

BURNIE WEST COASTAL AREA STRATEGIC MASTERPLANS CAMDALE & COOEE POINTS



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Prepared
Lesley Gulson | Ferndene Studio

in association with
Neil Shephard & Associates

for Burnie City Council

PROJECT TEAM

FERNDENE STUDIO

Lesley Gulson
John Miller

NEIL SHEPHARD AND ASSOCIATES

Neil Shephard

GRAPHIC ASSISTANCE

Rebecca Kurczok

BURNIE CITY COUNCIL

Rodney Greene
Patrick Earle

ACKNOWLEDGEMENTS

TASMANIAN PLANNING COMMISSION

Stewart Johnson
Tony Davidson

Supply of modelling - *From models prepared by
Dr John Hunter and Dr Richard Mount*
Informal liaison

DR. RICHARD MOUNT

Senior Research Fellow, Blue Wren Group,
School of Geography and Environmental Studies,
UTAS
Informal liaison



1 INTRODUCTION

BURNIE WEST COASTAL AREA

1.1 SCOPE

Burnie City Council requested an investigation of options for Council owned land at 2 precincts which are located on points on the coast to the west of Burnie CBD:

- Camdale Point (or Freezers Siding) – alongside the Cam River at the west boundary of the municipality
- Cooe Point – to the north of the urban village of Cooe

The investigation was to inform Council regarding directions for those areas (which until recently had been used for industrial purposes), considered in a wider strategic context, and prepared in a manner that could if appropriate, underpin amendments to the Planning Scheme. It was not intended to address financial viability, rather to identify available or indicative land use options.

The recommended directions were to be formulated having consideration of:

- Tasmania's Coastal Policy
- Emerging directions for addressing coastal processes including sea level rise
- Relevant public access previous studies

The study was to be prepared using readily available information. It has been undertaken without the benefit of site specific coastal geographer/geomorphologist or ecological studies, and without a traffic impact assessment for Camdale. (Council has undertaken a Traffic impact Assessment for Cooe Point.)

1.2 THE BWCA STUDY

The investigation was undertaken as the Burnie West Coastal Area Study (or BWCA). It was separated into 2 stages: a separate background assessment, followed by consideration of use and any development on each of the points. This report, the Stage 2 Strategic Master Plans, should be read together with the Stage 1 report.

STAGE 1 – STRATEGIC LAND USE GUIDELINES

The first stage entailed preparation of strategic land use guidelines for the length of the coastal strip from the Cam River to Parklands. It was undertaken with reference to various Tasmania Government, regional and Council strategies, policies, planning controls and studies, with primary reference to the *Burnie Settlement and Investment Study* and also *Burnie - Directions for the Future*.

The Guidelines were necessarily broadbrush, providing overview directions rather than detail. They outline a strategy for the existing land use pattern to:

- Continue to evolve from a pattern of isolated settlements into part of the fabric of a regional city
- Meet contemporary expectations for residential, commercial and service amenity
- Retain some of the original settlement pattern

The Guidelines established preferred land use directions for Camdale and Cooe Points, in both instances proposing a balance of recreation, conservation of natural values and mixed use (or flexible use) areas.

Stage 1 completed mid 2010, has been provisionally accepted with some qualifications to allow the project to be finalised.

STAGE 2 - STRATEGIC MASTER PLANS

Methodology

The second stage (this report) builds on the Stage 1 Guidelines together with detailed consideration of nature of the 2 points, and consideration of alternative directions to propose preliminary strategic master plans (SMPs).

Preliminary SMPs were tested and then refined by developing indicative interpretations to explore the range of ways the SMPs could be applied.

After the exhibition of Stage 2 draft, comments received were primarily positive and only minor typographical refinements were made prior to the report being reviewed by Council.

What is a strategic master plan (SMP)?

A SMP establishes a site-specific land use structure, but allowing some flexibility - in this instance flexibility is required as the Master Plans are being prepared where information about some factors may change..

Status of the Stage 2 report.

The report will be only an advice to Council, unless all or part of the SMP is adopted by Council or incorporated into Council documents.

The SMP is definitive in that it clarifies potential land



Figure 1a: Extent of Burnie West Coastal Area



Figure 1b: Study Overview

use intentions for a specified area.

Flexibility can be explicitly incorporated into a planning framework, using a performance component to guide consideration of uses or details not previously anticipated. This technique provides an ability to respond to changing circumstances.



2 LAND USE STRATEGIES

BURNIE WEST COASTAL AREA

2.1 APPROACH

RESPONDING TO A DYNAMIC CONTEXT

The physical coastal environment is dynamic or changing. Similarly, virtually all factors routinely considered in land use planning change over time.

Key factors with some deficit in the knowledge regarding change potentially impacting land use at Camdale and Cooe Point Precincts are:

- Evolving requirements for responding to coastal processes including forecast sea level rise
- Traffic management along the Bass Highway with footprint and access/egress implications
- Development of best practice for conservation management of coastal fauna and flora

As part of its land use planning responsibilities, Council is required to formulate a land use response to the coastal context, without the luxury of waiting dynamic context factors to become fully clear.

APPROACH ADOPTED

The inherent uncertainty in the planning context of the 2 sites has been addressed by:

1. Considering a range of alternative environmental scenarios and selecting a provisional response that balances benefits, caution, risks and a range of consequences.
2. Strategies are formulated using the best available information, but with a conservative allowance the evolving information context.
3. Establishing a framework for refining the selected

response to reflect additional information, changed situations and trends identified through recurrent monitoring

Scenario planning

The planning context can be understood as a complex system that is ultimately unknowable because of its complexity and detail. Among the factors that keep changing are Council policy and actions and other actor responses to Council initiatives.

Scenario planning entails developing and assessing alternative responses and considering the consequences. Areas that have been addressed considering alternative outcomes are:

- Land use demand and opportunities – responds to both externals such as macro-economic trends, local economies and success or otherwise of local initiatives - potential high demand and low demand/interim options have been considered and are incorporated into the implementation strategies
- Forecast sealevel rise, an emerging science - requiring modelling which is subject to being reviewed, and refined. Existing models give high and low probability scenarios over specified periods

Monitor and refine cycle

The monitor and refine cycle is already familiar as it integrated into Tasmania's land use planning system,

and underpins the standard 5 yearly review of Planning Schemes.

ADAPATIVE RESPONSE

An adaptive response allows for altering directions and specific initiatives should the situation change and to learn about the dynamic context by commencing work and monitoring impacts.

This approach is most validly applied where directions can be adapted or reversed, and can complement the monitor and refine cycle. An adaptive response has been proposed as an option in nature conservation buffer areas.

PRECAUTIONARY RESPONSE

A precautionary response entails anticipating potentially adverse situations or scenarios, (for instance economic situation or changed modelling of sea level) and preferring directions that would potentially avoid or minimise those poor outcomes, across a range of potential outcomes. This principle has been used to develop and assess alternative options.

RESILIENCE

Another response to the uncertainties inherent in coastal context that has been used is to select directions that will be responsible across the range of environmental scenarios considered including allowing for later adaptations of built form and management to avoid unduly excluding options.

2.2 STAGE 1 GUIDELINES

BWCA STRATEGIC LAND USE GUIDELINES 2010

The Stage 1 Guidelines described conflicting demands for the narrow foreshore strip north of the Bass Highway where both of the Master Plan areas are located:

- Expanding demand for the transport corridor
- Implicit desire for continuing recreation use with more access by locals and others for walking, swimming, fishing, etc
- Continuing conservation management
- Other uses only as compatible with those above, plus complementing directions outlined for the Camdale and Cooee settlements

Given the limited areas available along the foreshore, the Guidelines recommended exploring options for complementary co-location of the competing land uses. It was not practical to address the transport corridor which is a state government asset during Stage 1.

The Guidelines established directions for each of the 4 settlements along the Burnie West Coastal Area in terms of:

- General land use pattern and direction for each settlement
- Intent and directions identified for specific areas including the SMP areas

2.3 CONTEXT UPDATE

The following have occurred or changed since completion of the Stage 1 Guidelines.

Extent of Cooee urban village

Council officers have undertaken investigation of boundary and interface issues.

Cooee Superclinic

The Superclinic has opened on a site in central Cooee. It may act as an attractor, supporting revitalisation of Cooee as a village centre.

Burnie Open Space Development Strategy

The Strategy describes the demand for multiple use on Burnie's coastal points West Park, Cooee Point and Camdale Point and notes that in these locations open space, conservation management and any mixed use development should be balanced.

North West Coastal Pathway Plan and the Burnie Foreshore Walk

The Cradle Coast Authority has finalised a regional cycleway concept.

Council has extended Burnie's Foreshore Walking Track connecting Burnie to Red Rock in Cooee.

Bass Highway

At state level there has been some recognition of Bass Highway traffic issues, but no direction.

Les Clark Precinct

Council has explored a range of land use options.

2.4 COASTAL HAZARD

There are a number of coastal hazards relevant to Camdale and Cooee Points:

- Existing storm events
- Flooding and altered wave behaviour in storms associated with forecast sea level rise
- Undercurrents in the Cam River and along the Camdale Point – Somerset Beach
- Cam River receives flood flows
- Cooee Point has a rocky, uneven and steep in places outer wall

FORECAST SEA LEVEL RISE

Currently Tasmanian modelling for coastal change is preliminary. Models are still being tested against reality and are not intended for site-specific use.

As the current models are not definitive, while options considered in preparing the SMPs have been informed by the available modelling, it is recommended that any land use change or development is prepared and assessed using the site-specific modelling (reflecting underwater topography and rock type) and referring to the best Tasmanian models available at that time. Such modelling could be undertaken by a coastal geographer, geomorphologist or other professional with relevant experience and qualifications.

Modelling would inform

- Types of land uses including consideration of vulnerability of users
- Constructed form - elevation of floor levels and for all services s

2.5 NATURAL SYSTEMS

EXISTING GENERAL VALUES

While the main issue identified in the Stage 1 Guidelines was conservation of Little Penguins, it is likely that there are natural values existing at these ex-industrial points. If development and management of the points favoured habitat, the points could contribute to local diversity of flora and fauna and build the resilience of the natural systems.

EXISTING VEGETATION

The existing vegetation is a mix of relict natural vegetation and rehabilitation planting.

Issues

At Camdale Point rehabilitation vegetation is all of one age and may be becoming overmature. It receives regular maintenance by the Cooee_Camdale Coastcare and Council but is subject to weed infestation and fly dumping.

PENGUINS

Different penguin species have different resilience to human impacts. The requirements and adaptation capacities of Little Penguins and possibly of specific penguin colonies is an emerging area for study within conservation management.

A recent report *Penguin Habitat Management: Cooee Point – Camdale Coastal Reserve* assessing potential habitat areas on the coast between Camdale and Cooee, and identified Camdale and Cooee Points as the most suitable areas, with reservation that Camdale Point may be less suitable in the long term due to the relative lack of elevation.

Issues

Recreation and associated impacts

There is potential for conflict between penguin conservation and recreational use of the water's edge.

Penguin burrows are above the tidal range with preferred areas being more natural with some cover, but not too shaded. Penguins move between their burrows and the water primarily at dawn and dusk.

Many people enjoy walking along the water's edge, including at dusk on long summer evenings and to access fishing spots, and walkers cross the penguin routes which can compromise the viability of the colonies.

Penguins and penguin colonies are also vulnerable to cars on the beach, dogs getting into colonies and interested people spotlighting the penguins.

Informal signs on rock barriers at Camdale Point discouraging dogs suggest dog management is an issue at the point.

Vegetation and vegetation management

Penguins are highly vulnerable to fire. The existing configuration, particularly at Camdale Point may represent a fire hazard.

The established dense shrubland dominated by Acacia sophorae or coast wattle, tends to have a dense underground root system, which is unsuitable for penguins constructing burrows.

2.6 URBAN FORM

LOCATION ON BASS STRAIT POINTS

The location alongside Bass Strait is a key attribute of both points.

LOCAL CHARACTER

Historically the coastal points alongside the railway accommodated more noxious activities, many with relatively larger industrial buildings. While these developments have largely been demolished they are part of the history and community associations for the points. To some extent the earlier and remaining industrial buildings set a reference in terms of heights, volumes and massings for future development on the Points and for relationships to adjacent areas.

HEIGHT AND FOOTPRINT

Building volumes for any proposed development should be contained to allow space to accommodate the range of uses proposed for the Points. This may require balancing higher building for financial viability with potential impacts from overlooking or blocking views and making available land.

IMAGERY

The Phase 1 Guidelines followed on from Council's 1994 framework plan *Burnie - Directions for the Future*, identifying both Precincts as having the potential to contribute strongly to the amenity and the economy of Burnie as part of the strengthening re-presentation of Burnie as a life-style city by visible improvement of prominent areas and showing a high standard of visitor and local, living, recreation and leisure opportunities available in the City.

2.7 COMMON DIRECTIONS FOR BURNIE'S COASTAL POINTS

Common situations exist at both points that can be accommodated by land use and character gradients established between the foreshore and highest elevation areas.

FORESHORE

The areas closest to the waters edge have the greatest vulnerability to coastal processes and should be developed or managed so as to have a capacity to absorb potential erosion, sea level rise and storm surge.

Foreshore recreation

This is most compatible with recreation opportunities including resilient paths, furniture and facilities or ephemeral use such as camping.

Foreshore conservation habitat

It is also compatible with some conservation management provided that more elevation areas are also provided.

Recreation and habitat

Recreation use is potentially complemented by natural vegetation or coastal protection works for stability of the coast.

POTENTIAL BUFFER AREAS

Inland or upslope from foreshores are areas where there may be some vulnerability to coastal processes, but that vulnerability could be readily addressed should that situation occur.

These areas require responses that ensure the land is not un-necessarily precluded from any use while waiting for coastal hazard modelling to become more definitive.

The areas could be used to buffer the elevated areas further upslope. These areas can accommodate:

- Ephemeral or short lifetime uses
- Uses or developments managed or designed to allow for refinement if required
- Uses with lower requirements for risk management

Examples might include sacrificial or removable building forms or buildings and landscape designed to include protective features.

Consideration would be need to given to the basis for use including the duration or period of any approval. .

Recreation transition

A buffer between recreation and any development requires that there is adequate privacy for both users. which can be achieved by a spatial buffer or by design techniques.

Habitat buffer

In a parallel manner habitat and development areas require buffering to ensure fauna is not disturbed by noise, light or direct disturbance and people using a development should be buffered from noise, odour, vermin potentially associated with habitat areas

COASTAL DEVELOPMENT

Most development should occur in elevated inland or upslope areas at a distance from the waters edge.

These may still requiring some ability to adapt to storm events, but subject to report at the time the least onerous requirements.

Land uses should specifically take advantage of the coastal situation, and adjacent. longer lived fabric and pattern of use, and could include:

- Residential
- Accommodation/Tourism
- Maritime Industrial
- Continuing Uses
- Recreation
- Combination





3 STRATEGIC MASTERPLAN | CAMDALE POINT

3.1 CAMDALE POINT PRECINCT

LOCATION

Camdale Point is a minor point to the north of the Bass Highway, between the controlled intersection with East Cam Road and the Cam River to the west. From the water Camdale Point is located in a long shallow bay-like arc from Cooee Point to Table Cape.

The Point is located at the extreme west of the Burnie City Council area.

On plans the Point is known as Freezers Siding, but that name is not in current use, the term Camdale Point has been used to identify the location of the Precinct as it suggests the location.

PRECINCT HISTORY

The Precinct is located in the vicinity of an early sports field.

A 1910 photo shows that the Precinct supported an established woodland.

Around 1914, a series of factory buildings was erected following completion of the rail line to Somerset and it is likely that fill on the site dates back to that initial development.

In 1996 the meatworks complex on the site was demolished, entailing removal of large industrial buildings, a residence and garden and a sea wall along the boundary. Rubble was placed along the shoreline edge as a protection, together with planting of coastal shrubland for stabilisation.

At around this time East Cam Road was extended to the Bass Highway.

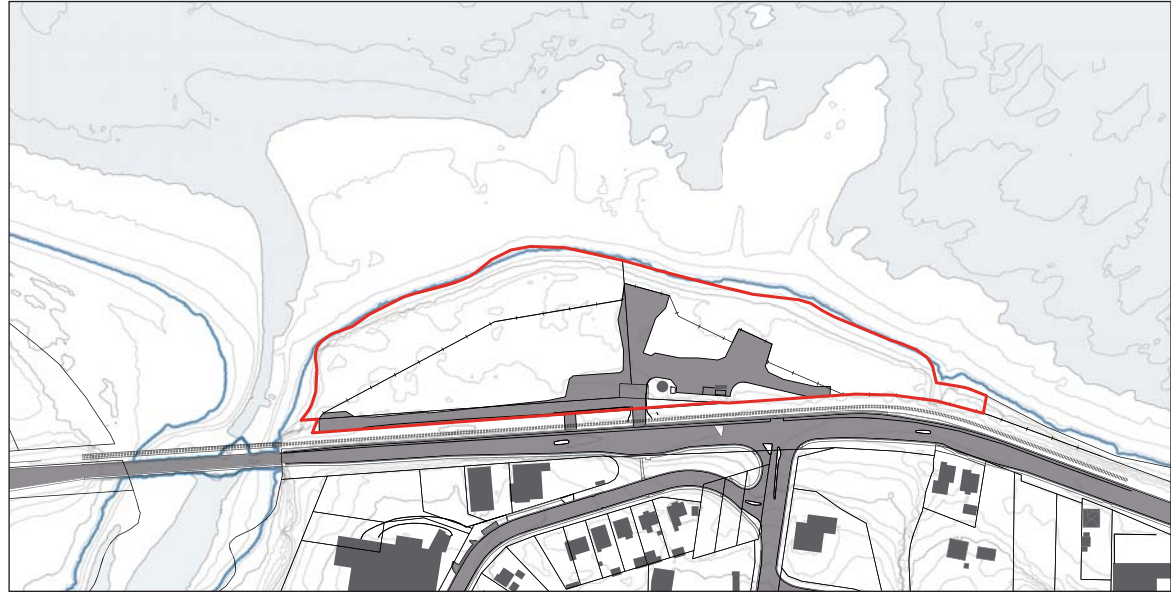


Figure 3a: Camdale Precinct



Figure 3b: Oblique aerial photos Photo-stitch Original photos Burnie City Council

CONTEXT AND SETTING

Camdale settlement

Camdale has a distinctive mixed use character with industrial and commercial uses established among older houses.

Immediate environs

The Precinct runs alongside a beach and rock platform that edge the Bass Strait.

The major feature of the Precinct is its relationship to the coastal shoreline adjacent. In low tide and when the Cam River is low, the narrow beach along the shore connects west to Somerset Beach and Anzac Beach. In some conditions the shoreline area connects under the Cam River Bridge to the riverine foreshore and one can walk across the Cam to the popular Cam Park.

To the east the shoreline continues past the Point to minor beaches and rock outcrops that connect through to Cooee, although they are not easily accessible in high tide or storm conditions.

The multi-strand road – cycle - rail transport corridor to the south is dominated by the Bass Highway. The Western Line (rail) runs immediately alongside the Precinct, separating it from the Bass Highway. The line is no longer in use but is being retained to be available for future use. The cycleway is within the Bass Highway on the shoulder of the carriageway.

TOPOGRAPHY

The Precinct is a narrow (E-W) shape, with a 400m frontage to Bass Strait. It is narrow (N-S), average 40-90 m in width. The west Cam River side is angled while at the east the Precinct tapers, ending just past the mouth of Messenger Creek.

Much of this area is covered with fill, and it is not clear what the original land form was. The Burnie Geology Map 1:25000 series shows stabilised beach ridges at the north of the site near the shoreline and consolidated aeolian (wind blown) sands to the south of the site, overlying an older folded and dipping PreCambrian series that extends out into Bass Strait.

Shoreline

Coastal scrub and a bank above the narrow beach identify the edge of the Precinct.

The west end

The western end of the Precinct is generally at a higher elevation being an almost flat platform created by earlier fill. The most elevated area within the Precinct is at the south side of the west area alongside the rail line.

The shoreline bank above the beach is obviously man-made with identifiable rubble elements and soil profile visible, the 2-3m high bank appears to be vulnerable to erosion..

The east end

The east end land is lower with a more natural

bank sloping down to the beach and dense coastal shrubland around the Messenger Creek outlet.

TENURE

Council owns 2 large lots located between the railway reserve to the High Water Mark, Lot 1 at the east end and Lot 2 at the west.

There are 2 other owner lots to the south owned by DIER, a small rectangular lot and a long narrow lot, these other owner lots have been considered in the Master Plan.

CIRCULATION AND ACCESS

Vehicular

The 2 existing vehicular entries to the precinct are configured to facilitate the traffic movements at the East Cam intersection with an in-road queuing lane for vehicles turning into the land travelling west, and 2 entries directly off the highway for vehicles travelling east. Neither entry aligns with the traffic lights at East Cam Road and they appear to use existing entries situated for optimum sight lines for rail.

A potential entry at the East Cam Road intersection would require reconciling the difference in elevation between the road carriageway and the rail line

At this stage it is not clear where the optimum vehicular access should be and until the foreshadowed reworking of the highway is finalised it would be prudent to consider areas close to the existing Bass



Figure 3c: 1950s - Meatworks, development primarily to west, highway TasLIST

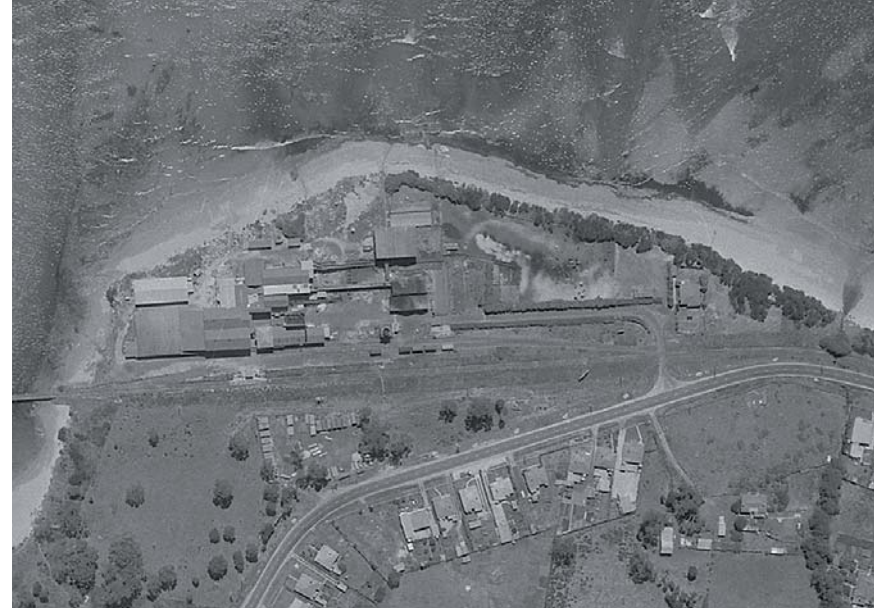


Figure 3d: 1960s Minor additional buildings TasLIST



Figure 3e: c. 1996 shows demolition and new highway alignment BCC



Figure 3f: c. 2010 Shows rehabilitation vegetation areas BCC

Highway traffic lights as potential vehicle entry points. From within the site there are large areas of hardstand suitable for parking, corresponding to 3 of the defined accesses to the beach.

Pedestrian

Walkers can access Camdale Point from:

- the adjacent beach shoreline
- through the vehicle entry, located near a pedestrian path and stair connecting into Scarfe St, Camdale
- under the bridge on occasions

From within the Precinct there are 4 defined accesses to the shoreline

- West - Cam River
- North – 2 strongly defined entries with views to the Strait
- East – entry at the end of a narrow path through shrubland

There are also informal tracks down to the beach developing through the west shrublands.

EXISTING CONDITIONS AND CHARACTER

Most of the Precinct is enclosed between screen planting along the rail line and coastal shrub around the shore-line. Views are limited to breaks in the coastal shrubland screen.

The different characters that exist within the Precinct are defined by:

- Proximity, views to and access to adjacent shorelines or water views
- Proximity to, noise from and views to the transport corridor
- Amount of enclosure

Areas with shoreline views or close to shoreline accesses

The areas of the Precinct with the strongest association with the shoreline are those with views or closest the beach accesses.

Interior areas

The dominant character within the Camdale Point Precinct is of being contained, although the area is relatively open.

The ground plane is flat with areas of concrete, bitumen and gravel hardstand remaining from the earlier buildings and large areas of open rehabilitation grassland with isolated shrubs establishing.

The remaining structures, a substation and a concrete tank, show a lack of cosmetic maintenance.

Sense of history

The story or history of Camdale Point is still evident in part and can be read in the pattern of hardstand areas and Spring bulbs at the location of the earlier residence to the east of the site.

Gateway identity

A sign at the vehicle entry into the Precinct, identifies this the commencement of Burnie City.

LANDSCAPE VALUE AND PROMINENCE

In the 15 years since the demolition and rehabilitation of the site, the coastal vegetation has become well established providing some scenic and habitat values.

The coastal shrubland around the shoreline now reaches to 3- 4m being much denser at the eastern end. The established vegetation appears to be intended to secure the bank. The shrubland obstructs views out of the site.

Aerial photos show that during the 1950s, during the period when the site was largely occupied by an industrial buildings, there was vegetation along the shore with most to the east.

A grassland within the Precinct are being colonised by shrubs.

Views to the site

The Precinct is largely screened from the Bass Highway by vegetation on both sides of the rail line. The west end shrubland, bank and beach is visible from Cam River Bridge. There are views across the Precinct to the water from the Bass Highway at the eastern existing entry.

EXISTING INFRASTRUCTURE

Councils Engineer has determined that there are no infrastructure servicing constraints.

There is a water tank and substation on site, although their condition is not clear, and services maps show ground sewer and stormwater.

HAZARD

Site contamination

In view of the previous industrial use there may be some environmental contaminants still on the site.

Hazard to people

This section of the Bass Strait beaches is reported to have some undercurrents. The adjacent beach at Somerset is patrolled.

The Cam River river is subject to flooding and can have treacherous undercurrents.

Coastal processes vulnerability

Camdale Point is currently overwashed along the north side from Bass Strait and to the west from flood waters of the Cam River.

The rubble bank edge appears to be eroding along the north and west. The lower elevation more natural profile to the east is more vulnerable to coastal flooding.

While the rehabilitated coastal shrubland provides some land stability, it does appear that the fill is being eroded with some undercutting apparent and also possible loss of fabric when comparing aerial photos.



Figure 3g: View north - out to rock platform



Figure 3h: View west - Camdale Point interior



Figure 3h: View east to the Cam River and Camdale Point from the Bass Highway

3.2 USE CONTEXT AND PREVIOUS PROPOSALS

EXISTING USE

Recreation and passive enjoyment of the site

The primary observed use of the Precinct during the study was as access to the adjacent shoreline areas to the north. People wander along from the east end beach towards Cooe, usually a solitary walker or a couple.

Fishing seems popular, primarily on the west side at mouth of the Cam, and there are often cars in the small parking space at the west of the Precinct.

During the day some people visit to sit in their cars to eat lunch while looking out to sea.

Conservation management

It is understood that penguins use coastal shrubland around the shore of Camdale Point for burrows. The *Acacia sophorae* Coast Wattle, the most successful of the re-establishment shrubs is less suitable in supporting nesting, as its roots become dense obstructing burrows.

Anecdotally, penguins have been described as nesting on Camdale Point from when the meatworks was running, occupying areas under the buildings.

PLANNING SCHEMES

Camdale Point is currently zoned industrial reflecting its historic use. However under the operation of Tasmania's coastal policy few industries are likely to find the site attractive and the zoning is not consistent with more recent council policy. There is a foreshadowed 50m setback from main roads for Residential zone in the new Planning Scheme, unless the development complies with performance criteria set out in the Roads and Rail Asset Schedule

COUNCIL POLICIES AND STRATEGIES

Settlement and Investment Strategy

The Settlement and Investment Strategy does not comment on Camdale Point, it does propose a change for the role of Camdale from industrial to Residential.

Other Council Policies and Strategies

Burnie – Directions for the Future

The 1994 framework plan proposed that the aging and un-occupied buildings at Camdale Point alongside the west entry into the City should be demolished to create a better gateway experience as part of nurturing a diverse base for the Burnie economy.

The recommendations have been partly realised with removal of the meatworks and rehabilitation plantings to give a more natural appearance.

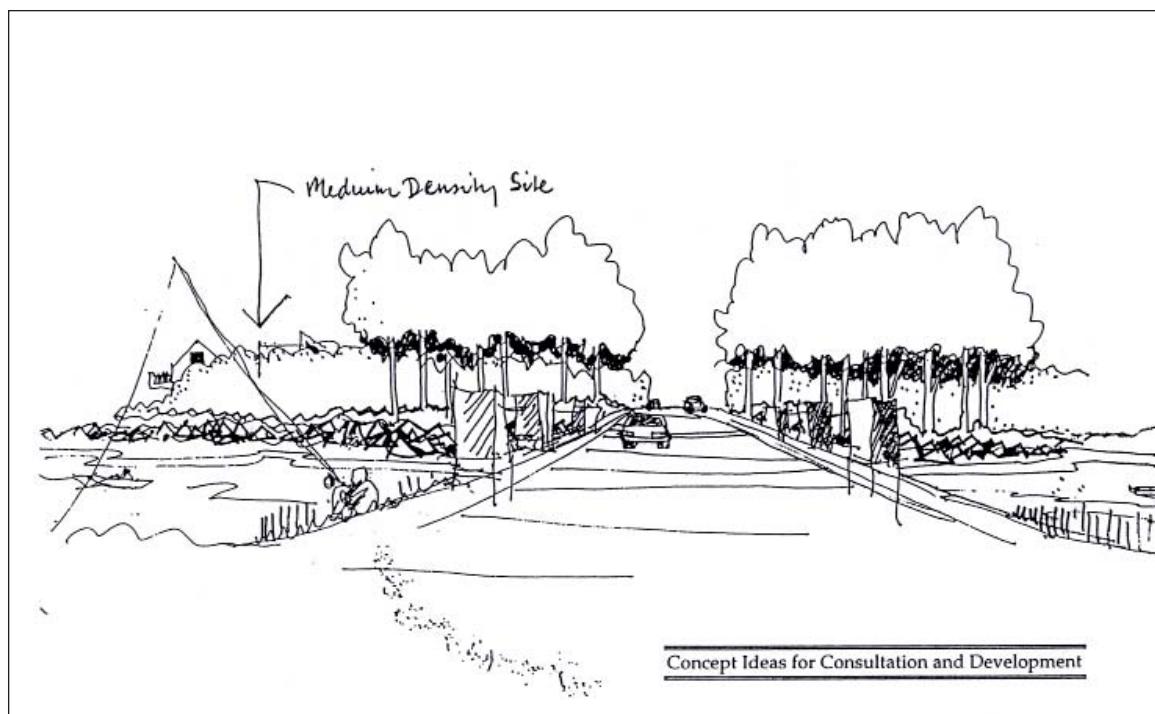


Figure 3j: Camdale Gateway indicative sketch - *Burnie: Directions for the Future 1994*

Burnie Open Space Development Study 2010

Status - Adopted

The Study notes pressures for multi-use development along the foreshore points, including Camdale Pont and proposes sensitive development that balances economic considerations with:

'access to quality open spaces, regional linkages and the edge of the water.'

North West Coastal Pathway Plan 2010

Status – At this stage only intended as a concept and a basis for negotiation with various stakeholders.

The Cradle Coast Authority Concept plan for a cycleway along the NW Coast (prepared by Cradle Coast Authority and Safer Roads for Cyclists),. The proposal for the cycleway section close to Camdale is to retain the existing in-road cycleway located at the north edge of the highway carriageway.

BURNIE PRIVATE DEVELOPER PROPOSAL 2004-5

A proposal was prepared with reference to the then-current best practice for co-location of penguins and people and responding to coastal processes. Development provided for mixed use including tourism apartments and minor facilities, such as a restaurant cafe. The development was focussed on the southern (higher) section of the site. The more natural shrubland area to the east was to be set aside as part of a conservation offset.



Figure 3k: View south - along Cam River boundary, group fishing



Figure 3l: View west - along Western Line boundary



Figure 3m: View south - Rock platform. Camdale Point and escarpment behind Camdale

3.3 IMPLICATIONS OF BWCA STAGE 1 STRATEGIC GUIDELINES

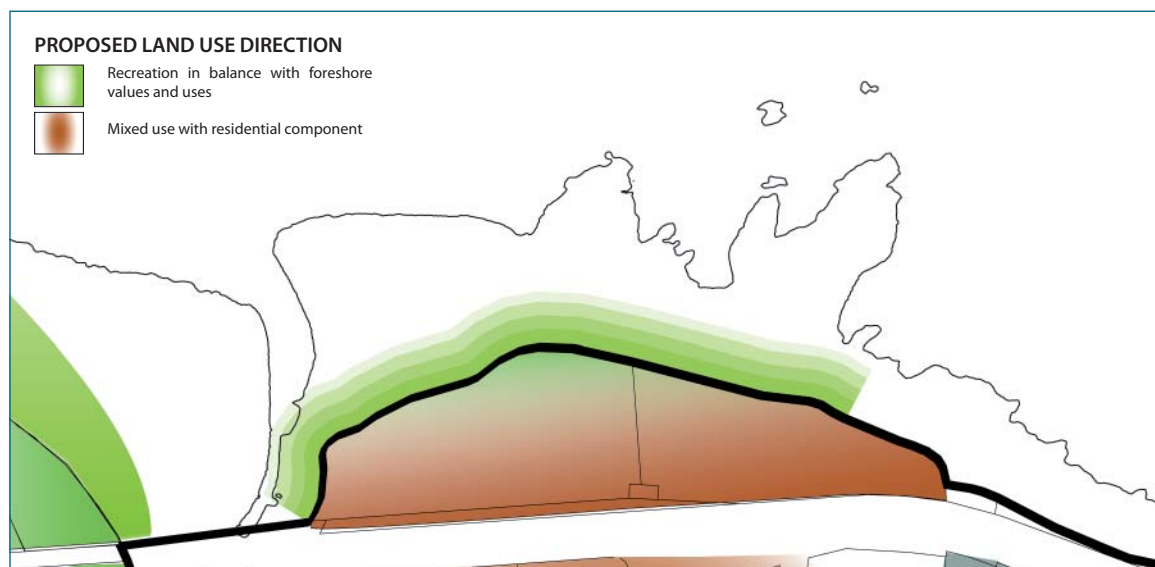


Figure 3n: Section from BWCA Stage 1 Guidelines - Land Use Plan

The Stage 1 Strategic Guidelines land use plan shows on Camdale Point, mixed use to the south and an open space, recreation and conservation band around the shoreline and near shoreline areas.

COMMUNITY PREFERENCES

During Phase 1 consultation local people proposed Camdale Point could be used for a more developed parkland, modest visitor facilities such as a caravan park.

The important issues for the local community was retaining access to the beach.

STRATEGIES PROPOSED

The Guidelines proposed optimising:

- Retaining the recreation access
- Continuing conservation management
- Realising development opportunities associated with a coastal site
- Taking responsible precautions concerning forecast sea level rise
- Strengthening Camdale Point as a component of a memorable scenic Cam River incident on the Bass Highway that linked to the promotional image of Burnie, and acted as a memorable gateway

The Guidelines proposed as practical working with the Waratah and Wynyard Council on management and use of the Cam River and contiguous coastal foreshore management and recreation.

3.4 SITE PLANNING CONSIDERATIONS

The following is based on additional consideration of site and context characteristics and application of the strategies outlined in the Stage 1 Guidelines.

THE IMAGERY OF CAMDALE POINT

The long term objective for Camdale Point, to provide a better gateway to Burnie, has been realised in part, with a natural-like area that provides some water views for travellers on the Bass Highway, but has a relatively low key presence.

The existing sign is primarily for information and not obviously linked to building the imagery of the city,

IMPLICATIONS

Camdale Point could potentially make a greater contribution to the imagery of the City of Burnie including:

- *better signposting of the city entry integrating more with other City signage*
- *stronger definition of the view through the Precinct to the Bass Strait*

CANDIDATE USES

The Guidelines proposed co-locating conservation management, recreation and coastal development at Camdale Point.

There are differences across the Precinct in terms of suitability for different uses:

- The west end is the most suitable in terms of existing and potential connections to recreation areas in Somerset, and being more popular at present has better informal surveillance.
- The south west is the most elevated area so is suitable for development, but is also the area most impacted by the Bass Highway
- The east end has the most natural vegetation and least human impacts

Conservation habitat

The 2010 report *Penguin Habitat Management: Cooee Point – Camdale Coastal Reserve* identified Camdale Point as being currently a significant nesting area, but less suitable in the long term due to the relative absence of elevated areas.

Currently no section of Camdale Point is completely suitable for conservation habitat:

- The west end is the less suitable in that it attracts more people with an increased likelihood of dogs and the coastal shrubland areas are relatively narrow and crossed by paths. However it may be the most suitable in the long term due to its higher elevation
- The most established natural areas at the east end while currently the most suitable may be vulnerable to coastal flooding being lower elevation

IMPLICATIONS

There are a number of opportunities for effective conservation management associated with Camdale Point:

- *An emphasis on the eastern end near Messenger Creek outlet but requiring vegetation management*
- *Providing an elevated additional habitat retreat area in the open area immediately to the south west*
- *Allowing for continuing use of all established penguin areas*

Recreation

The *Burnie Open Space Development Study, 2010*, did not identify a significant recreation demand in the Camdale Point locality which is close to adjacent parkland in Somerset. However should the recommendation in the *Settlement and Investment Study* that Camdale gradually change towards a primarily residential use be implemented, then Camdale Point would be well located to function as a neighbourhood park being centrally located considering the nominal 500m walking distance catchment area used in the Open Space Study to assess adequacy of provision of neighbourhood parks.

The current recreation use of the Precinct is to access the adjacent waters edge areas.

Any future neighbourhood park should be designed to complement the waters edge activities.

While there are opportunities for recreation at Camdale Point ideally they would complement rather than replicate the well established parklands in Somerset, on the west side of the Cam River.

IMPLICATIONS

Camdale Point, or alternatively a part of Camdale Point could be reserved for a future neighbourhood park, at least while the future of the Camdale settlement is still being considered.

Coastal development

The Coastal Policy requires that landuses introduced along the coast should preferably be those uses that strongly benefit from a coastal location or support use of the coast by visitors or local, which suggests for Camdale Point with a shallow waters edge, recreation or tourism in this location.

However, the policy is not intended to make land unusable where coast oriented uses are not practical immediately. Interim land uses that do not significantly compromise introducing a more suitable use in the future can be considered.

The existing setting of Camdale Point would discourage some forms of development for higher end purposes. The industrial streetscape along the Bass Highway and impacts of noise, light and vibration from the Highway detract from the setting of Camdale Point. Any development would need to mitigate the impacts of being alongside the highway, and while this may be possible in terms of construction, it may be expensive.

Tourism

The existing setting alongside a highway and an industrial zone does not favour tourism, although that impression could be addressed to some extent by strengthening existing screening and entrance imagery. More modest tourist proposals might be more forgiving of the immediate context of the Precinct.

The shape of available land favours a linear building form, which suggests a hotel, motel or apartments.

Residential

For residents, the environmental impacts are likely to be more consistent, and a detractor from enjoyment of the location.

The narrow configuration of the Precinct is not optimum for supported accommodation.

IMPLICATIONS

While the area is not fully suitable for tourist accommodation, some forms of development could be considered.

Staging

Given there is no clear timetable for a change of focus for Camdale settlement and implications for viability of different uses are determined by the setting, with both coastal development and recreation becoming more viable should the character of Camdale change.

IMPLICATIONS

A good interim use that retains possibilities for the future might be the optimum for Camdale Point. This might consolidate the existing conservation management and recreation uses and develop good co-locations relationships between those uses. Ephemeral uses might be explored including using the area for specific occasional events.

CIRCULATION

At this stage it is not clear where the optimum location is for vehicle access, at the existing rail crossing or off the existing controlled intersection Bass Strait/East Cam Road intersection.

As the site is narrow, circulation could easily occupy a disproportionately large section of the site. However one of the best used parts of the site is the west fishing spot.

IMPLICATIONS

Retain existing single entry and minimise circulation footprint as practical.

Provide parking for both casual users and visitor/occupiers associated with any long term use and generous standing on-site.

Retain vehicular access to the Cam River fishing spot

COASTAL PROCESSES VULNERABILITY

Due to steep fill bank and relatively flat platform there is relatively little difference in vulnerability across the Precinct. The east end is more vulnerable to coastal flooding. In the short-medium term monitoring and stabilisation of the bank is potentially an issue.

Preferably to be least vulnerable to coastal processes, development and any long term conservation management should be located in elevated areas, which in the precinct is the narrow strip at the SW of the Precinct. However given that much of this area is already man-altered with fill and rehabilitation, introducing additional fill to provide protection would be consistent with site history and management of existing values.

IMPLICATIONS

Coastal development and long term conservation management should be located at the south of the Precinct or close to that area providing for additional fill if required.

Any development should be based on best available site-specific assessment undertaken at the time by coastal geographers or geomorphologists or other recognised as qualified to prepare site specific modelling of coastal hazard.

CHARACTER AND FORM CONSIDERATIONS

Coastal character

Any development should have a character that alluded to the coastal setting and white sands of the narrow beach, for instance using natural materials in contemporary design styles.

Site footprint

Any development set back from the shoreline for coastal processes would also provide for a sense of privacy, between people on the beach or rocks and the building.

Development should retain and highlight the view through the Camdale Precinct to the sea.

Circulation and open space

There should be free passage through the Precinct for

local people and easily accessible parking near the main entry but not obstructing views to it.

The hardstand footprint for vehicle movements should be contained.

Height

Limits intrusive overlooking of the beach while providing some informal surveillance. Height 2 stories or 3 if set back from open space areas.

Apparent bulk, facades and visual prominence

The bulk of buildings should not create solid walls along the beach or visible from the Bass Highway or public domain areas within the Precinct.

TIMING

In preparing the Stage 1 report there was some speculation about the best time to encourage development at this site.

The area is currently devalued by some aspects of its setting, particularly the highway and its Camdale setting. Care would be needed to ensure that any development attracted was of a high standard.

Aspects of the setting could be addressed by a designed gateway, but options are limited as DIER is maintaining lots in reserve on the opposite side of the Bass Highway until it resolves congestion along the Highway including that associated with the Cam River bridge - and to wait might mean unnecessarily precluding suitable development.

IMPLICATIONS

In the event that the site is not attractive to developers for some time interim uses should not adversely impact future use.

Interim use and management should at a minimum:

- *Monitor and address coastal erosion*
- *Formalising recreational use including resolving supporting and enforcing dog management*
- *Formalise the extent of conservation management or habitat areas and fence to preclude penguin colonisation of larger areas*



Figure 30: View west from east end

3.5 STRATEGIC MASTER PLAN

The Camdale Point Strategic Master Plan (SMP) was prepared after considering a range of options for circulation, land use and form, referring to different potential responses (refer Appendix 2). Separate sub precincts identified that provide optimised locations for each land use .

The various scenarios for changing environmental factors has been addressed by identifying explicit transition sub-precincts and by requirements for best available information reports to underpin any proposal, refer section 2.8.

The general objectives and strategy are outlined below followed by relevant general requirements and requirements for each subprecinct.

3.6 MASTER PLAN OBJECTIVES AND STRATEGIES

	OBJECTIVES	STRATEGIES
CIRCULATION	<p>Provide readily identified and welcoming access to Camdale Point Beach and the Cam River bank, including access for fishing but minimising potential habitat impacts.</p> <p>Retain options for vehicular entry.</p>	<p>Limit accesses through the coastal shrubland and make the main access stronger and address easy access issues for the less mobile.</p> <p>Retain car access to the Cam River unless an alternative access is finalised.</p> <p>The main vehicle entry is to be strongly presented and welcoming.</p> <p>Retain options for a potential entry at the existing location and at the East Cam Road intersection until a preferred access is agreed with DIER .</p>
GATEWAY ROLE	<p>Development and land management to be undertaken in a way that contributes to a positive first impression of the City of Burnie for people travelling east.</p>	<p>Retain and emphasise the views through the Precinct to the Bass Highway.</p> <p>Retain the primarily natural appearance of the Precinct viewed from the Cam River bridge, Bass Highway and East Cam Road.</p>
LAND USE BALANCE	<p>Facilitate a balance of conservation management, recreation and some coastal development and opportunities for coastal erosion.</p>	<p>Provide for potential coastal development at the west end of the Precinct to reflect the the easy linkage opportunities and established use connections to the Cam River and Camdale Beach and Somerset Beach.</p> <p>Recognise the responsibilities resulting from conservation habitat use of the shubby areas along the Precinct shoreline, but encourage consolidation of conservation habitat at the east end of the Precinct and provide for future long term elevated in this area</p>
COASTAL DEVELOPMENT	<p>Encourage coast-oriented development compatible with other uses</p> <p>Allow for flexibility</p> <p>Address impacts of noise, vibration and light from the rail and highway to the south</p>	<p>Coastal development set on the elevated areas at the south west of the Precinct, or on higher elevation areas created by additional fill on the existing fill platform.</p> <p>Encourage tourism that incorporates features attractive for other visitors to Camdale.</p> <p>Allow residential use with a mixed use compoent where building have a flexible design allowing for adaptation to tourism or live-work or where a residential area is limited in size, say 12 dwellings.</p> <p>Site layout , buildings and landscape designed to address noise, vibration and light impacts from the adjacent highway in a manner that does not create a wall to the south and gives good presentation to all public access areas and for motorists on the Bass Highway.</p> <p>Building form to not create an impression that public access areas are overviewed while still providing infomal surveillance of those areas</p> <p>Any buildings to have a coastal style with natural materials used in a contemporary styling.</p>

RECREATION	<p>Provide for easy access to the adjacent coastal areas of Camdale Beaches and shore of the Cam River:</p> <ul style="list-style-type: none"> • Readily accessible and preferably easy to access for less able ay • Allow for links to the Foreshore Walk • Provide for future neighbourhood park and restaurant cafe site, 	<p>Work with Waratah Wynyard to address water hazards from the river and sea and integrate warning protocols and incident protocols.</p> <p>After water hazard issues are addressed, provide for greater recreation use including a modest neighbourhood park close to the main entry to Camdale Beach associated with future development of the Precinct or the suburb.</p> <p>Identify Camdale Point as a recreation area for passing traffic including cyclists on the NW Coastal Pathway</p>
COASTAL HABIT	<p>Provide additional elevated habitat areas to provide suitable habitat anticipating impacts of forecast changes to coastal processes, while retaining viability of existing habitat areas.</p> <p>Ensure areas provided are protected from adverse impacts from activities associated with coastal development or recreation.</p>	<p>Widen existing habitat area at the east end to incorporate a component that could be elevated if changing coastal conditions made that relevant</p> <p>Provides a default 20m buffer between habitat areas and any coastal development or design or manage development in the buffer area to provide buffering equivalent to a 20m separation.</p> <p>The buffer could be reduced (potentially allowing a greater area available for coastal development) where the proposal could demonstrate regional conservation management outcomes comparable to or exceeding the contribution of the 20m buffer, that could include:</p> <ul style="list-style-type: none"> • building design features that reduced impacts • enduring conservation management arrangements • off-site conservation habitat areas <p>Such a proposal would need to be accompanied by a report assessing conservation habitat performance, undertaken by an ecologist or land manager recognised by DPIW as competent to report on habitat impacts.</p>
COASTAL PROCESSES	<p>Minimise vulnerability to potential hazard without unduly removing land available for use in the short term or long term.</p> <p>Address stabilisation of the shore as part of any development and as interim land management</p>	<p>Any substantial development to be accompanied by coastal geographer or geomorphologist report assessing coastal hazard and demonstrating, adaptation to, or provision for future adaptation coastal processes.</p> <p>Monitor any erosion and develop a response as required.</p> <p>Any development should be associated with upgrading of the stability of the Camdale Point shoreline.</p>
LANDSCAPE AND URBAN FORM	<p>Retain and emphasise the view across the Precinct from the highway to the Bass Strait.</p> <p>The dominant character of Camdale Point should be natural-like immediately alongside the beach and may be part of stabilisation and habitat functions.</p> <p>Location and design of buildings to allow for views over the Bass Strait while allowing a sense of privacy for beach users.</p> <p>Character from Bass Highway as natural as practical, contemporary and inviting</p>	<p>Bulk of any buildings to be set back to the south of the Precinct.</p> <p>Potential visual prominence and intrusive over-viewing from beach mitigated by buildings set back from the beach and of a modest height.</p> <p>Buildings to be 2 storey or effectively up to 3 storey with visual bulk diminished by for instance use of inhabited roofs, articulated facades with balconies, bays etc and 100% maximum plot ratio.</p> <p>Buildings to present an attractive articulated facade in any views from the Bass Highway and complemented by consolidation of the southern screen planting</p>

3.7 MASTER PLAN OPERATION

The Strategic Master Plan outlines preferred performance for:

- Access and circulation
- Landscape and urban form
- Specific land use sub-precinct

ACCESS AND CIRCULATION

The circulation plan shows optimum circulation. Any interpretations that vary from the circulation plan should advance the objectives and strategies of the Master Plan.

Vehicle movement footprint

The current entry provides for limited entry off Bass Highway with some queuing. An entry at the existing controlled East Cam Road intersection may be more appropriate if the Precinct was attracting considerably more visitors. The option for an alternative access at the East Cam Road intersection should be retained until final development proposals are finalised.

The circulation area required for vehicles should be limited to the south close to the Highway entry and the access to the beach.

Parking should be close to the access to Bass Strait, with views from parked cars to the Strait, but should not be located where it obstructs views across the Precinct to the Strait.

Vehicle access to the small parking at the west adjacent to the Cam River should be retained.

Pedestrian walks

The main central access to the beach should be retained and highlighted, with better access provided for less mobile people.

Accesses to the beach.

The number of accesses can be reduced, without significantly reducing effective access.

All accesses retained need to be stabilised to control erosion, particularly on the Cam River bank.

LANDSCAPE AND URBAN FORM

The 'Landscape and urban form plan' of the SMP shows optimum open space and building volumes. Alternatives to or interpretations of the SMP, that significantly vary from the form plan should advance the objectives and strategies of the Master Plan.

Natural-like undeveloped water's edge

The shrubland around Camdale stabilises the fill and provides habitat for penguins. Areas of Camdale Point immediately alongside the shoreline are to remain natural-like in character. This would be compatible with some options for stabilisation of the shoreline bank.

Urban form

Buildings are preferably located in the elevated southern central area of Camdale Point or if further north require additional elevation incorporated into designs.

Bulk and height

Building height is generally limited to 2 storeys but could be effectively 3 stories high where the design breaks down the apparent bulk with articulated building volumes and roofs, for instance pitched/skillion roofs and tiered or cantilevered volumes, configured to encourage active frontage and informal surveillance.

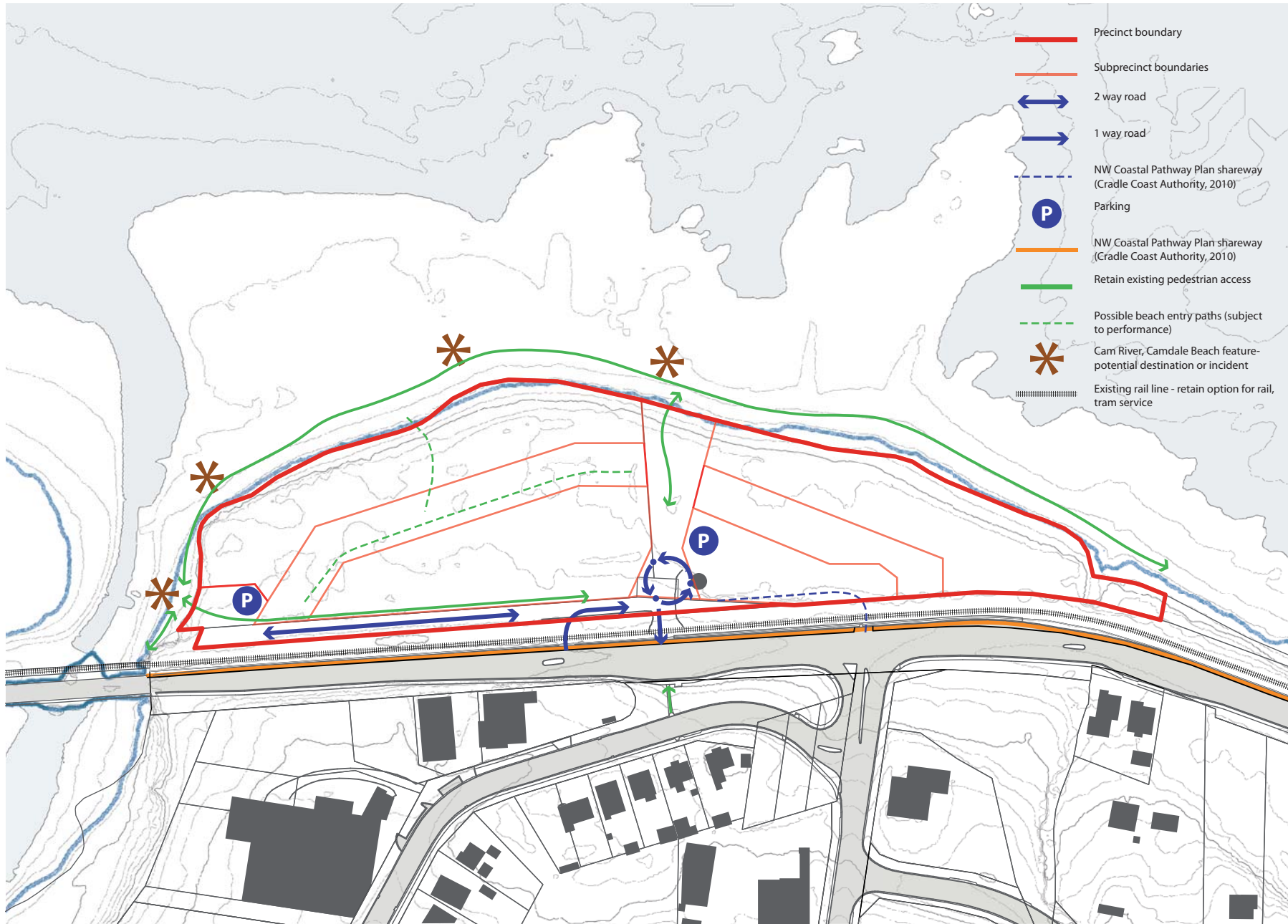
Complex volumes, surfaces and patterning of materials, tones and colours should be used to reduce the apparent bulk in views from shoreline areas and along the Bass Highway.

Adaptive design

Development should be designed to demonstrate resilience to coastal hazard or that it would be practical to adapt building forms and infrastructure if hazard with forecast sea level rise did emerge, or alternatively that such a hazard could be addressed by management.

Materials and surfaces, floor level, elevation and detail of services, to be consistent with an elevation determined by a coastal geographer, geomorphologist or similar qualified profession to be capable of resisting forecast storm events, based on site-specific modelling.

Services design, building volume design and layout and landscape design should be designed to cope with assessed hazard.



CAMDAL POINT SMP - Circulation

Public domain open space and main beach entry

The central north entry to the beach should be strengthened as the the main feature of Camdale Point.

Face to public domain open space

Design should balance minimising intrusive overlooking of shoreline with providing some informal surveillance.

The height immediately alongside the central view corridor should generally be limited to 1 storey. If apparent bulk and overlooking are significantly addressed a taller building, up to 2 storeys could be appropriate.

Face to conservation habitat arease

The design of building facades addressing proposed conservation habitat areas should minimise adverse impacts of noise, light and movement on penguin habitat areas and if the habitat area is located close to the building, to also mitigate natural odour and night noise.

Staging and interim use

It is not clear that conditions will be suitable for coastal development due to the current setting of Camdale Point. In the interim period recreation and conservation management uses could be consolidated consistent with the Strategic Master Plan and retaining options for:

- Vehicle entry locations
- Neighbourhood Park

Recreational use could be consolidated by a program of events, preferably co-ordinated with Waratah Wynyard, however the relative isolation suggests any significant landscape features could be vulnerable to vandalism.

CENTRAL ENTRY SUBPRECINCT

Current use – Circulation, parking, access to the beach and view through this area to Bass Strait

Issues – this area is relatively low lying on the Camdale Point fill platform and has some vulnerability to coastal processes. There may be overwash already occurring at pedestrian access points along the north shoreline.

Function**Views and imagery**

As part of the likely main entry into the Precinct, retain and emphasise the direct view through to Bass Strait from the Bass Highway for passersby and for people entering the Camdale Point Precinct and accommodate a minimum of arrival circulation, and links to the access point into Camdale Beach.

In the longer term accommodate a modest neighbourhood park designed and located to be visually transparent,

Character

Emphasise the view to Bass Strait from the Highway, with signage, hard landscape and planting to draw attention to the entrance and then to the view.

Use natural materials that reflect the open coastal setting, but in a contemporary way.

CENTRAL - COASTAL DEVELOPMENT SUBPRECINCT

Current use – The south of the Camdale Point open interior area.

Issues - This is the most elevated section of Camdale Point with least sea level rise vulnerability. Current modelling suggests that the majority of the area is above forecast coastal hazards although it may be within some of the range of some modeller's contingency factor precautionary limits, refer Appendix 1. The area is highly impacted by noise, light and vibration from the Bass Highway and potentially from the rail line if rail is re-introduced.

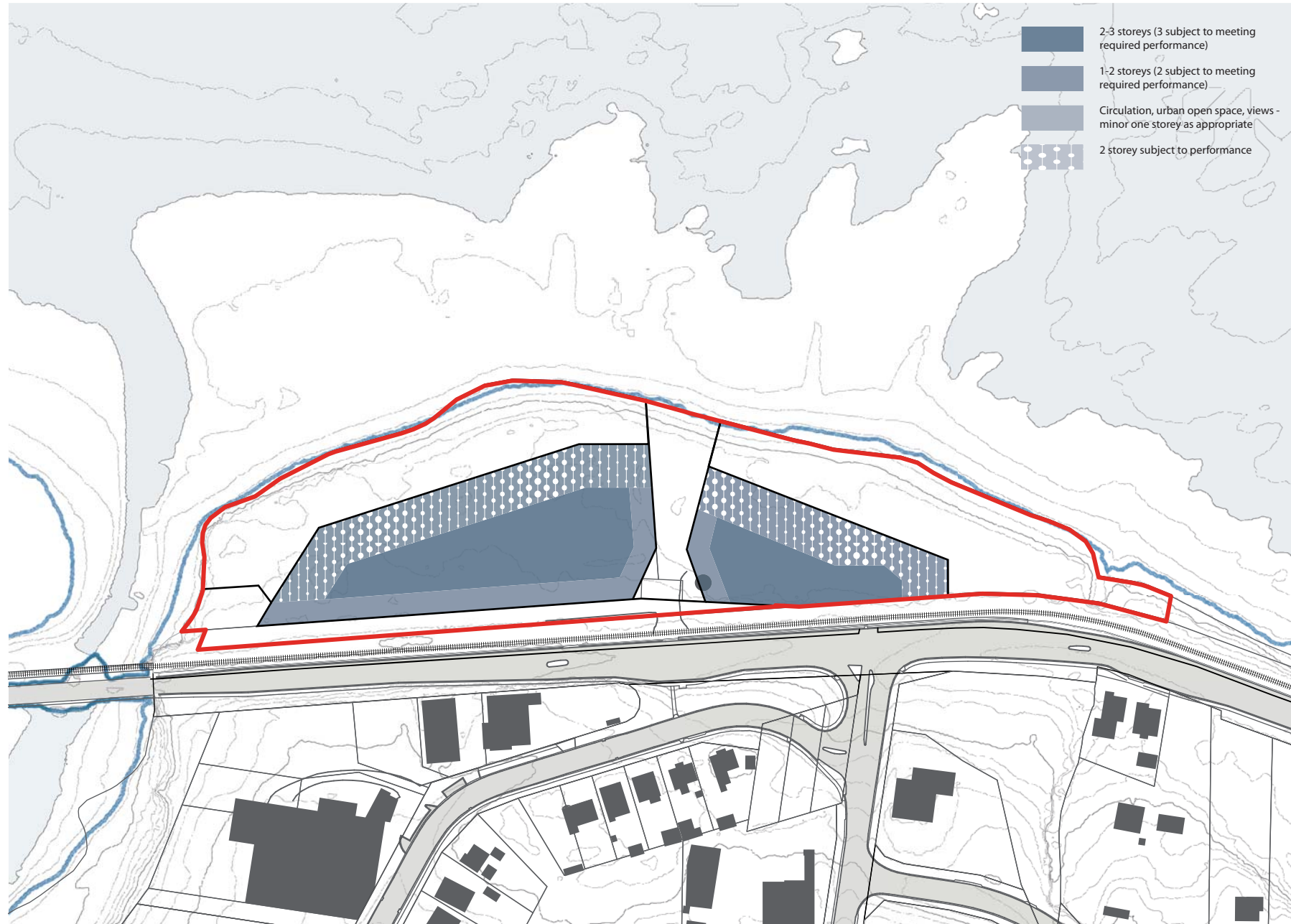
Function

This is the most suitable area for any intense activity or development.

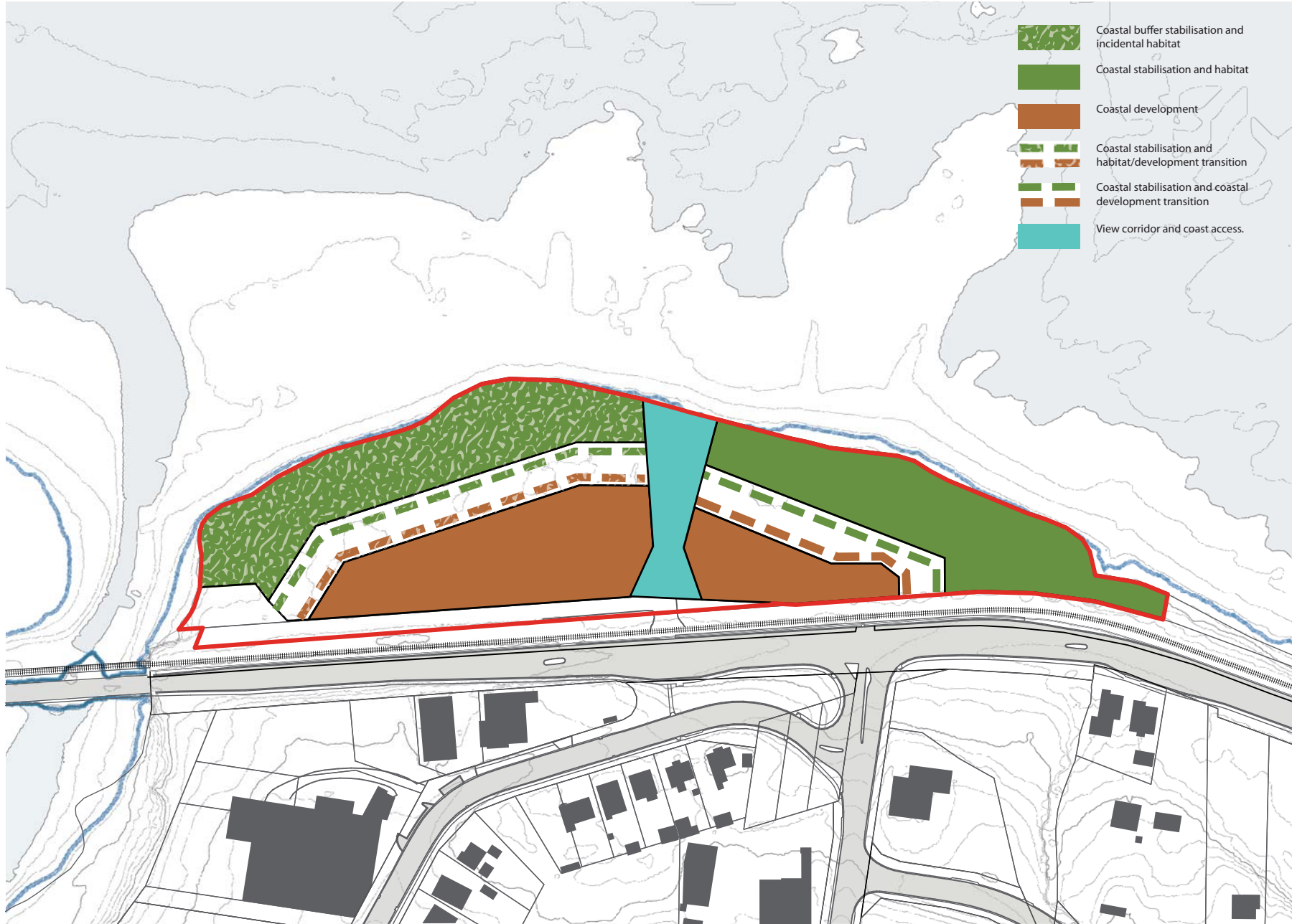
Any land use and development should complement continuing recreational use of Camdale Point beach and river's edge.

Candidate uses include:

- Tourist accommodation
- Restaurant or cafe
- Residential use with a Mixed use component, including a mixed use component, could include: small lot villas, apartments dwellings designed designed to allow for ready conversion



CAMDALE POINT SMP - Landscape and urban form



CAMDALE POINT SMP - Subprecincts

to tourism should market change make that use attractive

- live-work designed dwellings with appropriate building design and parking
- limited commercial use

Character

Massing - The building volume should allow for a central access through the Point, complementing the Central Entry Sub-Precinct.

Facades and overlooking, south - While building design will be required to address noise and light impacts from the highway and potentially from the rail line, the south facade should be articulated and not present a blank wall to the south, The design should allow for good sight lines and some overlooking and informal surveillance of the circulation route along the south.

Facades and overlooking, north - Building form is setback from the beach, but may require height to look over the stabilising vegetation along the coast. and provide views while also are set

Landscape - The south screen to be consolidated, but glimpses of the development are encouraged as part of building imagery.

Built form and colour - Should allude coastal context

WEST COASTAL BUFFER AND INCIDENTAL HABITAT SUBPRECINCT

Existing use – Stabilisation of relatively steep fill bank to the north and west of Camdale Point which is capped

by coastal shrub. There is thought to be some use of the western shrubland by Little Penguins even though the area also attracts people for fishing and collecting river drift wood after flooding.

Issues -This area immediately at the back of the narrow beach appears vulnerable to coastal processes including erosion and coastal recession and existing storm event overwash.

Function

Stabilisation of the bank is a priority. Optimise stabilisation of the fill bank and resilience to coastal storm events with retention of coastal vegetation and associated habitat values and providing recreation access to the narrow Cam River and Bass Strait beaches.

The existing use as penguin habitat is to continue within a transition zone, as this seems practical within penguin adaptation to human use and coastal processes access and associated, passive enjoyment.

Any recreational use, specifically access tracks would need to be consistent with stabilisation of the bank and address habitat impacts possibly by on-site or off-site habitat offsets.

Form

Response to eroding bank, using best available soft engineering techniques with as natural an appearance as practical (or if a natural appearance is not possible designed to reflect or complement the coastal landscape setting).

Any accessways - designed for resilience to coastal flooding and wave action while presenting an attractive appearance and providing access for the less mobile.

Any fencing required for penguin habitat viewline obstruction or to prevent access - to be visually unobtrusive.

All works to be designed consistent with best practice for minimising impacts on Little Penguins, including timed for minimal impact on successful nesting and raising of young.

Management

Monitoring of condition of the bank and viability as a penguin habitat area.

TRANSITION SUBPRECINCT - WEST COASTAL BUFFER AND DEVELOPMENT

Current Use – This section of the precinct is occupied by rehabilitation grassland that is gradually maturing into coastal scrub. Aside from habitat values and appreciation of natural vegetation this area is little used.

Issues - This is a lower area on the Camdale Point fill platform and being lower is more vulnerable to coastal processes.

Function

This is a buffer area in that it should provide an additional buffer to the coastal buffer area. As a default, it would function as an extended coast stabilisation and habitat area.

Coastal development permitted where it would

provide high protection from coastal processes and buffering of coastal development from the shore the equivalent of 20m separation.

Form

Retain existing open grassland areas.

EAST – COASTAL HABITAT SUBPRECINCT

Highest vulnerability – existing overwash

Function

Optimise stabilisation of the existing more natural profile with, retention of dense coastal vegetation and providing for continuing penguin habitat in the the short – medium term.

Character

This area should appear to be natural coastal vegetation.

However the natural profile of the shore may need to be strengthened to be more resistant to erosion. Preferably the local coastal vegetation would be managed to provide a vegetation structure that favoured establishing for a full a suite of local flora and habitat for a diversity of fauna.

Visually discrete fencing containment of penguin habitat area to exclude unwanted dogs or people.

TRANSITION SUBPRECINCT - EAST HABITAT AND COASTAL DEVELOPMENT

Moderate vulnerability, due to being located towards the shoreline side of the Camdale Point fill platform.

Function

There are 2 alternative purposes for this subsector.

1. Short term a buffer between people and penguins and remaking of land form for future more elevated nesting area if recession and/or sea level rise takes place.
2. Possibly providing for some appreciation of the presence of penguins by visitors or residents but provided in a low key benign impact/no impact manner associated with conservation management, while also being complementary to (rather than competing with) the Burnie Penguin Observation Centre/Interpretation Centre
3. If conservation offsets are provided offsite this area would be included in the Coastal Buffer -Mixed Use Transition Sector

Character

This subprecinct focused on conservation habitat should have a natural-like environment. Any works and management undertaken to re-inforce stabilisation of the more natural gradient bank, should utilise techniques consistent with a appearance of natural coastal vegetation and allowing for penguin burrows or providing alternative nesting opportunities.

Management may be required to address shrub land becoming too dense or dominated by single species.

Any fencing or containment of habitat areas or other line of sight obstruction or future habitat area and

not be individually prominent in the landscape with a natural like appearance or appearance that reflects the local or contemporary coastal design.

3.8 CASE STUDIES

Case studies were used in refining the Strategic Master Plan after a preferred land use structure had been identified.

The case studies illustrate the range of ways in which the Strategic Master Plan circulation structure, form and sub-precincts could be interpreted. The case studies are not recommendations or proposals.

The case study examples show some of the varied uses that could occur in the Camdale Point Precinct consistent with the SMP and responses to uncertainty associated with the Bass Highway, coastal processes and planning standards:

- Multi use residential/tourism dwellings
- Contained residential development
- Parkland designed to maintain long term options and build the use of Camdale Point for recreation

They also illustrate:

- Options to accommodate conservation habitat
- Potential circulation options associated with the different potential vehicle entries



Figure 3p: View west - east end of Precinct and Table Cape



CAMDALE POINT Case Study 1 - Tourism or residential apartments west, public access cafe and playground area central, substantial conservation east and vehicle entry east



CAMDALE POINT Case study 2- Generous tourism/residential apartments south, central entrance, conservation including elevation east, conservation/bank stabilisation west



Figure 3 m: Camdale Point Case Study 3- Single tourism destination central entry



COOEE POINT

4 STRATEGIC MASTERPLAN | COOEE POINT

4.1 COOEE POINT PRECINCT

LOCATION

The Cooee Point Precinct is at the north and east of geographical 'Cooee Point'. The Precinct is defined by a rail line to the south.

CONTEXT AND SETTING

Cooee Township and Cooee North

The dis-used rail line, the Western Line, to the south of the Precinct encircles Cooee North, an older 1920s-30s residential section of Cooee, located adjacent to the Cooee Town Centre.

Cooee North has a distinctive character with a well preserved complement of Art Deco styled houses and fences. The area has an open character with views along roads to the Bass Strait coastline and unlike most of the Burnie West Coast, has more light due to being located at a distance from the escarpment.

Within Cooee North, properties show a range of maintenance and condition, ranging between recent renovation and some infill, to vacant sites serving as accesses into town strip premises.

The cottages and streets give Cooee North a small scale urban grain. There is a coarser large scale urban form with large lot retail and 2 storey buildings on and adjacent to the main street and also at the north alongside Cooee Point where there is a large industrial scale shed at the end of Morris Street.

The shed has an older style utilitarian presentation. The Morris Street property (along with all of Cooee



Figure 4a: Cooee Point Precinct Plan



Figure 4b: View down to Cooee Point

North) is zoned Residential A and is a substantial area. It is not unlikely that at some time this site will be developed to a contemporary standard with medium density housing designed to take advantage of the Brickport Bay views.

The Coast

Cooee Point separates Cooee Beach to the west and Brickport Bay at the mouth of Cooee Creek to the east.

Cooee Beach is popular. Recent Council and Coastcare work has created good access through areas of rehabilitated minor coastal dunes. Use of the beach is supported by 2 parking bays and a modest toilet block at the east end constructed in 2010.

At the east end of Brickport Bay there is a well-used dog beach.

PRECINCT HISTORY

Cooee Point is to the west of the bay where an early boat harbour was established by James Parish, still shows on some maps as Parish's Boat Harbour. The bay was later known as Brickport apparently due to Brickworks on the Cooee Creek and associated shipping.

Newspaper reports describe an abattoir proposed for this site from 1910s. The current owners believe the abattoir was built around the 1950s with key development through the 1960s.

Between then and 1990s Cooee Point has been extended to the west with land fill as shown on the

aerial photos Fig 4. c-f. The extended headland has accommodated a variety of utilitarian uses less compatible with residential or civic use: sale yards, municipal sewerage complex and dog pound in addition to the abattoir.

Following Council's adoption of the 1994-5 *Burnie - Directions for the Future* framework plan, Council has been actively reframing the use of Cooee Point, to shift the area from utilitarian uses to higher amenity uses with a significant recreation component.

Most structures associated with the utilitarian period have been demolished. Only the abattoir and immediate yards, amenities block and washdown areas remain.

The greater part of the area is open, with remnant hard stand areas, some low retaining walls and shrubby vegetation at the north in the vicinity of the dip on the north shoreline.

TOPOGRAPHY

There are 2 identifiable sections of the Precinct.

Headland

The 3.9 ha headland extends north into Bass Strait. It has an irregular, square-like shape, 225m E-W by 200m N-S and provides 270 degree views to the Strait and along the coast.

The area of the headland has been enlarged in the

north west by filling, refer Fig // aerial photo sequence. There is a low dip towards the water along the north shoreline and a minor protuberance or beak on the NE. The walls of the headland rise to approximately 2.5-4m elevation above sea level. The natural rock walls and fill banks have been reinforced by concrete fill, primarily on NE and W and present an un-natural appearance, in many locations refer aerial photos that show the change in shape of Cooee Point.

The headland's platform has an overall low gradient that rises to a high point of approx 5.3m elevation in the centre west, although local features, remnants of demolished structures make the surface more complex.

Below and around the headland is a distinctive rock platform of intensely folded metamorphosed Precambrian rocks, that is part of the rock platform along the coast from Somerset to Burnie west.

South-east entry

A narrow entry section of the Precinct extends SE along the shore of Brickport Bay. It is 0.7ha.

The SE Cove

At the north of this section is a small shallow basin-like cove that has been partly filled (the SE cove)

The SE local point

Immediately to the SE of the local inlet is a minor headland.



Figure 4c: 1950s Aerial - TasLIST



Figure 4d 1960s Aerial view - TasLIST



Figure 4e Late 1990s aerial - Burnie City Council (shows fill and occupation)



Figure 4f: Late 2010 aerial - Burnie City Council

TENURE

The Cooee Point Precinct is currently in 2 titles:

- A larger lot owned by Council that includes the SE entry section - approx 3.9ha
- An irregular trapezoid lot owned by Cooee Abattoir P/L, 0.67ha located in the central east of the headland

The Cooee Abattoir lot has a right of access over the Council land. The abattoir's current use of the land on the Point includes spillover truck parking, and drivers use of wash down and amenities blocks.

ACCESS

By road

The existing vehicular entry is along Cooee Point Road which connects from the Bass Highway to the Precinct through the narrow entry section.

There are capacity issues at the Junction of Cooee Point Road and the Bass Highway and no second vehicle entry to Cooee Point seems feasible.

Council is currently exploring with DIER options such as traffic lights at the intersection, but at this stage road access appears to only allow limited development initially.

Significant development will be possible once the intersection issues are addressed.

Walking

It is easy to walk to Cooee Point from the east of Cooee, along a narrow grassy area between Cooee Point Road and the Brickport Bay shoreline. Walking from Cooee Beach requires clambering over rocks.

At present there is no direct walking route to Cooee town centre. There is a potential link across the rail and through a Cradle Water access title to Morris Street, subject to obtaining owner approvals. or a less direct route over the rail crossing at the west end of Turrung Street.

By rail

There is a historic rail stop to the SE of the Precinct between Western Line and Cooee Point Road, with good sight lines for rail and road drivers. There are no current plans to re-introduce rail services.

While the Department (DIER) is reluctant to retire the easement they have recently allowed multiple use of the easement including sections of the Burnie – Cooee foreshore path.

Cycling

The Cradle Coast Authority North West Pathway concept proposal for Cooee Point is an off road walker-cycle shareway along or adjacent to the rail easement.

EXISTING CONDITIONS AND CHARACTER

The headland

The setting and views are the defining characteristic of Cooee Point headland. Almost all areas of the headland provide scenic views over the coastline to Bass Strait or along the coast.

The headland has a sense of isolation being surrounded by sea on 3 sides and with large areas to the west and north occupied by grassy open space (following demolition of structures).

The presence of the abattoirs and stock yards together with the truck activity on abattoir days, still impacts the emerging more natural character of Cooee Point.

Cooee Point Abattoirs and surrounds

The abattoir and associated areas occupies or utilises roughly a third of the headland.

The abattoir is comprised of a cluster of aging buildings. While a number of buildings have a height comparable to 3 storey height of modern construction, the overall appearance seems relatively low on the 200m long extension of the point into Bass Strait. The component buildings are constructed in a mix of styles including a distinctive modernist element. The building fabric may include asbestos.

Weathered timber stock pens alongside the abattoir buildings occupy a considerable area in the centre of the headland.

Many of the utilitarian structures that were on Cooee Point have been demolished including saleyards demolished in 2010.

The SE entry section

There are no buildings along the open narrow strip, just a scrappy edged road with rough cut grass verges. The wall of the shoreline is less vertical and less high than that of the headland. There have been concrete pours over lengths of the shoreline of the entry area, so much of this shoreline has an almost surreal appearance.

LANDSCAPE VALUE AND PROMINENCE

Entering the site

Driving along Cooee Point Road, the shed at the end of Morris Street, parked stock trucks, the abattoir and camping vehicles mass up in different combinations to present a more industrial and disordered character.

The SE point

While the point is very close to the abattoir, it has attractive views north and east to Bass Strait, West Point and Parklands

Incidental views to Cooee Point

Generally the Point is not visible from the Bass Highway being obstructed by buildings in Cooee Town Centre. There are some more distant views, where the Point is visible but not prominent in wider panoramic views:

- Travelling east in long views from Ocean Vista

and west Cooee

- Travelling west in views from the near round rock.

Views from open space areas

Coee Beach

The headland is located at the extreme east of Coee Beach. Coee Point frames the east end of the beach in views from the east end of the beach, i.e. the most intensively used section of the beach closest to formal entry points, parking and amenities.

Since removal of sewerage lagoons on the west side of the Point the area has an almost natural appearance except that the Abattoir buildings are visible across the roll of the Headland platform, although often indistinct, due to sea haze and mid tone neutral colours.

Brickport Bay and Coee Dog Beach

The Point is visible from within the Cove of the Dog Beach but generally beach visitors would have attention elsewhere. It is viewed more centrally as people walk back to the parking areas and the abattoir is prominent in this view.

4.2 LAND USE CONTEXT AND PREVIOUS PROPOSALS

EXISTING LAND USE

Coee Point Abattoirs

The abattoir is in active use at least once a week.

While the abattoir buildings occupy approximately 40% of the abattoir lot, the abattoir activity has a relatively large footprint on the Coee Point headland, due to associated stock pens, parking and movement by trucks, use of amenities and wash off areas by drivers.

Informal camping

The local SE point off Coee Point Road, is used for short stay large-vehicle camping, for motorhomes and fully self-contained vehicles. The location with a scenic view across to Burnie appears popular particularly during Summer, with up to 20 vehicles observed on a number of occasions. The campers also provide some informal surveillance of the relatively isolated Point area.

Foreshore fishing

At least 1 local point is used for fishing.

Conservation habitat

A narrow area along the west shoreline of the Point and around the rail has been fenced off as penguin habitat. The fencing is low and open with little landscape presence. Concrete igloos have been introduced and are being used by penguins. Rehabilitation vegetation undertaken with co-ordination between



Figure 4g: View south from west shore



Figure 4h: View north -to shoreline and abattoir



Figure 4i: View south from centre Point towards Cooee township

Council and Cooee-Camdale Coastcare, using grant monies and workers, is beginning to establish. It is anticipated that over time a more natural coastline vegetation appearance would be established along this section of the shoreline.

Night use

In Stage 1 public consultation, local people described use of the Point at night as a source of concern.

Compatibility of existing uses

Recreation

The presence of the abattoir limits the nature of recreation activities, as evidenced by existing situation.

The large-vehicle camping located on the SE point is relatively close to the abattoir and at this stage is only considered suitable for short-stay accommodation.

Conservation habitat

As the abattoir has primarily regular daylight hours use and a contained human presence it is relatively compatible with conservation.

COASTAL POLICY

The Tasmania Coastal Policy identifies that the coast is valuable and finite resource, activities on the coast should be those that make good use of coastal locations and provide for wider enjoyment of the coast. However the policy is not intended to

unduly alienate coastal areas by discouraging coastal development that meet objectives in part, in case another better use is proposed.

PLANNING SCHEME

After the the finalisation of the 1989 *Burnie Planning Scheme*, the land use zone for Cooee Point changed from Industrial to Open Space.

Land Use Zones

Open Space Zone

Land designated as Open Space is intended to provide for active and for passive recreation. The zone applies to both public and private land used for recreation. The land is to be developed and maintained in a manner that ensures the character or environment supports recreational use. Buildings are permitted only when they complement recreational use.

Special Area Buffer

Currently there are 2 Special Areas or Buffers around Cooee Point, both reflect the earlier industrial nature of the Precinct:

- 500m radius abattoir buffer that extends over all of Cooee Point, over Cooee North and across the Bass Highway and provides a buffer for a continuing use
- 150m radius Buffer that extends Cooee Point around a Council sewerage treatment plant (now removed)

Cooee Abattoir

Cooee Abattoir is now a non-conforming continuing use, as it is not consistent with the current Open Space zone and does not comply with the directions established in the Coastal Policy.

The Open Space zone effectively limits options for current owners to either:

- Continuing to run the abattoir with only minor development or maintenance work being permitted
- On-selling as an operating abattoir

This situation discourages investment and upgrading, and may have contributed to the abattoir being poorly presented relative to more modern facilities. The current zoning effectively discourages a change of use for the abattoir lot.

Adjacent areas

While the Precinct is zoned Open Space, the continuing presence of the abattoir (effectively a consequence of the current zoning), reduces the value of the adjacent areas on Cooee Point by diminishing the character of the setting and the value of any recreational development considered, and so frustrates the objective of encouraging a more suitable use on Cooee Point.

COUNCIL STRATEGIES

Settlement and Investment Strategy

Status - Adopted

The strategy is Councils primary strategic land use planning document. The Strategy identifies Cooee Point as a potential development site for residential use or tourism, consistent with wider strategy for Burnie to attract tourist products to waterfront areas and to provide new accommodation.

The Strategy's summary statement referring to Cooee Point is:

the Settlement and Investment Strategy considers Cooee Point to have greater mixed use development potential in terms of residential units, tourist and commercial development, presenting a clear masterplanning opportunity that caters to these uses.

Small-scale higher-density development in the area would accommodate a growing trend toward unit development and provide a leading residential product planned in coordination with community and open space facilities to create a strong community asset. The site represents one of the clearest opportunities for premium Greenfield unit development in Burnie.

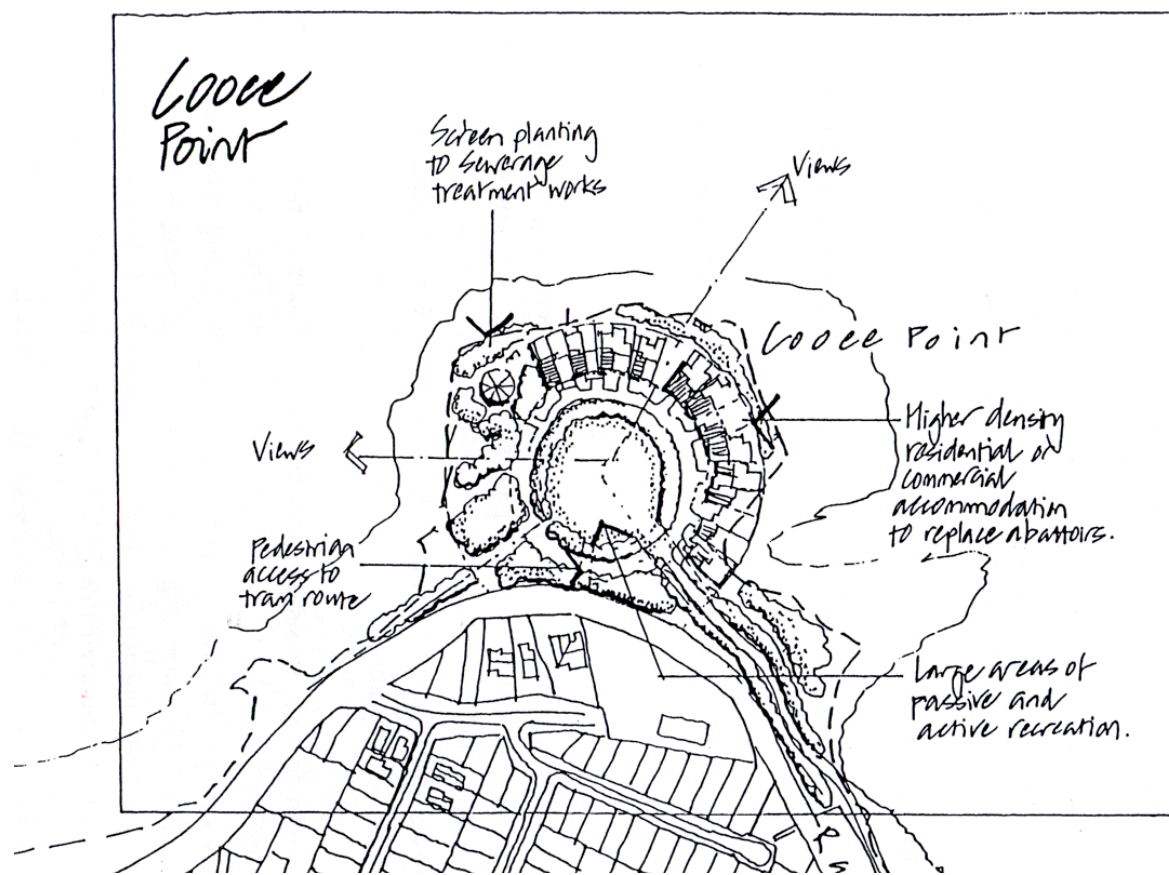


Figure 4j: Cooee Point - indicative development Burnie Directions

Other strategies

Burnie - Directions for the Future

Status - Adopted

The framework proposed holiday accommodation or other uses of Cooee Point, which was re-inforced by an illustration of an indicative building volume and landscape..

Cooee Land Use Strategy 2004: Within Cooee

Status - Adopted in part.

Proposed recreation oriented open space on Cooee Point, shown on maps as recreation and tourism.

The proposal plans and summary recommends primarily recreation and limited complemeatry tourism or visitor facilities, such as cafe, bar or restaurant.

Burnie Open Space Development Study 2010

Status - Adopted

The Study notes directions towards multi-use development on points along the foreshore and proposes as appropriate, sensitive development that balances economic considerations with

access to quality open spaces, regional linkages and the edge of the water'

North West Coastal Pathway Plan 2010

Status - At this stage a concept plan, a basis for negotiation

The Cradle Coast Authority Concept concept

proposes a cycle/pedesrian shareway around Cooee Point immediately alongside the rail line (potentially in the rail easement). In the Plan general comments that liaison regarding access to and across the rail line is an integral part of achieving the proposed Pathway. The proposed pathway is consistent with Councils long term strategy to create a Burnie Foreshore walk.

OWNER EXPLORATIONS

The current owners of the abattoir lot are exploring options for their site and the implications of the Stage1 study, but their consideration of options is not advanced and they are waiting on finalisation of this Strategic Master Plan.



Figure 4k : View east from central Cooee Beach, shows scale of existing buildings



Figure 4l: View east - over the end of Cooee Point Road right



Figure 4m: Fishing west shoreline

4.3 IMPLICATIONS OF BWCA STAGE 1 STRATEGIC GUIDELINES

Council has given the BWCA Stage 1 Strategic Guidelines provisional acceptance to allow for the preparation of Stage 2 with assessment awaiting the finalisation of the BWCA Study.

The provisional acceptance did not extend to Cooee Town Centre where additional investigation is being undertaken by Council.

COMMUNITY PREFERENCES

Community consultation during BWCA Stage 1 elicited a range of land use preferences for Cooee Point including:

- Significant parkland
- Tourist facilities or visitor accommodation options ranging between:
 - hotel
 - apartments, holiday units
 - better formalised campervan parking,
- A nursing home or retirement housing
- Primarily parkland or another use with significant areas set aside for parkland

The main concerns expressed were:

- Existing mis-use of Cooee Point at night
- Any parkland areas would not create an undue cost burden on Council
- If there was any development, that it was not too high or prominent.



Figure 4a: Excerpt from BWCA Stage 1 Guidelines Land Use Plan

COOEE URBAN VILLAGE AND NORTH COOEE

The Stage 1 Guidelines identified Cooee as a well located and popular residential area, that was attracting new residents. The suburb's population has a high proportion of older people and young families.

It noted that while Cooee was well provided with sub-regional services, the hospital, approved GP superclinic, schools and Burnie Greens, it was also vulnerable to losing functionality as a residential area, due to the withdrawal of retail and local town centre businesses that has occurred over the last years.

The Guidelines proposed revitalising the Cooee town centre by facilitating more residences to create more demand for services, including development such as on Cooee Point.

STRATEGIES PROPOSED FOR COOEE POINT

Objectives

The Stage 1 Guidelines proposed mixed use development on Cooee Point (or alternatively the flexibility to consider a range of uses) including tourism and appropriate forms of residential use.

Principles

The Guidelines proposed that the land use framework for Cooee Point should facilitate development that:

- Enhanced scenic and aesthetic values of Cooee Point
- Encouraged integrated development
 - with a limited or contained development

footprint

- that balanced achieving reasonable use of a valuable coastal site with providing access for recreational enjoyment of the site and providing for conservation management
- Provided for emergency egress if egress was not possible along Cooee Point road

The Strategy

It was proposed that a Local Area Plan or similar masterplanning approach would provide a framework that allowed some flexibility while defining Councils preferred directions for land use mix, land management and the form of any development.

4.4 SITE PLANNING CONSIDERATIONS

THE IMAGERY OF COOEE POINT

Imagery assets

Cooee Point has stunning views over the Bass Strait and coastline with a 270 degree view range.

The atmospheric and sense of light at Cooee Point resulting from being surrounded by water and distance from the escarpment is distinctive along this section of coast.

Associations

At present, and especially for local people, Cooee Point Precinct has a long association with noxious industry, and while such use has been reduced, the continuing use of Cooee Point Abattoir greatly impacts the appearance and associations of the whole Precinct. This is amplified by concerns about anti-social use of the Point area at night. Potentially these associations will fade as the appearance and use of the Precinct changes, however this requires the community to be aware of changing uses and developments.

While the Point currently has relatively low prominence in incidental views from the Bass Highway, if there was significant development that would attract attention (as people tend to notice a change) and begin to change associations. Similarly the changed views from Cooee Beach would alter associations.

The likely extension of the Foreshore Path (walk-cycle shareway) beyond Red Rock to Cooee Beach, alongside the south boundary of Cooee Point Precinct is another way that local people could become more aware of changing uses and character.

IMPLICATIONS

Site assets will become more valued if there is better access or views to the Precinct. The existing detracting associations could be addressed by:

- *Removal of the abattoir use, preferably attracting a different use*
- *The shoreline and remnant hard stand could be reworked to appear natural or an attractive designed foreshore esplanade created (possibly in association with shore stabilisation landscape works and building works)*
- *A promotions strategy to draw attention to the new character of Cooee Point*

CANDIDATE USES

The Stage 1 Guidelines proposed a balance of land uses on Cooee Point.

Conservation habitat

The 2010 report *Penguin Habitat Management Plan Cooee Point - Camdale Coastal Reserve* assessed the areas between Camdale and Cooee focusing primarily on optimum requirements for Little Penguin habitat. It identified Cooee Point and Camdale Point as currently the most suitable habitat areas along this section of coast, with Cooee Point being the more suitable in the long term due to its higher elevation.

The Management Plan designated as the optimum area for long term habitat on Cooee Point, the North West shoreline and adjacent inland areas. That area would significantly widen the existing habitat area and extend it around the north shoreline of the Point and around the rail line to the south.

The apparent intent of the designated area appears to be to ensure that:

- The most elevated area of the Point is available for habitat
- There is an adequate buffer between areas of human activity impacts and habitat, which requires a relatively large area to be set aside
- There is a continuing provision for habitat for coastal species in the Burnie West Coastal Area

In establishing a balance between land uses at Cooee Point, and the location and extent of area proposed for conservation management for the Strategic Management Plan, the following have been considered:

- Location of the existing penguin habitat area
- Requirements for other uses, particularly areas most suitable for recreation and the proposed alignment of the NW coastal Pathway and associated co-location implications
- Potential balances between the extent of a conservation habitat area and how the habitat area is defined and management, in terms of

optimum conservation management outcomes

- Use of site design and development design including visual obstruction, noise and light management to buffer between habitat areas and development or use areas
- Offsite conservation offsets - determining the optimum location for conservation habitat considering a greater length of the coast and noting the established Penguin habitat area and interpretation area at West Park

IMPLICATIONS

Balance area required and conservation management performance, rather than relying solely on the area set aside and consider options for impacts between conservation management and other users.

Recreation

The current zoning of Cooee Point is Open Space, recreation use of Cooee Point.

Comments made during Stage 1 consultation showed local people generally anticipate some recreation uses and access at Cooee Point.

Councils 2010 *Open Space Development Strategy* has assessed that Cooee's main recreation requirement is neighbourhood parks, small local parks that serve a local catchment of park visitors with an indicative

radius of 500m. The Strategy recommends that neighbourhood parks are linked which potentially amplifies their recreational value. .

A neighbourhood park

Cooee Point is potentially well located to provide a neighbourhood park catering to Cooee North residents - subject to being able to provide direct access (which may be possible along the Cradle Coast Water easement off Morris Street).

The narrow SE entry section of the Cooee Point Precinct could be suitable for such a neighbourhood park, but should not displace the informal camping on the local SE Point until Cooee Point is sufficiently developed to not rely on camping for informal surveillance.

This area would benefit from:

- Good informal surveillance, being alongside the Cooee Point Road and visible from parking areas used for the dog beach (and moreso if units were built on the large Morris Street lot with views facing over this area to the water)
- A scenic setting with the water that could be enhanced and focussed

A Cooee Point Pathway

As Cooee Point is close to the proposed route for the extension of the Foreshore Walk from Red Rocks to Cooee Beach, a path looping around Cooee Point could create a scenic incident along the Foreshore Path.

This could be constructed as soon as the Foreshore Path is extended, provided it was located so as not to preclude later preferred uses.

The most suitable areas for such a path is around the full extent of the Cooee Point, to catch the changing views. However the route should address potential conflicts with the conservation habitat area already established on the NW shore of the Point.

An alternative would be for a loop around most of the Point but with some sections of the pathway to through the central area or skirt the central area on the west - provided that the path was developed as an interesting and attractive walker experience, and if it passed through a developed area, that the design and signage of the path and any associated landscape provided cues that the path was part of the public domain, community open space available for all.

Larger open space destinations

Given the amount of land at Cooee Point it could potentially accommodate a larger recreation destinations, but based on the Open Space Development study there is no pressing demand for such a facility in the area.

Long term options

Longer term, a cafe or restaurant (as proposed in the *Cooee Land Use Strategy* to support recreational use) might be developed either to complement establishing recreation use or as part of another development.

IMPLICATIONS

Given the community expectation of recreational use based on the current zoning, any mix of uses proposed should be generous in the way recreation is accommodated and should be consistent with making provision for:

- *A neighbourhood park*
- *Opportunities for local people and visitors to be able to enjoy the coastal areas and feel free to walk around as much of the edge of the Point as is practical (while also ensuring there is sufficient area provided for other uses that rely on access to the coastal edge)*

Coastal development

Tourist accommodation

With 270 degree views from Cooee Point, tourism is an obvious use to be considered for the Precinct.

There already is tourist use at Cooee Point, the large vehicle camping on the site. Nearby there are 2 other tourist establishments located to overlook Cooee Beach, the Burnie View motel and caravan park complex and a beachside cottage accommodation.

However, Cooee Point is not within easy walking distance of the Burnie CBD and associated key tourist offerings and so cannot readily benefit from that cluster of attractions

Considered as a stand-alone destination attracting a higher end market is not realistic with the current appearance of the Bass Highway environs, the immediate Cooee setting, plus the presentation of the Point with concrete fill along Brickport Bay and around parts of Cooee Point.

With the downturn in the tourism cycle in Australia and Tasmania and sub-optimal setting, any tourist development is likely to be either a modest development or a mid- long term aspiration.

Retaining a long term option for tourism while not denying options in the short-mid term could be achieved by:

- An alternative use on a limited area of the Precinct
- A development designed so that it could be readily used for tourism or accommodation should market conditions become more favourable

Hotel/Motel

There is sufficient area in the Precinct to accommodate a hotel, either in the centre of the headland or smaller hotel on one side.

A boutique sized hotel could be relatively compact in terms of footprint, but needs more open space and may need to be designed to break up the apparent bulk of the building.

While there is sufficient area for a motel, it could be considered as wasteful use of land, particularly the area required for an open parking area and circulation.

Small units, Tourist apartments

It may be appropriate to introduce a small establishment as a catalyst project or as part of an interim or multiple use option.

However, small stand alone self contained units, say equivalent to cluster housing in density, are relatively wasteful of this valuable coastal edge area.

Camping, large vehicle camping

This use would be restricted to the east side of the Point to keep it distant from the Conservation Habitat area.

While camping may be an underutilisation of coastal it is a good interim use adding to the local economy and providing additional security.

Long term, with a better setting it could be cost effective to retain in the existing location use possibly if it was managed in association with a complementary accommodation enterprise elsewhere on the Point or closeby.

Residential - with a mixed use component

Residential use if not fully consistent with the aspirations of the Coastal Policy residential use as it is not reliant on its coastal context.

However, residential could be introduced as a catalyst land use associated with an initial period of changing perceptions of this area or as an initial use in dwellings designed to be suitable for tourism or other accommodation.

While the diversity of residential options has continued to expand since first highlighted as an issue in the 1994 *Burnie - Directions for Future* framework plan - there is still little absolute waters edge living.

This suggests either limited residential use as a first stage land use or designed to allow ready conversion to other uses, which suggests stratum or apartments.

Live-work - Residential development providing for commercial use of a front area or lower storey might suit a business cluster,

Independent living building standards – Using these standards would provide for use of dwellings by people throughout the age groups and provide a retirement living option that has the vibrancy resulting from differing age-groups and without committing to one age demographic.

Retirement home or independent living

During Stage 1 community consultation there was very strong support for this land use option from older members of the public especially middle aged people and local people, and it was an interest that was sustained over a number of consultation events. There were consistent comments that older people don't like moving away from the coast, they liked being able to walk along the beach and swim, moving away from the coast can make older people feel like they are already half way 'up the hill'.

Potential risk associated with coastal processes and wind exposure means this use may not be immediately seen as suitable. However if the Precinct

is assessed considering alternative closeby options for coastal living for older Burnie residents, there are few more suitable sites.

Lifestyle villages are popular in other states especially if they are associated with later stage care options. In Tasmania, examples such as Roches Beach Lauderdale and Derwent Waters at Claremont which offer different levels of care, both benefit from a water's edge location.

The Cooee Point Precinct being almost square and relatively flat, allows for site planning configurations suitable for a range of supported accommodation and levels of care. As a use, supported accommodation for the more independent would bring people into Cooee who may shop locally. Depending on size, such a facility could potentially attract health and care professionals to the area, building up the level of services in Cooee and supporting existing health facilities.

In view of the apparent demand for some form of supported living, that use has been retained as an option for Cooee Point, but with performance-based qualifications:

- Single ownership or other form of ownership or management mechanism that would facilitate conversion to use by a less vulnerable population if that were to become appropriate

- Design to provide for wind protection and to be capable of conversion to tourist accommodation or residential with suitable parking, identification and addresses of units etc.

IMPLICATIONS

- *Tourism and accommodation are the preferred form of coastal development being most consistent with Tasmania's Coastal Policy*
- *Residential could be suitable if it was a minor or early stage development, or if designed to also function as tourist accommodation at some later time*
- *Supported residential care may be suitable provided the building form and grounds afford a high degree of comfort, connection to the water (at a minimum from communal areas or individual living areas) and with a design that facilitates management responses to any emergency*

CIRCULATION

Traffic

Council has undertaken a Traffic Impact Assessment. The assessment established that the existing situation turning into and out of Cooee Point Road at the intersection with Bass Highway is already sub-optimal (consistent with residents comments during the Stage 1 consultation). The TIA concludes that up to 40 additional dwellings could be accommodated that used the Bass Highway intersection before traffic lights would be required.

This effectively puts a limit on development that can be undertaken in Cooee North and Cooee Point until the intersection is resolved.

There are potential development sites along Cooee Point Road and at the end of Morris Street, in addition to Cooee Point. The threshold for traffic movements into the Bass Highway could be exceeded if other areas were developed before Cooee Point in which case development would rely on the intersection being upgraded.

It is not unlikely that the existing traffic congestion at this intersection is already inhibiting development in Cooee North and resolution of the intersection could stimulate development on a number of sites favourably changing the setting and entry drive experience for Cooee Point.

IMPLICATIONS

There are significant traffic constraints applying at Cooee Point. Cooee Point may be able to proceed with a use that generated up to 350 traffic movements a day, but subject to other development not proceeding earlier.

Resolving traffic issues might have a catalyst effect, stimulating development on the various large lot sites in Cooee North.

COASTAL PROCESSES VULNERABILITY

Current situation

The Burnie high tide line is at approximately 1.9m. Anecdotally, currently storm tide events wash over the top of the bank of the Point on the east and into the dip to the north of the Point. The relative elevations around the Cooee Point shoreline suggest a similar overwash could occur on sections of the west close to the wall.

Preliminary modelling data provided by Tasmania's Climate Futures project, shows that the highest vulnerability areas occur in the local west bay, the 'beak' to the east, the dip to the north and a little of the north west corner (Refer Appendix 1 for more detail).

As modelling is updated on a 5 year cycle any development should be based on the best available data at the time.

Designs should show an ability to adapt and administrative processes that required monitoring may be required where it is proposed to use areas close to the more vulnerable areas.

IMPLICATIONS

Use best available data at the time of any construction to determine vulnerability of areas as established by coastal geographers assessing site-specific conditions.

CHARACTER AND FORM CONSIDERATIONS

Coee Point is part of the sequence of viewed landscapes along the coast. Its appearance has changed as noxious industries and associated land uses have been removed from the Point.

Currently people are accustomed to a scale of buildings on the Point set by the bulk and volumes of the abattoir building and the adjacent shed at the end of Morris Street.

Site footprint

The existing abattoir buildings are set back from the waters edge around the Point and the buildings are contained on the available lot occupying roughly 40% of the abattoir lot.

Circulation and open space

Consistent with expectations for recreation access development should allow free passage around the Point and through the Point. A walkway through the Point should be wide and designed to be recognisable and inviting as open space with any gateway or threshold clearly designed as a public entrance.

Height

As there is no vertical element development should primarily be low, relatively close to the height of the existing abattoir buildings, effectively 2-3 stories high.

Comparable prominence from heights can be created by lower volumes with solid shapes, volumes and finishes as higher buildings on the same footprint designed for less visual prominence and apparent bulk.

Height and pathways

Buildings may be adjacent to free passage roads and walks around the Point and should be set back with the height less than the setback from the path with design to minimise any over-viewing.

Apparent bulk and visual prominence

The existing buildings are a cluster of parts. New buildings should have an appearance of being a composite of parts without a large solid bulky appearance or long roof lines,

This can be achieved by breaking up the facades with

balconies and windows and breaking up roof lines. To a less extent with use of colour and materials can reduce the apparent bulk.

Reliance on screen planting should provide for a long plant establishment period.

Facades

Colours and materials that reduced the solid appearance of buildings are preferred, and may be considered in assessing apparent bulk.

IMPLICATIONS

Development should reflect the existing volumes on Cooee Point which are relatively low prominence with heights restricted to 2 storeys unless there is substantial articulation, neutral colours and surface modelling.

Buildings should provide informal surveillance of adjacent public access areas without creating a sense of being unduly over-viewed,

STAGING

Until the abattoir leaves the site complementary uses are limited, although some recreational use could be encouraged.

Improvements such as paths, landscape planting,

earthworks and pathways could be provided for limited short term use but anticipating future use and as a cost effective way to provide for landscape setting for later development, provided areas developed are consistent with the long term strategies for the Point.

Interim use

The existing conservation habitat area is complementary to this and existing large vehicle camping is provided as a service, that uses little of the site and discourages anti-social activities but does not bring a benefit and potentially conflicts with penguin conservation if campers have dogs.

IMPLICATIONS

In the event that the site is not attractive to developers for some time interim uses should not adversely impact future use. Interim use and management should at a minimum formalise the extent of conservation management or habitat areas and fence to preclude penguin colonisation of larger areas

4.5 COOEE POINT STRATEGIC MASTER PLAN

The Cooee Point Strategic Master Plan (SMP) was prepared after considering a range of options for circulation, land use and form, referring to different alternative responses (Refer Appendix 2) and separate sub precincts identified that provide optimised locations for each land use.

The various scenarios for changing environmental factors have been addressed by identifying explicit transition sub-precincts and requirements for best available information reports to underpin any proposal (Refer section 2.8).

The general objectives and strategy are outlined below followed by relevant general requirements and requirements for each sub-precinct.

4.6 MASTER PLAN OBJECTIVES AND STRATEGIES

	OBJECTIVES	STRATEGIES
CIRCULATION	Maximise access to the foreshore and through the site.	Contain the footprint of roadworks and provide for an outer walk around the Precinct or through the Precinct.
LAND USE BALANCE	Facilitate a balance of conservation management, substantial recreation and some coastal development with potential co-location impacts addressed.	Identify land use direction with dedicated land use sub-precincts (or sectors). Use transitional sub-precincts to address potential co-locations impacts and areas of uncertainty in the modelling.
COASTAL DEVELOPMENT	Encourage coast-oriented development compatible with other uses Allow for flexibility	Encourage tourism and accommodation and complementary uses Allow residential use with a mixed use component in smaller developments or where designed to also be used for tourism. Allow supported care when management addresses potential risk issues and the design can be adapted for tourist use
RECREATION	Allow for reasonable amount of access to the waters edge, access to views and configuration. Recreation areas to be: <ul style="list-style-type: none"> • Readily accessible, connecting to a Cooee Point Pathway around the Point • Cooee Point Pathway to connect to the Burnie Foreshore Walk • Provide for future neighbourhood park and restaurant cafe site • Address potential hazards 	Allow for recreation use on the north and east foreshore areas Encourage a round path Allow access to the north east end with or without co-operative development of the abattoir lot. Undertake a risk management assessment of the foreshore with Council's risk manager. Address access issues along the waters edge.
COASTAL HABIT	Consolidate existing habitat area and extend to accommodate a substantial area of the highest ground anticipating impacts of coastal processes. Ensure the area provided is adequate for habitat purposes and protected from adverse impacts from activities associated with coastal development or recreation.	Widen existing habitat area to incorporate an elevated west central area of Cooee Point. A coastal habitat-coastal development transition sector provides a default 20m buffer between co-located uses. The buffer could be reduced (potentially allowing a greater area available for coastal development) where the proposal could demonstrate regional conservation management outcomes comparable to or exceeding the contribution of the 20m buffer, that could include: <ul style="list-style-type: none"> • Building design features that reduced impacts • Enduring conservation management arrangements • Off-site conservation habitat areas Such a proposal would need to be accompanied by a report assessing conservation habitat performance, undertaken by an ecologist or land manager recognised by DPIW as competent to report on habitat impacts.

<p>COASTAL PROCESSES</p>	<p>Minimise vulnerability to potential hazard without unduly removing land from being available for for short term or long termuses</p>	<p>All development to be accompanied by coastal geographer report assessing coastal hazard and demonstrating, adaptation to, or foresseable coastal processes.</p> <p>Buildings and built form or services in the coastal sector to demonstrate resilience to coastal flooding and coastal surges. Coastal development to be set back from the shoreline and elevation of floor levels, services and hard surfaces at an elevation reflecting current modelling of hazard plus a conservative contingency factor.</p>
<p>LANDSCAPE AND URBAN FORM</p>	<p>The dominant character of Cooee Point is to be natural-like with development to have relatively little visual prominence.</p> <p>The headland is to be relatively natural in appearance viewed from Cooee Beach and around Brickport Bay.</p> <p>Building volumes are to be contained with height relationship to existing abattoir buildings and bulk.</p> <p>Building volumes and public domain open space and walkways should allow for an experience of privacy from adjacent building and any adjacent public domain areas</p>	<p>There should be a significant open space around shoreline with</p> <ul style="list-style-type: none"> • Any development to be setback from north end of the headland.and a substantial internal • A substantial central open space that is recognisably a public space, for instance a wide street, parkland, common or court <p>The bulk of any buildings is to be contained within a defined footprint but with detailing of roof and facades, colour and materials and landscape treatments to minimise visual prominence</p> <p>Visual prominence and perceived building bulk to be reduced by modest height to 2 storey or impact of 3 storey buildings broken up and a 100% maximum plot ratio and maximum 40% footprint.</p> <p>Building design and landscape to not create an impression of significant overlooking of public open space areas while still providing some informal surveillance of public access open space</p>

4.7 MASTER PLAN OPERATION

The Strategic Master Plan outlines preferred performance:

- Access and circulation,
- Landscape and urban form
- Specific land use sub-precincts.

ACCESS AND CIRCULATION

The circulation plan shows an optimum circulation. Any interpretations that significantly vary from the plan should advance the objectives and strategies of the Master Plan.

Cooee Point Road and vehicle movement footprint

The existing Cooee Point Road would be extended to provide access. Design of works should consider forecast sea level rise as Cooee Point Road crosses a low point close to the SE local cove. Any upgrade of the road could incorporate a protective function.

Parking for recreational use of Cooee Point should be provided off Cooee Point Road in the vicinity of the SE cove.

The footprint of vehicle use on the Point should be limited to the south end of the headland as much as practical. If the abattoir lot is developed as a stand alone proposal a road to the north of the point may be required.

Cooee Point Pathway

Preferably development of the point would provide a pedestrian-cycle shareway loop around the north

and east of Cooee Point giving the sense of traversing the bulk of the Point, including the northern dip, but leaving the north west area available for penguin habitat.

An alternative or complementary route skirting the North West habitat area would require any potential impacts on conservation habitat were ameliorated. Such a path should be integrated with low key interpretation, possibly as art work or incorporating discreet signage and with viewing opportunities such as a modest bird hide.

Connection to the Burnie Foreshore Trail (North West Pathway)

The Cooee Point pathway should connect to the trail. preferably this would be at a pedestrian crossing of the rail line at the end of the Cradle Coast easement off Morris Street.

Visual access only areas

Access into the conservation habitat sub-precinct proposed in this SMP should be limited to conservation management access. Public access is to be precluded, but undertaken in a visually discreet manner, allowing views over the area and complemented by interpretation of the area as a coastal habitat reserve.

LANDSCAPE AND URBAN FORM

The landscape and urban form plan shows optimum open space. Any interpretations that significantly

vary from the plan should advance the objectives and strategies of the Master Plan.

Natural undeveloped waters edge

Areas immediately alongside the shoreline are to remain open.

Urban form

Buildings are limited to the central area.

Bulk and height

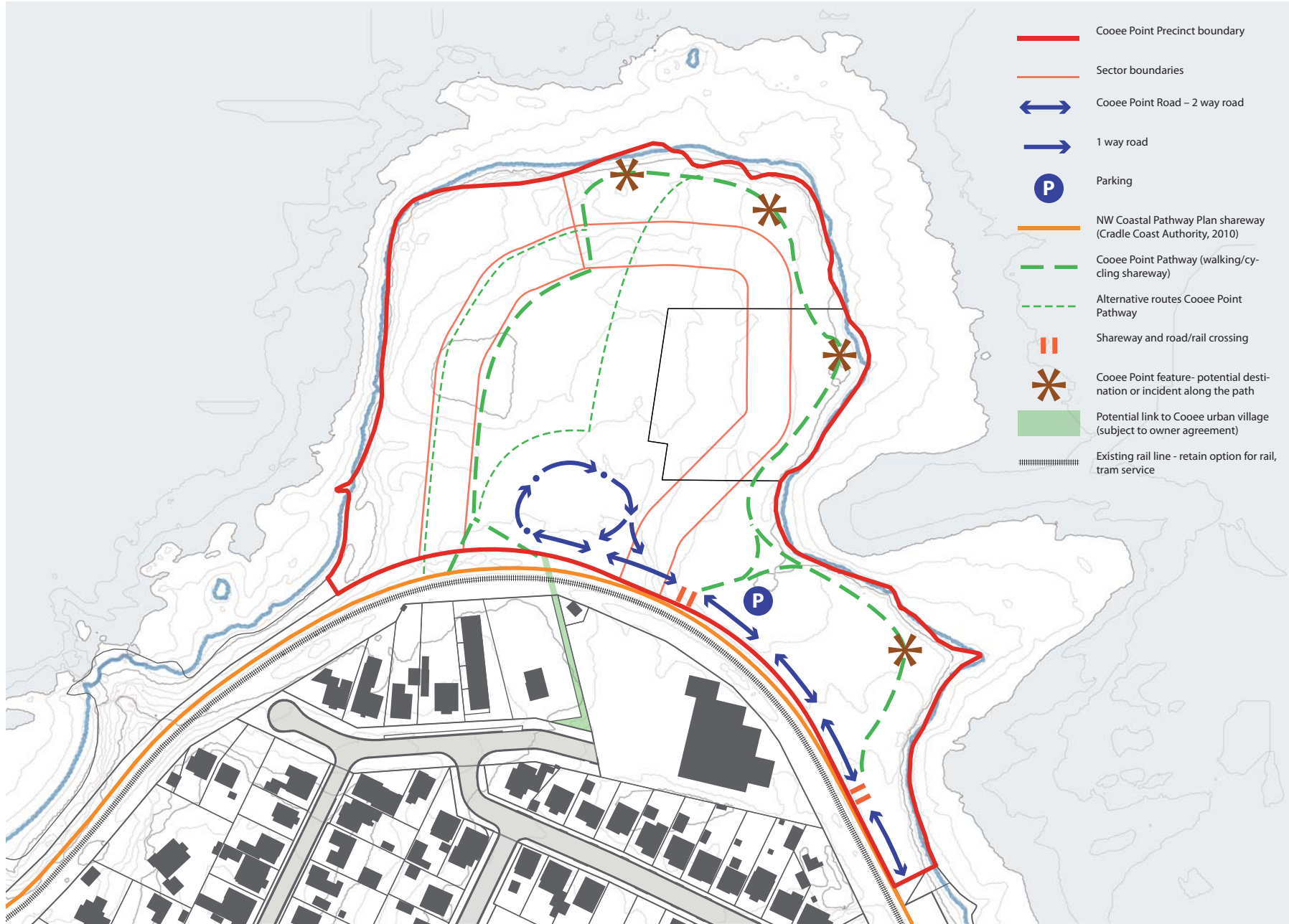
Buildings are limited to 2 storeys height unless the design breaks down the apparent bulk in which case 3 stories could be permitted.

Techniques for reducing apparent bulk could include articulated building volumes and roofs, pitched/skillion (or 2 stories with parking under), tiered, balconies. Complex surfaces and patterning of materials, tones and colours also reduce the apparent bulk of built volumes.

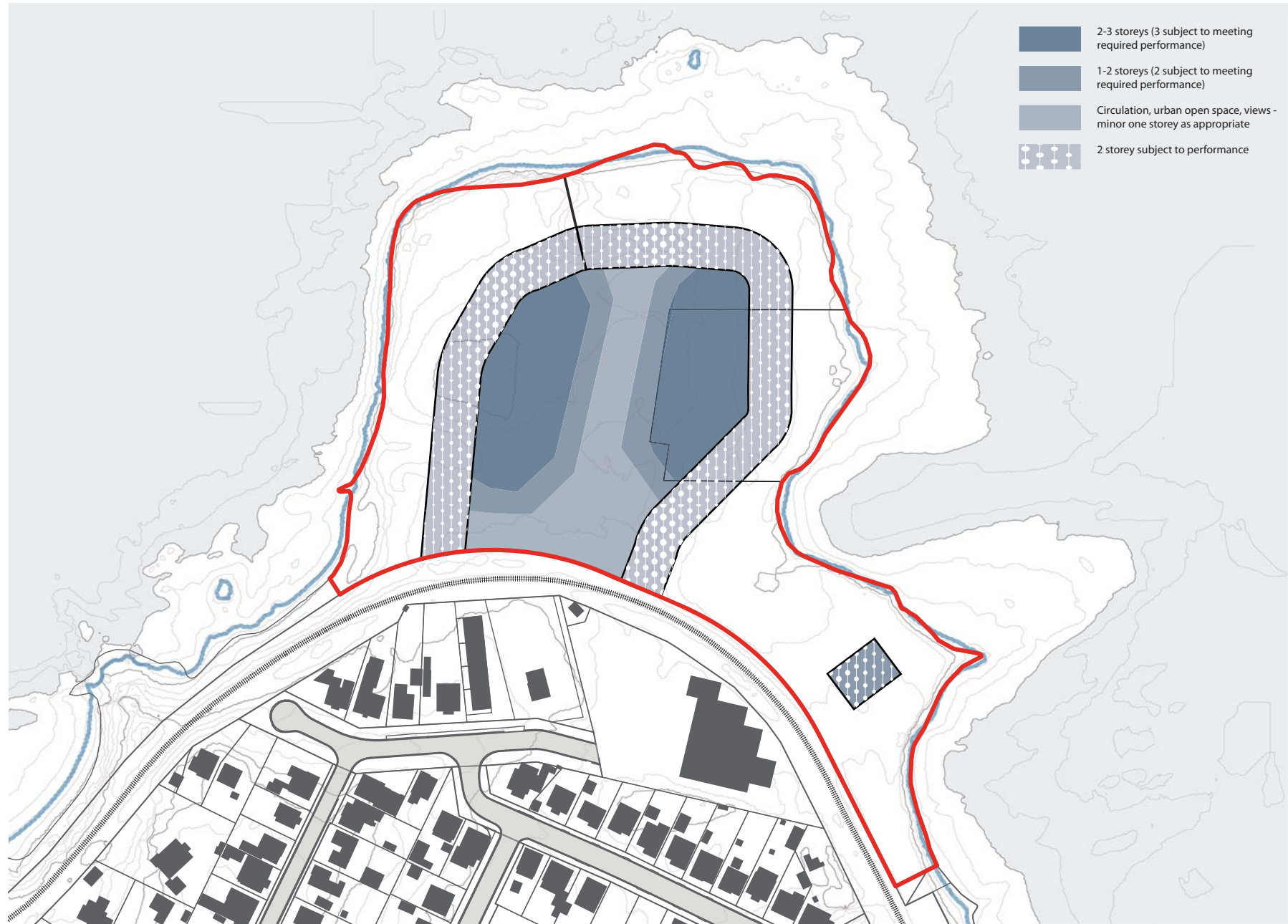
Buildings should be designed to encourage active frontage and informal surveillance of public access areas, but without obtrusive over-viewing.

Adaptative design

The layout and design of development is to demonstrate resilience to coastal hazard as assessed by a coastal geographer of comparable profession for that location on Cooee Point. Alternatively a proposal could demonstrate that it would be practical to readily adapt the building if required, or that any



COOEE POINT SMP - Circulation



COOEE POINT SMP - Landscape and urban form

future hazard could be addressed by management.

Materials and surfaces, floor level, elevation and detail of services, to be consistent with an elevation determined by the coastal geographer as capable of resisting storm events.

Services design, building volume design and layout and landscape design to be able to cope with assessed hazard and designed to mitigate rather than exacerbate the impacts of such an event.

Central public domain open space

The space occupied by buildings would be broken by a central public domain area. This public access area could be either public or private open space. The open space should be designed to ensure that it is welcome and accessible to all, encouraging both walking through and longer visits.

Face to public domain open space

Design should balance overlooking while providing some informal surveillance.

The height immediately alongside the central public domain space is limited to 1 storey except where apparent bulk and any overlooking are significantly addressed and the facade has an active frontage to the public domain area.

Face to west shoreline conservation habitat

The west face of any buildings alongside the conservation habitat area may require design to minimise adverse impacts from noise, light impacting the habitat area.

Staging and interim use

Traffic modelling suggests a 2 stage development to address capacity constraints.

An initial project, possibly either parkland or a specific development, might facilitate changes to the imagery of the Point.

CENTRAL - COASTAL DEVELOPMENT SUBPRECINCT

Current use – west section of the abattoir area and associated movement area and amenities block.

Issues - This is the most elevated section of Cooee Point with least sea level rise vulnerability. Current modelling suggests that the majority of the area is above forecast coastal hazards, however the area is within the range of some modeller's contingency factor precautionary limits, refer Appendix 1.

Function

Attract land uses that both benefit from the Cooee Point location and makes the Point, with its dramatic views and character available for a wide range of people.

Uses generally should not attract more vulnerable members of the community, except for specific events, or unless there is a management and processes for addressing any emergency events or responding to changing conditions.

Candidate uses include:

- Tourist accommodation
- Restaurant

- Residential with a mixed use component, medium density is preferred to create a contained footprint. Mixed use would include complementary commercial activities, and flexible housing that allow for live-work occupation. Any supported either designed to allow for ready conversion to tourism should market change make that use attractive.

Character

Massing - The building volume should allow for a central access through the Point.

The associated central open space could be a central court, common, parkway or the nature strip of a wide street. It should be open to the north, with views to Bass Strait and act as a protected sunspot in windy conditions.

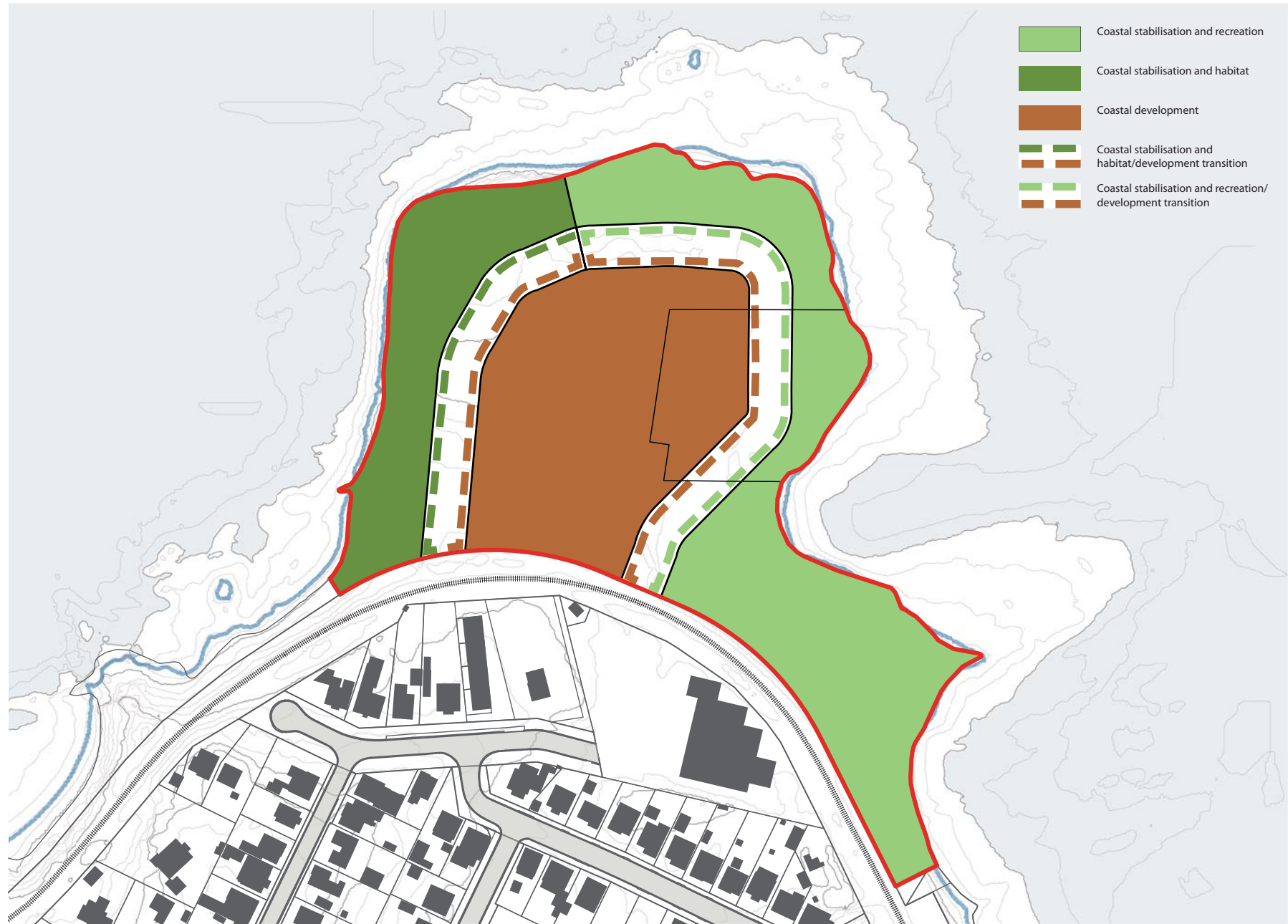
NE RECREATION SUBPRECINCT

Current use – east section of the abattoir area and point used for motor home informal camping. This area has attractive views around the coast north to Bass Strait, east to West Park and longer views to the Table Cape on the west.

Issues - This area is within current modelling 2100 sea level rise vulnerability forecast coastal flooding (when including provision for wave height). Sections of the area are currently subject to storm event overwash.

Function

The primary use is to accommodate the Cooee Point Path and any associated features and facilities, also:



COOEE POINT SMP - Subprecinct

- Large vehicle camping could be retained adjacent to the local SE cove, subject to a configuration that did not significantly impact the enjoyment of the foreshore area by others
- Limited development on local SE point such as a restaurant or cafe or toilets to support recreation, located for proximity to Cooee Point Road and the North West Pathway

Character

The proposed Cooee Point Pathway running through this area would have a natural-like character .

Over time additional incidents or features could be developed commencing with low key elements vandal-resistant/low cost elements such as planting, seats etc. Concrete fill areas could be addressed as part of early works.

Landscape should be subdued in character allowing the coastal setting to dominate.

Planting and works should to be resistant to coastal flooding or of a low value sacrificial construction.

TRANSITION SUBPRECINCT - RECREATION AND COASTAL DEVELOPMENT

Current use – Occupied by mid section of the abattoir area and adjacent open space

Issues - Being more elevated this area is less vulnerable to sea level rise associated coastal hazard.

Function

This area provides a buffer between coast-line recreation and coastal development, allowing each to have privacy and a defined character.

By default the primary use would be recreation. Coastal development can occur in this area provided that the form of the development is complementary to the recreation use of the adjacent subprecinct and addresses potential coastal processes hazard.

Character

The character of public domain in this area would be similar to that of the Recreation subprecinct.

Development should be resistant to storm events and capable of being made resistant to coastal flooding associated with forecast sealevel rise, or capable of being adapted should the flooding eventuate.

WEST COASTAL HABITAT SUBPRECINCT

Current use - penguin conservation and occasional fishing.

Issues - As this area is relatively elevated there is less sea level rise vulnerability.

Based on current modelling the majority of this area could be considered as being either above a precautionary 2100 storm surge line or as having a limited likelihood of being impacted by joint probability storm surge events.

Function

The primary use is to retain and build up the coastal habitat including habitat for Little Penguins and for other coastal species.

Associated activities are:

- Conservation management that supports the coastal habitat function, including management of erosion or providing for higher elevation habitat
- Interpretation and appreciation of coastal values – this could be suitable if undertaken in a benign or low impact manner and associated with conservation management. Note - any such activity should complement the West Park Penguin observation centre.

Character

Facilitate re-establishment of a full suite of coastal vegetation a natural appearance, with vegetation established and managed to optimise habitat values giving consideration to:

- Rehabilitation of coastal vegetation
- Visually discrete containment of penguin habitat area to preclude unwanted dogs or people
- Potential long term need for elevated habitat areas

Administration and tenure

A coastal habitat area needs effective management, based on an entity having clear responsibility for

management including resourcing and a protocol and resourcing providing for continuity of management should that arrangement be discontinued.

TRANSITION SUBPRECINCT - COASTAL DEVELOPMENT AND COASTAL HABITAT

Currently no defined use.

Issues - This area has relatively low sea level rise vulnerability – the majority of area either only impacted by storm surge events or above the precautionary 2100 storm surge line using some precautionary factors.

Function

A 20m wide area that buffers coastal habitat values from disturbance associated with coastal development or recreation and buffers people from impacts potentially associated with habitat.

The buffer mitigates:

- Disturbance to natural species through movement, noise, night light and human activity
- Disturbance to people using the coastal development area through noise, smells, perceived health hazards

While coastal habitat buffer is the default use of this land, the extent of land used for habitat could be reduced where adequate buffering would occur without requiring use of the full 20m.

Recreation or coastal development uses could be accommodated in parts of the transition subprecinct,

where it was demonstrated that significant conservation management offsets were achieved and that impact mitigation was at least comparable to the the buffering that would be provided by a 20m separation, for instance:

- Limited recreational use, possibly a walking trail that was highly screened by vegetation from views into sensitive areas of the conservation habitat area and not used at night
- Buildings utilising some of the transition area but designed to ensure no adverse noise and visual impacts on the coastal habitat sub-precinct

Character

Reliant on demonstrating no adverse impacts on penguin habitat and achieve described habitat outcomes.

4.8 CASE STUDIES

The case studies have been prepared to illustrate the range of uses and forms of development that could be considered consistent with the proposed Strategic Master Plan, they do not indicate a preferred direction. Although the case studies are conceptual, they have been coarsely dimensioned and were used to provided a second level of review of the proposed SMP.

A number of the case study examples utilise row housing (contemporary terrace housing), that maximises the number of dwellings that can enjoy the view. Row housing could require minor refinement of the planning scheme to be readily accommodated.

Case studies were prepared using a reference locations and elevations based on currently available coastal processes information. However for any proposal involving significant construction or infrastructure a coastal geography or geomorphology study reflecting the most recent forecast sea level rise modelling would be required.



COOEE POINT Case study 1 Supported accommodation west (room for expansion) and conservation offsets required, central court, tourist/residential development west



COOEE POINT Case study 2 - Different forms of holiday accommodation or residential , conservation west, central open space, recreation east and loop and central walks



COOEE POINT Case study 3 Conservation habitat west, tourist/residential west central, central parkway, east substantial building hotel/supported accommodation, recreation east



5 TRANSLATION

BURNIE WEST COASTAL AREA

5.1 CAMDALE POINT

Translation of the Strategic Master Plans for Camdale Point entails keeping long term options open both for development should the highway be relocated and for a memorable gateway.

SHORT TERM

Name and identity – signage at least and confirm a name with the Nomenclature Board and signpost. Begin to build the identity of Camdale Point as a park with key central views in more prominent and focus activities in areas with best sight lines.

SHORT TERM AND CONTINUING

Monitoring and responding to erosion and increasing mobility of fill bank and sand from the beach at Camdale, as cost effective.

Monitoring and responding to weed infestation of rehabilitation beds and possible re-structure to be more effective as habitat and minimise vulnerability to

Formalising the area available for conservation habitat and ensuring that the area put into this use can be practically managed.

MODERATE TERM

Consolidate the land use planning direction and monitor.

MODERATE LONG TERM

Consolidate the Camdale Point gateway working cooperatively with Waratah-Wynyard Council and with DIER if practical.

5.2 COOEE POINT

The Strategy should facilitate removal of the abattoir, preferably in a manner that allowed the full length of the east shore of Cooe Point to become available for recreation use.

SHORT TERM

Name and identity

The name of Cooe Point is already established and Cooe Point Reserve is signposted.

Land along Cooe Point Road allows opportunities to begin to build the associations of this area as open space, as does parts of the west and north of the point.

If Council committed to a Cooe Point Pathway as an incident along the NW Coastal Pathway/ Foreshore Trail that could begin to be implemented progressively with structural planting and minor sign-posting undertaken shortly after the Trail is extended to Cooe Beach.

SHORT TERM AND CONTINUING

Monitoring and responding to erosion and increasing mobility of walls of the point, as cost effective.

Monitoring and responding to weed infestation of rehabilitation beds and possible re-structure to be more effective as habitat and minimise vulnerability to fire.

MODERATE

Consolidate the land use planning direction and monitor.

5.3 PLANNING INSTRUMENTS

At present councils are preparing to refine planning schemes which are to be structured in accordance with Tasmania's model scheme template (Planning Directive 1, updated late 2010) and to conform to a finalised regional planning strategy, for the north west councils the finalised form of 'Living on the Coast: Cradle Coast Regional Land Use Planning Framework'.

If Council were to adopt the approach outlined in this Study, that would require determining an appropriate zone or zones for all Cooe and Camdale Points, most probably moderated by a site-specific controls. That would preferably be determined within the context of City-wide consideration of how to address the new requirements and still allow flexibility, implicitly required by these and other sites.

As noted earlier the Strategic Management Plans have been formulated with a structural similarity to the West Point Schedule to facilitate a common approach if deemed appropriate.



APPENDIX 1 - COASTAL PROCESSES

A.1.1 TASMANIAN RESPONSE TO FORECAST SEA LEVEL RISE (SLR)

The Tasmanian Department of Justice is responsible for Tasmania's Coastal Vulnerability Assessment project.

State Planning Principles for responding to sea level change are currently being drafted and are likely to reflect a balance between minimising vulnerability and not un-necessarily discouraging use and enjoyment of the coast, along with favouring more natural or natural-like responses where practical and affordable.

Earlier work undertaken in Tasmania includes:

- development of a methodology for assessing the vulnerability of specific shoreline type, Sharples 2006
- Tasmania Coastal Risk Management Plan and methodology that reflects:
 - the resilience of a coastal assets, i.e. its capability to withstand sea water inundation or drenching
 - the effective life of the asset
 - anticipated risk over the asset life
 - assessing, monitoring and prioritising risks for asset managers including local government

A.1.2 FORECAST SEA LEVEL RISE (SLR) IN BURNIE

TERMINOLOGY

The movement of the sea relative to the edge of a landmass is described in terms of:

Sea Level Rise (SLR)	Rise in mean level of the ocean
Bathtub rise	Calm water sea level rise
Mean sea level	The 0 metres contour
Storm surge	Rise in water level above the usual tidal level due to low pressure during a storm event
Recession	Effective movement of land inland due to erosion caused by coastal processes. Occurs at a rate reflecting hardness of the land, shoreline and water topography and exposure to the wave action in a specific location
Wave set up	Increased wave height with wind
Wave run up	Final height and reach over land of waves breaking over the specific land form

OBSERVED SEA LEVEL RISE

Data from the tidal gauge at Burnie are among the data being monitored to assess whether there is relative changes between sea level elevation and land elevation.

The Bureau of Meteorology notes data from the Burnie gauge is inconclusive as it may have been contaminated.

MODELLING

Global reference

The underlying model is the IPCC climate model which uses a range of scenarios to generate global models for sea level change.

Sea level rise modelling in Tasmania derives its methodology in part from the IPCC model.

The Tasmanian models have been run for the middle range of the IPCC scenarios, which forecasts a rise of between 5-88cm by 2100.

The IPCC model is regularly reviewed and refined. With each refinement the models derived from the IPCC global model need to be re-run to reflect the changes in the reference model.

A new update of the IPCC model is anticipated relatively soon.

Available modelling in Tasmania

The Coastal Vulnerability Assessment Project has entailed co-ordination of modelling of sea level rise around Tasmania.

The process of preparing useful information is currently at the 'second pass' stage. This means that while models are suitable for general background planning purposes they are not suitable for site-specific use. Model outcomes are still being confirmed against real conditions and observed changes over time. Clarence Council has undertaken locally-specific third pass modelling for the municipality.

Two different Tasmanian models have been prepared to inform land use planning in Tasmania. The models are based on different components of the suite of coastal processes that could be impacted by forecast sealevel rise:

- Part A model - based simply on rising sealevel understood as the rise above the high tide mark. A number of probabilities were generated for bathtub sea level rise or coastal flooding. The levels reflect the changes in the high tide of the normal intertidal range and has been mapped for reference dates including 2050 and 2100
- Part B model - a joint probability model, reflecting the combined probability of a storm surge water level elevation occurring at the same time as higher astronomical high tide elevation due to climate change. The model has been constructed utilising
 - modelled changes to weather over time including air pressure
 - mathematical probability of the conditions when an event is likely to occur, referring to engineering risk management conventions for combining frequencies of events (which may be revised following review in the light of Yaashi and Brisbane floods)

OTHER FACTORS

The Tasmanian models do not include all factors that may contribute SLR impacts at specific sites.

Although there has not been a site-specific assessment

of coastal processes at Camdale and Cooee Points, the following would impact the 2 points to some degree.

Local microclimate

Wind direction and extent it influences effect wave size. Along the NW coast, strong winds come primarily from east and west, west being the strongest. However Council officers note that recently there have been strong impacts along the coast from east weather.

Both sites are located where wave action would be amplified by wind, although Camdale Point is more sheltered.

Water environment

Swells along Bass Strait are primarily from the west. Average wave height described as 0.7-1m.

Local landside and underwater topography

The detail of local underwater land form can amplify or temper wave height.

The off-shore rock platforms that surround both Camdale and Cooee Points would absorb some of the wave energy and reduce real wave action impacts, including during storm events. That tempering may be altered with sea level rise.

At Camdale waterflow in the Cam River also impacts sea level and wave action.

Potential recession and hardness of the shoreline

Softer rock and consolidated sediments are more vulnerable to wave action and recession inland.

Camdale Point is more vulnerable, with the rubble fill bank breaking up around the north and west and consolidated sands at the east secured by an established belt of coastal scrub. The discrepancies between the High Water Mark title line and current edge of the land form may suggest some loss of land.

Cooee Point is harder with concrete rubble armouring in filled areas, but Council officers have observed erosion on the east shore.

Contingency factor-fudge factor-freeboard

In notes about use of the Tasmanian models, precautionary contingency factors are proposed, including plus 300mm based on a standard factor for flooding contingency or a plus 50m inland.

Neither of these has an argued or scientific justification. In particular 50m inland would have a large impact on potential uses and may not reflect the local situation, for instance the protection offered by Burnie's west coastal rock platform.

DIFFERENTIAL VULNERABILITY ACROSS THE POINTS

Even without the models having been reconciled, common sense suggests that the lowest areas now subject to overwash during storm events would be the first to be impacted by coastal flooding associated with any sea level rise and that elevation and distance from the shore affords some protection.

A.1.3 RESPONSES TO POTENTIAL HAZARDS FROM FORECAST SLR

GREENFIELDS AND BROWN FIELDS SITES

Camdale is close to a greenfields site. There may be existing services including sewer but their condition is unclear and they may require considerable refitting.

It is unlikely that the existing abattoir building on Cooe Point would be retained for any other use.

The appropriate responses depend on:

- The likely extent of change of circumstances and associated risks
- The value of the existing assets and the potential value of assets being considered for construction.

Responses range from avoid, retreat, adapt or protect

PROTECT

Protect the site, for example using dykes or more discretely using a raised water-side roadway, terraced garden or landscaped area to protect an asset.

ADAPT (ALSO CALLED ACCOMMODATE)

There are many ways land uses can adapt to the potential hazard associated with forecast SLR. Some may need to be in place initially, in other instances demonstrating that adaptation is feasible and likely cost effective may be appropriate.

Adaptation responses include:

- Siting - only using the area of site not potentially impacted or least potentially impacted
- Design and construction:
 - elevated floor level (high footings, stilts,

pontoon, elevated levels for paved surfaces

- design of services to include consideration of water level and storm events (includes connection services to a site, i.e. stormwater backflow protection, elevated connections)
- hard watertight construction or ephemeral (removable) buildings in vulnerable locations
- Administration or management:

Key questions about proposed adaptation or a proposal that relies on adaptation include:

- Cost - is adaptation cost effective? Will it require monitoring? Who bears any recurrent or administrative costs?
- Effectiveness - Is it the best way to address the risk? Were other options explored? Does it address the likely range of risk Does it increase vulnerability along the coast
- Implementation - Will it be undertaken if it is a future promise?

AVOID/RETREAT

- Avoidance is similar to siting but on a larger scale.
- Where it entails property acquisition it can be expensive and difficult to implement. Avoidance is more readily accepted if the threat is indisputably evident.
- A key question is whether avoidance removes valuable land from use unnecessarily, especially restrictions on short-term use

A.1.4 COMPARABLE REFERENCE GUIDELINES

FORECAST SEA LEVEL RISE

The modelled levels are comparable to those modelled or implicit in standards for other states.

MODELLED JOINT PROBABILITY STORM EVENT

The Part B Tasmanian joint probability model produces a sea level rise figure, consistent with comparable calculations by others, i.e. other work for Victoria's coastline by CSIRO. and also modelling undertaken for Victoria's 'Future Coasts' project.

SITE-SPECIFIC MODELLING

It has become standard practice to require a site specific response from qualified professionals e.g. recent modelling for Royal Hobart Hospital, UTas Marine Studies building and closer to the BWCA area, the recent figure supplied for West Park of 4.1m.

A.1.5 CONCLUSION AND APPLICATION

CONCLUSION

While the modelling of sea level rise around the coast of Tasmania associated with forecast climate change is still in the Pass 2 stage of resolution, there is sufficient consistency between models to allow it to be used for broad brush strategic planning - provided there is some provision for addressing the potential for refinements with improving accuracy, and also, providing that adaptive responses are not unduly precluded.

APPLICATION TO STRATEGIC MASTER PLANS

The highest water level of the 2 Tasmanian models has been used and combined with a precautionary factor to acknowledge factors not included in the models, to establish 3 risk vulnerability response bands defined by elevation above mean sea level and distance inland

- an area with highest vulnerability to coastal processes, some parts may already be subject to overwash, suitable for:
 - recreation that is supported by resilient landscape elements. paths, furniture, structures etc
 - coastal stabilisation on the consolidated sands at the east end of Camdale Point
 - coastal habitat areas
- a transition band where development may be possible, but would be likely to require some initial adaptation (e.g significant underfloor elevation) and would require coastal risk assessment associated with coastal processes undertaken by a coastal geographer or comparable qualified

and experienced person. This band is based around a smoothed line 700mm above highest modelled figure. This band is likely to receive limited storm impacts but be above inundation

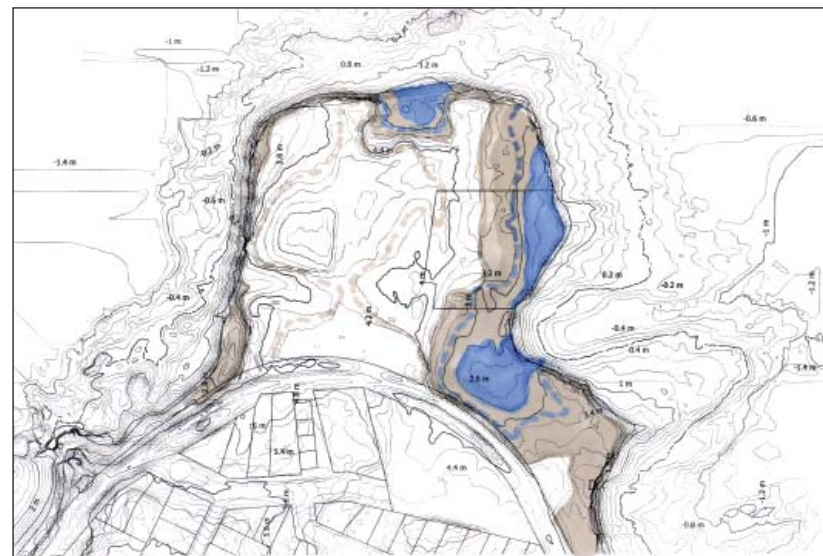
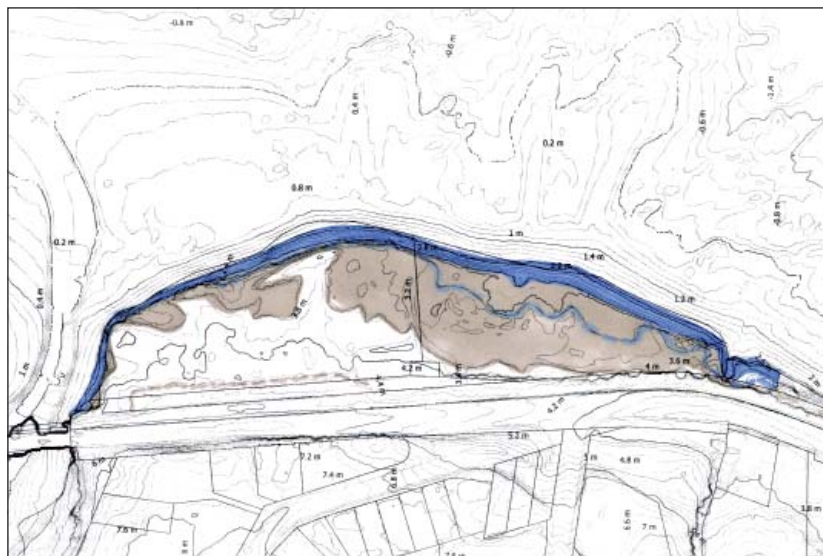
- A least vulnerable area in the most elevated sections where a development might be encouraged, but until locally specific sea level is finalised, and risk responses formulated, development proposed for this area would still require an assessment of risk that uses the best available information at that time. Definition of this area was based on 1.5m elevation above current Tas models and being at least 20m inland.

Coastal vulnerability was one of the elements considered in establishing the sub-precincts of the strategic master plans.

In the indicative case study examples, the figure used for elevation of floors and other features was 4.3 -4.5m (assumes 800mm -1m underfloor) with a reference topographic contour 3.5m, or comparable using fill. Note - This is not a standard.

APPLICATION

Any significant proposal for Camdale or Cooee Points should be informed by a site-specific assessment of risk from coastal processes over the anticipated asset life or duration of that land use, unless a state or local standard or protocol vulnerability of proposals along the coast has been established.







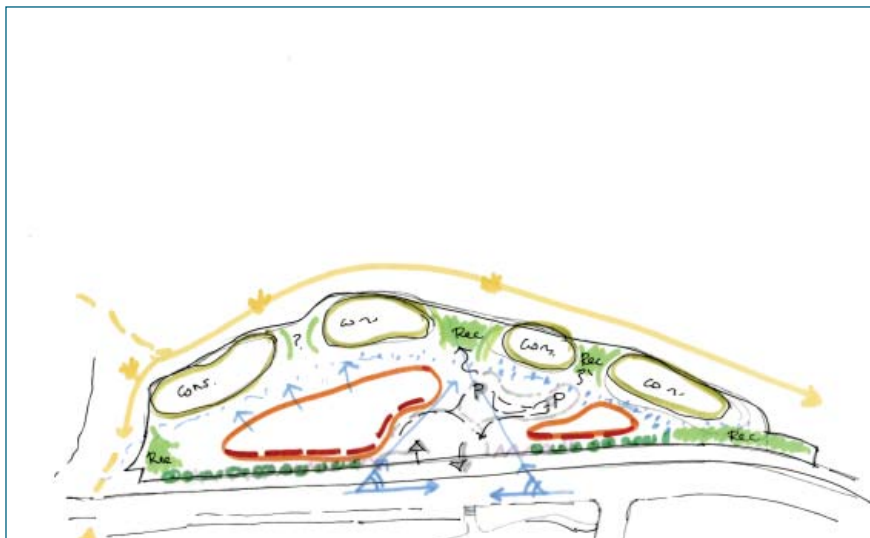
-  2000 - 2050 Sea Level rise current models with out waves
-  2050 - 2100 Sea Level rise current models with out waves
-  2000 - 2050 Sea Level rise with arbitrary factor for storm
-  2050 - 2100 Sea Level rise with arbitrary factor for storm

Figure A1a : Indicative relative vulnerability - used as basis for Strategic Master Plans

APPENDIX 2 - ALTERNATIVE RESPONSES CONSIDERED

ALTERNATIVE SCENARIO 1 RETAIN 2 BEACH ENTRIES

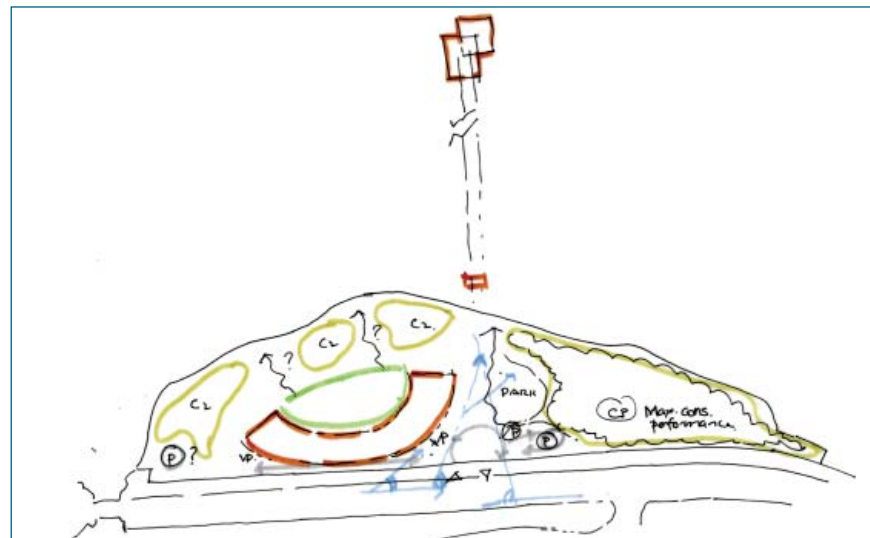
Conservation scattered along north and west shore, Recreation on beach, Use Areas and Circulation South, Existing entry



ADVANTAGES	DISADVANTAGES
Good use of existing landscape works , and entry Existing planting assisting to hold the bank	Alienates or privatises a section of the east area Conservation scattered Current configuration lessens options
ASSESSMENT OF SCENARIO	
Interim - solution., subject to monitoring of the bank	

ALTERNATIVE SCENARIO 2 REGIONAL DESITINATION - PUBLIC PIER ,RESTAURANT

Minor Conservation West, Primary conservation to east, Recreation on beach and internal, Use Areas And Circulation South central and in water, Existing entry from Bass Highway



ADVANTAGES	DISADVANTAGES
Allows to re-locate fishing activity and strengthen conservation Makes hotel a stand alone feature	Would need testing of any coastal geography impacts
ASSESSMENT OF SCENARIO	
Most costly and likely that the context would not justify it at this time	

ALTERNATIVE SCENARIO 3 RETAIN 2 BEACH ENTRIES

Minor Conservation West, Primary conservation to east, Recreation on beach And Use Areas And Circulation South west, Entry from East Cam Road



ADVANTAGES	DISADVANTAGES
Good use of existing landscape works, planting assisting to hold the bank Consolidates a primary conservation area and use area Efficient use of space for beach accesses	Less beach entry Head lights disturbance of conservation area and opportunities to provide 'arrival' views
ASSESSMENT OF SCENARIO	
Could be made to work, if East Cam intersection emerges as the optimum entry	

ALTERNATIVE SCENARIO 4 REGIONAL DESITINATION - PUBLIC PIER ,RESTAURANT

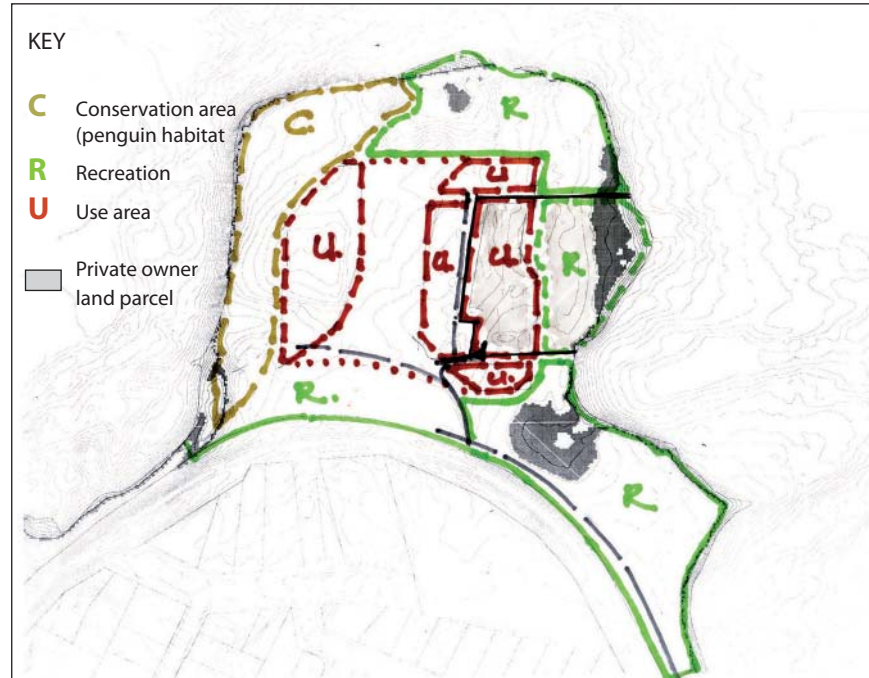
Minor Conservation West, Primary conservation to east, Recreation on beach And Use Areas And Circulation South west, Entry from East Cam Road



ADVANTAGES	DISADVANTAGES
Good use of existing landscape works, planting assisting to hold the bank Consolidates a primary conservation area and use area Efficient use of space for beach accesses A number of use area options	-
ASSESSMENT OF SCENARIO	
Preferred option, subject to resolution of access from Bass Highway	

ALTERNATIVE SCENARIO 1 ABATTOIR LAND REMAINS IN PRIVATE OWNERSHIP

Conservation West, Recreation East And Use Areas And Circulation Central



ADVANTAGES	DISADVANTAGES
<p>Does not rely on other party to commence work.</p> <p>Potentially development could East Use area including the abattoir land could encourage a higher return alternative use of the abattoir /private owner land, more compatible with other uses.</p>	<p>Current configuration lessens options</p>
ASSESSMENT OF SCENARIO	
<p>Could be made to work.</p>	

ALTERNATIVE SCENARIO 2 ABATTOIR PARCEL BOUNDARY REALIGNED OR DISSOLVED



ADVANTAGES	DISADVANTAGES
<p>Allows for freer allocation of activities.</p> <p>Allows for wide range of candidate uses including those such as managed living that need a large site.</p>	<p>Requires 2 land owners to work together on land swaps or acquisitions or long leases.</p>
ASSESSMENT OF SCENARIO	
<p>Potential for the best outcome</p>	

ALTERNATIVE SCENARIO 3 ABATTOIR CONTINUES AS USE

Conservation West, Large Vehicle Camping North And South East

ADVANTAGES	DISADVANTAGES
<p>None evident other than financial advantage to owner.</p> <p>Retains an active abbatiorir, a service that it can be difficult to find appropriate premises for.</p> <p>Continues to provide for short duation large vehicle camping.</p>	<p>The abattoir suppresses other uses: recreation; tourism/accommodation; residential. It uses adjacent Council owned land - alienating more the area.</p> <p>The abattoir is a continuing historic land use, and not consistent with Council strategy. Due to use of the single road in, it is difficult to lessen awareness of kill activity, even if screened. Screening absorbs excessive land.</p> <p>Effect on amenity means large vehicle camping is short term only and no fee collected.</p>
<p>ASSESSMENT OF SCENARIO</p>	
<p>A poor outcome - underutilisation of valuable coastal land for a land use that can be accommodated better in other locations, and so not consistent with the Coastal Policy, effectively sterilises an opportunity site.</p> <p>At best an interim land use pattern.</p>	