

Aspen Whitsunday Shores: Coastal Foreshore Landscape Master Plans.

INTRODUCTION.

Based on series of preliminary landscape concepts presented and approved by Bowen Shire Council (BSC), a package of 16 detailed Landscape Works Plans have been prepared and also submitted to Council for Operational Works approval.

Following two consultative meetings with the Queensland Environmental Protection Agency (EPA) this brief summary was requested to demonstrate details and compliance of the submitted Landscape Plans in relation to various key State coastal plan policies.

The approval of EPA and DNR as Resource Manager, is a critical step in the achievement of the Landscape Works Approval Decision Notice from BSC who are the designated Trustees of this foreshore area within a designated Coastal Management District. Accordingly this Summary is based on the EPA Guideline for Operational work on State coastal land.

The submitted Landscape Plans aim to maximize the restoration and long term protection of the foreshores special environmental qualities, and also provide the future basis for sustainable and highly appropriate use of this important coastal area by the local community under Council's management.

Significantly these Plans have been developed with careful consideration and the influence of a number of specific site assessments, expert and agency staff guidance and operational specifications of more detailed and issue specific environmental management reports also commissioned by Aspen Whitsunday Shores or predecessors PGP Developments.

Actual works including an extensive long term program of coastal ecological restoration will commence on achievement of approval from the Resource manager and subsequently BSC.

The submitted plans and this brief Summary have been prepared by U PLAN Landscape Architects on behalf of Aspen Whitsunday Shores (the Developer).

ENVIRONMENTAL CREDENTIALS:

A few key qualities of the Aspen Whitsunday Shores development must be identified and serve to demonstrate a long term commitment to sustainable environmental management and best practice application:

A hall mark of the landscape treatment of all the parklands within this development is the emphasis on the care and use of local plants. Local significant trees are being protected, eg the distinctive Whitsunday Bottletree,

An ongoing series of weed management regimes are being established to enhance opportunities for natural re generation from existing seed stock,

A major financial investment has resulted in the establishment of an on site production nursery. The nursery will produce 100,000 plus plants per year from local endemic seed collected on site, and also on grow and develop (early purchased) local trees for the parklands and streets,

Two horticultural trainees have been appointed to the project under the supervision of the Nursery and landscape maintenance Manager,

A fully self contained sewage treatment plant has been commissioned, and will in stages treat and supply recycled water for landscape irrigation purposes.

A team of planners, engineers, environmental scientists, landscape architects and horticulturalists and other specialists provide on going professional services.

The Client (Aspen) has a national proven track record of environmental credited estates and developments.

LANDSCAPE ARCHITECTURAL INTENT:

“Aspen Whitsunday Shores intend to genuinely advance the concepts of sustainable environmental coastal enhancement by concentrating low key recreational development within existing highly disturbed areas, extensively rehabilitating all disturbed areas & preserving and protecting all remnant vegetation, including the existing wetland & estuarine features. A program of ongoing management of weed & pest species is also proposed. Indigenous culture, environment, foreshore, flora & fauna qualities are to be further enhanced through education & controlled public access via a single system of pedestrian trails, consolidated (minimal size and impact) car parks, boardwalks & appropriate (low key) interpretative signage.”

DESIGN INTENT COASTAL FORESHORE.

As stated a package of 16 detailed Landscape Operational Works Plans have been prepared and submitted to Council for approval.

In summary the plans reflect the clear intent to restore and enhance this degraded section of coastal reserve while creating appropriate opportunities for managed and sustainable access and public use.

Key elements include single low visual profile pathway will provide only managed and defined access along the coastal reserve. The pathway will connect with low profile timber walkways to cross all future more sensitive environmental zones, eg storm water corridor. The path alignment is totally within degraded land and with the associated works will achieve the restoration of many of these substantially damaged areas.

A few environmental education stations will promote awareness and interest in the surrounding highly valued coastal environment.

Two small and defined car parks will control the main access points to the coast, from which a series of trailheads will permit managed access to the foreshore and beyond.

Associated with this approval application is a major coastal regeneration program to control weeds, and in identified areas replant local seed germinated plants. A major priority has been given to this work and appropriate re vegetation techniques will be applied to maximise protection of all nominated existing local vegetation including the current stands of broad leaf bottle tree, mangrove & beach cherry.

The provided typical sections and plant lists serve to illustrate the significant extent of re vegetation and environmental enhancement proposed.

In accordance with defined best practice techniques, low visual profile rehabilitation fences will be installed as required. A priority will be given to use of local seed provenance. Weed eradication works will also be undertaken as specified in the environmental advices and research.

STATE COASTAL POLICY COMPLIANCE

In detailed discussions with the EPA the importance of documenting compliance with the relevant State Coastal Policies was requested.

The following table provides a summary according to ten key policy areas of the EPA criteria and the justification or rationale for the Foreshore landscape architectural design as submitted. Please note the original submitted plans following detailed EPA consultations has been revised, especially in relation to increasing distances from HAT, again as requested.

The ten key policy areas are:

Erosion Prone areas

Coastal Hazards

Future Need for Access

Design for Access

Storm water Management

Groundwater quality

Areas of State Significance (Natural Resources)

Coastal Wetlands

Biodiversity Policy

Private use of State land on the coast

Aspen Whitsunday Shores Foreshore Landscape Master Plans.

Coastal Policy Compliance Tables:

Key State Coastal Plan Policy	EPA requested rationale or explanation	Summary of demonstrated Compliance
<i>Policy 2.2.2 Erosion Prone areas</i>	Erosion Prone Zone Safeguard stability of frontal dune areas Impacts on (marine) coastal process	Monitored rehabilitation of a 15 – 25 metre zone above HAT will proceed to remove weeds, siltation and fence and re vegetate the dunal systems where currently degraded. NO works extend seaward of HAT No works will impact on (marine) coastal processes.
<i>Policy 2.2.4 Coastal Hazards</i>	Storm tide inundation	Council recognizes that storm tide inundation may occur. Minor infrastructural damage (path) may occur resulting in path way repair. Path materials and profile is a design responsive to site and risk assessment and asset management. Refer Policy 2.3.2 regarding extent of only minor recreational infrastructure proposed The site is also within Edgecumbe Bay, and behind a zone of rocky shoreline and bands of mangroves.
<i>Policy 2.3.1 Future need for access</i>	Access to the foreshore (net loss)	There will be no net loss of access to the foreshore or public usability of coastal waters.

<p><i>Policy 2.3.2 Design of access</i></p>	<p>Long term stability of dunes or other landform Alteration of tidal regimes and coastal process Impacts on coastal process, incl disturbance to coastal wetlands, habitats, protected species, and significant habitats</p>	<p>Current ad hoc and damaging vehicle and pedestrian access throughout the entire area severely impacting on the long term stability of the dunal systems, and potentially altering tidal regimes and coastal processes will cease.</p> <p>All proposed minor structures and recreational infrastructure is located as far as practical inland.</p> <p>A single 2.5 metre path will permit managed pedestrian access and bollards will allow only management vehicle access. The path constructed of concrete to coastal engineering specifications follows natural landforms and keeps to subtle on site higher ground, avoids all existing local trees and is generally setback a MINIMUM of 15 metres from surveyed HAT.</p> <p>A single small toilet block is proposed within a key community node. The location has been carefully selected to account for gravity connection into an existing sewer line, it is central to the overall foreshore and parkland open space areas, adjacent to a small car park for ease of Council maintenance, within a small grassed open area to minimize inappropriate use and maintain surveillance, and being located on more elevated ground it is located acceptably in terms of distance from HAT and an assessment of acceptable storm surge risk</p> <p>Two small consolidated community car parks will prevent vehicle access into the foreshore reserve, and provide an accepted level of parking to meet resident and general community levels of expected use. Both car parks are located as far inland as is possible. The points of road access and orientation of the car parks has been carefully designed to minimize the extent of area devoted to this use, provide for safe use, limit the extent of barriers required, meet budget requirements and Council management standards, orientate the user to pathway access and being on slightly elevated land achieve an acceptable storm surge risk assessment.</p> <p>There are additional plans in preparation to develop management plans for the central parkland and catchment above the tidal wetland. (To be submitted and under current EPA and DPI discussions).</p>
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<p><i>Policy 2.4.4 Storm water management</i></p>	<p>Proposed site drainage</p>	<p>A series of currently eroding storm water channels will be repaired, planted and stabilized based on engineering performance criteria and proposed landscape treatment.</p> <p>The proposed landscape works do not require any excavation or quarrying of materials.</p>
<p><i>Policy 2.4.5 Groundwater quality</i></p>	<p>If removing dunes, impacts on groundwater quality</p>	<p>NO dunes will be removed or disturbed</p>
<p><i>Policy 2.8.1 Areas of State Significance (natural resources)</i></p>	<p>Details of impacts</p>	<p>NIL</p>
<p><i>Policy 2.8.2 Coastal wetlands</i></p>	<p>Potential Impacts on coastal wetland systems</p>	<p>NIL, no wetlands are in the project area. The plans promote protection and major investment to rehabilitate areas around a zone in which a tidal wetland is located and subject to more detailed planning work,</p>
<p><i>Policy 2.8.3 Biodiversity Policy</i></p>	<p>Potential impacts on ecosystems and habitats</p>	<p>Previously submitted Environmental Reports by Rob Ellison & Associates stated there will be no impacts Biodiversity Impacts.</p> <p>The extensive rehabilitation proposed will lead to a potential increase in the extent and quality of the range of habitats.</p>
<p><i>Policy 2.9.3/2.9.4 Private use on State land on the coast</i></p>	<p>Private Purpose works</p>	<p>NIL, the entire foreshore will be managed by Trustee Bowen Shire Council for Community and Environmental purposes.</p>