GOVERNMENT OF WESTERN AUSTRALIA

Environmental Protection Authority

EPA REFERRAL FORM

Referral of a Proposal to the Environmental Protection Authority under Section 38 of the *Environmental Protection Act 1986*.

PURPOSE OF THIS FORM

Section 38 of the *Environmental Protection Act 1986* (EP Act) makes provision for the referral to the Environmental Protection Authority (EPA) of a proposal (significant proposals, strategic proposals and proposals under an assessed scheme) by a proponent, a decision making authority (DMA), or any other person.

The purpose of this form is to ensure that EPA has sufficient information about a proposal to make a decision about the nature of the proposal and whether or not the proposal should be assessed under Part IV of the EP Act. Information provided in the referral form must be brief (no more than 30 pages), sharp and succinct to achieve the purposes of this form.

This form does not prevent the referrer from providing a supplementary referral report. Should a referrer choose to submit a supplementary referral report please ensure the following.

i. Information is short, sharp and succinct.
ii. Attachments are below eight megabytes (8 MB) as they will be published on the EPA's website (exemptions apply) for public comment. To minimise file size, "flatten" maps and optimise pdf files.
iii. Cross-references are provided in the referral form to the appropriate section/s in the supplementary referral report.

This form is to be used for all proposals[1] which can be referred to the EPA under section 38 of the EP Act; i.e. referrals from: **proponents** of proposals (significant proposals, strategic proposals, derived proposals, proposals under an assessed scheme); **DMAs** (significant proposals); and **third parties** (significant proposals).

This form is divided into several sections, including; Referral requirements and Declaration; Part A - Information of the proposal and proponent; and Part B Environmental Factors. Guidance on successfully completing this form is provided throughout the form and is also available in the EPA's *Environmental Assessment Guideline for Referral of a Proposal under s38 of the EP Act (EAG 16)*.

Send completed forms to
Office of the Environmental Protection Authority
Locked Bag 10, East Perth WA 6892

or

Email: Registrar@epa.wa.gov.au

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[1] Please note that this form consolidates and replaces the following forms: *Referral of a Proposal by the Proponent to the EPA under section 38(1) of the EP Act*; *Referral of a Proposal by a third party to the EPA under section 38(1) of the EP Act*; and *Referral of a development proposal to the EPA by the decision making authority*.

Referral requirements and Declaration

The following section outlines the referral information required from a proponent, decision making authority and third party.

(a) Proponents

Proponents are expected to complete all sections of the form and provide GIS spatial data to enable the EPA to consider the referral. Spatial GIS data is necessary to inform the EPA's decision.

The EPA expects that a proponent will address Part B of the form as thoroughly as possible to demonstrate whether or not the EPA's objectives for environmental factors can be met.

If insufficient information is provided the EPA will request more information and processing of the referral will commence once the information is provided or the EPA decides to make a precautionary determination on the available information.

Proponent to complete before submitting form	
Completed all the questions in Part A (essential)	☒ Yes ☐ No
Completed all the questions in Part B	☒ Yes ☐ No
Completed all other applicable questions	☒ Yes ☐ No
Included Attachment 1 – any additional document(s) the proponent wishes to provide	☒ Yes ☐ No
Included Attachment 2 – confidential information (if applicable)	☒ Yes ☐ No
Enclosed an electronic copy of all referral information, including spatial data and contextual mapping but clearly separating any confidential information	☒ Yes ☐ No
Completed the Declaration	☒ Yes ☐ No
What is the type of proposal being referred? * *a referred proposal seeking to be declared a derived proposal*	☒ significant ☐ strategic ☐ derived* ☐ under an assessed scheme
Do you consider the proposal requires formal environmental impact assessment?	☐ Yes ☒ No
If yes, what level of assessment? *API = Assessment of Proponent Information* *PER = Public Environmental Review*	☐ API Category A ☐ API Category B ☐ PER

NB: The EPA may apply an Assessment on Proponent Information (API) level of assessment when the proponent has provided sufficient information about:

- the proposal;
- the proposed environmental impacts;
- the proposed management of the environmental impacts; and
- when the proposal is consistent with API criteria outlined in the *Environmental Impact Assessment (Part IV Division 1 and 2) Administrative Procedures 2012*.

If an API A formal level of assessment is considered appropriate, please refer to Environmental Assessment Guideline No. 14 *Preparation for an Assessment on Proponent Information (Category A) Environmental Review Document EAG 14* (EAG14).

Declaration

I, ...James Holder....., *(full name)* declare that I am authorised on behalf of.....Department of Transport... (being the person responsible for the proposal) to submit this form and further declare that the information contained in this form is true and not misleading.

Signature		James Holder	
Position	Manager Maritime Projects	Position	Manager Maritime Projects
Email	James.Holder@transport.wa.gov.au		
Address	1 Essex Street		
	Fremantle	WA	6160
Date	9/2/17		

(b) Decision-making authority

The EPA expects decision-making authorities to complete applicable sections of Part A of the form and provide the proponent an opportunity to provide additional information in Part B of the form where appropriate.

Wherever possible the DMA should obtain relevant spatial information from the proponent and provide this to the EPA with the referral.

DMA to complete before submitting form	
Completed all the questions in Part A (essential)	☐ Yes ☐ No
Provided Part B to the proponent for completion	☐ Yes ☐ No
Completed all other applicable questions	☐ Yes ☐ No
Included Attachment 1 – any supporting information	☐ Yes ☐ No
Enclosed an electronic copy of all referral information, including spatial data and contextual mapping	☐ Yes ☐ No
Completed the below Declaration	☐ Yes ☐ No
Do you consider the proposal requires formal environmental impact assessment?	☐ Yes ☐ No
What is the type of proposal being referred?	☐ significant proposal ☐ significant proposal under an assessed scheme

Declaration

I, ……, *(full name)* submit this referral to the EPA for consideration of the environmental significance of its impacts.

Signature		Name (print)		
Email		Email		
Position				
Address	Street No.	Address		
	Suburb			Suburb
Date				

(c) Third Party

Third parties are asked to have consideration for the Significance Test outlined in Part A Section 1.5 of this form before referring a significant proposal to the EPA. The EPA will only consider proposals that are likely, if implemented, to have a significant effect on the environment.

Third parties are to provide sufficient information to clearly identify the significant proposal, the proponent, and their reasons for referring the proposal. This can be done by completing as much of Part A of the form as possible, taking into consideration the information available. Third parties may wish to fill in Part B of the form to advance their own views of the significance of the environmental impacts and the need for EPA assessment.

In most cases the EPA will seek additional information from the proponent. This will be to confirm or amend the identity of the proponent, the proposal, and to allow the proponent opportunity to provide its views on the significance of the environmental impacts and the need for EPA assessment.

Third Party to complete before submitting form	
Complete all applicable questions in Part A and B	☐ Yes ☐ No
Completed the Declaration	☐ Yes ☐ No
Do you consider the proposal requires formal environmental impact assessment?	☐ Yes ☐ No

Declaration

I, ……, *(full name)* submit this referral to the EPA for consideration of the environmental significance of its impacts.

Signature		Name (print)	
Email			
Position		Organisation	
Address	Street No.	Street Name	
	Suburb	State	Postcode
Date			

PART A: Information on the proposal and the proponent

All fields of Part A must be completed by the proponent and/or decision-making authority for this document to be processed as a referral. Third party referrers are only expected to fill in the fields they have information for.

1 PROPONENT AND PROPOSAL DESCRIPTION

1.1 The proponent of the proposal

Proponent and/or DMA to complete	
Name of the proponent	Department of Transport
Joint Venture parties (if applicable)	N/A
Australian Company Number(s)	N/A
Postal Address *(Where the proponent is a corporation or an association of persons, whether incorporated or not, the postal address is that of the principal place of business or of the principal office in the State)*	Department of Transport GPO C102 Perth Western Australia 6839
Key proponent contact for the proposal *Please include: name; physical address; phone; and email.*	James Holder Manager Maritime Projects 1 Essex Street Fremantle WA 6160 Telephone: (08) 9435 7559 Facsimile: (08) 9435 7808 Email: James.Holder@transport.wa.gov.au
Consultant for the proposal (if applicable) *Please include: name; physical address; phone; and email.*	N/A

1.2 Proposal

Proposal is defined under the EP Act to mean a "project, plan, programme policy, operation, undertaking or development or change of land use, or amendment of any of the foregoing, but does not include scheme". Before completing this section please refer to Environmental Protection Bulletin 17 – Strategic and derived proposals (EPB 17) and Environmental Assessment Guideline for Defining the Key Characteristics of a proposal (EAG 1).

Proponent and/or DMA to complete	
Title of the proposal	Casuarina Causeway Improvement Project
What project phase is the proposal at?	☐ Scoping ☐ Feasibility ☒ Detailed design ☐ Other _____
Proposal type *More than one proposal type can be identified, however for filtering purposes it is*	☐ **Power/Energy Generation** ☐ Hydrocarbon Based – coal ☐ Hydrocarbon Based – gas ☐ Waste to energy ☐ Renewable – wind

Proponent and/or DMA to complete	
recommended that only the primary proposal type is identified.	☐ Renewable – wave ☐ Renewable – solar ☐ Renewable – geothermal ☐ **Mineral / Resource Extraction** ☐ Exploration – seismic ☐ Exploration – geotechnical ☐ Development ☐ **Oil and Gas Development** ☐ Exploration ☐ Onshore – seismic ☐ Onshore – geotechnical ☐ Onshore – development ☐ Offshore – seismic ☐ Offshore – geotechnical ☐ Offshore – development ☐ **Industrial Development** ☐ Processing ☐ Manufacturing ☐ Beneficiation ☐ **Land Use and Development** ☐ Residential – subdivision ☐ Residential – development ☐ Commercial – subdivision ☐ Commercial – development ☐ Industrial – subdivision ☐ Industrial – development ☐ Agricultural – subdivision ☐ Agricultural – development ☐ Tourism ☐ **Linear Infrastructure** ☐ Rail ☐ Road ☐ Power Transmission ☐ Water Distribution ☐ Gas Distribution ☐ Pipelines ☐ **Water Resource Development** ☐ Desalination ☐ Surface or Groundwater ☐ Drainage ☐ Pipelines ☐ Managed Aquifer Recharge ☐ **Marine Developments** ☐ Port ☒ Jetties ☐ Marina

Proponent and/or DMA to complete	
	☐ Canal ☐ Aquaculture ☐ Dredging *If other, please state below:* ☐ **Other** _____
Proponent and/or DMA to complete	
Description of the proposal – describe the key characteristics of the proposal in accordance with EAG 1.	The existing Casuarina causeway is a vital component of Casuarina Boat Harbour (CBH), the primary facility for recreational boating in the Bunbury Region. Jetty Road is located on the causeway which forms the eastern boundary of CBH, providing shelter to the harbour and access to the existing recreational boat pens. Also located on the causeway are a temporary building currently used by the South West Cruising Association Inc. (SWCA), the DoT penholder amenities building and the Arrol Crane, which is listed on the Bunbury Municipal Inventory of heritage places. The causeway was built in 1967 and is currently in poor condition. The rate of deterioration has increased since the removal of the Bunbury Timber Jetty (in 2012/2013) which previously provided some protection from waves. Maintenance works are now required to ensure the ongoing structural integrity of the causeway and improve public safety and amenity. Minor improvements are proposed to be integrated into the maintenance program to reduce cost and environmental risks. The proposed works are listed below. Refer also to Table 1 and Attachment 1, Figure 1 and Figure 2. • Trim existing slope of causeway revetment where necessary and place new geofabric on all sides. • Small (0.08 ha) increase in the footprint to accommodate a multi-purpose building (MPB) with ablution and waste disposal facilities. The building itself is provisionally included in the current project. • Refurbish causeway rock armour on all sides (rearrange existing and place new). • Upgrade/install power, sewer, potable and fire water services. • Waste oil collection facility (provisional). • Upgrade access road and car parking. • Install universal access pathways, drainage, feature landscaping. • Public fishing/viewing platforms at the revetment crest (provisional). These works are consistent with proposed future developments, including the South West Development Commission's (SWDC) *Transforming Bunbury's Waterfront* (TBW) project and the City of Bunbury's planned heritage precinct at the head of the causeway. The works are, however, stand-alone and necessary to meet the requirements for structural integrity and public safety of the causeway regardless of possible future developments. The works do not include any components currently being assessed under the Strategic Public Environmental Review of the Koombana Bay Marine Structures project (as defined in Figure 2 of the *Koombana Bay Marine Structures Environmental Scoping Document*, EPA assessment no. 2049). It is not anticipated that the works included in the Casuarina Causeway Improvement Project will have a significant environmental impact as the project is essentially a maintenance and improvement process for an

Proponent and/or DMA to complete	
	existing marine structure.
Timeframe in which the proposal is to occur (including start and finish dates where applicable).	It is proposed that work will commence in November 2017. Work will be staged and the full package is anticipated to be completed in the first half of 2019.
Details of any staging of the proposal.	2017/2018: Revetment and bulk earthworks 2018/2019: Services, road works, landscaping and building (provisional)
What is the current land use on the property, and the extent (area in hectares) of the property?	The causeway is classified as Regional Open Space in the Greater Bunbury Region Scheme. It is situated across two lots within Reserve 43556 which is under a Management Order to the Minister of Transport and therefore the responsibility of the Department of Transport (DoT). The causeway has a total area of 2.2 ha (2.1 ha in Lot 503 and 0.12 ha in Lot 1036). Works will extend to the landside end of the causeway, including a small portion (approx. 0.04ha) located on Lot 502 in Reserve 46746 which is under the control of the City of Bunbury (CoB). Consultations between DoT and CoB are regularly undertaken for this project and an access agreement will be in place for works on this land.
Have pre-referral discussions taken place with the OEPA? If yes, please provide the case number. If a case number was not provided, please state the date of the meeting and names of attendees.	Yes. A pre-referral meeting took place on Monday 5 December 2016. This meeting was attended by Leanne Thompson (EPA), James Holder (DoT), Megan Willis (DoT) and Jeremy Fitzpatrick (RPS).
DMA (Responsible Authority) to complete	
For a proposal under an assessed scheme (as defined in section 3 of the EP Act, applicable only to the proponent and DMA) provide details (in an attachment) as to whether: • *The environmental issues raised by the proposal were assessed in any assessment of the assessed scheme.* • *The proposal complies with the assessed scheme and any environmental conditions in the assessed scheme.*	

Table 1 – Key characteristics of Casuarina Causeway Improvement Project as per EAG 1

Summary of the Proposal	
Proposal title	Casuarina Causeway Improvement Project
Proponent name	Department of Transport
Short description	This proposed project is to undertake maintenance and improvement works to the Casuarina causeway, located in Bunbury WA. The proposal includes

Summary of the Proposal		
	refurbishment and realignment of the revetment (including a small increase to the causeway footprint), installation of upgraded services, road works, landscaping and drainage. A multi-purpose building (including ablutions) and fishing/viewing platforms are included as provisional items.	
Physical Elements		
Element	**Location**	**Proposed Works**
Revetment wall	Existing revetment slope on all sides of the causeway and the seabed immediately adjacent to the toe of the structure (Attachment 1, Figure 1 & 2).	Remove existing armour rock and stockpile on site for re-use. Armour at depth likely to be pushed forward to enhance scour protection at the toe. Trim existing slope where necessary to achieve a uniform profile. Minor realignment of the revetment is required in some locations resulting in a small (approximately 0.08ha) increase to the causeway footprint. The precise location of this realignment may vary slightly, however the location shown in Attachment 1 is representative. Place geofabric on the slope as deep as practicable to prevent future loss of fine material. Place filter rock in two layers. The filter rock will consist of re-used and imported rock. Replace rock armour on the slope in two layers. The armour will consist of re-used and imported rock. Disturbance of the seabed immediately adjacent will be required at some locations to place armour rock at the toe of the revetment. Install a parapet wall and path at the revetment crest on the western side. Fishing/viewing platforms may be built into the revetment crest (provisional item).
Services	Crest of the existing structure (Attachment 1, Figure 1 & 2)	Install conduits for the provision of electricity, potable water, fire water and sewer services along the causeway. The services corridor will be located on the crest of the structure with the exact alignment TBC. A waste oil collection facility is provisionally included in the project.
Civil works (road, parking, paths, drainage)	Crest of the existing structure (Attachment 1, Figure 1 & 2)	Remove existing bitumen and building waste. Dispose of waste in accordance with approved methods. Grade the crest of the structure. Fill will be required in some locations to create a level surface. Construct new road, parking and footpaths, including kerbs, line markings, pedestrian crossings, ramps and steps. Install landscaped drainage swale.

1.3 Strategic / derived proposals

Complete this section if the proposal being referred is a strategic proposal or you are seeking the proposal to be declared a derived proposal. Note: Only a proponent may refer a strategic proposal and seek a proposal to be declared a derived proposal.

Proponent to complete	
Is this referred proposal a strategic proposal?	☐ Yes ☒ No
Are you seeking that this proposal be declared a derived proposal?	☐ Yes ☒ No
If you are seeking that this proposal be declared a derived proposal, what is the Ministerial Statement number (MS #) of the associated strategic proposal?	MS #: _____

1.4 Location

Proponents and DMAs must provide spatial data. Please refer to EAG 1 for more detail.

Proponent, DMA and Third Party to complete	
Name of the Local Government Authority in which the proposal is located.	City of Bunbury
Location: a) street address; lot number; suburb; and nearest road intersection; or b) if remote the nearest town; and distance and direction from that town to the proposal site.	The Casuarina causeway is a part of the Casuarina Boat Harbour, Bunbury WA and extends north of the intersection of Jetty Road and Bonnefoi Boulevard. The causeway is located across Lots 503 and 1036 and within Crown Reserve 43556. The rock revetment extends into Lot 502 in Reserve 46746.
Have maps and figures been included with the referral (consistent with EAG 1 where appropriate)? *The types of maps and figures which need to be provided (depending on the nature of the proposal) include:* • *maps showing the regional location and context of the proposal; and* • *figures illustrating the proposal elements.*	☒ Yes ☐ No
Proponent and DMA to complete	
Have electronic copies of spatial data been included with the referral? ***NB:** Electronic spatial (GIS or CAD) data, geo-referenced and conforming to the following parameters:* • *GIS: polygons representing all activities and named;* • *CAD: simple closed polygons representing all activities and named;* • *datum: GDA94;* • *projection: Geographic (latitude/longitude) or Map Grid of Australia (MGA);* • *format: ESRI geodatabase or shapefile, MapInfo Interchange Format, Microstation or AutoCAD.*	☒ Yes ☐ No

1.5 Significance test and environmental factors

Proponent, DMA and Third Party to complete	
What are the likely significant	☒ Benthic Communities and Habitat

Proponent, DMA and Third Party to complete	
environmental factors for this proposal?	☐ Coastal Processes ☒ Marine Environmental Quality ☒ Marine Fauna ☐ Flora and Vegetation ☐ Landforms ☐ Subterranean Fauna ☐ Terrestrial Environmental Quality ☐ Terrestrial Fauna ☐ Hydrological Processes ☐ Inland Waters Environmental Quality ☐ Air Quality & Atmospheric Gases ☒ Amenity ☐ Heritage ☐ Human Health ☐ Offsets ☐ Rehabilitation and Decommissioning
Having regard to the Significance Test (refer to Section 7 of the *EIA Administrative Procedures 2012*) in what ways do you consider the proposal may have a significant effect on the environment and warrant referral to the EPA?	The anticipated environmental impacts of the Casuarina Causeway Improvement Project are not considered to be significant. However, the project has been referred by the Department of Transport with an abundance of caution to ensure an appropriate consideration of impacts and make explicit any connection to the Koombana Bay Marine Structures project which is presently undergoing a Strategic Environmental Review. See Part B of this referral for further details.

1.6 Confidential information

All information will be made publically available unless authorised for exemption under the EP Act or subject to the Freedom of Information Act 1992.

Proponent to complete	
Does the proponent request that the EPA treat any part of the referral information as confidential? *Ensure all confidential information is provided in a separate attachment in hard copy.*	☒ Yes ☐ No

2 REGULATORY CONSIDERATIONS

This section applies to the Local, State and Commonwealth regulatory considerations for the referred proposal.

2.1 Government approvals

2.1.1 State or Local Government approvals

DMA to complete	
What approval(s) is (are) required from you as a decision-making authority?	

Is rezoning of any land required before the proposal can be implemented? If yes, please provide details.	☐ Yes ☒ No

2.1.2 Regulation of aspects of the proposal

Complete the following to the extent possible.

Proponent to complete	
Do you have legal access required for the implementation of all aspects of the proposal? *If yes, provide details of legal access authorisations / agreements / tenure.* *If no, what authorisations / agreements / tenure is required and from whom?*	☒ Yes ☐ No Refer to Attachment 1. An access agreement for works on CoB land is in the process of being developed.

Outline both the existing approvals and approvals that will be / are being sought as a part of this proposal.

Proponent to complete			
Aspects* of the proposal	Type of approval	Legislation regulating this activity	Which State agency /entity regulate this activity?
Planning	***Form 1 GBRS Application for Planning Approval***	***Greater Bunbury Region Scheme***	***City of Bunbury*** ***WA Planning Commission***

**e.g. mining, processing, dredging*

2.1.3 Commonwealth Government *Environment Protection and Biodiversity Conservation Act 1999* approvals

Refer to the assessment bilateral agreement between the Commonwealth of Australia and the State of Western Australia for assistance on this section.

Proponent to complete	
1. Does the proposal involve an action that may be or is a controlled action under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act)?	☐ Yes ☒ No *If no continue to Part A section 2.1.4.*
2. What is the status of the decision on whether or not the action is a controlled action?	☐ Proposal not yet referred ☐ Proposal referred, awaiting decision ☐ Assessed – controlled action ☐ Assessed – not a controlled action
3. If the action has been referred, when was it referred and what is the reference number (Ref #)?	Date: _____ Ref #: _____
4. If the action has been assessed, provide the decision in	☐ Yes ☐ No

Proponent to complete	
an attachment. Has an attachment been provided?	
5. Do you request this proposal to be assessed under the bilateral agreement?	☐ Yes ☐ No

Complete the following to the extent possible for the Public Comment of EPBC Act referral documentation.

Proponent to complete	
6. Have you invited the public to comment on your referral documentation?	☐ Yes ☐ No
7. How was the invitation published?	☐ newspaper ☐ website
8. Did the invitation include all of the following?	
(a) brief description of the action	☐ Yes ☐ No
(b) the name of the action	☐ Yes ☐ No
(c) the name of the proponent	☐ Yes ☐ No
(d) the location of the action	☐ Yes ☐ No
(e) the matters of national environmental significance that will be or are likely to be significantly impacted	☐ Yes ☐ No
(f) how the relevant documents may be obtained	☐ Yes ☐ No
(g) the deadline for public comments	☐ Yes ☐ No
(h) available for public comment for 14 calendar days	☐ Yes ☐ No
(i) the likely impacts on matters of national environmental significance	☐ Yes ☐ No
(j) any feasible alternatives to the proposed action	☐ Yes ☐ No
(k) possible mitigation measures	☐ Yes ☐ No
9. Were any submissions received during the public comment period?	☐ Yes ☐ No
10. Have public submissions been addressed? If yes provide attachment.	☐ Yes ☐ No

2.1.4 Other Commonwealth Government Approvals

Proponent, DMA and Third Party to complete	
Is approval required from other Commonwealth Government/s for any part of the proposal?	☐ Yes ☒ No *If yes, please complete the table below.*

Proponent, DMA and Third Party to complete			
Agency / Authority	Approval required	Application lodged?	Agency / Local Authority contact(s) for proposal
		☐ Yes ☐ No	
		☐ Yes ☐ No	

3. SUPPORTING INFORMATION

Please attach copies of any relevant information on the proposal, supporting evidence and / or existing environmental surveys, studies or monitoring information undertaken and list the documents below.

Proponent, DMA and Third Party to complete			
(1)	*Attachment 1*	*Various authors*	*Figures referenced in this referral*
(2)	*Attachment 1*	*Landgate*	*Certificates of Title*
(3)	*Attachment 2*	*Transforming Bunbury's Waterfront Steering Committee*	*Draft minutes – 6 December 2016*

PART B: ENVIRONMENTAL FACTORS

The purpose of Part B is to assist the EPA to determine the significance of the likely environmental impacts of the proposal in accordance with the EPA's *Environmental Assessment Guideline for Environmental factors and objectives* (EAG 8) and *Environmental Assessment Guideline for Application of a significant framework in the EIA process* (EAG 9). Referrers completing Part B should refer closely to EAG 8 and EAG 9.

The EPA has prepared *Referral of a Proposal under s38 of the EP Act EAG No.16 - Appendix A* (Appendix A) to assist in identifying factors and completing the below table. Further guidance can be found in the guidance and policy documents cited in Appendix A under each factor.

How to complete Part B
For each environmental factor, that is likely to be significantly impacted by the implementation of the proposal, make a copy of the table below and insert a summary of the relevant information relating to the proposal. The table can be broken down into more than one table per factor, if the need arises. For example the hydrological processes factor can be presented in two separate tables, one for surface water and one for groundwater, or similarly one for construction and one for operations.

For complex proposals a supplementary referral report can be provided in addition to the referral form. If this option is chosen the table must still be completed (summaries are acceptable) to assist the Office of the EPA with statistical reporting and filtering proposals for processing.

Proponents expecting an API level of assessment must provide information in accordance with the EPA's *Environmental Assessment Guideline for Preparation of an API-A environmental review document* (EAG 14).

For <u>each</u> of the significant environmental factors, complete the following table (Questions 1 – 10).

As noted above, the anticipated environmental impacts of the Casuarina Causeway Improvement Project are not considered to be significant. However, the project has been referred by the Department of Transport with an abundance of caution to ensure an appropriate consideration of impacts and make explicit the connection to the Koombana Bay Marine Structures project which is presently undergoing a Strategic Environmental Review. This project does not include any components of the works being assessed under the Koombana Bay Marine Structures SPER, as per Figure 2 of the SPER Environmental Scoping Document. The works are considered to be stand alone and are necessary to ensure ongoing structural integrity of the causeway and to improve the public safety and amenity of the structure.

Any impacts associated with the proposed works are considered to be minor and temporary in nature. Furthermore, completion of the project will have a positive impact on the factors of heritage, amenity and those which would be negatively impacted by the deteriorating condition of the structure.

Benthic Communities and Habitat

Proponent to complete. DMA and Third Party to complete to the best of their knowledge.		
1	Factor, *as defined in EAG 8*	Benthic Communities and Habitat
2	EPA Objective, *as defined in EAG 8*	To maintain the structure, function, diversity, distribution and viability of benthic communities and habitats at local and regional scales.
3	Guidance - what established policies, guidelines, and standards apply to this factor in relation to the proposal?	EAG 3 – Protection of Benthic Primary Producer Habitats in Western Australia's Marine Environment
4	Consultation - outline the need for consultation and the outcomes of any consultation in relation to the potential environmental impacts, including: • *anticipated level of public interest in the impact;* • *consultation with regulatory agencies; and* • *consultation with community.*	A strong level of support is anticipated for this project due to the minimal level of expected impacts, together with the increased amenity and safety resulting from the proposed works. Extensive consultation has been undertaken with the Dolphin Discovery Centre, South West Development Commission, Department of Planning, LandCorp, Southern Port Authority, Department of Lands and City of Bunbury. Attachment 2 includes minuted evidence of stakeholder support for the project and DoT's capability to manage the project and any environmental considerations. Consultation with existing pen holders and other harbour users has commenced and will be ongoing throughout the project. Community consultation will be ongoing throughout the duration of the works.
5	Baseline information - describe the relevant characteristics of the receiving environment. *This may include: regional context; known environmental values, current quality, sensitivity to impact, and current*	The seabed in the vicinity of the causeway structure comprises unconsolidated marine sediments and patches of low-profile, hard substrates. A review of available aerial imagery and benthic habitat mapping (Oceanica 2008, cited in RPS 2016) indicates that several patches of turf algae and Heterozostera sp. are located adjacent to the causeway. Refer to Attachment 1, Figures 3. On the eastern side, these small patches of Benthic Primary Producer Habitat (BPPH) are generally limited to the southern half of the causeway, approximately 10 m from the revetment toe. None have been identified on the western (harbour) side.

Proponent to complete. DMA and Third Party to complete to the best of their knowledge.		
	level of cumulative impacts.	The Point Busaco seawall represents a similar structure which has been recently constructed in Koombana Bay using a similar construction methodology to that proposed for this project. The seawall was constructed by the Southern Port Authority during winter 2015 at a site approximately 1.3km ESE of the causeway. Turbidity tube readings taken during construction were provided to DoT by Seashore Engineering, on behalf of the Port. Readings show that increased turbidity during construction was both localised and short lived, with levels dropping rapidly overnight and at the completion of construction.
6	Impact assessment - describe the potential impact/s that may occur to the environmental factor as a result of implementing the proposal.	The proposed maintenance works on the causeway require the placement and rearrangement of rock at the revetment toe and some excavation/disturbance of the sandy sediments immediately adjacent in order to ensure that the revetment is well founded. Works will be land based, using a loader and excavators. These works are not expected to disturb the seabed beyond ~10 m from the toe of the causeway and are not expected to have significant impacts on the quality of BPPH in Koombana Bay. The overall footprint of the revetment may vary marginally as a result of the refurbishment works. The causeway footprint will be increased by approximately 0.08ha on the western (harbour) side through the proposed realignment as shown in Attachment 1. While the location shown in Figure 1 and Figure 2 is representative, the final location may vary slightly from this. The seabed which will be impacted is predominantly an area of bare sediment so potential impacts to benthic primary producers are expected to be negligible. The slight increase in availability of hard substrate (in the form of exposed armour rock) is predicted to have a net benefit for productivity of benthic macro-algae. There is the potential for indirect impacts on benthic primary producers from the increased turbidity during the works, caused by placement of materials and from the material itself. It is expected that any turbidity generated during construction will be localised, temporary and very minor for the following reasons: • Works will regularly progress along the length of the structure so impacts will not be concentrated in one location for long periods of time. • Works will be limited to daylight hours to allow the settlement of suspended material overnight. • The specification of core material will limit the percentage of allowable fines. Handling of material will ensure contamination with finer material is minimised. • Armour stone which is to be re-used has been in-situ for many years and is therefore already washed.

Proponent to complete. DMA and Third Party to complete to the best of their knowledge.		
		No indirect impacts on benthic primary producer habitats are anticipated after the completion of the construction works.
7	Mitigation measures - what measures are proposed to mitigate the potential environmental impacts? The following should be addressed: • *Avoidance - avoiding the adverse environmental impact altogether;* • *Minimisation - limiting the degree or magnitude of the adverse impact;* • *Rehabilitate – restoring the maximum environmental value that is reasonably practicable; and* • *Offsets – actions that provide environmental benefits to counterbalance significant residual environmental impacts or risks of a project or activity.*	As noted above, no significant impacts to benthic primary producers are anticipated. Nonetheless, it is proposed to undertake daily monitoring of turbidity levels via photography and turbidity measurements to document the extent of turbidity during the works. Site photography and a time-lapse camera mounted to a light pole (or similar) will provide the photographic record. Recent construction experience in Koombana Bay found the effectiveness of silt curtains to be limited in areas exposed to waves, such as the eastern side of the causeway (information provided by Seashore Engineering on behalf of Southern Ports Authority). A silt curtain may be effective within the more sheltered harbour and so could be used to limit turbidity impacts on the swimming beach. This would not enclose the beach, but would be located perpendicular to the breakwater to minimise any impacts in the likely areas of highest turbidity. Works are proposed to be undertaken without the use of silt curtains along the eastern side and causeway head, but with the following management measures to minimise impacts, in accordance with a Construction Environmental Management Plan (CEMP): • Works limited to daylight hours. • Specification of materials to limit the percentage of allowable fines. • Imported materials to be clean and free of contaminants. Any excavated material which is considered unsuitable for use as fill will be appropriately disposed of onshore in accordance with the CEMP. Maintenance works on the causeway cannot be avoided if structural integrity, public safety and amenity of the structure are to be preserved or improved.
8	Residual impacts – review the residual impacts against the EPA objectives. *It is understood that the extent of any significant residual impacts may be hard to quantify at the referral stage. Referrers are asked to provide, as far as practicable, a discussion on the likely residual impacts and form a conclusion on whether the EPA's objective for this*	The preliminary program allows a period of 8 months for the completion of the revetment refurbishment and bulk earthworks on the causeway, though it is likely that the works can be completed in a shorter timeframe. 0.08ha of seabed within the existing harbour will be utilised for the proposed realignment and the final footprint of the structure may vary marginally as a result of the revetment refurbishment. Soft sediment BPPH is the dominant type in Koombana Bay and the disturbance or modification of a small area of seabed is not expected to have adverse ecological impacts. The main genera of seagrasses in the region (*Heterozostera* and *Halophila)* are disturbance specialists and are expected to recolonise any disturbed sediments. Turfing macro algae is expected to benefit from the area of

Proponent to complete. DMA and Third Party to complete to the best of their knowledge.		
	factor would be met if residual impacts remain. This will require: • *quantifying the predicted impacts (extent, duration, etc.) acknowledging any uncertainty in predictions;* • *putting the impacts into a regional or local context, incorporating knowable cumulative impacts; and* • *comparison against any established environmental policies, guidelines, and standards.*	exposed rock created through the refurbishment of the revetment toe. The total change of BPPH resulting from the proposed works is negligible in the context of Koombana Bay and does not exceed the recommendations of the EAG3. The works included in the project will actively reduce the risk of negative impacts to BPPH in the future through: • the provision of improved facilities and services on the structure, i.e. improved drainage and waste disposal will reduce the likelihood of harmful runoff in the event of a spill or other incident on the causeway; and • stabilisation of the existing core and armour material.
9	EPA's Objective – from your perspective and based on your review, which option applies to the proposal in relation to this factor? *Refer to EAG 9*	☒ *meets the EPA's objective* ☐ *may meet the EPA's objective* ☐ *is unlikely to meet the EPA's objective*
10	Describe any assumptions critical to your conclusion (in Question 9). *e.g. particular mitigation measures or regulatory conditions.*	

Marine Environmental Quality

Proponent to complete. DMA and Third Party to complete to the best of their knowledge.		
1	Factor, *as defined in EAG 8*	Marine Environmental Quality
2	EPA Objective, *as defined in EAG 8*	To maintain the quality of water, sediment and biota so that the environmental values, both ecological and social, are protected.
3	Guidance - what established policies, guidelines, and standards apply to this factor in relation to the proposal?	EAG 15 – Protecting the Quality of Western Australia's Marine Environment Australian and New Zealand Guideline for Fresh and Marine Water Quality (ANZECC/ARMCANZ 2000) State Water Quality Management Strategy Document No. 6 (DoE 2004)

Proponent to complete. DMA and Third Party to complete to the best of their knowledge.		
4	Consultation - outline the need for consultation and the outcomes of any consultation in relation to the potential environmental impacts, including: • *anticipated level of public interest in the impact;* • *consultation with regulatory agencies; and* • *consultation with community.*	As per Item 4 in *Benthic Communities and Habitat*.
5	Baseline information - describe the relevant characteristics of the receiving environment. *This may include: regional context; known environmental values, current quality, sensitivity to impact, and current level of cumulative impacts.*	A number of environmental quality studies have been undertaken for Koombana Bay as a part of development and dredging activities in Bunbury Port. A review by RPS summarised the key findings from studies: • Turbidity levels within Koombana Bay are variable and are likely to be influenced by rainfall, river inflow, tidal exchange, wind speed and direction, wave heights and re-suspension of bottom sediments (Wave Solutions 2012). • Analyses of metals found in marine sediments in Koombana Bay identified arsenic levels above the screening level (20 mg/kg) at sites around the bay. The distribution of elevated arsenic concentrations in the water suggests that this is naturally occurring (Wave Solutions 2012). • Polychlorinated biphenyls, organochlorine pesticides and aromatic hydrocarbons were below detection levels in tested marine sediments (Wave Solutions 2012). As a part of its long term dredge management program, the Port of Bunbury is conducting an ongoing marine and sediment water quality monitoring program. Monitoring has been conducted at a variety of sites on an annual basis since May 2008 (RPS 2016). Site OH01 is located approximately 300m north of the Casuarina Boat Harbour causeway head. While site surveys of the causeway have identified that the majority of existing fill material is clean sand, some building waste (concrete and bricks) was observed above the waterline at the structure's head where it used to join the Bunbury Timber Jetty. There are no records on the DER Contaminated Sites Database for the project area. A site inspection conducted in December 2016 found no visible evidence of asbestos among the building waste located at the causeway head. Asbestos has been identified in the existing DoT amenities building located on the causeway and it is considered highly likely that the existing water

Proponent to complete. DMA and Third Party to complete to the best of their knowledge.		
		main is an asbestos cement pipe. Further investigations are planned to be undertaken to confirm the precise extent and location of asbestos on site.
6	Impact assessment - describe the potential impact/s that may occur to the environmental factor as a result of implementing the proposal.	There is the potential for impacts on Marine Environmental Quality from the increased turbidity during the works, reducing light availability in the water column and possibly causing avoidance behaviour in marine fauna. It is expected however that any turbidity generated during construction will be temporary and very minor (refer Item 6 of *Benthic Communities and Habitat*) and will have negligible effect on the hydrodynamics, ecological processes or environmental quality in the bay. The disturbed sediment at the revetment toe is expected to be uncontaminated sand as indicated by the results of the previous marine sediment sampling programs in Koombana Bay. Construction activities will involve the removal of building waste, including asbestos, in accordance with the project CEMP. No negative operational impacts to water circulation or the marine environmental quality of Koombana Bay are anticipated from either maintenance or improvement works after completion. The provision of proper drainage and waste disposal facilities will reduce the potential for run-off to enter Koombana Bay from the causeway.
7	Mitigation measures - what measures are proposed to mitigate the potential environmental impacts? The following should be addressed: • *Avoidance - avoiding the adverse environmental impact altogether;* • *Minimisation - limiting the degree or magnitude of the adverse impact;* • *Rehabilitate – restoring the maximum environmental value that is reasonably practicable; and* • *Offsets – actions that provide environmental benefits to counterbalance significant residual environmental impacts or risks of a project or activity.*	Maintenance works on the causeway cannot be avoided if structural integrity, public safety and amenity of the structure are to be preserved or improved. A number of measures will be in place during construction to ensure any impacts are either avoided or minimised. Where possible, building waste will be removed from the structure head during the revetment maintenance works and appropriately disposed of in accordance with the CEMP. Asbestos will be removed and disposed of in accordance with the asbestos removal plan included in the CEMP. The use of silt curtains and photographic monitoring will be undertaken as outlined in Item 7 of *Benthic Communities and Habitat*. The waste oil collection facility (provisional) will be a fully bunded collection point with a small tank to be emptied by pumping to a truck, similar to other facilities provided at DoT Boat Harbours. The provision of this facility would greatly reduce the potential for a spill or illegal dumping on the causeway.

Proponent to complete. DMA and Third Party to complete to the best of their knowledge.		
8	Residual impacts – review the residual impacts against the EPA objectives. *It is understood that the extent of any significant residual impacts may be hard to quantify at the referral stage. Referrers are asked to provide, as far as practicable, a discussion on the likely residual impacts and form a conclusion on whether the EPA's objective for this factor would be met if residual impacts remain. This will require:* • *quantifying the predicted impacts (extent, duration, etc.) acknowledging any uncertainty in predictions;* • *putting the impacts into a regional or local context, incorporating knowable cumulative impacts; and* • *comparison against any established environmental policies, guidelines, and standards.*	There is unlikely to be any residual impacts to Marine Environmental Quality as a result of the Causeway Improvement Project. There are no plausible impacts to water circulation or flushing of existing facilities. The works included in the project will actively reduce the risk of negative impacts to marine environmental quality in the future through: • the provision of improved facilities and services on the structure, i.e. improved drainage and proper waste collection facilities will reduce the likelihood of harmful runoff in the event of a spill or other incident on the causeway; • stabilisation of the existing core and armour material; and • the removal of potentially hazardous building waste from the structure's head. Removal of this material from the environment will be a positive impact of the project, minimising future hazards to the marine environmental quality and the safety of visitors.
9	EPA's Objective – from your perspective and based on your review, which option applies to the proposal in relation to this factor? *Refer to EAG 9*	☒ *meets the EPA's objective* ☐ *may meet the EPA's objective* ☐ *is unlikely to meet the EPA's objective*
10	Describe any assumptions critical to your conclusion (in Question 9). *e.g. particular mitigation measures or regulatory conditions.*	The proposal involves the maintenance and improvement of an existing structure with no known or expected environmental quality effects. The minor changes to the footprint will not affect the circulation of water within the boat harbour and will not engender any elevated risks of spills or discharges into the bay.

Marine Fauna

Proponent to complete. DMA and Third Party to complete to the best of their knowledge.

Proponent to complete. DMA and Third Party to complete to the best of their knowledge.		
1	Factor, *as defined in EAG 8*	Marine Fauna
2	EPA Objective, *as defined in EAG 8*	To maintain the diversity, geographic distribution and viability of fauna at the species and population levels.
3	Guidance - what established policies, guidelines, and standards apply to this factor in relation to the proposal?	*Wildlife Conservation Act 1950* EAG 13 – Consideration of environmental impacts from noise
4	Consultation - outline the need for consultation and the outcomes of any consultation in relation to the potential environmental impacts, including: • *anticipated level of public interest in the impact;* • *consultation with regulatory agencies; and* • *consultation with community.*	As per Item 4 in *Benthic Communities and Habitat*. Consultation with Dolphin Discovery Centre regarding the management of construction activities to minimise impacts to dolphins will be ongoing throughout the design and construction period.
5	Baseline information - describe the relevant characteristics of the receiving environment. *This may include: regional context; known environmental values, current quality, sensitivity to impact, and current level of cumulative impacts.*	Koombana Bay has a resident population of bottlenose dolphins (*Tursiops* sp.). Dolphin abundance varies seasonally with greater numbers present during summer and autumn. Calving activity generally commences in December, peaking in February with mothers and calves residing in the bay. The Dolphin Discovery Centre permits and controls interactive activities between the public and the resident dolphins (RPS 2016). Whales (mostly *Megaptera* sp.) may pass along the Bunbury coastline during annual migrations. Mothers and calves may occupy the protected waters closer to shore, though Bunbury does not represent a regularly frequented habitat for whales (RPS 2016). Blue swimmer crabs (*Portunus armatus*) spawn in Koombana Bay, with data indicating the highest number of egg-bearing females is present between October and January (Kangas 2000). Recent shorebird and waterbird surveys conducted within Koombana Bay have not identified significant numbers of waterbirds/migratory birds in Koombana Bay (RPS 2016).
6	Impact assessment - describe the potential impact/s that may occur to the environmental factor as a result of implementing the proposal.	Noise from the placement of rock armour on the revetment or road works on the structure's crest may disturb marine fauna and shorebirds in the immediate vicinity. These impacts are considered to be very minor however as the generated noise will be relatively low level and not sudden 'impact' type of noise such as that associated with piling or blasting operations (neither of which are

Proponent to complete. DMA and Third Party to complete to the best of their knowledge.		
		proposed to occur). Turbidity from the placement of rock and disturbance of the seabed may cause avoidance behaviour for marine fauna in the immediate vicinity however potential construction impacts will be both localised and temporary. Some marine fauna (i.e. dolphins) may be attracted to the disturbance of the water and seabed during construction. Potential interactions will be managed successfully under the CEMP marine fauna management measures. Any impacts from construction will be temporary and are not expected to be significant. No operational or residual impacts to marine fauna are anticipated.
7	Mitigation measures - what measures are proposed to mitigate the potential environmental impacts? The following should be addressed: • *Avoidance - avoiding the adverse environmental impact altogether;* • *Minimisation - limiting the degree or magnitude of the adverse impact;* • *Rehabilitate – restoring the maximum environmental value that is reasonably practicable; and* • *Offsets – actions that provide environmental benefits to counterbalance significant residual environmental impacts or risks of a project or activity.*	Marine megafauna monitoring (principally for dolphins) will be undertaken by dedicated marine fauna observers for the duration of construction works. Management protocols to minimise disturbance of marine fauna during construction activities will be addressed in the CEMP. Consultation with the Dolphin Discovery Centre will inform the development of marine fauna management actions to be included in the CEMP to ensure any impacts to dolphins are negligible.
8	Residual impacts – review the residual impacts against the EPA objectives. *It is understood that the extent of any significant residual impacts may be hard to quantify at the referral stage. Referrers are asked to provide, as far as practicable, a discussion on the likely*	No residual impacts to marine fauna are expected to result from the maintenance and improvement works on the Casuarina causeway. There will be no impacts on the diversity, geographic distribution and viability of fauna at species and population levels.

Proponent to complete. DMA and Third Party to complete to the best of their knowledge.		
	residual impacts and form a conclusion on whether the EPA's objective for this factor would be met if residual impacts remain. This will require: • *quantifying the predicted impacts (extent, duration, etc.) acknowledging any uncertainty in predictions;* • *putting the impacts into a regional or local context, incorporating knowable cumulative impacts; and* • *comparison against any established environmental policies, guidelines, and standards.*	
9	EPA's Objective – from your perspective and based on your review, which option applies to the proposal in relation to this factor? *Refer to EAG 9*	☒ *meets the EPA's objective* ☐ *may meet the EPA's objective* ☐ *is unlikely to meet the EPA's objective*
10	Describe any assumptions critical to your conclusion (in Question 9). *e.g. particular mitigation measures or regulatory conditions.*	Dolphin interactions can be managed adequately under the marine fauna management measures outlined in the CEMP. This is a safe assumption given the very low level of risk and the well-established management procedures.

Amenity

Proponent to complete. DMA and Third Party to complete to the best of their knowledge.		
1	Factor, *as defined in EAG 8*	Amenity
2	EPA Objective, *as defined in EAG 8*	To ensure that impacts to amenity are reduced as low as reasonably practicable.
3	Guidance - what established policies, guidelines, and standards apply to this factor in relation to the proposal?	Environmental Protection (Noise) Regulations 1997 Guidance Statement 13 – Consideration of environmental impacts from noise

Proponent to complete. DMA and Third Party to complete to the best of their knowledge.		
4	Consultation - outline the need for consultation and the outcomes of any consultation in relation to the potential environmental impacts, including: • *anticipated level of public interest in the impact;* • *consultation with regulatory agencies; and* • *consultation with community.*	As per Item 4 in *Benthic Communities and Habitat*. Consultation with pen holders will be ongoing throughout the design and construction period in order to minimise impacts and maximise access to the pens. Consultation with other harbour users as well as local residents and businesses will be ongoing throughout the design and construction period. Community consultation will be undertaken via a coordinated approach between CoB, DoT and the SWDC.
5	Baseline information - describe the relevant characteristics of the receiving environment. *This may include: regional context; known environmental values, current quality, sensitivity to impact, and current level of cumulative impacts.*	The causeway is located in close proximity to residential and commercial areas. The structure is located within the DoT harbour management zone however it is also classed as Regional Open Space in the Greater Bunbury Region Scheme. The structure provides protection to Casuarina Boat Harbour and access to 48 recreational boat pens. Two buildings are located on-site, the DoT penholder amenities building and a multi-purpose building owned by the SWCA which is located on the causeway under a temporary approval from DoT. Public amenity of the existing structure is presently limited by the lack of services and facilities as well as the poor condition of both Jetty Road and the revetment itself. The poor and deteriorating condition of the road and revetment wall presently pose a potential public safety hazard.
6	Impact assessment - describe the potential impact/s that may occur to the environmental factor as a result of implementing the proposal.	Impacts are expected to be low given the short-term nature of the works and the fact that the area is already subject to similar impacts (such as noise and traffic) from the port and other industrial activities in the area. Impacts are expected to include: • noise associated with rock placement activities; • truck movements through the Bunbury waterfront area; • temporary access restrictions along the causeway; and • temporary access restrictions and service disruptions to recreational boat pens. All impacts will be limited to the construction period. No ongoing negative impacts are expected, but there will be significant positive amenity outcomes.
7	Mitigation measures - what measures are proposed to mitigate the potential	The following measures shall be implemented through the CEMP to limit the impacts to public amenity during the works:

Proponent to complete. DMA and Third Party to complete to the best of their knowledge.		
	environmental impacts? The following should be addressed: • *Avoidance - avoiding the adverse environmental impact altogether;* • *Minimisation - limiting the degree or magnitude of the adverse impact;* • *Rehabilitate – restoring the maximum environmental value that is reasonably practicable; and* • *Offsets – actions that provide environmental benefits to counterbalance significant residual environmental impacts or risks of a project or activity.*	• appropriate working hours to minimise disruption to nearby residents and businesses, 7am to 6pm Monday to Saturday only, excluding public holidays; • traffic management to control both vehicular and pedestrian movement; • public signage containing information about the works and provide contact details for further information or complaints; • ongoing consultation with harbour users, local residents and local businesses; and • ongoing liaison and communication with the pen holders to manage access and service interruptions.
8	Residual impacts – review the residual impacts against the EPA objectives. *It is understood that the extent of any significant residual impacts may be hard to quantify at the referral stage. Referrers are asked to provide, as far as practicable, a discussion on the likely residual impacts and form a conclusion on whether the EPA's objective for this factor would be met if residual impacts remain. This will require:* • *quantifying the predicted impacts (extent, duration, etc.) acknowledging any uncertainty in predictions;* • *putting the impacts into a regional or local context, incorporating knowable cumulative impacts; and* • *comparison against any established environmental policies, guidelines,*	The works will significantly increase the amenity of the causeway, delivering improved services and facilities for pen holders and the general public and safe, universal access for vehicles and pedestrians.

Proponent to complete. DMA and Third Party to complete to the best of their knowledge.		
	and standards.	
9	EPA's Objective – from your perspective and based on your review, which option applies to the proposal in relation to this factor? *Refer to EAG 9*	☒ *meets the EPA's objective* ☐ *may meet the EPA's objective* ☐ *is unlikely to meet the EPA's objective*
10	Describe any assumptions critical to your conclusion (in Question 9). *e.g. particular mitigation measures or regulatory conditions.*	Access and service disruptions to the existing boat pens will be short term and can be managed through consultation with pen holders.

In circumstances where there was some uncertainty on the level of significance of a particular factor it is recommended that a brief summary (no longer than 1 - 2 paragraphs) is provided on the steps taken to determine why a factor was not considered to be significant.

Coastal Processes have been excluded from the significant environmental factors because the proposed repair and improvement works will not result in any change to the influence of the causeway on local or regional coastal processes, given that it is an existing structure and the works will not significantly change the footprint. Sea level rise has been considered and the capacity of the structure to adapt to rising sea levels by increasing the crest height has been allowed for in the design.

Heritage was excluded from the significant environmental factors because the heritage values associated with the causeway are ancillary to the structure itself and the works will not have any negative impact on these. The causeway was constructed in 1967 and originally provided access to the Bunbury Timber Jetty. The Jetty was listed on the State Register of Heritage Places and a condition of its deconstruction (in 2012/2013) was that an interpretive display was established to provide information on the historic value of the Jetty. The City of Bunbury is planning to meet this requirement through the development a heritage precinct at the head of the causeway to display information on both the Jetty and the Arrol Crane currently located near the causeway head. The crane is included in the State Heritage List. The crane is currently fenced off for safety and protection and this will remain in place during the works. The proposed works are designed to significantly increase the heritage amenity of the area by improving services, access and providing a permanent site for the heritage precinct and the crane.

The region forms a part of the Gnaala Karla Booja Indigenous Land Use Agreement. A search of the Aboriginal Heritage Inquiry system on 16 September 2016 found no registered sites in the project area.

REFERENCES

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