

14. Infrastructure and Facilities

14.1 Loss of Moorings and Anchorage

While the proposed channel to the proposed Port of Airlie will require some moorings in Boathaven Bay to be removed, information provided in the Marina Demand Analysis indicates that there are currently 225 unallocated/vacant moorings in Pioneer Bay in 2000. Further, some vessels currently on moorings in the Pioneer Bay/Boathaven Bay area are expected to relocate into the marina and this is likely to compensate for any loss of moorings due to the channel.

In the unlikely event that demand for moorings exceeds the number of allocated moorings, application can be made to Queensland Transport to provide additional moorings.

The proposed Port of Airlie will not significantly diminish the area of “safe anchorage” available to vessels in Pioneer Bay/Boathaven Bay. The proposed Port of Airlie will also provide safe haven for some 400 boats during cyclones. Boats on moorings in Pioneer Bay/Boathaven Bay are currently exposed to northerly winds typical during cyclones and tropical depressions.

14.2 Management of Sewerage

Section 14.3 of the Supplementary Environmental Impact Statement discusses proposed arrangements for management of sewage/wastewater from the Port of Airlie proposal. These arrangements include upgrades of pump stations, sewer lines and the Cannonvale Sewage Treatment Plant to ensure that the sewage system can continue to operate to the standards required by the Environmental Protection Agency in the Environmental Authority issued to Whitsunday Shire Council.

It should be noted that an upgrade of the Cannonvale Sewage Treatment Plant by Whitsunday Shire Council is required. The proponent is not in a position to undertake these works directly but will make contributions to Whitsunday Shire Council in the form of headworks charges which will assist in meeting the costs of this upgrade.

Discussions are continuing with Whitsunday Shire Council on the timing of headworks payments for the development to assist in the upgrading of both the water supply and sewerage reticulation networks required because of the development. The sewage headworks charges to be paid by the developer will make a significant contribution to the cost of upgrading of the Cannonvale Wastewater Treatment Works, which must be completed by 2008 in accordance with EPA licensing requirements.

The developer has committed to WSC that an analysis of the water supply system and the wastewater collection system and treatment plant will be undertaken during detailed design of the development to determine the external works, bought forward costs and schedule of headworks payments to meet the upgrading requirements associated with the development. The arrangements will be included in a deed of agreement to be concluded with WSC before construction of the development commences.

The volume of sewage effluent with high salinity from pump out of vessels in the marina is a small percentage (17%) of the total volume of effluent generated from the development. The effluent from the pump out facility will be thoroughly mixed and diluted with effluent from the commercial and residential developments in the developments main pumping station before transmission to the treatment plant. No special treatment facilities will be required for treatment of this effluent.

14.3 Boat Ramp

14.3.1 Demand

The most recent information on demand for boat ramps is The Public Boat Ramps North Queensland Strategic Plan prepared in 1987 (Sinclair Knight and Partners, 1987). Queensland Transport advises that the forecasts made in this document were accurate enough that future demand can be extrapolated from these forecasts.

The study identified and assessed the following boat ramps as existing in the area in 1986:

- ❑ Airlie Beach (assumed to be the ramp on the headland adjacent to the Whitsunday Sailing Club), Category E
- ❑ Shingley Beach, Category D
- ❑ Shute Harbour, Category D
- ❑ Dingo Beach, Category D

Category E boat ramps are defined as “ a single lane boat ramp with no queuing beach” and the acceptable capacity for such a ramp is 20 boats launchings per day. Category D boat ramps are defined as a “single lane boat ramp with at least 10 metres of contiguous beach usable at most stages of the tide, or a 2 lane boat ramp with no queuing beach” and the acceptable capacity for this type of ramp is 30 launchings per day.

The study identified that the shortfall in boat ramp launching capacity was 40 per day in 1986 and predicted to be 54 per day by 1991 and 70 per day by 1996. Extrapolating from these forecasts, it could be predicted that a shortfall of approximately 100 launchings per day would occur by 2006 and 115 by 2011.

Since this study was undertaken, an additional 2 lane boat ramp has been installed at Abel Point. The queuing capacity at this facility is unknown, so it is assumed that it is a Category D facility with a capacity of around 30 launches per day (based on capacities quoted in Sinclair Knight and Partners, 1987, pg 39). A boat ramp is also proposed for Altman Avenue at Cannonvale. The capacity and timing of this facility is unknown.

The proposed boat ramp at Port of Airlie will be two lanes with a queuing pontoon. In accordance with the classifications used in the Public Boat Ramps Strategic Plan, this would be a Category C facility with a capacity of 80 launches per day (Sinclair Knight and Partners, 1987, p 39).

The boat ramp at Abel Point marina, combined with the proposed boat ramp at Port of Airlie will increase launching capacity in the Airlie Beach/Shute Harbour area by approximately 110 launches per day. This should satisfy demand until 2011.

It is noted that the existence of the Port of Airlie marina may increase demand for boat ramp facilities in the region beyond that which is forecast. Additional boat ramps such as the proposed ramp at Altman Avenue will assist in meeting demand beyond that forecast. The potential for further expansion of the boat ramp at Port of Airlie also exists and could be explored further if future demand appears to warrant this.

14.3.2 Pontoon Usage

The pontoon provided at the boat ramp will be dedicated for use by boat ramp users only, and only while actually launching/retrieving boats. Users of the commercial boat maintenance and repair facilities adjacent to the boat ramp will not be permitted to use the floating pontoon.

14.3.3 Impact on Other Boat Ramps

As discussed in Section 14.1.2 of the Supplementary Environmental Impact Statement, the proposed Port of Airlie development is not expected to impact on any existing boat ramp. The nearest boat ramp is at the headland adjacent to the Whitsunday Sailing Club. The boat ramp itself, and the area typically used for car/trailer parking will not be impacted on by the proposal.

14.3.4 Conflict with other Vessels

As discussed in Section 14.1.2 of the Supplementary EIS, the potential for conflict between larger boats accessing the marina facilities area and smaller vessels using the boat ramp will be managed using speed limits and possibly use of navigational markers to delineate approaches for different vessels.

14.3.5 Design

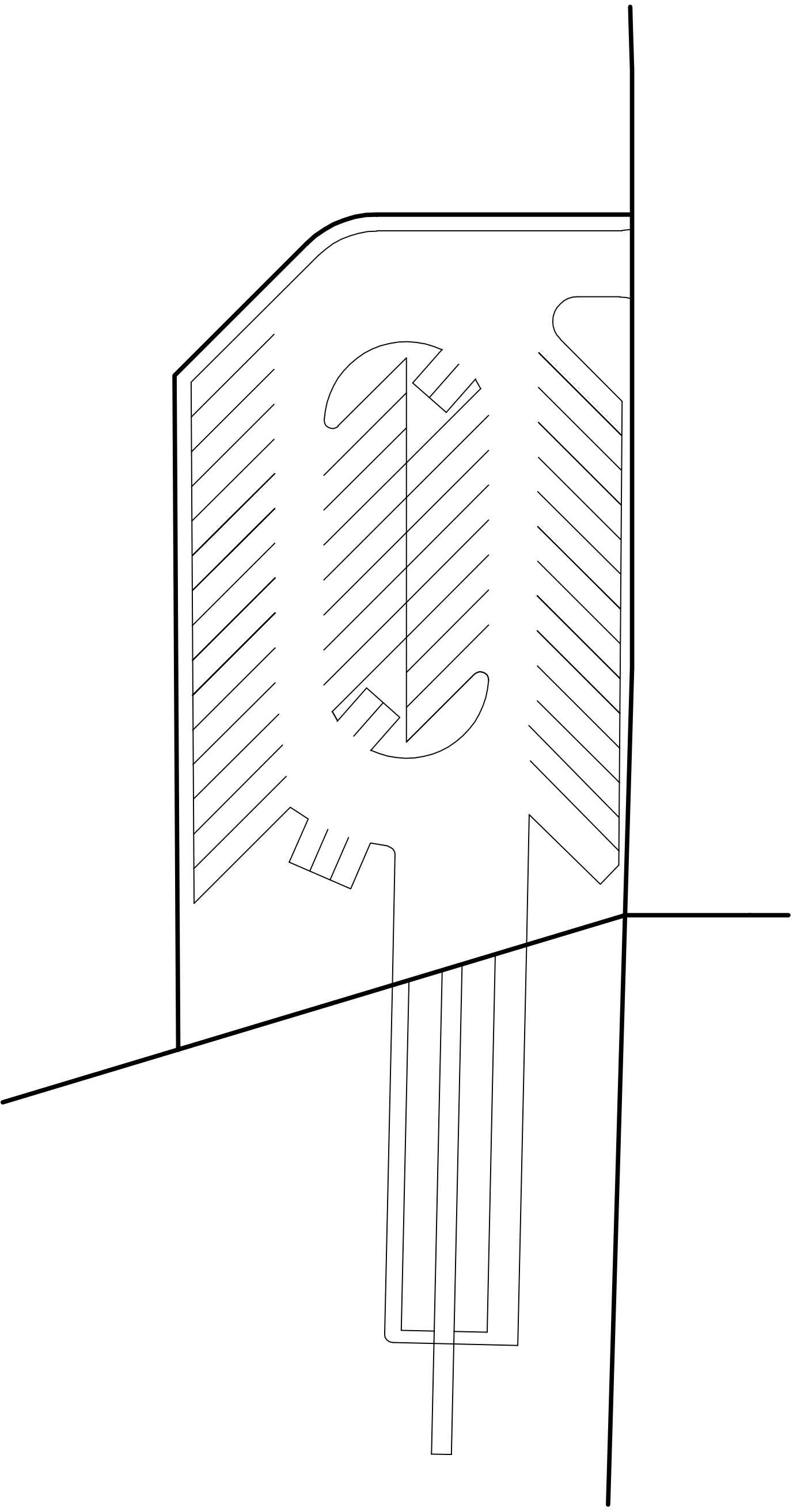
A plan demonstrating that it is possible to comply with Queensland Transport Marine Division Public Boating Facilities Guidelines is provided in **Figure 14-1**. Detail design plans will be provided at Development Permit stage.

The plan includes 45 car/trailer unit parking spaces and 7 car only parking spaces as required by the guidelines. Other aspects of boat ramp design will also comply with the guidelines.

14.4 Infrastructure Standards

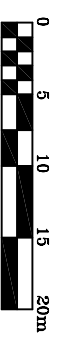
Provision of stormwater, wastewater and waste infrastructure designed to best practice standards is important to ensure that the highest appropriate level of environmental protection is provided by this infrastructure.

PRELIMINARY : FOR DISCUSSION



PORT OF AIRLIE SITE (K)

WINDWARD AIRLIE BEACH PTY LTD



SCALE 1 : 500

4326-01-D

16 April 2003

SK-428

1:500



Design

mckerrill lynch

architects

planners

interior designers