> <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"> <li>More rigorous geotechnical investigations and design will be required for the design of the recharge pits, including: <ul style="list-style-type: none"> <li>Establish a series of four (4) groundwater bores within the proposed revegetated buffer zone to document subsurface conditions.</li> <li>At each bore, further testing of saturated hydraulic conductivity in the underlying sand aquifer is to be undertaken.</li> <li>Measurements of storativity/specific yield are to be made in order that the groundwater mounding from recharge pits can be minimised.</li> <li>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</li> </ul> </li> </ul> | <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 |
|-----|-----------|---|--------|----------------|
|     |           | <ul style="list-style-type: none"> <li>• design of the recharge pits.               <ul style="list-style-type: none"> <li>○ Two (2) of the existing bores at higher elevations shall be instrumented for the same six (6) month period.</li> </ul> </li> <li>• Establishment two (2) further monitoring bores within the SEPP 26 area (if this is possible) so that the current groundwater model for the study area can be extended to the coast as far as practical. Recommendations include:               <ul style="list-style-type: none"> <li>○ Bores to be located in either sub-catchments C2 or C3; arid</li> <li>○ 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.</li> </ul> </li> <li>• 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.</li> <li>• 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"> <li>○ Within the SEPP 26 forest;</li> <li>○ Within the revegetation area; and</li> <li>○ An existing bore location further upslope.</li> </ul> </li> <li>• 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.</li> <li>• The Preparation of a report to accompany the Stage Two PA to provide the following:               <ul style="list-style-type: none"> <li>○ 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.</li> </ul> </li> </ul> |        |                |

| No. | Objective | Commitment   | Timing   | Responsibility |
|-----|-----------|--|--|----------------|
|     |           | <ul style="list-style-type: none"> <li>○ 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).</li> <li>○ Confirmation of the design of end-of-line stormwater structures. This should include on a sub-catchment basis, revised OSD requirements and a daily water balance modelling demonstrating that surface moisture conditions within the SEPP 26 rainforest will not be affected by the proposed stormwater management infrastructure.</li> <li>○ Updated and appropriately supported designs of the stormwater recharge pit system.</li> </ul> <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"> <li>• 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;</li> <li>• 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.</li> <li>• 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 'rifting' or minor contouring.</li> <li>• 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.</li> <li>• On the lower slopes (below 12.5m AHD, which excludes the majority of</li> </ul> | <p>Details to be provided with the relevant CC documentation</p> |                |



| No.  | Objective  | Commitment   | Timing   | Responsibility               |
|--|--|--|--|------------------------------|
|  |  | <ul style="list-style-type: none"> <li>the residential development area), excavations &gt; 1m in depth (other than for the deep infiltration pits) shall be plastic lined and backfilled with low permeability materials.</li> <li>Roads in low lying areas (below 12.5m AHD), shall be constructed to enable sufficient durability and bearing pressure under the assumption that the groundwater table may be close to or within the sub-grade materials, or be designed somewhat elevated to ensure that pavement and upper sub-grade materials do not become water logged.</li> <li>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.</li> </ul> <p>Groundwater Licences:</p> <ul style="list-style-type: none"> <li>All groundwater licences must be obtained and associated works appropriately authorised prior to works commencing.</li> <li>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.</li> <li>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.</li> </ul> | <p>Prior to works commencing</p>   | <p>Landowner / Developer</p> |
| CP15 - Water Cycle Management (Western catchments) | To ensure that the post development water quality and quantity satisfy best practice guidelines. | <p>North-western sub-catchment (Lake Innes):</p> <ul style="list-style-type: none"> <li>The stormwater biofiltration and detention basin for the NW sub-catchment is to be located generally as shown on Exhibit 08A.</li> <li>Detailed modelling and design shall be undertaken in accordance with the aims of the IWCMP and Auspec.</li> <li>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</li> </ul>   | <p>Details to be provided with the relevant PA and CC documentation.</p> | <p>Landowner / Developer</p> |

| No.                             | Objective   | Commitment  | Timing   | Responsibility        |
|---------------------------------|---|---|--|-----------------------|
|                                 |   | <ul style="list-style-type: none"> <li>The top of water level within the basin is located below the road surface level in Ocean Drive (with allowance for freeboard.</li> </ul> <p>South-western sub-catchment (Duchess Gully):</p> <ul style="list-style-type: none"> <li>A groundwater management plan and monitoring plan for the proposal must be prepared to NOW's satisfaction.</li> <li>The biofiltration basin, erosion controls and riparian revegetation for the SW sub-catchment is to be located generally as shown on Exhibit 08A.</li> <li>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.</li> <li>Detailed modelling and design of the biofiltration basin shall be undertaken in accordance with the aims of the IWCMP and Auspec.</li> <li>The outlet structures shall be designed generally in accordance with the 'indicative outlet detail' (DECCW), shown on Exhibit 08B.</li> <li>The riparian revegetation works shall be undertaken in the areas specified on Exhibit 08B.</li> </ul>  | <p>Stage 2 PA and future relevant PA and CC documentation.</p> | Landowner / Developer |
| CP16 - Heritage and Archaeology | To preserve and protect items of Aboriginal significance. | <ul style="list-style-type: none"> <li>The Stage 1 Project Application shall include the temporary exclusion fencing along the western edge of the planted buffer to the Littoral Rainforest, to ensure pedestrian restriction and protection of the identified aboriginal artefact.</li> <li>Temporary fencing shall be erected adjacent to the Duchess Gully vegetated area to preserve any archaeological materials which may be present.</li> <li>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.</li> <li>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</li> </ul> | Stage 1 Project Application                                    | Landowner / Developer |

| No.                    | Objective   | Commitment   | Timing                      | Responsibility        |
|------------------------|---|--|-----------------------------|-----------------------|
|                        |   | <ul style="list-style-type: none"> <li>archaeologist and DECCW to develop and implement management strategies for all objects/sites.</li> <li>If human remains are located in the event that surface disturbance occurs, all works shall halt in the immediate area to prevent any further impacts to the remains. The NSW Police shall be contacted immediately. No action shall be undertaken until Police provide written notification to the proponent. If the skeletal remains are identified as Aboriginal, the proponent shall contact DECCW's Enviroline on 131555. No works are to continue until DECCW provide written notification to the proponent.</li> <li>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.</li> <li>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.</li> </ul> |                             |                       |
| CP17 - Flora and Fauna | To minimise and manage any potential impacts on flora and fauna biodiversity. | <p><u>Littoral Rainforest:</u></p> <p>Implement a Vegetation Management Plan as part of the Stage 1 Project Application, in order to :</p> <ul style="list-style-type: none"> <li>Immediately improve the existing condition of the rainforest by the removal of the weeds along its western edge;</li> <li>Provide longer-term enhancement of the existing rainforest by decreasing the edge-to-area ratio through plantings along the western boundary;</li> <li>Restrict and control public access through the rainforest; and</li> <li>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.</li> </ul> <p>The VMP shall include:</p>  | Stage 1 Project Application | Landowner / Developer |



| No. | Objective | Commitment   | Timing        | Responsibility        |
|-----|-----------|--|---------------|-----------------------|
|     |           | <ul style="list-style-type: none"> <li>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;</li> <li>An elevated walkway to the beach along the existing pathway and improve drainage or minimize erosion by rip-rap filters or similar structures; and</li> <li>Temporary protective fencing along the western edge of the planted buffer to the Littoral Rainforest.</li> </ul> <p><u>Duchess Gully:</u></p> <ul style="list-style-type: none"> <li>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;</li> <li>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.</li> <li>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.</li> </ul> <p><u>Stage 2 VMP:</u></p> <ul style="list-style-type: none"> <li>A Vegetation Management Plan shall be prepared in relation to the 'grassed area' on the western side of the temporary exclusion fence. The VMP shall be submitted with the DA/PA for Stage 2.</li> <li>The Stage 2 VMP shall include details of the permanent protective fencing to the Littoral Rainforest, adjacent to the proposed footpath, to Council's satisfaction.</li> </ul> <p><u>Revegetation - general:</u></p> <ul style="list-style-type: none"> <li>Any proposed revegetation must be in accordance with best practice measures, specifications and principles as outlined Nationally accepted</li> </ul> |               |                       |
|     |           |  | Stage 2 DA/PA | Landowner / Developer |
|     |           |  | Stage 2 DA/PA | Landowner / Developer |

O:\4898\_Millard&Seawide\3-Government\PART 3A DRAFT DOCUMENTS\4898\_SOC\_final\_2011\_11.doc

| No.                         | Objective   | Commitment  | Timing                       | Responsibility        |
|-----------------------------|---|---|------------------------------|-----------------------|
|                             |   | Windows, doors and other openings must be closed).  |                              |                       |
| CP19-The Environment        | To ensure the on-going protection of the environment.         | The landowners/developers shall implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the construction, operation, maintenance, decommissioning or rehabilitation of the project   | Throughout duration of works | Landowner / proponent |
| CP20 – Plant and equipment  | To ensure the safety of workers on site                       | All plant and equipment installed at the premises or used in connection with the proposal: <ul style="list-style-type: none"> <li>• Shall be maintained in a proper and efficient condition; and</li> <li>• Shall be operated in a proper and efficient manner.</li> </ul>  | Throughout duration of works | Landowner / proponent |
| CP21 – Air                  | To protect air quality  | All dust generating activities on the site must be managed in a proper and efficient manner to minimise dust emissions from the site.   | Throughout duration of works | Landowner / proponent |
| CP22 - Water                | To ensure maintenance of the water quality                    | Except as may be expressly provide by a licence under the <i>Protection of the Environment Operations Act 1997</i> in relation of the development, section 120 of the <i>Protection of the Environment Operations Act 1997</i> prohibiting the pollution of waters must be complied with on connection with the carrying out of the development.<br><br>Soil and water management controls shall be employed to minimise soil erosion and the discharge of sediment and other pollutants to lands during construction activities in accordance with the requirements outlined in <i>Managing Urban Stormwater: Soils and Construction</i> (Landcom, 2004) | Throughout duration of works | Landowner / proponent |
| CP23 – Waste                | To ensure the proper disposal of waste                        | All waste and fill materials, whether imported or generated on site, shall be assessed, classified, managed and disposed of in accordance with the <i>Waste Classification Guidelines</i> (DECC 2008).<br><br>All waste and fill material removed from the site shall only be directed to a waste management facility lawfully permitted to accept the materials.   | Throughout duration of works | Landowner / proponent |
| CP24 – Street tree planting | To ensure use of appropriate tree species within subdivision. | All future PA's/DA's shall incorporate street trees from the following list:  | All future DA's/PA's         | Landowner / proponent |



| No.                            | Objective  | Commitment  | Timing                          | Responsibility        |
|--------------------------------|--|---|---------------------------------|-----------------------|
|                                |  | <ul style="list-style-type: none"> <li>• Tuckerroo (<i>Cupaniopsis anacardioides</i>);</li> <li>• Rosewood (<i>Dysoxylon fraserianum</i>);</li> <li>• Smooth Quandong (<i>Elaeocarpus obovatus</i>);</li> <li>• Broad-leaved Paperbark (<i>Melaleuca quinquinervia</i>);</li> <li>• Beach Alectryon (<i>Alectryon coriaceus</i>);</li> <li>• Coogera (Rose Tamarind) (<i>Arytera divaricata</i>);</li> <li>• Oyster Bay Pine (<i>Callitris thomboidea</i>);</li> <li>• Hairy Rosewood (<i>Dysoxylon rufum</i>);</li> <li>• Guioa (<i>Guioa semiglauc</i>); and</li> <li>• Water Gum (<i>Tristaniaopsis laurina</i>).</li> </ul> |                                 |                       |
| CP25 – Permanent Fencing       | To ensure that the permanent fencing to the revegetation area is installed in stages, to manage environmental impacts in a coordinated manner. | <p>The design details for the permanent fencing adjacent to the revegetation area shall be approved by PMHC. Confirmation of approval shall be provided with the DA for the corresponding adjoining stages, being M2, S2 and S5.</p> <p>The erection of the permanent fence to the Littoral Rainforest buffer, adjacent to the proposed footpath, shall occur at the completion of works for the corresponding adjoining stages, being M2, S2 and S5.</p>   | The DA for stages M2, S2 and S5 | Landowner / proponent |
| CP26 – Construction Management | To ensure the appropriate management of potential construction impacts, for the on-going protection of the environment.                        | All future DA's for works within each stage shall include a Construction Management Strategy.   | All future DA's/PAs             | Landowner / proponent |

