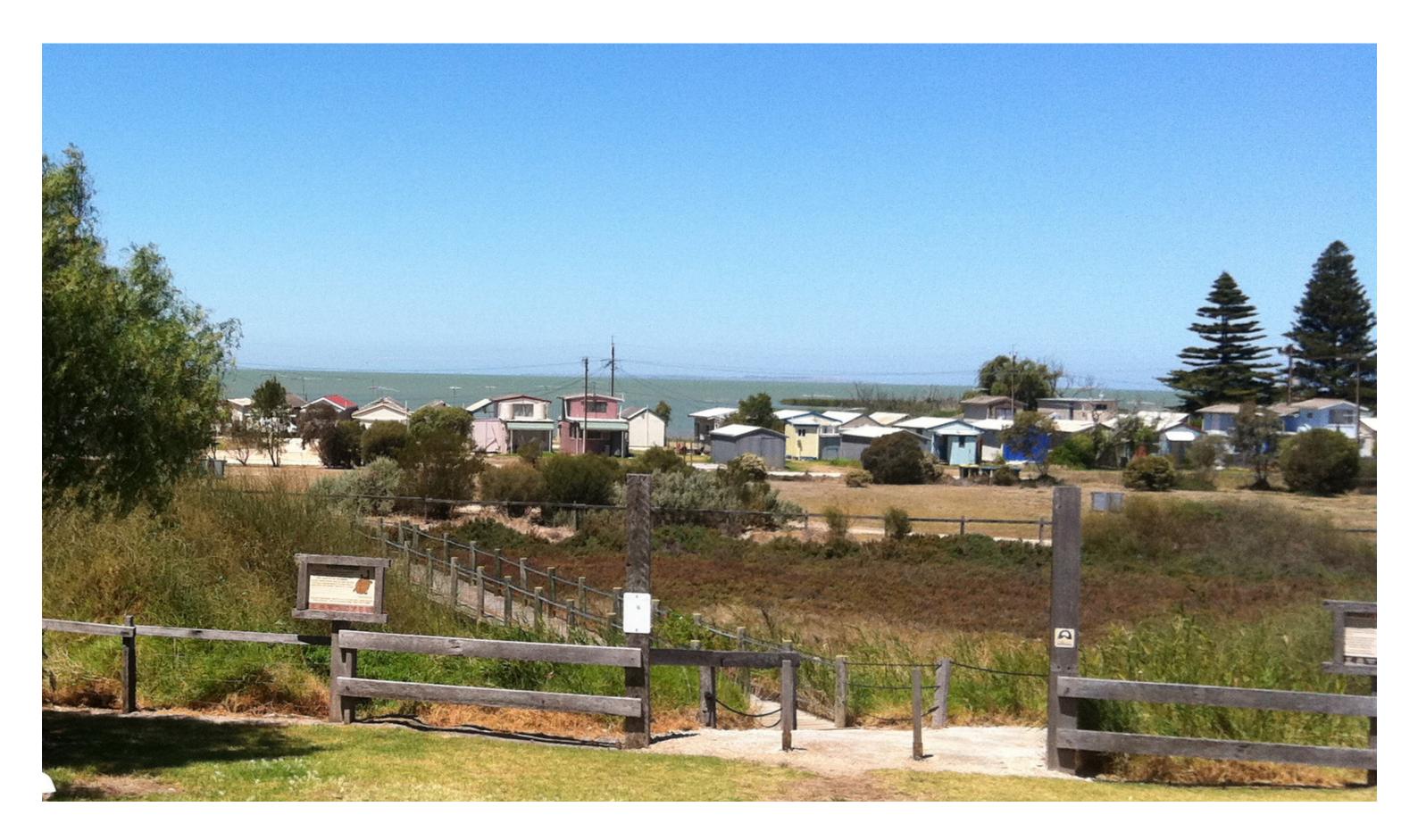
## **CLLMM MILANG HABITAT RESTORATION PROJECT** SNIPE SANCTUARY CONCEPT PLAN

**08 NOVEMBER 2016** 



# **SNIPE SANCTUARY SITE**

Oxigen were previously engaged by Alexandrina Council to provide strategic concept planning for redevelopment of the Milang Foreshore. Recent Commonwealth Government funding has become available for the restoration of the Snipe Sanctuary including site infrastructure and ecological works.

The Milang Habitat Restoration Project is funded through the Commonwealth Government's Coorong, Lower Lakes and Murray Mouth (CLLMM) Recovery Project. The project will focus on infrastructure and ecological works in and around the Snipe Sanctuary to promote awareness of the environmental significance of the wetland and its relationship to social and cultural values of the area. The project's primary aims are to achieve environmental outcomes and enhanced visitor experience.

Alexandrina Council, independently of this project, commenced development of the Milang Foreshore Redevelopment Plan in 2014, culminating in a set of draft concept plans being completed. Given time constraints for the completion of the CLLMM Habitat Restoration Project, the earlier-commenced Foreshore Redevelopment planning will be placed on hold to give priority to the completion of this CLLMM project. However, the plans for the broader foreshore redevelopment may be referred to throughout the CLLMM project as a reference, to ensure compatibility and to identify potentially complimentary works between the projects.

This concept plan defines the scope of work to be undertaken by Alexandrina Council for the CLLMM Milang Habitat Restoration Project.





# **ABOUT LATHAM'S SNIPE**

The Milang wetland is an important site for Latham's Snipe (Gallinago hardwickii), listed as 'rare' under the South Australian National Parks and Wildlife Act 1972.

Latham's Snipe is a medium-sized wader, with a length of around 30cm and weighing just 200 grams. It has mainly brown plumage. The upper body is boldly patterned with black, brown and white. There is a bold narrow dark brown cheek stripe and dark line through the eye. The eyes are set well back on the distinctive rounded head, and it has a long, straight bill.

Latham's Snipe breed in Japan and far eastern Russia during the northern hemisphere summer. They migrate south after the breeding season, flying some 8,000 kilometres, travelling across Papua New Guinea to winter in south-eastern Australia. They arrive between August and November and depart again by early March. This species is also known as the Japanese Snipe.

Latham's Snipe usually occurs singly or in small, loose groups of less than a dozen birds and inhabit permanent and ephemeral wetlands inhabiting open, freshwater or brackish wetlands with low, dense vegetation (e.g. swamps, flooded grasslands or heathlands, around bogs and other water bodies).

Latham's Snipe are not easily detected. Their plumage provides them with a natural camouflage that makes them difficult to see amongst the vegetation that is typical of their preferred habitats. They are extremely shy and wary, and may crouch down or remain motionless when approached by an observer; and they are mostly active under the cover of darkness (i.e. during the night, or in the morning before sunrise).

The area of occupancy is presumed to have declined since the arrival of Europeans with the widespread loss of habitat due to the drainage and clearance of wetlands, and the impact of hunting. Global warming represents a potential threat that could further threaten the species throughout its range in the future.

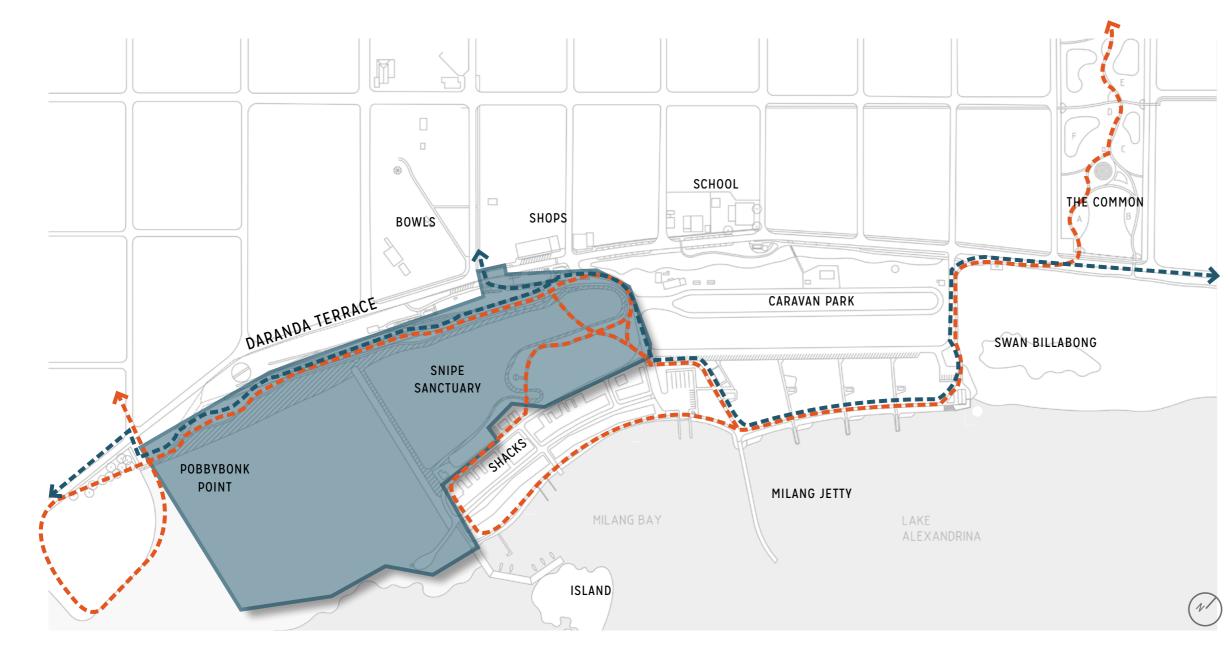


Birdlife Australia. Latham's Snipe. Available from http://www.birdlife.org.au/bird-profile/lathams-snipe Department of the Environment (2016). Gallinago hardwickii in Species Profile and Threats Database, Department of the Environment, Canberra. Available from: http://www.environment.gov.au/sprat.

# **SNIPE SANCTUARY CONTEXT**

The Snipe Sanctuary in Milang is set on the edge of Lake Alexandrina adjacent Daranda Terrace and extends south-west past the Shacks to Pobbybonk Point. Path connections around the edges of the Snipe Sanctuary connect to current and future pedestrian and cycle networks. These paths provide connection throughout the Milang foreshore from Pobbybonk Point to the Shacks and lake edge reserve, past the Swan Billabong to The Common(age).

Restoration works to the Snipe Sanctuary will provide important ecological benefits and enhance community and visitor connection to this valued natural resource. Future infrastructure projects by the Alexandrina Council will build on the proposed restoration works and further improve the quality, amenity and accessibility of the Milang Foreshore.





MEC/ MCDA Environmental Walk



Proposed dual use path



Snipe sanctuary: extent of work

4

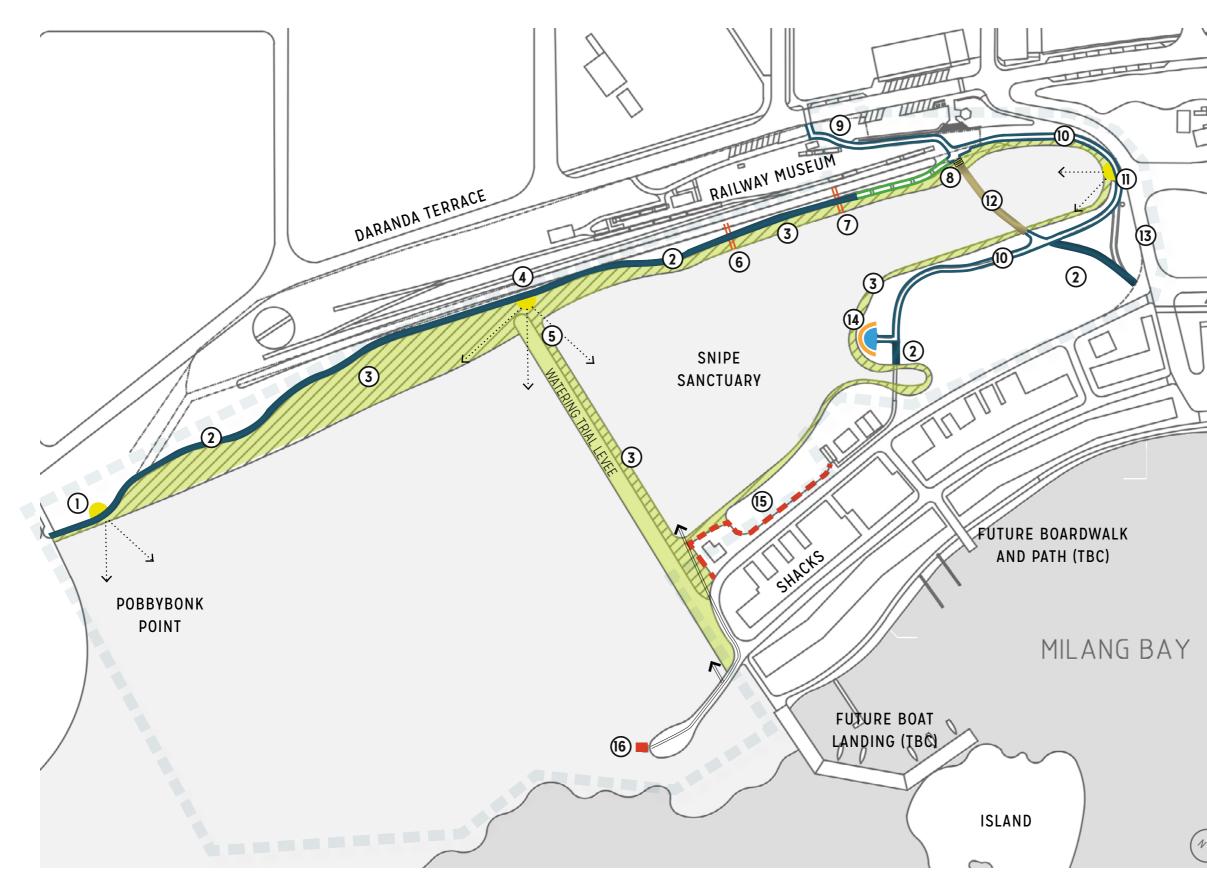
# **SNIPE SANCTUARY EXISTING KEY FEATURES**



IIIII Existing water trial levee Existing rubble paths Site boundary

Existing boardwalks Bird-hides



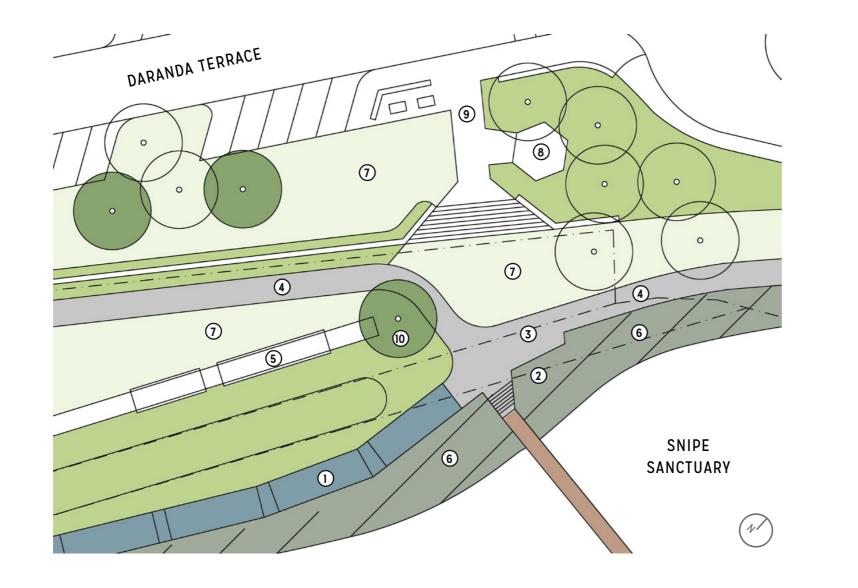


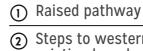
|       | 1    |  | g node with shelter, seating<br>erpretive signage.   |  |
|-------|------|--|--|--|
|       | 2    | Re-surf  | ace existing rubble paths.   |  |
|       | 3    | Re-vege<br>edge.   | etation of Snipe Sanctuary   |  |
|       | 4    |  | g node with seating and<br>etive signage.  |  |
|       | 5    | height aloi  | equalising point. (Note: lower levee<br>ng approximately 5.0 metre length from<br>nd to allow water flow between lagoons)  |  |
|       | 6    | Adjust   | existing stormwater outlet.  |  |
| 11/1/ | 1    | New st   | ormwater outlet.   |  |
|       | 8    | Raised pathway providing disability<br>access to the existing rubble path.<br>New stepped access to the existing<br>boardwalk.           |  |  |
|       | 9    | Connec<br>groups.  | tion to car parking for all user   |  |
|       | 10   | Concret  | te connecting path.  |  |
| 7///  | 1    | Seating<br>signage   | node with interpretive<br>e.   |  |
|       | (12) | Retain existing boardwalk and provide new compliant balustrade.  |  |  |
|       | (13) | Rubble   | connecting path.   |  |
|       | (14) | Bird-hide screen with viewing platform.  |  |  |
| =     | (15) | Infill ex  | isting fence to prevent access.  |  |
|       | (16) | Remove existing bird-hide. Provide<br>concrete platform for water pump and<br>piping to each side of levee for future<br>watering trial. |  |  |
|       |      |  | Concrete path  |  |
|       |      |  |  |  |
|       |      |  | Re-surfaced rubble paths   |  |
|       |      |  |  |  |
|       |      |  | Re-surfaced rubble paths   |  |
|       |      |  | Re-surfaced rubble paths<br>Rubble connecting path   |  |
|       |      |  | Re-surfaced rubble paths<br>Rubble connecting path<br>Existing boardwalk   |  |
|       |      |  | Re-surfaced rubble paths<br>Rubble connecting path<br>Existing boardwalk<br>Raised pathway   |  |
|       |      |  | Re-surfaced rubble paths<br>Rubble connecting path<br>Existing boardwalk<br>Raised pathway<br>Infill existing fence  |  |
|       |      |  | Re-surfaced rubble paths<br>Rubble connecting path<br>Existing boardwalk<br>Raised pathway<br>Infill existing fence<br>Watering trial piping                     |  |
|       |      | •  | Re-surfaced rubble paths<br>Rubble connecting path<br>Existing boardwalk<br>Raised pathway<br>Infill existing fence<br>Watering trial piping<br>Viewing platform |  |

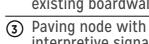
# **BOARDWALK, RAISED PATHWAY + CONCRETE PATH JUNCTION: CONCEPT PLAN**

Several pathways intersect at the western end of the existing boardwalk and provide a key departure point for visitors to the Snipe Sanctuary. The following key moves are proposed to improve accessibility and function of the pathways:

- < Provide compliant steps at the western end of the existing boardwalk.
- < Replace a non-compliant section of rubble path with a raised pathway to provide equal access to the Pobbybonk Point rubble path.
- Provide concrete paving to connect Daranda Terrace to the bird hide screen and viewing platform.







- (4) Concrete connecting path
- (5) Railway museum track and trucks
- (6) Re-vegetation of Snipe
- Grass
- (8) Existing shelter

Steps to western end of existing boardwalk

interpretive signage

Sanctuary edge

Future paving and terraces (indicative)

(i) Proposed trees (indicative)

# **SNIPE SANCTUARY SCHEDULE OF WORKS**

The following key elements are proposed for the CLLMM Milang Habitat Restoration Project:

#### SCHEDULE OF WORKS (indicative):

#### LANDSCAPE ELEMENTS + SIGNAGE

1. Provide 1 x Viewing Platform with seating and bird hide screen

2. Provide 3 x Viewing Nodes with seating

3. Provide 1 x Shelter

4. Provide minimum 6 x interpretive signs (final number to be agreed in detailed design)

5. Provide an access compliant raised pathway from the western end of the existing boardwalk to the Pobbybonk Point rubble path

6. Provide compliant steps to the western end of the existing boardwalk

7. Provide compliant balustrading to the existing boardwalk, including additional posts as required

8. Infill the existing fence at the western extent of the shacks to prevent access

#### PATHWAYS

1. Resurface the existing rubble path from Pobbybonk Point to the raised pathway

2. Resurface the existing rubble path from the new concrete path at the eastern end of the boardwalk to the northern end of the shacks

3. Provide a new rubble path from the northern end of the shacks to the northern viewing node

4. Provide new exposed aggregate concrete path connection from Daranda Terrace to the viewing platform and bird hide screen

#### CIVIL/SERVICES INFRASTRUCTURE

1. Provide a concrete platform for a water pump and associated piping for future watering trial

2. Adjust existing storm water outlet pipes and provide new outlets as required

3. Provide water equalising point in levee bank by lowering levee height along approximately 5.0 metre length at western end of levee

#### DEMOLITION

- 1. Remove balustrade from existing boardwalk
- 2. Remove existing bird hide south of the shacks
- 3. Remove existing bird hide west of the shacks
- 4. Salvage existing hardwood elements for re-use where possible

8

NOTE: 1. Vegetation restoration not included in scope.

<sup>2.</sup> Items detailed above are subject to detailed designed and itemised budget being confirmed in next stage of planning.

### **SNIPE SANCTUARY CONCEPT PLAN** VIEWING PLATFORM WITH SEATING



### **SNIPE SANCTUARY CONCEPT PLAN** VIEWING NODES WITH SEATING



# **SNIPE SANCTUARY CONCEPT PLAN** CONCRETE CONNECTING PATH



## **SNIPE SANCTUARY CONCEPT PLAN** BIRD-HIDE SCREEN



## **SNIPE SANCTUARY CONCEPT PLAN** EXISTING PATH RE-SURFACED



## **SNIPE SANCTUARY CONCEPT PLAN** RAISED PATHWAY



### **SNIPE SANCTUARY CONCEPT PLAN** RUBBLE CONNECTING PATH



## **SNIPE SANCTUARY CONCEPT PLAN** REVEGETATION OF SNIPE SANCTUARY EDGE

NOTE: Extent of vegetation shown is indicative only and is subject to development of a separate development plan being endorsed by DEWNR



### **SNIPE SANCTUARY CONCEPT PLAN** REMOVAL OF BIRD-HIDE AND INSTALLATION OF PUMP PAD FOR FUTURE WATER TRIALS



### **SNIPE SANCTUARY CONCEPT PLAN** FUTURE CONNECTIONS AND OPTIONAL PATHS

