#### REFERRAL OF A PROJECT FOR A DECISION ON THE NEED FOR ASSESSMENT UNDER THE ENVIRONMENT EFFECTS ACT 1978

### **REFERRAL FORM**

The *Environment Effects Act 1978* provides that where proposed works may have a significant effect on the environment, either a proponent or a decision-maker may refer these works (or project) to the Minister for Planning for advice as to whether an Environment Effects Statement (EES) is required.

This Referral Form is designed to assist in the provision of relevant information in accordance with the *Ministerial Guidelines for assessment of environmental effects under the Environment Effects Act 1978* (Seventh Edition, 2006). Where a decision-maker is referring a project, they should complete a Referral Form to the best of their ability, recognising that further information may need to be obtained from the proponent.

# It will generally be useful for a proponent to discuss the preparation of a Referral with the Department of Planning and Community Development (DPCD) before submitting the Referral.

If a proponent believes that effective measures to address environmental risks are available, sufficient information could be provided in the Referral to substantiate this view. In contrast, if a proponent considers that further detailed environmental studies will be needed as part of project investigations, a more general description of potential effects and possible mitigation measures in the Referral may suffice.

#### In completing a Referral Form, the following should occur:

- Mark relevant boxes by changing the font colour of the 'cross' to black and provide additional information and explanation where requested.
- As a minimum, a brief response should be provided for each item in the Referral Form, with a more detailed response provided where the item is of particular relevance. Cross-references to sections or pages in supporting documents should also be provided. Information need only be provided once in the Referral Form, although relevant cross-referencing should be included.
- Responses should honestly reflect the potential for adverse environmental effects. A Referral will only be accepted for processing once DPCD is satisfied that it has been completed appropriately.
- Potentially significant effects should be described in sufficient detail for a reasonable conclusion to be drawn on whether the project could pose a significant risk to environmental assets. Responses should include:
  - a brief description of potential changes or risks to environmental assets resulting from the project;
  - available information on the likelihood and significance of such changes;
  - the sources and accuracy of this information, and associated uncertainties.
- Any attachments, maps and supporting reports should be provided in a secure folder with the Referral Form.
- A CD or DVD copy of all documents will be needed, especially if the size of electronic documents may cause email difficulties. Individual documents should not exceed 2MB.

- A completed form would normally be between 15 and 30 pages in length. Responses should not be constrained by the size of the text boxes provided. Text boxes should be extended to allow for an appropriate level of detail.
- The form should be completed in MS Word and not handwritten.

The party referring a project should submit a covering letter to the Minister for Planning together with a completed Referral Form, attaching supporting reports and other information that may be relevant. This should be sent to:

#### Postal address

#### **Couriers**

Minister for PlanningMinPO Box 500LetEAST MELBOURNE VIC 3002EA

Minister for Planning Level 17, 8 Nicholson Street EAST MELBOURNE VIC 3002

In addition to the submission of the hardcopy to the Minister, separate submission of an electronic copy of the Referral via email to <u>ees.referrals@dpcd.vic.gov.au</u> is encouraged. This will assist the timely processing of a referral.

#### PART 1 PROPONENT DETAILS, PROJECT DESCRIPTION & LOCATION

Name of Proponent:	Blairgowrie Yacht Squadron Inc.	
Authorised person for proponent:	Ms Jenni Maclean	
Position:	Acting Commodore	
Postal address:	PO Box 13, Blairgowrie,3942	
Email address:	jmaclean@australand.com.au	
Phone number:	0411 640 982	
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Person who prepared Referral:	Mandy Elliott	
Position:	Principal Environmental Scientist	
Organisation:	Landserv Environmental Services Pty Limited	
Postal address:	PO Box 1628, Geelong, Victoria	
Email address:	mandy.elliott@landserv.com.au	
Phone number:	03 5222 4173 m) 0417 940084	
Facsimile number:	03 5221 4173	
Available industry & environmental expertise: (areas of 'in-house' expertise & consultancy firms engaged for project)	The BYS have engaged Landserv Environmental Services (Landserv) to prepare the referral under the EE Act 1978. Landserv have expertise in Environmental impact assessment, environmental approvals, environmental management, and risk assessment.	
	The BYS have directly engaged the following technical specialists to provide professional advice and reports in preparation of this EE Act Referral:	
	Appendix A: Preliminary Marine Environmental Considerations (CEE, June 2010)	
	Appendix B: Coastal Assessment Report (SKM, Feb 2010)	
	Appendix C: Traffic and car parking assessment (Cardno Grogan Richards, July 2010)	
	Appendix D: Due Diligence Heritage Assessment (SKM, June 2010)	

#### 1. Information on proponent and person making Referral

#### 2. Project - brief outline

#### Project title: Blairgowrie Safe Boat Harbour Reconfiguration Project

## Project location: (describe location with AMG coordinates and attach A4/A3 map(s) showing project site or investigation area, as well as its regional and local context)

The Blairgowrie Yacht Squadron (BYS), located on the shores of Port Phillip, has a strong membership including many Peninsula residents and currently has 1243 members. The BYS is conveniently located at the southern end of Port Phillip and is between Martha Cove (20km east) and Queenscliff (15km west). As a result, the Blairgowrie Safe Boat Harbour plays an important role in providing a network of safe harbours for southern Port Phillip.

The location of the BYS is: Foreshore Blairgowrie VIC 3942

Contact number: ph: (03) 5988 8453

As described in the *Proposed Safe Harbour Blairgowrie Yacht Squadron EES Inquiry/Panel report* (1999) 'the immediate landward context of the site is a residential street pattern with elevated dwellings off The Loop (the former Coastal arterial road) being the dominant feature of the site. The BYS contrastingly is largely screened from passing traffic along Point Nepean Road because it is well below the elevation of the road with the exception of a clear vista gained from the top public car park' (p.4).

A local shopping centre is located some 500 metres to the east of the highway entrance to the BYS. A site layout plan is attached as **Figure 1** and the safe harbour reconfiguration concept plan is presented as **Figure 2**.

Short project description (few sentences):

The BYS wish to reconfigure the existing Blairgowrie Safe Boat Harbour, as well as its land based infrastructure including the slipway, winch house and gantry crane. Specifically, the BYS propose to reconfigure the existing safe boat harbour which currently has 170 berths to accommodate the following:

- create 110 additional wet berths and upgrade of 35 visitor marina berths;
- extend the existing wave wall to the west by 151m and then a further 75m angled towards the shore;
- remove the existing wave attenuator (which is not effective);
- replace the existing slipway, winch house and gantry crane with travel lift infrastructure; and
- create a new hard standing area for boats.

#### 3. Project description

The proposed reconfiguration of the Blairgowrie Safe Boat Harbour is to include an increase of 110 additional berths. The project involves an extension of the existing wave wall to the west and the removal of the existing wave attenuator (which has not adequately worked to protect the harbour from strong north or north-westerly winds). Revenue raised by granting licences to the additional berth licensees will mean that the proposed safe boat harbour reconfiguration and associated works outlined below will be self funding.

More specifically, the proposal includes:

- Construction of 110 new permanent and upgrade of 35 visitor marina berths of similar design to the existing marina (concrete decked floating pontoon arms secured with steel tube piles).
- Extension of the main wave screen (steel tube piles and concrete panels) 151m westwards and then a further 75m angled towards the shore;
- Construction of a smaller fixed wave screen (with either timber or steel panels) 75m in length at the western entrance to the harbour;
- Construction of a hard stand area (platform with a concrete slab deck, steel pile tubes and two small lift out cranes in the north west corner and western end) of approximately 35m x 40m off the western side of the existing jetty;
- Construction of a new straddle carrier track (solid deck with dual concrete tracks, tie beams and steel tube piles) approximately 190m in length off the western side of the existing jetty (replaces existing slipway facility);
- Installation of navigation aids one near the marina entry and two on the western wave screen; and
- Installation of rock or mat scour protection on the seabed under the existing and new wave screens.

The Blairgowrie Safe Boat Harbour reconfiguration project is focused on creating an attractive and welcoming multipurpose facility that can cater for current and future member's needs whist at the same time retaining the club's culture and history. Demand for the wet berths from existing members has been overwhelming.

The landside works will be minimal in relation to this project. The only works landside will be the removal of the existing gantry crane and small winch house.

Background/rationale of project (describe the context / basis for the proposal, eg. for siting):

The BYS was established and has held a lease in its current location since 1952. The existing safe boat harbour is a 170 berth floating marina which was completed in December 2001 in accordance with a previous EES and planning permit. The BYS offers a unique and beautiful environment for sailing, boating and beach activities at the southern end of Port Phillip. The BYS offers a wide range of harbour and club facilities for boating enthusiasts, including hosting of state, national and international sailing events, sail training and social program. The BYS's mission statement is: *Blairgowrie Yacht Squadron fosters a progressive, friendly yacht club that brings together families, friends and community to promote all aspects of yachting and associated social activities in a safe and ecologically sustainable environment.* 

In certain weather conditions, namely moderate to strong winds from a north or north westerly direction, sea water surges through the north western end of the safe boat harbour cause unsafe conditions in the western part of the safe harbour, extensive damage to moored craft and to the safe harbour itself Wear and tear on the safe harbour has been far more extensive than predicted.

Boating safety at the southern end of Port Phillip will be greatly enhanced by this proposal. In addition, its capacity to offer secure permanent all weather berthing facilities will be significantly increased from 170 berths at present, to 280 berths. Further, its capacity to offer temporary safe berthing space to visiting yachts participating in yachting events, or boats in trouble, will be significantly increased as the western end of the safe harbour will become what it currently is not,

namely an all weather safe haven. The BYS currently provides permanent berthing facilities for the Southern Peninsula Rescue Service and also offers to provide facilities for the Victoria Water Police as required.

The objectives and key rationale for the Blairgowrie Safe Boat Harbour reconfiguration project are to:

- Expand the existing safe boat harbour with creation of 110 additional berths, replace the existing slipway, winch house and gantry crane with travel lift infrastructure, create a new hard standing area for boats, other improvements; and
- Overcome a major design defect in the wave attenuator at the north west end of the harbour.

Specifically, key rationale for the reconfiguration is to:

- Increase berthing capacity in accordance with community need;
- Render the safe boat harbour more robust so as to secure its existence into the future;
- Provide a higher level of protection to vessels as a safe boat harbour;
- Overcome a major design defect in the wave attenuator at the north west end of the harbour; and
- Make better provision for funding of periodical maintenance, repair and replacement of harbour components.

State and local government policy and strategies exist that support Blairgowrie as a safe boat harbour. Particularly:

#### Boating Coastal Action Plan 2007

The Boating Coastal Action Plan 2007 (BCAP) is used as a strategic tool to provide a vision for the future use and improvement of the boating network within the Central Coast Region and is a relevant policy document for the Blairgowrie Safe Boat Harbour reconfiguration proposal. The Blairgowrie Safe Boat Harbour reconfiguration proposal is noted in the BCAP and describes Blairgowrie as providing 'some haven for boats in bad weather. The facility includes a 300 metre public jetty. The planning process has commenced for improvements to this facility. This facility provides the only safe harbour between Mt Martha and Portsea' (p84 BCAP). The following is an evaluation undertaken by the BYS of its reconfiguration proposal against some principles within the BCAP.

#### Theme 1: Network of Boating Facilities; Guiding Principles (p22B-CAP)

A safe and sustainable network of boating facilities will be established, with each facility providing a level of service appropriate to its role in the boating hierarchy and providing equitable access both now and into the future.

Appropriate levels of service will be delivered through an integrated approach to onshore and offshore components of facilities.

The location and design of facilities must consider marine and terrestrial issues.

The Proposal is consistent with these principles. In particular, the proposal will secure the safe harbour reconfiguration as a "District Boating Facility" well into the future. Importantly, it will elevate it to the upper level of District Boating Facilities (table 2 p.26 B-CAP) by enabling it to offer safe harbour to craft drawing 3 metres or less in all conditions. At present, BYS cannot guarantee a safe haven in strong wind conditions from the north or north west. In these conditions, the visitor berthing locations at the west end of the marina cannot be used.

#### Theme 2: Sustainable Development; Guiding Principles and Policies

The Proposal complies with each of these Principles and Policies set out in B-CAP where applicable, as discussed above.

#### Theme 3: Boating Safety & Standards; Guiding Principles and Policies

A significant driver for the Proposal is the need to improve personal safety and minimize damage to boats at Blairgowrie. The Proposal will remove to the extent possible the impact of dangerous conditions in the safe boat harbour currently caused by inadequate protection in strong northerly wind conditions.

#### Theme 4: Balancing Demand for Coastal Space; Guiding Principles and Policies

The Proposal will not impact on coastal land and so complies with this principle. The Proposal complies with these policies in so far as they apply; indeed the proposed upgrade is an example of an efficient use of existing infrastructure as specifically advocated by these policies.

#### Theme 5: Accessibility & Equity; Guiding Principles and Policies

The Proposal will specifically provide for visiting boats as does the current marina. The key difference will be that visiting boats will be able to use the facility in all conditions.

#### Theme 6: Management; Guiding Principles and Policies

The BYS has always employed a full time marina manager and will continue to do so. The BYS's marina manager is specifically instructed to act in accordance with detailed operating procedures including an environmental management plan prepared specifically for BYS' operations.

#### Theme 7: Maintenance; Guiding Principles and Policies

BYS accepts all of these principles and policies and will comply.

#### Theme 8: Investment Priority; Guiding Principles and Policies

There will not be any need for public investment in the Proposal. Nevertheless BYS understands the need for public access and the Proposal provides for it.

#### Guiding Principles and Policies (Part 111)(p55)

Mornington Boating Area. Area 7(p84)

Blairgowrie Safe Boat Harbour is designated as a District Facility and is located within the Mornington Boating Area. Blairgowrie Safe Boat Harbour is recognised at p84 of the BCAP as providing "...safe haven for boats in bad weather" and as being "...the only safe harbour between Mt Martha and Portsea." While we would suggest the nearest safe harbour to the west is Queenscliff not Portsea, the importance of Blairgowrie Safe Boat Harbour in the boating network is well recognised.

BCAP further recognises the anticipated future population growth across the entire Boating Area and as a result, the likely need to develop future District or even Regional facilities at both Rosebud and Sorrento, in addition to a new safe harbour at Rye.

#### Mornington Goal

To provide a diverse range of recreational boating facilities that are safe and effectively provide for seasonal use.

#### Relevant Mornington Policies

A7.3 The existing yacht clubs and ramps other than at Mornington will be retained and maintained at their existing service level or improved to meet Australian Standards, unless otherwise requiring decommissioning.

A7.5 The placing of swing moorings and safe harbours must be considered at existing facilities before the development of new sites.

The proposed Blairgowrie Safe Boat Harbour reconfiguration project is consistent with the Mornington Goal and with the above BCAP Policies.

**Main components of the project** (nature, siting & approx. dimensions; attach A4/A3 plan(s) of site layout if available):

The main components of the proposed safe harbour reconfiguration are:

- create 110 additional wet berths and upgrade of 35 visitor marina berths;
- extend the existing wave wall to the west by 151m and then a further 75m angled towards the shore;
- replace the existing slipway, winch house and gantry crane with travel lift infrastructure;
- create a new hard standing area for boats; and
- remove the existing wave attenuator (which is not effective).

Refer to Figure 1 Concept plan. Given that the design is currently at a Concept Plan level, much of the detail of the design is yet to be finalised and will be detailed during the planning scheme amendment stage of the development approvals process.

Aim/objectives of the project (what is its purpose / intended to achieve?):

The purpose of the proposal is to:

- Create 110 additional berths, replace the existing slipway, winch house and gantry crane with travel lift infrastructure, create a new hardstanding area for boats;
- Overcome a major design defect in the wave attenuator at the north west end of the harbour;
- Render the Blairgowrie Safe Boat Harbour more robust so as to secure its existence into the future;
- Provide a higher level of protection to vessels as a safe boat harbour;
- Increase its berthing capacity in accordance with community need; and
- Assist in funding improvements to the slipway infrastructure

**Ancillary components of the project** (eg. upgraded access roads, new high-pressure gas pipeline; off-site resource processing):

There are no ancillary components of the project.

#### Key construction activities:

The proposed reconfiguration primarily consists of the following activities:

- construction of an extended wave wall;
- removal of the existing wave attenuator;
- construction of floating berthing components;
- construction of a new travel lift facility;
- creation of a new hardstand area for boats;

No works are proposed to occur to the existing access road into the site.

#### Key operational activities:

Key operational activities will not vary from the existing operational activities of the BYS.

Existing operational activities include:

- Yacht racing and yacht and power boat recreational cruising activities;
- Sail training for BYS members and the wider community;
- Sailability program for members of the public with a disability;
- Boat launching and retrieval facility;
- Boat wash down facility;
- Boat storage for keelboats and off the beach dinghies; and
- Clubhouse facility for members and guests, and community groups and organisations.

#### Key decommissioning activities (if applicable):

Not applicable.

#### Is the project an element or stage in a larger project?

**X** No **X** Yes If yes, please describe: the overall project strategy for delivery of all stages and components; the concept design for the overall project; and the intended scheduling of the design and development of project stages).

Is the project related to any other past, current or mooted proposals in the region?

 $\times$  No  $\times$ Yes If yes, please identify related proposals.

The BYS publicly proposed a safe harbour in January 1998 when the BYS Inc. wrote to the then Minister for Planning asking whether an EES was required. The former Minister decided in May 1998 that the previous safe boat harbour development would be subject to an EES, as well as requiring a planning permit. The 1998 safe harbour development included both a primary and secondary Wave Attenuator, a new 350m concrete public access jetty, permanent floating berths (162) for a range of different boat sizes, 60 temporary public berths for visiting boats. Landside arrangements include improved access for vehicles and increased and reorganised parking that would serve the expanded facility.

A Panel/Inquiry report was issued in August 1999, the Ministers Assessment under the Environment Effects Act 1978 (EE Act) released in December 1999 and the planning permit issued in November 2000. The Blairgowrie Safe Boat Harbour was completed in 2001. It has short and long term permanent berths and capacity for visiting boats.

The BYS is planning to redevelop the existing clubhouse, however this is not a part of the current proposal.

#### 4. Project alternatives

**Brief description of key alternatives considered to date** (eg. locational, scale or design alternatives. If relevant, attach A4/A3 plans):

A number of design alternatives were considered during the pre-planning and feasibility process, which has lead to the current safe boat harbour reconfiguration concept.

Two alternative proposals were considered and dismissed:

- a. northern extension proposal.
- b. eastern extension proposal.

The northern extension proposal involved extending the current jetty to the north by approximately 60 metres and either relocating the current wave wall and wave attenuator, or building an additional wave wall approximately 60 metres to the north with a wrap around on the west side. Because of the extra depth involved, the extra cost of construction of this proposal rendered it uneconomic. Initial estimates indicated a capital cost of \$27M for the northern extension against \$14.8M for the current Proposal.

The eastern extension proposal involved replication of the existing finger arrangement on the east side of the jetty. This proposal was rejected by BYS members because it failed to address the west end problems, and it would necessarily inhibit current off-the-beach sailing activities, visual amenity and safety to children. These activities are vital to the BYS representing the hub of BYS young family activities. This proposal would also necessarily prevent public access to the east side of the current jetty.

The Proposal will not interfere with surrounding land uses either during construction or upon completion as it will be managed from within the current BYS site.

BYS is satisfied the Proposal represents the best practicable option.

Brief description of key alternatives to be further investigated (if known):

No further alternatives are proposed to be investigated.

#### 5. Proposed exclusions

Statement of reasons for the proposed exclusion of any ancillary activities or further project stages from the scope of the project for assessment:

Not Applicable

#### 6. Project implementation

Implementing organisation (ultimately responsible for project, ie. not contractor):

The implementation organisation is the Blairgowrie Yacht Squadron Inc.

Implementation timeframe:

It is proposed that environmental assessment outcomes (EE Act decision) will occur in Sept/Oct 2010. The BYS propose to obtain planning and environmental approvals by early 2011 and begin construction in mid 2011.

**Proposed staging** (if applicable):

The project will be constructed as one project, not staged.

#### 7. Description of proposed site or area of investigation

#### Has a preferred site for the project been selected?

No XYes If no, please describe area for investigation. If yes, please describe the preferred site in the next items (if practicable).

**General description of preferred site**, (including aspects such as topography/landform, soil types/degradation, drainage/ waterways, native/exotic vegetation cover, physical features, built structures, road frontages; attach ground-level photographs of site, as well as A4/A3 aerial/satellite image(s) and/or map(s) of site & surrounds, showing project footprint):

The Blairgowrie Yacht Squadron (BYS), located on the shores of Port Phillip, has a strong membership including many Peninsula residents and currently has 1243 members. The BYS is conveniently located at the southern end of Port Phillip and is between Martha Cove (20km east) and Queenscliff (15km west). The BYS is approximately 63km south-south west of Melbourne. As a result, the Blairgowrie Safe Boat Harbour plays an important role in providing a network of safe harbours for southern Port Phillip.

The yacht squadron clubhouse, storage area, and seabed on which the jetty and safe boat harbour are constructed are on Crown land and leased from the Crown under the *Crown Land* (*Reserves*) Act 1978.

As described in the *Proposed Safe Harbour Blairgowrie Yacht Squadron EES Inquiry/Panel report* (1999) 'the immediate landward context of the site is a residential street pattern with elevated dwellings off The Loop (the former Coastal arterial road) being the dominant feature of the site. The BYS contrastingly is largely screened from passing traffic along Pt Nepean Highway because it is well below the elevation of the road with the exception of a clear vista gained from the top public car park' (p.4).

The existing harbour has patches of seagrass which monitoring during the past decade has indicated that the seagrass has colonized since the construction of the existing safe harbour. There are limited seagrass areas within the proposed area of wave wall extension.

Site area (if known):

Additional water space will be required increasing the current sea floor leasehold area of approximately 27,000 square metres by approximately 11,000 square metres.

Route length (for linear infrastructure) .....NA..... (km) and width .....NA.... (m)

#### Current land use and development:

The site is currently used as a safe boat harbour and for recreational (beach) purposes. The current safe boat harbour is a 170 berth floating marina in the waters off the Blairgowrie Yacht Squadron.

**Description of local setting** (eg. adjoining land uses, road access, infrastructure, proximity to residences & urban centres):

The township of Blairgowrie is located near the western tip of the Mornington Peninsula, between Sorrento and Rye, and is one of many popular holiday destinations for Melburnians along this narrow peninsula strip. It is bordered on the north by Port Phillip and on the south by Bass Strait and a series of surf beaches interspersed with spectacular cliffs and rocky ledges. It is very popular with tourists over the summer months. The land use surrounding the existing harbour is zoned public reserve and conservation. The Blairgowrie beach/foreshore is used by residents and tourists throughout the year for recreational and boating activities.

The closest resident is on the opposite side of Pt Nepean Road, which runs parallel to the BYS site.

Planning context (eg. strategic planning, zoning & overlays, management plans):

Zones and Overlays: BYS currently operates within a public purpose recreation zone (PPRZ) and is surrounded by a public conservation reserve zone (PCRZ). For BYS to extend beyond the existing PPRZ, a rezoning will be required to allow for the safe harbor reconfiguration. The reconfiguration will also require a planning permit. Landserv has confirmed with both the Mornington Peninsula Shire Council and DPCD (State Planning Services), that both a planning scheme amendment and a permit are required if the proposed reconfiguration intends to extend beyond the PPRZ boundary. The site also has an Environmental Significance Overlay (ESO25) which reflects the importance of 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". Schedule 25 to the ESO, Mornington Planning Scheme.

#### Local government area(s):

The proposed Blairgowrie Safe Boat Harbour reconfiguration project is within the Mornington Peninsula Shire Council.

#### 8. Existing environment

**Overview of key environmental assets/sensitivities in project area and vicinity** (cf. general description of project site/study area under section 7):

The key environmental assets/sensitivities in the project area are the marine environment (ecology and coastal processes). Some cultural heritage exists, however no cultural heritage has been located within the proposed safe boat harbour reconfiguration area.

The <u>marine environment</u> in the vicinity of the present and proposed extension to the Blairgowrie harbour is characterised by:

- Generally clear water with regular flushing by tidal currents;
- Sandy and shelly seabed with complex nearshore sandbars that are strongly influenced by wind generated waves from the north;
- Intertidal and subtidal seagrass beds that undergo substantial changes in abundance and distribution; and
- Water depth ranging from the shore to 4.5 m to 5 m below chart datum at the outer wave screen approximately 330 m offshore (CEE p2 Appendix A).

Prior to installation of the existing Blairgowrie Safe Boat Harbour, the marine ecosystem offshore from the Blairgowrie Yacht Squadron was characterised by wave affected sandy seabed, some cunjevoi and intertidal and subtidal seagrass beds. The installation of the wave screen and other harbour infrastructure protected some of the soft seabed from wave action and provided artificial hard habitat for reef biota to colonise, grow and inhabit. Hence the present marine ecosystem can be described in terms of three predominant habitats:

- Seagrass beds;
- Soft sediment habitat; and
- Artificial hard habitat.

<u>Seagrass</u> in Camerons Bight is sparse and mostly distributed to the east of the harbour. Periodical monitoring of the safe harbour seagrass from prior to construction of the existing safe

harbour to the present day, demonstrates that growth of seagrass has improved since construction of the safe harbour was completed in 2001. The seagrass is *Heterozostera tasmanica* and the beds of seagrass extend from the 2 metre depth contour to approximately 5 metre depth contour. A consequence of construction of the existing safe boat harbour in 2001 was the removal of approximately 60 swing moorings in the vicinity of the development which lead to an enhancement of the seagrass beds.

Seagrass remaining outside the harbour is sparse and patchy. It is apparent that the existing harbour provides a more suitable environment for subtidal seagrass than the surrounding unprotected seabed. Subtidal seagrass and associated fish and invertebrates have become more common within the harbour than in Camerons Bight west of the harbour.

Overall, the marine environment report concluded that there is little impact on the biota of the seabed. Particularly:

- Most of the soft seabed habitat in Camerons Bight is unvegetated.
- The sediments comprise fine to medium sands with variable fractions of shell.
- The sediments outside the influence of the harbour wave screen are affected by wave action and scraping of swing moorings.
- Biota on seabed outside the harbour are very sparse.
- Unvegetated seabed inside the harbour is characterised by the mounds of burrowing invertebrates

The <u>water quality</u> of the existing safe boat harbour is of good quality. Blairgowrie beach is a popular, safe swimming beach. The Yacht Squadron provides facilities for beach launched vessels in addition to the harbour facilities for larger vessels offshore. The beaches inshore of the harbour are available to the public for swimming. Water quality with respect to bacterial levels at Blairgrowrie Beach is very good with acceptable water quality for bathing over the past six years (EPA Publication 1297 November 2009 and Beach Report for Blairgowrie 2010). It is not expected that the proposed extension of the harbour will affect water quality on the adjacent bathing beaches or within the harbour.

In terms of <u>cultural heritage</u>, there are five registered cultural (Aboriginal) heritage places (all shell middens) listed within a 1 km radius of the Blairgowrie Safe Boat Harbour reconfiguration area. The closest shell deposit is located approximately 200 m west of the activity area and there are no Aboriginal Places located within the actual project area. There are no heritage (non-Aboriginal) sites located within the Blairgowrie Safe Boat Harbour reconfiguration area although there are two properties listed on the Victorian Heritage database located within 1 km – these being Blairgowrie House (HO29) and the Collins Settlement site (H1050) which is also listed on the Victorian Heritage Inventory (H7821-0001).

In regards to the existing social context, residents exist within a short distance from the existing safe harbour (approximately 300 metres). The existing visual landscape is mostly obstructed by the vegetation on the tops of the foreshore from these nearby residences; however there are some breaks in vegetation which may provide views to parts of the existing safe boat harbour.

#### 9. Land availability and control

#### Is the proposal on, or partly on, Crown land?

 $\times$  No XYes If yes, please provide details.

The yacht squadron clubhouse, storage area, and seabed on which the jetty and safe boat harbour are constructed are on Crown land and leased from the Crown under the Crown Land (Reserves) Act 1978. The existing lease is a 21 year lease that commenced in 2001.

A new 21 year lease will need to be sought for the existing BYS and Safe Boat harbour facilities and the reconfigured area. The BYS has commenced discussion with DSE for a new lease.

Current land tenure (provide plan, if practicable):

As described above, the current area is leased from DSE and a new lease agreement would be required.

The land manager of the coastal foreshore area is the Whitecliff's to Cameron's Bight Committee of Management.

**Intended land tenure** (tenure over or access to project land): As described above

Other interests in affected land (eg. easements, native title claims):

The BYS has an existing Indigenous Land Use Agreement with the Boonerwrung people for the Blairgowrie Safe Boat Harbour.

The Whitecliff to Cameron's Bight Foreshore Committee of Management is the committee of management under the lease (as landlord) appointed by the Minister.

#### 10. Required approvals

State and Commonwealth approvals required for project components (if known):

State:

- Planning scheme amendment and permit required under the *Planning and Environment Act 1987* – Landserv has confirmed with the Mornington Peninsula Shire Council and DPCD (State Planning Services) that the project requires a planning scheme amendment (if the project extends beyond the current PPRZ) and a permit;
- Consent under the *Coastal Management Act 1995* is required for development on coastal crown land and therefore required for the Blairgowrie Safe Boat Harbour reconfiguration project. In deciding whether to grant consent for the project, various matters need to be considered such as the *Victorian Coastal Strategy* and the *Boating Coastal Action Plan*; and
- A Cultural Heritage Management Plan (CHMP) under the *Aboriginal Heritage Act 2006* is required because the proposal is deemed to be a 'high impact activity' according to Regulation 43(1b)(xviii).

#### Commonwealth:

There are no Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) listed or migratory species within the existing safe harbour or extension area, however species listed under the EPBC Act do occur in the broader Port Phillip Bay area. Potential impacts on such species from the BYS safe boat harbour redevelopment are unlikely as impacts from the project (e.g. noise from piling and minor disturbance of sea floor sediment during construction) would be localised, short term and minor.

#### Have any applications for approval been lodged?

 $\mathbf{X}$  No  $\mathbf{X}$ Yes If yes, please provide details.

Approval agency consultation (agencies with whom the proposal has been discussed):

The proposal has been discussed with the Mornington Peninsula Shire Council, DSE, DPCD, and Parks Victoria. Over the past 2 years, a number of meetings with government agencies have occurred to discuss the project and to advance the planning and environmental approvals. The BYS have ongoing meetings and discussions with the DSE regarding the beach renourishment program. The Whitecliff's to Cameron's Bight Foreshore Committee of Management have also been involved in some of these discussions.

#### Other agencies consulted:

The Whitecliff's to Cameron's Bight Foreshore Committee of Management, as well as the members of the BYS.

#### PART 2 POTENTIAL ENVIRONMENTAL EFFECTS

#### 11. Potentially significant environmental effects

**Overview of potentially significant environmental effects** (identify key potential effects and comment on their significance and likelihood, as well as key uncertainties):

The key potential effects of the Blairgowrie Safe Boat Harbour reconfiguration project are impacts to the marine environment, coastal processes (water quality, circulation and sand movement), and social / amenity impacts (such as potential increase in traffic and car parking during peak periods).

The potential impact of the Blairgowrie Safe Boat Harbour reconfiguration project on water quality and on coastal processes of the harbour, including water quality, sand transfer and sediment disturbance during construction is the most significant impact (although still a low risk with management measures in place) to the environment from the development proposal.

There are three marine ecosystems present within the safe harbour area. These are:

- seagrass beds;
- soft sediment habitat; and
- artificial hard habitat.

Although no seagrass is present within the proposed extension area, impacts to the existing habitats within the current safe harbour have been identified and will need to be minimised, especially during the construction of the wave wall and removal of the wave attenuator.

There are potential impacts from an increase in traffic and disruption to access during the construction of the reconfiguration project although such impacts are of a temporary nature. The project will not require additional car parking spaces and is not expected to generate significant new demand for car parking, because the additional berths will be mostly for existing members. Car parking is not considered to be an additional issue of concern for the proposed for the project. This is discussed in more detail in Section 15 of this referral document.

Discussions with VicRoads and the Mornington Peninsula Shire Council will be ongoing during the planning process and a traffic management plan will be finalised in consultation with those authorities. The landscape and visual impacts are not likely to be significant as the extension will be a continuation of the existing BYS safe harbour. Views from Point Nepean Road are still mostly through short breaks in dense vegetation, as discussed in the previous EES and Panel reports.

Although there are\_five registered cultural (Aboriginal) heritage places (all shell middens) listed within a 1 km radius of the Blairgowrie Safe Boat Harbour reconfiguration area, impacts on Aboriginal cultural heritage are not predicted to be significant. The closest shell deposit is located approximately 200 m west of the activity area and there are no Aboriginal Places located within the actual project area. A Cultural Heritage Management Plan will be prepared.

#### 12. Native vegetation, flora and fauna

#### Native vegetation

#### Flora and fauna

What investigations of flora and fauna in the project area have been done?

(provide overview here and attach details of method and results of any surveys for the project & describe their accuracy)

A preliminary Marine Ecological Assessment was undertaken by CEE in June 2010 which included an underwater site inspection. The assessment found that the shelter from waves and associated sand movement and scour provided by the existing breakwater (constructed in 2000) has provided an environment that is suitable for:

- seagrass to recolonise and grow; and
- filamentous brown algae to accumulate, colonise and grow.

These marine plants are very sparse on the seabed outside the harbour where:

- Waves disturb the seabed during strong northerly wind events and
- Boat mooring chains scour the seabed and remove these plants from the seabed in the swinging radius of the mooring chain.

Therefore, the seabed in the harbour provides a protected environment for establishment and maintenance of seagrass communities compared to the unprotected coastal environment outside the harbour and is predicted to continue to do so in an extended safe harbour reconfiguration.

Some areas the soft seabed outside the harbour in depths between 2 m and 5 m provide habitat for sparsely distributed burrowing invertebrates (infauna) such as echiuran worms, cunjevoi and fish such as flathead.

The construction of the extended wave wall and associated infrastructure will cause some disturbance to these habitats, although some disturbance will be short term and will not have a detrimental impact on the health of the seabed overall.

The nature of the works associated with the reconfiguration of the Blairgowrie Safe Boat Harbour will not interact with freshwater or oceanic environments. The water is too shallow for whales or, to a lesser extent, great white sharks to occur. Only one of the protected invertebrate species is likely to occur in the Blairgowrie region – the chiton *Bassethulia glypta*. This chiton has been recorded on rocks in sandy habitat in the Sorrento region. Chitons are a multiple plated limpet-like creature which requires rock for attachment. There is no natural rock in the area of the proposed harbour reconfiguration. It is unknown whether *Bassethulia glypta* attaches to artificial surfaces. A variety of seabirds including listed species may occur in the region and may roost on harbour structures from time to time. The effect of the development on listed seabirds is likely to be negligible.

Overall the potential for interaction between the harbour reconfiguration and FFG listed threatened marine species is likely to be negligible.

Marine mammals including the Australian fur seal (*Arctocephalus pusillus doriferus*) and bottlenose dolphins (*Tursiops truncatus*) as well as little penguins (*Eudyptula minor*) occur in the area of BYS from time to time. The proposed reconfiguration of the safe harbour is unlikely to affect these animals which have been observed nearby the existing facility and, in the case of fur seals and penguins, within the boundaries of the harbour. It is possible that underwater noise from pile driving may affect these underwater animals during the construction activity. Hence it is proposed that the following actions be included in the CEMP to mitigate potential effects on marine mammals and penguins:

- Observation for whales, dolphins, seals and penguins prior to commencement of pile driving delay activity if animals within 100 m of site; and
- "Soft start" of pile driving small increment (25 mm drop) driver impacts over first two minutes of pile driving.

Consequently, in terms of the potential impacts to flora and fauna found within the existing harbour and surrounds, the risks such as increased turbidity and sediment and piling noise during construction to marine flora and fauna would be minimal and short term. Significant impacts over the long term are not likely to occur.

The Marine Environmental Considerations report (CEE Consultants) is found in Appendix A.

Have any threatened or migratory species or listed communities been recorded from the local area?

- $\times$  NYD  $\times$  No  $\times$  Yes If yes, please:
- List species/communities recorded in recent surveys and/or past observations.
- Indicate which of these have been recorded from the project site or nearby.

Table 1 and 2 of the Marine Environmental Considerations report (Appendix A) details the species which may be present. As presented in these tables, there is no Flora and Fauna Guarantee Act listed marine species that are limited to or known to occur within the area of the proposed extension to the Blairgowrie safe boat harbour. However, the following listed species may be present in the surrounding area of Port Phillip Bay:

- Southern Right Whale
- Humpback Whale
- Caspian Tern
- Fairy Tern
- Gull-billed Tern
- Great White Shark

If known, what threatening processes affecting these species or communities may be exacerbated by the project? (eg. loss or fragmentation of habitats) Please describe briefly.

Construction: during the construction period, there may be some disturbance to marine biota and fish species, although with mitigation measures in place such impacts will be short term and minimal.

Are any threatened or migratory species, other species of conservation significance or listed communities potentially affected by the project?

- $\times$  NYD  $\times$  No  $\times$ Yes If yes, please:
- List these species/communities:
- Indicate which species or communities could be subject to a major or extensive impact (including the loss of a genetically important population of a species listed or nominated for listing) Comment on likelihood of effects and associated uncertainties, if practicable.

Only one of the protected invertebrate species is likely to occur in the Blairgowrie region – the chiton *Bassethulia glypta*. This chiton has been recorded on rocks in sandy habitat in the Sorrento region. Chitons are a multiple plated limpet-like creature which require rock for attachment. There is no natural rock in the area of the proposed harbour safe boat harbour reconfiguration. It is unknown whether *Bassethulia glypta* attaches to artificial surfaces.

Is mitigation of potential effects on indigenous flora and fauna proposed?

 $\times$  NYD  $\times$  No  $\times$  Yes If yes, please briefly describe.

Potential effects on indigenous flora and fauna will be managed in accordance with the CEMP. Ongoing monitoring of seagrass is expected to occur as part of the future planning permit.

Other information/comments? (eg. accuracy of information)

Seagrass has been monitored over a period of at least 10 years and the monitoring results have shown that recolonisation has occurred because of the protection the safe boat harbour provides, as well as the removal of swing moorings.

#### 13. Water environments

Will the project require significant volumes of fresh water (eg. > 1 Gl/yr)? NYD X No X Yes If yes, indicate approximate volume and likely source.

Will the project discharge waste water or runoff to water environments? × NYD × No × Yes If yes, specify types of discharges and which environments.

Are any waterways, wetlands, estuaries or marine environments likely to be affected? NYD No Yes If yes, specify which water environments, answer the following questions and attach any relevant details.

The coastal processes (sand movement, water quality) were previously assessed in the 1998 EES and have been monitored as set out in the Blairgowrie Yacht Squadron Inc and Blairgowrie Safe Boat Harbour Ltd Operational and Environmental Management and Sand Management Plans dated February 2002. As sediment transport (sand movement) was an issue raised in the previous EES and proposal, the planning permit called for ongoing monitoring of this issue. The previous EES had predicted a gross movement of 5000m<sup>3</sup> sand per annum and a net transport from west to east of 2600m<sup>3</sup> which predicted to result in a potential accumulation of 1,900m<sup>3</sup> per annum (SKM Feb 2010).

The measurements (taken between April 1999 and April 2009) states that the volume of sand accumulation is in the range of 1500 to 3000 m<sup>3</sup> per annum and that about 75% of the movement is from west to east and 25% is from east to west. The current reconfiguration (extending the wave wall) proposes that sand movement would not increase the annual amount of sand being accumulated behind it or increase the erosion on any of the neighbouring beaches (SKM Coastal Assessment p11). Therefore, it is unlikely that the safe harbour reconfiguration project will have a significant impact on coastal processes.

However, there will be a westerly movement of sand accumulation and erosion. SKM's Coastal Assessment report suggests that the extension of the wave wall will not increase the annual amount of sand being accumulated behind it or increase the erosion on any of the neighbouring beaches, however the wave wall extension would cause the existing erosion (which is concentrated near Stringer Road) to be moved further west. SKM predict that a westward shift of erosion is not expected to result in any increased risk to infrastructure, environmental or social assets.

Regular monitoring of the Blairgowrie Safe Boat Harbour waters in accordance with the current planning permit since prior to construction of the safe harbour demonstrates that water quality has not been adversely affected by the development and use of the current safe boat harbour. As the Proposal will involve similar construction techniques and usage, no adverse impacts are considered to occur.

The Coastal Assessment report is attached in Appendix B.

The assessment considers that the water circulation time will remain unchanged because:

- it follows tidal movement;
- of the presence of the Sorrento Channel adjacent to the wave screen; and
- of the gap between the wave screen and the seabed.

Therefore, impacts to the existing water quality are unlikely. The Marine Environmental Consideration report also concluded that it is not expected that the proposed safe boat harbour reconfiguration will affect water quality on the adjacent bathing beaches or within the harbour itself.

he reconfiguration of the existing safe boat harbour and the Construction Environmental lanagement Plan (CEMP) will provide for relevant construction methods and mitigation neasures to be implemented to avoid impacts to the marine environment during construction. A nonitoring program will also be proposed as part of the CEMP. re any of these water environments likely to support threatened or migratory species?
$\times$ NYD $\times$ No $\times$ Yes If yes, specify which water environments.
he Blairgowrie Safe Boat Harbour is located within Port Phillip, which supports a number of nreatened and migratory species, although as presented in the previous section such species ar nlikely to occur within the BYS Safe Boat Harbour reconfiguration area.
re any potentially affected wetlands listed under the Ramsar Convention or <b>'A Directory of Important Wetlands in Australia'?</b> NYD X No Yes If yes, please specify.
<b>could the project affect streamflows?</b> ■ NYD X No X Yes If yes, briefly describe implications for streamflows.
ould regional groundwater resources be affected by the project?
NYD X No X Yes If yes, describe in what way.
could environmental values (beneficial uses) of water environments be affected?
NYD No X Yes If yes, identify waterways/water bodies and beneficial uses (as recognised by State Environment Protection Policies)
he Blairgowrie Safe Boat Harbour reconfiguration project is within the inshore segment of the EPP (Waters of Port Phillip) Schedule F6 (Waters of Victoria), for which specific water quality adicators and objectives are prescribed.
<ul> <li>he beneficial uses to be protected are:</li> <li>maintenance of natural aquatic ecosystems and associated wild life (substantially natural ecosystems with some modifications);</li> <li>water based recreation:</li> </ul>
<ul> <li>Primary contact (eg swimming and water skiing)</li> </ul>
Secondary contact (eg boating and fishing)
<ul> <li>Aesthetic enjoyment (eg walking by the water);</li> <li>production of molluscs for human consumption (eg. aquaculture);</li> </ul>
. commercial and recreational use of edible fish and crustaceans; and
navigation and shipping.
he CEE report on Coastal Processes ( <b>Appendix B</b> ) suggests that the water quality will not be npacted upon by the reconfiguration project.
could aquatic, estuarine or marine ecosystems be affected by the project?
he marine ecological assessment states that there will be minimal impact to the marine nvironment from the safe boat harbour reconfiguration proposal.
In terms of water quality, water quality in the harbour is managed by Blairgowrie Yacht Squadron ules which forbid the use of toilets on vessels that discharge into the marine environment while in arbour. Water quality in the harbour is naturally influenced by strong tidal currents that transport vater, parallel to shore, through the harbour area. Hence, water quality is generally typical of the roader Cameron's Bight region. A bacterial water quality monitoring program was undertaken b ne Blairgowrie Yacht Squadron from 2001 to 2004 to measure the concentration of <i>E. coli</i> in vater samples from inside the harbour and at nearby beaches. <i>E. coli</i> is readily used as a acterial indicator for monitoring recreational water quality. The SEPP and ANZECC ARMCANZ lational Water Quality Guidelines state that the median <i>E. coli</i> concentration in waters during the athing season should not exceed 150 organisms per 100mL when humans are in primary ontact with the water.

The results of the 2003/2004 monitoring when the harbour was in full operation are shown in Levels of *E.coli* at harbour and beach sites 2003/2004. The trigger level of 150 organisms per 100mL is shown in the figure as a conservative indicator of safe bathing conditions.

The proposed reconfiguration will have negligible effect on the volume of water passing through the harbour with the prevailing alongshore tidal currents. Hence, it is not expected that the proposed reconfiguration of the harbour will affect water quality on the adjacent bathing beaches or within the harbour. The harbour will continue to be managed under the same rules as present – no discharge to the marine environment from vessels. This will ensure pollutants into the marine environment do not occur.

Is there a potential for extensive or major effects on the health or biodiversity of aquatic, estuarine or marine ecosystems over the long-term?

No X Yes If yes, please describe. Comment on likelihood of effects and associated uncertainties, if practicable.

There is a potential for significant effects from the sand accumulation if the reconfiguration proposal proceeds and no monitoring and removal of sand occurs.

To manage the potential for this to occur, it is proposed that the BYS/BSBH Operational Environmental and Sand Management Plans continue. It is also proposed to review and update methods of sand measurement.

This program has been monitoring sand accumulation at the site for the past 10 years. Measurements are taken in April and October each year and forwarded to Sinclair Knight Merz (SKM) for analysis. The results of these surveys are then forwarded to the Planning Department of the Mornington Peninsula Shire Council.

The BYS has been working with the DSE on a beach renourishment program to help alleviate the sand accumulation issue and to use the 'excess' sand in other areas which will be beneficial to nearby beaches.

Is mitigation of potential effects on water environments proposed? ★ NYD ★ No ★ Yes If yes, please briefly describe.

Mitigation of potential effects on the marine environment will be determined through the CEMP, which will be a condition for the planning permit (an EMP was a condition for the current safe harbour project, as is an ongoing water quality and sand accumulation monitoring program).

#### 14. Landscape and soils

Landscape	
Has a preliminary	landscape assessment been prepared?
	Yes If yes, please attach.
reconfiguration wou	been provided over an aerial photograph providing an overview of what the uld look like within the existing landscape. A detailed landscape assessment as part of the planning approvals process.
Is the project to b	e located either within or near an area that is:
	andscape Significance Overlay or Environmental Significance Overlay?
The entire site is co	overed by an ESO but not a LSO.
	<b>f regional or State significance in a reputable study of landscape values? X</b> No X Yes If yes, please specify.
• Within or adjo	ining land reserved under the National Parks Act 1975? No Yes If yes, please specify.
	offshore from Portsea Pier) component of the Port Phillip Heads Marine e closest marine park to the BYS and is approximately 15kms west of the BYS.
• Within or adjo	ining other public land used for conservation or recreational purposes?
Crown land – fores	hore reserve
	getation or alteration of landforms likely to affect landscape values?
$\times$ NYD	$\mathbf{X}$ No $\mathbf{X}$ Yes If yes, please briefly describe.
No landside vegeta	ation is to be cleared as part of the reconfiguration project.
la thana a matantia	l fan affaste en landesen suelves of nanional en Otats immentance O
	Il for effects on landscape values of regional or State importance? No X Yes Please briefly explain response.
is an expansion or reconfiguration wor existing facilities, m and facilities when receive glimpses of remains quiet dens Although the area of is not included with government's Coas development along project. This included development in an key areas. The Bla public access will b roads.	nal, if any, changes to the landscape values of the area as the reconfiguration f an existing Blairgowrie Safe Boat Harbour. The view of the boat harbour uld be from residences on the north side of The Loop that overlooks the BYS's nostly from the existing car park at the top of the BYS or views to the beach walking along the beach. Traffic travelling on the Nepean Highway will only f the Blairgowrie Safe Boat Harbour reconfiguration as the foreshore vegetation e, allowing only small breaks in the vegetation for views to the sea. of the Blairgowrie Safe Boat Harbour (and the broader Mornington Peninsula) in one of the three significant landscapes assessed in the Victorian stal Spaces Landscape Assessment Study (2006), the best practice policies for the coast identified in the study have been assessed for the reconfiguration es avoiding the removal of native vegetation on the coast; siting the area that has already been changed and thus minimising visual intrusion from airgowrie Safe Boat Harbour is also sensitive to the surrounding land form and be maintained. The BYS also avoids incremental change of views from coastal
Is mitigation of po	otential landscape effects proposed?
× NYD	No 🔀 Yes If yes, please briefly describe.

**Note:** A preliminary landscape assessment is a specific requirement for a referral of a wind energy facility. This should provide a description of:

- The landscape character of the site and surrounding areas including landform, vegetation types and coverage, water features, any other notable features and current land use;
- The location of nearby dwellings, townships, recreation areas, major roads, above-ground utilities, tourist routes and walking tracks;
- Views to the site and to the proposed location of wind turbines from key vantage points (including views showing existing nearby dwellings and views from major roads, walking tracks and tourist routes) sufficient to give a sense of the overall site in its setting.

#### Soils

Is there a potential for effects on land stability, acid sulphate soils or highly erodible soils? NYD NO X Yes If yes, please briefly describe.

Although not directly attributed to the Blairgowrie Safe Boat Harbour, there has been evidence of erosion of beaches within Port Phillip.

SKM's Coastal Assessment report suggests that the extension of the wave wall will not increase the annual amount of sand being accumulated behind it or increase the erosion on any of the neighbouring beaches, however the wave wall extension would cause the existing erosion (which is concentrated near Stringer Road) to be moved further west. The coastal land which may be affected by the westward shift of the erosion is very similar to the land currently affected around the end of Stringer Road (similar width and vegetation present). Therefore, SKM predicts that a westward shift of erosion is not expected to result in any increased risk to infrastructure, environmental or social assets.

Are there geotechnical hazards that may either affect the project or be affected by it? X NYD X No X Yes If yes, please briefly describe.

The safe boat harbour reconfiguration has limited landside works, however a geotechnical assessment may be required as the development is on the coast and may also require some form of coastal vulnerability assessment (as described in Ministerial Direction 13). These would be undertaken during the planning scheme amendment stage of the process.

#### 15. Social environments

Is the project likely to generate significant volumes of road traffic, during construction or operation?

 $\times$  NYD  $\times$  No  $\times$  Yes If yes, provide estimate of traffic volume(s) if practicable.

A traffic and car parking assessment has been undertaken by Cardno Grogan Richards in June 2010 (Appendix C). The Blairgowrie Safe Boat Harbour currently provides for 170 member and 45 visitor berths. The proposed reconfiguration of the Blairgowrie Safe Boat Harbour is expected to generate at most an additional 34 vehicle movements during the course of a busy day, comprising of 17 ingress and 17 egress movements. This level of traffic is considered negligible in traffic engineering terms and would <u>not</u> be expected to have a discernable impact on the local residential area.

A total of 213 car parking spaces (79 member car parks) are provided in association with the harbour. There are an additional 11 car parking spaces available for the public who may be visiting Saville's lookout and an additional 16 spaces allocated for beach box users. From a parking perspective, a demand for up to 17 spaces is projected, assuming a 'worst case' scenario. The available data indicates that parking in the area is typically operating at about 90% occupancy, which indicates that on most cases at least 16 spaces are available (This does not include the likely availability of parking within the club car park). It is therefore expected that the level of car parking in the area would sufficiently cater for the proposed reconfiguration of the safe boat harbour\_and that no additional car parking is proposed (or required) as part of the reconfiguration. No impact on the local residential area is expected from a parking perspective.

The traffic assessment concludes that the level of car parking in the area would sufficiently cater for the proposed reconfiguration of the safe boat harbour.

Is there a potential for significant effects on the amenity of residents, due to emissions of dust or odours or changes in visual, noise or traffic condition ns?

NYD NO Yes If yes, briefly describe the nature of the changes in amenity conditions and the possible areas affected.

Visual amenity is unlikely to be significant as views to the coast from nearby residences are mostly through breaks in the foreshore vegetation at the top of the site. In regards to traffic, the assessment indicates that there will not be a significant increase in traffic.

Is there a potential for exposure of a human community to health or safety hazards, due to emissions to air or water or noise or chemical hazards or associated transport? NYD X No X Yes If yes, briefly describe the hazards and possible implications.

Is there a potential for displacement of residences or severance of residential access to community resources due to the proposed development?

 $\times$  NYD  $\times$  No  $\times$  Yes If yes, briefly describe potential effects.

There may be some disruption to access during the construction period, however the BYS will work with the community to ensure that such disruptions will be minimal and not during peak holiday periods.

Public access to the beach is from the Point Nepean Road and will remain as it is at present. The BYS facilities will continue to be available for public use. This would include shower and toilet facilities, jetty access for strollers and people fishing and for visiting, or undertaking passive recreation. Berthing for public boats in normal weather, or for shelter in adverse conditions would also be provided.

Are non-residential land use activities likely to be displaced as a result of the project?

The project requires an additional area of Crown land.

Do any expected changes in non-residential land use activities have a potential to cause adverse effects on local residents/communities, social groups or industries?

There will be no adverse effects to local residents/communities, social groups or industry. The project will not cause disruption. The local residents will be able to continue to use the foreshore and Blairgowrie facilities for recreational purposes (beach access).

The construction is planned during the April-November period in order to avoid any disruption to both berth licence holders and BYS members.

A Community Consultation Program as part of the planning process will be undertaken.

Other information/comments? (eg. accuracy of information)

#### **Cultural heritage**

Have relevant Indigenous organisations been consulted on the occurrence of Aboriginal cultural heritage within the project area?

- No If no, list any organisations that it is proposed to consult.
- **X** Yes If yes, list the organisations so far consulted.

The relevant traditional owner group, the Booner Wrung people, with which BYS has an existing ILUA have been consulted. The Bunurong Land Council Aboriginal Corporation and the Booner Wrung Foundation Ltd have also been consulted in regard to cultural heritage.

What investigations of cultural heritage in the project area have been done? (attach details of method and results of any surveys for the project & describe their accuracy)

A desktop Cultural Heritage Assessment has been undertaken by SKM for the Blairgowrie Safe Boat Harbour reconfiguration project in June 2010 (Appendix D). The assessment found five registered cultural heritage places (Aboriginal Places), all shell deposits, located within a 1 km radius of the activity area. Most of the shell deposits are located within 300m of the Port Phillip shoreline. The closest shell deposit is located approximately 200m west of the activity area. No Aboriginal Places are located within the activity area or within 1km of the Blairgowrie Safe Boat Harbour.

#### Is any Aboriginal cultural heritage known from the project area?

- $\times$  NYD  $\times$  No  $\times$  Yes If yes, briefly describe:
- Any sites listed on the AAV Site Register
- Sites or areas of sensitivity recorded in recent surveys from the project site or nearby
- Sites or areas of sensitivity identified by representatives of Indigenous organisations

#### Table 3-1: Aboriginal Places within a 1 km radius of the activity area

VAHRID	Aboriginal Place Name	Aboriginal Place Type	Grid Coordinates (GDA94 / MGA55)	
			Easting	Northing
7821-0126	Blairgowrie 3	Shell Deposit	304578	5752504
7821-0127	Blairgowrie 4	Shell Deposit	304812	5752284
7821-0128	Blairgowrie 5	Shell Deposit	305089	5752145
7821-0129	Blairgowrie 6	Shell Deposit	305985	5751835
7821-0323	Foam Ave 1	Shell Deposit	304423	5751571

(SKM, Cultural Heritage Assessment p.10)

A standard Cultural Heritage Management Plan (CHMP) is required to be prepared as the proposed reconfiguration is considered to be a "high impact activity" under Regulation 43(1b)(xviii) buildings and works for specified uses (a pleasure boat facility). The AAV will evaluate any CHMP within the activity area as no Registered Aboriginal Party (RAP) has been appointed.

Are there any cultural heritage places listed on the Heritage Register or the Archaeological Inventory under the *Heritage Act 1995* within the project area?

🗙 NYD 🗙 No 🗙 Yes If yes, please list.

There are no heritage (non-Aboriginal) sites located within the Blairgowrie Safe Boat Harbour reconfiguration area although there are two properties listed on the Victorian Heritage database located within 1 km – these being Blairgowrie House (HO29) and the Collins Settlement site (H1050) which is also listed on the Victorian Heritage Inventory (H7821-0001). The Collins Settlement Site is also listed as a heritage place on the Victorian Heritage Inventory.

The Collins Settlement Site is also listed as a heritage place on the Victorian Heritage Inventory. These places will not be impacted upon by the safe harbour reconfiguration.

#### Table 3-2 – Historical heritage places listed on the Victorian Heritage Register

Victorian Heritage Register Identification	Historical heritage place Name	Location
H0292	Blairgowrie House	17-23 Scott Wynd, Blairgowrie
H1050	Collins Settlement Site	2700-3148 Point Nepean Road, Sorrento

#### (SKM, Cultural Heritage Assessment p.14)

#### Table 3-3: Historical heritage places listed on the Heritage Victoria Inventory

VHI Identification	Historical heritage place Name	Location	Description
H7821-0001	Collins Settlement Site	2700-3148 Point Nepean Road, Sorrento Located 1 km from the Blairgowrie Safe Boat Harbour.	The site marks the first official attempt to establish a European settlement in Victoria in 1803. Archaeological material extant at the site may include graves.

(SKM, Cultural Heritage Assessment p.16)

Is mitigation of potential cultural heritage effects proposed?

 $\times$  NYD  $\times$  No  $\times$  Yes If yes, please briefly describe.

As stated above, a CHMP will be prepared for the project in accordance with the standards prescribed in the *Aboriginal Heritage Regulations* 2007.

#### 16. Energy, wastes & greenhouse gas emissions

What are the main sources of energy that the project facility would consume/generate?
Electricity network. If possible, estimate power requirement/output negligible
<ul> <li>Natural gas network. If possible, estimate gas requirement/output</li> <li>Generated on-site. If possible, estimate power capacity/output</li> <li>Other. Please describe.</li> </ul>
Please add any relevant additional information.
What are the main forms of waste that would be generated by the project facility? X Wastewater. Describe briefly.
Nil, Existing wastewater facility will be utilised
Solid chemical wastes. Describe briefly. Excavated material. Describe briefly.
X Other. Describe briefly.
Please provide relevant further information, including proposed management of wastes.
What level of greenhouse gas emissions is expected to result directly from operation of the project facility?
<ul> <li>Less than 50,000 tonnes of CO<sub>2</sub> equivalent per annum</li> <li>Between 50,000 and 100,000 tonnes of CO<sub>2</sub> equivalent per annum</li> <li>Between 100,000 and 200,000 tonnes of CO<sub>2</sub> equivalent per annum</li> <li>More than 200,000 tonnes of CO<sub>2</sub> equivalent per annum</li> <li>Please add any relevant additional information, including any identified mitigation options.</li> </ul>

#### 17. Other environmental issues

Are there any other environmental issues arising from the proposed project?

#### 18. Environmental management

What measures are currently proposed to avoid, minimise or manage the main potential adverse environmental effects? (if not already described above)

- × Siting: Please describe briefly
- X Design: Please describe briefly
- **X** Environmental management: Please describe briefly.

BYS has agreed to contribute financially to beach renourishment following an approach by DSE in March 2010. The project will see beach renourishment works undertaken opposite the Blairgowrie shops (approximately 750m east of the club). The sand bypass operation includes the removal of approximately 10,000 cubic metres of sand accumulated in the shadow of the harbour with most of this sand relocated to this area. In conjunction with the Whitecliff's to Camerons Bight Foreshore Committee of management it is also proposed to relocate some of sand to replenish the beach in Camerons Bight (west of the club) which as a result of natural processes loses sand each winter. This project commenced on 12 July 2010.

The Environmental Management Framework provides the overall guidance for the relevant approvals, performance measures, environmental management plans and monitoring requirements for the project.

An Environmental Management Plan (EMP) outlines the performance requirements for the proposed works, proposed safeguards and environmental management measures. An EMP can assist in the preparation of the planning and environmental documentation by describing the environmental management framework for the construction phase and post-completion operation of the BYS facility.

Some of the areas to address in the EMP are:

- The environmental management framework for the construction phase of the project;
- Environmental performance standards and management measures for each environmental issue or impact;
- A table of environmental management commitments for the proposal;
- How statutory requirements, standards, guidelines and environmental commitments will be complied with;
- The environmental monitoring program for the construction and operational phases;
- Impacts of the options on existing uses during development;
- Occupational, Health and Safety requirements and proposed control measures;
- Organisational arrangements and review procedures for the EMP; and
- Assignment of responsibilities for the implementation, monitoring and compliance with EE Act Referral outcomes and commitments and any other environmental controls. The monitoring program will build upon the existing monitoring program and will include:
  - Seagrass monitoring 0
  - Sand accumulation / coastal processes 0
  - Water quality.
  - × Other: Please describe briefly

Add any relevant additional information.

#### 19. Other activities

Are there any other activities in the vicinity of the proposed project that have a potential for cumulative effects?

 $\times$  NYD  $\times$  No  $\times$  Yes If yes, briefly describe.

#### 20. Investigation program

#### Study program

Have any environmental studies not referred to above been conducted for the project? X No X Yes If yes, please list here and attach if relevant.

Has a program for future environmental studies been developed?

No X Yes If yes, briefly describe.

A planning assessment will need to be undertaken as part of the planning scheme amendment process. Further detailed environmental investigations will also be undertaken to inform the planning and Coastal Management Act consent approvals (eg. a CVA). Studies to be undertaken during the planning phase include:

- Planning policy assessment;
- Landscape assessment;
- Traffic management;
- Cultural Heritage Management Plan; and
- Environment management framework.

#### Consultation program

#### Has a consultation program conducted to date for the project?

No X Yes If yes, outline the consultation activities and the stakeholder groups or organisations consulted.

The members of the BYS and the current berth licence holders have been consulted throughout the course of the proposed reconfiguration.

Consultation via project update meetings has also occurred over the past 2 years with relevant government agencies (MPSC, DSE, Parks Victoria and DPCD) and will continue throughout the duration of the project.

#### Has a program for future consultation been developed?

 $\times$  NYD  $\times$  No  $\times$  Yes If yes, briefly describe.

A program has been developed as part of the planning process. Ongoing consultation will occur with the relevant approval agencies and the Whitecliffs to Cameron's Bight Foreshore Committee of Management.

#### Authorised person for proponent:

I, Jenni Maclean.....(full name),

Acting Commodore, confirm that the information contained in this form is, to my knowledge, true and not misleading.

Signature

Date 3 August 2010

#### Person who prepared this referral:

I, Mandy Elliott.....full name),

Principal Environmental Scientist, Landserv confirm that the information contained in this form is, to my knowledge, true and not misleading.



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Date 3 August 2010