MORNINGTON SAFE HARBOUR ENVIRONMENT EFFECTS STATEMENT MORNINGTON PENINSULA PLANNING SCHEME AMENDMENT C107, PLANNING PERMIT APPLICATION CP09/005

INQUIRY REPORT

APRIL 2011

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INQUIRY REPORT

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Nick Wimbush, Chair

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Chris Harty, Member

APRIL 2011

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1. Overview and recommendation in chief

The Mornington Yacht Club (MYC) has established a not-for-profit public company, Mornington Boat Haven Limited (MBHL) to investigate, develop and ultimately manage the proposed Safe Harbour at Mornington.

The Mornington Safe Harbour proposal has the key elements of:

- a 210m harbour wavescreen;
- wavescreens on the existing pier and a small perpendicular pier extension; and
- wet berths for approximately 170 boats behind the harbour wavescreen.

The Environment Effects Statement (EES) prepared by MBHL has been exhibited along with Planning Scheme Amendment C107 to the Mornington Peninsula Planning Scheme and Planning Permit Application CP09/005.

Amendment C107 seeks to rezone the Mornington Harbour from the Public Conservation and Resource Zone (PCRZ) to the Public Park and Recreation Zone (PPRZ). The planning permit application is for the use and development of a Pleasure Boat Facility.

During exhibition 2,018 submissions were received, a substantial number for a project of this size. Submissions were received from local, regional and State stakeholders and were divided between supporters and objectors of the proposal.

Submitters were heard over a 12 day period in February and March 2011 by a two person Inquiry (a third member being taken ill prior to the proceeding commencing) under the *Environment Effects Act*. The same members were also appointed as a Panel under the *Planning and Environment Act*.

Key issues raised in submissions and at the hearing included:

- The safe harbour in policy;
- Landscape and visual impacts;
- Social impacts;
- Coastal processes and water quality;
- Marine ecology;
- Cultural heritage;
- Traffic and parking; and
- Net community benefit.

The inquiry has had a very difficult task in balancing the State and regional policy imperatives for a significant safe harbour with the obvious concern and passion of mostly local people for the harbour as it stands now.

Having considered the issues and submissions in considerable detail and listened to a substantial amount of expert evidence, the Inquiry has concluded that the environmental effects of the project can be effectively managed or mitigated for most issues.

Issues where the impact is unlikely to be able to be mitigated to everyone's satisfaction include those of landscape and visual impact and social effects. On these issues the Inquiry considers the effect of the proposal will be a significant change to Mornington Harbour's values rather than their loss.

In net community benefit terms the Inquiry concludes that overall there will be significant positive community benefit. The Inquiry's rationale for reaching this conclusion is included in detail in the following chapters.

The Inquiry recommends in chief:

Subject to the detailed recommendations in this report, that the environmental effects of the project are manageable and the Mornington Safe Harbour proposal has strong policy support and should proceed.

The detailed recommendations are contained in the issues chapters of this report and summarised in Chapter 16.

2. Background

2.1 The subject site and surrounds

The proposed Safe Harbour is to be located on the existing Mornington Harbour. Mornington Harbour is situated within the Mornington Peninsula Shire. It is located on the east coast of Port Phillip Bay, approximately one kilometre north-west of the Mornington township centre and 55km south east of Melbourne. The harbour is bounded by Schnapper Point to the west and Mornington Pier to the northwest, with three beaches, Mothers, Scout and Shire Hall, forming the southern and eastern coastline boundary. Red Bluff forms the north eastern boundary.

Mornington Harbour and the surrounding area is used for a variety of water-based recreational activities including boating, fishing, diving, swimming and walking, dining and social gatherings along the nearby beaches of Mothers Beach, Scout Beach and Shire Hall Beach.

The coastline surrounding Mornington Harbour is dominated by small pockets of beaches backed by low cliffs with high scenic and amenity value. South of Mornington, from Martha Point to Point Nepean, the coast is dominated by expansive sandy beaches, boat launching facilities and recent marina developments at Blairgowrie and Martha Cove. There are several yacht clubs with launching for small boats and several public boat launching facilities. The largest of these public facilities are at Rye and Sorrento.

The existing harbour supports 60 swing moorings for recreational craft and 30 other berths (including fore and aft moorings on the Fisherman's Jetty and Mornington Pier). The swing moorings are managed by Mornington Yacht Club (MYC) under an agreement with Parks Victoria, with MYC in effect acting as Parks Victoria's mooring agent. Three of the 60 swing moorings are leased by members of the public who are not MYC members, while the remaining 57 swing moorings are leased by individual MYC members. MYC currently manages four berths along Mornington Pier and Fisherman's Jetty under an agreement with Parks Victoria, while two other berths are leased to Schnapper Point Boat Hire.

In addition to the moorings, Mornington Harbour also consists of the historic Mornington Pier, Fisherman's Jetty, the MYC lease area, a public restaurant, a two lane public boat ramp and associated car and trailer parking.

Mornington Pier is approximately 180m long and includes timber bollards and railing, public boat berths and light poles. The Pier is administered by Parks Victoria and used by fishermen, divers, and commercial tour operators and for public berthing.

Fisherman's Jetty extends to the harbour in front of the MYC building and provides public boat berths, light poles and security fencing. The jetty is administered by Parks Victoria. There are also a number of mooring bollards provided in the harbour in the vicinity of the jetty. MYC occupies a 5745 m^2 lease area south of the Mornington Pier.

MYC facilities comprise a two storey clubhouse, slipway, a launching crane with a two tonne capacity, a wash down facility, a fenced dry storage area for approximately 40 boats and four car parking spaces. During the warmer months the dry storage is used for dinghies, and in the winter primarily for keel boats which have to be removed from their moorings due to the seasonal predominance of northerly winds.

Approximately 443 car spaces are available in the foreshore precinct. This includes the Schnapper Point public car park, on-road parking along Schnapper Point Drive and Flinders Drive, Mothers' Beach car park, and the BBQ area car park, the Esplanade and public car park to the south of the MYC building. The public car park includes 38 car and trailer parking spaces and 83 spaces for other vehicles. Trailer parking is charged for, while other spaces are free with no time restrictions.

Beaches to the south-east of the MYC are administered by the Mornington Peninsula Shire Council (MPSC). Mothers Beach is an expansive beach with toilet facilities and a stairway providing access to the cliff top above. Scout Beach includes the Sea Scout building and boat hire building. A rock reef, with a channel through which boats launch, is adjacent to Scout Beach. Shire Hall beach is narrow and includes a substantial number of bathing boxes.

Mornington Park provides a range of recreation facilities and other surrounding cliff top areas provide recreation opportunities. Two historic sites, the Schnapper Point Exploration Site and the Football Disaster Memorial, are also located within the vicinity of Mornington Harbour.

The Mornington Activity Centre is located to the south-east of the harbour across the Esplanade. It is a strip shopping centre extending approximately 1.5 kilometres northward along Main Street from the intersection with the Nepean Highway to the Esplanade.

The existing conditions are shown in Figures 1 and 2.

Figure 1: Existing situation

Figure 2: Mornington Harbour showing Mornington Pier under reconstruction and existing swing moorings

2.2 Previous proposals at Mornington

2.2.1 1987 Design

The 1987 design was developed by GHD Macknight in a report entitled *Mornington Safe Harbour Feasibility Study*. The design, which would have accommodated 300 boats, involved the construction of a 300m rock breakwater that followed the alignment of the pier. It extended past the pier in a curve out to the 9m contour, before veering towards the shoreline. A number of breakwater designs were considered including a rubble mound, concrete caissons, caisson-rubble mound combination, wavescreen, tubular pile, concrete sheet pile, and floating. Although the rubble mound breakwater was identified as the most economic form of protection, the 1987 study did not make a final recommendation on the preferred design.

Environmental concerns existed in relation to this design. These included impacts on water circulation patterns, such as the potential accumulation of 'seamud' and algae under certain conditions, with estimated residence times being 7-10 days. There were also concerns about the impact on coastal processes, as it was estimated that the proposal would lead to the net transportation of up to 10,000m^3 of sand per year.

2.2.2 1991 Design

The Mornington Boating Facilities Study (*Loder & Bayly Consulting Group, 1990*) (the previous EES, exhibited in 1991) was undertaken to provide a strategic assessment of potential alternative locations for a Safe Harbour. These included Royal Beach (northern and western orientations), Linley Point and South of Linley Point. Mornington Harbour was considered the most appropriate location. This was known as the 'Preferred Development Concept'.

The 'Preferred Development Concept' comprised either a timber jetty or a rock breakwater, which extended past the end of the pier by about 14 metres and then turned at a right angle of approximately 150 metres long. This would enclose floating pontoons to provide berths for 150 boats. The fishing fleet would be relocated to the new arm of the jetty, leaving additional mooring space in front of the Yacht Club and kiosk. A 150 seat restaurant was proposed at the base of the present jetty.

In 1991, the Panel appointed by the Minister for Planning reported on the previous EES. The 1990 Loder and Bayly design was the preferred option at the commencement of the hearing however the 1987 design was also considered. The Panel recommended that Mornington be upgraded to a Safe

Harbour generally following the breakwater alignment shown on the 1987 plan. The Panel also recommended that the site be rezoned to the Harbour Zone. Having assessed the EES, the Panel stated that it was:

> *…completely confident that Mornington Harbour can be redeveloped to provide a safe harbour and that any environmental impact can be effectively accommodated in a final concept.*[1]

Options other than the 'Preferred Development Concept'

The 1991 Panel made the following comments in relation to the other design options presented at the Hearing (Royal Beach, Linley Point and South of Linley Point):

- The development of a new safe harbour at these locations would result in a change to the character of both places, with cliff environments and possibly habitats being destructively altered;
- The alternative locations would require construction of major new access roads down the cliffs, causing disturbance to existing coastal vegetation and natural habitat;
- The two options at Royal Beach had considerable merit but were not supported by the Mornington Environment Association (MEA) and Campaign to Defend the Foreshore (CDF). Whilst Royal Beach allowed cheaper construction costs for a breakwater as the water is shallower, the Panel concluded that '*those groups would give no genuine support to any harbour or marina proposal at any location'*. In addition, the Panel noted that it would be '*extremely destructive'* to alter the '*wild coast character of Royal Beach'*;[2]
- Close proximity of the Safe Harbour to the township was desirable which meant that the options south of Linley Point were not preferred; and
- Mornington Harbour would be less affected by additional development as it already has a number of man-made structures. In addition, it has good road access, shares recreational facilities such as Mornington Park, along with access to the town's commercial activity centre. According to the Panel, *'careful and sensitive development'* would not threaten Mothers Beach and other adjacent recreational uses.

1 1991 Panel Report, p13.

2 1991 Panel Report, p17.

2.2.3 Outcomes post-1991 Report

In August 1993, the Minister for Planning accepted the 1991 Panel report subject to minor changes. The Minister commented that the project should be based on the 'Preferred Development Concept' (the 1991 design), but:

> *…if circumstances dictate the need for something larger, then a development up to the scale of the GHD Macknight proposal* (the 1987 Design*) should be contemplated. The exact design should be finalised by the proponent with the assistance of experts in coastal processes.*[3]

The site at Schnapper Point which was proposed for the restaurant in the EES and recommended by the Panel was not accepted.[4]

In the Assessment of Environmental Effects, the Minister made the comment that:

> *The need for a safe haven…seems to be clear…What is also clear is that the community of Mornington and elsewhere attaches a high value to the beach area adjacent to the Yacht Club…and anything which impinges adversely on the integrity of that will not be accepted easily*[5]*.*

In May 1994, the Minister wrote to the Mornington Shire President, having received joint advice from Dr Eric Bird and Professor John Hinwood following a meeting with the Department of Planning and Development.[6] The letter from the Minister stated that a marina at Mornington was not appropriate and that:

> *…any future proposal for a marina in the vicinity of Mornington should be outside the Mornington Harbour, and would require an extensive, in-depth, study.*[7]

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3 The Honourable Robert Maclellan, Minister for Planning, Letter to the Mornington Shire President and Councillors, (10 August 1993).

4 However, the Minister stated that a restaurant would potentially be better located within or adjacent to the Yacht Club.

5 Mornington Boating Facilities Development: Assessment of Environmental Effects (August 2003), p1.

6 The advice in Dr Bird and Professor Hinwood's letter included comments about potential issues related to flushing and water quality and impacts on surrounding beaches such as Scout Beach and Mothers Beach, which were associated with a full depth rock breakwater design. As the site would result in additional sand accumulation at Scout Beach and Mothers Beach and on the Harbour floor, routine maintenance dredging would be required. Constructing harbours at Royal Beach or Linley Point as an alternative would involve less risk of sand accreditation and reduce the need for dredging and maintenance. However, these options would require construction in deeper water, and a thorough investigation would be needed to assess the various environmental consequences.

7 The Honourable Robert Maclellan, Minister for Planning, Letter to Mornington Shire President Councillor John Armitage (2 May 1994).

The Minister further commented about whether the rock wall could be extended out on the seaward side of the pier for its full length and that studies could be conducted into the form of such a proposal and to minimise the need for maintenance dredging.

The current Inquiry notes that the Minister based his comments on flushing, water quality and sand movement which related to a full depth rock breakwater design. These issues are still relevant and are addressed in the current EES and in this report. In relation to the Minister's statement that any future proposal should be outside the harbour, the Inquiry simply notes that the current proposal has come forward in the harbour and it has been appointed to consider the merits of the design put forward.

2.3 The current safe harbour proposal

The proposed development (refer to Figure 3) comprises:

- A north facing harbour wavescreen (refer to Figure 4), to be located east of the existing Mornington Pier, approximately 210m in length and along the 7m depth contour;
- A north west facing wavescreen along the full length of Mornington Pier and a pier extension, approximately 20m in length;
- Approximately 170 floating berths arranged as marina pens, generally orientated in a north-south arrangement, to be installed in stages;
- 'Fore and aft' moorings (eight) to the south of the third marina arm;
- Swing moorings (12) to the east of the first, second and third marina arms;
- A number of short term public (10) and emergency and police berths (10) along the new public jetty and adjacent areas, in addition to the marina berths;
- A new public jetty parallel to the south of the existing Mornington Pier to provide access to the marina berths and a public walkway and viewing platform above the harbour wavescreen; and
- Provision for disabled access via the low level public jetty.

A number of ancillary facilities are proposed including delineated fairways to the public boat ramp and Mornington Pier, a travel lift (refer to Figure 5) and a re-fuelling facility and sewerage pump-out facility (refer to Figure 6).

The objectives considered in the development of the Mornington Safe Harbour proposal are as follows:

- Reduce the wave climate in the harbour to protect moored vessels, boats using launching ramps, swimmers, kayakers, emergency services vessels

and commercial vessels from seas generated during storm events from the west to the north;

- Provide safe access to the harbour all year round in all weather conditions; provide new and improved facilities for users of the harbour; and
- Enhance emergency response capability and public safety by enabling rescue boats to be launched from the public boat ramp in northerly storm conditions and through the provision of emergency refuge, emergency services and police berths.

Figure 3: The proposal

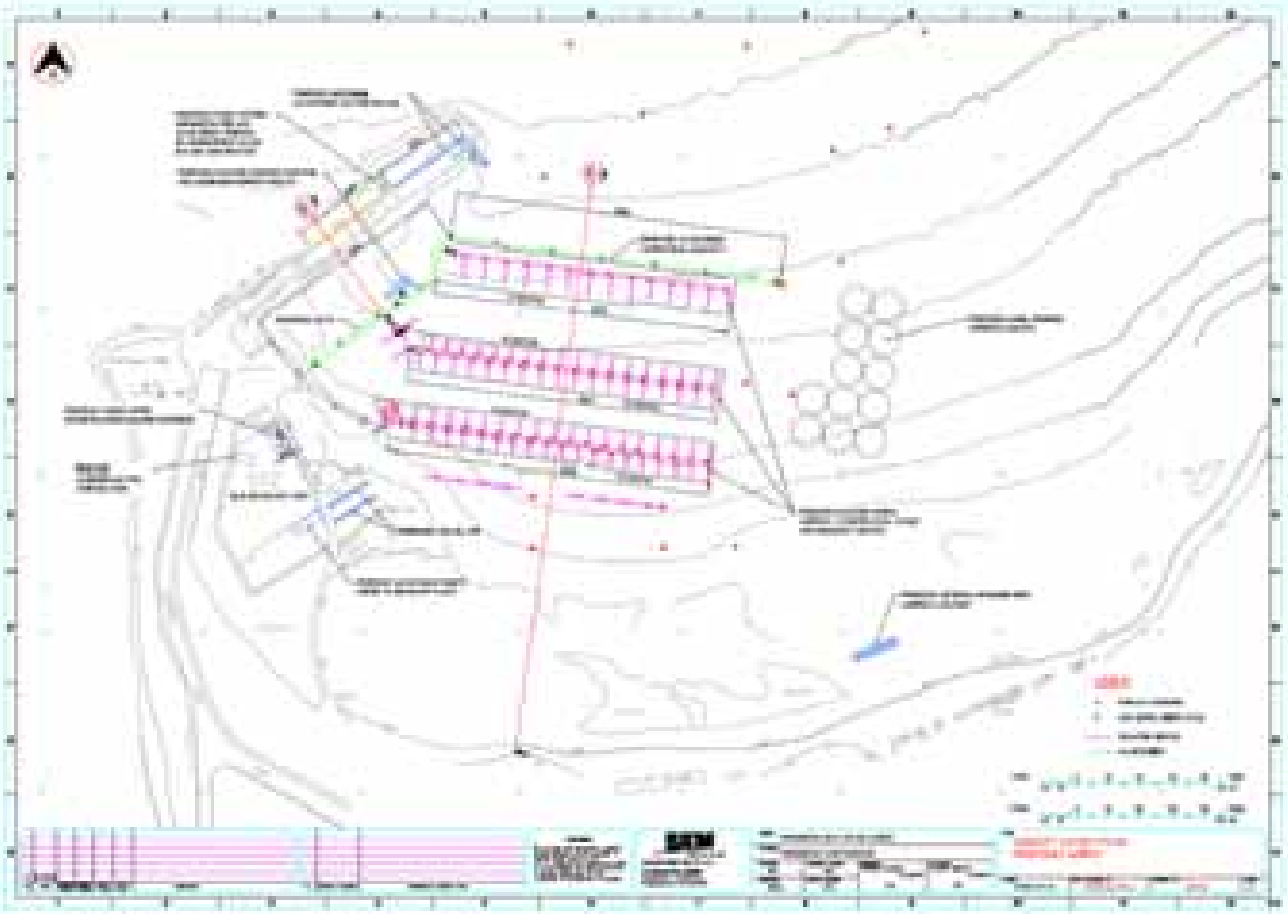

Figure 4: The wavescreen at the Blairgowrie Marina

Figure 5: An example of a travel lift (Sandringham Yacht Club)

Figure 6: An example of a sewage and re-fuelling facilities (Sandringham Yacht Club)

2.4 Submissions on the current proposal

An outline of the Environment Effects Statement (EES) process is shown in Appendix B. The proposal put forward attracted 2,018 submissions which is an extremely high number for an EES.

The submissions were split roughly equally in support and objecting to the proposal with a slight majority in support. They were a mix of personally written submissions, form letters and form letters with additional comments on them.

Approximately half of the submissions were from the Mornington postcode and of these a slight majority were in opposition to the proposal. As Mornington Harbour serves a regional as well as local role it is not surprising that there may be some tension amongst the local submitters but also between local submitters compared to broader regional submitters.

In considering the submissions the Inquiry has read all of them and considered the issues raised, many of which are raised multiple times. Given the number of submissions and the extensive nature of many the Inquiry has not responded individually to every submission but has rather drawn on them in the relevant issues chapter as necessary.

The Inquiry has been assisted by, but not relied on, the submission summary presented to Mornington Peninsula Shire Council in the Officer's Report of 18 October 2010.

A list of those who made submissions at the hearing is attached in Appendix B4 and a complete list of submitters is attached in Appendix C.

2.5 Consideration of alternatives

The current EES was prepared by Sinclair Knight Merz (SKM). The following options were considered in its development:

- the 'no build' option;
- the construction of the Pier Wavescreen (without the Harbour Wavescreen);
- the construction of the Harbour Wavescreen (without the Pier Wavescreen); and
- the construction of the Pier Wavescreen, the Harbour Wavescreen and the Pier return (the preferred option).

The wave climate investigation determined that the first three options would not be sufficient to achieve a 'good' wave climate within the harbour, based on the Australian Standard AS3962—2001 *Guidelines for Design of Marinas*.

The fourth (preferred) option above initially involved the construction of the Pier Wavescreen and the Harbour Wavescreen, but not the Pier Return. The EES investigations determined that this development would result in a good wave climate throughout the harbour under virtually all conditions, and the public berthing areas adjacent to the pier would receive greater protection. However, the proposal was modified to incorporate the Pier Return to further enhance conditions in the area, increasing usability and safety of the pier berths without causing any additional effects to hydrodynamics or coastal processes.

The issue of options or alternatives was considered by the EES Technical Reference Group (TRG) on a number of occasions. Mornington Peninsula Shire Council indicated in the hearing that they had tried through the TRG to have more options considered, particularly relating to development of a smaller scale facility but these requests were generally not met (see Document 31 from the hearing).

A number of submitters suggested that the lack of alternatives in the EES (either locations or design) was a fundamental flaw in the process and that it does not allow the Inquiry to properly consider other, possibly superior, options.

2.5.1 Discussion

The Inquiry has considered the proposal as put forward and the various alternatives offered by the Proponent and suggestions from submitters. Without further detailed information on other designs it is difficult for the Inquiry to determine if there may be a better design solution. Submitters have suggested that this is the very point; that the Proponent should have prepared and assessed other design options with different scale, design and appearance.

Are there better options available? Possibly, but the Inquiry can only draw conclusions on the options and alternatives before it, and no other well considered development proposal has come forward through the process from any party.

In relation to location, the Inquiry tends to agree with the previous Panel from 1991. That is, it seems to the Inquiry that use of the already developed Mornington Harbour for a safe harbour is far superior than consideration of a 'greenfields' site outside the harbour. As discussed in Chapter 4 below the Inquiry also considers this is the correct view on the basis of policy.

2.5.2 Conclusion

The Inquiry notes the submissions suggesting that additional alternatives should have been developed for consideration in the EES. Having viewed the alternatives put forward it is satisfied that the range of alternatives as outlined in Section 2.5 above is reasonable in the context of an EES Inquiry.

2.6 Main approvals required

The relevant legislative and policy framework for the proposal is set out in Chapter 4 of the main volume of the EES. The key legislation to be considered in determining whether the proposal should proceed is discussed below.

2.6.1 Environment Effects Act 1978

The Minister for Planning determined on 1 August 2005 that the project required an EES under the *Environment Effects Act* 1978. Under Section 8(c) of the *Environment Effects Act* decision makers can not make decisions on the project until the Minister for Planning has completed his assessment.

Thus the Minister for Planning does not actually issue an approval or refusal under this Act but makes an assessment of its environments effects which is provided to the decision maker under relevant legislation.

The Minister's determination that an EES is required has resulted in the preparation and exhibition of the EES documentation and the holding of a public inquiry leading to the preparation of this report.

The Inquiry has undertaken its task in accordance with the Terms of Reference included in Appendix A.

2.6.2 Planning and Environment Act 1987

The *Planning and Environment Act* provides the framework for planning in Victoria including providing the statutory head of power for the Mornington Peninsula Planning Scheme.

A rezoning (Amendment C107) for the project area from Public Conservation and Resource Zone to Public Park and Recreation Zone is sought by Mornington Boat Haven Limited to facilitate the development of the Mornington Safe Harbour.

Under this new zone a Pleasure Boat Facility requires a planning permit (Planning Permit Application No CP09/005).

The Mornington Peninsula Shire Council is the Planning Authority for the amendment and the Responsible Authority for determining the permit. The Inquiry appointed to consider submissions to the EES was also appointed as a Panel under the provisions of the *Planning and Environment Act*.

The amendment and permit are considered in Part 2 of this report.

2.6.3 Coastal Management Act 1995

Coastal Crown land is defined as the seabed of the waters of Victoria and Crown land up to 200m inland from the high water mark. The Mornington Safe Harbour and ancillary facilities are located on coastal Crown land.

Under Division 4 of the *Coastal Management Act* 1995, consent from the Minister for Environment and Climate Change is required to use or develop coastal Crown land. This process is a separate application to the planning permit requirement and there is no statutory third party involvement in the process. The responsible Minister must consider the Minister for Planning's assessment of the EES in making their decision under the *Coastal Management Act.*

2.6.4 Aboriginal Heritage Act 2006

An EES triggers the requirement for a Cultural Heritage Management Plan (CHMP) under the *Aboriginal Heritage Act* 2006. A planning permit under the *Planning and Environment Act* 1987 can not be issued until the CHMP has been prepared and approved by the Registered Aboriginal Party.

The CHMP includes an assessment of Aboriginal heritage values and management and mitigation measures to protect such values. A CHMP has been prepared and approved for the Mornington Safe Harbour. This is discussed further in Section 9.1 of this report.

2.6.5 Environment Protection and Biodiversity Conservation Act 1999[8]

The Proponent did not consider during the development of the EES that any matters of National Environmental Significance under the *Environment Protection and Biodiversity Conservation Act* 1999 would be adversely affected by the project.

During the hearing, because of the possibility of listed marine species being present, the Proponent indicated that they would refer the project to the Commonwealth as a precaution.

2.7 Approach taken to this assessment

The Mornington Safe Harbour is a complex proposal with a number of statutory approvals required. The Inquiry has been appointed to consider the EES, the planning scheme amendment and the planning permit application.

These elements are closely interlinked but also have separate elements such as the evaluation objectives for the EES compared to the strategic assessment guidelines for planning scheme amendments and the planning scheme policy frameworks, zoning provisions and decision guidelines for the permit.

The Inquiry has divided the report into two parts to manage these elements as follows:

- Part 1 focuses on the environment effects including an evaluation of the project against the evaluation objectives from the project Assessment Guidelines;
- Part 2 focuses on the strategic and statutory planning elements whilst drawing on the overall assessment in Part 1.

A summary of recommendations is provided in Chapter 16.

[8] Commonwealth legislation

Part 1 - Environment effects

3. Inquiry approach to assessment of effects

3.1 Existing evaluation objectives and performance criteria

The evaluation objectives from the Assessment Guidelines and the performance criteria developed from them are shown in Table 1 below in the order presented in those documents.

In the following chapters the Inquiry considers these objectives and performance criteria against the submissions and evidence it has before it. The issues have been re-ordered by the Inquiry to reflect their relative significance in the deliberations.

Table 1: Evaluation objectives and performance criteria

Evaluation objective from Assessment Guidelines	Performance Criteria in EES (Table 9-1)	Chapter in this report
To provide for the development of enhanced safe boat harbour facilities at Mornington, consistent with the provisions of the *Victorian Coastal Strategy 2002*.	Provide for the development of enhanced safe boat harbour facilities at Mornington, consistent with the provisions of the Victorian Coastal Strategy.	4
To avoid or minimise as far as practicable adverse impacts on the seasonal dynamics and long term stability of beaches adjacent to the proposed development.	Avoid, or minimise as far as practicable, adverse impacts on the seasonal dynamics and long-term stability of beaches adjacent to the proposed development.	7
To minimise as far as practicable adverse impacts on water quality within and in the vicinity of the harbour.	Minimise as far as practicable adverse impacts on water quality within and in the vicinity of the harbour.	7
To minimise as far as practicable adverse impacts on marine ecological values within the harbour and its vicinity	Minimise as far as practicable adverse impacts on marine ecological values within the harbour and its vicinity.	8
To avoid significant risks to public health and safety.	Avoid significant risks to public health and safety.	4.4[9]

[9] The Inquiry considers the primary health and safety risk relates to harbour entrance and exit in adverse conditions.

Evaluation objective from Assessment Guidelines	Performance Criteria in EES (Table 9-1)	Chapter in this report
To avoid as far as practicable, adverse impacts on sites of cultural heritage including Mornington Pier and any historic shipwrecks.	Avoid as far as practicable, adverse impacts on sites of cultural heritage (Indigenous and non-Indigenous), including Mornington Pier and any historic shipwrecks.	9
Establish the basis for an environmentally acceptable and sustainable management regime for the construction and operation of the proposed development, especially with respect to parameters relevant to coastal processes, water quality, marine ecology and cultural heritage.	Establish the basis for an environmentally acceptable and sustainable management regime for construction and operation of the proposed development, particularly with respect to coastal processes, water quality, marine ecology and cultural heritage.	13
	Ensure that the proposed development is compatible with the existing landscape values and minimises potential visual impacts.	5
	Maintain compliance with noise criteria during construction and operation	11.2
	Minimise greenhouse gas emissions during construction and operation	11.2
	Identify strategies to meet projected traffic and parking demands	10
	Undertake stakeholder consultation throughout the EES process	11.1
	Ensure that the proposed development achieves a net community benefit	12

Most of the objectives and performance criteria require an element of judgement (for example 'avoid as far as practicable') and this goes to the heart of the Inquiry's assessment of environmental effects.

This is done in the following chapters by reflection on the exhibited material, submissions and evidence received by the Inquiry and a discussion of key issues before conclusions are drawn and a recommendation made.

The relevant evaluation criteria or performance standard are restated at the commencement of each chapter prior to the Inquiry's assessment.

3.2 New evaluation objective

From reading submissions and during the hearing it became apparent that the social effects of the project, both negative and positive, are a significant element in the consideration of the proposal. Having reviewed the existing evaluation objectives the Inquiry considers there is not an existing evaluation objective that effectively covers this issue.

Whilst 'net community benefit' provides an overall balance of assessment, the Inquiry considers that the social effects warrant their own objective. The Inquiry has framed the objective as:

> *To maximise positive social effects from the project whilst minimising negative social effects.*

Consideration of this issue and objective is provided in Chapter 6.

4. Provision of a safe harbour

Evaluation Objective: Provide for the development of enhanced safe boat harbour facilities at Mornington, consistent with the provisions of the Victorian Coastal Strategy.

Evaluation Objective: Avoid significant risks to public health and safety.

4.1 Background and key issues

From an initial reading of the evaluation objective above, the provision of a safe harbour at Mornington would appear to be a relatively simple objective. However this has proved not to be the case and the issue of a safe harbour, what it may entail, for whom it is safe and whether the current proposal is indeed a safe harbour attracted considerable debate in the hearing.

On reflection this should come as no surprise as the definitional aspects also attracted some attention during the assessment of previous proposals.[10]

Having reviewed submissions, heard from a number of parties and carefully analysed the policy basis for a safe harbour, the Inquiry considers the key issues are:

- The position and interrelationships of various state and local policy documents as they relate to the proposal including:
  - The Victorian Coastal Strategy (VCS);
  - The Central Region Boating Coastal Action Plan (BCAP);
  - The Mount Eliza to Point Nepean Coastal Action Plan (MEPNCAP); and
  - Other relevant plans such as the Schnapper Point Framework Plan (SPFP) and the Mornington Foreshore Coastal Management Plan (in preparation);
- The definition of a safe harbour and the relationship of the proposal to this definition; and
- Whether the proposal as put forward will actually provide a safe harbour, particularly in relation to entrance and egress under difficult north and north west weather conditions and would an alternative such as Martha Cove act as a more appropriate safe harbour facility.

[10] See for example p 9 of the 1991 Panel report

4.2 The policy background

This section focuses on the key coastal policies with some reference to the Mornington Peninsula Planning Scheme. The assessment of the planning scheme amendment and permit are discussed in Part 2 of this report.

The most relevant coastal policy documents in the Inquiry's mind are:

- The Victorian Coastal Strategy (VCS) adopted by Government in 2008;
- The Central Region Boating Coastal Action Plan (BCAP) adopted by Government in 2007; and
- The Mount Eliza to Point Nepean Coastal Action Plan (MEPNCAP) adopted by Government in 2005.

These documents and their relationship to each other and the Mornington Peninsula Planning Scheme are discussed below.

4.2.1 Submissions and evidence

Mr Phil Bisset for the Proponent submitted at the hearing that there is strong policy support for the project in State coastal policy and particularly in the Victorian Coastal Strategy (VCS) and Boating Coastal Action Plan (BCAP).

Mr Bisset emphasised the nature of the network approach to boating facilities in Port Phillip Bay encouraged by both policies and particularly the BCAP. That is the facilities as they are developed are complementary to each other, not choices for possible locations. He also submitted that Mornington is clearly identified for a significant regional facility in these policies.

The referencing of the VCS and BCAP and Parks Victoria's *Our Bays Vision: The Bays and Maritime Initiative* in the Mornington Peninsula Planning scheme was also put to the Inquiry as supporting the development of a safe harbour at Mornington generally and this project specifically.

Mr Bisset submitted that the project is also consistent with local planning policy (at Clause 21.08), which while not providing specific direction for the harbour does provide the protection and development of coastal areas. Coastal development in this case being focused on coastal dependent uses in accordance with the VCS.

In his submission Mr Bisset drew the analogy with activity centre planning in Melbourne. That is, a number of centres are to take significant growth with increasing intensity of development but broad areas of metropolitan Melbourne are unlikely to see significant changes in density. He suggested that planning for regional boating facilities is similar in that existing developed areas on the coast such as Mornington will and should continue to

be the focus for new and upgraded boating infrastructure, with the rest of the Port Phillip Bay coastline remaining relatively undeveloped.

Many submitters were critical of the lack of specific demand assessment for the project, suggesting that any need could be met via existing and planned facilities such as Martha Cove and the proposed marina at Olivers Hill in Frankston.

Mr Bisset noted in response that Martha Cove is some distance away and may not be suitable for all boats due to the depth limitations of the entrance channel, as well as noting that the BCAP and Mt Eliza to Point Nepean CAP (MEPNCAP) both identify increasing demand for recreational boating.

In submissions for MPSC, Mr Terry Montebello also identified a number of key elements of coastal and planning policy and pointed out to the Inquiry that having regard to coastal policies is important but can not override the discretions required in making decisions under the planning scheme.

Mr Montebello also suggested that the BCAP has a number of weaknesses in that it fails to undertake the demand assessment required in policy 1 of Section 3.1.2 of the VCS or provide the level of protection of the environment and landscape required in the hierarchy of principles of the VCS.

He concluded on the BCAP by suggesting there was only qualified support for the development of a safe harbour at Mornington on the basis of the need to protect Mothers Beach; safety in all conditions may be difficult to achieve; other facilities planned and in existence are a relevant factor in decision making and that Mornington may not be as high a priority as these other facilities.

Mr Montebello also took the Inquiry through a number of elements in the MEPNCAP particularly related to demand to suggest that there are other elements of local recreational boating planning that need to come forward before the harbour redevelopment can be properly considered. Mr Barnaby Chessell for the MEA also drew these matters to the Inquiry's attention and suggested that the Inquiry should look closely at the interrelationship between the two coastal action plans in particular.

Mr Montebello, questioned the status of the BCAP, suggesting that as it had been prepared for an *issue* (boating) rather than a *region*, it may actually be in contravention of the *Coastal Management Act* 1995 and thus *ultra vires*. The other legally qualified advocates in the hearing did not endorse Mr Montebello's conclusions on this issue. The Inquiry notes the submission from Mr Montebello, however it acknowledges the fact that issue based Coastal Action Plans have been prepared and approved by successive State

Governments for over nearly 15 years without any apparent concern being expressed.

The Central Coast Board, in their submission, suggested that the development of a safe harbour is consistent with the BCAP and MEPNCAP but that it should be carefully considered in the context of the range of other user groups and the potential impacts on Mothers Beach.

4.2.2 Discussion

It is clear to the Inquiry that Mornington Harbour has been identified in coastal policy as a site for further development of boating infrastructure for well over twenty years.

In the 1991 EES Panel Report the Panel noted at page 22 in relation to policies:

> *In summary, the Panel believes that an upgraded harbour and improved facilities are completely in accord with all relevant Government policies and, in fact, would be essential if those policies are to be implemented.*

The Victorian Coastal Strategies prepared since the *Coastal Management Act* was passed in 1995 (1997, 2002, 2008) have all recognised Mornington Harbour as a strategic site for providing enhanced boating facilities.

In relation to demand assessment, the VCS requires that a demand assessment be carried out to inform the preparation of a boating coastal action plan. However it is the understanding of the Inquiry that a demand assessment was undertaken to inform the BCAP. This assessment, part of the *Background Report on Boating Facilities and Trends* suggested annual growth in boat registrations in Victoria from 1998 to 2002 of about 3%.

It could be argued that this data is now out of date; may be of limited use in a post global financial crisis world; and may be hard to apply to Mornington Harbour. However the fact remains that the demand assessment has been undertaken and shows significant growth in boating registrations. This is borne out in practical terms by the observation of the intense use of existing boating facilities at different times in Port Phillip Bay, both at harbours and boat ramps.

There is nothing in policy that suggests redevelopment of Mornington Harbour should be contingent on other projects in other locations. The network of boating facilities countenanced in policy is meant to be just that; a range of boating destinations with safety, economic and social benefits for Port Phillip Bay (and environmental for issues such as sewage pump out).

In relation to the various coastal policy documents (the VCS, BCAP and MEPNCAP in particular), the Inquiry notes that due to the different times of preparation and scope there may be minor inconsistencies between them. For example it may have been ideal for more local boating planning to have been undertaken as per the MEPNCAP prior to this project coming forward and to even inform the BCAP. However planning does not stand still and decision makers frequently have to work with policy as it stands and interpret policy as it stands, not in an ideal world.

Whilst there may be differences in the boating policy for Mornington, the Inquiry does not consider they are substantive. There is nothing in policy that suggests further development of the Mornington Harbour should not be undertaken or that it is not an appropriate place for a regional boating facility/safe harbour.

Furthermore the BCAP explicitly encourages private investment in Mornington Harbour where it is tied to maximising public benefit. This particular issue is discussed further in Section 11.3.

Conversely, there is nothing in policy that suggests Mornington Harbour should be intensively developed at any cost. Implementation of boating policy and consideration and assessment against the planning scheme must undertake a balancing exercise of the various needs and values to arrive at an acceptable outcome.

The Central Coastal Board in particular was careful to stress that the safe harbour development must be seen in the context of other harbour users and local impacts.

The critical question, is, and perhaps always has been, what level of development should occur and what level of impact on the local environment and community might be acceptable. More specifically, does the project before this Inquiry effectively provide the regional boating facility/safe harbour supported by policy? This question will be considered in the various issues chapters to follow.

4.3 Definition of a safe harbour

As discussed above there was no dispute in the hearing that Mornington is a Regional Boating Facility in the key state and regional coastal policy documents. However beyond this, there was considerable disagreement around definitions.

The essence of the debate was around the terms safe harbour and marina. More specifically, should or must a safe harbour by definition include a marina?

Some of the key definitions in coastal policy documents are shown in Table 2 below.

Table 2: Definitions in coastal policy documents

Definition	*Victorian Coastal Strategy 2008*	*Boating Coastal Action Plan 2007*
Regional Boating Facility	A Regional Boating Facility accommodates a significant amount of recreational boating in appropriate conditions. These include multiple boat ramps, jetties, substantial car parking, safety measures where required and significant offshore facilities such as fish cleaning facilities, wash down areas and toilets. A site satisfying this level of hierarchy generates a significant level of boating activity from a wide catchment.[11]	A regional boating facility will either provide a range of services and facilities at one location (e.g. at a harbour or marina) or be one regional facility such as a regional boat ramp that, due to its size, provides for a large catchment.[12]
Safe Harbour	No definition	Areas where boaters can find anchorage or shelter from unexpected or unfavourable weather conditions from a specific direction. A safe harbour may not be safe in adverse weather from all directions, and may not necessarily enable launch and retrieval in all conditions.[13]
Marina[14]	No definition	A permanent boat storage facility usually comprised of one or more of pontoons, jetties, piers, or similar structures designed or adapted to provide

[11] From Figure 11 on p86.

[12] From Table 1 in BCAP, p24

[13] From BCAP p106

[14] For contrast to the BCAP the Macquarie Dictionary offers the rather more concise definition of a marina as 'a facility offering docking and other services for small craft'.

Definition	*Victorian Coastal Strategy 2008*	*Boating Coastal Action Plan 2007*
		berthing for craft used primarily for pleasure or recreation, located on the waterway. May include ancillary works on an adjoining area of land or the waterway such as slipways, facilities for the repair and maintenance of boats and the provision of fuel, provisions and accessories, and include any single mooring or multiple mooring managed in association with the facility and in its vicinity.[15]

There is some internal inconsistency in the documents. For example, Table 1 in the BCAP gives the Regional Boating Facility definition as above which suggests that a large boat ramp might constitute such a facility. However Table 3 in its list of facilities and services to be provided *requires* the provision of public berths, wet berths and dry berths at a regional facility.

4.3.1 Submissions and evidence

The Inquiry wrote to the Victorian Coastal Council (VCC) for its opinion on these matters, and particularly the treatment of safe harbours and marinas between the 2002 and 2008 (current) Victorian Coastal Strategy. In its response the VCC (Document 72) noted in part:

> *While the Safe Harbour definition of the VCS 2002 '… would include marinas….' it became clear during the development of the Central Region Boating CAP that these definitions required revision and refinement, and that a Regional Boating Facility may or may not include a marina……*

4.3.2 Discussion

At the heart of this issue is some definitional confusion and inconsistency amongst the state and regional level coastal policy documents, being the Victorian Coastal Strategy and the Boating Coastal Action Plan.

[15] Ibid.

This in turn has perhaps arisen due to their different timeframes for preparation and approval, with the overarching state document being more recent than the regional plan.

However, the Inquiry considers that these documents are not intended to be read down in a strict legal sense, and their various strategies and directions are to be taken as a whole to guide detailed decision making such as is being supported by this EES process.

From this review of submissions and the policy documents themselves the Inquiry reaches the following conclusions on definitions:

- A regional boating facility may include a marina and a higher level of boating infrastructure is clearly envisaged, but a marina is not 'mandated' in the definition and each location needs detailed assessment as per Table 3 in the BCAP;
- Similarly a safe harbour may include a marina but it is not essential. From the definition above any sheltered anchorage could be considered a safe harbour under certain conditions. For example in a brisk southerly the current Mornington Harbour could be defined as a safe harbour.

This is not to suggest at this point that the marina component of the current proposal is not appropriate, but rather to suggest that in considering the policy context, the existence and scale of the marina component needs careful consideration.

4.4 The current proposal as a safe harbour

One of the key issues raised in submissions and hearings was whether the proposal as put forward in the EES will actually result in the provision of a safe harbour. A corollary issue to the above was whether an alternative safe boating facility was already available at Martha Cove.

This issue has three key elements, being:

- The first is the safety of the boats within the harbour;
    - In marina pens or tied up to wharves in the harbour; and
    - The operation of the boat ramp under adverse weather conditions.
- Secondly, the safety of boats on the swing moorings to the east of the new harbour; and
- Thirdly, ingress and egress to the harbour entrances in times of adverse weather conditions.

Of these different elements, in general there was little disagreement that the safety of boats within the harbour would be much improved compared to

existing conditions, particularly under northwest to west adverse weather conditions.

The other two elements are discussed in the following section. The detailed exploration of the coastal processes and wave climate modelling is found in Chapter 7.

4.4.1 Submissions and evidence

The swing moorings

Twelve swing moorings are proposed east of the new marina running generally in a north south directions (see Figure 3). The eastern entrance fairway to the safe harbour would run between these swing moorings and the harbour.

There was no argument in submissions and evidence that these moorings would not be exposed under certain conditions. The EES itself stated:[16]

> *The swing moorings will experience a wave climate that is similar to existing conditions. Boats on the swing moorings will need to be stored in the dry storage area during winter to avoid impacts from northerly storm conditions.*

Dr Andrew McCowan of Water Technology in his evidence for the Proponent also noted in response to questions that the wave climate at this location for northerly wind conditions would be similar to existing conditions.

Harbour ingress and egress

A significant issue raised by submitters (generally opposing the safe harbour as proposed) was that in the very same conditions where it is designed to protect the harbour, it will be unsafe for entry and exit due to wave reflection off the face of the proposed harbour wavescreen.

Coastal processes are discussed in further detail in Chapter 7. For the purposes of safety associated with the proposed safe harbour, reference is made to figures in the *Mornington Harbour Wave Investigation Report, October 2008* ('the Wave Report') included in the technical reports to the EES.

The issue was raised in the MPSC Officer's Report however in the hearing the MEA made the strongest submissions on this issue. Mr Chessell for MEA argued at paragraphs 4-18 of his submission that the safe harbour should be

[16] At pp 37-38 of the main report.

safe not only for boats in the harbour in adverse weather conditions, but for those needing to enter (boats caught out in Port Phillip Bay) and exit the harbour (emergency vessels for example on rescue operations).

He went on to suggest that there was evidence that entrance to or exit from the harbour under adverse weather conditions would not be safe, particular when the wind was in the north northwest. In supporting this he drew on Figure 5-27 of the Wave Report and concluded that there could be significant wave heights off the harbour entrance in excess of 2.6m with maximum wave heights in excess of 5m.

In essence reflected waves off the wavescreen running north combine with incident waves running south to produce a combined standing wave higher than the incident wave. This mechanism and likelihood was not disputed by any party.

Dr McCowan, in his evidence for the Proponent noted that the modelling assumed 100% wave reflection while in extreme conditions there would be some overtopping which would reduce reflection to some extent.

Dr David Provis of Cardno, in his expert witness statement for MEA, suggested that not only the height of the waves is important but that:

> *For a vessel approaching from the west, there are significant areas of what is likely to be a very confused and violent sea-state with wave heights which may reach over 5m maximum wave height immediately off the entrance to the safe harbour.*

Dr Provis suggested that 'very hazardous conditions' may occur under certain weather conditions when boats wish to enter the harbour. He pointed out with reference to Figure 6-2 in the Wave report that waves could be rising and falling in an unpredictable cross hatched pattern ('pyramid shaped') rather than as a predictable series of wave fronts for the incident wave.

Dr Provis indicated that these conditions may be manageable for a skilled mariner, but more challenging for an inexperienced skipper.

In the Proponent's initial submission to the Inquiry, Mr Bisset drew on the evidence of Dr McCowan. Dr McCowan noted that the reflected standing wave scenario discussed above could have an adverse effect on harbour entrances. This would be most pronounced for reflection off the pier wavescreen in north west conditions and the harbour wavescreen in northerly conditions.

Dr McCowan noted that the northerly conditions which are potentially most hazardous predominantly occur in winter when boating activity is reduced. He suggested in his witness statement that for boats seeking shelter in north or northwest conditions:

- *The navigation fairway leading to the public berthing area behind the pier wavescreen remains relatively unaffected by wave reflections,*
- *The navigation fairway leading to the main boat harbour would be relatively unaffected by wave reflections from northerly waves.*
- *Although the navigation fairway leading to the main boat harbour can be affected by wave reflections from northwest waves, these reflections can be avoided by approaching the harbour further from the east, or by seeking temporary refuge in the public berthing area behind the pier wavescreen.*

In relation to this last point, Mr Chessell for the MEA cross examined Dr McCowan about the water depth of this area and the possibility of boats coming in from the north east and east encountering beam on seas.

Dr McCowan did not agree in principle that this should result in an unsafe situation. Dr Provis also expressed concern in relation to this issue in his evidence, noting the depths shown in Figure 3-1 and contrasting them with existing and predicted wave heights. He also noted that entrance to the harbour would become a 'labyrinth' with boats expected to navigate into the eastern fairway in adverse conditions with difficult wave conditions and possibly dodging boats remaining on the swing moorings.

Dr McCowan under questioning from the Inquiry agreed that the swing moorings in their proposed location were not ideal for either boat protection or for ease of navigation in the area.

Dr Peter Riedel of Coastal Engineering Solutions, an expert witness called for MPSC, concluded that the issue of wave reflection is real but that safety could be managed by a combination of design and operational controls.

He also stated that:

> *Entering any 'safe harbour' during storm conditions can be a difficult process. It is my understanding that the main intent for providing safe harbours is to create an environment where vessels may safely moor during a storm and that most of the vessels will have entered the harbour before the brunt of the storm hits.*

In response to this issue, the Inquiry asked the Proponent and Parks Victoria whether a safety risk assessment for harbour operations in these conditions

had been prepared and a number of other questions around safety. A response was tabled in the hearing at Appendix B to Document 71.

This response suggested primarily that:

- A risk assessment for the harbour entrance had not been undertaken;
- If recommended by the Inquiry a detailed design response for the wavescreen to minimise reflection could be considered;
- Parks Victoria are responsible for issuing Notices to Mariners in Port Phillip Bay and this could be done post construction;
- Navigation aids will need to be installed to mark the proposed east and west fairway in accordance with relevant standards; and
- A range of educational and signage measures could be employed by the Proponent to improve awareness of the harbour's operation.

A preliminary risk assessment for the proposed harbour and the existing conditions were provided by Parks Victoria. The Inquiry notes the risk assessment quotes the superseded Australian risk standard rather than the new AS/NZS ISO 31000:2009, Risk Management - Principles and Guidelines.

Marine Safety Victoria (MSV) provided a submission (706) to the EES but this was generic in nature and identified that the Proponent must eliminate or mitigate risks to boating safety.

An issue associated with the safety of the proposed Mornington Safe Harbour was whether alternative safe boating facilities were already available. Submitters such as Mr Franz Bjerkhamn (Document 62) argued that because of the entry and exit hazards associated with the proposed safe harbour, an existing alternative was available at Martha Cove. He submitted that ingress and egress at Martha Cove would be safer than what would be created at Mornington for boating traffic. Martha Cove would not only address boating demand but also provide a current safe boating location compared to the proposed Mornington Safe Harbour.

Responding to the submitters' arguments about the benefit of Martha Cove as an alternative safe harbour facility, Mr Bisset submitted to the Inquiry that:

- *The depth at Martha Cove is approximately 2.4m, and based on the experience of club members possibly less. This means that the marina is not an option for some large boats.*
- *In northerly conditions, entrance to Martha Cove is protected from the sea is quite manageable. However, in westerly conditions the waves are entering directly into the marina entrance making entry difficult.*

- *The cost of berths provided at Martha Cove is significantly higher than is proposed at Mornington Harbour.*
- *Martha Cove is not associated with a yacht club, which reduces its appeal for many boat owners and users.*
- *The distance between Martha Cove and Mornington Harbour is significant, particularly in stormy conditions. The travel time between the two facilities in a yacht is at least an hour.*

4.4.2 Discussion

A number of issues seem clear to the Inquiry around safety of the proposed harbour. These include:

- Safe launch and retrieval at the boat ramp will be very significantly improved for all weather directions but particularly north and northwest wind and wave conditions;
- The protection of boats within the marina will be very significantly improved including the boarding of craft;
- The proposed swing moorings will have no greater protection than existing swing moorings; and
- Reflected waves will cause disturbed seas in front of the safe harbour that may impact on safe entry to and exit from the harbour under adverse conditions, particularly those from the north and north west.

It is this last point that is the most challenging. Should the entrance to the safe harbour be completely safe under all conditions? The Inquiry concluded in Section 4.3 above that whilst this is desirable, it is not necessarily the primary objective of the safe harbour design where a completely safe harbour would result in a much greater level of overall environmental impact.

The Inquiry is not concerned with exit from the harbour under adverse conditions. Any such exit is likely to be undertaken by emergency services vessels and these would be expected to be of suitable seaworthiness with highly skilled master and crew to be able to safely navigate the conditions (or indeed decide not to in extreme conditions).

The Inquiry has summarised the Operational Wave Conditions for a full pier and harbour wavescreen in Table 3.[17]

[17] Noting that the pier return has not been modelled.

Table 3: Emergency scenarios

Conditions	Comment on conditions	Possible entrance avoiding worst reflection
North (Fig 5-25, and 5-26)[18]	Significant area of increased standing wave height north west of the pier wavescreen, north and north east of the harbour wavescreen	Eastern approach through swing moorings, sea mostly behind
North Northwest (Fig 5-27 and 5-28)	Significant area of increased standing wave height north west of the pier wavescreen and north east of the harbour wavescreen	Due south approach to western entrance or easterly approach through swing moorings. Potential for beam seas in this area although large area of reduced incident wave height east of harbour
Northwest (Fig 5-29 and 5-30)	Significant area of increased standing wave height north west of the pier wavescreen and north east of the harbour wavescreen	Due south into western entrance
West Northwest (Fig 5-31 and 5-32)	Significant area of increased standing wave height north west of the pier wavescreen and broken area of standing waves running east north east from harbour wavescreen	Due south into western entrance
West (Fig 5-33 and 5-34)	Significant area of increased standing wave height north west and north of the pier wavescreen and broken area of standing waves running east from harbour wavescreen	Approach to either entrance could encounter increased wave height due to reflection 0.05-0.25m higher than incident wave and higher for the eastern entrance

The Inquiry has noted comments from a number of submitters and experts that the scenario encountered at any given time could vary enormously depending on:

- The weather conditions and the time they have taken to develop;
- The type and size of boat exposed to the conditions and its state (seaworthiness, level of safety equipment etc…);
- The fitness, skill level and experience of the crew; and

[18] Figure references are to the *Wave Investigation Report.*

- Their familiarity with the layout and arrangements of the new harbour.

The Inquiry considers that the number of boats seeking entrance into the harbour during severe northerly dominant events is likely to be low due to the time taken for these weather events to develop and that there will be less boating in winter when they are more likely to occur.

As the adverse northerly weather conditions develop, the wave climate at the entrances to the safe harbour will become progressively more aligned with those shown in the relevant Figures of the Wave report and discussed in Table 3 above. However, for much of the time as these conditions develop, the wave climate will be considerably less challenging than that represented in the Wave Report.

The Inquiry also questions whether if a true emergency situation is developing (e.g. a small boat loses power, very inexperienced crew caught out by a weather change), whether it will develop at the harbour entrance. The Inquiry considers it more likely that the emergency will be developing offshore given the incident wave heights (for example see Figure 5-7). In this case the emergency services resources at the new harbour may be called on to bring the stricken vessel in or rescue the crew as the conditions allow.

The Inquiry is not suggesting that there will never be a 'worst case' scenario where an unseaworthy boat with an inexperienced crew is attempting to enter the harbour in adverse conditions. However, this scenario can be planned for in many ways including education to prevent such a scenario, emergency response planning and harbour operational plans.

The Inquiry does consider there is a strong argument to be mounted for removing the swing moorings from the proposal. These include to lessen landscape issues (discussed in Chapter 5), social impact (Chapter 6) and for safety reasons, to improve navigation into the eastern entrance of the safe harbour, whether under normal or adverse conditions.

If these swing moorings have boats on them during adverse northerly conditions, they could pose an impediment to boats entering the harbour and given that they are offered no protection in the proposal, the Inquiry considers they should be removed.

Having considered the safety aspects of the proposed safe harbour, the Inquiry considers that the option of an alternative safe harbour facility at Martha Cove would not satisfy the function of providing a safe boating haven for all types of boating activity. Martha Cove is an existing facility that is still under development. During the inspection of Martha Cove by the Inquiry it was clear that its primary function is for the provision of boating

facilities associated with residential development (i.e. a canal estate). It does not appear to the Inquiry that the facility at Martha Cove can function as a safe harbour for all types of boating vessels, particularly large keeled yachts and is primarily associated with motor boats with some yachts. Its distance from Mornington and the limitations of its entrance channel depth are considered to be a disadvantage compared to the proposed safe harbour at Mornington where there are no limitations on the types of vessels that can use the facility.

4.5 Overall conclusions and recommendations on the safe harbour

Evaluation Objective: Provide for the development of enhanced safe boat harbour facilities at Mornington, consistent with the provisions of the Victorian Coastal Strategy.

Evaluation Objective: Avoid significant risks to public health and safety.

The Inquiry concludes that there is strong support for an enhanced safe harbour development in Mornington. Whilst this need not necessarily include a marina, the marina in the current proposal appears to us to be consistent with the general emphasis in policy of increasing harbour activity with the provision of a safe harbour in Mornington.

This is subject to a number of recommendations in this report that the Inquiry considers will improve the project in the context of coastal and planning policy.

In relation to safety, the Inquiry concludes that overall, the construction of the project will increase safety for boat users in Port Phillip Bay, whether through moored boats and access to them or through the increased utility of the boat ramp in developing poor weather conditions from any direction.

It is possible that the wave reflection from the harbour wavescreen may exacerbate the wave climate in front of the harbour in adverse, northerly dominant weather conditions. However the Inquiry considers that effective harbour and emergency management planning should be capable of reducing such risks to an acceptable level.

The detailed design of the harbour wavescreen should consider whether this risk can be 'designed out' but not to a point where other impacts such as coastal processes or visual impacts are increased.

The Inquiry considers that for safe access (and landscape reasons as discussed in the next chapter), the swing moorings located east of the proposed harbour should be deleted from the project.

The Inquiry recommends that:

1. **Subject to the detailed recommendations in this report, that the environmental effects of the project are manageable and the Mornington Safe Harbour proposal has strong policy support and should proceed.**

2. **The twelve swing moorings proposed to be located east of the eastern fairway should be removed from the proposal.**

3. **The detailed design of the harbour wavescreen should explore opportunities to reduce reflected waves but any such design changes should not increase the environmental effects of the proposal beyond those identified in the design as exhibited in the EES.**

5. Landscape and visual impact

Evaluation objective: Ensure that the proposed development is compatible with the existing landscape values and minimises potential visual impacts.

5.1 Background and key issues

The Proponent's landscape and visual assessment was contained in two volumes in Appendix I of the Technical Reports to the EES. This was undertaken primarily by Integral Landscape Architecture & Visual Planning with the photomontages compiled by Sound Light and Motion.

During the Directions Hearings, the Inquiry directed that a new photomontage be developed from the centre of Mothers Beach looking towards the proposed harbour. This was done by Integral and separately by Mr Allan Wyatt of ERM for Council.

The methodology for the assessment is described in Section 2 of Appendix I of the EES but follows the general approach of considering the visual effect of the project against the visual sensitivity of the receiving environment.

In relation to visual effect some of the main conclusions by Integral included:

> *In this context the highest visual effects are obviously those areas that are closest to the development with moderate visual effects being experienced.*

and:

> *However the overall visual effect, based on a consideration of scale and total view is that the high visual quality of the settings is altered rather than reduced. The greatest visual effect is on those locations that are closest and do not have the benefit of a larger primary view zone that would take in other view components.*

In relation to visual sensitivity Integral's conclusions included:

> *The visual impacts created by the Safe Harbour development vary in relation to the numerous viewing points from where it is seen.*
>
> *The greatest impact is on locations in close proximity such as Schnapper Point and western parts of Mothers Beach. However these impact levels drop quickly at distances of 200m and by 300m visual impact levels are low.*

> *The impacts created by the redevelopment of the Boat Harbour are not significant and are part of the visual character of what would be expected in such a location. Such development when seen in other areas is appreciated for its visual amenity value.*

The overall conclusions on landscape and visual impact in Section 7 of Appendix I to the EES included:

> *Having stated there is contrast between what is proposed and the existing setting it is not considered to be visually significant in terms of degrading the visual setting.*
>
> *It is inevitable that there will be a greater visual effect on areas such as the Pier, Schnapper Point and the western parts of Mothers Beach because of their immediate proximity to the proposed Boat Harbour development. However the character of the development is to be expected in a boat harbour area and such intimate views in other locations are not generally considered unattractive or negative in outcome.*
>
> *With the exception of these intimately adjacent use areas, the visual effects when viewed from other locations are further reduced in significance. This is due to the decreased scale of the Safe Harbour development components, the increased level of the visual context of the Harbour setting and increased levels of visual integration offered by existing Harbour elements and by Schnapper Point itself that is seen in a view.*

The landscape and visual impact of the development from a range of viewpoints, and particularly from Mothers Beach, was a highly contested issue in the hearing. This contest was around both methodology and results and many submitters made strong submissions for and against the visual impact of the project.

From submissions and the hearing process the Inquiry considers the key issues relate to:

- the policy framework for coastal landscapes in this area;
- loss of view of bay horizon, particularly when viewed from Mothers Beach;
- the consequent 'closing in' of the bay seascape, particularly by the proposed harbour wavescreen; and
- impact on landscape values and views from other viewpoints.

5.2 Submissions and evidence

A 3-dimensional visual model of the harbour was prepared for Mornington Peninsula Shire Council by Mr Peter Buckle of DD3D. This 'fly through' model was shown at the commencement of the hearing and gave the Inquiry a good appreciation of the overall scope of the project. In particular the model allowed the Inquiry to view the proposal from various positions within the harbour and out to sea.

The Proponent had intended to call evidence from Mr John van Pelt of Integral who prepared the assessments in the EES. Mr van Pelt prepared and circulated his witness statement according to the Inquiry directions but was taken ill immediately prior to the hearing and was unable to attend.

Mr Bisset for the Proponent drew the Inquiry's attention to the written statement. Mr Chessell for MEA submitted that as Mr van Pelt had not been available for cross examination his statement must necessarily be given less weight.

Mr van Pelt's evidence statement effectively summarised the material in the EES Appendix I report and responded to the MPSC officer's report of October 2010. In essence he contended that he:

- Has considered the harbour in its appropriate landscape context in his assessment;
- Acknowledged that whilst the project will change the visual setting, this is no different to the way that the existing elements in the harbour landscape changed the setting when they were constructed;
- Considers that whilst the harbour proposal is a new element in the landscape, it is consistent with the existing harbour use in that '… the area is currently used as a boat harbour, and therefore elements that form part of the Proposal currently exist within the visual setting'; and
- Considers that the impact on the recreational amenity of Mothers Beach will be 'moderate and acceptable'.

MPSC called Mr Wyatt to give evidence on landscape and visual impacts. Mr Wyatt in his evidence was critical of Mr van Pelt's work in three main areas. These were:

- Lack of input into the marina design process including consideration of alternative marina designs such as orientation of the marina fingers north south rather than the proposed east west orientation;
- Methodological criticism of the photomontage preparation; and
- Disagreement over the visual assessment conclusions.

In relation to the first dot point Mr Wyatt's evidence was that he considered that the assessment of visual and landscape elements had not been sufficiently used to inform, in particular the marina design. To support this contention Mr Wyatt considered that an alternative marina design with the marina fingers running perpendicular to Mothers Beach rather than parallel would be superior as it would allow more distant views up the marina fairways from that location. He used an example at Rose Bay in Sydney as an illustration of this point.

Mr Wyatt was also critical of the utilitarian nature of the harbour wavescreen.

In relation to the photomontages, Mr Wyatt was critical of the 35mm focal length used, suggesting that in his opinion it does not give a good representation of what the eye sees and makes the objects in the montage look further away than they will in reality.

Mr Buckle in his evidence for Council also criticised this element and suggested the use of a 35mm lens tended to downplay the impact of the development in the photomontages in the exhibited planning report.

Many submitters were critical of this element of the photomontages in the EES, suggesting that it was a deliberate attempt to minimise the visual impact of the development.

Mr Wyatt suggested that both VCAT and Planning Panels Victoria have Practice Notes recommending at least a 50mm lens be used to give a more accurate representation of what the human eye would see. Mr Bisset during cross examination of Mr Wyatt suggested that no such Practice Notes exist and that Mr Wyatt may be referring to Appendix 1 of *Austcorp Group v Monash CC* [2006] VCAT 692 which provides guidance on photomontages but not a recommended lens size.

Mr Wyatt appeared confused on this point but did not refute Mr Bisset's proposition in principle.

Mr Wyatt suggested that his enlarged photomontage from Mothers Beach held at arms length provides the most accurate representation of what the harbour may look like. In this regard, the Inquiry did use Mr Wyatt's enlarged photomontage during one of its inspections of Mothers Beach to assist in gaining an appreciation of change that would result from the proposed safe harbour development.

During cross examination by Mr Bisset Mr Wyatt essentially agreed that the visual impact revolves around the *degree* of change introduced by the proposed harbour rather than whether there can be any change at all.

I relation to Mothers Beach, Mr Wyatt stated in his evidence that:

> *The impact is high and will be unattractive for the users of Mothers Beach as the views to open water are blocked and the Bay ill (sic) become enclosed. As well boats are much closer. These will result in a character change when viewed from Mothers Beach.*

and later on he stated:

> *……I believe that there is a high level of visual impact on viewers on Mothers Beach and the proposed marina fails to comply with the Boating Coastal Action Plan for Mornington that stated that 'it would be important to ensure that adjacent Mothers Beach was not adversely affected by any development'.*

The MEA called Mr Matthew McFall of MEMLA Landscape Architects to give landscape evidence to the Inquiry. Mr McFall's evidence in principle was that the proposal is incompatible with the landscape and sense of place of the existing Mornington Harbour. In relation to the project he suggested:

> *It is an entirely utilitarian, engineering driven project to create a safe storage facility for boats. It totally disregards the 'Genus Loci' of Mornington harbour, introducing an intrusively large, dominant and completely alien man made element that would completely change the character of the harbour forever.*

He also stated in his evidence that associated elements related to the 'industrialisation' of the harbour such as traffic congestion would have significant impacts.

The effect on landscape and visual impact was one of the most commonly raised issues in submissions with several hundred submissions raising the potential for negative effects as a key reason why the project should not proceed.

There was some concern expressed in submissions regarding the visual impact of the proposed travel lift. Mr McFall in his evidence also made specific comment on its visual impact as a new industrial element in the harbour. At the Inquiry's request, Mr Bisset for the Proponent produced a document (16) which outlined the general dimensions of the travel lift relative to the existing yacht clubhouse and more information on the general design and appearance of the machine.

5.3 Discussion

What was not at issue in the Hearing was that Mornington Harbour as it is now is a beautiful and much loved place with many attractive views. The Inquiry, in numerous inspections at different times of the day and under different weather conditions, was taken by the beauty of the harbour and the different moods of interaction between land, sea and sky.

However, in its evaluation the Inquiry must balance a range of competing objectives. In the context of this assessment landscape and visual impact is arguably the most significant impact of the proposal. The Inquiry discusses the different elements below.

5.3.1 Mornington Harbour landscape in policy

The broader policy discussion for the proposal is provided in Section 4.2 above. In relation to landscape, a number of policy documents comment on the landscape significance of coastal areas generally and the Mornington Peninsula and Mornington specifically.

For example there is general reference to coastal landscape protection in the Victorian Coastal Strategy 2008, as well as specific reference in regional and local policy such as the *Landscape Setting Types for the Victorian Coast 1998*, the *Mt Eliza to Point Nepean Coastal Action Plan*[19] and indeed the Mornington Peninsula Planning Scheme.

The Inquiry does not have before it evidence or submissions that sought to argue that the landscape at Mornington Harbour is not significant. It may be arguable as to whether the significance is of State, regional or local importance.

Importantly, the Inquiry does not consider there is anything in the various policies that suggests the landscape quality in itself is such that no development should be countenanced. For example one of the objectives of ESO25 as identified by Mr Wyatt in evidence is:

> *To protect and enhance the natural features, vegetation, ecological diversity, landscape quality, heritage values and recreation opportunities of the Port Phillip Bay coastal area and associated intertidal and marine habitats.*

[19] Described as 'Visual and landscape amenity is highly valued in this coastal region offering significant views of Port Phillip Bay and the surrounding coastline'.

This objective requires the landscape quality and recreation opportunities to be protected and enhanced so a degree of careful consideration and balancing is required in this, and many of the relevant policies.

Some submitters and experts relied heavily on the following statement in the Boating Coastal Action Plan:

> *It would be important to ensure that adjacent Mothers Beach was not adversely affected by any development.*

The Inquiry notes that this is a statement in the Description and Issues section of the chapter rather than a specific policy. It is also on the end of a paragraph that is focused mainly on boating and access and safety and thus could be read as meaning the physical character of Mothers Beach rather than broader landscape and amenity concerns.

Given the weight of broader policy supporting the development of Mornington Harbour (as discussed in Section 4.2), the Inquiry considers that this statement is meant to recognise and reinforce the special status of Mothers Beach as an extremely highly valued element of the Mornington area. It is not in the Inquiry's mind however meant to be read as a literal policy statement. It is hard to imagine *any* development in the Mornington Harbour that would not have some members of the community considering there to be an adverse effect on Mothers Beach.

The Inquiry agrees with the many submissions stating that Mothers Beach is a very special place and its protection is paramount during any development. But it does not agree that there can be no impact on it from a landscape point of view.

The key issue then becomes whether the landscape can absorb the type of development proposed without impacting unacceptably on the values that make it significant.

These issues are discussed in more detail in Section 5.3.2 below.

On a related matter, the planning scheme amendment and planning permit are considered in Part 2 of this report. In relation to landscape significance, the Inquiry notes that there is no specific planning overlay identifying and protecting the terrestrial landscape of the Mornington foreshore.

The Environmental Significance Overlay (ESO) Schedule 25 specifically mentions landscape quality in the environmental objectives but extends from the low water mark to 600m offshore. There appears to be no specific overlay (such as an ESO or Significant Landscape Overlay) applied to the foreshore area, presumably because this is Crown land.

To the Inquiry, Crown land would appear to have no lesser inherent landscape quality than private land. In fact on the Mornington Peninsula the Crown foreshores are arguably the most significant landscapes and yet they have no recognition of this in the statutory tools in the planning scheme.

The Inquiry understands this may be a policy position in the application of overlays on Crown land but it appears to be an absurd one never the less. It is particularly stark in a project such as this where the works are not being carried out by the public land manager but rather by a private entity.

5.3.2 The visual impact of the proposal

Having considered the evidence and submissions the Inquiry considers that in principle the continuation and expansion of the boating use through the marina should not in itself result in an unacceptable visual impact. Whilst the form, density and alignment of moored boats will change, it is still a boating use in a maritime precinct.

Having viewed the area from a number of points around Mornington, including from offshore during a water-based inspection, and considered the submissions and evidence, the Inquiry considers the areas of greatest visual impact are:

- From Mothers Beach;
- From the existing pier back towards Mornington;
- From the various lookouts that look northward from Schnapper Point; and
- From the headland between Mothers Beach and Scout Beach.

Of these the Inquiry considers the impact on the view from Mothers Beach to be the most significant. Mr van Pelt assessed this impact as moderate, whilst Mr Wyatt assessed it as High. The Inquiry in this instance tends to agree with Mr Wyatt.

The impact of the view from Mothers Beach, or at least the western two thirds, will be very significant. If you are down at water level, glimpses of the open bay horizon will be completely lost and be replaced by the line of the harbour wavescreen leading east to where the wavescreen visually intersects with the Port Phillip Bay coast further north. Views of the bay horizon could only be achieved by moving further east to the eastern end of Mothers Beach or further around to Scout Beach.

Moving further up the hill behind Mothers Beach would also open up the view. Of all the views that may be impacted by the proposal, it is this

'closing in' that is of most concern and it will undoubtedly be a negative impact for some users of Mothers Beach.

The views from other areas within and around the harbour do not offer as significant an impact because whilst there will certainly be visual change, and change perceived as negative by some, the opportunities for viewing the coastal environment and harbour are many, varied and interesting at the moment from the various viewing points and the Inquiry considers that they will remain so.

Views from further away such as from Red Bluff or the car park and lookout above Mills Beach will clearly change and be a negative impact for some people, but given the distance from the harbour the Inquiry does not consider that the change is unacceptable.

The extent of visual impact of course depends on the perspective of the viewer in the landscape, their relationship to the harbour (emotionally, patterns of use) and their broader feelings about the safe harbour proposal.

There are many people who submitted to us at the hearing and in written submissions that the visual impact of the proposal will detrimentally affect the very values of Mornington Harbour that make it so special. Perhaps the Inquiry's hardest task has been to try and balance these views with the strong support in State policy for a significant and long standing harbour development in Mornington.

There are a number of specific problematic elements that increase the potential for negative visual impact for those who consider the proposal an imposition on the values of the existing harbour. These are:

- The move from the irregular, seasonal, active pattern of swing moorings to the regimented, dense and relatively static form of the marina;
- The harbour wavescreen and its effect of closing off horizon views, particular from Mothers Beach as discussed above; and
- The increased scale of the proposed marina and associated swing and fore and aft moorings.

Of these elements, the Inquiry considers the harbour wavescreen, itself a solid element, will create the greatest visual impact. It is effectively a new element in the main space of the harbour.

A 'safe harbour' without a marina was suggested by some submitters but it seems to the Inquiry that if a similar wavescreen (or even a smaller one) was constructed without the marina, the visual impact could be even worse as the marina boats to some extent break up the wavescreen bulk and form as we can see in photomontages and witnessed at Blairgowrie.

The Inquiry considers there are opportunities in design, some suggested by Mr van Pelt, to improve the appearance of the wavescreen and has recommended them accordingly below. The Inquiry also notes that another way to reduce the visual impact of the wavescreen is to make it as low as possible whilst still achieving its protection objectives. Dr McCowan's suggestion that the design height could be reduced by 400mm without a loss of protection[20] is considered by the Inquiry to have some merit.

The Inquiry does not support in principle the realignment of the marina fingers as suggested by Mr Wyatt. The Inquiry considers that it would not add particular value and from the most sensitive viewing point, Mothers Beach, would actually create a lesser experience by opening up views directly to the wavescreen. At best it could be seen as an equal rather than superior approach to that proposed.

Other measures to reduce visual impact could also be considered. The Inquiry considers there is a strong case to be made for reducing the visual impact of the project by removing the 12 swing moorings east of the proposed harbour. This will have a number of advantages including:

- safety as discussed in Section 4.4;
- reducing the footprint of development to something more akin to the existing swing mooring footprint (see Figure 2-3 in the EES Main report); and
- reducing the visual barrier effect when looking north from Mothers Beach and Scout beach.

The Inquiry also considers there is a strong argument for removing the fore and aft moorings proposed on the south side of the harbour from the project. Again this will achieve multiple objectives including:

- providing the ability to move the boating fairway to the boat ramp further from Mothers Beach;
- reducing the side view of boats moored fore and aft that creates a 'wall' effect from Mothers Beach (for example see the photomontages provided by Sound Light and Motion through Mr van Pelt for the Proponent and the enlarged version of plan VP01 attached to Mr Wyatt's evidence); and
- it will mean the closest boats in the marina are another 20-25m away from Mothers Beach with a small reduction in visual impact.

To the Inquiry, removing these boats, based on the photomontages, will also result in a less cluttered view of the marina, more akin to that when viewing Blairgowrie from the shore.

[20] Refer to Section 5 of Annexure C of Document 71.

In relation to the travel lift, the Inquiry is not particularly concerned about its visual impact. The machine is similar in height to the yacht club buildings and lower than many masts on yachts on the hardstand and moored boats. In addition the travel lift models seen (including the one at Sandringham Yacht Club refer to Figure 5) appear to be of an open type structure and do not have a great visual bulk. The choice of paint colour may reduce its visual impact further (for example the white model shown in Document 16 compared with the blue model at Sandringham).

The visual impact of the artificial reef that may be constructed also attracted many submissions. The Inquiry considers that the impact of the reef should not be visually significant given its small scale and low lying nature. Its detailed design should incorporate finishes and materials to further reduce any impact.

5.4 Conclusions and recommendations

Evaluation objective: Ensure that the proposed development is compatible with the existing landscape values and minimises potential visual impacts.

Subject to the recommendations made below, the Inquiry concludes that overall the landscape and visual impact of the proposal will be acceptable within the context of relevant policy and the evaluation objective above.

The impact on coastal landscape will be local within the harbour and be an extension, and intensification of the existing harbour use. There will be very significant changes to local views within the harbour which will be considered negative to some and positive to others. The most significant negative impact will be the views looking north from Mothers Beach. The Inquiry discusses elsewhere in this report that it considers the general use patterns and characteristics of Mothers Beach should not need to change. However it acknowledges that due to the change in views from Mothers Beach it may affect the use patterns of some residents and visitors.

However, after carefully considering the policy framework the Inquiry considers this negative impact on views is of itself not significant enough to recommend radical changes to the proposal beyond those recommended below.

The Inquiry has already recommended in Chapter 4 that the swing moorings be deleted from the project. In addition it recommends:

4. **The eight fore and aft moorings proposed to be located on the southern side of the Mornington Safe Harbour should be removed from the proposal.**

In relation to visual impact mitigation the Inquiry considers that the mitigation measures proposed by Integral in Section 6.7 of Appendix I in Volume 2 of the EES be implemented. Specifically the Inquiry recommends:

5. **The following visual impact mitigation measures should be implemented during project development as a minimum:**

    - **Reduce the wavescreen height as much as possible during detailed design whilst still achieving the protection objectives for the marina and safe harbour;**

    - **Prohibit the use of floating boat cradles in the harbour via permit condition or through the Harbour Operations Plan;**

    - **Design the harbour wavescreen surface above high water mark on the harbour side to provide an attractive finish that breaks up the bare concrete wall;**

    - **Use the walkway design on the harbour wavescreen (via railings, timber treatment or other measures) to ensure that the 'horizon line' of the wavescreen is irregular and not the solid contiguous line shown in photomontages;**

    - **Design the artificial reef if it is required so to maintain, as best as practical a low profile and incorporate finishes and materials to further reduce impacts.**

6. Social impact

Evaluation objective: To maximise positive social effects from the project whilst minimising negative social effects.

6.1 Background and key issues

The social and economic impact of the proposal was discussed in Appendix N to Volume 2 of the EES.

Positive impacts of the project were outlined including increased boating safety and opportunities for flow on economic benefits from more boating. The social benefits of increased pier lengths for walking and fishing were identified.

The negative impacts, particularly on non-boaters, were also identified such as the impact on views and ambience in the harbour from the development.

Many objecting submitters were opposed to the development on social grounds, particularly relating to the existing patterns of harbour use and how these might be changed by real or perceived impacts (the latter leading to behavioural change) on issues such as access, views, water quality and safety.

6.2 Submissions and evidence

As expert witness for the Mornington Peninsula Shire Council, Ms Bonnie Rosen of Symplan provided an assessment of what she perceived as the probable social impacts associated with the proposal. Her assessment focused on the extent to which the proposal will result in a net social community benefit, particularly in relation to access to recreational facilities and impact on the social role that the Harbour plays in the general community.

Ms Rosen stated that the proposal will have a detrimental impact on the future enjoyment of the harbour for the broader community, and the extent to which the general community has access to public assets.

She considered that the proposal will have a permanent detrimental impact on the existing visual character and iconic value of the Harbour. She stated that the provision of public berths was modest and the use of the Harbour for the private boating community will detract from perceived access to

public assets. A perceived privatisation of the Harbour could lead to a detrimental impact on the broader community's sense of identity and place attachment.

Stating that perception strongly influences behaviour, Ms Rosen believed that the proposal would have a moderately negative impact on real and perceived safety. While the proposal would have no impact on real water quality in the long term, it would have an impact on perceived water quality. Mr Montebello for Council added that the *Planning and Environment Act* 1987 requires an assessment of social (and economic) effects under objective 4(2)(d).

Ms Rosen's conclusions were derived from the submissions received by the Inquiry, and specific feedback gathered during consultation undertaken by SKM (2008), and not from an independent community survey.

Several submitters expressed concern in relation to potential loss of enjoyment of local beaches in the area, in particular Mothers Beach, Scout Beach and Shire Hall Beach. These beaches are perceived by the community as safe and clean. Mothers Beach was described by one submitter as *'a local icon used by mothers and their children for generations'*. The shallow waters of Mothers Beach have recently been described in a State magazine as *'a bay going from very shallow to very deep very gradually, rocks to swim among and old jetties to play near….* These shallow waters are seen as safe for children and toddlers, the elderly and disabled, and one submitter stated that *'…it is the one local beach where you can see, hear, smell the sea from the car*. Ms Judith Martin commented that the clean water at Mothers Beach is used by businesses such as the Melbourne Aquarium and a wholesale crayfish business, which collect the water daily in tankers.

The Inquiry heard that user groups who enjoy Mothers Beach include swimmers, divers, anglers, wind surfers, paddle craft, junior sail boat classes, promenaders, painters, commercial operators, tourists and visitors, emergency services and community groups (refer to Figure 7). Many submitters were concerned about the potential for an increased number of boats in the harbour, along with powered boats and jet skis, which may restrict swimming in the area. This could result in the area being rezoned in the future, away from public use. Mornington Sea Scouts, who utilise the beach several days a week, believed that water safety concerns could lead to issues with them accessing and enjoying Scout Beach.

The location of Mothers Beach, with its connection to the park and the town, was raised by many submitters as significant. It was noted that *'The harbour's charm is based on its relaxed seaside atmosphere*. Council reaffirmed this by stating that the location of the proposal *'...serves as a prominent and defining*

aspect of the cultural identity of the Mornington township, and is not tucked away'. Consequently, Council added that these views represent *'…an element of the local psyche which present enormous unquantifiable costs if they are damaged'.*

Figure 7: The beaches at Mornington are popular for recreation

Some submitters emphasised the importance of Mornington Harbour for community gatherings of international and national significance. This includes the arrival of the Endeavour at Schnapper Point for the Bicentennial celebrations, the Olympic Torch Relay, dawn services and fireworks displays. Captain David Wharington for Tall Ships Victoria noted that the current design of the marina (and specifically the proposed pier extension) would prevent tall ships from manoeuvring into the harbour. Tall Ships Victoria would prefer to see a berthing area for tall ships on the landward side of the pier whereby they can come in straight alongside the pier without have to manoeuvre around the pier extension. Captain Wharington emphasised that international tall ships are an important drawcard for Mornington.

Many submitters also suggested that the project is effectively privatisation of the harbour and transfer of 'ownership' of the harbour from multiple public users and individuals to one large private user (the Mornington Yacht Club).

However, some boating user groups emphasised the important role that boating plays for a range of people within the community. Yachting Victoria stated that Mornington Yacht Club (MYC) is one of its largest member clubs and therefore important for recreational boat users in the region. Facilities MYC provides include:

- An accredited Yachting Australia Training Centre for adults, children and schools throughout the year;

- Tackers program – Yachting Australia's national junior 'Tackers' program, which MYC helped pioneer;
- An international program, 'Sailability', that enables people of all abilities and disabilities to go sailing;
- Conducting regionally significant events including the Schnapper Point Regatta that attracts competitors from around the State; and
- Supporting bay wide boating activities, though these have been constrained by the existing harbour, due to inadequacies in berthing facilities.

In relation to concerns that the proposal would result in a perceived privatisation of public assets, Mr Bisset for the Proponent stated that:

- Only 10 per cent of the over 900 MYC members are boat owners;
- Ten berths for emergency and rescue boats will be provided and available year round;
- The proposal will benefit boat owners who use the public launching ramps. In addition, the owners and users of visiting boats will benefit due to increased opportunities to moor their boats in safe conditions;
- The proposal will make the harbour more attractive to trailer sailors;
- The safer wave conditions will provide greater protection for activities other than power boating and yachting including scuba diving and sea kayaking;
- Safe disabled access to the boating facilities would be ensured by using appropriate grades and surfaces on the new jetty and second marina finger.

In addition, the following infrastructure of the harbour would be improved:

- The provision of wash down facilities, the travel lift, and fuel facilities and sewerage pump out facilities;
- The public will be able to access the new jetty, the Pier Return and the public walkway on the Harbour Wavescreen, which would increase opportunities for fishing and promenading;
- Low level access for people with disability and/or limited mobility will be provided to boats;
- A navigational fairway and boat exclusion zones will assist with managing conflicts between different harbour users such as boats, swimmers and divers;

The Proponent also suggested that economic benefits would be created due to additional visitation, with secondary benefits to businesses and tourism.

6.3 Discussion

Many submitters were passionate and articulate in their written and verbal submissions about the potential for social impacts from the proposal. Many had lived in, or been visiting, Mornington and its harbour for a long time and brought personal stories of romance, family and children to the Inquiry.

Non yacht club user groups also expressed concern that their existing use may be compromised.

The Inquiry considers these two main areas require separate consideration. In relation to user groups the Inquiry is not particularly concerned about the impact. The open water within the marina itself will still be publicly accessible for activities such as kayaking and there will still be significant open water between the shore and the marina and east of the marina.

Whilst some of this water is for the fairway between the boat ramp and Port Phillip Bay, this is not substantially different from the current situation. Small yachts and water craft off the beach will no longer be able to move straight from Scout Beach out through the swing moorings as currently occurs. However, the Inquiry considers this is a change in the pattern of use rather than a significant curtailment in the opportunity for the use *per se*.

The harbour should also provide additional opportunities for activities such as scuba diving. The Inquiry's viewing of other harbours at Blairgowrie and Sandringham has satisfied it that the variety of marine life that will colonise the harbour will be interesting for day and night dives.

The Inquiry has recommended the removal of the swing moorings and the fore and aft moorings from the project. This will also help to ensure the safe harbour environment is less cluttered and there is more open water available for other users.

In relation to beach use, and particularly Mothers Beach, the Inquiry considers it paramount to protect it in its current form so that the range of potential uses will not be curtailed. This has been discussed from a coastal processes point of view in Chapter 7 and the Inquiry concludes there that the fundamental physical nature of Mothers Beach should not change.

The range of uses that occur there now (and particularly for the young, older persons and those with a disability), should be able to continue in future as the nature and character of Mothers Beach should not be different to the existing situation.

However the Inquiry has no doubt that there will be some level of social impact on those who perceive the proposal in its entirety as a negative

imposition on their use and enjoyment of the harbour. Responses to this may range from resignation and continued use to those who feel so strongly that they may not be able to use the area in future.

This is a difficult issue to address as it is fundamentally in conflict with the notion of development of a safe harbour at Mornington. A much reduced proposal may be satisfactory to some of those submitters (the Inquiry suspects not all), but this in itself is inconsistent with the policy support for the development of a significant safe harbour/regional boating facility at Mornington.

In relation to the issue of harbour 'privatisation', the Inquiry considers this is overstating the case. Fundamentally the Crown land will remain Crown land even if leased to the Mornington Yacht Club. Public access will be protected on the new harbour wavescreen and to the harbour waters within the marina itself. The overall spread of the marina is similar to the area 'privatised' now through swing moorings, albeit they are only seasonal in character.

The public benefits associated with the safe harbour and the fact that the Mornington Yacht Club is itself a community organisation with many local and regional members leads the Inquiry to conclude that the privatisation argument is without substantive merit.

The Inquiry has noted the submission of Tall Ships Victoria and considers that this is an important use that should be catered for in the harbour design in terms of historic, social and economic importance.

6.4 Conclusions and recommendations

Evaluation objective: To maximise positive social effects from the project whilst minimising negative social effects.

The Inquiry concludes that the opportunities to maximise positive social effects can be achieved through the proposal put forward subject to the recommendations in this report. These include the increased safety and intensity of boating use in all forms, and the opportunities for increased public access to the new harbour wavescreen for promenading and angling.

The Inquiry concludes that the impact on opportunities for existing harbour uses and user groups should not be significant, but recognises that some community members will consider the social impact of the project to be very significant.

In relation to the tall ships issues the Inquiry recommends:

6. **The design of the Mornington Safe Harbour should ensure that safe, navigable and suitable areas for tall ships berthing are provided with good public access. Mornington Boat Haven Limited should seek advice from Tall Ships Victoria as to how this can be achieved.**

7. Coastal processes

Evaluation objectives:

- Avoid, or minimise as far as practicable, adverse impacts on the seasonal dynamics and long-term stability of beaches adjacent to the proposed development.
- Minimise as far as practicable adverse impacts on water quality within and in the vicinity of the harbour.

This chapter addresses the issues around the physical impact of the proposed harbour wavescreen and the wavescreen on the Mornington Pier and the proposed pier extension on the marine and coastal environment of Mornington Harbour.

In referring to coastal processes, the Inquiry includes reference to wave climate, water movement, wave energy, water quality and beach sand movement and quality.

7.1 Background and key issues

The creation of a safe harbour means reducing wave energy. The EES has assessed the impacts on coastal processes of the construction and operation of a series of wavescreens on the Mornington Pier and across the north of the harbour (referred to as the harbour wavescreen). The purpose of the wavescreens is to achieve a reduction in wave energy within Mornington Harbour thus creating a safe harbour.

Reducing wave energy within Mornington Harbour creates changes to coastal processes.

Coastal processes were addressed in Chapters 7.1 to 7.4 of the EES Main Report (Volume 1) and in the Wave Investigation Assessment (Appendix N in the Planning Report), Hydrodynamic Assessment (Appendix O in the Planning Report) and in the Coastal Processes Assessment (Appendix R in the Planning Report) prepared by Water Technology.

Mornington Harbour is located on the south-eastern shore of Port Phillip Bay and has a generally east-west shoreline orientation sandwiched between the rocky headlands of Schnapper Point in the west and Red Bluff/Tanti Point in the east creating an enclosed shoreline (referred to as *pocket beaches*). The end

of Schnapper Point forms the landward point of the Mornington Pier, which is approximately 180 metres long.

The beaches in the harbour are backed by cliffs comprising from west to east; Mothers Beach, Scout Beach and Shire Hall Beach. They are approximately 20-30 metres in width and change from being gently sloping and shallow at Mothers Beach (refer to Figure 8), which is more protected from wave action to the more steeply graded Shire Hall Beach, which is more exposed to waves. As a result of the degree of protection and exposure to wave action the beach sands found on Mothers Beach are fine compared to the coarser sands found on Shire Hall Beach.

Figure 8: Mothers Beach

Pocket beaches tend to experience more limited longshore sand movement. As a result it is expected that beach sand movement along the shore within Mornington Harbour is generally constrained between Schnapper Point and Red Bluff amongst the three beaches. Currently these beaches have a stable equilibrium with regards to sand movement.

The bathymetry of Mornington Harbour is deep with depths around the end of Mornington Pier of approximately 6 to 9 metres. It is proposed to construct the harbour wavescreen at the 7 metre depth contour. Shallow water depth occurs at Mothers Beach making it popular for families. Rock outcrops and inshore sub-tidal reefs occur offshore from Scout Beach including a channel through the reef for launching of small boats from the beach and also to the east of Shire Hall Beach.

The existing wave climate is generated by winds with dominant south to southwest winds in summer and strong northerly and westerly winds during winter. The EES identifies that the current 1 year return period wave heights offshore of Mornington Harbour are in excess of 2.0 metres and can be up to 2.2 metres within the harbour. Consequently exposure to such wave

action can be pronounced during winter storms when northerly winds increase wave action. Impacts for boats moored in the harbour or attempting to launch and retrieve at the boat ramp can be severe due to a lack of protection from storm or strong waves.

To improve boating conditions and provide a safe harbour at Mornington the proposal to construct full depth wavescreens (constructed to the seabed) would seek to reduce wave heights to less than 0.5 metres offshore of Mothers Beach and Scout Beach. Wave heights offshore of Shire Hall Beach would remain relatively unchanged.

The EES identifies that the effect of reducing wave heights and energy within Mornington Harbour would be a change to how beach sands will move resulting in erosion of sand from Shire Hall Beach due to wave action and accretion on Scout Beach due to reduced wave action arising from the effect of the wavescreens. The EES indicates that the beach alignment of Mothers Beach is unlikely to be significantly affected as there will be little wave energy to move sediments into or out of the western end of the harbour.

Modelling undertaken by Water Technology indicates that the construction of the safe harbour is expected to result in the annual redistribution of approximately 1,000m^3 of sand from Shire Hall Beach to Scout Beach with a reliability of such sand movement ranging from 0.5 to 2 times the volume[21]. The majority of sediment movement is likely to occur over winter with re-alignment of the beaches expected to occur slowly over a period of approximately 10 years before a stable beach alignment is achieved. Beach sand management measures include monitoring over a 12 month period with the option of relocating sand through the use of an excavator and trucks and/or the use of an artificial offshore reef to trap/slow sand movement.

Reduction in wave action arising from the wavescreens will increase the periods of calm water conditions. A consequence of this is an increase in the time water stays within the harbour. In other words water flushing, mixing and exchange with waters in Port Phillip Bay may be reduced. Impacts associated with this effect is a reduction in water quality arising from pollutants discharged into the harbour from increased boating and land based activities, from stormwater discharges and entrapment of organic material such as seagrass wrack and algae.

The EES identifies that numerical modelling of harbour hydrodynamics shows that under summer and winter conditions water residency times within the harbour will be typically between 1 to 2 days and under calm

[21] This means the range of sand volume could vary between 500m^3 to 2,000m^3.

conditions could be up to 5 days. The combination of tidal current and wind conditions will enable adequate water exchange between the harbour and the Bay to ensure that water quality will be maintained.

Wavescreens by their nature comprise a solid, blunt structure against which waves travelling towards them hit and bounce back reflecting from the wall. This is referred to as wave reflection and can create standing waves some distance from the wavescreen face. A potential impact is the mobilisation of sediment from scouring of the seabed directly in front or seaward of the wavescreens and particularly at the toe or seaward bottom of the wavescreens. Where this scoured sediment goes is an issue particularly if it ends up in the safe harbour contributing to sedimentation and hastening the need to undertake maintenance dredging of the harbour to maintain depths.

Another effect from reducing wave conditions includes changes to beach sand composition and quality. This is an effect not considered by the EES and is a failing of the assessment. It is an issue that was raised in the submission from Mr Russell Colman (Submission 234 and Documents 46 and 73). Mr Colman submitted that the lack of wave energy would lead to a build-up of fine sediments and muds along the beaches sheltered by the wavescreen including Mothers Beach. The accumulating fine sediments would quickly turn anaerobic below the surface of the nearshore sands and smell at low tide. Clean beaches require wave energy to transport finer sediments away from the nearshore areas. He submitted that the beaches at Mornington Harbour would become degraded similar to degraded beaches found close to the Sandringham and Brighton Marinas.

The effects of projected future climate change effects on the Mornington Harbour and the safe harbour proposal is also an important issue. Impacts arising from projected sea level rise are particularly relevant. The Proponent has indicated that sea level rise including the effects of storm surge have been considered and the proposed safe harbour wavescreens have been designed to accommodate projected sea level rise for up to 50 years based on the design life of the in-water infrastructure.

The key issues identified by the Inquiry from a reduction in wave energy and action and the creation of calmer waters within Mornington Harbour are:

- Changes to beach sand movement patterns with beach erosion and accretion.
- Changes in water residency times affecting water quality.
- Wave reflection off (seaward of) the wavescreens resulting in sediment movement (scouring).
- Changes in beach sand composition and quality.

- Climate Change.

7.2 Submissions and evidence

Coastal processes were raised by a number of submitters and evidence from Dr McCowan was called by the Proponent, from Dr Riedel by MPSC and from Dr Provis MEA.

At the direction of the Inquiry (Direction 14 contained in the Inquiry Directions Letter dated 19 November 2010) a conclave of the expert witnesses involved with coastal processes and including attendance from the Environment Protection Authority (EPA) was held prior to the commencement of hearings on 28 January 2011 to identify matters of agreement and disagreement. A report on the conclave was tabled at the hearing (Document 2).

The conclave report formed the following views:

- The methodology used in the EES considering coastal processes was generally accepted as being appropriate and the results obtained consistent with what would be expected, although there was some difference of opinion regarding model design. The conclusion was that although some effects on coastal processes may be greater under climate change scenarios it was considered unlikely that impacts would be significant. The conclave did indicate that the proposed sand management measures would be important in responding to the effects on changes to coastal processes.
- There was potential for scouring at the base of the wavescreens and that this would require attention through protection of the toe of the wavescreen to minimise sediment re-suspension due to wave reflections. The conclave added that it was considered that this would not be a significant issue with respect to sedimentation within the harbour.
- The issue of settling of fines within the harbour from stormwater and other sources has not been addressed. The Inquiry understands this issue relates somewhat to that of the concern expressed by Mr Colman about the degradation of beach sand quality arising from calmer wave conditions within the harbour.
- With regards to sea level rise, the 50 year design life for the wavescreen with provision for adaptation to cater for increased sea levels and wave conditions to 2100 is appropriate.
- That beach monitoring and management, including the need for any control structures such as an artificial reef is essential in managing the

effects of changes to coastal processes arising from the development of the Mornington Safe Harbour.

Despite the relative agreed position from the conclave, MPSC and submitters expressed concerns about the impacts on the local beaches and Mothers Beach in particular from the safe harbour proposal.

MPSC called for a reduction in the size of the facility for the proposed safe harbour. Council queried whether the marina was required or could be reduced in size and whether the extent of the safe harbour proposed with the wavescreens were necessary to achieve a safe harbour. Council raised issues concerning whether the provision of a safe harbour could be satisfactorily achieved through pier wavescreens alone.

Many submitters such as Ms Ann Robb (Submission 794 and Document 57) and Mr Bjerkhamn (Submission 1013 and Document 62) expressed concern that Mothers Beach, which is popular for families and the local community because of its gentle sloping beach and shallow, protected waters would end up looking like the degraded *dog only* type beaches found at Brighton or Sandringham. The common thread of these submissions to the Inquiry with respect to impacts on the beaches and harbour arising from the proposal was that; *if in doubt don't do it*.

With respect to water quality, the EPA, at the request of the Inquiry responded with a submission advising that a 99% level of ecosystem protection is required for the Mornington Harbour under the State Environment Protection Policy (Waters of Victoria) 2003 (SEPP WoV). Mornington Harbour falls under the *Inshore Segment* set out in Schedule F6 to the SEPP WoV which covers Port Phillip Bay and the area is classified as a *substantially natural ecosystem with some modifications*. This is in contrast to the EES claiming that Mornington Harbour is in a *slightly to moderately disturbed* segment and the level of protection is 95%.

7.3 Discussion

7.3.1 Beach sand movement

Key tenets from the Inquiry's hearings are:

- That coastal processes will change as a result of the wavescreens and reduction of wave action. Changes will be evident through an increase in beach erosion from Shire Hall Beach and accretion onto Scout Beach and little change to beach morphology at Mothers Beach.
- That the community is very concerned about the impacts on the quality of the beaches at Mornington.

The issue for the Inquiry is whether the extent of change in coastal processes and its effects will be significant.

The Inquiry understands that with the earlier proposal in the late 1980's/early 1990's for a safe harbour at Mornington, the estimated alongshore transport rate of sand from Shire Hall Beach and in part from the offshore seabed towards Mothers Beach[22] was in the order of 6,000m^3 per annum. The Inquiry understands that, although the Panel report in 1991 concluded that such order of magnitude of sand movement was acceptable, the Minister of Planning in 1994[23] rejected the proposal citing as one of the reasons, the similar quantum of sand movement.

Evidence from Dr McCowan was that as a result of the design of the safe harbour wavescreens now proposed at Mornington, the rate of sand movement is expected to be approximately 1,000m^3 per annum. The Inquiry notes the comment from the conclave that this could vary in range from 500m^3 to 2,000m^3. The Inquiry also notes the concern expressed by MEA that the effects of climate change could exacerbate these quantities. With regards to this latter point, however, if the effects of climate change impacts on the coast are factored in, the Inquiry considers the greater impact would be beach inundation from sea level rise, which was confirmed by Dr McCowan in his evidence where he stated that:

> *With 0.8m of sea level rise and no harbour construction, the beaches at Mornington could be expected to recede by 20 to 25m by 2100. In the absence of any remedial works, such as beach nourishment, this would effectively eliminate any beach in the area at high water.*
>
> *Construction of the harbour wavescreens will reduce the amount of wave energy penetrating through to Scout Beach and Mothers Beach. As such, the extent of the recession would be expected to be less severe in these areas. Nevertheless, the whole of the existing beach areas would be expected [to] become inundated during a major storm tide.*

Is the quantity of sand movement projected for the beaches at Mornington accurate and significant? Is 1,000m^3 of annual sand movement an accurate projection and is it significant? When compared to 6,000m^3 associated with the previous proposal and modelling, it appears to be a significant reduction. Dr McCowan stated that he had confidence in the order of magnitude of the projected estimate of sand movement because:

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[22] Letter from Prof. J.B. Hinwood & Dr. E.C.F. Bird to Robin Saunders, Chief Assessment Officer, Department of Planning and Development dated 6 April 1994.

[23] Letter from Robert Maclellan, Minister for Planning to Cr. Ron Armitage, Shire President, Shire of Mornington dated 2 May 1994.

- *Early estimates of the alongshore transport rate in the area have consistently over-estimated the actual transport rates in the area.*
- *The lower value is consistent with physical observations of what is actually happening at Mornington.*
- *The approach using the LITPACK alongshore transport model has been validated at Martha Cove.*

It is always a concern when development activity has the potential to upset and change permanently a natural process. However, such change must be considered within the context of policy frameworks, locational attributes, extent of effect and manageability of the effects in the long term.

The policy framework has been addressed. It is clear that Mornington Harbour is a modified place within Port Phillip Bay. It has a long history of change, which is recognised not only in its heritage values but also with respect to its recognition as a place of change linked to the Mornington Activity Centre. Change is expected.

The beaches in the Mornington Harbour (between Schnapper Point and Red Bluff) have been modified in the past. The Inquiry noted that Mothers Beach was affected in the 1960's by reclamation for the car park and Mornington Yacht Club and there used to be sea baths in the area. The Mornington Harbour is a place with great and varied activity. Given the *pocket* or enclosed nature of the beach system in the Mornington Harbour, the effects of the safe harbour development will be localised or constrained to within this area. It is clear to the Inquiry that environmental impacts beyond Mornington Harbour will be minimal. Mr Bisset, on behalf of the Proponent reiterated from a policy viewpoint that areas in Port Phillip Bay recognised as places of activity have been identified because of their resilience to accept development while ensuring that other areas around the Bay are protected from scattered forms of development. He stated that:

> *The Inquiry is respectfully requested to not overlook the fact that part of the environmental and net community benefit delivered by the project includes the implicit protection of more sensitive sections of the Bay coastline from the pressure for the expansion of additional or expanded safe boat launching and berthing facilities.*

The extent of the effects within Mornington Harbour is not considered significant given the small amount of sand movement expected. This is qualified by the need for good management. Sand movement could affect local features such as the inshore sub-tidal reefs and the small boat launching channel between the reefs located off Scout Beach (refer to Figure 9).

Figure 9: Scout Beach showing the nearshore sub-tidal reefs and the small boat launching channel located to the right

The EES outlines that sand management could be based on allowing the beaches to re-adjust themselves over time and to monitor the beaches to determine the need for sand relocation to occur. Sand relocation would be expected to shift 1,000m^3 of sand each year which could be undertaken over a 3 to 4 day period using standard road working machinery. The EES also outlines a management option of constructing an artificial reef offshore from Shire Hall Beach to reduce and control the amount and movement of sand westwards to avoid the potential for sand movement smothering the inshore sub-tidal reefs and boat channel off Scout Beach. The artificial reef is an option to be considered 12 months after construction of the wavescreens so that the need can be determined. Sand movement may occur along the beach face rather than through the process of an offshore sand bar formation following erosion and slow return back to the beach, further west which runs the risk of reef smothering.

The Inquiry considers that the extent of beach sand movement is considered small in quantity and the required extent of beach sand management would appear reasonable. The Inquiry considers the option of using an artificial reef as exactly that; an option for which the need for its use would be ascertained following beach monitoring to see what reaction does occur following the construction of the safe harbour.

In terms of the effects of a reduction in the size of the safe harbour facility, the inquiry notes the evidence from Dr McCowan that the effects of reducing the size of the wavescreens will be evident, not so much in terms of change to coastal processes but where the effects from changed coastal processes will be most pronounced. Dr McCowan stated that:

> *If for example, the proposed harbour wavescreen was half the length that is currently proposed, this would increase the wave action at Scout Beach. The westward transport of sand would be similar to that for the full length wavescreen, however, the erosion point would be moved westward to include much of Scout Beach, and most of the corresponding sand build-up would occur at Mothers Beach.*

With regards to the above, however, the Inquiry notes that the greater presence of inshore sub-tidal reefs in front of Scout Beach may have some benefit in reducing the extent of wave energy directed onto this beach, but not eliminating it entirely as a result of a reduction in wavescreen length.

From the perspective of not having a harbour wavescreen i.e. only wavescreens on the pier, the Inquiry notes that the extent of safe harbour conditions created would be restricted. Protection from stormy winds from the north and northwest would be limited to the area behind a line drawn from the end of Mornington Pier to Mothers Beach. This would include the boat ramp, the area in front of the Yacht Club and the southeast side of the pier. Protection would not be provided from north-easterly winds. The Inquiry does not believe that this extent of protection for a safe harbour to be sufficient. The Inquiry considers that creating a safe harbour is a significant investment in not only boating safety but also in terms of creating what the Central Coast Boating Coastal Action Plan refers to as destination points around Port Phillip Bay. If a safe harbour is to be provided, then such a facility, being one which is limited to a few places around Port Phillip Bay, should provide for extensive protection from most conditions so that appropriate commensurate investment in boating facilities ought to also be provided.

It is unclear how much sand movement would occur with the construction of wavescreens only on the pier. However, the Inquiry does note the advice from Professor Hinwood and Dr Bird in their letter dated 6 April 1994 that following some works on the pier and the reclamation works behind the harbour and associated with the boat ramp, sand was accumulating both within the harbour and on Mothers Beach. It is considered that wavescreens only on Mornington Pier would more than likely continue, if not increase the rate of such processes. This in turn would potentially create and enhance a continuing issue with respect to sedimentation within the harbour and the need evident for ongoing dredging of the Yacht Club slipway and boat ramp entrance. Such maintenance dredging was noted and viewed by the Inquiry during the hearing with dredge spoil deposited onto Mothers Beach (refer to Figure 10).

Figure 10: Mothers Beach closed for disposal of harbour maintenance dredging

7.3.2 Water movement and residency times

Mornington Harbour, as does Port Phillip Bay, generally experiences a micro-tidal pattern of water movement (small tidal variation). Water circulation and movement is predominantly wind driven. Consequently, the Inquiry understands that water currents within Mornington Harbour are not strong.

The EES stated that water residency times for the earlier safe harbour proposal was around 7 to 10 days. The earlier proposal was based on a solid breakwater design with a proposal for pipes to allow some water movement through the structure[24]. This compares to residency times numerically modelled in the EES of up 5 days in worst conditions and around 1 to 2 days under expected conditions. Poor water flushing arising from entrapment created by constructing a protecting breakwater was a reason for the earlier proposal being rejected.

The Inquiry was informed by Dr McCowan that water residency times considered to be appropriate to maintain good water quality within Martha Cove and Wyndham Cove Harbour marinas should be below 30 days. This was the target used to obtain Coastal Management Act consent for these developments.

[24] Page 59 of EES Final Report.

Water residency times projected for the proposed safe harbour compared to existing undeveloped conditions change from less than a day under existing conditions in summer wind conditions to one and a half days in developed conditions. In winter wind conditions water residency times were two and a half days for both the existing and developed situation. Under completely calm conditions (worst case condition) the residency times went from 4 days for existing conditions to 5 days for developed conditions.

Dr McCowan explained the reasons for these projections in his evidence:

> *There are two factors which help maintain good circulation within the proposed harbour. These are the 200m plus wide entrance on the eastern side, and the fact that the harbour has a natural range of water depths.*

The Inquiry also notes that in addition to the open eastern area of the harbour, the design of the safe harbour includes an open area between the harbour and the Bay between the proposed pier return and the western end of the proposed harbour wavescreen. The Inquiry also notes the similarity of thinking with the findings of the Panel on the earlier proposal in 1991 with respect to water circulation. The water depths found in Mornington Harbour would assist in water circulation patterns between surface water and deeper water which provides for water movement and hence exchange between the harbour and the Bay but also within the harbour itself.

Water residency times are important because the safe harbour will attract substantial boat traffic associated with berthing and visitation. The proposal also includes provision for refuelling and sewage pump out facilities. Boat maintenance and wash down activity is presently available in the Yacht Club facility. Spillages and build-up of contaminants within the harbour waters and sediments is a concern. The Inquiry considers that the projected flushing and water residency times are adequate to ensure that water quality is not further degraded. The provision of controlled access and operation of a refuelling facility with appropriate spillage controls is considered appropriate and a service that can only benefit the protection of the environment. Similarly, provision of a sewage pump out facility will provide a controlled environment for such activity to safely and appropriately occur. In contrast, without these facilities, the Inquiry would be of the view that concern over water quality would be justified because of the potential for ad hoc disposal of wastes into the harbour and un-managed spillages from boat refuelling.

The Inquiry's inspection of the Yacht Club facility highlighted the opportunity for improved facilities for appropriate boat maintenance activities to occur. Current dredging of sediment from the slipway and boat ramp area generally indicated that the quality of sediment was satisfactory.

The Inquiry noted that the quality of the dredged sediment was suitable enough for disposal onto Mothers Beach.

The Inquiry considers that the projected water residency times are appropriate and will not contribute to significant environmental impacts within the harbour or its surrounds.

A matter that requires clarification is the reference to the SEPP (WoV) policy position regarding the level of ecosystem protection to achieve environmental objectives for avoiding risks to beneficial uses and environmental values relevant to Mornington Harbour. The Inquiry notes the position submitted by Mr Bisset in relation to this issue:

> *The SEPP states that in Schedule F6, the level of ecosystem protection that needs to be used to determine the objective is:*
>
> - *99% for 'largely unmodified', 'natural' or 'substantially natural' aquatic ecosystems;*
> - *95% for 'modified' aquatic ecosystems; and*
> - *90% for 'highly' or 'largely modified' aquatic ecosystems.*[25]
>
> *The area covered by Schedule F6 is divided into segments. The 'Inshore' segment is defined to include the area within which the Mornington Harbour sits. The Inshore segment is described as 'Substantially Natural Ecosystems with Some Modification'.*[26]
>
> *On this basis, the EPA contends that 99% protection is required at Mornington Harbour.*
>
> *Sampling done as part of the EES process showed that some parameters (for example Tributylin (TBT) which comes from antifoulant) may exceed the background levels set in the Guidelines.*[27] *Therefore, for some parameters it may be impractical to comply with 99% protection levels.*
>
> *The SEPP states that beneficial uses are protected except in circumstances where the background level would not provide for their protection.*[28] *Therefore, it is submitted that the background levels of substances at Mornington Harbour should be taken into account in determining the degree of protection that is ultimately required. In particular, we note that to require the 99% protection level for TBT is*

[25] Schedule F6 at Clause 6(2) in SEPP (2003) Part 3 of Schedule B, page 42

[26] Schedule F6 Table 1

[27] For some substances where the SEPP (WoV) Schedule F6 do not specify water quality objectives, the Schedule to the SEPP defaults to the water quality objectives and levels specified in the Australian and New Zealand Guidelines for Fresh and Marine Water Quality (the Guidelines)

[28] SEPP at Clause 10 under Part IV Beneficial Uses

unlikely to be feasible. There may be other substances that are currently at such levels that it would be impractical to require compliance with 99% protection levels.

Water quality monitoring should be carried out prior to construction to determine relevant levels, from which it can be ascertained whether a 99% protection level would be technically feasible. In this regard, we note that the draft Framework EMP includes the following commitment:

- *Environmental monitoring, in the form of water sampling, will be undertaken during construction to measure compliance with the relevant SEPP and ANZECC/ARMCANZ water quality objectives.*

The Inquiry agrees with the above position. While it is agreed that a 99% level of protection should be achieved it acknowledges that existing conditions (background levels) may not allow such a level of protection to be achieved. This is provided for under the SEPP (WoV). The Inquiry supports the concept of monitoring water quality during construction, but considers that monitoring should also be extended, as suggested by Mr Bisset to be carried out prior to construction and also during operation of the safe harbour on a regular basis. The Inquiry also considers that monitoring should be extended to include sediment quality prior to construction, during construction and post construction (during operation) of the facility to assess the effects of increased boating activity on the environment of Mornington Harbour and to inform management and compliance actions.

7.3.3 Wave reflection scour

The Inquiry notes the conclave conclusion that sediment re-suspension due to wave reflections from the front of the wavescreens is a potential source of sediment to the harbour but that it was unlikely to have a significant effect on sedimentation within the harbour. It is also noted that Dr McCowan indicated that erosion of the seabed will be most pronounced approximately 6 to 10 metres in front of the wavescreen where seabed velocities will be greatest as wave energy is reflected back off from the vertical wavescreens. These events will occur most during severe northwest storms on the pier wavescreen and severe north storms on the harbour wavescreen. He gave evidence that there would be some scour and winnowing of fine sediment from the seabed, which would create some turbidity in the immediate area but add little sediment in the harbour.

The Inquiry supports this view and does not consider that sediment build up within Mornington Harbour arising from seabed scouring from wave reflection off the wavescreens to be significant. The Inquiry considers that a more important issue is the effects on the seabed itself and the toe of the

wavescreen structure and its integrity. These issues are dealt with elsewhere in this report.

7.3.4 Beach sand composition and quality

Beach sand composition and quality is an issue that was overlooked in the EES. The Inquiry considers this a significant oversight. However, the attention of the Inquiry and that of the Proponent, other parties and the coastal processes expert witnesses were drawn to this issue. Accordingly, evidence, submissions and opinions have been presented to the Inquiry allowing the issue to be considered.

The Inquiry finds that the effects on a reduced wave climate on the quality of the beach sands, particularly for that of Mothers Beach to be a significant issue.

The submission, presentation and comments provided by Mr Colman have been particularly helpful to the Inquiry in identifying the nature of the impact that could arise from the development of the safe harbour and the reduction of wave action on the Mornington Harbour beaches. A clear message from the hearings was that the quality of the sand on the beaches and Mothers Beach in particular must not become black and anaerobic like the beaches close to the Sandringham Yacht Club (refer to Figure 11).

Viewpoints over the cause and management of the impact diverged.

Mr Colman considered that the lack of wave action will contribute to an inability of fine sediment and organic material that may end up on the beaches from being washed away and that the sediment under the surface layer of the sand would not be adequately aerated by wave action to avoid anaerobic (oxygenless) conditions from developing. The sources of fine sediment would be from material settling out of suspension because of calm conditions and a lack of wave action to shift fine sediment particles off the beach and into deeper water (onto the seabed). Sources of organic material would be from the seawater itself and contributions from stormwater. The nearest stormwater outlet is on Shire Hall Beach near Red Bluff and Tanti Creek east of Red Bluff.

The impact of this process would be the creation of black and smelly sand/sediment on the beach making it unfit for recreational enjoyment and potentially unpleasant for the community.

Figure 11: Degraded beach near the Sandringham Yacht Club

In contrast, Dr McCowan stated in a response to Mr Colman that wave action will remain sufficient to maintain the quality of the sands on Shire Hall Beach and the eastern part of Scout Beach, but that:

> *It is only at Mothers Beach and the western end of Scout Beach where wave action will be insufficient to cause regular movement of the near shore sediments. Here it is suggested that beach cleaning should be extended to include raking of the near shore area at low water. This should remove any litter and prevent the build up of fines and development of anaerobic conditions in the surface layers of the near shore sands.*

Dr McCowan also provided a further response on this matter in responding to Mr Colman's presentation to the Inquiry that the main source of organic material that causes the degradation of sand quality at beaches is seaweed, which if left to decay on the beach will create anaerobic conditions.

The Inquiry finds that irrespective of how the beach sands may degrade, it is obvious that reducing wave action will contribute towards an impact on the quality of the beach sands at Mothers Beach and the western part of Scout Beach. The Inquiry is aware that the beaches in Mornington Harbour are important to the community and important for Mornington and surrounds. Mothers Beach is a popular beach. This was evident during the Inquiry's inspections of the area where the use of the beach for various forms of both informal and formal recreational use were viewed.

The Inquiry considers that the impacts from changed coastal processes on the quality of the beach sand can be significant. However, the Inquiry also considers that this impact is not significant enough to warrant abandoning

the safe harbour proposal. The extent of impact is focussed on Mothers Beach and part of Scout Beach. They are not large or extensive beaches and it is likely any impact could be managed appropriately. The Inquiry considers that further investigation and assessment is warranted to more fully identify and quantify the potential for impacts on beach sand quality arising from the safe harbour proposal. It is considered that this is important given the EES failed to consider the issue initially.

As a result it is important to ensure that the quality of the beach sands is maintained. Beach sand management becomes critical. Can the quality of the beach sand be maintained and is it sustainable? This is an important issue because if the safe harbour proceeds management of the beach sands will become an ongoing responsibility.

The option for regular beach cleaning and raking of the near shore sands at low water is considered a practical option which may not be too difficult to undertake. Removal of beach wrack (seagrass and seaweed washed up or floating up onto the beach) is important. Aeration is also considered important. Mr Colman referred to beach raking as ploughing of the beach. His comment highlights the importance of managing this impact. Being able to undertake these activities without causing unwarranted or extensive environmental damage is important to ensuring the management regime is effective and appropriate.

7.3.5 Climate change

Climate change effects on the coast are primarily associated with the impacts of sea level rise. However, sea level rise can be influenced by other effects such as changes to rainfall and wind patterns and increased frequency and severity of storms. Planning policy in Victoria seeks to plan for sea level rise of not less than 0.8 metres by 2100. The design of the Mornington Safe Harbour wavescreens has been based on a 50 year design life of the structures. Accordingly, the design of the wavescreens has been based on a sea level rise in 50 years of 0.4 metres and taking into consideration the effects of storm surge and storm tides.

The Proponent argued that if a 0.8 metre rise in sea level to 2100 was taken into regard with the design of the wavescreens the structure would be over-designed for its expected design life. This would result in an unnecessarily high structure with increased visual impacts. Mr Bisset stated that:

> *In our submission, a different approach to sea level rise should be taken for water-based infrastructure as opposed to land-based infrastructure. In general, structures that are designed to engage with the water have a greater tolerance to increasing sea levels. Dr McCowan's evidence is*

that as sea levels rise, more instances of over-topping over the wavescreen will occur. Therefore, this is not a case where as soon as sea levels rise beyond a certain point the whole purpose and function of the structures will be compromised.

The Proponent's position is that either the wavescreen height be increased based on the base of the structure being over-engineered now to accommodate any future upgrade, or the whole structure being replaced with a new wavescreen designed to withstand higher sea level rise.

The Inquiry notes that the conclave supports the Proponent's approach subject to the wavescreens being adapted to cater for increased sea level rise and wave conditions to 2100. The Inquiry agrees with the conclave's findings and considers that the design of the wavescreens based on a 50 year life which can accommodate sea level rise over the same period is appropriate. The design of the facility should ensure that base of the wavescreen structures are able to accommodate upgrades beyond the 50 years to accommodate further increases in sea level projected to 2100.

As mentioned earlier, the effects of sea level rise on coastal processes should take into regard the impacts projected to occur on the beaches in Mornington Harbour. It is noted that beach recession rates would be reduced as a result of the wave dampening effect from the wavescreens, but that inundation from higher sea levels at high tide will result in the long term to the loss of the beaches. The Inquiry does not consider that the safe harbour proposal will increase or have significant impacts on coastal processes influenced by climate change effects on the coastal environment.

7.4 Conclusions and recommendations

Evaluation objectives:

- Avoid, or minimise as far as practicable, adverse impacts on the seasonal dynamics and long-term stability of beaches adjacent to the proposed development.
- Minimise as far as practicable adverse impacts on water quality within and in the vicinity of the harbour.

Subject to the recommendations made below, the Inquiry concludes that overall the impacts on coastal processes of the proposal will be acceptable within the context of relevant policy and the evaluation objectives above.

The Inquiry concludes that the Mornington Safe Harbour will have impacts on coastal processes through a reduction in wave action within Mornington

Harbour, but that apart from beach sand quality, the impacts will not be significant.

Impacts on beach sand quality have the potential to be significant because of reduced wave action not being able to clean beach sands of fine sediment or organic material nor capable of adequately aerating the near shore sands to avoid build up of fine sediment or anaerobic conditions.

The Inquiry considers that the effects of the safe harbour on beach sand quality should be further investigated and assessed to determine the extent of the impacts, the causes and what treatments are available to avoid or mitigate the effects.

The Inquiry recommends that:

7. **Further investigation and assessment should be undertaken by Mornington Boat Haven Limited to determine the extent of the impact, the causes and what treatments are available to avoid or mitigate the effects of the safe harbour on beach sand quality particularly at Mothers Beach and the western part of Scout Beach.**

8. **Environmental monitoring of water and sediment quality should be included in the Framework Environmental Management Plan to be undertaken by Mornington Boat Haven Limited prior to construction, during construction and following construction and during operation of the safe harbour to determine the appropriate level of ecosystem protection in accordance with the State Environmental Protection Policy - Waters of Victoria – Schedule F6 (Port Phillip Bay) and to inform management and compliance actions.**

8. Marine ecology

Evaluation objective: Minimise as far as practicable adverse impacts on marine ecological values within the harbour and its vicinity.

This chapter addresses the issues around the impact of the proposed safe harbour development on marine ecology. It considers the effects on marine ecology from construction and operation of the proposed safe harbour.

8.1 Background and key issues

The EES provides an assessment of the current ecological conditions in Mornington Harbour and an assessment of the impacts on the harbour's marine ecology from construction and operational effects of the proposed safe harbour.

Marine ecology was addressed in Chapters 7.5 of the EES Main Report (Volume 1) and in the Marine Ecology Assessment (Appendix V in the Planning Report) prepared by SKM.

The EES identifies that the marine biota found in Mornington Harbour comprises both native and introduced species that are typical of similar environments found elsewhere in Port Phillip Bay. The harbour seabed is mainly sandy silt with very few epibenthic species present.

There is a mix of marine habitats currently found within Mornington Harbour including:

- Intertidal habitats (the area exposed to air at low tide and submerged during high tide), which include:
  - Beaches, which provided habitat for benthic organisms such as polychaetes (marine worms) and bivalves (molluscs that have two shells that open and close such as mussels and pipis).
  - Rocky intertidal areas such as those near Red Bluff, which provide habitat for gastropods (marine snails) and crabs such as the Rough Shore Crab (*Cyclograpsus granulosus*).
- Sub-tidal habitats (the area occurring below the intertidal zone), which include:
  - Soft seabed areas covering the majority of the harbour area with fine to medium grained sand in the inshore areas and fine silty sediment in the deeper harbour areas (between 5 to 10 metres

deep) which is heavily bioturbated (areas disturbed and sediment mixed by burrowing benthic organisms). These areas were most commonly found to be occupied by the introduced Northern Pacific Seastar (*Asterias amurensis*), particularly in the deeper harbour areas and at the base of the pier where wave energy was not as strong. Other species of ascidians, anemones and marine worms were also present. Areas of seabed within the sheltered areas of the harbour were also covered by algae and accumulated debris and litter.

- Seagrass areas located in discrete patches in the more sheltered areas of the harbour comprising *Halophila australis* and *Heterozostera nigricaulis.*
- Pier piles and rock revetments under the pier. Pier biota is dominated by algal species on the outside facing piles, whereas piles below the pier deck are dominated by faunal species. This is largely attributable to the availability of light – most piles directly beneath the pier are devoid of macroalgae. Dominant species under the pier include the blue mussel (*Mytilus planulatus*) and the colonial ascidian (*Pyura stolonifera*). A diverse fish fauna is also present beneath the pier, particularly at the seaward end. Common species include moonlighter, wrasse, leatherjackets, old wives and morwong.
- Inshore sub-tidal reefs, which are largely dominated by brown macroalgal species such as *Ecklonia radiata*, *Sargassum* sp. and *Cystphora* sp. Invertebrates include Black lip Abalone (*Haliotis rubra*), Sea Urchin (*Heliocidaris erythrogramma*) and the seastar (*Patiriello calcar*).

Species of conservation significance identified included seahorses near the pier which are part of the family *Syngnathidae* and pipefish found on the inshore sub-tidal reefs. These were identified and described by Dr Matt Edmunds of Australian Marine Ecology in his expert evidence presentation on behalf of MEA as the Wide-body Pipefish (*Stigmatopora nigra*), Tyron's Pipefish (*Campichthys tyroni*) and a *Vanacampus* sp.

At the Commonwealth level all *syngnathid* species (which include seahorses, seadragons and pipefish) are listed under the EPBC Act 1999 as *listed marine species* and as such are afforded protection in Commonwealth waters. In Victoria, *syngnathids* are protected under the *Fisheries Act* 1995.

The assessment in the EES concluded that potential impacts on marine ecology would relate to:

- The construction of the wavescreens due to noise and turbidity resulting from piling; and
- The physical presence of the proposed safe harbour structures and the impacts of those structures on coastal processes and water quality.

The key issues identified by the Inquiry from construction and operation of the safe harbour on marine ecology are:

- Construction impacts from noise and turbidity.
- Changes to ecological processes arising from the presence of safe harbour structures such as the wavescreens, jetty, marina pontoons and from calmer wave action notably the potential for sand smothering of the inshore sub-tidal reefs.

8.2 Submissions and evidence

Submissions were presented to the Inquiry on marine ecology from the Proponent, MBHL and MEA while expert evidence was presented to the Inquiry from Dr Edmunds on behalf of MEA (Document 51).

On behalf of the Proponent, Mr Bisset summarised the conclusions from the EES assessment of marine ecology:

- *Any increase in turbidity is likely to be extremely localised and transitory in nature, and unlikely to affect resident marine communities in other parts of the harbour.*
- *The type of noise that is likely to be generated by construction activities is readily transmitted underwater and may deter fish from approaching the construction area. Most other species, particularly invertebrates will not be affected by the noise.*
- *The seahorses in the area only exist near to the pier (as opposed to in the open sea area) and therefore are unlikely to be affected by the proposed construction activities.*
- *No seagrass will be lost by the piling, as most if not all of the seabed beneath the proposed wavescreen and moorings is bare substrate.*
- *The wavescreen is likely to enhance the growth of seagrass in the lee of the structure, due to the creation of more sheltered conditions. While shading created by the structures and the floating berths will inhibit the growth of seagrass, some seagrass will be re-established due to the removal of swing moorings.*
- *The potential for contaminants that are present in sediments to be mobilised into the water column and impact on the resident harbour communities as a result of the disturbance is low.*

- *Any increase in numbers of Asterias amurensis (a type of seastar) is likely to be short-lived as its distribution is likely to be affected by the availability of food and other environmental factors. Eradication of the species in the bay is not possible.*
- *The expected residence times are more than sufficient to maintain good water quality in the harbour.*
- *Effective environmental management in terms of activities such as refuelling, waste disposal, maintenance and cleaning will be required to maintain a viable marine ecosystem. These are matters that can be addressed in the Operational EMP for the proposal.*

In response to the EES, the expert evidence of Dr Edmunds was that not all impacts were adequately assessed including changed sediment habitat conditions, increased area of shading by artificial structures and vessels, translocation and infestation of marine pests and the reduction in open water in the harbour.

The Inquiry was advised by Dr Edmunds that Mornington is likely to be a very important area for a resident breeding population of approximately 30 Common Dolphins (*Delphinus delphis*). He advised that the dolphins have a small home range from approximately Dromana to Olivers Hill, with the highest frequency (70-90%) of occurrence at Mornington, which is likely to be an important feeding and residence areas. The Inquiry observed a pod of dolphins offshore from Mornington Harbour during its boat inspection on Friday 4 February 2011.

Dr Edmunds stated in conclusion in his evidence that:

> *There is essentially no impact evaluation in the EES, although the unsubstantiated statement that the habitats and species are represented elsewhere implies that any impact would be considered of no ecological significance. The EES does not provide sufficient information to establish whether there would be residual impacts of ecological significance. There is, however, potential for significant residual impacts to occur. These include:*
>
> - *changes in the population dynamics of the resident dolphin Delphinus delphis group;*
> - *loss of inshore reef habitat if it is habitat for important abalone populations, short-headed seahorse Hippocampus breviceps or other species restricted in range within Port Phillip Bay;*
> - *changes to the sediment chemistry, nutrient cycling and biodiversity, especially with accumulation of finer sediments with higher organic loading;*

- *infestation of new marine pests, with Japanese Kelp Undaria pinnatifida being an immediate threat that would have synergistic effects on sediment and water quality; and*
- *reduced primary and secondary productivity outside the natural level of variation.*

8.3 Discussion

8.3.1 Impacts of noise and turbidity from construction activity

The Inquiry considers that the impacts from construction activities will be mainly associated with noise and turbidity from disturbance of the seabed from pile driving. It is noted that such activity is currently occurring with the redevelopment of the central section of Mornington Pier by Parks Victoria.

Impacts associated with noise can be a significant issue because of the ability for noise to travel underwater and the percussive nature of sound from driving piles into the seabed through a hammering action. However, the Inquiry considers that such impacts are temporary and transient in nature and do not present as an ongoing source of pressure on marine ecological communities. Such impacts can be managed successfully through slow start up procedures whereby the activity commences slowly and softly and gradually builds up to full force thus allowing marine organisms the opportunity to avoid the disturbance. The activity can usually be stopped relatively quickly if cetaceans are sighted by observers to minimise the extent of disturbance. The Inquiry considers that these types of measures are appropriate and that noise impacts from construction can be reduced to avoid significant effects.

With respect to turbidity, the Inquiry considers that such effects will be difficult to avoid given the silty nature of the seabed sediment located where the wavescreens are proposed to be sited. However, the Inquiry also believes that the nature of the impacts from turbid waters generated from construction works will be temporary and transient in nature because of the site specific location of works and the short time frame for construction activity.

The Inquiry considers that construction activity in the marine environment at Mornington Harbour would generally be for a short and definable period of time. Accordingly, the impacts from such short term activity are considered to result in pulse type effects on the receiving environment. Pulse effects are usually of such a nature that the receiving environment can recover unless the extent of impact is of such a scale that recovery is permanently impaired.

The Inquiry considers that the scale of impacts from construction activity associated with the Mornington Safe Harbour would be localised and not of a scale to create permanent impairment of the ability for marine ecology to recover and survive.

The exception to this would be if the outer section of Mornington Pier were to be completely redeveloped as part of constructing new wavescreens and the pier extension, similar to what has happened with the Parks Victoria works for the central section of the pier. In this situation habitat loss would occur with pylons being replaced or significantly disturbed. Existing habitat provided by the pylons would be lost however, the new pylons and underwater structures associated with the new pier wavescreens would provide new surfaces for marine habitat to be created and re-occur. Hence, although loss may occur, provision of opportunities for habitat replacement will be provided. Accordingly, the Inquiry considers that short term impacts will be overcome in the long term. The Inquiry observed habitat development on the pylons associated with both the wavescreens in place at Blairgowrie and Sandringham marinas to the extent that recreational divers were observed around the encrusted pylons at Blairgowrie marina (refer to Figure 12).

The Inquiry considers that pre-construction monitoring of work locations would be appropriate and beneficial. Monitoring should determine the presence of endangered species and species listed under both State and Commonwealth legislation to ensure that impacts are avoided and to inform management actions if species are detected to avoid impacts.

Figure 12: Marine growth evident on the Blairgowrie Marina wavescreen

8.3.2 Impacts from safe harbour structures

Marine environments found in Mornington Harbour are considered by the Inquiry to represent the range of habitats found elsewhere around Port Phillip Bay. The Inquiry understands that within Mornington Harbour there are no marine ecological habitats that are truly unique from what may be found around Port Phillip Bay. This was demonstrated to some extent by Mr Bisset providing the Inquiry with a paper published in the Journal of Marine and Freshwater Research in 2000 on epibenthic community structure in Port Phillip Bay[29]. The paper describes epibenthic habitats around the Bay and indicates that nearshore habitats are largely similar around the periphery of the Bay within areas comprising *High Diversity Sands* including the Mornington area of the Bay.

Impacts within Mornington Harbour are anticipated as a result of the safe harbour wavescreens and marina structures altering wave action and hydrodynamic processes within the harbour. However, the Inquiry is not convinced that the changes created by the proposed safe harbour will have a significant impact on the marine ecology within the harbour. The Inquiry considers the impacts will be more of a shift in marine ecology rather than a loss of marine ecology.

Mr Bisset provided the Inquiry with information responding to Dr Edmunds evidence from Dr Dan McClary from Sinclair Knight Merz. Dr McClary was not called to give evidence so his information was not able to be tested. However, the Inquiry considers that his responses are of some use in considering the scale of impacts from the proposed safe harbour. In particular, the issue of scale of impact is relevant because the effects of the proposed safe harbour are limited to the Mornington Harbour environment.

In terms of the current condition of the harbour, the Inquiry observed, for example the presence of the Northern Pacific Seastar around the harbour adjacent to the boat ramp, Yacht club slipway and between the pier and Fishermans Jetty. It is clear that marine pests are already present within the harbour. Development of the proposed safe harbour offers an opportunity for better monitoring of the marine environment through more targeted responsibility by the Proponent and Parks Victoria and presents a strategy for action to identify and manage marine pest risks.

Although the proposed safe harbour structures will result in changed coastal processes and consequently changes to marine ecological processes and environments, the changes are considered to be limited. The scope of change

[29] Cohen B.F., Currie D.R. and McArthur M.A. (2000) Epibenthic community structure in Port Phillip Bay, Victoria, Australia. *Mar. Freshwater Res.* 51, 689-702.

will be restricted to the development footprint within the existing Mornington Harbour environs. Mornington Harbour is already a disturbed and altered ecological setting and has been for over a century. Habitats associated with Mornington Pier have been created and lost and are being created again through pier construction, removal and re-construction.

The proposed wavescreens, jetty and marina pontoons will provide additional surfaces for new habitat for marine ecology to eventuate. Overall, a balance will be expected to occur over time.

The inshore sub-tidal reefs are susceptible to smothering by sand as a result of changed coastal processes. Monitoring of sand movement will be important and has already been addressed in this report. However, the evidence provided by Dr Edmunds increases the significance of this impact because of the presence of listed species of Pipefish on these reefs. The Inquiry considers it important that monitoring of changes on the inshore sub-tidal reefs be undertaken pre and post construction of the safe harbour proposal to ensure that habitat is not lost and detrimental impacts are avoided.

The Inquiry also considers that a benefit of the proposal will be the opportunity created for seagrass coverage to increase. Seagrass loss from constructing the safe harbour is not anticipated due to the current scattered patchiness of coverage. However Dr Edmunds indicated in his evidence that there may be a patch affected by sand movement arising from altered wave patterns. Given the patchiness generally of seagrass across eastern Port Phillip Bay, an increase in seagrass coverage within Mornington Safe Harbour would be considered to be a positive effect on marine ecology. However, a potential negative effect might be the impact increase seagrass wrack might have on the quality of the beach sands (refer to Figure 13).

Figure 13: Seagrass near the Sandringham Yacht Club

8.4 Conclusions and recommendations

Evaluation objective: Minimise as far as practicable adverse impacts on marine ecological values within the harbour and its vicinity.

Subject to the recommendations made below, the Inquiry concludes that overall the impacts on marine ecology of the proposal will be acceptable within the context of relevant policy and the evaluation objective above.

The Inquiry concludes that the scale of change on marine ecology will be small and limited to the footprint of development within Mornington Harbour. Commensurately, the scale of impact will be localised and minor in terms of marine ecology generally. The effects on marine ecology from the proposed safe harbour in terms of construction and operation will be transient in nature and represent a change rather than a loss. This is anticipated to occur in terms of loss of some habitat structure and replacement with new surfaces for habitat colonisation and creation of

conditions conducive for some existing habitats such as seagrasses to expand and improve habitat condition.

Overall, the Inquiry does not consider that the effects of the proposed safe harbour will result in significant environmental impacts on marine ecology at Mornington Harbour.

The Inquiry recommends that:

9. **The Environmental Management Framework should be amended to ensure that pre and post construction monitoring is undertaken by Mornington Boat Haven Limited to determine the presence of endangered species and species listed under both State and Commonwealth legislation. This is to ensure that impacts are avoided and to inform management actions if species are detected to avoid impacts.**

9. Cultural heritage

Evaluation Objective: Avoid as far as practicable, adverse impacts on sites of cultural heritage (Indigenous and non-Indigenous), including Mornington Pier and any historic shipwrecks.

9.1 Indigenous cultural heritage

9.1.1 Background and key issues

A number of Aboriginal archaeological sites (middens and artefact scatters) are registered in the vicinity of Schnapper Point. A Cultural Heritage Management Plan (CHMP) was prepared for the project and was attached as Appendix F to Volume 2 of the EES.

The CHMP concluded that the development should not impact the known sites but that measures should be put in place to ensure they are not disturbed and contingency planning is needed in the event that new sites are discovered during development.

No Registered Aboriginal Party was in existence for the area at the time of plan preparation[30] so the statutory approval responsibility fell to the Secretary of the Department of Planning and Community Development.

The plan was approved under delegation by the Deputy Director of Aboriginal Affairs Victoria on 29 July 2008.

9.1.2 Discussion and conclusion

No evidence was called on this issue and it was not a significant issue in submissions. The Inquiry notes that a CHMP has been approved for the project outlining the steps to protect and manage Aboriginal heritage. The Inquiry concludes that the project should have minimal impact on Indigenous cultural heritage and any issues can be addressed through the statutory regime provided by the *Aboriginal Heritage Act*.

[30] According to information on the Aboriginal Affairs Website the Bunurong people were in the process of applying to be the RAP for this area at 15 March 2011.

9.2 Non-Indigenous cultural heritage

9.2.1 Background and key issues

An investigation into the cultural heritage that may be affected by the proposal was included in Appendix G in Volume 2 of the EES.

The following places in the vicinity of the proposal are covered by the Schedule to the Heritage Overlay (HO) in the Mornington Peninsula Planning Scheme.

- Mornington Pier (HO228) which applies to the pier but not the harbour works (see Figure 14);
- Mornington Public Park (HO55);
- Schnapper Point Exploration Site (HO57);
- Football Disaster Memorial (HO59); and
- Mornington Main Street and Esplanade Civic Precinct (HO329).

Mornington Pier is also included in the Victorian Heritage Inventory (H7921-0110). The Statement of Significance on the Victorian Heritage Database reads as follows:

> *The Mornington Pier is of local historical, social and archaeological significance. The pier has been influential in shaping the development of Mornington and is historically important for its association with bay trade during the mid 19th century. The pier is of local significance for its continuing association with passive recreational activities including promenading and angling. There is some potential for archaeological deposits to be located on the seafloor adjacent to the existing pier and areas where additions were once located, for example, the area of the former 'L'-shaped extension.*

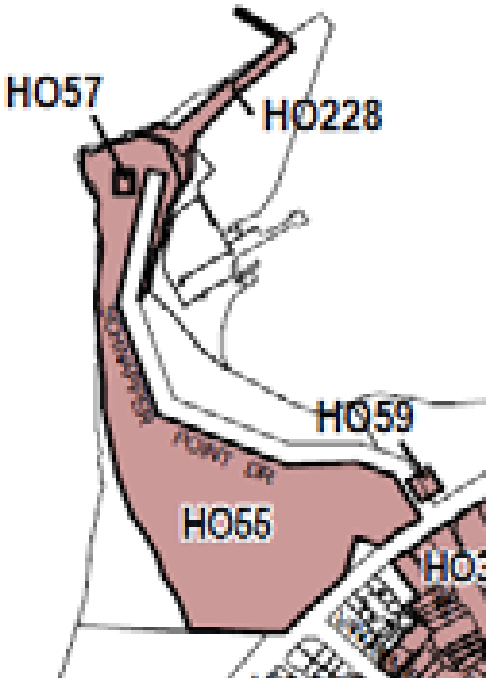
The Local Planning Policy Framework (SPPF) at Clause 22.04 'Cultural Heritage Places', states that:

> *Particular regard should be given to the heritage values of foreshore and coastal areas, in recognition of their critical link to the historic development of the Peninsula.*

It also notes that:

> *The consideration of heritage values must extend beyond particular buildings, to include precincts, places, landscapes and features.*

Figure 14: Heritage Overlay at Mornington Harbour[31]



The *Admiral* (Heritage Victoria Listed Shipwreck S006), lost in 1854, is located at Schnapper Point. The Mt Eliza to Pt Nepean CAP states that:

> *…there is potential that further historical sites are located along this section of the coast, and that coastal works near historical sites have the potential to impact on these sites.*[32]

9.2.2 Submissions and evidence

Mr Peter Lovell of Lovell Chen Architects and Heritage Consultants was called as an expert witness on heritage for the Mornington Peninsula Shire Council. He provided an extensive historical overview which was both interesting and useful to the Inquiry.

He stated that the cultural landscape of the Mornington Harbour Precinct can be understood through the themes of transportation, recreation and fishing. These themes impact on the way in which the cultural landscape of Mornington has developed over time.

Mr Lovell explained that historically, Mornington Pier provided entry into the township through the trade and transportation of goods and the steamboat tourist trade of the late 1800s and early-mid 1900s, prior to the development of road infrastructure in Victoria.

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[31] Part of Map 5HO in the Mornington Peninsula Planning Scheme

[32] Mt Eliza to Pt Nepean CAP, p22.

Mornington Harbour has evolved and experienced changes over time, including the current works to the middle section of the pier. According to Mr Lovell it has relatively comfortably accommodated the insertion of new elements, without the place as a whole being overwhelmed or dominated. From a heritage perspective it relies on maintaining a balance between landscape, seascape and built form.

He noted in part that:

> *The proposed marina, to be located within Mornington Harbour, will not have a direct impact on the historical and social significance of the pier, as a historic structure which provided entry into the township and a place for recreational pursuits such as fishing and promenading.*
>
> *……*
>
> *However there will potentially be heritage impacts deriving from the visibility of the proposed marina. The development will become the primary element of prominence in views towards Mornington Pier from Mothers Beach and the surrounding foreshore……..*

In his conclusion he discussed extensively the issue of the degree to which Mornington Harbour could be changed without undermining its fundamental cultural and heritage values and concluded:

> *…The proposal is one which is of a scale and visual impact which will dominate that fabric and alter the place as a whole, such that the appreciation of its significance is will be compromised.*

He concluded that the proposal was inconsistent with the relevant clauses of the planning scheme (particularly those outlined above in section 9.2.1).

Heritage Victoria provided a submission which noted that consent would be required for any works on the heritage listed pier and for the removal of the slipway. Their submission also noted the potential for archaeological relics to be uncovered during development and for appropriate measures to be in place for their management given their protection under the *Heritage Act* 1995.

Mr Bisset for the Proponent submitted that the visual impact will not be so significant as to adversely affect the heritage values of the areas adjoining the harbour. The pier will still dominate in the background as a major structure when viewed from Schnapper Point and Mills Point and the pier and the marina will not be visible from Main Street and vice versa.

He also questioned the extent to which heritage values should dictate safety standards and concluded that the proposed design was an appropriate balance between a safe harbour and protecting heritage values.

9.2.3 Discussion

There seems to be little disagreement in the material before the Inquiry that there should be no physical impact on known heritage sites associated with the harbour wavescreen or harbour works. Works on the pier itself will require consent from Heritage Victoria but they have not indicated any particular concern in principle with the proposal.

There is the potential for other artefacts and sites to be discovered during development (for example remnants of shipwrecks or the Old Mornington Baths) and appropriate protection, reporting and management requirements need to be in place for these. Such considerations are shown in the draft Framework Environmental Management Plan in Appendix E.

The most difficult issue is that raised by Mr Lovell regarding the broader cultural and landscape context of the heritage values of the Mornington Harbour. Mr Lovell rightly points to Clause 22.04 of the Mornington Peninsula Planning Scheme which raises this as a significant issue in terms of policy.

The Clause requires the consideration of heritage values beyond particular sites to encompass 'precincts, places, landscapes and features'. The question then becomes does the proposal impact unacceptably on these broader heritage values?

Mr Lovell concluded that it does. However the Inquiry is less convinced. The Inquiry has already considered landscape and visual impacts of the project in Chapter 5 and made conclusions on these.

In relation to the heritage aspects of the harbour the Inquiry considers that the proposal will not unacceptably impact on these values for the following main reasons:

- As discussed above the impact on physical fabric should be minimal;
- Whilst the safe harbour development will be a substantial new element in the harbour, its function and use will be consistent with, and expand opportunities for, many of the values that have contributed to the harbour's heritage such as passive recreational boating, angling and promenading.

The heritage values of the harbour are not fixed in time and are continuously evolving and developing whether through natural processes or human

caused changes. The safe harbour proposal is the latest chapter in the history of the harbour.

Does the proposal cross a threshold in terms of its scale as suggested by Mr Lovell and result in upsetting the balance between seascape, landscape and built form? Arguably yes, but that is often how impacts on heritage values must be considered. Sometimes impacts are small and incremental and occur almost without being noticed. At other times the impact is more transformative and this proposal is probably at that end of the scale. However it does not make the impact necessarily unacceptable.

The Inquiry also considers that the safe harbour proposal offers the opportunity to provide significant interpretation of Mornington Harbour's history and that this should be included in detailed design and construction.

9.2.4 Conclusions and recommendations

The Inquiry concludes that impacts on cultural heritage values of identified sites at the Mornington Harbour should be minimal and can be managed by implementing appropriate environmental management measures. The impact on the broader cultural landscape of the harbour will be significant in the eyes of some, but the Inquiry concludes that when considered in the policy mix for the harbour, the extension and expansion of boating use proposed is acceptable in terms of heritage impacts.

Opportunities to explore heritage interpretation should be considered in the project. The Inquiry recommends:

10. During further design and development Mornington Boat Haven Limited should provide or contribute to the interpretation of the history of Mornington Harbour in consultation with local heritage groups and with input from a suitably qualified maritime heritage expert.

9.3 Overall conclusions on cultural heritage

Evaluation Objective: Avoid as far as practicable, adverse impacts on sites of cultural heritage (Indigenous and non-Indigenous), including Mornington Pier and any historic shipwrecks.

The Inquiry considers that the proposal should not have a significant impact on Indigenous and non-Indigenous cultural heritage values and should be able to avoid or manage impacts on particular sites through the Environmental Management Plan, planning permit conditions and the Cultural Heritage Management Plan.

10. Traffic and parking

Evaluation objective: Identify strategies to meet projected traffic and parking demands.

10.1 Background and key issues

Traffic and parking was considered in Appendix H to the EES. The Mornington Harbour currently has significant traffic and parking demands placed on it from users including the Mornington Yacht Club, restaurant patrons, casual beach and pier visitors, charter boat operators and clients, users of the boat ramp and many others (refer to Figure 15).

Figure 15: Part of the boat ramp car parking area with Mothers Beach in the background

This leads to significant congestion at peak times and particularly during weekends and holidays during summer.

From a review of the EES, submissions and evidence, the Inquiry considers the key issues related to traffic and parking are:

- The likely traffic to be generated by the development of the Mornington Safe Harbour;
- How many spaces should be provided by the Proponent and where; and
- What are the options for managing parking demand.

10.2 Submissions and evidence

In his submissions Mr Bisset for the Proponent noted that there is no standard parking rate for the project in Clause 52.06-5 of the Mornington Peninsula Planning Scheme and therefore:

> *…an adequate number of car spaces must be provided to the satisfaction of the responsible authority.*

He drew the Inquiry's attention to a VCAT case[33] in noting that the provision of parking, whilst problematic in this heavy utilised harbour location, should not be a determinant as to whether the project should proceed or not.

Two sets of evidence were called on traffic:

- Ms Kate Partenio of GTA Consultants for the Proponent; and
- Ms Gillian Austin of Aurecon for Mornington Peninsula Shire Council (MPSC).

In written directions of 19 November 2010 the Inquiry directed that the traffic experts meet prior to the hearing in a conclave to explore areas of agreement and disagreement. Their joint statement was tabled on Day 1 of the hearing as Document 1.

Their statement included a number of points of agreement and the key ones are summarised below:

- Foreshore parking demand exceeds capacity on peak summer days coinciding with race days;
- Boat trailer parking does not meet current needs;
- There is significant spare retail capacity at the southern end of the retail area on Saturdays;
- There will be an increase in berths of 133;
- The parking demand will depend on the type of boats and the provision of parking but the agreed estimate is a need for 50 plus spaces;
- The use of a shuttle bus is consistent with policy and this would be a good demonstration site for such a service;
- There is sufficient capacity for remote parking south of Barkly Street; and
- A 50% reduction in the project size would still lead to the need for an offsite parking strategy.

[33] *Hasham v Maribyrnong CC* [2003] VCAT 1666 at paragraphs 5 and 6.

Suggested amended draft planning permit conditions were also agreed. The main point of disagreement related to the appropriate car parking rate and thus the associated demand level.

Ms Partenio suggested a rate of 0.3 spaces per berth was appropriate leading to 40 spaces being required. Ms Austin in her evidence preferred a rate in the range of 0.17 and 0.94 spaces per berth, leading to parking demand in the range 23-125 spaces.

Both experts outlined extensive reasons for their choice of parking rates and referenced a range of case studies, reports and the Australian Standard *Guidelines for Design of Marinas*.

Ms Partenio in evidence drew our attention to a number of documents that supported the proposition that there should either be no net increase in the area for parking (Schnapper Point Framework Plan) or that there should be a decrease in parking on the coast where there are suitable inland alternatives available (Mt Eliza to Point Nepean Coastal Action Plan).

Mr Montebello in submissions for MPSC noted that the EES itself identified 64 spaces as the additional demand generated from development based on 90 additional berths rather than 133 agreed by the experts.

He noted that it was regrettable that an analysis of existing demand from the Yacht Club had not been undertaken, as this would have provided useful data to help the analysis for the marina development.

Whilst Council did not disagree that a parking strategy involving car parks in the Mornington town centre may be part of the solution, Mr Montebello noted that these car parks are mostly owned by Council and may fulfil a different role to be determined in the development of the Mornington Activity Centre. Some level of contribution to parking was considered essential by Council:

> *It is essential that in any permit, the fair and reasonable obligations of this private user be ascertained and recorded.*

Council did not discount the use of a shuttle bus to assist with parking but indicated that they have some concerns with the approach related to:

- Matching of its operations with demands;
- The inadequacy of town centre parking to provide a central parking and collection point; and
- It will not help existing demand issues associated with trailer parking and the boat ramp.

Many individual submissions commented on the difficulty of parking either on or near the foreshore at peak times now and how the increased demand from the development would make an already bad situation worse.

10.3 Discussion

Parking on Crown land foreshores around Port Phillip Bay follows a similar pattern. On warm summer days, and particularly weekends or public holidays, parking demand far exceeds supply as a range of users rush to the bayside beaches and harbours. In cooler months, or cooler weather, there is nearly always sufficient parking for the much reduced crowds.

Mornington Harbour is no different in this regard except perhaps that the range of users of the harbour is very extensive. Even so, the Inquiry notes that on perhaps 20 visits to the harbour during the course of the hearings in February 2011, there was nearly always some parking available on the lower level, primarily due to the unseasonably cool month.

The net result of the heavy use of foreshore car parking is that foreshore managers, correctly in the opinion of the Inquiry, do not try to cater for the peak parking demand as this would be expensive and damaging to the foreshore environment and is not supported in coastal or planning policy.

Rather, at peak times the community of users is left to self manage its parking by a mix of early arrivals, family drop offs, parking and walking and other measures.

The Mornington Yacht Club certainly generates a significant parking demand at the present time during its races and other events, and this demand will increase with the harbour development. An assessment of current demand would have been useful as it would have provided a starting point for extrapolation for the expanded harbour, albeit with modifications to cater for the changed boating type.

As it is, the Inquiry is left with the respective expert's estimates of parking demand. The agreed figure of '50+' and the estimate of 64 in the EES sit approximately in the middle of the range of extremes presented by the experts.

This makes it very difficult to put an exact figure on the likely demand. For example, if the upper end of the spaces to be provided per wet berth is taken from the Australian Standard (AS3962-2001) at Clause 8.2.1, this would suggest a figure of approximately 80 spaces would be required (133x0.6=79.8). The note to the table suggests that the higher end of the range (0.6) should be used for racing yacht clubs due to the greater crew number

required when racing. It was agreed at the hearing that Mornington Yacht Club is a 'racing club' and hence a higher demand for parking may be expected.

To resolve this issue the Inquiry considers a parking demand assessment of the existing club should be undertaken to better inform the requirements for parking spaces to be provided. The Inquiry does not consider that the eventual number of spaces to be provided will be a major determinant on the overall acceptability or otherwise of the proposal provided it is broadly within the range suggested by the experts.

This demand should also be put into the context of a range of other harbour users who also generate demand at some time, both private activities and public. There is likely to be a secondary increase in parking demand for boat trailers due to the provision of a 'safe harbour' and thus increasing the range of opportunities for safe launching and retrieval in a broader variety of weather conditions.

The shuttle bus proposal appears to the Inquiry to have merit as an option forming part of the traffic and parking solution. Ideally the route, operating hours and days would be carefully design to maximise its use. The Inquiry considers the most useful approach would be to have a shuttle system that provides multiple roles including providing a visitor experience in itself as well as a viable mechanism for increasing non car traffic to the foreshore.

Most importantly, it seems to the Inquiry that a broader traffic and parking strategy for the whole precinct is required, which the Proponent should contribute to. Even in the absence of this proposal, the Inquiry would argue that such a strategy is required. This could include elements such as:

- Parking management through paid parking for non-residents;
- Increased provision of drop off bays;
- Use of a shuttle bus as a parking management aid but also as a tourist shuttle in its own right.

The Inquiry has not provided a recommendation on this issue as it is a broader one for Council to consider rather than the Proponent.

10.4 Conclusions and recommendations

Evaluation objective: Identify strategies to meet projected traffic and parking demands.

The Inquiry concludes that increased parking demand associated with the development of the safe harbour will be significant but in itself is not a reason to prevent the project going ahead.

The joint strategies of providing some level of car parking for the increased club use and a shuttle bus should be an effective method of managing the increased traffic and parking demand.

Parking demand on the Mornington Foreshore and at the harbour already exceeds supply at peak times so the net effect will be to place a higher demand on off-foreshore parking areas in the Mornington town centre. The Inquiry considers a broader parking strategy is required which will include the shuttle bus proposal as well as improving other elements such as pedestrian access and improved circulation and harbour drop off points.

There is no disagreement that the Proponent should contribute to improvements in traffic and parking because of the impact of increased traffic from the development but there is disagreement as to what extent this should take. The Inquiry concludes that further demand assessment is required.

Management of existing and increased parking will be an issue that Council, as foreshore manager, will increasingly need to address. The Proponent for the safe harbour development should provide additional parking to the satisfaction of the responsible authority as per Clause 52.06 of the planning scheme as well as the proposed shuttle bus.

The Inquiry considers this shuttle bus proposal has merit and could be extended in duration to provide a more comprehensive tourist shuttle service from the town to the foreshore. It has not made a recommendation on this matter as it is an issue for Council rather than the Proponent.

The Inquiry recommends that:

11. Prior to the development commencing Mornington Boat Haven Limited should commission from a suitably qualified traffic expert an assessment of current parking demand generated by the Mornington Yacht Club. This will inform the appropriate number of car parking spaces required for the Mornington Safe Harbour facility with the

scope of the assessment to be approved by Mornington Peninsula Shire Council. This should be included as a permit condition.

12. **The results of the parking demand assessment should be used in conjunction with the evidence presented to this Inquiry to assist Council in arriving at a reasonable, defensible figure for the car parking spaces to be provided by the Proponent.**

13. **Mornington Boat Haven Limited should be required via permit condition(s) to provide: parking spaces as informed by the car parking demand assessment referred to in Recommendation 11 to the satisfaction of the Mornington Peninsula Shire Council; or a shuttle bus service between the harbour and the Mornington town centre.**

Planning permits conditions are discussed in Section 15.4 and draft conditions proposed in Appendix D.

11. Other issues

11.1 Stakeholder Consultation

Evaluation objective: Undertake stakeholder consultation throughout the EES process.

11.1.1 Background and key issues

On 1 August 2005, the Minister for Planning determined that the proposed Mornington Safe Harbour project required an EES. Assessment Guidelines for the Inquiry were released by the Minister for Planning in May 2006.

The Terms of Reference for the Inquiry were approved by the Minister for Planning on 24 May 2010, and subsequently amended by the current Minister on 31 January 2011.

The Terms of Reference required the Inquiry to consider submissions and hold a public hearing. The Inquiry was tasked with considering the exhibited EES, any submissions received in response to the exhibited EES, the Proponent's response to submissions and other relevant information provided to or obtained by the Inquiry, having regards to relevant statutory provisions, policies and associated plans.

The EES for the Mornington Safe Harbour development was exhibited from 20 May to 5 July 2010.

All submissions received and all information provided in respect of the Inquiry were treated as public documents. The Inquiry received in excess of 2,000 submissions. All submitters were given the opportunity to make a verbal submission to the public hearing. Further details of this process are provided in Appendix B.

11.1.2 Submissions and evidence

Some submitters at the hearing expressed the view that written submissions received by the Inquiry may not accurately reflect public sentiment about the issue. Issues raised by submitters in relation to the consultation process included:

- Suggestion that the Council indicated to the community in a meeting that a marina would not be considered until a Coastal Management Plan was endorsed, and a Coastal Management Plan does not yet exist;
- That the term 'safe harbour' has been used in promoting the proposal as opposed to 'marina'. As the word 'marina' did not appear in Mornington Yacht Club's literature, it was suggested that people were not aware of the consequences of a marina. In addition, Council made the comment that there is *'no formal, official recognised policy of Government at any level that refers to a marina development at the Mornington Harbour'*[34];
- That the original permit for the Council had been for only one wavescreen, on the inner side of the pier, and that Parks Victoria were now proposing two wavescreens (one on the bay side and one on the harbour side) for the heritage section of the pier . Accordingly, it was suggested that there was at times a lack of consistency in Parks Victoria's views as to whether they supported the proposal: and
- Suggestion was made by some submitters that they had heard anecdotally that some members of the yacht club did not support the proposal but feared voicing their concerns as their submissions would be made public.

11.1.3 Discussion

Having considered information related to the consultation process, the Inquiry is not in a position to draw any conclusions about the consultation processes prior to the formal exhibition of the Environmental Effects Statement.

However in relation to the EES, planning scheme amendment and planning permit, the Inquiry is satisfied that the consultation process appears to have been effective. It bases this conclusion on the fact that over 2,000 submissions were received from a range of stakeholders both local and regional expressing a diverse range of opinions. This is an extremely high number of submissions for an EES.

If there were deficiencies in earlier processes, and the Inquiry is not suggesting there were, then the formal exhibition of the EES and planning documents has provided an equal and reasonable opportunity for people to make their views known based on a 'standard' set of documentation.

[34] Proponent Closing Submission, Document 81, p3.

11.1.4 Conclusions

Evaluation objective: Undertake stakeholder consultation throughout the EES process.

In relation to that portion of the EES process that this Inquiry has been involved in, the Inquiry is satisfied that the evaluation objective has been met.

11.2 Noise and greenhouse gases

Evaluation objective: Maintain compliance with noise criteria during construction and operation.

Evaluation objective: Minimise greenhouse gas emissions during construction and operation.

Noise (Appendix J) and Greenhouse Gases (Appendix K) were addressed in Volume 2 of the EES. These issues, whilst significant, are not considered critical by the Inquiry in terms of their environmental effects and influence on the recommendation in chief that the project can proceed.

They are issues of effective environmental management (construction and operation) and project design. That is, the management of these issues is well understood and subject to a number of regulatory instruments.

They were addressed in the evidence of Ms Christine Wyatt of GHD for the Proponent in the context of the Framework Environmental Management Plan (EMP) and are included in that document in Appendix E.

The Inquiry considers that provided the environmental management measures in the EMP, the commitments made by the Proponent and the permit conditions are complied with, then the impact of these issues should not be significant and the evaluation objectives can be met.

11.3 The business case

11.3.1 Background and key issues

Due to a range of submissions related to the 'public' or 'private' nature of the proposed facility, the Inquiry directed Mornington Boat Haven Limited to prepare a summary of the business case. This was to provide the Inquiry with some guidance as to the proposed mix of public and private funding anticipated for the development and to help it consider the Boating Coastal Action Plan policy A7.2:

Private investment in the redevelopment of the Mornington Harbour will be encouraged where this also brings maximised public benefit.

The Inquiry was also interested in how the public and private funding mix might relate to project scale and specifically whether the design response in the project is directly related to the berth numbers needed.

The Proponent's business case was founded on a document prepared by Leisurecorp titled *Delivering the Mornington Safe Harbour* which they contended should be kept commercial in confidence. Having viewed this document and the information tabled in response to the Inquiry's directions (Document 52, a letter from Minter Ellison Lawyers), the Inquiry decided to proceed with the tabled information without ruling specifically on the Leisurecorp report.

11.3.2 Submissions and evidence

The tabled Document 52 provided further information on the business case behind the safe harbour development. Extracts from this document are shown below.

Number of wet berths needed for yacht club purposes alone

The estimated number of wet berths required by MYC is summarised in Table 4.

Table 4: Summary of berths to be provided

Type of berth	Number[35]
Pen berths required to cater for MYC's existing demand and anticipated demand over the design life of the safe harbour (for long term, medium term and short term leasing)	115
Other berths (i.e. swing moorings and fore and aft moorings) to cater for MYC's existing and anticipated demand	25
Visitor berths	5
Emergency services berths	2
Total	147

[35] Estimated minimum number of berths required by MYC

Updated capital cost figures

The EES included an estimated capital cost of $15 million to $17.5 million in 2008 dollars. The current revised estimate based on a conceptual design is in the order of $19 million not including the pier wavescreens or the pier return.

Division of 'private' and 'public' facilities

There was some discussion and disagreement in the hearing as to what constitutes 'public' and 'private' facilities, particularly in relation to the availability of wet berths. The summary table from Document 52 is shown below.

Table 5: Public and private facilities

Public facilities	Private facilities	Public or private facilities
55 pen berths - leased long term to members of the public	85 pen berths leased long term to MYC members	29 pen berths leased short/medium term to MYC members or the public
12 visitor/emergency berths		12 swing moorings leased to MYC members or the public
Other facilities: - Harbour wavescreen walkway - Pier return - Public jetty - Travel lift and wash down facility - Sewerage pump out facility - Re-fuelling facility - Toilet and shower facilities (Note: only available to members of the public who lease a berth or mooring)	Other facilities: - Office	8 fore and aft moorings – leased to MYC members or the public

Investment of private and public monies

The Proponent indicated that no agreement has been reached for public funding as yet but it considers the following elements would attract State funding:

- *the government funds the pier wavescreen and return on the existing pier; and*

- *MBHL will contribute around two-thirds and government will contribute around one-third of the costs, for the remainder of the works that comprise the project.*

Proposed leasing arrangements

The Proponent indicated that pen leasing costs would be in the order of $9,000 per metre for a 10m berth on a 21 year lease which compares favourably with other harbours around Port Phillip Bay.

Cost sensitivity

The Proponent indicated there are two major elements to cost sensitivity. The first is the location of the wavescreen. If it was moved to a deeper location (say on the 9m contour), it was estimated that the unit cost rate could increase by 30%.

The second major element is the number of berths provided. A reduction in the number of berths would result in a higher per berth cost and thus potentially a greater call on Government funding to maintain project viability.

11.3.3 Discussion

To provide a safe harbour at Mornington of any form will involve significant capital cost. Building structures in the marine environment can be an expensive exercise. To fund the harbour wavescreen and marina alone for this proposal is estimated at $19 million, of which two-thirds or nearly $13 million is intended to be generated by the sale of pen leases.

A smaller safe harbour with perhaps just a wavescreen to protect the boat ramp and existing harbour facilities could be constructed with no marina pens. However this would not provide any significant opportunities for private investment and would likely require the State Government to fund all the works. It would also seem to result in a harbour development that is somewhat less intensive than coastal policy would suggest is warranted at Mornington.

The Boating Coastal Action Plan policy at A7.2 explicitly encourages private investment with the proviso that public benefit is maximised. Whether the public benefit in the existing proposal has been maximised becomes a critical question. Certainly 'public' availability of berths becomes important and there was some disagreement in the hearing as to what constituted public and private in this context.

Council seemed to consider that public berths were those that are available to visiting boaters on a casual basis whereas the Proponent was more of the view that berths leased to the public were 'public berths'. Mr Philip Coombs for the Proponent indicated that in practice it is likely that many berths would be available to casual visitors when they are not being used by their substantive owner (lessee).

The Inquiry notes that the proposal provides a number of other public benefits including the all weather protection for the boat ramp and public basin as well as ancillary boating facilities and greater pedestrian access to the harbour via the new wavescreen.

Whilst this is an arguable point, on balance the Inquiry considers that the private investment in the Mornington Safe Harbour proposal is appropriate. Through the proposal as put forward and during further detailed design, every opportunity to add to the benefit should be explored.

The Inquiry notes that the State Government has not to date committed any funding to the proposal beyond that already being spent on the existing pier by Parks Victoria and the funding contributed to the preparation of the EES itself. This issue in itself is not within the domain of the Inquiry and such decisions will rest with Government as they consider a response to this report.

11.3.4 Conclusions

The Mornington Safe Harbour will require significant Government investment beyond that already committed if the coastal and boating policy objectives for the area are to be achieved. The level of private investment proposed should be encouraged and every opportunity to increase public benefit sought.

12. Net community benefit assessment

Evaluation objective: Ensure that the proposed development achieves a net community benefit.

12.1 Background and key issues

Assessment of the proposed Mornington Safe Harbour requires consideration of environmental, social and economic issues. The test for considering these issues in an integrated sense involves assessing whether the proposal will achieve an overall positive benefit for the community or 'net community benefit'.

Clause 10.04 of the Mornington Peninsula Planning Scheme states:

> *Planning authorities and responsible authorities should endeavour to integrate the range of policies relevant to the issues to be determined and balance conflicting objectives in favour of net community benefit and sustainable development for the benefit of present and future generations.*

Section 4 of the *Planning and Environment Act* 1987 and Clause 10.02 of the planning scheme also state that an objective of planning in Victoria is *'To secure a pleasant, efficient and safe working, living and recreational environment for all Victorians and visitors to Victoria*. Decision makers are urged to apply the precautionary principle in relation to matters where community safety is at stake.

Considering net community benefit involves weighing up positive and negative elements and outcomes in proposed land use and development.

12.2 Submissions and evidence

The Inquiry heard a variety of submissions and evidence on the issue of net community benefit, both positive and negative. It heard about environmental matters relating to the functionality and quality of the harbour and beaches, social matters relating to public perception and opportunities to use the features of the harbour primarily for recreation and on economic matters associated with public-private use and benefit of the various facilities comprising the Mornington Safe Harbour.

Mr Montebello, for Council submitted to the Inquiry that a net community benefit analysis often involves a blunt comparison of benefits and dis-

benefits without asking whether a particular group is more advantaged over others. He suggested that:

> *The circumstances of this matter demand the Panel ask whether one user group is benefiting at the expense of other user groups and whether this can be justified. Council submits that the question of social equity should loom large in the panel's deliberations. The result should not be the creation of winners and losers, but a decision which preserves the cultural fabric of the community and its sense of identity whilst reasonably providing for the needs of a safe harbour firstly and then marina facilities only if that is do-able.*

In relation to social issues, the Inquiry heard from Ms Rosen, an expert called by Mornington Peninsula Shire Council who presented evidence on the probable social impacts associated with the proposal[36]. Her assessment was conducted in relation to the nature and scale of the impact, the extent of the impact and who is likely to be affected. She focused on the extent to which the proposal will result in a net social community benefit, particularly in relation to access to recreational facilities and impact on the social role that Mornington Harbour plays in the general community.

In terms of the impact assessment on future enjoyment of the environment, Ms Rosen rated the significance as 'High'. She stated that the proposal will have a permanent detrimental impact on the existing visual character and iconic value of the harbour. She believed that it would likely detract from the future enjoyment of swimmers and would not enhance the level of recreational facilities to be provided by the proposal, which were considered to be already available.

Ms Rosen expressed particular concern in relation to the issue of community access to public assets. She believed that the provision of public berths was modest and the use of the harbour for the private boating community will detract from perceived access to public assets and lead to a detrimental impact on the broader community's sense of place attachment. Ms Rosen stated that the proposal will have a moderately negative impact on real and perceived safety for the general public without significantly improving the safety of public boaters, anglers and swimmers during adverse weather conditions.

According to Ms Rosen, the proposal is likely to have a positive impact on the private boating community due to the ability of the safe harbour to protect private boaters and public boats for part of the year during which adverse weather conditions prevail. However, the overall impact to this

[36] Social issues were discussed specifically in Chapter 6.

stakeholder group is low to moderate due to the limited duration of this benefit.

While the proposal would have no impact on real water quality in the long term, it would have an impact on perceived water quality.

Ms Rosen stated that perception strongly influences behaviour, and if the public perceive that the harbour is less available for recreational use, this perception would impact on their overall decision about their activity and lifestyle choices and therefore their enjoyment of the amenity.

In questioning from the Inquiry, Ms Rosen stated that her conclusions had been derived only from the submissions received by the Inquiry, and she had not undertaken an independent community survey.

Mr Rob Milner of 10 Consulting Group, an expert called by MPSC, also provided the Inquiry with an assessment of net community benefit which attempted to encapsulate the conclusions from the evidence of Ms Rosen, Mr Wyatt and Dr Riedel. He noted that there is no one agreed process, formula or framework that can be applied to determine whether a project will have a net community benefit (this was also noted by Mr Bisset on behalf of the Proponent).

Mr Milner stated that in relation to this particular proposal, the impact would be both:

> *… positive and negative, multiple and diverse, social, economic and environmental, local and regional and affect diverse groups within the community differently.*

In relation to net community benefit, Mr Milner identified four principal themes that are relevant and appropriate to the proposal:

- Coastal environment resources and risks;
- Sustainable use of natural coastal resources, boating and recreation;
- Coastal development, built environment and heritage; and
- Settlement, activity centres and economic development.

He considered that policy has recognised the need for a safe harbour, and that there would be considerable community benefit from extending the pier and the addition of a wavescreen. The pier and wavescreen, if built effectively for the next fifty years, would also positively respond to climate change conditions.

He also stated that while the inclusion of the marina would be of benefit to boat owners and users and would be one way of further complementing the

regional role of the harbour, there are potentially community costs associated with the proposal. These are:

- Change to the character and appearance of the harbour diminishing the sense of the 'iconic harbour' adjacent to the 'village';
- Increased marina capacity leading to an increasing demand for car parking causing greater congestion and frustration for all harbour user groups;
- Increased potential for conflict between water users due to larger marina footprint;
- Restriction of some parts of the marina from public access; and
- Increased usage of Schnapper Point without improved links to the activity centre.

Mr Milner considered that on the balance, the project concept would result in a net community benefit but that the marina component and design should be reviewed and redesigned with the following outcomes in mind:

- Greater protection of the established harbour character and utilisation patterns;
- Further minimisation for the potential conflict between water users and craft using the ramp and harbour;
- A reduction in the overall boat capacity to more closely align with the parking constraints proximate to the harbour and the physical constraints of the space between the beaches and the pier.

He added that as a consequence of a marina, greater density and mass is experienced and sense of spaciousness is lost.

For persons with little interest in boating, greater value and enjoyment may be placed on the existing and familiar space associated with the harbour and relatively uninterrupted views of the headlands and bay. He cautioned that there may emerge a greater sense of 'community cost' or something lost to the community.

From a community perspective, the Inquiry heard from Mr Chessell on behalf of MEA who submitted that although members of the Yacht Club and the broader boating community may benefit from the proposal such benefits would be outweighed by the following impacts that would be borne by the community:

- The visual impact of the proposal;
- The changes in the character of the harbour and township;
- Increased conflict between beach users and boats;
- Changes to coastal processes, sand quality and sediment management;

- Impacts on marine ecology and water quality; and
- Increased car parking difficulties.

Mr Chessell indicated that the concern of MEA would be that:

> *…the benefits of the proposal would (to a large extent) be private in nature whereas the disbenefits (to a large extent) would be public in nature.*

In contrast to the above, the Inquiry heard from Mr Bisset for the Proponent who directed the Inquiry to the MBHL's paper on net community benefit (this was in part a response to the Inquiry's directions for net community benefit to be addressed in submissions). He stated that the net community benefits of the proposal are:

- The proposal will benefit other members of the public who are members of the MYC, as only 10 per cent of the over 900 MYC members are boat owners;
- Ten berths for emergency and rescue boats will be provided and available year round;
- The proposal will benefit boat owners who use the public launching ramps, providing for year round use and reducing the risk of damage and injury. Charter boats and commercial fishing boats will also benefit from the proposal;
- The owners and users of visiting boats will benefit due to increased opportunities to moor their boats in safe conditions, in public berths or by anchoring outside the mooring grid;
- The proposal will make the harbour more attractive to trailer sailors;
- The safer conditions will benefit the *Sailability* program (which promotes sailing for disabled persons), school sailing groups and sail training; and
- The safer wave conditions will provide greater protection for activities other than boating including diving and kayaking.

Opportunities for public access to the new facilities include:

- Short term/overnight mooring on the jetties, in pens or in swing moorings;
- Short to medium term leasing of pens or swing moorings that might be owned by members of the MYC or the public;
- Long term leasing of a pen or swing mooring;
- Opportunity to join MYC and gain access to yard storage (depending on boat class) or to join a crew.

In addition, the following infrastructure of the harbour would be improved:

- The provision of wash down facilities, the travel lift, and the fuel facilities (reducing the risk of spillage from containers) and the sewerage pump out facility (reducing disposal in the bay);
- Most boats will be moored in pens rather than swing moorings, involving a more efficient use of space. The public will be able to access the new jetty, the pier return and the public walkway on the harbour wavescreen, which would increase opportunities for fishing and promenading;
- Low level access for people with disability and/or limited mobility will be provided to boats via the new public jetty to the second marina arm. Access for disabled sailors will also be retained via the MYC boat ramp;
- A navigational fairway assisting with managing conflicts between different harbour users. The risk of collisions between boats, swimmers and divers will be managed through the creation of boat exclusion zones;
- Economic benefits to the area in the form of additional visitation, additional regional income and employment generation, along with secondary benefits for tourism and business.

12.3 Discussion

In considering net community benefit, the Inquiry notes the conclusion of Mr Milner's evidence that a net community benefit will be an outcome of the Mornington Safe Harbour but that that the size of the marina component should be reduced. The Inquiry notes that the Schnapper Point Framework Plan was used by Mr Milner in preparing his evidence to consider net community benefit.

The Inquiry considers that overall the proposed safe harbour will result in a net community benefit. Certainly some local dis-benefits may result. These have been considered at length in this report and include issues such as landscape and visual impacts and social impacts. However the Inquiry has attempted to balance these potential local dis-benefits for some sections of the community with the more regional policy perspective.

Importantly, the Inquiry considers that many of the major issues such as water quality, coastal processes and marine ecology, with appropriate management measures, are clearly either positive or neutral in terms of net community benefit. The provision of a safe harbour at Mornington including a marina is achievable without creating significant negative impacts.

The Inquiry has made recommendations to delete the proposed swing moorings and fore and aft moorings to both improve navigation and separation between boating traffic and swimmers using the beaches. The

Inquiry believes that this will significantly lessen the concerns over potential conflict between recreational user groups and public safety.

With respect to loss of access to public land, the Inquiry is mindful of the comment from Parks Victoria that:

> *The development envelope is similar to that already occupied by the swing moorings. It is land covered by water, by its very nature it limits access to those who can swim and those using boats. There is no direct loss of access to public land for the majority of other activities that occur within Mornington harbour, e.g. sun baking, playing on Mothers Beach, etc….*
>
> *New piers and wavescreen will provide new opportunities for the community to access this area. More berths and safer public boat ramp will improve opportunities for boating access on the bay. Visitors will still be able to access the beaches and play in the water safely and undertake the land based recreational activities that they do today.*

The inquiry agrees with these sentiments and considers that the proposed safe harbour will result in a change but not a permanent loss of opportunities or facilities available in the harbour.

12.4 Conclusions

Evaluation objective: Ensure that the proposed development achieves a net community benefit.

The Inquiry concludes that the proposed Mornington Safe Harbour will achieve a net community benefit and accordingly satisfy the above objective. There will be negative impacts on some stakeholders in the areas of landscape and visual impact and changes in character that may result in a negative social impact. However the Inquiry considers that these impacts are not considered universally negative by all stakeholders, and when balanced against the broader benefits to safe boating and improved harbour access and facilities (for boaters and non boaters), the project has a clear net community benefit.

13. Environmental management plan

Evaluation objective: Establish the basis for an environmentally acceptable and sustainable management regime for construction and operation of the proposed development, particularly with respect to coastal processes, water quality, marine ecology and cultural heritage.

13.1 Background and key issues

A Framework Environmental Management Plan (EMP) was included in Appendix U of the Planning Report of the EES. This framework EMP is intended to provide the outline of the detailed EMP that will be prepared for the project as the detailed design process proceeds.

Mornington Boat Haven Limited provided a new EMP during the hearing dated February 2011 and prepared by GHD Pty Ltd Consultants. This new plan, at Figure 1 in Appendix E to this report, provided an overview of the how the various EMPs and permit conditions would interact.

Essentially the planning permit requires both a Construction (CEMP) and Operations (OEMP) EMP which are prepared in accordance with the Framework EMP.

Importantly the Framework EMP establishes the performance requirements for environmental management and monitoring. These are made up, at Section 4 of the Framework EMP, of monitoring requirements drawn from the EES and the table of commitments prepared by the Proponent at the request of the Inquiry.

The Proponent's final statement of commitments is shown in Appendix F following extensive comment from Ms Wyatt (accepted by the Proponent). As this is the Proponent's statement, the Inquiry has not attempted to redraft this document. Where the Inquiry considers changes are needed in environmental performance monitoring they are recommended in the Framework EMP or as permit conditions. The commitments are 'called' up in Section 4 of the Framework EMP.

13.2 Submissions and evidence

Ms Wyatt gave evidence at the hearing in relation to the environmental management framework proposed. Ms Wyatt essentially took the EMP as proposed in the exhibited EES and suggested significant changes to both content and structure to improve the clarity and usefulness of the EMP.

13.3 Discussion

The Inquiry considers that the general approach of a Framework EMP followed by detailed operation and construction EMP's tied in to permit conditions is reasonable and should provide a clear and strong framework for managing detailed environmental effects.

Having appropriately qualified and skilled personnel to manage construction and operation of the project will be critical to:

- Ensure good relations with other harbour users during construction;
- Ensure the environmental management framework is implemented successfully; and
- Lead to improved environmental outcomes.

Having considered the Framework EMP the Inquiry considers one area that requires further work in terms of monitoring is the beach and sand monitoring. This is addressed in the Framework EMP and permit conditions with monitoring for 12 months mentioned and monitoring every six months mentioned.

The Inquiry considers this issue requires a greater level of monitoring and response effort as the protection of Mothers Beach is critical to the local community. The Inquiry considers that monitoring should be conducted every three months on a regular basis and after significant storm events (which the Inquiry has not attempted to define). This monitoring frequency should be maintained for at least two years and then the frequency could be reduced if no adverse results are found.

The Inquiry also considers (as is discussed in Chapter 8), that pre and post construction monitoring for marine ecology should be more comprehensively undertaken than that proposed.

The terminology in the Framework EMP and the Commitments relating to the frequency of monitoring also requires careful scrutiny during project implementation. The Inquiry is satisfied that the key issues (such as beach monitoring) have appropriate frequency of monitoring specified. Where

such frequency is not specified, this can be addressed in subsequent approval such as the *Coastal Management Act* consent or through the requirements of the responsible authority.

The Inquiry also notes advice that the reference to the Australian Standard for Risk Management is incorrect in the tabled draft in Section 3.3.1. This has been corrected in the Framework EMP in Appendix E.

13.4 Conclusions and recommendations

Evaluation objective: Establish the basis for an environmentally acceptable and sustainable management regime for construction and operation of the proposed development, particularly with respect to coastal processes, water quality, marine ecology and cultural heritage.

The Inquiry concludes that in general the environmental management framework provided by the various environmental management plans tied in to the statutory approval of the planning permit conditions provides a sound base for meeting the evaluation objective above.

The Inquiry considers that greater monitoring intensity over a longer time period is required for the beaches behind the harbour and has recommended changes in the Framework EMP (in Appendix E) and the draft planning permit (in Appendix D) accordingly. Additional monitoring for marine ecology has also been proposed.

The Inquiry recommends that:

14. The frequency and duration of beach monitoring on Mothers Beach, Scout Beach and Shire Hall Beach should be increased to three monthly after construction is completed, and the frequency should be reviewed in the 12 monthly review of the Operational Environmental Management Plan required in permit conditions depending on the monitoring results.

15. The Draft Framework Environmental Management Plan as shown in Appendix E should be adopted for use in further project design and development subject to:

- **Deletion of reference to fore and aft moorings and swing moorings.**
- **Inclusion under Section 3.3.1 of reference to the marina arms and pens and the wavescreens requiring further environmental risk assessment.**

- **Inclusion of Mornington Boat Haven Limited's statement of commitments (shown in Appendix F of this report) in Section 4.1.**

- **Inclusion under 'Marine Ecology' in Table 2, of pre construction and post construction monitoring for species of State and National significance as a monitoring requirement.**

Part 2 – Planning controls

14. Planning scheme amendment

Apart from the consideration of environmental effects of the proposed Mornington Safe Harbour, there are considerations of how the proposed safe harbour satisfies the strategic directions, requirements and provisions of the Mornington Peninsula Planning Scheme. This section of the report considers the appropriateness of Amendment C107 to the Mornington Peninsula Planning Scheme. Amendment C107 is the request by MBHL to rezone Mornington Harbour from the Public Conservation and Resource Zone (PCRZ) to the Public Park and Recreation Zone (PPRZ).

In conjunction with the amendment is draft Planning Permit CP09/005 which seeks approval for the use and development of land and seabed in the Mornington Harbour for the purposes of a Pleasure Boat Facility. The consideration of the planning permit application is dealt with in the following Chapter.

14.1 Amendment C107

Amendment C107 seeks to rezone the following from PCRZ to PPRZ:

- Land generally located within the Mornington Harbour, including the Mornington Pier and Fisherman's Jetty, the Mornington Yacht Club building and lease area, the car park, boat ramp, foreshore and adjoining seabed generally located between the Mornington Pier, Mothers Beach, Scout Beach and Shire Hall Beach (Crown Allotments 7A, 8A, 8B, 8C, 8D, 8G, 8H, 8J, 8K, 9A, 2003, 2004, 2005, 2006, 2008, 2009 Township of Mornington and unreserved Crown land).

The area proposed to be rezoned includes the Mornington Pier on its westernmost extent, Shire Hall Beach on its easternmost extent and the seabed in between. This area extends beyond the extent of the proposed marina and swing moorings to the east. As mentioned in Council's report dated 18 October 2010:

> *The proposed rezoning would in effect extend the PPRZ zoning of the Mornington foreshore to the Harbour area.*

The explanatory report for the amendment explains why it is required:

> *The purpose of the amendment is to enable the consideration of a proposal for a Pleasure Boat Facility in Mornington Harbour that is not conducted by the public land manager or Parks Victoria.*

Such a facility is prohibited under the current Public Conservation and Resource Zone. The proposed Public Park and Recreation Zone enables the consideration of such a facility, proposed to be operated by persons other than Parks Victoria or the public land manager.

14.1.1 Strategic assessment guidelines

The strategic assessment of planning scheme amendments is required in accordance with Ministerial Direction No. 11. Strategic Assessment Guidelines are also included as a General Practice Note No. 46 in the VPPs and should be used by Councils and Panels during the consideration of amendments (or proposals). The Strategic Assessment Guidelines include a number of matters that should be considered to ensure that planning is strategic and policy based. The broad issues to be considered in assessing an amendment include the following:

- Why is an amendment required?
- How does the amendment implement the objectives of planning in Victoria?
- How does the amendment address any environmental effects?
- How does the amendment address any relevant social and economic effects?
- Does the amendment comply with the requirements of any other Minister's Direction applicable to the amendment?
- How does the amendment support or implement the State Planning Policy Framework and any adopted State policy?
- How does the amendment support or implement the Local Planning Policy Framework, and specifically the Municipal Strategic Statement?
- Does the amendment make proper use of the Victoria Planning Provisions?
- How does the amendment address the views of any relevant agency?
- What impact will the new planning provisions have on the resources and administrative costs of the responsible authority?

The explanatory report exhibited with the EES, amendment and draft planning permit addressed each of the above broad issues. The Inquiry notes the responses to each of the guidelines. From the perspective of the Inquiry, a number of the above issues warrant further discussion because of the importance in establishing a sound strategic basis for land rezoning. The key issues relevant to the Inquiry are:

- The need for the amendment.
- The appropriateness of the zone.

- Planning scheme support for selecting the zone.
- Compliance with Ministerial Directions.
- The effects of the amendment.

14.1.2 The need for Amendment C107

As mentioned earlier, the Inquiry was presented with arguments in relation to the need for the amendment, that the development of a safe harbour and marina at Mornington would not be possible under the existing PCRZ where the development is not proposed by the public land manager such as Parks Victoria (i.e. proposed by private party such as MBHL). The amendment facilitates the consideration of a planning permit application with both considered under the assessment under the project EES.

The need for the safe harbour is driven by the level of exposure of boating activity at Mornington Harbour to hazards associated with winter northerly storms within Port Phillip Bay. The consequence of this hazard is that to facilitate a safe harbour at Mornington involving private investment requires the area to be rezoned to a zoning that allows discretion for a planning permit application for a safe harbour to be considered. Under the Mornington Peninsula Planning Scheme, the land use term *Pleasure Boat Facility* is sufficiently broad enough to include not only facilities for recreational boating but also includes boat launching facility and marina. The development of a pleasure boat facility encompasses the construction of wavescreens. Accordingly, the planning permit application and consequently draft Planning Permit CP09/005 seeks approval for the use and development of the Mornington Harbour for a Pleasure Boat Facility.

Council submitted to the Inquiry that if the current proposal for the safe harbour including the marina is not supported, the rezoning should not proceed. Mr Montebello submitted that the tests for considering development of any safe harbour or marina proposal at Mornington are broader than merely whether a development proposal could provide an acceptable outcome against the provisions of the planning scheme. He argued that rezoning of the harbour should not proceed alone and thereby create a situation where a planning permit application could be made in the future for a safe harbour or marina proposal. He submitted that although the rezoning of the land may appear unremarkable and that the PPRZ may be an appropriate zone to facilitate the proposed safe harbour, if it does not go ahead, there would be no other reason to rezone the area.

The Inquiry considers that the proposed safe harbour and the planning permit application for the Pleasure Boat Facility are seriously entertained planning proposals. Amendment C107 is required to allow for the proposal

to be assessed and considered. There is a *bona fide* need for the amendment and a process for parties to be involved.

The Inquiry also believes that the amendment is required to better reflect the existing character and use of Mornington Harbour given its status under the Victorian Coastal Strategy 2008 (VCS 2008)as an Activity Node and its links with the adjoining Mornington Activity Centre. The presence of the Mornington Yacht Club, boating activity and swing moorings within the harbour and the recreational hub associated with Mornington Pier all support the use of a zone that reflects significant recreational use.

14.1.3 The appropriateness of the zone

Council emphasised that the argument presented above about the need for the amendment represents the technical reason for the need for the amendment. However, there should be sound strategic planning reasons for the amendment and consequently why the choice of zoning is appropriate. The Council report dated 18 October 2010 outlined that:

> *The effect of the amendment would be to change the zoning of the area from a Zone that is focused primarily on conserving and protecting the natural environment and resources, to one that recognises areas for public recreation and open space.*

Is such a change in emphasis appropriate for Mornington Harbour? The Inquiry understands that under the Mornington Peninsula Planning Scheme, foreshore areas along Port Phillip Bay are generally included in the PPRZ, whereas land covered by the waters of the Bay is covered by the PCRZ. The Inquiry understands this reflects the general position that the Bay is considered a natural asset. Although there are areas where boat moorings and obvious concentration of recreational boating activity are located in areas zoned PCRZ a noted exception is the Blairgowrie Marina which is zoned PPRZ.

Having regard to this, the Inquiry considers that the selection of the appropriate public land zone for Mornington Harbour would be based on the best fit for purpose zone. The PCRZ is the zone that is structured to protect areas of public land that have important natural and environmental assets. Mornington Harbour, however is a part of Port Phillip Bay that is an active recreational area and an area where recreational activity is focussed. This is demonstrated through the association of Mornington Harbour historically with boating, links with the Mornington Activity Centre, links with recreational facilities such as the Mornington parklands, foreshore and cliff top walkways and viewing areas. The PPRZ has the following purposes:

- *To recognise areas for public recreation and open space.*

- *To protect and conserve areas of significance where appropriate.*
- *To provide for commercial uses where appropriate.*

The PPRZ retains the ability to afford protection of environmental values and assets whilst also recognising and providing for recreational activity. The presence of the Mornington Yacht club and boating activity within the harbour highlights this fact.

The Inquiry notes the evidence of Mr Milner that:

> *The zoning of land beyond the low water mark of Port Phillip Bay and the zoning of harbours in that area is inconsistently managed. In the Cities of Bayside and Kingston the off shore area is zoned PPRZ, in Frankston and Mornington Peninsula Planning Schemes the same zone is included in the PCRZ.*
>
> *The St Kilda Marina and the Sandringham Harbour are zoned PPRZ, Frankston Safe Harbour is zoned Special Use Zone 4 and the Safety Beach marina based development is also zoned Special Use Zone.*

Mr Milner's evidence was that the combination of rezoning Mornington Harbour to PPRZ and retaining the application of the ESO25 (which currently extends 600 metres out into Port Phillip Bay) would provide an effective balance that recognises the land use and environmental context of the area and the expected outcomes.

Having regard to the above, the Inquiry considers that the PPRZ is an appropriate zone to apply at Mornington Harbour because it better reflects its focus for water based recreational activity whilst maintaining safeguards for environmental values and sensitivity.

14.1.4 Compliance with Ministerial Directions

The amendment is required to comply with relevant Ministerial directions under Sections 7 and 12 of the *Planning and Environment Act* 1987. In this regard the following Ministerial Directions are considered relevant:

- *Ministerial Direction on the Form and Content of Planning Schemes*. Amendment C107 is considered to comply with the format and content required for planning schemes under the Victoria Planning Provisions.
- *Ministerial Direction No. 9 – Metropolitan Strategy*. It requires amendments to have regard to Melbourne 2030. The Inquiry is satisfied that the amendment does satisfy the outcomes of Melbourne 2030 by supporting the Mornington Activity Centre, protecting coastal and foreshore environments and improving public access and recreational facilities around Port Phillip Bay. The Inquiry does not consider that Amendment

C107 would conflict with Melbourne 2030 in terms of compromising the characteristics of Schnapper Point or Mornington Harbour generally. Environmental impacts are not significant and can be appropriately managed while characteristics of place are not lost as a result of the safe harbour proposal.

- *Ministerial Direction No 13 – Managing coastal hazards and the coastal impacts of climate change*. Its purpose is to set out the general requirements for consideration of the impacts of climate change within coastal Victoria as part of an amendment which would have the effect of allowing non-urban land to be used for an urban use and development. One of these requirements is to address the current and future risks and impacts associated with projected sea level rise and the individual and/or combined effects of storm surges, tides, river flooding and coastal erosion. The proposed amendment does not involve the establishment of an urban use. However, the assessment of climate change impact is still considered relevant. The Inquiry considers that compliance with the Direction has been satisfied through the safe harbour facility accommodating projected sea level rise impacts based on its 50 year design life.

14.1.5 Planning scheme support for selecting the zone

Support for the selection of the PPRZ is based on the policy directions outlined under the Mornington Peninsula Planning Scheme. The planning scheme outlines relevant policies in the State and Local Planning Policy Frameworks. These policy frameworks provide the strategic tests for consideration of Amendment C107.

State Planning Policy Framework (SPPF)

The SPPF policies considered relevant to considering Amendment C107 are:

- Clause 10.04 'Integrated decision making' outlines that planning authorities *should endeavour to integrate the range of policies relevant to the issues to be determined and balance conflicting objectives in favour of net community benefit and sustainable development for the benefit of present and future generations*. This is the key test with decision making under the planning scheme and for amending the planning scheme.
- Clause 12 'Environmental and Landscape Values' states that '*planning should help to protect the health of ecological systems and the biodiversity they support (including ecosystems, habitats, species and genetic diversity) and conserve conservation areas with identified environment and landscape values*'.

In doing so, '*planning should protect sites and features of natural conservation, biodiversity, geological or landscape value*'.

- Clause 12.02 'Coastal Areas', 12.02-1 'Protection of Coastal Areas' has the objective to '*recognise and enhance the value of coastal areas to the community and ensure sustainable use of natural coastal resources*'. This includes strategies such as coordinated land use and planning with the requirement of the *Coastal Management Act* 1995 to:
    - *Provide clear direction for the future sustainable use of the coast, including the marine environment, for recreation, conservation, tourism, commerce and similar uses in appropriate areas;*
    - *Protect and maintain areas of environmental significance;*
    - *Identify suitable areas and opportunities for improved facilities.*

  The hierarchy of principles for coastal planning and management as set out in the VCS 2008 must be applied, including providing for the protection of significant environment and cultural values, provide clear integrated planning for the future, ensuring the sustainable use of natural coastal resources and when these have been considered to ensure development is located within existing modified and resilient environments.
- Clause 12.02-2 'Appropriate Development of Coastal Areas' has the objective '*to ensure development conserves, protects and seeks to enhance coastal biodiversity and ecological values*'. In doing so, development must be sensitively sited and designed and respect the character of coastal settlements. It must also maintain the natural drainage patterns, water quality and biodiversity within and adjacent to coastal estuaries, wetlands and waterways.
- Clause 12.02-3 'Coastal Crown Land' has the objective to '*achieve development that provides an environmental, social and economic balance*'. This involves making sure that development on or adjacent to coastal foreshore Crown land can maintain safe, equitable public access and improve public benefit whilst protecting local environmental and social values, is coastal dependent and located within a defined activity or recreation node. The policy requires consideration of the VCS 2008, and any relevant coastal action plans or management plans prepared under the *Coastal Management Act* 1995.
- Clause 12.02-4 'Coastal Tourism' has the objective '*to encourage suitably located and designed coastal and marine tourism opportunities*'. This involves ensuring '*developments are of an appropriate scale, use and intensity relative to its location and minimise impacts on the surrounding natural visual environment and coastal character*'.

- Clause 12.02-5 'Bays' has the purpose to '*improve the environmental health of the bays and their catchments*'. Strategies relevant under this policy are to protect coastal and foreshore environments and improve public access and recreation facilities around Port Phillip Bay by looking for consistency between planning and management and the VCS 2008.
- Clause 12.04 'Significant Environments and Landscapes' aims to '*protect and conserve environmentally sensitive areas…with significant recreational value*' including the Mornington Peninsula.
- Clause 12.04-2 'Landscapes' has the objective '*to protect landscapes and significant open spaces that contribute to character, identity and sustainable environments*'. Strategies include '*ensuring sensitive landscape areas such as the bays and coastlines are protected and that new development does not detract from their natural quality*'. In addition, natural key features must be protected and enhanced, and the natural landscape must be recognised '*for its aesthetic value and as a fully functioning system*'.
- Clause 13 'Environmental Risks' states that '*planning should adopt a best practice environmental management and risk management approach which aims to avoid or minimise environmental degradation and hazards. Planning should identify and manage the potential for the environment, and environmental changes, to impact upon the economic, environmental or social well-being of society*'. This includes climate change impacts, coastal inundation and erosion, floodplains, soil degradation, erosion and landslip, salinity, noise and air.
- Clause 13.01 'Climate Change Impacts' under Clause 13.01-1 'Coastal Inundation and Erosion' looks to plan for and manage the potential coastal impacts of climate change and to plan for sea level rise of not less than 0.8 metres by 2100 allowing for tides, storm surges, coastal processes and local coastal conditions. The policy requires consideration of the VCS 2008, coastal action plans and Future Coasts coastal climate change vulnerability mapping.
- Clause 14-02 'Water' assists with '*the protection…of catchments, waterways, water bodies, groundwater, and the marine environment*'. This includes catchment planning and management, water quality and water conservation.
- Clause 15 'Built Environment and Heritage' states that '*planning should ensure all new land use and development appropriately responds to its landscape, valued built form and cultural context, and protect places and sites with heritage, architectural, aesthetic, scientific and cultural value*'. Furthermore, it states that '*Land use and development planning must support the development and maintenance of communities with adequate and safe physical and social environments for their residents, through the appropriate location of uses and development and quality of urban design*'.

- Clause 17.03-3 'Maritime Precincts' has the objective '*to develop a network of maritime precincts around Port Phillip Bay and Western Port that serve both local communities and visitors*'. A relevant strategy under this policy includes maintaining and expanding boating and recreational infrastructure around the bays in maritime precincts including amongst other at Mornington. Other strategies look to provide public access to recreational facilities and activities on land and water and to support maritime and related industries in appropriate locations. The policy also requires consideration be given to Parks Victoria's *Our Bays Vision: The Bays and Maritime Initiative* and the Central Coastal Board's Boating Coastal Action Plan.

With respect to the SPPF, the Inquiry considers that the policies outlined under the SPPF that are relevant to the amendment are supportive for both the selection and application of the PPRZ to the Mornington Harbour. The Inquiry does not see any conflict between what the SPPF seeks to achieve and what the PPRZ as proposed under Amendment C107 will be capable of doing. The Inquiry believes that the PPRZ in combination with the continued use of the ESO25 satisfies the purposes of the policy framework outlined in the SPPF.

Local Planning Policy Framework (LPPF)

The LPPF comprises both policies under the Municipal Strategic Statement (MSS) and Local Planning Policies (LPP).

Relevant policies to Amendment C107 under the MSS include:

- Clause 21.02 'Profile of Mornington Peninsula' under 'Infrastructure' recognises Mornington as a major facility for local boating.
- Clause 21.03 'Mornington Peninsula – Regional Role and Local Vision' under Clause 21.03-3 'Summary of Strategic Challenges and Opportunities' under 'Landscapes Recreation and Tourism' identifies that '*the rural and coastal landscapes of the Peninsula reflect diverse landforms, environmental systems and land use histories. They provide the basis for recreational experiences and a 'sense of place', that have a strong cultural significance. Much of the Peninsula's attraction for recreation is connected to this 'cultural capital' and a key challenge is to ensure that land use and development does not lead to incremental change that devalues the Peninsula as a recreational area. In this sense, sustainable development is seen as that which supports the inherent values of the Peninsula and provides opportunities for access, understanding and enjoyment rather than introducing elements that are disruptive, intrusive or out of character*'.
- Clause 21.04 'Mornington Peninsula Strategic Framework Plan' provides a '*framework for balanced development and sustainable land use on the*

Peninsula'. The Plan also identifies that '*achieving balance does not mean trying to accommodate all land uses in all locations; it means making the most of each area's particular strengths and respecting limits'*. The Strategic Framework Plan identifies Mornington as a major town on the Mornington Peninsula and as an activity node as recognised in the Victorian Coastal Strategy. This strategic direction under the Plan provides for the '*distinguishing between the Port Phillip foreshore as an area capable, in selected locations, of sustaining recreational opportunities for large numbers of people and Western Port and Bass Strait/Wild coast, which are more fragile environments, with greater sensitivity to modification'*.

- Clause 21.06 'Strategic Framework and Peninsula's Settlement Pattern' looks to integrate land use and development through the Strategic Framework Plan and township boundaries to recognise focal points for development such as at Mornington and places of value such as the foreshore areas and the character and 'sense of place' of individual townships. Of relevance for the amendment under 'Implementation' and 'Zones and Overlays' are the directions for:
    - *Utilising the Public Conservation and Resource Zone to indicate coastal areas and other public land with high environmental value and limited capacity to absorb development.*
    - *Utilising the Public Park and Recreation Zone for the more intensively utilised areas of public land, including sections of the Port Phillip Bay foreshore.*
- Clause 21.07 'Guiding Future Township Development' under Clause 21.07-3 'Activity Centres' identifies Mornington as a major activity centre.
- Clause 21.08 'Foreshores and Coastal Areas' recognises the important values of the coast and Port Phillip Bay to the Mornington Peninsula and the strong recreational use of the Bay. Under 'Key Issues' is recognition of ensuring coordinated management of coastal areas including the inter-relationship between the foreshores and local character of towns and the importance of distinguishing between the foreshore areas of Port Phillip Bay. This will continue to support relatively high levels of public use, in association with the facilities provided by adjoining towns like Mornington, and other parts of the Bay that have more limited capacity to absorb development. The policy seeks '*to protect and enhance the natural ecosystems and landscapes of the coast for the benefit and enjoyment of present and future generations*'. Strategies to achieve this objective include (amongst others):
    - Acknowledging natural processes.
    - Identifying environmental threats that may impact foreshores and applying appropriate management techniques.

- Containing coastal development in coastal locations to existing settlements.
- Limiting the development of new structures on the foreshore to designated activity nodes.
- Ensuring that new construction and development on the coast is designed on the basis of a site and landscape analysis, which takes account of the scenic and visual qualities of the foreshore and coastal areas.
- Establishing performance standards and monitoring programs to minimise the risk of pollution of the coastal environment and to improve water quality from urban and rural catchments entering the Bays.

Under 'Implementation' in 'Zones and Overlays' the following actions are outlined:

- *Applying the Public Park and Recreation Zone to areas of the Port Phillip foreshore that form part of the General Recreation Zone under the Victorian Coastal Strategy.*
- *Applying the Public Park and Recreation Zone to areas of Port Phillip Bay to assist in facilitating appropriate development.*
- *Applying the Public Conservation and Resource Zone to the areas of the Western Port, Bass Strait and Port Phillip coastline that form part of the General Protection Zone or National Park and Conservation Reserve under the Victorian Coastal Strategy.*

The Inquiry notes that these implementation actions are somewhat out of date with respect to the Victorian coastline being designated for coastal recreation protection given that they appear to reflect earlier versions of the Victorian Coastal Strategy. However, it is clear that the intent of these actions was to apply the PPRZ to areas where recreational activity was focussed on Port Phillip Bay.

Under 'Policies and the exercise of discretion' the emphasis is on:

- *Applying a precautionary approach to decision making, ensuring that the environmental effects of both the construction and operation of a proposed development are assessed as part of the approval process. New development proposals should respect natural coastal systems and should include an assessment of vulnerability to climate change effects.*
- *Avoiding the construction of additional structures on the foreshore except where substantial net benefits to the community and/or coastal environment are clearly demonstrated.*

- *Avoiding the extension or establishment of car parks and roads in sensitive coastal locations such as dunes or wetlands.*
- *Approving private coastal protection works only where they will not:*
  - *Cause loss of or damage to public beaches, Crown land or significant natural features.*
  - *Result in erosion of adjacent properties.*
  - *Adversely affect on coastal landform stability or coastal processes.*

The policy also seeks '*to achieve coordinated development of public and private facilities that increases the sustainable social, economic and recreational value of the coast and foreshore to the community*'. Strategies to support this objective include (amongst others):

- *Consolidate all new development within identified activity nodes which are compatible with the long-term protection of the coastal environment and which strengthen the physical and functional connection between existing township areas and the foreshore.*
- *Ensure that coastal development is designed and constructed in a manner which respects and enhances the coastal environment and the experience and enjoyment of the coast by the community.*
- *Encourage pedestrian access and connections, both along the coast and between the coastal foreshore and adjoining township areas, provided this does not threaten fragile coastal environments or fragment narrow stands of coastal vegetation.*
- *Ensure that coastal development helps to meet the costs of managing and maintaining coastal and foreshore areas through the development of equitable development contribution plans and special rate schemes.*

Under 'Policy and the exercise of discretion', of relevance to the amendment the policy looks to ensure that structures are sited and designed to integrate with and compliment the surrounding coastal landscape in accordance with Landscape Setting Types for the Victorian Coast (1998) and Siting and Design Guidelines for Structures on the Victorian Coast (1998). Car parking provision is to be balanced between the convenience for users and the protection of the conservation and landscape values of the foreshore. Commercial activities on foreshore areas are to maintain public access and encouraging a range of services and activities to enhance the recreational use and enjoyment of the coast by the community in selected activity nodes.

Under 'Further strategic work' there is reference to developing further policy planning for Mornington that should encompass issues relating to landscape design, built form, views, siting, building height and integration between town centres, scenic roads and foreshore /coastal areas.

With respect to the MSS the Inquiry acknowledges the emphasis of the policy framework, that for a place such as Mornington Harbour it is important to ensure that planning is sensitive to the 'sense of place' that the harbour provides for the town of Mornington, but is also conscious of making the most of the harbour for recreational activity.

The Inquiry considers that the policy framework under the MSS does not contradict the application of the PPRZ to the Mornington Harbour area. The PPRZ does not diminish the policy intent of the MSS and is considered to continue to allow for the MSS to be considered without any change in emphasis particularly given the continued application of the ESO25 and the Heritage Overlay (HO).

Relevant policies to Amendment C107 under the LPP include:

- Clause 22.04 'Cultural Heritage Places' relates to heritage places and adjoining land and includes policy that;
  - *Particular regard should be given to the heritage values of foreshore and coastal areas, in recognition of their critical link to the historic development of the Peninsula.*
  - *The use and development of heritage sites and adjoining land must be compatible with and not adversely affect the significance of cultural heritage sites; this includes consideration of heritage buildings in their site and local area context. Where an individual building contributes to the significance of a broader precinct this must be included in the assessment of heritage value.*
- Clause 22.05 'Aboriginal Cultural Heritage' applies to all land and includes policy identify, protect and manage Aboriginal cultural heritage values. This policy is somewhat overtaken by the provisions of the *Aboriginal Heritage Act* 2006 and the fact that a Cultural Heritage Management Plan has been prepared and approved for the proposed safe harbour proposal.

The Inquiry considers the local planning policies are not contradicted by the amendment and that the amendment supports these policies.

14.1.6 The effects of the amendment

The Inquiry considers that the amendment will not have detrimental effects on the Mornington Harbour area. Rezoning the harbour area from PCRZ to PPRZ will change the emphasis from conservation to recreation; however, the Inquiry considers that this better reflects the way the harbour area is used now. The continued application of the ESO25 and the HO will maintain appropriate checks and balances on future land use and development proposals.

The Inquiry has already considered the effects of the proposed Mornington Safe Harbour and has found that generally, the effects will not significant to warrant the proposal not proceeding. Given this overall finding, the Inquiry believes that the effects of the amendment and rezoning of the harbour will be satisfactory.

14.2 Conclusion and recommendations

In conclusion, the Inquiry considers that Amendment C107, which seeks to rezone Mornington Harbour from the PCRZ to the PPRZ, is required because such rezoning will better reflect the existing character and use of the harbour area. This is reinforced in the opinion of the Inquiry by its status under the VCS 2008 as a Regional Boating Facility and Activity Node and its links with the adjoining Mornington Activity Centre. The presence of the Mornington Yacht Club, boating activity and swing moorings within the harbour and the recreational hub associated with Mornington Pier all support the use of a zone that reflects significant recreational use.

Rezoning the harbour area from PCRZ to PPRZ will change the emphasis from conservation to recreation; however, the Inquiry considers that this better reflects the way the harbour area is used now. The continued application of the ESO25 and the HO will maintain appropriate checks and balances on future land use and development proposals.

The amendment complies with the requirements of relevant Ministerial Directions.

There is policy support for the amendment and for the selection and application of the PPRZ. There does not appear to be any conflict with the policy frameworks of both the SPPF and LPPF. The Inquiry considers that Amendment C107 will continue to enable the SPPF and LPPF to be considered without being diminished or compromised.

The Inquiry recommends that:

16. Amendment C107 to the Mornington Peninsula Planning Scheme should be adopted without change.

15. Planning permit application

Planning Permit Application No CP09/005 seeks approval for the use and development of land and seabed in the Mornington Harbour for the purposes of a Pleasure Boat Facility. The planning permit application is made on the basis that the request for Amendment C107 is also made at the same time. The planning permit application is part of a combined planning scheme amendment and planning permit application process sought pursuant to Sections 96A to 96N (inclusive) of the *Planning and Environment Act* 1987. Apart from allowing joint exhibition and notice of the amendment and planning permit application, the process allows for the assessment of the planning permit application under the zoning proposed by the amendment (in this case the PPRZ).

A Pleasure Boat Facility is considered in the EES to represent the best fit definition from Clause 74 of the Mornington Peninsula Planning Scheme that supports the proposed safe harbour at Mornington Harbour. Under Clause 74 a Pleasure Boat Facility is defined as:

> *Land used to provide facilities for boats operated primarily for pleasure or recreation, including boats operated commercially for pleasure or recreation.*

This definition includes reference to a Boat Launching Facility and a Marina. A Boat Launching Facility itself is defined as:

> *Land used to launch boats into the water and to retrieve boats from the water.*

A Boat Ramp and Slipway is included in this definition.

A Marina is defined in Clause 74 as[37]:

> *Land used to moor boats, or store boats above or adjacent to the water. It may include boat recovery facilities, and facilities to repair, fuel, and maintain boats and boat accessories.*

A Jetty, Mooring Pole, Pier and Pontoon are included within this definition.

Under the planning permit application the Pleasure Boat Facility is the land use while the wavescreens form part of the buildings and works necessary

[37] Compare to the marina definitions in Section 4.3.

for developing the use. Together, the land use and the development comprise the safe harbour facility. The safe harbour facility as proposed fundamentally consists of two wavescreens and a marina.

The Mornington Peninsula Planning Scheme sets out the objectives, policies and provisions relating to the use, development, protection and conservation of land within the Mornington Harbour including land 600 metres into Port Phillip Bay. The planning scheme regulates the use and development of land through planning provisions to achieve those objectives and policies. These include planning policies in the SPPF and LPPF, which have been summarised in the preceding chapter dealing with Amendment C107. Other provisions of the planning scheme are the Zones - PPRZ, Overlays – ESO25 and HO228, Particular Provisions – Advertising Signs, Car Parking and Native Vegetation and General Provisions – Clause 65 General Decision Guidelines for determining planning permit applications.

15.1 Pleasure Boat Facility

Planning Permit Application No CP09/005 seeks to use and develop the following land that is generally located within the Mornington Harbour, including[38]:

- *The Mornington Pier and Fisherman's Jetty, Schnapper Point Drive, Mornington - Crown Allotment 8G Township of Mornington.*
- *The Mornington Yacht Club site, Schnapper Point Drive, Mornington - Crown Allotment 8H Township of Mornington, Crown Allotment 8J Township of Mornington, Crown Allotment 8K Township of Mornington, Crown Allotment CA 2003 Township of Mornington, Crown Allotment CA 2005 Township of Mornington and CA 2006 3 Township of Mornington, Crown Allotment CA 2008 Township of Mornington.*
- *Schnappers Kiosk, Lower level Car Park and boat ramp Schnapper Point Drive, Mothers Beach, Scout Beach and Shire Hall Beach - Crown Allotment 7A Township of Mornington, Crown Allotment 8A Township of Mornington, Crown Allotment 8B Township of Mornington, Crown Allotment 8C Township of Mornington, Crown Allotment 8D Township of Mornington, Crown Allotment 9A Township of Mornington, Crown Allotment 2004 Township of Mornington, Crown Allotment 2009 Township of Mornington.*

[38] The description of the land and seabed is based on the 31 March 2011 iteration of the proposed planning permit

- *The entire sea bed generally bounded by the above land (unreserved Crown land managed by DSE under the Land Act 1958).*

The planning permit application seeks approval for the following use and development[39].

The use and development of the land for a Pleasure Boat Facility, comprising the following purposes, all in accordance with the endorsed plans:

- *A marina that includes the following elements:*
  - *Harbour wavescreen, which also functions as a public jetty.*
  - *Public jetty.*
  - *Marina pontoons, berths arranged as marina pens and other berths and moorings*
  - *Sewage pump-out facility adjacent to the public jetty.*
  - *Re-fuelling facility adjacent to the public jetty*
- *Alteration to a Heritage Place – Mornington Pier, including:*
  - *Perpendicular extension of Mornington Pier to the south-east of the existing Pier.*
  - *Associated wavescreens/wave protection works*
- *Refurbishment of the existing Mornington Yacht Club building to provide:*
  - *Marina manager's office.*
  - *Upgraded toilets.*
  - *Shower facilities.*
  - *Storage facilities.*
- *Travel lift facility and associated works (including any associated dredging).*
- *A boat wash-down facility.*
- *An underground storage tank or tanks.*
- *A stormwater tank.*
- *An artificial reef.*
- *The removal or destruction of native vegetation from the seabed required to construct the works hereby permitted.*
- *Signs for the purpose of the identification or operation of the marina and for heritage interpretation.*
- *Waiver of loading bay requirements.*

[39] The description of the land use and development is based on the 31 March 2011 iteration of the proposed planning permit

- *Any ancillary works, including works required under the Operational Environmental Management Plan.*

The permit triggers for the planning permit application are outlined in Table 6 below in Section 15.3. Land use and development approval is required under the PPRZ, development approval is also required under the ESO25 and HO. Approval is also required under the Particular Provisions relating to Native Vegetation (Clause 52.17). Approvals are not triggered under car parking provisions (Clause 52.06) although consideration is required under their decision guidelines regarding the number of car spaces that may be required.

With regards to advertising signs, it is noted that the draft planning permit does make reference to allowing permission for signs associated with identification of the marina and for heritage interpretation. However, the Inquiry notes that the EES planning Report indicates that no signage is sought as part of the planning permit application and that any signage which requires approval will be the subject of a separate application in the future.

15.2 Planning policy assessment

In regards to assessing the planning permit application under the Mornington Peninsula Planning Scheme, the SPPF provides direction for responsible authorities to endeavour to integrate the range of policies relevant to the issues to be determined and balance conflicting objectives in favour of net community benefit and sustainable development for the benefit of present and future generations (refer to Clause 10.04).

Planning policies from the SPPF and LPPF from the Mornington Peninsula Planning Scheme that are relevant to the consideration of the proposed Mornington Safe Harbour and assessment of the planning permit application for the Pleasure Boat Facility described above are outlined in Section 14.1.5.

The policy framework of the SPPF seeks to ensure that land use and development supports the protection of coastal environments including biodiversity and landscape values and prevents degradation of the coast and avoids coastal hazards. Development of coastal crown land is to achieve an environmental, social and economic balance. Support for tourism is encouraged while ensuring that sensitive environments, coastal landscapes and important open space and recreational areas are protected. Specifically, the SPPF contains reference to policy under the VCS 2008, relevant coastal action plans such as the MEPNCAP and the BCAP and the Our Bays Vision: The Bays and Maritime Initiative. The SPPF also contains specific policy

reference to Mornington under Clause 17.03-3 as a maritime precinct where boating and recreational infrastructure are to be maintained and expanded.

Victorian Coastal Strategy 2008 (VCS2008)

With respect to the VCS 2008 the relevant key policy relating to boating in Section 3.1.2. The policy context recognises that boating is an important recreational and social outlet with boating registrations outpacing population growth. The Strategy recognises the importance of strategically managing the increasing demand for improved and new boating facilities and the need to provide safe access to, from and on the water while ensuring impacts on the natural environment and coastal processes is minimised. The Strategy recognises that safety of boaters and swimmers is paramount. Finally, the Strategy recognises the challenge of balancing the provision of boating infrastructure with the needs of coastal user groups.

Policy for boating under the VCS 2008 includes:

- *Strategically plan for and deliver sustainable boating facilities and infrastructure on the coast via Coastal Action Plans that respond to a demand assessment, safety considerations, the protection and sustainable management of coastal processes, conservation objectives, and quality of experience for all beach users.*
- *Provide new access and review existing inappropriate access in accordance with the recreational boating facilities hierarchy*[40].
- *Ensure the provision of effluent disposal facilities at strategic boating locations to address illegal sewage discharge from boats.*

Actions that support the policy include:

- *Develop and implement (and/or review as required) boating Coastal Action Plans across Victoria.*
- *Develop a long-term strategy for the upgrade and sustainable development of safe boating facilities and infrastructure at strategically identified sites along the Victorian coast.*

[40] This policy refers to Figure 11 in the VCS 2008. Figure 11 identifies Mornington as a Regional Boating Facility. A Regional Boating Facility accommodates a significant amount of recreational boating in appropriate conditions. These include multiple boat ramps, jetties, substantial car parking, safety measures where required and significant onshore facilities such as fish cleaning facilities, wash down areas and toilets. A site satisfying this level of hierarchy generates a significant level of boating activity from a wide catchment.

Mt Eliza and Point Nepean Coastal Action Plan (MEPNCAP)

The MEPNCAP seeks to undertake integrated planning and provide direction for the future of the coast from Mt Eliza to Point Nepean. It also facilitates suitable development on the coast within existing modified and resilient environments where the demand for services is evident and requires management.

The MEPNCAP under coastal and marine threats identifies that marinas can pose a moderate threat to the cliff coastal areas of the Mornington Peninsula through the introduction of pollutants and alteration to the visual landscape.

Schnapper Point is identified as a place where activity is high with boating, fishing, dining, sightseeing, walking and swimming.

The MEPNCAP is a more general policy document that establishes principles for future, more detailed strategic planning and management. This is recognised in the MEPNCAP in relation to boating infrastructure where it looks towards further detailed planning to ascertain future boating infrastructure requirements and considerations.

Central Coast Boating Coastal Action Plan (BCAP)

The BCAP contains, amongst other places, a specific focus on boating matters at Mornington. The BCAP provides the context for Mornington that:

> *This boating area is quite varied and presents different challenges. The coastline around Mornington is particularly challenging in terms of access from the land due to coastal topography that is dominated by small pocket beaches backed by steep cliffs. The section of coast in the northern part of this area is generally not suitable for the development of boating facilities due to coastal cliffs.*

The BCAP also identifies that the area has high scenic and amenity value and is a popular destination for holiday-makers. For Mornington the BCAP sets the scene:

> *There is one harbour at Mornington, and several yacht clubs along this section of the coast. Boat ramps in this area are constrained by car parking and there are limited opportunities to improve this given the high value coastal environment and limited public land. There are relatively good launching facilities at Mornington and near Linley Point, which may be considered for a larger role in future if necessary. Both are dangerous in northerly weather and therefore do not provide a safe harbour facility in all conditions, meaning a significant portion of the eastern side of Port Phillip is without safe harbour facilities. The only*

area capable of expansion to provide better harbour facilities is at Mornington. Mornington harbour is exposed to northerly weather and many boats have been damaged there in storms. It would be possible to protect the harbour and to make an efficient boating precinct. However, the area has limited capacity for land based infrastructure. It would be important to ensure that adjacent Mothers Beach was not adversely affected by any development.

To address the boating issues within the East Port Phillip Boating Area, the BCAP has the following objective for Mornington:

To provide a diverse range of recreational boating facilities that are safe and effectively provide for seasonal use.

Policies outlined in the BCAP relevant to the proposed safe harbour include:

A7.1 In this boating area, the strategic focus for investment to significantly upgrade facilities will be:

- *Mornington, which is currently, and proposed to remain, a regional facility. These improvements, while recognising environmental constraints, will be encouraged and focus on providing a safe harbour.*
- *Improving the general level of service provided at local boat ramps, primarily through upgrading car parking to cater for peak season demand, and improving ramp design when upgrades occur;*

A7.2 Private investment in the redevelopment of the Mornington Harbour will be encouraged where this also brings maximised public benefit.

A7.4 The rest of the coast will be preserved in its existing near-natural state.

A7.5 The placing of swing moorings and safe harbours must be considered at existing facilities before the development of new sites.

Our Bays Vision: The Bays and Maritime Initiative

The Our Bays Vision: The Bays and Maritime Initiative identifies Mornington as a maritime precinct and a strategic investment site. It provides a vision for maintaining and expanding contemporary boating and recreational facilities around Port Phillip Bay and to ensure that these locations and facilities are used and enjoyed safely and sustainably through a network of safe havens and redeveloped maritime precincts with improved environmental management.

Modernising boat storage and maintenance facilities will ensure proper disposal of antifoulants and other contaminants, improving water quality and the health of marine environments. New marinas will be designed and built so that they meet contemporary environmental standards, and will be located where either the facility itself or boating activity will not adversely impact marine and coastal environments. The aim is to also progressively replace outdated swing moorings with modern tackle that will allow for the natural regeneration of about seagrasses.

It is intended that these maritime precincts will not only be about boating activity but will become vibrant destinations, reinforcing wherever possible Melbourne's Activity Centres including Mornington.

For Mornington Harbour the Our Bays Initiative recognises that the Mornington foreshore, beaches and harbour are highly valued by the local community and visitors alike. The Our Bays Initiative states that:

> *The proposed safe harbour is intended to protect moored vessels, boats using launching ramps, emergency services and commercial vessels from turbulent storm activity from the west to the north.*
>
> *Some of the features will include:*
>
> - *A new public jetty*
> - *Increased provisions for public and commercial berthing*
> - *Emergency berths*
> - *Wave protection of the harbour and public boat ramp*
> - *Improved parking and access*

With regards to the LPPF, the policy framework looks to support land use and development in activity node areas where activity can be absorbed without devaluing the recreational value of places like Mornington Harbour. Development needs to support the inherent value of places like the harbour and its surrounds whilst providing opportunities for access, understanding and enjoyment and not introducing elements that are disruptive, intrusive or out of character. Development is to recognise and protect coastal attributes and values and take account of visual and landscape qualities of foreshore and coastal settings.

The planning scheme acknowledges that Mornington Harbour does have cultural values with strong links to the past development of Mornington and its relationship in Port Phillip Bay as both a destination and tourism focal point.

The planning scheme under the local planning policy for cultural heritage places requires consideration to be given to the effects the Pleasure Boat Facility may have on heritage places as well as their locational context. In this regard the issue of how the Pleasure Boat Facility may impact on Mornington Pier and its setting in Mornington Harbour becomes important consideration.

Both the cultural heritage places local planning policy and that for Aboriginal cultural heritage also contains decision guidelines that are relevant to how these local policies are to be considered. They include:

- Clause 22.04-4 Decision Guidelines for Cultural Heritage Places the consideration by the responsible authority of:
    - *The extent to which the application meets the objectives and directions of this policy.*
    - *The need to require or prepare a heritage impact assessment for any proposed development involving a heritage place.*
    - *The need to require or prepare a heritage management plan to guide the implementation of any proposed development, including conservation works. Where applications propose to use a heritage building for a prohibited use the responsible authority must consider:*
        - *The appropriateness of the use having regard to zone objectives and the surrounding land use.*
        - *Whether the proposed land use furthers the heritage objectives of this planning scheme.*
- Clause 22.05-4 Decision Guidelines for Aboriginal Cultural Heritage the consideration by the responsible authority of:
    - *The extent to which the application meets the objectives and directions of this policy.*
    - *The recommendations of representatives of the local Aboriginal community for the management of sites of Aboriginal cultural significance.*

The above local planning policy decision guidelines have been addressed through the EES documentation and the preparation and approval of a Cultural Heritage Management Plan.

Other policy not forming part of the planning scheme that has also been put to the Inquiry as relevant for considering the safe harbour proposal includes the Schnapper Point Framework Plan, which has been described earlier. It provides decision guidelines and assessment criteria based on current policy that assist in assessing land use and development proposals.

An assessment of the proposed Safe Harbour against the decision guidelines and assessment criteria of the Schnapper Point Framework Plan is provided in the explanatory report to Amendment C107, in the report to Mornington Peninsula Shire Council dated 18 October 2010 and in the witness statement of Mr Milner.

15.2.1 Discussion

The Inquiry has considered the environmental effects of the proposed safe harbour in Part 1 of this report. The consideration of the Inquiry is with respect to the proposal for the use and development of a Pleasure Boat Facility and that this goes towards the creation of a safe harbour at Mornington. In terms of planning policy, the Inquiry notes the strong emphasis on Mornington Harbour as a regional boating facility and a place where a safe harbour could be located.

The policy framework includes provisos on any safe harbour which includes ensuring that Mothers Beach is not adversely affected and that coastal processes are protected and sustainably managed. The only specific reference to Mornington under state planning policy is as a maritime precinct with a focus on maintaining and expanding boating infrastructure.

The Inquiry considers that the proposed Pleasure Boat Facility is supported by planning policy under the Mornington Peninsula Planning Scheme. It is considered that the proposal will facilitate the achievement of policy objectives and will not conflict with the strategies and actions identified to achieve planning objectives for the Mornington Harbour.

The Inquiry notes the comments from Mr Milner in relation to the themes of safety and maintenance and increased capacity. With regards to safety and maintenance and in relation to boating infrastructure generally, he states that the wavescreens will provide community benefit and identifies that:

> *Policy has recognised the need for a safe harbour and the proposal would deliver on that outcome, reinforcing the role of Mornington as a Regional Boating Harbour and fulfilling its role in the hierarchy and network of boat facilities.*

Regarding the costs and benefits particularly with respect to coastal processes he stated that:

> *The principal cost of these proposals upon the community and environment appear to be confined to either short term localised impacts during construction, or associated with the longer term maintenance of the beaches arising from changes in wave patterns and coastal processes. While the latter appear to entail long term monitoring and on ongoing*

> *maintenance cost to restore the effects of erosion and attrition, this could be seen as acceptable cost and consequence given the greater public benefit.*

Mr Milner concluded with respect to the works involved with the wavescreens that:

> *Collectively these works and their consequences would retain the sense of place and cultural identity of the harbour.*

Regarding increased capacity and in this regard the Inquiry understands this reference is with respect to the marina component of the proposal, Mr Milner noted that:

> *The analysis of this report identifies that while the inclusion of the marina would be of benefit to boat owners and users and would be one way of further complementing the regional role of the harbour, it is this aspect of the proposal that carries potentially the focus and burden of community costs associated with the overall proposal.*

Mr Milner identified such costs as being associated with a change in the character and appearance of the harbour, increased demand for car parking, the spatial extent of the marina increasing potential for user conflict (fight for space between boats, swimmers and other water user groups), increased restriction of access over the area occupied by the marina and lack of improvement of connectivity between the harbour and the Mornington Activity Centre. His conclusion was that the marina should be reduced in size to reduce these impacts.

Having regard to the viewpoints of Mr Milner's evidence, the Inquiry is satisfied that the planning permit application for the proposed Pleasure Boat Facility is appropriate from a planning policy perspective. The creation of a safe harbour at Mornington will achieve key planning directions for Mornington Harbour and will continue to support the Mornington Activity Centre. The Inquiry considers that the proposed Pleasure Boat Facility (safe harbour) meets the policy outcomes on the VCS 2008 and the MEPNCAP and BCAP when read together. Mornington Harbour is an activity node with capacity to absorb development. Impacts on the environment are not considered significant and can be managed within a small geographical area.

The marina component is considered appropriate having regard for the scale of the works with the wavescreens proposed for the safe harbour and given the opportunity to make full use of the safe harbour conditions that can be created without significant environmental effects. Maximising boating activity is considered sensible and practical for Mornington Harbour.

Although there will be impacts on visual and landscape qualities, the level of impacts are not considered to be significant on a regional scale. The Inquiry considers the effects on visual and landscape values to be acceptable on a local level having regard to the regional status of Mornington Harbour as a boating facility and destination node within Port Phillip Bay.

15.3 Planning provisions and decision guidelines assessment

Various planning controls within the Mornington Peninsula Planning Scheme contain decision guidelines which are relevant to considering the planning permit application for the Pleasure Boat Facility. Table 6 sets out the key planning permit provisions, purposes and requirements for the Pleasure Boat Facility and development of the Mornington Safe Harbour.

Table 6: Key Planning Permit provisions, purposes and requirements for the proposed Pleasure Boat Facility (Mornington Safe Harbour)

Zone	Purpose	Permit Requirement
Clause 36.02 Public Park and Recreation Zone (PPRZ)	To recognise areas for public recreation and open space, protect and conserve areas of significance and provide for commercial uses where appropriate.	Clause 36.02-1 a pleasure boat facility which is a land use not conducted by or on behalf of a public land manager or Parks Victoria or specified in an incorporated plan is a section 2 use (permit required) Clause 36.02-2 a permit is required for buildings and works (development) for a pleasure boat facility where the buildings and works are not conducted by or on behalf of a public land manager or Parks Victoria
Overlays	**Purpose**	**Permit Requirement**
Clause 42.01 Environmental Significance Overlay (ESO25)	Applied 600 metres from the low water mark into Port Phillip Bay. ESO25 contains a statement of environmental significance that the Port Phillip coastal area and adjoining offshore areas	Clause 42.01-2 a permit is required under the ESO to construct a building or construct or carry out works and to remove destroy or lop any vegetation

	contain some of Victoria's most significant cultural and natural features, including sites of ecological, archaeological, geological, geomorphological, aesthetic and cultural heritage value. These places are of cultural, scientific and educational value to current and future generations. It seeks: • To protect and enhance the natural features, vegetation, ecological diversity, landscape quality, heritage values and recreation opportunities of the Port Phillip Bay coastal area and associated intertidal and marine habitats. • To promote excellence in design of buildings, facilities and structures in the coastal area. • To promote coordinated management of the Port Phillip coastal area.	
Clause 43.01 Heritage Overlay (HO228 Mornington Pier)	This applies to a number of locations within and around Mornington Harbour including the Mornington Pier (HO228), Mornington Public Park (HO55), Schnapper Point Exploration Site (HO57) and the Football Disaster Memorial (HO59). The requirements of this overlay apply to the	Clause 43.01-1 a permit is required for buildings and works including signs affecting heritage places including the Mornington Pier.

	heritage place specified in the schedule to the overlay and includes both the listed heritage item and its associated land. It aims to conserve and enhance heritage places of natural or cultural significance as well as those elements which contribute to the significance of heritage places and to ensure that development does not adversely affect the significance of heritage places.	
Particular Provisions	**Purpose**	**Permit Requirement**
Clause 52.05 Advertising Signs	Category 4 – Sensitive Areas the purpose is to provide for unobtrusive signs in areas requiring strong amenity control	Clause 52.05-10 a permit is required for a Business Identification Sign not exceeding 3m^2 and for a Floodlit Sign. Directional Signs do not require a permit Clause 52.05-4 provides exemptions for certain types of signs Clause 62.02-2 of the General Provisions also provides exemptions for signs that do not have a permit requirement specified elsewhere in the planning scheme. The draft planning permit seeks approval for signs for the purpose of identification or operation of the marina and for heritage interpretation only. It is noted that the EES states that approval for signage is not being

		sought now but will be subject to a future application process.
Clause 52.06 Car Parking	Aims to ensure that car parking facilities are provided and designed efficiently with an appropriate number of car spaces having regard to the activities on the land and the nature of the locality without adverse effects on the amenity of the locality.	52.06-1 Car spaces - Provision of car spaces provides that a new use must not commence or the floor area of an existing use must not be increased until the required car spaces have been provided on the land. The number of car spaces required are listed in a table at Clause 52.06-5. Where a use is not specified in the table an adequate number of car spaces must be provided to the satisfaction of the responsible authority. A Pleasure Boat Facility falls within this category.
Clause 52.07 Loading and Unloading of Vehicles	Aims to set aside land for loading and unloading commercial vehicles to prevent loss of amenity and adverse effect on traffic flow and road safety.	Requires that no building or works may be constructed for the manufacture, servicing, storage or sale of goods or materials unless space is provided on the land for loading and unloading vehicles. A permit may be granted to reduce or waive these requirements if the land area is insufficient or adequate provision is made for loading and unloading vehicles to the satisfaction of the responsible authority.
Clause 52.17 Native Vegetation	Aims to protect and conserve native vegetation to reduce the impact of land and water	Clause 52.17-2 a permit is required to remove, destroy or lop native vegetation

	degradation and provide habitat for plants and animals. It seeks to achieve a net gain for native vegetation through avoiding, minimising and offsetting its loss.	

Relevant decision guidelines for assessing the Pleasure Boat Facility are outlined below:

- Clause 36.02-5 Decision guidelines of the PPRZ;
  - The comments of any public land manager or other relevant land manager having responsibility for the care or management of the land or adjacent land.
  - Whether the development is appropriately located and designed, including in accordance with any relevant use, design or siting guidelines.
- Environmental Significance Overlay – Schedule 25 – Port Phillip Coast (ESO25) decision guidelines;
  - The environmental objectives of this schedule.
  - The existing use and development of the land.
  - The degree to which the proposed development is dependent on a coastal location.
  - The ability to reduce the number of buildings and other structures by combined use or reuse of existing buildings.
  - The appropriateness of a condition requiring the relocation or removal of inappropriate structures as part of an application.
  - Whether any proposed structure or works, including the planting or removal of vegetation, is likely to cause any deterioration of the Port Phillip Coastal Area by virtue of erosion or the deposition of sand or silt or any other reason.
  - The Victorian Coastal Strategy, Siting and Design Guidelines for Structures on the Victorian Coast (May 1998) and Landscape Setting Types for the Victorian Coast (May 1998).
- Clause 43.01-4 Decision guidelines of the HO
  - The significance of the heritage place and whether the proposal will adversely affect the natural or cultural significance of the place.
  - Any applicable statement of significance, heritage study and any applicable conservation policy.

- Whether the location, bulk, form or appearance of the proposed building will adversely affect the significance of the heritage place.
- Whether the location, bulk, form and appearance of the proposed building is in keeping with the character and appearance of adjacent buildings and the heritage place.
- Whether the demolition, removal or external alteration will adversely affect the significance of the heritage place.
- Whether the proposed works will adversely affect the significance, character or appearance of the heritage place.

▪ Clause 52.06 Decision guidelines for Car Parking

Before a requirement for car spaces is reduced or waived, the applicant must satisfy the responsible authority that the reduced provision is justified due to:

- The availability of car parking in the locality.
- The availability of public transport in the locality.
- Any reduction in car parking demand due to the sharing of car spaces by multiple uses, either because of variation of car parking demand over time or because of efficiencies gained from the consolidation of shared car parking spaces.
- Any car parking deficiency or surplus associated with the existing use of the land.
- An empirical assessment of car parking demand.
- Any other relevant consideration.

▪ Clause 52.17-5 Decision guidelines for Native Vegetation

General issues

- Victoria's Native Vegetation Management – A Framework for Action (Department of Natural Resources and Environment 2002).
- Whether the proposed development can be located and designed to avoid the removal of native vegetation.
- Whether the proposed development is located and designed to minimise the removal of native vegetation.
- The need to offset the loss of native vegetation having regard to the conservation significance of the vegetation.
- The conservation and enhancement of the area.
- The preservation of and impact on the natural environment or landscape values.
- Any relevant approved Regional Vegetation Plan.
- The cumulative impact of native vegetation removal on biodiversity conservation and management.

Conservation significance

- The conservation status of the native vegetation.
- The quality and condition of the vegetation
- The strategic location of the native vegetation in the local landscape.
- Whether the native vegetation is a threatened community, or provides habitat for threatened fauna or flora, as listed in the *Flora and Fauna Guarantee Act* 1988.
- Whether the removal of the native vegetation could jeopardise the integrity or long term preservation of an identified site of scientific, nature conservation or cultural significance.

Offsets

- The conservation significance of the native vegetation.
- The offset criteria in Victoria's Native Vegetation Management – A Framework for Action (Department of Natural Resources and Environment 2002).
- Offset requirements in an approved Regional Vegetation Plan.
- The long term security of the offset.

▪ Clause 65 Decision Guidelines

Because a permit can be granted does not imply that a permit should or will be granted.

The responsible authority must decide whether the proposal will produce acceptable outcomes in terms of the decision guidelines of this clause.

Clause 65.01 Approval of an application or plan

Before deciding on an application or approval of a plan, the responsible authority must consider, as appropriate:

- The matters set out in Section 60 of the Act.
- The State Planning Policy Framework and the Local Planning Policy Framework, including the Municipal Strategic Statement and local planning policies.
- The purpose of the zone, overlay or other provision.
- Any matter required to be considered in the zone, overlay or other provision.
- The orderly planning of the area.
- The effect on the amenity of the area.
- The proximity of the land to any public land.

- Factors likely to cause or contribute to land degradation, salinity or reduce water quality.
- Whether the proposed development is designed to maintain or improve the quality of stormwater within and exiting the site.
- The extent and character of native vegetation and the likelihood of its destruction.
- Whether native vegetation is to be or can be protected, planted or allowed to regenerate.
- The degree of flood, erosion or fire hazard associated with the location of the land and the use, development or management of the land so as to minimise any such hazard.

15.3.1 Discussion

The various zone, overlay and particular provision purposes and associated decision guidelines relevant to the consideration of the planning permit application primarily relate to the protection and management of impacts and detrimental effects on environmental, cultural and heritage values. The Mornington Harbour contains many of these important values.

The Inquiry has reviewed the environment effects of the proposed safe harbour in Part 1 of this report. Accordingly, the impacts from the planning permit application are not considered to conflict with the various purposes and decision guidelines of the planning scheme's provisions. The environment of the Mornington Harbour will change as a result of the proposed development but will not be lost.

With respect to heritage, the Inquiry is satisfied that the heritage values of Mornington Pier will not be damaged by the proposal. This was confirmed by the evidence of Mr Lovell. Mr Lovell did suggest however, that the area around the Pier would be impacted through a change in the character and appearance of the harbour arising from the development and notably, the marina component.

The Inquiry, however considers that the extent of the impact is not significant to warrant refusal of the application particularly given the wider benefits of the proposed safe harbour.

With regards to advertising signs, the Inquiry considers that this provision is not required to be considered given that although the draft planning permit refers to signs the EES was clear in advising that signage would be subject to separate future planning permit applications.

Car parking issues in Mornington Harbour are already problematic and solutions appear to be difficult given the policy position to not expand car parking in foreshore areas. This limitation should not be seen to warrant refusal of the application and not lead to the 'infrastructure tail wagging the land use dog'. The Pleasure Boat Facility offers the opportunity to put in place mechanisms to provide some service for parking management closely linked to car parking capacity within the Mornington Activity Centre.

With respect to loading and unloading facilities, the Proponent has included reference in the draft planning permit to waiving the loading bay requirements under Clause 52.07 of the planning scheme. The Inquiry agrees to this on the basis that the proposed extension of the Yacht Club for the purposes of a marina office is within the existing building footprint and that the underground fuel storage tank is proposed to be located within the compound of the Yacht Club precinct. The Inquiry considers that deliveries generated by the proposed safe harbour over and above that generated by the existing Yacht Club facility will not be substantial and access can be provided when such deliveries are required that service the underground fuel storage tank or the marina office.

Native vegetation issues relate to impacts on seagrasses. The Inquiry considers that although there may be some impact on small areas of seagrasses from construction of the Pleasure Boat Facility, by far the loss will be expected to be overtaken by the opportunities provided by the safe harbour facility for seagrass regrowth. Hence, impacts are considered to be minor.

With respect to whether the proposal achieves an acceptable outcome, the Inquiry's attention is drawn to the concept of orderly planning. Orderly planning for Mornington Harbour comprises two perspectives; regional and local.

At a local level, the impacts arising from the proposal drawn to the attention of the Inquiry particularly by the MEA, other local submitters and by Council would be significant. These impacts would involve a loss of recreational amenity and devaluation of the heritage worth of Mornington Pier because of the combination of changed coastal processes and its effects on beach quality and visual dominance imposed by the wavescreens and marina components of the Pleasure Boat Facility.

At a regional level is a policy framework that requires boating activity in Port Phillip Bay to be improved and expanded with up to date infrastructure and services. The concept is to focus infrastructure and capacity towards identified activity nodes or focal points around Port Phillip Bay that can

accommodate a concentration of disturbance whilst avoiding similar impacts around the balance of the Bay.

Orderly planning is about minimising damage, providing protection and maximising benefit. The idea of orderly planning to ensure that if development is to occur it should do so in places that have resilience to impacts, have already been substantially modified and to concentrate development activity to such places so that other areas, particularly those areas that are sensitive to change can be protected or maintained.

The Inquiry considers that the proposal for the Mornington Safe Harbour achieves good orderly planning. The proposed Pleasure Boat Facility focuses on Mornington Harbour, a place that has experienced development and change in the past and which is currently a focal point for a broad range of commercial and recreational activity. In accordance with the Our Bays Initiative the provision of a safe harbour at Mornington will provide a boating destination on the east side of Port Phillip Bay that will contribute towards boating safety, refuge and activity which is considered to add benefit to the Mornington Activity Centre.

Impacts on the local environment will occur, however the Inquiry is satisfied that the type of impacts will not result in significant loss of environmental values, recreational use or unreasonable loss of amenity. The proposed Pleasure Boat Facility will result in change but the Inquiry considers that change is anticipated and the extent of change is considered appropriate given Mornington's location within the regional setting of Port Phillip Bay.

15.4 Draft planning permit

Variants of a draft planning permit were provided to the Inquiry during and following the hearings. The version dated 31 March 2011 was subject to comment by the Proponent, Council and Parks Victoria[41]. Substantial agreement was reached between the parties on the permit conditions. Changes and agreement were identified with respect to what the permit allows, conditions being more in tune with the commitments contained in the EMP Framework and conditions relating to amended plans.

Disagreement continued with respect to public access and the number of berths available for public use and parking requirements and in particular regarding parking numbers to be provided. Table 7 outlines the particular points of disagreement and the Inquiry's response.

[41] Correspondence commenting on draft planning permit conditions were received from Council dated 24 March 2011, Parks Victoria dated 30 March 2011 and from Minter Ellison on behalf of Mornington Boat Haven Limited dated 31 March 2011.

Table 7: Matters of disagreement and the response of the Inquiry on the draft planning permit

Permit Condition	Response of the Inquiry
Permit preamble – include the Mornington Pier because of the HO	Agrees and should be included because part of the Mornington Pier is included within the HO
1 – should reference be included to the wavescreen walkway of a viewing platform	Agree reference to a wavescreen walkway viewing platform should be included in Conditions 1, 1(a)(i) and 1(c)(ii) however the reference should be limited as suggested by the Proponent to the inclusion of the viewing platform at the end of the harbour wavescreen with a maximum area of $6m^2$ and subject to no upset conditions for coastal processes or navigation
1(a)(xvii) – requiring a plan of all existing berths and moorings to be retained along Mornington Pier and Fishermans Jetty	Council suggests that this remain because the application is also at the behest of Parks Victoria who should therefore be accountable for the impacts on existing pier facilities consequent of allowing the marina. Parks Victoria requests its deletion because it would restrict their management of berths and moorings in this area, which is a key function of the Local Port Manager. They suggest that if a condition is required it should be worded to the effect of requiring a plan showing the connection of the new public jetty to the bluestone wall and the southern marina arm to Fishermans Jetty. The Inquiry considers that the condition is appropriate as it would merely ensure that a site plan will depict existing berths retained along the Pier and Jetty
1B and 1C – relating to inclusion reference to a structural assessment and works authority from Parks Victoria	Agree with both although the structural assessment should be required a part of the final design phase to ensure that any integrity issues are identified to inform the design process of the facility.
2(a)(viii) – relates to general improvements of the Jetty forecourt area as part of the Schnapper Point Parking	The Proponent suggests this is too open ended. The Inquiry agrees. Council believes the condition can be negotiated

Permit Condition	Response of the Inquiry
Plan to be prepared prior to the start of the approved use	later however, this is not considered satisfactory as a condition and without further elaboration from Council; the Inquiry considers the condition should be deleted.
2(b)(iv) – relates to casual berths and available use of pen berths when not in use by the public	Council seeks specification in the condition of a minimum number of berths to be made available. The minimum number of berths should be commensurate with the scale of the facility, the regional nature of the Mornington Boat Harbour and a quantum which provides a significant public benefit having regard to the imposition of the development upon the Harbour. The Proponent agreed however, any decision regarding the proportion of public berths to private berths must take into account the business model for the proposal. In addition, the precise number of public berths along the jetty will be determined following consultation with the relevant emergency service providers. The Inquiry considers that the provision of an area for public berths should be shown on the plan but that numbers not specified. Provision of public berths will be managed by Parks Victoria as the port manager and should not be controlled by way of permit conditions.
2(d) – relating to the Boating Identification Plan includes a paragraph that notes for public record only the requirements of parts (ii) and (iii) of the condition relating to the location of navigation fairways and aids	The Proponent suggests that this should be controlled by Council but rather are matters for the responsibility of Parks Victoria and Transport Safety Victoria in relation to boating navigation. The Inquiry agrees and the paragraph should remain
4(c) – be deleted because there is no condition proposed requiring a certain number of berths be provided for sail boats only	Agree – this condition should be deleted.

Permit Condition	Response of the Inquiry
6(f)(iii) – Council requests the word 'unreasonable' should be deleted while Minter Ellison suggests it should remain	Given that this part of the condition relates to ensuring that construction works do not disrupt use of the harbour over the summer holiday period, the Inquiry considers the word 'unreasonable' should be deleted. Disruption from construction should be avoided over the summer holiday period.
8(f) – should the term minimise or mitigate be used under the Sand Management condition relating to impacts on the beaches	The Inquiry considers that the term mitigate should be used as it seeks to lessen the force or intensity of the impact.
8(f)(v) – define the term fines	The Inquiry considers that the term fines does not require specific definition but could be enhanced by referring to silts and muds as part of the meaning of the term.
11(a)(ii) – relating to car parking numbers	The Proponent suggests no number and for car parking to be negotiated while Council prefer to select 64 car spaces based on the EES. The Inquiry considers that it would be more appropriate to leave the number of car parking spaces unspecified but to require a parking demand assessment of the Mornington Yacht Club to assist in identifying an appropriate number of car parking spaces that should be required.
11(c)(iv) – relates to shuttle bus services over summer	Agree in part – the proposed condition from the Proponent is considered appropriate and should provide for shuttle bus services from 15 December to 31 January.
13 – two versions of the permit condition relating to whether car space number are included or not	The Inquiry considers that the Proponent's version of the condition is appropriate and consistent with its response to Condition 11(a)(ii) above.
16 – relates to deleting reference to Mornington Pier and all jetties in relation to public access	Parks Victoria requests these deletions in order to not fetter their responsibilities. The Inquiry agrees.
20 – relates to disabled access	The Inquiry agrees with this condition as

Permit Condition	Response of the Inquiry
	amended and considers that the permit should not limit Parks Victoria's management of access on the Pier or jetties.

15.5 Conclusion and recommendation

In conclusion, the Inquiry considers that the planning permit application for the proposed Pleasure Boat Facility is acceptable under the policy directions and provisions of the Mornington Peninsula Planning Scheme. The draft planning permit as amended and reviewed by the Inquiry is considered satisfactory.

The Inquiry recommends that:

17. Planning Permit Application No CP09/005 should be granted subject to the recommended changes made by the Inquiry and the conditions as amended by the Inquiry and contained in Appendix D.

16. Response to Terms of Reference and summary of recommendations

16.1 Terms of Reference

The Terms of Reference (at Section 2) required the Inquiry to perform the following tasks:

> *The Inquiry is required to:*
>
> *I. Inquire into and make findings regarding the potential environmental effects (impacts) of the proposed project.*
>
> *II. Examine the implications of the proposal for the Schnapper Point area, including the current and future use of the Mornington Pier.*
>
> *III. Recommend any modifications to the project, including in relation to possible modifications to siting and design, as well as environmental mitigation and management measures that would be needed to achieve acceptable environmental outcomes, within the context of applicable statutory provisions, policies and associated plans.*
>
> *IV. Recommend whether the project should proceed in light of its expected effects, assuming the measures recommended under (iii) were implemented.*

These tasks have been performed during the course of the Inquiry's work and a detailed response is included in the content of the various issues chapters in the report.

The Inquiry considers that subject to the detailed recommendations for mitigation and project design that have been made, the environmental effects of the project can be managed and the adverse impacts on Schnapper Point and the Mornington Pier should be minimal.

16.2 Summary of recommendations

The Inquiry recommends:

1. **Subject to the detailed recommendations in this report, that the environmental effects of the project are manageable and the Mornington Safe Harbour proposal has strong policy support and should proceed.**

2. **The twelve swing moorings proposed to be located east of the eastern fairway should be removed from the proposal.**

3. **The detailed design of the harbour wavescreen should explore opportunities to reduce reflected waves but any such design changes should not increase the environmental effects of the proposal beyond those identified in the design as exhibited in the EES.**

4. **The eight fore and aft moorings proposed to be located on the southern side of the Mornington Safe Harbour should be removed from the proposal.**

5. **The following visual impact mitigation measures should be implemented during project development as a minimum:**
   - **Reduce the wavescreen height as much as possible during detailed design whilst still achieving the protection objectives for the marina and safe harbour;**
   - **Prohibit the use of floating boat cradles in the harbour via permit condition or through the Harbour Operations Plan;**
   - **Design the harbour wavescreen surface above high water mark on the harbour side to provide an attractive finish that breaks up the bare concrete wall;**
   - **Use the walkway design on the harbour wavescreen (via railings, timber treatment or other measures) to ensure that the 'horizon line' of the wavescreen is irregular and not the solid contiguous line shown in photomontages;**
   - **Design the artificial reef if it is required so to maintain, as best as practical a low profile and incorporate finishes and materials to further reduce impacts.**

6. **The design of the Mornington Safe Harbour should ensure that safe, navigable and suitable areas for tall ships berthing are provided with**

good public access. Mornington Boat Haven Limited should seek advice from Tall Ships Victoria as to how this can be achieved.

7. **Further investigation and assessment should be undertaken by Mornington Boat Haven Limited to determine the extent of the impact, the causes and what treatments are available to avoid or mitigate the effects of the safe harbour on beach sand quality particularly at Mothers Beach and the western part of Scout Beach.**

8. **Environmental monitoring of water and sediment quality should be included in the Framework Environmental Management Plan to be undertaken by Mornington Boat Haven Limited prior to construction, during construction and following construction and during operation of the safe harbour to determine the appropriate level of ecosystem protection in accordance with the State Environmental Protection Policy - Waters of Victoria – Schedule F6 (Port Phillip Bay) and to inform management and compliance actions.**

9. **The Environmental Management Framework should be amended to ensure that pre and post construction monitoring is undertaken by Mornington Boat Haven Limited to determine the presence of endangered species and species listed under both State and Commonwealth legislation. This is to ensure that impacts are avoided and to inform management actions if species are detected to avoid impacts.**

10. **During further design and development Mornington Boat Haven Limited should provide or contribute to the interpretation of the history of Mornington Harbour in consultation with local heritage groups and with input from a suitably qualified maritime heritage expert.**

11. **Prior to the development commencing Mornington Boat Haven Limited should commission from a suitably qualified traffic expert an assessment of current parking demand generated by the Mornington Yacht Club. This will inform the appropriate number of car parking spaces required for the Mornington Safe Harbour facility with the scope of the assessment to be approved by Mornington Peninsula Shire Council. This should be included as a permit condition.**

12. **The results of the parking demand assessment should be used in conjunction with the evidence presented to this Inquiry to assist Council in arriving at a reasonable, defensible figure for the car parking spaces to be provided by the Proponent.**

13. Mornington Boat Haven Limited should be required via permit condition(s) to provide: parking spaces as informed by the car parking demand assessment referred to in Recommendation 11 to the satisfaction of the Mornington Peninsula Shire Council; or a shuttle bus service between the harbour and the Mornington town centre.

14. The frequency and duration of beach monitoring on Mothers Beach, Scout Beach and Shire Hall Beach should be increased to three monthly after construction is completed, and the frequency should be reviewed in the 12 monthly review of the Operational Environmental Management Plan required in permit conditions depending on the monitoring results.

15. The Draft Framework Environmental Management Plan as shown in Appendix E should be adopted for use in further project design and development subject to:

- **Deletion of reference to fore and aft moorings and swing moorings.**
- **Inclusion under Section 3.3.1 of reference to the marina arms and pens and the wavescreens requiring further environmental risk assessment.**
- **Inclusion of Mornington Boat Haven Limited's statement of commitments (shown in Appendix F of this report) in Section 4.1.**
- **Inclusion under 'Marine Ecology' in Table 2, of pre construction and post construction monitoring for species of State and National significance as a monitoring requirement.**

16. Amendment C107 to the Mornington Peninsula Planning Scheme should be adopted without change.

17. Planning Permit Application No CP09/005 should be granted subject to the recommended changes made by the Inquiry and the conditions as amended by the Inquiry and contained in Appendix D.

Appendix A Terms of Reference

TERMS OF REFERENCE

INQUIRY UNDER SECTION 9(1) OF ENVIRONMENT EFFECTS ACT 1978

MORNINGTON SAFE HARBOUR DEVELOPMENT

1. BACKGROUND

Mornington Boat Haven Limited, acting on behalf of the Mornington Yacht Club, proposes to develop a 'safe harbour' at the existing Mornington Harbour near the Mornington township on the east coast of Port Phillip Bay. The proposal includes a north facing wavescreen located east of the existing Mornington Pier (approximately 210 metres in length), a north-west facing wavescreen along the full length of the Mornington Pier and a pier extension (approximately 20 metres in length). This infrastructure would create a 'safe harbour' for approximately 170 floating berths, approximately 8 'fore and aft' moorings, 12 swing moorings and 20 short term and emergency services berths. A new public jetty would run parallel to the south of the existing Pier to provide access to the marina berths. The proposal also includes a travel lift and boat wash-down facility which would replace the existing slipway.

On 1 August 2005, the Minister for Planning determined that an Environment Effects Statement (EES) was required for the proposal under the *Environment Effects Act 1978* (EE Act). The EES was prepared by the proponent in response to Assessment Guidelines issued for the proposal in May 2006.

In accordance with section 8A(3) of the *Planning and Environment Act 1987* (P&E Act), the Minister for Planning has authorised the Mornington Peninsula Shire Council as planning authority to prepare Amendment C107 to the Mornington Peninsula Planning Scheme to facilitate the Mornington Safe Harbour Development.

Under Victorian law, the project also requires the following approvals:

- *Coastal Management Act 1995* consent for works on coastal Crown land;
- lease, licence or other agreement under *Crown Land (Reserves) Act 1978* to use or occupy reserved land;
- approval of a Cultural Heritage Management Plan under *Aboriginal Heritage Act 2006* to manage works in areas of cultural heritage sensitivity; and
- *Heritage Act 1995* consent to disturb heritage sites.

The EES was placed on public exhibition together with Amendment C107 to the Mornington Peninsula Planning Scheme and Planning Permit Application (No. CP09/005).

The Inquiry[1] for the Mornington Safe Harbour Development is to be appointed by the Minister for Planning under section 9(1) of the EE Act to consider submissions regarding the EES. Following the report of this Inquiry, the Minister for Planning will prepare an assessment of the project's environmental effects[2] to inform decisions whether or not to approve the project under legislation including the P&E Act.

2. TASK

The Inquiry is required to:

i. Inquire into and make findings regarding the potential environmental effects (impacts) of the proposed project.

ii. Examine the implications of the proposal for the Schnapper Point area, including the current and future use of the Mornington Pier.

iii. Recommend any modifications to the project, including in relation to possible modifications to siting and design, as well as environmental mitigation and management measures that would be needed to achieve acceptable environmental outcomes, within the context of applicable statutory provisions, policies and associated plans.

iv. Recommend whether the project should proceed in light of its expected effects, assuming the measures recommended under (iii) were implemented.

3. METHOD

The Inquiry must consider the exhibited EES, any submissions received in response to the exhibited EES, the proponent's response to submissions and other relevant information provided to or obtained by the Inquiry, having regards to relevant statutory provisions, policies and associated plans.

The Inquiry must conduct a public hearing and may make other such enquiries as are relevant to its consideration of the potential environmental effects of the proposed Mornington Safe Harbour Development.

The Inquiry must be conducted in accordance with the following principles:

- The Inquiry hearings will be conducted in an open, orderly and equitable manner, in accordance with the rules of natural justice, with a minimum of formality and without the necessity for legal representation.
- The Inquiry process will aim to be exploratory and constructive, where adversarial behaviour is minimised.

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[1] The members of which may also be appointed as a panel under sections 96, 153 and 155 of the P&E Act to consider submissions regarding the planning scheme amendment and associated planning permit application and as an Advisory Committee for the project under section 151 of this Act to assess the overall merits of the options for the proposed development. If this occurs, a single consolidated report meeting the requirements of both the EE Act and the P&E Act is to be prepared.

[2] Under the seventh edition of the *Ministerial guidelines for assessment of environmental effects* (June 2006), environment for the purposes of assessment includes the physical, biological, heritage, cultural, social, health, safety and economic aspects of human surroundings, including the wider ecological and physical systems within which humans live.

- Parties without legal representation will not be disadvantaged – cross-examination will be strictly controlled and prohibited where not relevant by the Inquiry Chair.

The Inquiry will meet and conduct hearings when there is a quorum of at least two of its members present including the Inquiry Chair.

4. OUTCOMES

To prepare a report for the Minister for Planning presenting:

- The Inquiry's response to the matters detailed in section 2;
- Relevant information and analysis in support of the Inquiry's recommendations; and
    - A description of the proceedings conducted by the Inquiry and a list of those consulted and heard by the Inquiry.

5. TIMING

The Inquiry is required to report to the Minister for Planning in writing within six weeks of its last hearing date.

6. FEES

The members of the Inquiry will receive the same fees and allowances as a panel appointed under Division 1 of Part 8 of the P&E Act.

APPROVED:

MATTHEW GUY MLC
Minister for Planning

DATE: 31·04·11

Appendix B The Inquiry process

B1 Exhibition

The EES was publicly exhibited with the Planning Permit Application and Planning Scheme Amendment from 20 May 2010 until 5 July 2010.

B2 The Inquiry

The Inquiry members were appointed on 19 July 2010 under Section 9 of the *Environment Effects Act* 1978 as follows:

- Nick Wimbush - Chair
- Chris Harty
- Robert Johnson

The same members were appointed as a Panel under Sections 153, 155 and 96B of the *Planning and Environment Act* 1987 to consider submissions to Mornington Peninsula Planning Scheme Amendment C107 and Planning Permit Application CP09/005.

Immediately prior to the commencement of the main hearing Mr Johnson was taken seriously ill and took no further part in the proceedings. Mr Wimbush and Mr Harty completed the Inquiry's work under revised terms of reference (shown in Appendix A).

B2 Hearings and site inspections

Directions Hearings were held in Mornington on 19 August and 12 November 2010.

The Main Hearings were held in Mornington as follows:

- 1-3 February 2011
- 8-10 February 2011
- 16-18 February 2011
- 22 February 2011
- 24 February 2011
- 10 March 2011

An accompanied site inspection from the land and water was undertaken at Mornington on 4 February 2011. The Inquiry undertook multiple

unaccompanied visits to the Mornington Harbour during the course of the hearing.

Accompanied visits to other harbours at Blairgowrie, Martha Cove and Sandringham were undertaken on 23 February 2011.

B2 Appearances

The main parties and groups appearances are listed below. Individual submitters are listed in Appendix C.

ORGANISATION	APPEARANCE
Mornington Boat Haven Limited (Proponent)	Mr Philip Coombs, represented by Mr Philip Bisset and Ms Stephanie Price, Minter Ellison Lawyers. They called the following expert witnesses: • Mr John Van Pelt (landscape and visual impact) (written statement), • Ms Kate Partenio (traffic and parking), • Dr Andrew McCowan (coastal processes), • Ms Christine Wyatt (environmental management)
Mornington Peninsula Shire Council	Mr Frank Mangan, represented by Mr Terry Montebello, Maddocks Lawyers. They called the following expert witnesses: • Mr Peter Lovell (heritage), • Mr Peter Buckle (landscape and visual impact), • Mr Rob Milner (planning and net community benefit), • Ms Gillian Austin (traffic and parking) (written statement), • Ms Bonnie Rosen (social impact), • Mr Peter Riedel (coastal engineering)
Mornington Environment Association	Mrs Janet Oliver, represented by Mr Barnaby Chessell, Barrister. They called the following witnesses: • Dr Andrew Edmunds (marine ecology), • Dr David Provis (coastal processes), • Mr Matthew McFall (landscape and

	visual impact), • Dr Eric Bird (geomorphological impacts) (written statement)
Department of Planning and Community Development	Ms Margo Kozicki
EPA Victoria	Mr Naren Narenthiran Dr Randall Lee
Parks Victoria	Mr Richard O'Byrne Mr David Ritman
Yachting Victoria	Mr Ross Kilmore
	Mr Grant Hailes
Port Phillip Conservation Council	Mr Len Warfe
	Ms Catriona du Jardin
	Mr Kenneth Healey
	Mr Wayne Ashdown
Mornington Foreshore Advisory Group	Ms Carolyn Rose
	Ms Georgina Stubbs
	Ms Margaret Howden
	Mr Frank Ricco
	Ms Ann Robb
	Ms Barbara Jane Pashen
	Mr Malcolm Rosier
	Mr David Read
	Mr James Price
	Mr Frank Bjerkhamn
	Mrs Elizabeth Bjerkhamn
	Mr Peter Robb
	Ms Shirley Butcher
	Mr Richard Grose
	Mr Russell Colman
	Mr Neil Gilbert
	Mr Alan Crowe

	Dr David Drennan
	Dr W G Wicks
	Mr Damien Kiernan
	Ms Judith Martin
Tall Ships Victoria Inc.	Captain David Wharington
	Ms Helen Sarcelles
	Mr John Nixon

Appendix C List of submitters

First Name	Surname
Michael	Abrahamsson
Wasyl	Abrat
Neale	Adams
William	Adams
Mr & Mrs	Addems
Mark	Adlam
Eva Angel	Ady
Andrea	Airol
Anita	Alexander
Graeme	Alexander
Jan	Alexander
Laura	Alexander
Nigel	Alexander
Melita	Alford
Kris	Allen
N.E.	Allen
Jane	Altmann
Ardena	America
Helene	America
Annette	Anderson
Bob	Anderson
D	Anderson
June	Anderson
Kyffin	Anderson
Marissa	Anderson
Mary	Anderson
Vicki	Anderson
Steve	Anderstre
J	Andrews
Samantha	Anstice
Denise	Appelbee
Lior	Arad
D & G	Archer
Ian Maxwell Leslie	Armstrong
Robert	Armstrong
Charles	Arter
Mary	Arter
Donald	Ash
Chris	Ashard
Kendall	Ashard
Wayne	Ashdown
Ebony	Ashman
David	Asprey
Eleanor	Auhl
Richard	Auhl
Jill	Austin
Andy	Avard
Brett	Averay
Caroline	Ayres
David	Ayton
M	Baer
Rayma	Bailey
Shane	Bailey
Dion	Baines
Julie	Baker
Malcolm	Baker
Millar-Rose	Baker
Peter	Baker
Robert	Baker
Rod	Balcke
Helen	Balharry
Annis	Ballard
Rob	Ballard
Michelle	Balthazaar
A	Baltruschaitis
Laszlo	Barasits
Louise	Barbour
Magdalen	Barics
Brian	Barker
David	Barker
Elaine	Barker
Julia	Barker
Christina	Barnes
Ian	Barnes
Jenny	Barnes
Leanne	Barnes
Gwen	Barnett
Wendy	Barr
Mr & Mrs S	Barrington
Mrs L.A.	Barry
Rob	Barry
Scott	Barry
Heather	Barton
Richard	Bartram
Lyle	Bassett
Sally	Bassett
Tom	Bastias
John	Batty
Travis	Batty
Nicole	Bau
George	Bazley
Pauline	Bazley
Paul	Beattie
Dean	Beaumont
Mr P	Beaumont
John	Bebbington
David	Beck
Sheila	Beck
Chris	Beebie
Peter	Beesley
Suzanne	Beeson
Jennifer	Behrend
Stuart	Behrend
Thomas	Beilken
Rob	Bell
Tammy	Belshaw
Antonio	Bencicn
Sandra	Benjamin
Peter	Bentley
	Berold
Keith	Berryman
John	Bevan
Kate	Bicknell
K	Biddell
David	Bignell
Glen	Bilham
Malcolm	Billings
D. F.	Bingham
Andy	Binns
Mark	Bionnici
Maree	Bird
Nevil	Bird

Rosemary	Bird
Gail	Birmingham
Gary	Bishop
Laraine	Bishop
Jim	Biviano
Elizabeth	Bjerkhamn
Franz	Bjerkhamn
Brett	Blaber
Lorraine	Black
Geoff	Blake
Gordon	Blake
Kyle	Blake
Norma	Blake
Peter	Blake
Val	Blake
Markus	Blaser
Melinda	Blaser
V	Blease
Rien	Bleumink
John	Bloom
Patricia	Bloom
Malcolm	Boag
Geoff	Boalth
Robyn	Boalth
Roger & Judy	Boast
Evelyn	Bodger
Susan	Bollard
Chris	Bolton
Jayson	Bolton
Trevor	Bolton
Ian	Bond
Jane	Bone
Kate	Bone
Stephen	Bonfield
Peter	Booth
Mary	Borden
Anthony	Borg
Cohen	Borke
Stefan	Borzymowski
Andrew	Both
Margaret	Bottari
Dr Stuart	Boucher
J	Boughey
Jane	Boutland
Anna	Bowen

Tim	Bowen
Heather	Bowman
Paul	Bowman
Frances	Boyden
Ken	Bradbrook
Judi	Braden
John	Bradley
Phillip	Bradley
Leonard	Bradshaw
Georgia	Brady
John Morton	Brady
Tracy	Brattle
Chantelle	Breen
Gail	Breesle
Jane	Breidall
S	Brilley
Mr & Mrs	Broadbent
Marie	Brooks
V	Broome
Andrew	Brophy
A	Brown
Annette	Brown
Ella	Brown
Maureen	Brown
Robert	Browne
Albert	Bruehwiler
Malcolm	Brunott
Bruce	Brunsdon
Uldis	Bruveris
Merna	Brydon
P	Buck
Mark	Bucknell
Paul	Bucknell
Valerie	Bucknell
Colin	Budds
Wayne	Bull
Nancye	Bullen
Denise	Bulstrode
V	Bulter
Barbara	Burdon
Marie	Burgess
K	Burnstein
Cheryl	Burrell
Elizabeth	Burrell
Adam	Burridge

Kay	Burton
Michael	Burton
Gary	Butcher
Shirley K	Butcher
Dean	Butler
Douglas	Butler
Maeghan	Butler
Sharon	Butler
Lincoln	Butt
Bill	Butterworth
Peter	Butterworth
Jarrod	Buyre
Brad	Byrne
Peter	Byrnes
Eunice	Cain
John	Cain
Bill	Caldwell
Alison	Cameron
Karen	Camp
Toni	Camp
Dylan	Campbell
Evan	Campbell
Matthew	Campbell
Robert	Campbell
Errol	Candy
James	Canning
Tony	Cardona
Trevor	Careless
Eva	Carew - Reid
Cheryl	Carey
Tim	Carley
Kath	Carlisle
Robert	Carlton
Marina	Carroll
W.M.	Carroll
Judith	Carruthers
Stewart Ross	Carruthers
Suzi	Carter
Pam	Carver
Frank	Cascio
Phil	Castaldo
Sal	Cataland
Brian	Catley
Julia	Catley
Tom	Cerbasi

Catherine	Chalmers
Terrie	Chamberlain
John	Chandler
David	Chapman
V.C.	Chapman
Neil	Chapple
Philippa	Chapple
Marie	Chatterton
Mary Ellen	Cheek
Mark	Chen
Dr L	Chester
Grant	Chipperfield
Barry	Chitts
Keith	Christy
Elizabeth	Chun
Frank	Churcher
Chris	Churchley
Coral	Churchley
Joel	Ciszek
Roderick Amos &	Clare Murphy
Adrian	Clark
Judy	Clark
Libby	Clarke
R	Clarke
Shane	Clarke
Tenielle	Clarke
Velina	Clarke
Simon	Clauin
Ken	Clavering
Val	Clavering
P	Clearihan
Sein	Clearihan
Greg	Cleaver
John & Gloria	Clift
Terry	Clough
John	Coates
Darren	Cocks
Geoff	Coghill
Andrew	Coghlan
Jennifer	Coghlan
Sarah	Coghlan
Lynne	Coleman
Ronald C	Coleman
Kylie	Colemane
Thalia	Collard

Alan	Collins
Gillian	Collins
Grant & Jenny	Collins
Leonie	Collins
Jean	Collison-Dawson
Russell	Colman
Jill	Condie
Steven	Conyers
Mrs S.M.	Cook
Stephen	Cook
Ted & Phyllis	Cook
David	Cooke
Helen	Cooke
Stuart	Cooke
Geoff	Coombs
Philip	Coombs
Anthony D	Cooper
Damien	Cooper
James	Cooper
Peter	Cooper
V	Cooper
Wendy	Copeland
Janet	Copland
Gary	Copplestone
Ruth	Copplestone
Mr & Mrs	Corbett
B	Corke
Dylan	Corn
Christine	Cornish
Peter	Cornish
Ray	Corrigan
Janice Pamela	Corry
Michael	Corton
Linda	Coster
Christian	Couche
Rob	Coulson
Georgette	Courtenay
Geoff	Cowan
Jennifer & Ryan	Coward
Susan	Coward
Louise	Cowdell
David	Coyle
Jeff	Coyle
John	Crabtree
Dallas Arthur	Crane

Vicki	Crane
Terry	Crapper
Douglas	Creek
Gladys	Creek
B	Cribbes
Damian	Cripps
Patricia	Crispin
Gillian	Croaker
Dawn	Crocker
Leon	Croft
Taylor	Croft
Lorna	Crossett
Lisa	Crowder
Scott	Crowe
Joy L	Cullen
Jean	Curley
Laurel	Curran
Lisa	Curtin
Cathie	Curtis
Nady	Cvetkovich
Alex	Czarny
Andrew	Dackas
Lewis	Dackson
Brek	Daff
Jackie	Dahlsen
Jim	Dailey
Matt	Dalsanto
Greg	Dalton
Virginia	Dalton
Eddy	D'Amico
Jane	D'Amico
Renay	D'Amico
Caroline	Dante
Mr	Darbyshire
A	D'Arcy
Richard	Dare
Pamela	Dauncey
Barry	Davenport
John	Davey
Mrs Pauline	Davey
Alison	Davidson
Alan	Davies
Bev	Davies
Darren	Davies
Ian	Davies

Rod	Davies
Sue	Davies
Jack	Davis
Kelly	Davis
Tony	Dawes
Tom	Dawkins
Annie	Dawson
John	Dawson
W.	Dawson
Alison	Day
Clare	Day
Sally	Day
Kathryn	De Garis
Catriona	de Jardin
Pru	de Lange
Christine	Deady
Lesley	Deady
Andrew	Dean
Anthony	Dean
Peter	Decker
L&R	DeClerck
Johnathan	Deerson
Peter	Deerson
John	Delaney
Pete	Delawge
Alex	Dempsey
Brenda	Denny
Rosemary	Dennys
Valerie	Dennys
Leonard	Dent
Mavis	Dent
Terry	Denton
Peter John	Denys
Drew	Dewan
Michael	Dexter
Mario	Di Pilla
Teresa	Di Pilla
Ben	Dickens
Barbara	Dickson
Michael	Dickson
Phil & Fiona	Dickson
Matthew	Digec
Rhonda	Dillon
S	Dillon
B	Dimitriou

Andrea	Dix
Adam	Doherty
Craig	Dolman
Jane	Dolphin
Tony	Donellan
Maureen	Donelly
Beverley	Donnelean
Jemma	Donnellan
Lauren	Donnellan
Tim	Donnellan
Anthony	Donovan
Paula	Dorrington
Andrea	Douglas
Vanessa	Dowd
Carol	Dowling
Joan	Downward
David Francis & Wendy Leigh	Doyle
Donne	Doyle
David	Drennan
Claire	Driver
Daniel	Drummond
Gerry	D'Silva
Veronica	D'Silva
Robert	Duff
Terry	Duff
Jaqui	Duffee
Mark	Duffee
Steve	Duffee
Joseph	Dukes
Stuart	Dunlop
B	Dunn
H M	Dunne
P	Dunne
Tim	Dunne
Lyn	Durack
Peter	Durham
Guy	Dwyer
Janice M	Dwyer
Joan	Dwyer
Michelle	Eakins
Brendan	Earea
Glenys	Earea
Paul	Earea
Dennis	Earl
Brian	Eaton

Valerie	Eaton
Michael	Ecders
Jo	Eckardt
Mandy	Eddy
F.A.	Edis
Charles & Susan	Edney
Bill	Edwards
Ian	Edwards
Lindsay	Edwards
Mary	Edwards
Scott	Edwards
Tony	Eichstadt
Casey	Eickmeyer
David	Eiurmeier
Kathryn	Eldridge
D	Elliott
Hugh	Ellis
J G	Ellis
Kane	Ellis
Ken	Ellis
Geoffrey	Ellison
Alfred	Ellwood
Paul	Embling
John	Eriksson
Cheryl	Esler
Neville	Esler
Denny	Evans
Elizabeth	Evans
Fran	Evans
Jan & Barry	Evans
K	Evans
Pru J	Evans
Rachel	Evans
Roslyn R.	Evans
Janine	Everett
Michelle & James	Everett
Joe	Fagan
Margaret	Fagan
Sam	Failla
Elaine	Fairhurst
Pauline	Fairhurst
A	Fairnie
M.L.	Fairnie
Tony	Falvo
Cheryl	Farmer

D	Farmer
David	Farmer
John	Farrar
Christie	Fasham
Judi	Fasham
Trevor	Fasham
Andrew	Fay
Liz	Fay
Stan	Fear
Albert	Feather
P & M.A.	Federico
Max	Feehan
Rainer	Felden
Kellie	Felic
David	Fenton
Mrs M	Fenton
Sally	Fenton
Brendan	Fergus
Debbie	Fergus
Danielle	Field
De	Fima
John	Finn
Peter	Firth
Adam	Fisher
Frank	Fisher
Gary	Fisher
RJ	Fiske
R	Fitcher
Pauline	Fitzgerald
Margaret	Flangan
Karen	Flavell
James	Fleetwood
Isabelle	Flower
Anthony	Fly
Noele	Foley
Helen	Foote
Tom	Foote
Glenys	Foreman
Mrs Judy	Foreman
Mrs. C.	Forrester
Craig	Forster
John	Forster
Mrs W.P.	Forward-Leenstra
Brian	Foster
R	Foster

Ron	Fowler
David John & Beryl Jill	Fox
Jennifer	Fox
Helen	Frame
Andrew	Frandson
Brent	Frankcombe
Steven	Frankland
Tobias	Franklin
Grant	Freeman
Laurie	French
Sharon	Frier
Maureen	Frizelle
Celia & Grant	Fuller
Roland	Gait
James	Gallagher
Ted	Galloway
Barry	Galvin
Claire	Gardner
Jeff	Gardner
Susan	Garvin
Renee	Gati
V	Gayathri
Kenwyn R	Gayler
Dr Douglas	Gee
Denis	George
Joan	George
Mendel	George
Rivica	George
Amanda	Gibb
Hilary	Gibson
Margaret	Gibson
Rob	Gibson
Darryn	Gilbert
Mary	Gilbert
Neil	Gilbert
Simon	Gillham
Paul	Gilligan
Jeffrey	Gilmour
Sheenagh	Ginnane
Rebecca	Gipp
Howard	Girdler
Alan	Girlins
Debbie	Girlins
Pat	Girolami
Emanuel	Giuliand

Janet	Glaspole
Jenny	Gleeson
Alison	Glen
Beau	Glennon
Scott	Glennon
Scout	Glennon
Melvyn	Glynne
Elizabeth	Goddard
Jodie	Goddard
Tim	Goddard
Haydn	Godony
M	Godony
Stephen	Goggins
Barry	Goldsmith
Ellen	Goldsmith
Karen	Goldsmith
Brian & Sylvia	Good
Scott	Goodchild
Dr. Colin	Goodwin
Stuart	Gooley
Letitia & Angela	Gordon
Eva	Gosley
Garry	Gosling
Daniel	Gott
Joe	Gowans
Simon	Grain
Adam	Grant
John	Grant
John & Robyn	Gray
Aaron	Green
Grahame	Green
Milton	Green
L	Greenall
Sue	Greening
Valerie	Greenough
Robin	Greenwood-Smith
Meredith	Greer
Patricia	Greer
Rhiannon	Gregson
Glen	Griffin
J	Griffin
Karen	Griffin
Rex & Hazel	Griffin
Kaeler	Grigg
Diana	Grose

Richard	Grose
Helga	Gross
James	Grover
E.M.	Groves
Rod	Grummitt
Jenni	Guilfoyle
Janet	Guillot
Kim	Guov
Por	Guov
Michael	Haderup
Jason R	Hadlow
Grant	Hailes
Kirsten	Hailes
Robert	Hair
Tony	Hale
Lydia	Haley
P	Haley
John	Halfo
Andrew	Hall
Bev	Hall
Jason	Hall
John	Hall
Luke	Hall
Carolyn	Hallo
Dale	Halstead
Gail	Hamilton
Howard	Hamilton
Anne	Hammond
David	Hanby
Geoff	Hancock
Tony Brent	Hancock
Warren	Hancock
Judi	Hanke
Rob	Hanke
Angela	Hannaford
Tony	Hannan
Robyn	Harcourt
Ian	Harding
Nicholas	Harding
Stuart	Hardy
Yvonne & John	Hardy
Cosmo	Harpantidis
Brad	Harris
Brendon	Harris
J	Harris
T	Harris
Alan	Harrison
Heather	Harrison
Mr	Harrison
G	Harrod
Faye	Harrop
Kate	Harry
John	Hart
John	Hart
Michael	Hartley
John	Hartnett
Lucy	Harvest
Helen	Harvey
Jane M.	Harvey
Noel	Harvey
Ray	Harvey
Ray	Harvey
Shaun	Harvey
A	Hassett
Denise	Hassett
Len	Hatfield
Anne-lise	Haugen
Gerrie	Haugh
Margie	Haugh
Peter	Haughen
Catherine	Hawkins
Jane	Hawkins
K	Hawkins
Michelle	Hawksworth
Lisbeth	Hay
Andrea	Hayden
Ashley	Hayden
Joy	Hayes
Michael	Haynes
Andy	Head
Kenneth	Healey
Rebecca	Healey
Kerry	Healy
Jo	Heaney
John	Hedley
Roger	Heeps
Kathy	Heffernan
Ken	Helleren
Darren	Hendrie
Philip	Henser
Michael	Hermitage
Tate	Herschell
Cameron	Hess
Ted	Hewitt
David Noel	Heyes
Pamela	Heyes
Paul	Heyes
Jennie	Hiene
E	Higgins
Sean	Higgins
Tom	Higgins
Chris	Hill
Doug	Hill
James	Hill
Lyn	Hill
Patricia	Hill
Anne	Hillman
James	Hillman
Michael	Hilt
R	Hilt
B	Hilton
Brian	Hilton
John Geoffrey	Hilton
David	Hinton
Cheryl	Hoban
R	Hobley
Barry	Hocking
Katherine	Hocking
Angie	Hogan
Gail E.	Hogan
Sylvia	Hogan
Caitlin	Hogon
Kirsten	Holden
Margaret	Holden
Di	Holdsworth
Finbar	Holland
Kathryn	Holland
Chris	Holloway
Mark	Hollowood
Charmaine	Holmes
T	Holmes
David	Hood
Nesa	Hoogendoorn
Dr Hester L	Hopkins
Tony	Hoppen

D	Horme
Vas	Hoskin
Nicola	Houghton
Gren	House
Gary	Howard
Paul & Elspeth	Howard
Erik & Danielle	Howarth
Margaret	Howden
Wendy	Howie
Nadine	Huels
Peter	Huels
Ann R	Hughes
Bronwyn	Hughes
Pam	Hughes
Peter	Hughes
Bob	Hulyer
Michael	Humphries
Jennifer	Hunt
Megan	Hunt
Paul	Hunt
J	Hunter
Keith	Hunter
Patricia	Hunter
Anna	Huntley
Sharyn	Hussey
Ron	Hutchison
Bob	Hutton
Brooke	Hyrapiet
Colin	Hyton
Mark Jones &	I Marcola
Harley	Ibbott
Julie	Ibrobin
B	ILLEGIBLE
ILLEGIBLE	ILLEGIBLE
ILLEGIBLE	ILLEGIBLE
ILLEGIBLE	ILLEGIBLE
ILLEGIBLE	ILLEGIBLE
ILLEGIBLE	ILLEGIBLE
Sean	ILLEGIBLE
Alison	Inchley
Marianne	Inchley
Pamela	Ingbritsen-Svendsen
Nicole	Ingram
Rob	Innes
Diana	Irwin

Garry	Isbister
Rosemary	Isbister
Bev	Jack
Ian	Jack
Michael	Jackman
Peter	Jackman
Christopher W	Jackson
Dale	Jackson
Michelle	Jackson
Peter	Jackson
Lorraine	Jago
Inta	Jahn
Klaus & Debra	Jahn
Ivan	Jakelic
Diana	James
E.G. & R.E.	James
Gregory Thomas	James
J	James
Janet	James
Katharine Ann	James
Louise	James
Philip	James
Di Costanzo	Jean
Peter	Jeanne
Erik J	Jensen
Gillian	Jensen
Duncan J	Jewell
Elizabeth	Johnson
Barbara	Johnston
Judith	Johnston
Liz	Johnston
Tony	Johnston
Jason	Johnstone
Brian	Joiner
Annie	Jones
Ben	Jones
Brian	Jones
Emma	Jones
Gomer	Jones
Hugh	Jones
Larry	Jones
Merilyn	Jones
Pamela	Jones
Warren	Jones
J	Jordan

Henning	Jorgensen
Roland	Josefsson
M	Joseph
R	Joseph
D	Joss
Susan	Joss
Les	Joyce
Doug	Joycey
Jennifer	Joycey
Mark	Judd
David	Judge
Terry	Kampe
Peter	Karay
Pauline M	Keast
Liane	Keean
Dave	Keep
Maggie	Kelly
Tony	Kelly
Diane & Russell	Kemp
F&S	Kendall
Margaret H	Kendall
William	Kendall
Coralie	Kennedy
Ross	Kenner
William Charles	Kent
May	Kentish
Timothy	Keogh
Michael & Louise	Kesik
Helen	Kettle
Jacques	Khoui
Geoffrey	Kidd
Ross	Kilborn
Peter	Kilbride
Susan	Kilbride
J	Kilgariff
Anne	King
Brian	King
Cheryl	King
Graeme	King
Laurel	King
Lynette	King
Terrence & Ann	King
Terry	King
Nalda	Kingston
Claire	Kinnear

S	Kiramidas
Peter	Kirby
Abbey	Kirk
Ben	Kirk
Jenna	Kirk
Jennifer	Kirk
Karen	Kitchen
Annette	Klein
Judith	Klietz
Margaret	Knee
Phillip	Knights
Susan	Knowles
George	Knox
Fiona	Knox-Johnson
Henry	Koberle
Franke	Koch
K	Kompe
Andrew	Kostizen
Lise	Kostizen
Ramesh	Kottai
Helena	Kovac
Gary	Kranse
Fiona E	Krushka
Prabu	Kumar
Trish	Ladd/Allen
J	Ladewig
Sebastian	Laffont
Rod	Lake
Chris	Landman
Fiona	Landrigan
Alan	Lane
Graham	Lane
Mary	Lane
Norma	Lane
Robert M.	Lane
Simon	Lane
Kerry and Wayne	Larder
Nola	Larke
J	Latcham
Jacki	Latham
John	Latham
Mark	Lauricella
Virginia	Law
Barbara	Lawrence
David	Lawrence
Walter	Lawrence
Barry	Laws
Gary	Lawson
Phil	Lawson
J	Lawton
Tanya	Lawton
Ros	Le Page
Michael	Leach
Susan	Leake
Steven	Leatham
Charlotte	Lee
Dale	Lee
Gary	Lee
J	Lee
J&W	Lee
Joan T	Lee
Joel	Lee
Joy	Lee
Lynne	Lee
Nick	Lee
Chauntelle	Leeder
Baz	Leenstra
Harry	Leggett
Gary	Lehmann
Rachel	Lehmann
Albert	Leitch
Jennifer	Lenard
Martin	Lenard
Tess	Lenard
Luke	Lenard
Ross	Lenten
Vaughn	Leonard
Helen	Lester
Peter	Lester
Angela	Lever
David	Lever
Dr Daniel	Levinson
Harry	Lew
Adrian	Lewis
Janard	Lewis
Ken	Lewis
Richard	Lewis
Russell	Lewis
Brian	Lilley
Peter	Lillie
Gunnel	Lindros
Dorothy	Lindsay
James	Little
Barry	Lloyd
Mrs C.A.	Lloyd
Philip	Lloyd
Wesley J	Lloyd
Bruce A	Logan
Jeffrey	Logan
M	Lolatgis
Jeff	Londres
Allan	Long
Dennis	Long
J.H.	Long
Bronwyn	Lonsdale
Hayley	Lonsdale
Christine	Lopez
Keith	Lord
Liam	Lord
Mark	Lord
Nadia	Lord
Katrina	Lore
Alan	Lorley
Breta	Loutit
Lynn	Loutit
Robert	Loutit
Debbie	Love
Stuart	Loveday
Peter	Lovell
Susan	Lovell
Des	Lovett
Susan	Lovett
C	Lowe
Clare	Lubrano di Diego
Paul	Lucas
Roy	Luck
Veronica	Luck
Ian	Ludwell
Kerri	Luff
Ty	Luff
Guy	Lukins
N	Lumley
Glynn	Lund
Giorsal Freda	Lyall
Francis J	Lynch

John	Lynch
Nico	Lynch
S	Lynch
Richard	Lyneham
Sue	Lyneham
Patrick	Lyons
Michael	Lytra
J Wren &	M Lindsaar
Paul	Maas
Doug	MacGregor
Anita	Machin
Nicole	Mackie
Louise & Norman	Mackinnon
Adam	MacNee
James	MacPhie
Maire	MacPhie
Robert	Madden
Julie	Madsen
K	Madsen
Sally	Madsen
Jai & Damien	Maher
G	Mai
Guy	Maiorana
Sylvia	Maip
Lauren	Makin
Matthew	Makin
Jonathan	Makoni
Debbie	Malkin
Peter	Malkin
Louis Joseph	Managan
Kathy	Manallack
Ted	Manallack
Roger	Manning
Susan	Manning
Horst	Marcinsky
M	Marcinsky
Mrs P	Marcom
Alan	Marlow
Don	Maroszeit
Stephen	Maroszeit
John	Marsh
Anne	Marshall
Brett	Marshall
Debbie	Marshall
Glenn	Marshall
Ruth	Marshall
Jodie	Marstin
Claire	Martin
David	Martin
Greg	Martin
Jenny	Martin
Judith	Martin
Sophie	Martin
Susan	Martin
Barbara	Martin
Colin Peter	Mason
Paul	Mason
Ted	Masur
Denis	Matthews
Markaye	Matthews
Nancy J & Richard M	Matthews
I	Maw
S.A.	Maw
Karen	Maxwell
Annette	Mayne
Matthew	Mazewinkel
Mark J	McAuliffe
Murray	McAuliffe
David	McBeth
G A	McCall
Katie	McCallum
Lynette	McCarthy
Julie	McCausland
Henry	McClutchie
Nicole	McComb
Anne	McCormack
John	McCormack
Judith	McCormack
John	McCoy
A.J	McCraw
Brad	McCurtayne
Sally	McCurtayne
Sue	McCurtayne
C	McDermid
J	McDevitt
Joanne	McDonald
Mr/Ms	McDonald
Don	McDonell
J.M	McElhinney
A M	McGann
Dena	McGann
Des	McGann
Brylee	McGee
Helen	McGladdery
Adam	McGregor
Barnaby	McIlrath
Susan	McIntyre
Jill	McIver
Cameron and Joanne	McKenzie
Derek	McKenzie
Stuart	McKenzie
Richard	McLeod
Sally	McLeod
Katie	McLorinan
Deb	McMahon
Martin	McMahon
Ray	McMahon
Campbell	McMillan
Christopher	McMillan
David	McMillan
Edward	McMillan
Elizabeth	McMillan
Anne	McNamara
Christine	McNiece
Geoff	McNiece
Barbara	McOrist
Kerry	McPhee
David	McPheran
Rosemary	McPherson
Rodney	McQueen
Peta	McRae
Alice	McSweeney
Steve	McVeigh
J A and S R	Mead
Yoeun	Meas
Daniel	Meilclejoln
Elias	Melham
Brenda	Mentz
Eric	Mentz
Tanya	Menz
Will	Merritt
Alfred	Metelli
Michael	Mether
P.E. & E.H.	Mether
Jeff	Meyer

Honor	Middleton
Len	Midson
Lindy	Midson
J	Mikelat
Lyn	Milburn
Edward	Milford
Felicity	Milford
Peter	Milford
Natalie	Millan
J	Miller
Shirleyanne P	Miller
Graeme	Mills
John	Mills
P	Mills
Sally	Mills
Tony	Mills
Leigh	Millsom
Graeme	Minifie
Paul	Minifie
C M	Minisi
Georgia	Miras
Jan	Miskiewicz
Herni	Mitchell
John	Mitchell
Shaun	Mitchell
J	Molinaro
M	Molodtsov
Matthew	Monaghan
Nina	Montgomery
Michelle	Mooney
Anne	Moore
Joe	Morabito
S	Morell
Jo	Morey
Fiona	Morgan
Lynne	Morgan
Ann	Morris
David	Morris
Frank & Betty	Morris
James Stanley	Morris
Kane	Morris
Trevor	Morrison
Yvonne	Morrison
Dr Carol	Morse
H	Moulden
Richard & Margaret	Moulsdale
G	Moxey
Stephen	Mulholland
John	Mullen
Mick	Mundy
Angela	Munro
David H	Munroe
Maurice	Murphy
Mike	Murphy
Glen	Murray
Shaun	Murray
Charles	Muscat
Dario	Muscillo
Fay	Musgrave
Ron	Musgrove
Christopher	Muylle
Les	Myers
P Crow	N Wolfenden
Robert	Natoli
Aaron	Neam
Trevor	Neate
Robert	Nelson
Huw	Nestor
Stuart	Nestor
David	Nethercott
Pam & Dean	Newlan
Arthur	Newman
Brett	Newman
Elizabeth	Newman
R.G.	Newton
Hai	Nguyen
B	Nichoff
Ben	Nicholls
Margaret	Nicholls
Ray	Nicholls
S	Nichols
Mark	Nicholson
Max	Nicholson
Bruce	Nicol
Andrea	Nicolaides
Josh	Niehoff
Bernard Norris	Nix
John	Nixon
Andrew	Noble
Geoff	Noble
Juan	Noguera
Neil	Noonan
S	Noonan
Glen	NOT GIVEN
Jodi	NOT GIVEN
Stuart	Oakley
John	Ogden
Ian	Ogiluie
Tim & Lisa	O'Grady
J	O'Halloran
Ursula	O'Hanlon
Helena	O'Keefe
Peter	O'Keefe
Terence	O'Keefe
Alexander H.	Okill
Chloe E.	Okill
Jan	Okill
Richard	Okill
Sophie	Okill
Julie	Oldenburger
Catherine & Russell	Oldmeadow
Janet	Oliver
Nicole	Oliver
Rebecca	Oliver
Richard	Oliver
Alan	Orchard
Duane	O'Regan
Dr. Karol J	O'Reilly
Karol	O'Reilly
Kathy	Ovcharenko
Harley	Over
Graham	Owen
Mary	Owen
Robin	Owen
James	Owen-Smith
Sigrid	Packham
Ian	Paine
Michael	Pakes
Ben	Pallant
Bill	Papias
Robyn	Parfett
Andrew	Parker
Rebecca	Parker
Dori	Parkin
Inez	Parkin

R	Parkyn
Robert	Parmezel
Barbara Jane	Pashen
Robert	Pashen
Celia	Patane
Tony	Patane
Dave	Pate
Nathan	Pate
Craig	Paterson
Jono	Paterson
Prue	Patterson
Peter	Pavey
Allan	Paynter
Brenton	Pearman
John	Pearman
Lyn	Peart
Dr Catherine	Pease
Lu	Pease
Richard	Pease
David	Pedley
Gary	Perks
Louise	Permezel
Mario	Perri
Vic	Perry
Danielle	Petherbridge
Sharon	Petterson
Andrew & Marina	Philip
Kate	Philip
Marylou	Phillip
Garry	Phillips
Matthew	Phillips
Julio	Pignon
Sandra	Pimlott
Lincon	Pingiaro
Paul	Pingiaro
Gina	Pittau
John Brewer	Pizzey
Gary	Plumley
E Keith	Pocklington
Tami	Pollard
Barry	Pollock
Christine	Pompei
Clive Lee	Porcher
David	Porriti
Mr & Mrs R	Porritt
John	Postgate
June	Postgate
D	Poulton
Lydie	Pradier
Penelope	Presland
David	Presley
Samuel	Preston
David	Price
James & Carol	Price
John	Price
Nola	Price
Sally	Prideaux
Jacqueline	Priestly
John	Pritchard
Sam	Prokopiou
Mike	Prouten
Rhonda	Prouten
Thelma	Pryor
Sharon	Puddy
Brian	Pullman
Thomas	Purcell
Ann	Quinn
Barry & Margaret	Quinn
Judith	Quinn
Kevin	Quinn
Lorna	Quinn
Peter	Quinn
Antony	Rabl
Frank	Raccanello
Charmaine	Rad
Jeremy	Rae
Kevin	Raeburn
Pam	Rafter
Carol	Railley
Krystal	Ram
June	Rance
Mel	Ray
Alan Kevin	Read
David	Read
Jessica	Read
Kirsty	Reaks
N	Reaks
Dale	Redford
Keith	Redman
Sue	Redman
V	Reed
Mark	Rees
Ruth	Rehfisch
Annie	Reid
Anthony	Reid
Craig	Reid
Fiona	Reid
John	Reid
Martin	Reid
Robert	Reid
Jinny	Reinhard
Christine	Rennie
John	Renowder
The	Resident
Mark	Resuggan
Meagan	Resuggan
David	Reyne
Eva	Reyne
Hunter	Reyne
Kate	Reynolds
John	Ricardi
Cheryl Susan	Ricco
Frank Vincent	Ricco
Carly	Rice
Greg	Rice
Jeanette	Rice
Kirsty	Rice
Leah	Rice
Ian	Rich
Janet	Rich
Christine	Richards
Don	Richards
Geraldine	Richards
Ralph	Richards
Trish	Richards
Alan	Richardson
Cynthia	Rigg
Frances	Riley
Nicole	Riley
H & P	Ritter
David	Rix
Ann	Robb
Peter	Robb
Thomas H	Robbins
James Duncan	Roberston

Sue	Roberston
Paul	Roberts
Rochelle	Roberts
Samantha	Roberts
Brian	Robertson
Dorothy	Robertson
Bruce N.	Robinson
Craig	Robinson
Dee	Robinson
Len	Robinson
Louis	Robinson
Margaret	Robinson
Moina	Robinson
Philip	Robinson
Rob	Rodgers
Ally	Roe
Karen	Roebuck
Pierre	Roelofs
Barbara	Roff
Dr. John & Mrs Genevieve	Rogers
Helene	Rogers
Juanita	Rogerson
Yvonne	Rolfe
Valerie	Rolfs
William R	Rolls
Fee	Romney
Carolyn	Rose
Malcolm	Rosier
Wendy	Rosier
Christine	Ross
John	Ross
K	Ross
Jenny	Roth
Paul	Roth
Georgia	Rouette
Mrs Linda	Rouette
John & Carol	Rouse
D	Rowan
G	Rowe
Judy	Rowe
Janice	Rowland
Glyn	Rowlands
Jessica	Rumble
John	Rundell
Greg & Kristine	Rundle

Jane	Rush
Martin	Rush
Susan	Rush
Donnalita	Russell
Trevor J.	Russell
W	Russell
Vivien	Russell-Smith
Anthony	Ryan
David	Ryan
Kate	Ryan
Suzane	Ryan
John	Sagar
John	Said
Marie	Sainsbury
Sittichai	Sakonpoonpol
Mark	Sampson
John	Samtamaria
Austin	Sands
E.K	Sanjeev
Helen	Sardelis
Ryoji	Sasaki
Martin	Saul
Lisa	Saunders
Michael	Savage
Sally	Savage
Ray	Sawyer
Pamela	Sayers
Carolyn	Scantlebury
H.	Schaarscmidt
W.	Schaarscmidt
Reiner	Scheibe
Ian	Scholey
A	Schrandt
Peter	Schroder
Evelyn	Schuetz
Sheryl	Schumacher
Hans	Schwob
Liz	Scolaro
L	Scorhazzon
Dr J.	Scott
Eric	Scott
Kate	Scott
Les	Scott
Marcus	Scott
Pam	Scrivenor

Graeme Victor	Seager
Judy	Seager
Bisson	Seales
G	Searing
Astrid	Secher
Victor	Secher
Brenda	Sellars
Pamela	Semmens
Peter	Sephton
Sue & Tony	Sewell
Bhagya	Shankar
Jyoth	Shankar
Jane	Sharland
George	Sharman
Joan	Sharman
R	Sharman
Sally	Sheales
I	Shears
Mavis	Sheedy
Janette	Sheen
Julia	Sheppard
Peter	Sheppard
Don	Shields
Kevin	Shillington
B	Shuster
Jean	Sidwell
Mahnic	Silvester
Richard	Simcock
Daryl	Simmons
Darren	Simnett
Lisa	Simonov
Ross	Simpson
Richard Thomas	Sims
Catherine	Sinclair
Jean	Sinclair
Louise	Skidworth
Maureen	Skilton
Ross	Skinner
Kathy	Skliros
Maryan	Slatter
M	Sliogeris
J S	Slocombe
Judith	Smart
Mrs. E.	Smeaton
Brenton	Smith

Colin	Smith
Colin	Smith
Geoff	Smith
Jeanette	Smith
Jill	Smith
Kenneth G	Smith
Lindsay	Smith
Melissa	Smith
Murray	Smith
Paul	Smith
Robina	Smith
Russell	Smith
Scott	Smith
Tyler	Smith
Amber	Snell
Ben	Snell
Christopher	Snell
Simon Antony	Snell
M	Solich
Jennie	Solis
Paul	Sollnor
Ashlyn	Sorraghan
Dennis	Sorraghan
Julie	Sorraghan
Kristyn	Sorraghan
G.J	Spencer
Phillip	Spender
Skye	Spicer
Ruth	Spiegel
Pia	Spreen
Carol	Squire
Vicki	Squire
William Henry	Squire
Lynette	St John
Ron and Jean	Stadus
Nash	Stahner
Tony	Staunton
Rupert	Steiner
Jill	Stenszus
Maxwell W	Stephens
Jerome D	Stern
Joell	Stern
Sally	Stevens
Christine	Stewart
Merv	Stewart

Amanda	Stockley
Brian	Stockley
Michele	Stockley
Deidre	Stokes
Warren	Stokes
Gavin	Stollery
S	Stone
Robert	Stork
Bonnie	Storm
Jonathon	Storm
Juris	Strauss
Roslyn	Strauss
Col	Strawbridge
Patricia	Strawbridge
John	Struthers
Vyv	Stryder
Pat	Stuart
Andrew	Stuart-Murray
Gayle	Stuart-Murray
Georgie	Stubbs
Greg	Sugars
Mason	Sugars
Riley	Sugars
Ian	Summers
Mike	Surndge
Mark	Sutherland
N	Swales
Brigitte	Swallow
Marilyn	Swan
Paul	Swann
Jan	Sweetser
Ron	Sweetser
Catherine	Swinbank
Peter	Sydes
Chris	Szatike
Timothy	T.e.h.
Dominic	Taafe
Heather	Tadich
John	Tadich
Paul	Tadich
Barry	Tammer
Aldo	Taranto
Margaret	Taranto
Fred	Tatana
Helen	Taylor

Julie	Taylor
Lucinda	Taylor
Pauline	Taylor
Toby	Taylor
Tony	Taylor
Gary	Tedeschi
Vicky	Tedeschi
Felicity	Tenzer
Jennifer	Thom
Mandy	Thomas
Russell	Thomas
Vaughan	Thomas
David	Thompson
Irene	Thompson
Julie	Thompson
Margaret	Thompson
Patricia Ann	Thompson
Robert	Thompson
Scott	Thompson
Tim	Thompson
W	Thomsen
Jo	Thomson
Ron	Thomson
E	Thornton
Libby	Thornton
Colin	Thorp
Graham	Thurley
Trudy	Thurley
Jim	Tiddy
Damien	Tiernan
Francis	Tiernan
Graeme	Tinsley
Angelo	Toigo
Nick	Toigo
Dawn	Tormey
Ron	Tormey
Frank	Tostovrsnik
David	Toyne
Raymond	Toyne
Sonia	Toyne
Richard	Trembath
Hans	Trenkel
John	Trevillian
Jill	Tribe
Jennifer	Trigger

Ian	Trueman
A	Trwett
Paul	Tucker
D.E.	Tuckwell
Merrilyn	Tully
Alison	Turner
Bill	Turner
Ed	Turner
Jo	Turner
Les	Turner
Robyn	Tyson
Karl	Ulvestad
John	Underwood
Brenda	Upjohn
Edward & Lydia	Upjohn
Ian	Upjohn
N	Uranie
Peter	Urban
Stie	Urbancic
Harlan	Usher
Shane	Vallerant
Bruce	Van Den Berg
Kay	Van Dernet
J & J	Van Gameren
F&S	Vanderkolk
Jillian	Varhardt
Elly	Vasilaki
W.A	Vaughan
Shane	Vedamyth
Helen	Vening
San	Venvenioisr
Adri	Verhagen
Diedrie	Verheijen
Jim	Verin
Terry	Voigt
Barbara	Vortman
Jim	Vortman
Lily	Wabefield
Mrs Betty	Wadsworth
G	Wagener
Kaye	Waghorne
Michelle	Wagner
Bronwyn	Waile
Chris	Wain
Jean	Wakley
Roger	Wale
Dr. John	Walker
Lindsay	Walker
Margaret	Walker
Roger	Walker
Roger	Walker
Ron	Walker
Ronda	Walker
Ronda	Walker
Justine	Wallace
Ian	Wallis
P	Wallis
Cassandra	Walpole
Judy	Walsh
Elaine	Walter
Julie	Walters
K.J.	Warburton
E.J.	Ward
Joan	Warden
Tedd	Warden
Robert	Ware
Jenny	Warfe
Cassandra	Warin
Terry	Warin
Jan	Waring
R	Waring
Ian	Warr
Rob	Warren
Jason	Watene
Dr J.	Waterhouse
Brad	Watson
Caroline	Watson
Glenn	Watson
Jerri-Lee	Watson
Jim	Watson
Narelle	Watson
Reece	Watson
Rod	Watson
Sandra	Watson
Shona	Watson
Christine	Watterson
Lorna	Watterson
Daryl	Watts
Julie	Watts
Paul	Wearmeat
Ken	Weatherley
Andrew	Weber
Lesley	Webster
Pat	Wech
Caroline	Weir
Jeff	Welch
Margaret	Welch
Robert	Wells
Glen Thompson	Wendy Davis
Lauren	Wertheim
Tracy	Westwood
K	Wharington
Rob	Wheat
David	Wheeldon
Margaret	Wheeldon
Joel	Wheeler
Rod	Wheeler
Bernadette	Whelan
Sean	Whelan
Mrs Lu	Whistlecroft
Andrew	Whitbourne
Michele	Whitbourne
Alan	White
Barbara	White
Graeme	White
Malcolm & Vicki	White
Stephen	White
Tim	White
Richard	Whitehead
Julie	Whitehouse
G	Whiteoak
Jessica	Whitfort
Brett	Whitmore
Jordon	Whitmore
Michael	Whitmore
Donald	Whittingham
Paul	Whittington
T	Whorlow
A	Wiber
June	Wicks
William Geoffrey	Wicks
Lynette and Ian	Wightwick
Brent	Wilcox
E	Wilcox
Denis	Wilkins

Ian	Willett
A L	Williams
B	Williams
Glenn	Williams
Julia	Williams
Karen	Williams
Lisa	Williams
Luke	Williams
Margaret	Williams
Michelle	Williams
Simon	Williams
Tina	Williams
James	Williamson
Neil A	Williamson
Graeme	Willis
Bronwyn	Wilmore
Antonia	Wilson
Denis	Wilson
Elaine	Wilson
Jodi	Wilson
Joyce	Wilson
Kenneth Alfred	Wilson

Max	Wilson
Michael	Wilson
R.	Wilson
Sue	Wilson
Klaus P	Winkels
Arthur	Wood
Barbara	Wood
Ian	Wood
Kathryn	Wood
Kevin	Wood
Peter	Wood
John	Woodall
Kathleen	Woodroffe
David R	Woods
Sue	Woods
Geoff	Woolcock
Suzi	Woolston
John	Wormald
Ryan	Worthington
N	Wotherspoon
Alan Gough	Wrangle
Jean	Wrangle

Joanne	Wren
Andy	Wright
C	Wright
C. Justin	Wright
Christine	Wright
J	Wright
Josephine	Wright
Roger M	Wright
Reinhart	Wuttke
Jeff	Young
Jenny	Young
Lee	Young
Max	Young
Stuart	Young
Terry	Young
Gareth	Yukich
Zonia	Zagrodzki
John	Zammit
Peter	Zembruzuski
Charles J	Ziegler
Elizabeth	Ziegler

Appendix D Draft planning permit

PROPOSED PLANNING PERMIT

GRANTED UNDER DIVISION 5 OF PART 4 OF THE PLANNING AND ENVIRONMENT ACT 1987

Permit No.: CP09/005

Planning Scheme: Mornington Peninsula

Responsible Authority: Mornington Peninsula Shire Council

Note: Planning permit conditions are subject to change, dependent on Council's final resolution and negotiation during the process for considering Planning Scheme Amendment C107 and the concurrent planning permit application CP09/005.

ADDRESS OF THE LAND:

The Mornington Pier and Fisherman's Jetty, Schnapper Point Drive, Mornington - Crown Allotment 8G Township of Mornington.

The Mornington Yacht Club site, Schnapper Point Drive, Mornington - Crown Allotment 8H Township of Mornington, Crown Allotment 8J Township of Mornington, Crown Allotment 8K Township of Mornington, Crown Allotment CA 2003 Township of Mornington, Crown Allotment CA 2005 Township of Mornington and CA 2006 3 Township of Mornington, Crown Allotment CA 2008 Township of Mornington.

Schnappers Kiosk, Lower level Car Park and boat ramp Schnapper Point Drive, Mothers Beach, Scout Beach and Shire Hall Beach - Crown Allotment 7A Township of Mornington, Crown Allotment 8A Township of Mornington, Crown Allotment 8B Township of Mornington, Crown Allotment 8C Township of Mornington, Crown Allotment 8D Township of Mornington, Crown Allotment 9A Township of Mornington, Crown Allotment 2004 Township of Mornington, Crown Allotment 2009 Township of Mornington.

The entire sea bed generally bounded by the above land (unreserved Crown land managed by DSE under the Land Act 1958).

THE PERMIT ALLOWS:

The use and development of the land for a Pleasure Boat Facility, comprising the following purposes, all in accordance with the endorsed plans:

- A marina that includes the following elements:
  - Harbour wavescreen, which also functions as a public jetty.
  - Public jetty.
  - Marina pontoons, berths arranged as marina pens and other berths.
  - Sewage pump-out facility adjacent to the public jetty.
  - Re-fuelling facility adjacent to the public jetty
- Alteration to a Heritage Place – Mornington Pier, including:
  - Perpendicular extension of Mornington Pier to the south-east of the existing Pier.
  - Associated wavescreens/wave protection works

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- Refurbishment of the existing Mornington Yacht Club building to provide:
  - Marina manager's office.
  - Upgraded toilets.
  - Shower facilities.
  - Storage facilities.
- Travel lift facility and associated works (including any associated dredging).
- A boat wash-down facility.
- An underground storage tank or tanks.
- A stormwater tank.
- An artificial reef.
- The removal or destruction of native vegetation from the seabed required to construct the works hereby permitted.
- Waiver of loading bay requirements.
- Any ancillary works, including works required under the Operational Environmental Management Plan.

THE FOLLOWING CONDITIONS APPLY TO THIS PERMIT:

Conditions Nos. 1 to 52 inclusive

Plans before start of approved development

1. Prior to the start of the construction of the approved development, all of the following plans to the satisfaction of the responsible authority must be submitted to and approved by the responsible authority. When the plans are endorsed they will then form part of the permit. The plans must be drawn to scale with dimensions and three (3) copies must be provided. The plans must be generally in accordance with the plans submitted with the application being:
   - SKM Project No. VW04219.4, Drawing Number SO13, Amdt B, Concept Layout Plan Proposed Works dated 20 January 2011;
   - SKM Project No. VW04219.4, Drawing Number SO14, Amdt B, Typical Sections dated 20 January 2011;
   - Eliza Designs Pty Ltd Job No. 29115, Drawing number 1, Revision A, Site Plan Existing Conditions dated 16 April 2009; and
   - Eliza Designs Pty Ltd Job No. 29115, Drawing number 2, Revision A, Ground and First Floor Existing and Proposed Conditions dated 9 April 2009.

   But modified to include:
   - Deletion of fore and aft moorings and swing moorings.
   - A viewing platform at the end of the wave screen walkway of no greater than 6 square metres in size and of a design that will not negatively affect coastal processes or navigation.
   - The final height of the top of the harbour wave screen wall reduced as much as possible whilst still meeting the design objectives.
   - Measures to improve the visual appearance of the harbour side of the harbour wavescreen by the use of appropriate materials and finishes.
   - Design responses for the top of the harbour wave screen and public walkway to break up the solid horizontal line of the wave screen.
   - Appropriate navigable areas for the safe berthing of tall ships.
   - The deletion of the swing moorings east of the marina and the fore and aft moorings south of the marina.

   Layout Plans

   a. A site plan/s which shows the location, layout and dimensions of all proposed buildings and works and other matters including:

i. Wave screens, public jetty, pontoons, Mornington Pier extension and viewing platform (location as determined by survey).
ii. Pens and berths dedicated to public use.
iii. Pens and berths for mixed public and private use.
iv. Pens and berths for emergency services.
v. Sewage pump-out facility adjacent to the public jetty.
vi. Re-fuelling facility adjacent to the public jetty and associated works, an underground fuel tank or tanks within the Mornington Yacht Club yard, and the area required for the delivery of fuel.
vii. Travel lift storage location;
viii. the approximate area to be dredged to facilitate the installation of the travel lift, if dredging is required;
ix. Boat wash-down facility.
x. Existing on-land boat storage areas.
xi. Artificial reef (indicative location).
xii. Refuse collection facilities.
xiii. Physical infrastructure and services.
xiv. Seating.
xv. Lighting.
xvi. Fencing.
xvii. The area protected with a safe wave climate for marinas as described in the relevant Australian Standard.
xviii. All existing berths that are to be retained along Mornington Pier, along Fisherman's jetty and along the water's edge between Mornington Pier and the public boat ramp.

Elevation and Cross Section Plans

b. Plans showing elevations, cross-sections, details of finished height levels relative to Chart Datum (with annotations showing the Australian Height Datum), of all buildings and works shown on the Layout Plans.

Such plans must be based on a prior detailed structural design of the development prepared by a structural engineer with appropriate engineering qualifications and a geotechnical investigation.

Schedule of construction materials and finishes

c. A schedule of construction materials, external finishes and any colour treatments for all of the following:
i. Wave screens.
ii. Public walkway and viewing platform..
iii. Jetty.
iv. Pontoons.
v. Mornington Pier extension.
vi. Artificial reef (indicative schedule).Travel lift and associated works.
vii. Any alterations to the Mornington Yacht Club building.
viii. Seating.
ix. Lighting.
x. Fencing.

Materials that will be underwater should be designed to encourage marine life and wave screens that will be visible above the waterline should have external finishes designed to de-emphasize their bulk.

Non-Indigenous Heritage Management Plan

d. A non-indigenous heritage management plan including all of the following:

i. The results of an archaeological survey of the seafloor that would be affected by the approved development to identify any archaeological deposits and their extent. The survey must have been conducted by an appropriately qualified maritime archaeologist

ii. Evidence that any necessary consent under the Heritage Act 1995 required for the approved development has been issued.

Services Plan

e. Plans detailing the stormwater management, drainage and sewerage systems to be provided as part of the approved development, including connection to the existing sewerage and drainage systems.

Re-fuelling Facility Plan

f. A plan showing details of the re-fuelling facility, including location of pump, emergency information and equipment, any bunding and size of berth.

Disability Access Plan

g. A Disability Access Plan prepared by an accredited access consultant in accordance with Australian Standard AS1428 and in consultation with the Mornington Peninsula Shire Council's Disability Consultative Committee that includes all of the following:

i. Disabled access to the toilets and change rooms.
ii. The provision of a continuous path for travel.
iii. Public seating.
iv. Disabled parking close to the facilities.
v. At least one public berth with provision for disabled access.
vi. Disabled access provision for any shuttle bus

Existing Pier to be provided with Wave Screen

1A. The use of the area of waterbody and land under this permit must not commence until a wave screen is constructed and completed on the northern side of the existing pier and the proposed pier return to the satisfaction of Parks Victoria.

Structural assessment

1B. Prior to the commencement of works and as part of the detailed design of the marina a structural assessment of Fisherman's Jetty and its suitability for use as an attachment point for the southern most marina arm must be completed by the proponent, to the satisfaction of Parks Victoria.

Works Authority

1C. Before the commencement of:

- any works that are below the high water mark; or
- any works that affect any areas below the high water mark,

the proponent must provide to the responsible authority a copy of any works authority required for those works under the *Port Services (Local Ports) Regulations 2004*, to the satisfaction of the responsible authority.

Plans before start of approved use

2. Prior to the start of the approved use, all of the following plans to the satisfaction of the responsible authority must be submitted to and approved by the responsible authority. When the plans are endorsed they will then form part of this permit. The plans must be drawn to scale with dimensions and three (3) copies must be provided. The plans must be generally in accordance with SKM Project No. VW04219.4, Drawing Number SO13, Amdt B Concept Layout Plan Proposed Works dated 20 January 2011 The plans must include all of the following:

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Schnapper Point Parking Plan

a. A Schnapper Point Parking Plan that has been prepared in consultation with the relevant Committees of Management and other lease holders in the area, and that shows for an area at the base of Mornington Pier and delineated to the satisfaction of the responsible authority, at least all of the following:

i. Disabled parking as determined by the Disability Access Plan provided within the car park at the northern (lower end of Schnapper Point Drive).

ii. Safe pedestrian links between the existing pedestrian network and the new public walkway including the provision of safety measures across the travel lift.

iii. Details of bicycle parking facilities for MYC members and their visitors and other people associated with the marina pens.

iv. Details of the provision of an unloading area for fuel trucks.

v. Vehicle drop off / pick up areas (up to 15 minutes) within the car park at the northern (lower end of Schnapper Point Drive)

vi. Bus stop for the proposed shuttle bus, in accordance with the Traffic Management Plan.

vii. A physical pedestrian refuge at the south western end of the car parking bays between the toilet block and Schnappers Café.

Public access and security plan

b. A Public Access and Security Plan that shows all of the following:

i. Details of all fences, gates, locks and other security access measures.

ii. Which areas of the marina and Mornington Yacht Club building (including toilets, showers and locker facilities) are accessible to the following groups:

- Lessees of marina berths.
- Visiting members of the public who are using the marina berths that are being leased.
- Police and other emergency personnel.
- Visiting members of the public who are using public berths.
- Visiting members of the public who require temporary berths for reasons of boating safe haven during bad weather.
- Members of the public who are involved with a recreational activity that the lessee is required to permit under the terms of the lease
- Disabled persons in accordance with Australian Standard AS1428, if any.

iii. Any conditions, restrictions or procedures for access that must be met by any of the above groups.

iv. the provision of an area or areas along the public jetty and/or marina arms which is/are reasonably available for casual docking during the day or overnight. A secondary consent provision in this permit does not apply to any proposed substantial alterations to this area/s.

v. measures to encourage lessees of pen berths to make the berths available for use by others when the berths are not in use, so as to encourage the efficient use of the pen berths.

Heritage Interpretation Plan

c. A Heritage Interpretation Plan to interpret the rich contribution the area has made in terms of Aboriginal occupation and the development of the Mornington township and region. The plan:

- Must address the history of the area.
- Must include the provision of at least four plaques or signs in public areas.
- May address any archaeological deposits that are reported in the Non-indigenous Heritage Management Plan that forms part of this permit.
- May address any archaeological deposits that are uncovered during construction of the approved development.

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- May include other interpretative information such as displays, website information and brochures.

Boating Precinct Identification Plan

d. A Boating Precinct Identification Plan which:

(i) clearly identifies on a scaled plan with dimensions and measurements the boundaries and extent of the Pleasure Boat Facility within the Mornington Harbour;

(ii) records the location of any areas or zones, such as boating zones and fairways, which have been made in accordance with relevant legislation in order to ensure a safe interface between boats and other users of the water; and

(iii) records the location of navigational aids, such as signs buoys, piles, lights and other devices, which are required by Parks Victoria or Transport Safety Victoria.

For the avoidance of doubt, the purpose of the parts of this Plan required by conditions (ii) and (iii) is simply to record, as a matter of public record, the boating zones and fairways which have been made for the site under relevant legislation, and the navigational aids that are required to be provided in conjunction with the approved development under relevant legislation.

Requirements before the start of approved use

3. a) Prior to the start of the approved use the various requirements and provisions of each of the endorsed plans which require works to be completed prior to the use commencing, must be implemented to the satisfaction, in writing, of the responsible authority.

b) Prior to the start of the approved use, navigation aids such as signs, buoys, piles, lights and other devices must be provided to the satisfaction of Parks Victoria and Transport Safety Victoria.

Public Access and Security Plan and Disability Access Plan

3A. Public access must be provided at all times in accordance with the requirements of the Public Access and Security Plan and Disability Access Plan endorsed under this permit to the satisfaction of the responsible authority.

Use not to be altered

4. The layout and nature of the use shown on the endorsed plans must not be altered without the prior written consent of the responsible authority. Consent may not be sought for alterations that would do any of the following:
   a. Reduce the areas or otherwise restrict the facilities that are open to the public.
   b. Increase the number of marina berths the use of which is restricted to members of a club or group, members' guests, or to the public on payment of a fee.

Development not to be altered

5. The development as shown on the endorsed plans must not be altered without the prior written consent of the responsible authority. Consent may not be sought for alterations that would do any of the following:
   a. Reduce the area or facilities that are open to the public.
   b. Increase the number of marina berths the use of which is restricted to members of a club or group, members' guests, or to the public on payment of a fee.

Construction Environmental Management Plan

Date Issued:	**Date Permit comes into operation:**	**Signature for the Responsible Authority**

6. Prior to the start of construction of the approved development, a Construction Environmental Management Plan (CEMP) must be submitted to and approved by the responsible authority. The submitted CEMP must be in accordance with the Framework Environmental Management Plan *[Reference to be inserted]* (Framework EMP) and the Mornington Peninsula Shire Council's template Environmental Management Plan insofar as these documents relate to construction and when endorsed will form part of this permit.

In addition to the matters set out in the Framework EMP, the CEMP must also provide procedures and management measures for the following matters:

a. **Construction Period Harbour Operations** including all of the following:
   i. Evidence of consultation with other lessees or licensees of the harbour or foreshore who might be affected by construction of the approved development, as well as relevant Committees of Management must be provided.
   ii. Reasonable and safe access during the construction period must be proposed for all existing foreshore and harbour users including pedestrians, divers, sightseers, beach users, swimmers, kiosk and restaurant patrons of Schnapper Point, Mornington Yacht Club members, fishers and boat users including people launching and retrieving boats.

   This part of the CEMP must be prepared to the satisfaction of Parks Victoria, as well as to the satisfaction of the responsible authority

b. **Construction Traffic Management** including all of the following:
   i. Measures to minimise damage to local roads caused by construction vehicles.
   ii. Hours of access/egress to the site by heavy vehicles
   iii. Methods to separate construction traffic from public parking.
   iv. Reinstatement of public parking areas to their former standard.
   v. Areas set aside as construction zones.
   vi. Reinstatement of roads to their former standard including any relining of roads for their intended purpose.
   vii. Parking of vehicles of site operatives and visitors.
   viii. Loading and unloading areas.

c. **Construction Storage** including a plan delineating the areas to be used for the storage of construction materials, vehicles and equipment.

d. **Construction Security** including details of signs, fences and any other measures to secure the construction site including the storage of any hazardous materials, construction materials and equipment.

e. A **Construction Timetable** including a proposed commencement and completion date.

f. **Construction working hours** and the **hours for deliveries and collection**. Except with the consent of the responsible authority, the hours must meet the following timing requirements:
   i. Heavy vehicles must only enter and egress the site on weekdays and between 7am – 5pm .
   ii. The hours of operation must be:

Monday to Friday, inclusive	7:00 a.m. to 7:00 p.m.
Saturday	7:00 a.m. to 1:00 p.m.
Sunday	No operation

   iii. Except with the consent of the responsible authority, works must not cause disruption to the use of the site by the public in December and January.

g. **Flora and Fauna Management** set out in the Framework EMP;

h. **Emergency preparedness and response procedures**.

The CEMP must address the whole of the development and may not be submitted in stages. The CEMP may be amended with the written consent of the responsible authority.

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Uncovered archaeological deposits

7. If any archaeological deposits are uncovered during the construction works, work must immediately cease in the area and contact must be made with Heritage Victoria all to the satisfaction of the responsible authority.

Operational Environmental Management Plan

8. Prior to the start of the approved use, an Operational Environmental Management Plan (OEMP) for the management and operation of the use to the satisfaction of the responsible authority must be submitted to and approved by the responsible authority. When approved, the OEMP will be endorsed and will then form part of this permit.

   The submitted OEMP must be in accordance with the Framework Environmental Management Plan (Framework EMP) *[Reference to be inserted]* and include procedures and management measures to address the following matters:

   - environmental objectives for the operation of the use and techniques for their achievement.
   - monitoring systems.
   - identification of possible risks of operational failure and environmental management response measures to be implemented.
   - day to day environmental management requirements for the use.

   It must address:

   a. **Environmental monitoring**, as set out in the Framework EMP

   b. **Flora and fauna management** as set out in the Framework EMP.

   c. **Waste management** including**:**

   i. Measures to prevent the transportation of sediment, deposition of oil and grease from roads and other surfaces, vehicles and machinery, spills of chemicals or fuels, residues generated from machinery and waste material including heavy metals and organic compounds from boat or machinery maintenance.

   ii. Mitigation measures for potential spills from the storage of diesel, petrol, lubricating and hydraulic oils, coolants or other hazardous substances.

   d. **Wastewater management** including**:**

   A wastewater management plan that includes all of the following:

   i. Measures to manage any disruptions in the electricity supply or other problems in the provision of reticulated sewage.

   ii. Measures to manage any spills of wastewater.

   iii. Measures to ensure that all users of the harbour are aware of amenities in the Mornington Yacht Club building and user's responsibilities with regard to wastewater disposal and the sewage pump out facility.

   e. **Re-fueling Management** including**:**

   i. Measures to manage the installation and operation of the refueling facility.

   ii. Measures to manage any petrol spills.

   iii. Measures to ensure that all users of the harbour are aware of their responsibilities with regard to use of the refuelling facility.

   f. **Sand Management**

   Sand management to mitigate the potential impact of the approved development on Mothers Beach, Scout Beach and Shire Hall Beach. This component of the OEMP must be prepared by suitably qualified professionals in consultation with the Department of Sustainability and Environment and include:

   i. Detailed assessment of the likely volume and rate of accretion of fines and the management measures that will be used to mitigate any resultant impact.

   ii. Details of the sand monitoring program for Mothers Beach, Scout Beach and Shire Hall Beach including:

- The establishment of a baseline by a suitably qualified surveyor.
- Monitoring of the alignments of Mothers Beach, Scout Beach and Shire Hall Beach at no greater than three monthly intervals and after significant storm events and the performance of any artificial reef (if the reef is constructed).
- The use of appropriately qualified persons to undertake all surveys.

iii. The establishment of benchmarks that will trigger a requirement for the commencement of sand movement operations and/or the construction of the artificial reef to provide for any beach realignment and/or nourishment of Mothers Beach, Scout Beach or Shire Hall Beach.

iv. Detailed plans for the location, layout and construction materials of the artificial reef (should the requirement for this be triggered in the previous section).

v. Details of any sand moving operation affecting Mothers Beach, Scout Beach and Shire Hall Beach including:

- The nature and timing of any sand movement works.
- The type and size of any sand moving vehicle or machinery.
- Method of beach access.
- A safety plan to apply during and after any sand movement.

vi. Details of:

- monitoring at Mothers Beach, Scout Beach and Shire Hall Beach to be carried out to determine whether the approved development is causing a build up of fines (including silts and muds) or organic material, or is creating anaerobic conditions;
- trigger points that will determine the need for the implementation of management measures to mitigate the build up of fines or organic material or the creation of anaerobic conditions in the near shore area;
- management measures that would be carried out if the relevant triggers were reached.

g. Ecologically Sustainable Development including:

- energy management, as set out in the Framework EMP;
- water conservation and re-use;
- demolition and construction waste management.

Where appropriate, this part of the OEMP should:

- Identify relevant statutory obligations, strategic or other documented sustainability targets or performance standards.
- Document the means by which the appropriate target or performance will be achieved.
- Identify responsibilities and a schedule for implementation, and ongoing management, maintenance and monitoring.
- Demonstrate that the design elements, technologies and operational practices that comprise this part of the OEMP can be maintained over time.

9. The OEMP must be reviewed within 12 months from the start of the approved use and then once every three years all to the satisfaction of the responsible authority. The review must:
   a. Evaluate the performance of the approved use against the OEMP;
   b. Identify any new environmental policy or standard since the OEMP was last reviewed and, if the approved use does not comply, propose an amendment of the OEMP in response; and,
   c. Be submitted to the responsible authority for approval within three months of its due date.

   Any amendment of the OEMP must be submitted to and approved by the responsible authority. When approved, the OEMP, as amended, will be endorsed and will then form part of this permit.

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10. The use must be conducted in accordance with the endorsed OEMP at all times to the satisfaction of the responsible authority.

Traffic Management Plan

11. Prior to development commencing, an assessment of current parking demand generated by the Mornington Yacht Club must be undertaken to the satisfaction of the responsible authority.

12. Prior to the start of the approved use, a Traffic Management Plan must be prepared to the satisfaction of the responsible authority and approved by the responsible authority. When approved it will be endorsed and will then form part of this permit. The plan must include:
    a. Either:
        i. details of the operation of a shuttle bus service - at the permit holder's cost, - including the frequency of services, the bus route and bus stops (including provision for disabled access), or
        ii. at the permit holder's cost alternative car parking spaces, with the number informed by the results of Condition 11 above, to the satisfaction of the responsible authority within 800 metres of the base of the Mornington Pier in lieu of the provision of car parking spaces on the land.

    b. Measures to encourage members of the marina and other users of the area to avoid or otherwise minimize their use of vehicles and their demand for parking in the Schnapper Point parking and pedestrian area.

    c. The details of the shuttle bus service under part (a) of this condition must initially provide that

        i. On Mornington Yacht Club's Saturday race days during summer, the shuttle bus must operate at least between the hours of 12:00 p.m. and 7:00 p.m. with shuttle bus arrivals at the Mornington Yacht Club scheduled to be 20 minutes or less apart.

        ii. On Mornington Yacht Club's Thursday night races during summer, the shuttle bus must operate at least between the hours of 4.00pm and 9.00pm, with shuttle bus arrivals from the MYC scheduled to be 20 minutes or less apart.

        iii. On Mornington Yacht Club's regatta days, the shuttle bus must operate at least between the hours of 9.00am and 6.00pm, with shuttle bus arrivals from the MYC scheduled to be 20 minutes or less apart.

        iv. On all days from 15 December until 31 January, the shuttle bus must operate at least between the hours of 9.00am and 6.00pm, with shuttle bus arrivals from the MYC scheduled to be 60 minutes or less apart.

13. The Traffic Management Plan must be reviewed within 12 months from the start of the approved use and then once every three years to the satisfaction of the responsible authority. The review:
    a. Must evaluate the performance of any shuttle bus service against the demand for it and the capacity of the car parking in the Schnapper Point area during peak periods.
    b. Must make recommendations about the need for any change in the shuttle bus service.
    c. May propose amendments to the Traffic Management Plan.
    d. Must be submitted to the responsible authority for approval within two months of its due date.

    Any amendment of the Traffic Management Plan must be to the satisfaction of the responsible authority and be submitted to and approved by the responsible authority. When approved, the Traffic Management Plan, as amended, will be endorsed and will then form part of this permit.

Date Issued:	**Date Permit comes into operation:**	**Signature for the Responsible Authority**

14. The responsible authority may consent to the amendment of the Traffic Management Plan to vary or delete the requirement to provide the shuttle bus if one of the following applies:
    - The permit holder provides parking spaces to the satisfaction of the responsible authority at its own cost, within 800 metres of the base of Mornington Pier; or
    - Evidence is provided that demonstrates that the shuttle bus is not used sufficiently by either the public or members of the yacht club; or
    - There is an alternative public transport service or shuttle bus service servicing the Mornington town centre and stopping at Schnapper Point.

15. The use must be conducted in accordance with the endorsed Traffic Management Plan at all times to the satisfaction of the responsible authority.

Infrastructure

16. Reticulated services, including electricity, must be provided underground to the subject land and below waist height to all buildings and structures on the land, to the satisfaction of the responsible authority.

Public Access

17. The walkway and viewing platform along the wave screen must be open to the public at all times. This does not apply when access needs to be restricted for emergency or maintenance purposes, but any restrictions for the purpose of maintenance must be to the satisfaction of the responsible authority.

18. The refueling facility and sewerage pump-out facility must at all times be available for use by the public during the hours of operation of these facilities. This does not apply when access needs to be restricted for emergency or maintenance purposes.

19. Except with the consent of the responsible authority, when not in use, the travel lift must be stored in the location shown on the layout plan endorsed under this permit to the satisfaction of the responsible authority.

20. The approved marina must at all times be open, free of charge, to any member of the public seeking safe haven for their boat during bad weather.

21. Access for disabled persons must at all times be provided to the public jetty up until the point that it joins the second marina finger. This does not apply when access needs to be restricted for emergency or maintenance purposes, or access is restricted by Parks Victoria. All work carried out to provide such access must be constructed in accordance with the relevant Australian Standard for access and mobility.

Concealment of Pipes

22. All pipes (except down-pipes), fixtures, fittings and vents servicing any building on the site must be concealed in service ducts or otherwise hidden from external view to the satisfaction of the responsible authority.

Noise

23. The emission of noise from the approved use and development must not exceed the noise limits determined in accordance with the State Environment Protection Policies number N-1(control of noise from commerce, industry and trade) and N-2 (Control of music noise from public premises).

24. Outdoor amplification of music is not permitted except with the written consent of the responsible authority.

25. Except with the written consent of the responsible authority, all security alarms or similar devices used on the land must be of a silent type approved by the Standards Association of Australia.

Date Issued:	**Date Permit comes into operation:**	**Signature for the Responsible Authority**

Amenity of Area

26. The use and development must be managed to the satisfaction of the responsible authority so that the amenity of the area is not detrimentally affected, through the:
    a. Transport of materials, goods or commodities to or from the land.
    b. Appearance of any building, works or materials.
    c. Emission of noise, artificial light, vibration, smell, fumes, smoke, vapour, steam, soot, ash, dust, waste water, waste products, grit or oil.
    d. Presence of vermin.

Appearance of Site

27. The site must be so ordered and maintained so that it will not prejudicially affect the amenity of the locality by reason of appearance, to the satisfaction of the responsible authority.

External Lighting

28. All outdoor lighting must be designed, baffled and located to avoid any adverse effect on adjoining land to the satisfaction of the responsible authority.

Lighting of Jetties and Accessways

29. Low intensity lighting must be provided to the satisfaction of the responsible authority to ensure that pedestrian accessways are adequately illuminated during evening periods without any significant loss of amenity to occupiers of adjoining land.

Floating boat cradles prohibited

30. Floating boat cradles must not be used in the harbour.

Commercial Pleasure Boat Operation Plan

31. Any use of the marina for the purposes of an individual pleasure boat operation for commercial purposes, such as a fishing trip, pleasure cruise, charter boat service or the like, must not start until a Commercial Pleasure Boat Operation Plan for each specific operation has been prepared to the satisfaction of the responsible authority. Such Plan must be generally consistent with the OEMP that forms part of this permit. Any Commercial Pleasure Boat Operation Plan must be submitted to and approved by the responsible authority and when endorsed will form part of this permit. A Commercial Pleasure Boat Operation Plan must include:
    a. The numbers of staff and passengers.
    b. Details of any food or drink service including the provision of any such service that is operated whilst the boat is moored in the marina.
    c. A restriction that the serving of food or drinks is limited to persons who are on board a boat for the purpose the relevant commercial operation.
    d. Staffing, staff training and other measures designed to ensure the orderly arrival and departure of passengers and the retention of continuous and safe thoroughfare for other pedestrians, including disabled persons, using the marina.
    e. The hours of operation including proposed times of arrival and departure, days of operation and any seasonal variations.
    f. A review and, if appropriate, update of the ESD component of the OEMP required elsewhere in this permit.
    g. A traffic management plan designed to protect the levels of service, safety and amenity of Schnapper Point Drive, Flinders Drive and the Esplanade and, in particular, to prevent demand for parking spaces on those roads in parking areas immediately accessed from those roads. The plan must include:
        i. Evidence that passengers and staff will be guaranteed access to any shuttle bus service that is required elsewhere under this permit.
        ii. Measures to achieve coordination with other operators in the marina with regard to

parking.

iii. Measures to alert passengers to the need for drop off and pick up and any such service that is provided.

iv. Identification of possible risk of operational failure and response measures to be implemented.

32. A pleasure boat operation for commercial purposes such as a fishing trip, pleasure cruise, charter boat service or the like must at all times be operated in accordance with its Commercial Pleasure Boat Operation Plan that forms part of this permit and more generally to the satisfaction of the responsible authority.

Repair or Maintenance Business Operation Plan

33. Any use of the marina or Mornington Yacht Club yard for the purpose of a business operation for the repair or maintenance of boats and boat accessories must not start until a Repair or Maintenance Business Operation Plan has been prepared to the satisfaction of the responsible authority. The plan must be generally consistent with the OEMP that forms part of this permit. The Repair or Maintenance Business Operation Plan must be submitted to and approved by the responsible authority and when endorsed will form part of this permit. The Repair or Maintenance Business Operation Plan must include:

a. Measures to achieve coordination with other operators in the marina with regard to parking.

b. Measures for alerting customers to the need for drop off and pick up and any such service that is provided.

c. Identification of possible risk of operational failure and response measures to be implemented.

34. Any business operation for the repair or maintenance of boats and boat accessories must at all times be operated in accordance with the Repair or Maintenance Business Operation Plan that forms part of this permit and more generally to the satisfaction of the responsible authority.

Maintenance of development

35. Once construction of the approved development has started it must be completed in accordance with the endorsed plans that form part of this permit and thereafter maintained in perpetuity, at the cost of the permit holder, and all to the satisfaction of the responsible authority except as provided in the endorsed End of Life Plan.

36. Implementation of the endorsed OEMP, as may be amended from time to time must be undertaken in perpetuity at the cost of the permit holder and to the satisfaction of the responsible authority except as provided in the endorsed End of Life Plan.

37. The responsible authority may issue a direction for the demolition, removal and disposal of an approved development in accordance with a trigger in an endorsed End of Life Plan and any demolition must be carried out at the cost of the permit holder within 12 months of any such direction, except with the prior written consent of the responsible authority.

End of Life Plan

38. Prior to the start of the approved development, an End of Life Plan to the satisfaction of the responsible authority must be submitted to and approved by the responsible authority. When the plan is endorsed it will form part of this permit. The End of Life Plan must show:

a. An estimate of the cost of demolition, removal and disposal of the approved development that has been prepared and peer reviewed by an appropriately qualified professional. This does not apply to the following elements of the approved development:

i. Any element constructed above high water mark.

ii. Travel lift and wash down facility

iii. Any element of the development that the relevant public land manager is willing to either

maintain, replace or remove at its own cost as evidenced by the consent in writing of the public land manager.

b. Triggers for the start of demolition This does not apply to any element of the development that the relevant public land manager is willing to either maintain, replace or remove at its own cost as evidenced by the consent in writing of the public land manager.

39. Prior to the start of the demolition of the approved development, a demolition plan to the satisfaction of the responsible authority must be submitted to and approved by the responsible authority. When endorsed it will form part of this permit. The demolition plan must show:
    a. The buildings and works that are proposed to be demolished.
    b. The method of demolition.
    c. Any fencing and security measures.
    d. The duration of the proposed demolition.
    e. The hours of work.
    f. Any storage areas.
    g. A demolition traffic management plan.
    h. Any access restrictions.

Expiry of use

40. The approved use must cease on the date fifty years after the date this permit is granted or at the completion of the demolition of the approved development in accordance with the End of Life Plan whichever is earlier . An extension of that time may be approved by the responsible authority upon a request in writing no more than 5 years before the cessation date.

Permit Expiry

41. This Permit will expire if one of the following circumstances applies:

    a. The development and use does not start within five (5) years of the issue date of this Permit; or
    b. The development is not completed within ten (10) years of the issue date of this Permit.

    The responsible authority may extend the times referred to if a request is made in writing before the Permit expires or within the three (3) months afterwards.

(If the permit has been amended, include the following table indicating the date and nature of amendments included in the amended permit)

Date of amendment	Brief description of amendment

Date Issued:	**Date Permit comes into operation:**	**Signature for the Responsible Authority**

IMPORTANT INFORMATION ABOUT THIS PERMIT

WHAT HAS BEEN DECIDED?

The Responsible Authority has issued a permit. The permit was granted by the Minister administering the **Planning and Environment Act 1987** under section 96I of that Act.

WHEN DOES THE PERMIT BEGIN?

The permit operates from a day specified in the permit being a day on or after the day on which the amendment to which the permit applies comes into operation.

WHEN DOES A PERMIT EXPIRE?

1. A permit for the development of land expires if -
   * the development or any stage of it does not start within the time specified in the permit; or
   * the development requires the certification of a plan of subdivision or consolidation under the **Subdivision Act 1988** and the plan is not certified within two years of the issue of a permit, unless the permit contains a different provision; or
   * the development or any stage is not completed within the time specified in the permit, or, if no time is specified, within two years after the issue of the permit or in the case of a subdivision or consolidation within 5 years of the certification of the plan of subdivision or consolidation under the **Subdivision Act 1988**.
2. A permit for the use of land expires if -
   * the use does not start within the time specified in the permit, or if no time is specified, within two years after the issue of the permit; or
   * the use is discontinued for a period of two years.
3. A permit for the development and use of land expires if -
   * the development or any stage of it does not start within the time specified in the permit; or
   * the development or any stage of it is not completed within the time specified in the permit, or, if no time is specified, within two years after the issue of the permit; or
   - the use does not start within the time specified in the permit, or, if no time is specified, within two years after the completion of the development; or
   - the use is discontinued for a period of two years.
4. If a permit for the use of land or the development and use of land or relating to any of the circumstances mentioned in section 6A(2) of the **Planning and Environment Act 1987**, or to any combination of use, development or any of those circumstances requires the certification of a plan under the **Subdivision Act 1988**, unless the permit contains a different provision-
   * the use or development of any stage is to be taken to have started when the plan is certified; and
   * the permit expires if the plan is not certified within two years of the issue of the permit.
5. The expiry of a permit does not affect the validity of anything done under that permit before the expiry.

WHAT ABOUT APPEALS?

* Any person affected may apply for a review of -
  - a decision of the responsible authority refusing to extend the time within which any development or use is to be started or any development completed; or.
  - a decision of the responsible authority refusing tot extend the time within which a plan under the **Subdivision Act 1988** is to be certified, in the case of a permit relating to any of the circumstances mentioned in section 6A(2) of the **Planning and Environment Act 1987**; or.
  - the failure of the responsible authority to extend the time within one month after the request for extension is made.
* An application for review is lodged with the Victorian Civil and Administrative Tribunal.
* An application for review must be made on an Application for Review form which can be obtained from the Victorian Civil and Administrative Tribunal, and be accompanied by the applicable fee.
* An application for review must state the grounds upon which it is based.
* An application for review must also be served on the Responsible Authority.
* Details about applications for review and the fees payable can be obtained from Victorian Civil and Administrative Tribunal.

Date Issued:	**Date Permit comes into operation:**	**Signature for the Responsible Authority**

Appendix E Draft Framework environmental management plan

Mornington Boat Haven Limited

Mornington Harbour Redevelopment Project

Framework Environmental Management Plan

April 2011

Contents

1. Table Index

2. Appendices

1 Introduction

This Framework Environmental Management Plan (FEMP) has been prepared by GHD Pty Ltd (GHD) for Mornington Boat Haven Limited (MBHL). It applies to construction works and operation of the Mornington Safe Harbour.

This FEMP applies to the construction and operation of the Mornington Safe Harbour development. This includes construction of harbour and pier wavescreens, berths and moorings, a new public jetty and viewing platform, extension of the Mornington Pier, a travel lift, dredging of sediments for the travel lift, installation of refuelling and sewage pump out facilities. The ongoing operation of the Mornington Safe Harbour will be managed by MBHL in accordance with this FEMP.

1.1 Purpose of this FEMP

The FEMP provides an overview of the management and performance requirements for the construction and operation phases of the project, including roles and responsibilities for environmental management.

The Contractor, once awarded, will prepare a detailed Construction Environmental Management Plan (CEMP). MBHL will be responsible for preparing operational plans for the Mornington Safe Harbour.

The FEMP contains:

- A summary of environmental values, which require protection during construction and operation (Section 2)
- A summary of statutory approvals which must be complied with throughout the construction and operation phases (Section 2.4)
- Description of the responsibilities of project parties for environmental management during construction and operation (Section 3.1)
- MBHL expectations for the Contractor's environmental management system, Construction Environmental Management Plan (CEMP), procedures and processes (Section 0), including:
  - Environmental risk assessment and management
  - Operational controls
  - Training and site inductions
  - Monitoring and inspections
  - Reporting and documentation
  - Internal and external audits
- Description of requirements for the Operations Environmental Management Plan and supporting plans and procedures (Section 3.4).
- Description of environmental performance and monitoring requirements for construction and operation of the Mornington Safe Harbour Project (Section 4).

2. Project and Environs

The project

The Mornington Safe Harbour development has been proposed to provide greater protection to users of the Mornington Harbour from seas generated during storm events from the west to the north and to enable all year round, all weather access to the harbour.

- The key aspects of the construction of the Mornington Safe Harbour Project include:
- A north facing harbour wavescreen, located to the east of the existing Mornington Pier, approximately 210 metres in length and along the 7m depth contour
- A north west facing wavescreen along the length of Mornington Pier and a pier extension approximately 20 metres in length
- Approximately 170 floating berths arranged as marina pens, generally oriented in a north-south arrangement, to be installed in stages
- Eight ‘fore and aft’ moorings to the south of the third marina arm
- Twelve swing moorings to the east of the first, second and third marina arms
- Ten short term public and ten emergency and police berths along the new public jetty and adjacent areas, in addition to the marina berths
- A new public jetty parallel to the south of the existing Mornington Pier to provide access to the marina berths and a public walkway and viewing platform above the harbour wavescreen
- Provision for disabled access via the low level public jetty
- A travel lift, refuelling and sewage pump-out facilities.

Mornington Boat Haven Limited (MBHL) will be responsible for the delivery of the Mornington Safe Harbour development and for the ongoing operation of the Mornington Safe Harbour facilities.

Environmental context

An Environment Effects Statement and a Planning Report have been prepared for the Mornington Safe Harbour development by Sinclair Knight Merz. The following sections provide a summary of the environmental values of the site and potential impacts, based on these studies.

Site location

Mornington Harbour is located on the east coast of Port Phillip, approximately one kilometre north-west of the Mornington township centre and 55 km south east of Melbourne. It is situated within the Mornington Peninsula Shire. The harbour is bounded by Schnapper Point to the west and Mornington Pier to the northwest. Mothers, Shire Hall and Scout Beaches form the southern and eastern coastline boundary and Red Bluff forms the north-eastern boundary.

The proposed Safe Harbour is to be located on the existing Mornington Harbour.

History of Mornington Harbour

Mornington Harbour is located within the traditional language boundary of the Bun wurrung peoples (Clark 1990), who occupied the coastal tract from the Werribee River around Port Phillip and Western Port Bay to the Tarwin River watershed (Clark 1990).

The beginnings of a European settlement at Schnapper point were laid with the construction of a small goods and produce store in 1852 at the corner of the Main Street and The Esplanade. The siting of the store influenced the location of what would become the Mornington Township. Road access into the area was poor and the main mode of transport was by sea.

In 1864 the small settlement of Schnapper Point was renamed Mornington after the Earl of Mornington and soon established itself as a seaside resort.

The Mornington Peninsula became a favourite place for retreat in the mid to late nineteenth century and large summer residences such as Beleura on Kalimna Drive, Mornington, were constructed between 1860 and 1890 for Melbourne's rich and famous. The setting of Schnapper Point with its proximity to sandy beaches and Port Phillip helped to establish it early on as a seaside resort in which activities including bathing, fishing, boating, promenading and racing were leisurely enjoyed by the middle and upper classes.

In 1962 land east of the Pier was reclaimed for development and construction of the Mornington Yacht Club clubhouse and boat harbour in 1965. The present club was built on the site in 1966.

A number of minor jetties are located to the southeast of the MYC. They are unlikely to be more than 50 years old and are likely to date to the development of the MYC and the land reclamation works during the early 1960's.

Existing Facilities

Mornington Harbour is currently used for a variety of water based recreational activities including fishing, diving and swimming, and supports 60 swing moorings for recreational craft and 30 other berths. Mornington Harbour also consists of the historic Mornington Pier, Fisherman's Jetty, the Mornington Yacht Club (MYC) lease area including a restaurant, bar, decking, communications tower and other facilities.

A two lane public boat launch ramp is heavily utilised during weekends and during the summer months when fishing and water sports are popular activities. The three beaches at Mornington, Scout, Mothers and Shire Hall, all provide areas for recreation as does Mornington Park.

Environmental Setting

Mornington Harbour and its environs have been the focus of recreational activity for residents and visitors since white settlement, and continue to be enjoyed by a vast array of interest groups.

Mornington Harbour is considered an iconic landscape setting by members of the public, with the landscapes including a combination of natural and cultural elements making it a popular area for visitors and locals alike. Mornington Pier and Fisherman's Jetty have local heritage significance and the possibility of shipwrecks being located in the area has been noted.

Water quality in the harbour is generally good. Stormwater discharges after rainfall events do not seem to introduce large quantities of nutrients or contaminants into the harbour (although it may with higher intensity rainfall events). Tidal flushing and wind driven mixing within the harbour is very efficient and likely to be the main reason why water quality is maintained.

The marine biota of Mornington Harbour consists of both native and introduced species that are typical of equivalent environments around Port Phillip. The silt and sand seabed is dominated by the introduced Northern Pacific seastar, Asterias amurensis.

Summary of potential environmental impacts

The Environment Effects Statement has assessed a range of potential environmental impacts that may arise from the construction and operation of the Mornington Safe Harbour, including:

Changes in wave climate

- Adverse impacts on seasonal dynamics and long-term stability of beaches adjacent the proposed development
- Adverse impacts on water quality within and in the vicinity of the harbour
- Adverse impacts on marine ecological values within the harbour and its vicinity
- Risks to public health and safety
- Adverse impacts on sites of indigenous and non-indigenous cultural heritage, including Mornington Pier and any historic shipwrecks
- Compatibility with existing landscape values and visual amenity
- Noise emissions during construction and operation
- Greenhouse gas emissions during construction and operation
- Increased traffic and parking demands.

Performance criteria and management measures identified through the EES process to address these impacts are contained in Section 4.1.

Regulatory approvals

MBHL are responsible for obtaining regulatory approvals for the project. The Contractor is required to comply with the conditions of these approvals. Key regulatory approvals may include:

- Environment Effects Statement, pursuant to the *Environment Effects Act 1978* (Vic)
- Cultural Heritage Management Plan, pursuant to the *Aboriginal Heritage Act 2006 (Vic)*
- Planning Scheme Amendment and Planning Permit from Mornington Peninsula Shire Council, pursuant to the *Planning and Environment Act 1987 (Vic)*
- Coastal Management Act Consent, pursuant to the *Coastal Management Act 1995 (Vic)*
- Heritage Victoria Consent for works on Mornington Pier, pursuant to the *Heritage Act 1995 (Vic)*

- Approval to enter or occupy unreserved Crown Land, pursuant to the *Crown Land (Reserves) Act 1978 (Vic)*
- Approval to enter and occupy reserved Crown Land, pursuant to the *Land Act 1958 (Vic)*
- Indigenous Land Use Agreement, pursuant to the *Native Title Act 1993 (Cth)*
- Trade waste licence agreement for the boat wash down facility, pursuant to the *Water Act 1989 (Vic)*
- Approval for dredging of sediment that may be required for the installation of the travel lift, under the *Marine Act 1988 (Vic)*
- Approval from Parks Victoria as required by the *Port Services (Local Ports) Regulations 2004 (Vic)*
- Approvals under the *Fisheries Act 1995 (Vic),* the *Flora and Fauna Guarantee Act 1988 (Vic)* and the *Wildlife Act 1975 (Vic)*
- Approval may be required under the *Environment Protection and Biodiversity Conservation Act 1999 (Cth).*

3. Environmental Management Strategy

3.1 Roles and responsibilities for environmental management

MBHL will be responsible for the overall delivery and operation of the Mornington Safe Harbour development. MBHL will appoint a Contractor who will be responsible for construction works for the project.

The key roles and responsibilities of project team organisations for delivery of the construction and operation phases of the Mornington Safe Harbour are listed in **Table 1** below.

Table 1 Responsibilities for Environmental Management

Stakeholder	Responsibilities
MBHL	
MBHL - Environment Manager	The MBHL Environment Manager shall: • Ensure that project environmental objectives and targets are defined and systems put in place to enable their achievement • Ensure that all required project statutory approvals have been obtained prior to works commencing • Liaise with relevant authorities • Undertake regular audits of contractor environmental performance • Review the Construction Environmental Management Plan (CEMP) prepared by the Contractor to confirm it meets the requirements of the FEMP and regulatory approvals • Require formal adherence to the FEMP and CEMP as a condition of contract/employment at the site • Ensure the Contractor reports all significant non-compliances and incidents to relevant authorities and ensure that remedial actions have been implemented • Prepare the Environment Management Plan for operations and other operational environmental plans.

Stakeholder	Responsibilities
MBHL – Project Superintendent	The MBHL appointed Project Superintendent is responsible for project management of design phase and superintending construction activities including but not limited to: • Project management • Oversee development of CEMP and other construction environmental plans • Arrange auditing of environmental responsibilities and ensure they are carried out during the construction stage • Arrange training for all contractors to ensure they are appropriately inducted, including understanding of their environmental responsibilities • Regular surveillance of all environmental management measures • Reviewing non-conformance and complaints and arranging audits of corrective actions undertaken.
Cultural Heritage Advisor (Archaeologist)	The MBHL appointed Cultural Heritage Advisor (Archaeologist) is responsible for: • Preparation of Cultural Heritage Management Plan • Investigation, management and reporting of any cultural heritage sites encountered during construction • Liaison with Registered Aboriginal Parties (RAPs) and Aboriginal Affairs Victoria
Contractor	
Contractor – Site Foreman	The Contractor – Site Foreman is responsible for carrying out all work consistent with Project Procedures including but not limited to: • Obtaining relevant particular works permits from statutory authorities other than project statutory approvals obtained by MBHL • Recording and addressing corrective action in relation to complaints and non-compliances and passing information to the Project Superintendent • Maintaining a non-conformance and complaints register and ensuring corrective action has been undertaken • Appointing a suitably qualified environmental officer with regular attendance on-site to develop and implement the CEMP and relevant environmental management measures • Conducting all construction works in accordance with the CEMP • Appointing an independent environmental auditor to conduct audits of the works • Ensuring that all site workers and subcontractors are aware of the CEMP, its contents and impact on their work methods, before work is commenced.

Stakeholder	Responsibilities
Contractor – Site Environmental Officer	The Contractor – Site Environmental Officer is responsible for: • Development of CEMP and other environmental plans • Implementation of CEMP and other environmental plans • Achieving environmental objectives and targets • Monitoring and reporting of all environmental elements • Regular inspection, implementation and maintenance of all CEMP management measures • Responding to environmental complaints, non-conformances and incidents.
Authorities	
Mornington Peninsula Shire Council	The Mornington Peninsula Shire Council shall: • Approve relevant EMPs and operational plans as required by planning permit conditions • Consider the views of relevant agencies in relation to component plans of the EMPs as required by planning permit conditions • Input to the Traffic Management Plans for construction and operation • Receive EMP compliance reports • Ensure planning permit conditions are complied with and enforced for construction and operation

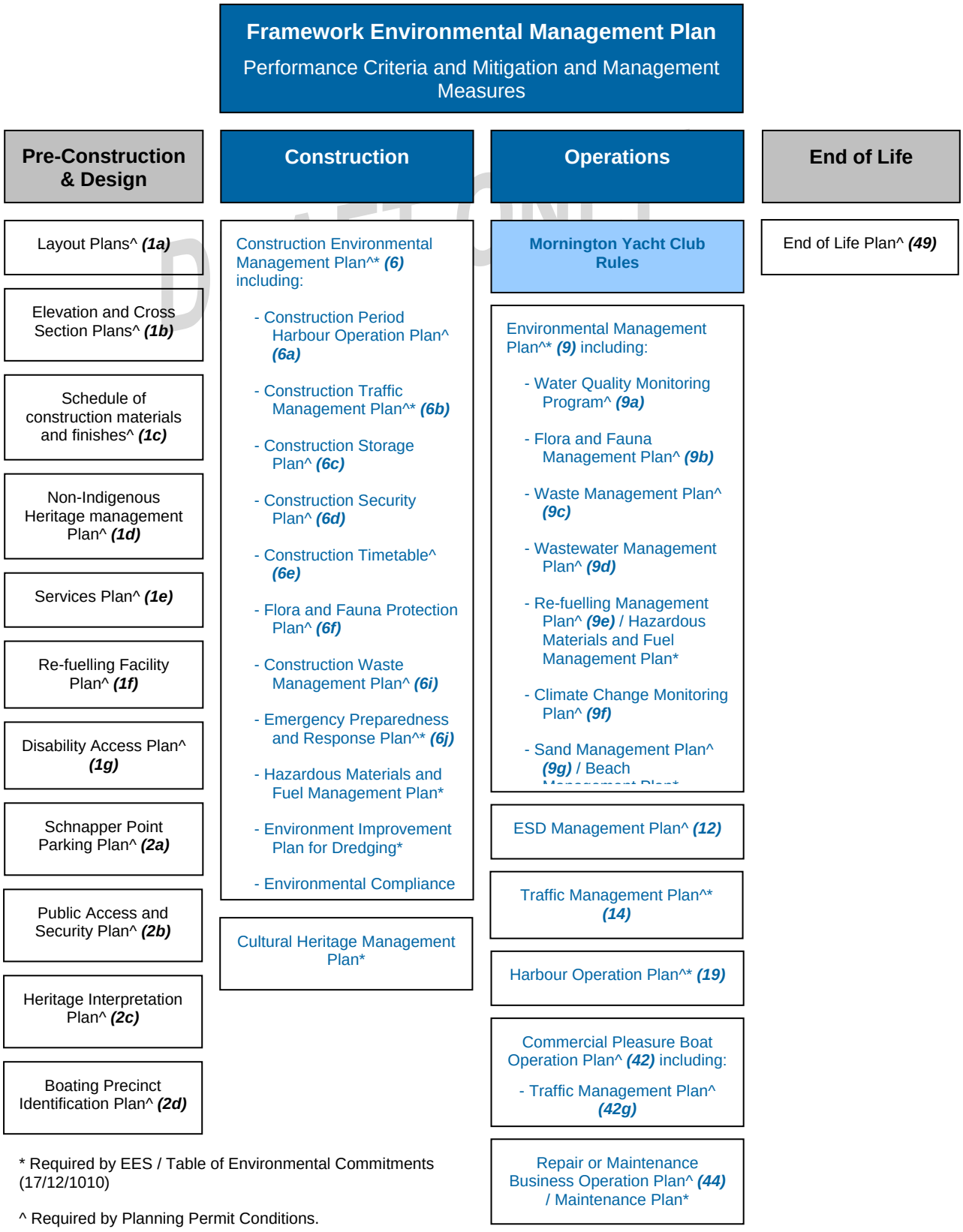
3.2 Environmental management documentation

The Mornington Safe Harbour Environment Effects Statement (SKM 2010) and proposed planning permit conditions require a number of management plans to be prepared for the project. Figure 1 shows the relationship between these component plans and this FEMP.

The Contractor appointed to construct the Mornington Safe Harbour development is required to prepare a Construction Environmental Management Plan (CEMP) for the project that meets the requirements of this FEMP. MBHL are responsible for preparing all other construction and operational plans in accordance with this FEMP.

MBHL will also be responsible for preparing and submitting to Council the pre-construction and design plans and End of Life Plan in accordance with planning permit conditions.

Figure 1 Environmental Management Structure



* Required by EES / Table of Environmental Commitments (17/12/1010)

^ Required by Planning Permit Conditions.

(XX) Planning Permit Condition Number

3.3 Construction

The Contractor will be required to have in place a documented project environmental management system based on the principles of AS/NZS ISO 14001: 2004[1]. Major elements of the environmental management system are expected to include processes and procedures for:

- Project risk identification and assessment
- Environmental objectives and measurable performance targets
- Legal and other requirements
- Roles and responsibilities for environmental management
- Staff training and induction processes
- Responding to and managing complaints, non-compliances and incidents
- Environmental reports and correspondence for the project
- Audits of the CEMP
- Review and update of the CEMP.

3.3.1 Project environmental risk assessment and control plan

A range of potential environmental impacts have been identified through the EES process for construction of the Mornington Safe Harbour. Indicative objectives have been developed for these issues, and are detailed in Section 4.

The Contractor is required to undertake a detailed assessment of environmental risks associated with work activities for various stages/phases of work. Risk assessment and management processes should be consistent with AS/NZS ISO 31000:2009 Risk management - Principles and guidelines.

Specifically, matters subject to further design should be subject to a risk assessment process to assist in identification of potential environmental impact pathways and development of appropriate environmental control management responses for inclusion in the EMP. These matters include:

- Swing Moorings – design and operation
- Offshore Reef – design and construction and collection and relocation of sand from behind the reef onto the beach
- Travel Lift – design, investigation of sediment quality and potential remediation measures, construction and operation
- Refuelling Facility / Underground Storage Tank – design, installation, operation and monitoring (to be managed through the Hazardous Material and Fuel Management Plan)
- Possible need for grading of the car parking areas.

The Contractor is required to develop a control program for reducing environmental risks to acceptable levels. Details of control measures to address identified environmental risks should include, but not be limited to:

[1] AS/NZS ISO 14001:2004, *Environmental management systems - Requirements with guidance for use*.

- Design measures, engineering controls and construction techniques to be implemented to protect the environment
- Work procedures and methods to address identified environmental risks
- Drawings and plans, which clearly show locations of and design specifications for environmental controls.

These must be consistent with environmental commitments in Section 4.

3.3.2 Legislative requirements and project environmental approvals

The Contractor is required to develop a register of legislation, statutory approval conditions and other requirements relevant to the project as part of the CEMP. Section 2.4 of this FEMP provides guidance regarding key environmental approvals for the project.

The Contractor must comply with relevant legislation and project approval conditions.

3.3.3 Training and site inductions

The induction procedures shall incorporate a section for environmental targets and controls.

All site staff must be trained in their responsibilities relating to the implementation of the CEMP.

The CEMP shall include a requirement for a site induction, performed for all personnel working on site. The site induction will include all site-specific environmental issues on the project and will review the environmental risks associated with the site and discuss the procedures in place to manage these risks.

All records of site inductions are to be maintained.

3.3.4 Monitoring and inspection

The Contractor is to undertake planned surveillance of their CEMP through inspections, checks, monitoring and audits.

Inspection program

The Contractor shall develop an internal inspection program of construction works as part of the CEMP.

The inspections will review all relevant water quality, stormwater, sediment, drainage, dust, waste (excavated material, groundwater and other materials), noise and vibration controls. The date and time of inspections will be recorded on an Environmental Compliance Checklist, as well as comments on non-compliance with the CEMP and remedial action taken. Copies of completed Environmental Compliance Checklists will be maintained in a logbook onsite.

Monitoring program

The Contractor is to develop a detailed environmental monitoring program for approval by MBHL and the Project Superintendent, as part of the CEMP. Specific monitoring requirements are outlined in Section 4.

External audit programme

An independent, suitably qualified and experienced auditor, such as an EPA appointed auditor pursuant to the *Environment Protection Act 1970*, will be engaged by the Contractor to conduct audits of CEMP implementation.

An audit will be undertaken prior to the final submission of the CEMP to the Superintendent and prior to any proposed significant changes to the CEMP.

A compliance audit will be undertaken within 30 calendar days of commencement of site works to ensure that environmental controls are in place. Audits will then be undertaken on a quarterly basis during construction.

3.3.5 Complaints, non-conformance and corrective actions

Complaints

The Contractor shall appoint a nominated representative to whom all public complaints will be directed.

The Contractor shall have in place a documented procedure for responding to and documenting community complaints.

Non-conformances

If a non-conformance is identified (i.e. monitoring results identify an exceedance of performance criteria, or a non conformance with procedures and controls is identified through an internal or external audit) appropriate measures must be taken to ensure that the non-conformance is recorded and corrective and preventative actions implemented.

The Contractor shall have in place a non-conformance procedure and reporting process.

Incident management

Examples of incidents include a fuel or chemical spill, the accidental discharge of turbid stormwater, generation of excessive noise or damage to protected vegetation or cultural heritage sites.

The Contractor shall have in place an incident response and reporting procedure as part of the CEMP.

The level of reporting required shall be determined by the impact of the incident and must be signed off by the appropriate level of authority within MBHL and corrective action implemented as required.

3.3.6 Reporting and documentation

Construction Environmental Management Plan (CEMP)

The Contractor is to prepare a CEMP for the project, which includes:

- A description of the project's environmental management system, procedures and processes as discussed in this Section, including all project forms and registers
- Project Environmental Risk Assessment and Control Plan (refer Section 3.3.1)
- Project Legal and Other Requirements Register (refer Section 3.3.2)

- Details of approvals, permits, agreements and/or licences for the various stages of work
- Relevant environmental procedures and work instructions, incorporating performance requirements listed in Section 4
- Environmental monitoring program, incorporating monitoring requirements listed in Section 4
- Environmental compliance checklist for use during site inspections
- Plans and drawings, which clearly show locations of and design specifications for environmental controls
- A checklist that demonstrates that each requirement of this CEMP framework has been addressed in the CEMP.

A draft CEMP is to be prepared prior to award of contract and reviewed by MBHL. Following award, the CEMP is to be formally submitted to the MBHL Project Superintendent and approved by Council.

If any changes to the CEMP are required these will be approved as followed:

- Minor administrative changes are to be approved by MBHL
- Major changes, such as changes to environmental controls or work practices are to be approved by MBHL and Council.

Site Work Plans for individual stages of work

Prior to each stage of work, the Contractor is to provide Site Work Plans, which are to include information regarding the management of environmental risks from work activities. This detail would include:

- Detailed risk assessment and control plan; and
- Plans and drawings, which clearly show locations of and design specifications for environmental controls.

Specific Site Work Plans are to be prepared for the:

- Wavescreens, pier and berth works
- Swing moorings
- Offshore reef
- Travel lift
- Refuelling facility / underground storage tank
- Sewage pump out facility
- Grading of the car parking areas.

Site Work Plans for individual stages of work are to be submitted to the Superintendent 14 days prior to works commencing.

Project reporting

A monthly report will be provided to the Superintendent and MBHL outlining the performance and effectiveness of the CEMP. This report shall include reports from the site inspections, external and internal audits, monitoring and incidents and non-compliances.

Site documentation

A site environmental folder, documenting site inspections and any issues of note will be maintained at the site office under the care of the designated site manager. The folder should include the following information:

- Completed site inspection sheets, signed and dated;
- Documentation of any issues of non-compliance and remedial action undertaken to address items of non-compliance;
- Documentation of complaints, of environmental nature, received from the public and remedial actions undertaken in response to complaints;
- Current site contact list;
- Completed waste material tracking records;
- Documentation of any site inspections, meeting or correspondence from responsible authorities, issued raised and remedial action taken to address any items of non-compliance; and
- Any other information and documentation relevant to demonstrating compliance with the requirements of the CEMP and relevant legislation and guidelines.

3.4 Operation

3.4.1 Operations EMP

MBHL are required to prepare an Operations EMP that is consistent with this FEMP and the EPA Guidelines for Cleaner Marinas (EPA Publication 624, 1998). Information to be included within the Operations EMP must include:

- Environmental policy
- A description of the scope and application of the plan
- Environmental aspects, assessment of impacts and their significance or risk
- Objectives, targets and action plans for significant environmental aspects
- Management and mitigation measures for all activities
- Register of legal and other requirements
- Resources, roles, responsibilities and authorities
- Competence, training and awareness
- Communication protocols and stakeholder consultation requirements
- Emergency preparedness and response
- Monitoring and measurement programs and templates for records, including site inspection checklists

- Incident and non-conformity investigation, corrective and preventive action
- Required documents and records, including documents, forms, templates and records.
- Processes for evaluation of compliance and audit schedule
- Management review.

3.4.2 Other Operations Management Plans

MBHL are required to prepare operations management plans in accordance with the Planning Permit Conditions. These operations management plans are to be consistent with this FEMP and the Operations EMP. Operations management plans are to include:

- ESD Management Plan
- Traffic Management Plan
- Harbour Operation Plan
- Commercial Pleasure Boat Operation Plan
- Repair of Maintenance Business Operation Plan.

4 Environmental Performance and Management Requirements

Project environmental objectives and requirements

Project performance criteria and management and mitigation measures have been developed to address environmental issues during construction and operation, including:

- Coastal processes
- Water quality
- Marine ecology
- Indigenous and non-indigenous cultural heritage
- Traffic and car parking
- Landscape and visual amenity
- Noise
- Energy and greenhouse gases
- Stormwater
- Public safety
- Social.

Table XXX and Table XXX set out these performance criteria and the corresponding management and mitigation measures for construction and operation.

[INSERT FINAL TABLE OF EES COMMITMENTS]

Environmental monitoring requirements

A number of monitoring requirements have been identified from the EES. These requirements and monitoring frequency are detailed in **Table 2**.

Table 2 Monitoring Requirement

Environmental Issue	Monitoring Requirement	Frequency
Monitoring Commitment During Construction		
Water Quality	Preliminary environmental monitoring will be undertaken of turbidity generated through pile driving to measure compliance with legislative requirements.	During pile driving

Environmental Issue	Monitoring Requirement	Frequency
	Water sampling will be undertaken to measure compliance with the relevant SEPP and ANZECC/ARMCANZ water quality objectives and provide a baseline.	Periodically during construction
	Testing of sediments will be undertaken for antifoulants and hydrocarbons to provide a baseline for monitoring the potential build up of contaminants in the harbour seabed.	Prior to construction
Marine Ecology	Preliminary environmental monitoring will be undertaken of turbidity generated through pile driving.	During pile driving
Cultural Heritage Indigenous	Compliance with CHMP.	At least once prior to construction, once during construction and once following construction
Energy and Greenhouse Gases	Monitoring fuel consumption.	During construction
Stormwater	Inspections for turbidity will be undertaken at each drainage outlet to ensure stormwater runoff (which will discharge to the Bay) is leaving the site treated.	Daily during construction
	Sediment and pollution control measures will be regularly reassessed.	Regularly during construction
	Baseline monitoring of water quality entering the Bay may be undertaken as part of the construction management, pending the outcomes of further discussions with the EPA.	During construction
	Drainage management measures and sediment control structures will be inspected and maintained	Regularly during construction and immediately after rainfall events
Monitoring Commitments During Operation		
Coastal Processes	The beach alignment will be monitored for the first 12 months of operation to determine the need (or otherwise) for sand relocation to occur	During operation
Water Quality	Water sampling will be undertaken to measure compliance with the relevant SEPP and ANZECC/ARMCANZ water quality objectives. Water from inside the harbour will be sampled periodically and analysed for copper, petroleum hydrocarbons, dissolved oxygen and turbidity for comparison with baseline (pre-construction) levels and compared with concentrations outside the harbour to verify flushing rates and residence times	Regularly during operation and after storm events

Environmental Issue	Monitoring Requirement	Frequency
	Testing of sediments will be undertaken for antifoulants and hydrocarbons on an annual basis after commissioning to monitor the potential build up of contaminants on the harbour seabed	Annually during operation
Marine Ecology	Monitoring of the colonisation of epibiota on the outside and inside of the constructed wavescreen and also on the growth of seagrass on the surrounding seabed. Non-destructive sampling using photographic plots of species present (and percentage cover) of selected species will be undertaken.	At 6 or 12 monthly intervals during operation
	Monitoring of coastal processes will be undertaken to quantify the extent of sediment impingement on the inshore coastal reef	During operation
Noise	Compliance with Noise Limits defined by the EPA Noise Policy No N-1	Regularly during operation
Energy and Greenhouse Gases	Electricity consumption will be monitored by maintaining records of monthly electricity use to identify any changes in electricity and help reduce operating costs	Monthly during operation
Stormwater	Drainage management measures and sediment control structures will be inspected	Regularly during operation and immediately after significant rainfall events:

QA Limitations

This Framework Environmental Management Plan for the Mornington Safe Harbour Project ("Report"):

- has been prepared GHD Pty Ltd ("GHD") for Mornington Boat Haven Limited;
- may only be used and relied on by Mornington Boat Haven Limited;
- must not be copied to, used by, or relied on by any person other than [insert name of client] without the prior written consent of GHD and subject always to the next paragraph;
- may only be used for the purpose of a Framework Environmental Management Plan for the Mornington Safe Harbour Project (and must not be used for any other purpose).

If Mornington Boat Haven Limited wishes to provide this Report to a third party recipient to use and rely upon, then GHD's prior written consent will be required. Before this Report is released to the third party recipient, the third party recipient will be required to execute a GHD prepared deed poll under which the recipient agrees:

- to acknowledge that the basis on which this Report may be relied upon is consistent with the principles in this section of the Report; and
- to the maximum extent permitted by law, GHD shall not have, and the recipient forever releases GHD from, any liability to the recipient for loss or damage howsoever in connection with, arising from or in respect of this Report whether such liability arises in contract, tort (including negligence),"

To the maximum extent permitted by law, all implied warranties and conditions in relation to the services provided by GHD and the Report are excluded unless they are expressly stated to apply in this Report.

The services undertaken by GHD in connection with preparing this Report:

- were limited to the preparation of a Framework Environmental Management Plan based on information and management measures proposed in the Mornington Safe Harbour Environment Effects Statement (SKM 2010) and updated during the panel hearing;
- did not include any environmental impact assessment work or development of new mitigation and management measures to address potential impacts, or assessment of the proposed mitigation and management measures as being appropriate to manage potential impacts.

The opinions, conclusions and any recommendations in this Report are based on assumptions made by GHD when undertaking services and preparing the Report ("Assumptions"), including (but not limited to):

- that the mitigation and management measures proposed by the Mornington Safe Harbour Environment Effects Statement (SKM 2010) are adequate to address and manage potential environmental impacts.

GHD expressly disclaims responsibility for any error in, or omission from, this Report arising from or in connection with any of the Assumptions being incorrect.

Subject to the paragraphs in this section of the Report, the opinions, conclusions and any recommendations in this Report are based on conditions encountered and information reviewed at the time of preparation and may be relied on for 6 months, after which time, GHD expressly disclaims

responsibility for any error in, or omission from, this Report arising from or in connection with those opinions, conclusions and any recommendations."

GHD has prepared this Report on the basis of information provided by Mornington Boat Haven Limited, which GHD has not independently verified or checked ("Unverified Information") beyond the agreed scope of work.

GHD expressly disclaims responsibility in connection with the Unverified Information, including (but not limited to) errors in, or omissions from, the Report, which were caused or contributed to by errors in, or omissions from, the Unverified Information."

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Document Status

Rev No.	Author	Reviewer		Approved for Issue		
		Name	Signature	Name	Signature	Date

* Denotes signature on original.

Appendix F Statement of commitments from Proponent

- **EES Environmental Management Commitments – 18 February 2011**

Construction			
Performance Criteria	**Management and Mitigation Measures**	**Resources / responsibility**	**Timing**
Coastal Processes			
Ensure that measures are in place to control the movement of sand	A Beach Management Plan will be developed which sets out trigger points to be used for determining the need for sediment management following construction. The Beach Management Plan will include: - Monitoring locations, frequency and trigger points. Trigger points may be considered in terms of beach rotation and/or the volume change of sand in a beach compartment and/or the distribution of the sand within each of the beach compartments (Mothers Beach, Scout Beach and Shire Hall Beach). - Procedures for monitoring sand grain size at selected locations to determine how the beach response compares with that determined in the EES - Procedures for sand relocation, including equipment for sand moving and access and raking of sands - Responsibilities for monitoring and sand relocation - A contingency plan for the offshore reef, including consideration of potential impacts and management measures - Assessment and approval process for the offshore reef, if required.	MBHL	Prior to construction
Water Quality			
Maintain good flushing of the harbour and	A Construction Environmental Management Plan will be developed for all planned construction activities. The main potential sources of impact on water quality during construction are accidental spills of hazardous materials, accidental releases of construction wastes and litter into the harbour and turbidity generated by plant and equipment including barges causing seabed disturbance. Use of silt curtains and floating bunds may be useful mitigation options.	Contractor - Site Environmental Officer	Prior to construction

Construction			
Performance Criteria	**Management and Mitigation Measures**	**Resources / responsibility**	**Timing**
Minimise impacts on water quality	Testing of sediments will be undertaken for antifoulants and hydrocarbons prior to construction to provide a baseline for monitoring the potential build up of contaminants in the harbour seabed.	Contractor - Site Environmental Officer	Prior to construction
	Preliminary environmental monitoring will be undertaken of turbidity generated through pile driving to measure compliance with legislative requirements. Where necessary, silt curtains will be used to contain turbid plumes generated by pile driving and any other activities likely to cause disturbance to the seabed.	Contractor - Site Environmental Officer	During construction
	Any dredging that may be required will be undertaken in accordance with EPA Best Practice Guidelines for Dredging (Publication 691). The dredging methodology and controls to be used, such as silt screens, will be assessed as part of the Environment Improvement Plan in the Application for Consent for Dredging. Controls will include: – assessment of contamination of sediment to be dredged and identification of appropriate management measures. - assessment of risk of translocation of exotic species in spoil or introduction of new exotic species by dredges. - installation of silt curtains (where practical and sediments are fine) - undertaking dredging during less sensitive periods of the year such as avoiding summer. - assessment of noise impacts associated with dredging and identification of noise mitigation measures, such as equipment selection and working hours. If dredging is required, material will be disposed to landfill.	Contractor - Site Foreman/ Site Environmental Officer	During construction
	Storage and use of chemicals and fuels on-board vessels is to be minimised. Any chemicals or fuels used on board vessels are to be bunded. Spill kits appropriate to the chemical / fuel type are to be	Contractor – Site	During construction

Construction			
Performance Criteria	**Management and Mitigation Measures**	**Resources / responsibility**	**Timing**
	maintained on board the vessel and staff trained in spill response procedures.	Environmental Officer	
	Silt curtains and floating bunds will be used to prevent any spillages or accidental releases of construction wastes from barges etc into harbour waters.	Contractor - Site Foreman/ Site Environmental Officer	During construction
	Environmental monitoring, in the form of water sampling, will be undertaken during construction to measure compliance with the relevant SEPP and ANZECC/ARMCANZ water quality objectives. Water from inside the harbour will be sampled periodically and analysed for copper, petroleum hydrocarbons, dissolved oxygen and turbidity for comparison with baseline (pre-construction) levels and compared with concentrations outside the harbour. This will verify whether flushing rates and residence times are sufficient for maintaining water quality within the harbour.	Contractor - Site Environmental Officer	During construction
	Water quality monitoring and associated sampling will be conducted in accordance with the EPA Publication IWRG701 Industrial Waste Resource Guidelines – Sampling and analysis of Waters, Wastewaters, Soils and Wastes.	Contractor - Site Environmental Officer	During construction
	An Environmental Compliance Checklist will be completed to assist the Contractor in monitoring the environmental performance of management measures. The checklist will contain the details of project personnel to whom non-compliance is to be reported.	Contractor - Site Environmental Officer	During construction
	Any community complaints will be promptly investigated by the site foreman (or delegate) and responded to accordingly. Where necessary corrective action will be initiated.	Contractor - Site Foreman	During construction
Marine Ecology			
Maintain good flushing of the	Preliminary environmental monitoring will be undertaken of turbidity generated through pile driving.	Contractor - Site Environmental Officer	Prior to construction

Construction			
Performance Criteria	**Management and Mitigation Measures**	**Resources / responsibility**	**Timing**
harbour and Minimise impacts on marine life	An Environmental Management Plan will be developed for all planned construction.	Contractor - Site Environmental Officer	Prior to construction commencing
	Visual scanning will be undertaken for the presence of marine mammals within 3 km of the harbour prior to major noise generating works (e.g. piling). If an animal is spotted, prior or during construction, work will cease and not commence until the animal is further than 3km away from the construction site.	Contractor - Site Environmental Officer	Prior to and during construction
	The number of anchor points and the frequency of moving anchors will be minimised by using existing moorings for anchoring of boats and plant where feasible and practical.	Contractor - Site Foreman / Site Environmental Officer	During construction
	The suspension of sediment from the seabed will be minimised as far as practicable and if necessary, silt curtains will be used to contain turbid plumes generated by pile driving. This will be determined following preliminary environmental monitoring of pile driving.	Contractor - Site Environmental Officer	During construction
	A soft start process will be adopted for pile driving to allow aquatic fauna that are sensitive to noise to depart without risk of harm.	Contractor - Site Engineer	During construction
	Any dredging that may be required will be undertaken in accordance with EPA Best Practice Guidelines for Dredging (Publication 691) and involve the installation of silt curtains (where practical and sediments are fine). Any dredging required will be undertaken during less sensitive periods of the year avoiding summer and material will be disposed to landfill.	Contractor - Site Foreman/ Site Environmental Officer	During construction
	Environmentally friendly swing moorings will be installed, similar to those installed by Parks Victoria in Port Phillip Bay at Queenscliff, Limeburners Bay, Williamstown and Sorrento. These are designed to protect the marine environment from the effects of anchor damage caused by traditional swing moorings.	Contractor - Site Engineer	During construction

Construction			
Performance Criteria	**Management and Mitigation Measures**	**Resources / responsibility**	**Timing**
	An Environmental Compliance Checklist will be completed to assist the Contractor in monitoring the environmental performance of management measures. The checklist will contain the details of project personnel to whom non-compliance is to be reported.	Contractor - Site Environmental Officer	During construction
	Any community complaints will be promptly investigated by the site foreman (or delegate) and responded to accordingly and where necessary corrective action will be initiated.	Contractor - Site Foreman	During construction
Cultural Heritage Indigenous			
Avoid sites of significant archaeological and cultural heritage value	All vehicle traffic and construction work will be restricted to areas of existing ground disturbance including the existing roadways, car park areas and the sand beaches of Mothers Beach, Scout Beach and Shire Hall Beach to ensure the protection of registered Aboriginal Places (AAV 7921-0070, 7921-0071, 7921-0090 and 7921-0091). Work will not extend into coastal Crown land that has not been subject to significant ground disturbance.	Contractor - Site Foreman	Prior to and during construction
	All activities must be conducted in accordance with the approved CHMP. A copy of the approved CHMP is to be maintained on site.	Contractor - Site Environmental Officer	Prior to and during construction
	If the activity is to change in any way that may contravene the above management measure, the cultural heritage advisor will be contacted at once as a new CHMP may be required to outline management recommendations.	Contractor - Site Environmental Officer	Prior to and during construction
	All contractors, sub-contractors and employees associated with the Mornington Safe Harbour Project will be made aware that there are areas of cultural heritage sensitivity (that is, registered cultural heritage places) within the activity area and that care must be taken to avoid indirectly impacting on them.	Contractor - Site Environmental Officer	Prior to construction

Construction			
Performance Criteria	**Management and Mitigation Measures**	**Resources / responsibility**	**Timing**
	Cultural Heritage Mini-Posters will be circulated to and read by all site staff and contractors prior to the initiation of work and available for reference on site at all times.	Contractor - Site Environmental Officer	Prior to and during construction
	Compliance will be checked at least once before beginning ground disturbance works, once during construction and once following construction using the Compliance Checklist provided in the CHMP.	Contractor - Site Environmental Officer	Prior to and during construction
	Open communication will occur between MBHL and the cultural heritage advisor prior to, during and following finalisation of the proposed works.	MBHL	Prior to and during construction
	If any relevant RAP(s) and/or cultural heritage advisor wishes to enter the activity area at any stage, this will be facilitated by MBHL.	MBHL	Prior to and during construction
	The location and nature of cultural heritage material is sensitive information and will be kept confidential.	MBHL	Prior to and during construction
	At any time during construction, if Aboriginal cultural heritage material, features and/or deposits are found, all construction that could potentially harm identified features will cease (including stopping all construction within at least but not limited to 5m). Only construction that is required to comply with occupational and environmental health and safety standards and/or to protect the cultural heritage will occur.	Contractor - Site Foreman / Site Environmental Officer	During construction
	Where Aboriginal cultural heritage material and/or deposits are discovered in the activity area, a cultural heritage advisor will be engaged to record in detail the location and context of the material in consultation with the relevant RAP and complete and submit to AAV a Victorian Aboriginal Heritage Register Form. The Cultural Heritage Advisor will then decide on the most appropriate course of action for the material.	Cultural Heritage Advisor / Contractor - Site Environmental Officer	During construction

Construction			
Performance Criteria	**Management and Mitigation Measures**	**Resources / responsibility**	**Timing**
	If the cultural heritage material and/or deposits found are deemed to be in situ and of moderate or higher significance, a suitably qualified and experienced archaeologist will be engaged to conduct salvage excavation.	Cultural Heritage Advisor / Contractor - Site Environmental Officer	During construction
Cultural Heritage Non-Indigenous			
Avoid sites of significant archaeological and cultural heritage value Confine construction works to highly disturbed areas	The scale, mass, form and material of the pier return will be sympathetic to the current conditions	MBHL	Detailed design
	Consent from Heritage Victoria will be obtained for works associated with Mornington Pier and further archaeological recording will be undertaken should it be required.	MBHL	Prior to construction
	An archaeological survey of the seafloor will be undertaken prior to construction commencing to identify any archaeological deposits and their extent.	MBHL	Prior to construction
	Care will be taken to avoid accidental disturbance to the MCC Services Box. The Services Box will be fenced and flagged during works being undertaken in the car park area.	Contractor - Site Environmental Officer	Prior to and during construction
	Should any archaeological deposits be uncovered during the construction works (including adjacent to the jetty on the seafloor), work will cease in the area and Heritage Victoria will be contacted immediately.	Contractor - All construction personnel / Site Foreman / Site Environmental Officer	During construction
	All vehicle traffic will be restricted to areas of existing ground disturbance including the existing roadways, car park areas and the sand beaches of Mothers Beach, Scout Beach and Shire Hall Beach.	Contractor - All construction personnel	During construction

Construction			
Performance Criteria	**Management and Mitigation Measures**	**Resources / responsibility**	**Timing**
Traffic and Car Parking			
To ensure parking and traffic is managed to cope with extra capacity of vehicles.	A Traffic Management Plan will be developed and implemented prior to construction works commencing	MBHL	Prior to construction
Landscape and Visual			
Maintain landscape amenity values of Mornington Harbour	Concrete wave wall top structures will be detailed above high water mark to give a more textured finish to vertical concrete walls. Areas below high water mark will be detailed with salt water microflora.	MBHL Design team	Design
	All lighting will be hooded to only cast light down onto walking areas with indirect light spilling onto adjoining boats but having limited long range penetration. This will ensure that there is no light cast above the horizontal plane.	MBHL Design team	Design
Noise			
Maintain compliance with noise criteria	A point of contact and phone number for complaints and enquiries will be made available.	Contractor - Site Environmental Officer	Prior to and during construction
	Visual scanning will be undertaken for the presence of marine mammals within 3 km of the harbour prior to major noise generating works (e.g. piling). If an animal is spotted, prior or during construction, work will cease and not recommence until the animal is further than 3 km away from the construction site.	Contractor - Site Environmental Officer	Prior to and during construction
	Piling and construction work will be limited to the daytime period only. Construction hours will be 7	Contractor - Site	During construction

Construction			
Performance Criteria	**Management and Mitigation Measures**	**Resources / responsibility**	**Timing**
	am to 7 pm Monday to Friday and 7 am to 1 pm Saturday.	Foreman	
	A soft start process will be adopted for pile driving to allow marine fauna that are sensitive to noise to depart without risk of harm.	Contractor - Site Foreman	During construction
	The Environmental Management Plan will include control procedures to reduce noise generated during construction (i.e. the use of quieter equipment where available, minimising the use of horns and engine breaks when approaching or departing the site).	Contractor - Site Foreman	During construction
	An Environmental Compliance Checklist will be completed to assist the Contractor in monitoring the performance of management measures. The checklist will contain the details of project personnel to whom non-compliance is to be reported.	Contractor - Site Environmental Officer	During construction
	Any community complaints will be promptly investigated by the site foreman (or delegate) and responded to accordingly. Where necessary corrective action will be initiated.	Contractor - Site Foreman	During construction
Energy and Greenhouse Gases			
Minimise greenhouse gas emissions during construction and operation	The proposed renovation of the existing amenities block within the existing Yacht Club building will incorporate the principles of sustainable design where possible, to maximise the use of natural lighting, ventilation and heating. The purchase of a solar hot water heater will also be considered.	MBHL - Design Team	Design
	A constructor with a good environmental record will be selected, who uses energy efficient and well-maintained equipment.	MBHL	Prior to construction
	Measures to reduce direct and indirect greenhouse gas emissions arising from the construction of the Safe Harbour will be built into the construction Environmental Management Plan wherever possible.	MBHL	Prior to and during construction

Construction			
Performance Criteria	**Management and Mitigation Measures**	**Resources / responsibility**	**Timing**
	Materials will be sourced locally as far as feasible and practical.	Contractor - Site Foreman	Prior to and during construction
	Consideration will be given to suppliers to be chosen based on their environmental performance. This will include consideration of the embodied energy of potential construction materials and the location of suppliers.	Contractor - Site Foreman	Prior to and during construction
	Energy efficient plant and equipment (i.e. lighting) will be used as far as feasible and practical.	Contractor – Site Foreman	During construction
	Construction works will occur during daylight hours to avoid the need for lighting.	Contractor - Site Foreman	During construction
	Low emission fuels will be used, such as LPG or biodiesel, as far as feasible and practical.	Contractor - Site Foreman	During construction
	Construction works will be carefully planned so that there is no unnecessary work.	Contractor - Site Foreman	During construction
	Greenhouse gas emissions associated with construction will be monitored by monitoring fuel consumption.	Contractor - Site Environmental Officer	During construction
Stormwater			
To minimise as far as practicable, adverse impacts on water quality	A hazardous material and fuel management plan will be developed and implemented in accordance with State legislative controls and guidelines, including the *Environment Protection Act 1970* (Vic) and State Environment Protection Policies, *Occupational Health and Safety Act 2004* (Vic) and Occupational Health and Safety Regulations 2007 and *Dangerous Goods Act 1985* (Vic). The	Contractor - Site Environment Officer / Site Foreman	Prior to and during construction

Construction			
Performance Criteria	**Management and Mitigation Measures**	**Resources / responsibility**	**Timing**
	hazardous material and fuel management plan will include requirements and procedures for: - a detailed site plan showing the location of refuelling and storage areas and spill kit locations - provision of collections systems to contain fuels and contaminated run-off - maintenance of a dangerous goods register on site - methods of disposal of any contaminated materials resulting from refuelling areas - regular inspection of storage and bunded areas - contingency plans in the event of any fuel or chemical spill - provision of accessible hydrocarbon spill kits at all times and training for all personnel in the use of spill kits.		
	A site plan is to be prepared showing the intended locations of stockpiles and any proposed controls such as silt fences or bunding.	Contractor - Site Environment Officer / Site Foreman	Prior to and during construction
	The Construction Environmental Management plan will include procedures for the management, treatment, disposal and use of dewatered groundwater.	Contractor - Site Environment Officer	Prior to and during construction
	The Construction Environmental Management Plan will refer to the Emergency Response Plan procedures to be adopted in the case of an emergency or environmental incident on site.	Contractor - Site Environment Officer	Prior to and during construction
	Refuelling and wash-down areas will be appropriately bunded to contain any spills or leakage and runoff.	Contractor - Site Foreman	Prior to and during construction

Construction			
Performance Criteria	**Management and Mitigation Measures**	**Resources / responsibility**	**Timing**
	Stormwater pollutant controls will include silt fences, such as sandbags placed immediately upstream of any drainage inlet pits	Contractor - Site Environment Officer / Site Foreman	During construction
	All clearing and construction works will be conducted in accordance with the EPA Publication 275 *Construction Techniques for Sediment Pollution Control*.	Contractor - Site Foreman	During construction
	Any sediment control structures will be designed for the 1 in 2 year average recurrence interval (ARI) storm event and to retain sediment on site.	Contractor - Site Environment Officer / Fpreman	During construction
	All hazardous materials (oils, fuels and chemicals) which are required to be located on site will be stored on a bunded impervious base which can contain 110% of the volume of all stored substances to prevent soil and stormwater contamination from chemical spills. The bund will be constructed in accordance with EPA Bunding Guidelines (Publication 347) and where possible, located at least 50 metres from the water's edge. It will be checked regularly for cracks and leaks.	Contractor - Site Environment Officer / Site Foreman	During construction
	All sewage, sullage and other wastewater generated at the construction site (other than stormwater runoff) will be collected and transported for treatment at a facility of adequate capacity and licensed to handle such waste.	Contractor - Site Environment Officer / Site Foreman	During construction
	Any spillage of hazardous materials will be immediately contained, cleaned up and disposed of (by an appropriately licensed contractor). Any contaminated soil arising from incidents during construction will be removed for treatment and/or disposal at an appropriate facility.	Contractor - Site Environment Officer / Site Foreman	During construction
	Contamination booms, spill kits and absorption materials (appropriate to the chemicals, fuels and hazardous materials to be used on site) will be maintained on site to contain and recover any inadvertent spillage of fuels or chemicals.	Contractor - Site Environment Officer / Site Foreman	During construction

Construction			
Performance Criteria	**Management and Mitigation Measures**	**Resources / responsibility**	**Timing**
	Any stockpiles will be located clear of drainage lines (by at least 10m if possible), road surfaces and drainage kerbs/lines and designed with slopes no greater than 2:1 (horizontal: vertical).	Contractor - Site Foreman	During construction
	Sediment controls, such as silt fences, will be utilised around unstabilised stockpiles.	Contractor - Site Foreman	During construction
	Daily visual inspections for turbidity will be undertaken at each drainage outlet to ensure stormwater runoff (which will discharge to the Bay) is leaving the site treated.	Contractor - Site Environment Officer	During construction
	The effectiveness of sediment and pollution control measures will be regularly reassessed to make any necessary improvements.	Contractor - Site Environment Officer	During construction
	Baseline monitoring of water quality entering the Bay may be undertaken as part of the construction management, pending the outcomes of further discussions with the EPA.	Contractor - Site Environment Officer	During construction
	An Environmental Compliance Checklist will be completed to assist the contractor in monitoring the environmental performance of management measures. The checklist will contain details of project personnel to whom non-compliance is to be reported.	Contractor - Site Environmental Officer	During construction
	Any community complaints will be promptly investigated by the site foreman (or delegate) and responded to accordingly and where necessary corrective action will be initiated.	Contractor - Site Foreman	During construction
	To ensure that drainage management measures and sediment control structures are operating at maximum efficiency, they will be inspected and maintained on a regular basis and after significant rainfall events. All drains will be regularly cleaned to remove silt, leaf litter and rubbish.	Contractor - Site Environment Officer	During construction

Construction			
Performance Criteria	**Management and Mitigation Measures**	**Resources / responsibility**	**Timing**
Public Safety			
Avoid significant risks to public health and safety	A Site Safety Plan will be developed and implemented and include measures relating to the installation of appropriate signage and fencing around all construction works, maintaining safe public access, and safe work sites, storage and handling of hazardous substances, community notices / letter box drops to advise of any changes to access arrangements during construction works, provision of alternative walking tracks where construction works block pedestrian access.	Contractor – Site Foreman / Site Environmental Officer	Prior to and during construction
	A Construction Environmental Management Plan will be developed and implemented with specific controls and procedures relating to water quality, stormwater, noise, cultural heritage, waste management and disposal, spill containment etc.	Contractor – Site Environmental Officer	Prior to and during construction
	A Traffic Management Plan will be developed and implemented with strategies to maintain safe vehicle and pedestrian access to and within the Harbour during construction.	Contractor – Site Foreman / Site Environmental Officer (in consultation with MPSC)	Prior to and during construction
	Site security will be installed prior to and during construction.	Contractor - Site Foreman	Prior to and during construction
	Suitably qualified construction workers will be employed.	Contractor – Site Foreman	Prior to and during construction
	The local community (including recreational groups) will be informed about any temporary disruptions to access during construction prior to works commencing	Contractor – Site Foreman	During construction

Construction			
Performance Criteria	**Management and Mitigation Measures**	**Resources / responsibility**	**Timing**
	Exclusion zones will be created around construction works. Boating zones will be delineated in accordance with Parks Victoria's requirements.	Contractor - Site Foreman	During construction
Social			
Ensure that the proposed development achieves a net community benefit	The community will be consulted about the proposed Safe Harbour development to receive community input into the final design.	MBHL	Design
	An Environmental Management Plan will be developed and include control strategies to manage issues such as noise and vibration associated with construction.	Contractor - Site Environmental Officer	Prior to construction
	The timing of construction will be planned to minimise disruption to users and ensure business continuity during construction.	Contractor - Site Foreman	Prior to construction
	Construction works will be timed so as to disrupt as few people and businesses as possible. Implementation of a Traffic Management Plan will assist in managing traffic impacts during construction.	Contractor - Site Foreman	Prior to construction

Operation			
Performance Criteria	**Management and Mitigation Measures**	**Resource / responsibility**	**Timing**
Coastal Processes			
Ensure that measures are in place to control the movement of sand	The beach alignment will be monitored for the first 12 months of operation to determine the need (or otherwise) for sand relocation to occur	MBHL	First 12 months of operation
	During the first 12 months of operation sand will be relocated with an excavator and truck as required.	MBHL	First 12 months of operation
	At the end of the first 12 months of operation, the transport of sand will be managed through the continued yearly relocation of beach sand, preferably during the spring months when the dominant winter sediment transport processes are completed or through the construction of an offshore reef to restrict the area of annual sediment deposition to a zone behind the reef.	MBHL	During operation
	The Beach Management Plan will be implemented and then reviewed at the end of the first 12 months post development.	MBHL	During operation
Water Quality			
Maintain good flushing of the harbour	An Environmental Management Plan will be developed for the operation of the harbour that is consistent with EPA Guidelines for Cleaner Marinas (Publication 624). Mitigation measures for management of waste are detailed in the Guidelines.	MBHL	Prior to and during operation
Minimise impacts on water quality	Adequate and well positioned rubbish and recycling bins will be provided in the Harbour to minimise littering.	MBHL	Prior to and during operation

Operation			
Performance Criteria	**Management and Mitigation Measures**	**Resource / responsibility**	**Timing**
	All boat repairs and maintenance that have the potential to generate pollution will be undertaken in designated work areas including inside buildings or under cover to reduce contamination to stormwater, or over impermeable surfaces that are properly drained to a collection pit). Abrasive blast cleaning will be performed in suitable enclosures to contain the spread of residues.	MBHL	Prior to and during operation
	Appropriate facilities and waste receptacles for fish cleaning and wastes will be provided and maintained.	MBHL	Prior to and during operation
	A suitable stormwater control system that prevents contamination of stormwater and reduces the quantity of contaminated stormwater will be provided.	MBHL - Design team	Design
	Any sediment control structures shall be designed for the 1 in 2 year average recurrence interval (ARI) storm event and to retain sediment on site.	MBHL - Design team	Design
	Typical stormwater pollutant controls will include silt fences in front of the drainage inlet pits.	MBHL	During operation
	All boat cleaning will be performed to ensure that no marine organisms or harmful paints fall into marine waters.	MBHL	During operation
	Wastewater will be disposed of to the sewage system in accordance with the requirements of South East Water.	MBHL	During operation
	Bunding and automatic shut off nozzles to reduce pollution from refuelling will be used,	MBHL	During operation
	Sewerage pump-out station for boats will be provided.	MBHL - Design team	Prior to and during operation

Operation			
Performance Criteria	**Management and Mitigation Measures**	**Resource / responsibility**	**Timing**
	Environmental monitoring, in the form of water sampling, will be undertaken during operation to measure compliance with the relevant SEPP and ANZECC/ARMCANZ water quality objectives. Water from inside the harbour will be sampled periodically and analysed for copper, petroleum hydrocarbons, dissolved oxygen and turbidity for comparison with baseline (pre-construction) levels and compared with concentrations outside the harbour. This will verify whether flushing rates and residence times are sufficient for maintaining water quality within the harbour.	MBHL	Regularly during operation and after storm events
	Water quality monitoring and associated sampling will be conducted in accordance with the EPA Publication IWRG701 Industrial Waste Resource Guidelines – Sampling and analysis of Waters, Wastewaters, Soils and Wastes.	MBHL	During operation
	Testing of sediments will be undertaken for antifoulants and hydrocarbons on an annual basis after commissioning to monitor the potential build up of contaminants on the harbour seabed.	MBHL	Annually during operation
Marine Ecology			
Maintain good flushing of the harbour Minimise impacts on marine life	Environmental monitoring, in the form of water sampling will be undertaken during operation to measure compliance with the relevant SEPP and ANZECC/ARMCANZ water quality objectives, verify the impact assessment undertaken as part of this EES and assess the effectiveness of mitigation measures adopted. Monitoring will focus on the colonisation of epibiota on the outside and inside of the constructed wavescreen and also on the growth of seagrass on the surrounding seabed. Non-destructive sampling using photographic plots of species present (and percentage cover) of selected species will be undertaken. Monitoring will commence at the conclusion of wavescreen construction and proceed at 6 or 12 monthly intervals well into the operational period.	MBHL	6 or 12 monthly intervals during operation
	An environmental management plan for the operation of the harbour will be developed that is consistent with EPA Guidelines for Cleaner Marinas (Publication No.624)	MBHL	Prior to operation

Operation			
Performance Criteria	**Management and Mitigation Measures**	**Resource / responsibility**	**Timing**
	The transport of sand from Scout Beach back to Shire Beach will be undertaken before summer to ensure that the build up of sand is managed.	MBHL	Prior to summer during operation
	Monitoring of coastal processes will be undertaken to quantify the extent of sediment impingement on the inshore coastal reef.	MBHL	During operation
	If required, a low level offshore groyne or reef will be considered at Shire Hall Beach to contain and manage the build up of sand over the reef.	MBHL	During operation
Cultural Heritage Indigenous			
Avoid sites of significant archaeological and Indigenous cultural heritage value	All vehicle traffic will be restricted to areas of existing ground disturbance including the existing roadways, car park areas and the sand beaches of Mothers Beach, Scout Beach and Shire Hall Beach to ensure the protection of registered Aboriginal Places (AAV 7921-0070, 7921-0071, 7921-0090 and 7921-0091).	MBHL	During operation
	All activities must be conducted in accordance with the approved CHMP. A copy of the approved CHMP is to be maintained on site.	MBHL	During operation
	The location and nature of cultural heritage material is sensitive information and will be kept confidential.	MBHL	During operation
Cultural Heritage Non-Indigenous			
Avoid sites of significant archaeological and non-indigenous	An interpretation scheme will be developed for the Mornington Pier and Harbour precinct highlighting its importance and contribution to the development of Mornington Harbour. The interpretation scheme will include further historical research and survey of the physical fabric of the Pier.	MBHL, MPSC, Parks Victoria	During operation

Operation			
Performance Criteria	**Management and Mitigation Measures**	**Resource / responsibility**	**Timing**
cultural heritage value Confine construction works to highly disturbed areas	All vehicle traffic will be restricted to areas of existing ground disturbance including the existing roadways, car park areas and the sand beaches of Mothers Beach, Scout Beach and Shire Hall Beach.	MBHL	During operation
Traffic and Car Parking			
To ensure parking and traffic is managed to cope with extra capacity of vehicles.	In consultation with MPSC measures to alleviate congestion and improve amenity and safety in the Schnapper Point Precinct will be explored. These include measures to increase parking supply in the Precinct, introduction of time limits on parking, establishment of a shuttle bus service (either as a general weekend service between the centre and the Precinct or a limited service oriented to the Mornington Yacht Club Saturday race days), provision of offsite boat storage and / or traffic management options such as the redesign of the parking layout and aisles in the area between the head of the Mornington Pier and Schnapper Point Cafe to provide simpler search patterns and possibly more parking. Improvements to the walking network to improve conditions for pedestrians, will also be explored.	MBHL	Prior to operation
Landscape and Visual			
Maintain landscape amenity values of Mornington Harbour	Good management of the Safe Harbour will be undertaken to ensure that areas remain clean and that water quality aspects are not compromised.	MBHL	During operation
	The use of boat cradles will be prohibited within the Safe Harbour. These cradles elevate boats out of the water on large pontoon structures. These elements do not borrow from the existing visual setting and are industrial in visual character. Boats that require such storage will be kept in hard stand storage racks.	MBHL	During operation

Operation			
Performance Criteria	**Management and Mitigation Measures**	**Resource / responsibility**	**Timing**
	Should the construction of the offshore reef be necessary once the Safe Harbour is in operation, detail design will consider visual implications and strategies to achieve visual integration with the existing reef in this location, such as the use of natural materials that occur within the visual setting, use of irregular sized rocks above high water mark and irregular filling of the top gabion cage.	MPSC	During operation
Noise			
Maintain compliance with noise criteria during construction and operation	Maintenance work performed on boats in the proposed Safe Harbour will be limited to daytime only.	MBHL	During operation
	A point of contact and phone number for complaints and enquiries will be made available	MBHL	During operation
	Compliance with Noise Limits defined by the EPA Noise Policy No N-1 will be monitored regularly. A periodic evaluation of the noise level at the nearest residential boundary will be undertaken in order to check the performance of management measures and if necessary the implementation of new measures.	MBHL	During operation
Energy and Greenhouse Gases			
Minimise greenhouse gas emissions	Signage will be placed in the Mornington Yacht Club encouraging members to use biodiesel and to ensure regular servicing of their boats to minimise greenhouse gas emissions.	MBHL	Prior to operation
	Energy efficient equipment and lighting will be used where feasible and practical.	MBHL	Prior to operation
	Electricity consumption will be monitored by maintaining records of monthly electricity use to identify any changes in electricity and help reduce operating costs.	MBHL	During operation

Operation			
Performance Criteria	**Management and Mitigation Measures**	**Resource / responsibility**	**Timing**
	Consideration will be given to purchasing green power or carbon offsets to reduce emissions or offset their impact where feasible and practical.	MBHL	During operation
	Measures to reduce direct and indirect greenhouse gas emissions arising from the operation of the Safe Harbour will be built into the operational Environmental Management Plan wherever feasible and practical.	MBHL	During operation
	MBHL will advise the fuel provider to investigate all potential options to ensure that fuel supplied at the refuelling facility has the lowest possible greenhouse gas emissions including biodiesel blend fuels where feasible and practical	MBHL	During operation
Stormwater			
To minimise as far as practical, adverse impacts on water quality	All hazardous materials (oils, fuels and chemicals) which are required to be located on site will be stored on a bunded impervious base which can contain 110% of the volume of all stored substances to prevent soil and stormwater contamination from chemical spills. The bund will be constructed in accordance with EPA Publication 347 Bunding Guidelines and where possible, located at least 50 metres from the water's edge. It will be checked regularly for cracks and leaks.	MBHL	Prior to and during operation
	Potential pollution of stormwater from boat cleaning, maintenance, repair and refuelling within the hardstand areas will be minimised through the appropriate design of drainage systems, diversion of stormwater from working areas through the use of drains and bunds and use of stormwater pits.	MBHL - Design team	Prior to and during operation
	Refuelling and wash-down areas will be appropriately bunded in accordance with EPA Publication 347 Bunding Guidelines to contain any spills or leakage and runoff.	MBHL	During operation

Operation			
Performance Criteria	**Management and Mitigation Measures**	**Resource / responsibility**	**Timing**
	Contamination booms, spill kits and absorption materials (as appropriate) will be maintained on site to contain and recover any inadvertent spillage of fuels or chemicals.	MBHL	During operation
	Stormwater will be diverted from working areas through the use of drains and bunds to the proposed triple interceptor pit, discharging to the sewage system to avoid any potential pollution of stormwater from chemicals associated with maintenance within the hardstand areas.	MBHL	During operation
	To ensure that drainage management measures and sediment control structures are operating at maximum efficiency, they will be inspected and maintained on a regular basis and after significant rainfall events. All drains will be regularly cleaned to remove silt, leaf litter and rubbish.	MBHL	During operation
Public Safety			
Avoid significant risks to public health and safety	A Traffic Management Plan will be developed and implemented which includes strategies for reducing parking demand including, the establishment of a shuttle bus service for Yacht Club members to use on yachting race days.	MBHL in consultation with MPSC	Prior to and during operation
	Adequate fairways (approximately 35m) will be maintained in the Harbour for the range of public boating and other recreational users	MBHL	Prior to and during operation
	A Safe Harbour Operation Plan will be developed and implemented to outline procedures relating to the use and operation of the Harbour.	MBHL	Prior to and during operation
	A suitably qualified Marina Manager (i.e. someone who has completed marina management training through the Marina Industry Association of Australia) will be appointed.	MBHL	Prior to and during operation

Operation			
Performance Criteria	**Management and Mitigation Measures**	**Resource / responsibility**	**Timing**
	Appropriate signage will be provided throughout the safe harbour and around the refuelling facility.	MBHL	Prior to and during operation
	Appropriate signage on safe boating practices (e.g. speed limit, emergency procedures) and warnings for swimmers and kayakers will be installed and maintained.	MBHL	Prior to and during operation
	Details on safe boating procedures will be displayed on public websites (e.g. Parks Victoria website) and outside of the Marina Manager's office.	MBHL in consultation with Parks Victoria	Prior to and during operation
	A Beach Management Plan will be developed and implemented. This will specify that all works are to be undertaken during the daytime period and temporary signage will be erected during any such works.	MBHL in consultation with MPSC	Prior to and during operation
	An Environmental Management Plan will be developed and implemented for the operation of the Safe Harbour that is consistent with EPA Guidelines for Cleaner Marinas (Publication No. 624).	MBHL	Prior to and during operation
	A Site Safety Plan will be developed and implemented.	MBHL	Prior to and during operation
	An appropriate bunding / enclosure will be installed around the re-fuelling facility in accordance with EPA Publication 347 Bunding Guidelines.	MBHL	Prior to operation
	Adequate lighting and railings will be provided along the harbour wavescreen, new public jetty and pier extension and barriers will be placed at the end of the harbour wavescreen and pier extension to prevent falls.	MBHL	Prior to operation

Operation			
Performance Criteria	**Management and Mitigation Measures**	**Resource / responsibility**	**Timing**
	Fairway markers will be installed to guide boats away within the harbour	MBHL	Prior to operation
	Consideration will be given to the use of buoys to mark the reef as far as practical and feasible.	MBHL	Prior to operation
Social			
Ensure that the proposed development achieves a net community benefit	Enhanced vehicle and pedestrian access will be provided to and within the harbour including public access along the wavescreen, pier and jetties. Access to the harbour by the general public will be maintained through the provision of swing moorings and fore and aft moorings as occurs currently, as well as provision of some additional lower cost yacht storage and access to short term lease pens.	MBHL	Prior to and during operation
	Pump out facilities will be installed to discourage direct discharge from boats into the sea while in the harbour and education programmes for visitor yachts will be developed.	MBHL	Prior to and during operation
	Ongoing monitoring of nearby beaches will be undertaken to study impacts to local beaches. Sand will be transported back to the existing alignment yearly, as required, to assist in managing impacts.	MBHL	During operation
	Should an offshore reef be used as a mitigation measure, consultation will occur with directly affected users such as the sea scouts, school groups and other formal users to ensure that their needs are taken into account.	MBHL	During operation