



Photo 4: Aerial south view over Trinity Point. Note that the site is cleared of structures, however the footprints can be clearly seen.

2.4 ADJACENT & SURROUNDING DEVELOPMENT

As provided by the Aerial photographs at Photo 5 Trinity Point is located on a peninsula with water frontage to the north, east and south. The area immediately to the west of the subject site is being progressively developed by JPG as Trinity Point residential estate. Approval has been gained for 190 residential lots.



Photo 5: Aerial Photo of Morisset Park

Adjoining lands further to the west are typically low density residential development, and are largely buffered from the subject land by JPG Trinity Point

residential estate. There are existing dwellings which are separated from the northern part of the subject site by a shallow unnamed bay.

Suburban development extends around the edges of the Morisset Peninsula, with a variety of interfaces to the lake, including some highly modified edges (walls, manicured lawns). Bonnells Bay Village (currently being redeveloped) is located within 2km of the site, and it, combined with nearby Morisset Emerging Regional Centre, provides commercial, retail, educational, medical, community, sporting and recreation facilities. With considerable population growth anticipated in the broader locality (some 5000 lots in Morisset and Coorangbong), appropriate social planning is underway.

The broader locality has large tracts of vegetated and reserved lands including the Morisset State Conservation Area.

2 . 5 T O P O G R A P H Y , F L O O D I N G A N D D R A I N A G E

Land falls from Bluff Point and a small low ridge in the south at 8.5m to low lying area in north, to open space zoned lands and water edges north, east and south. Bluff Point includes a cliff edge.

Part of the northern portion of the site is subject to flooding, the 1:100 year flood level is 1.38m AHD. The floor levels of any proposed future development will be required to have a minimum floor level set above the 1:100 year flood level. The Concept Plan proposes to establish local flood planning levels across the site for various components, which take into account

The site currently drains towards Bardens Bay with no formed watercourse evident on site.

2 . 6 E C O L O G Y

There is minimal vegetation on the subject site (Lot 31), other than cultural plantings near Bluff Point in the south. Fringing foreshore vegetation and aquatic ecology are sited around edges of the subject site.

The Ecology Lab Pty Ltd has mapped the aquatic vegetation surrounding the site during the preparation of the concept plan - see photo 6. It can be seen that seagrass extends out along the eastern boundary of the foreshore, with saltmarsh and mangroves around the shallow unnamed bay.

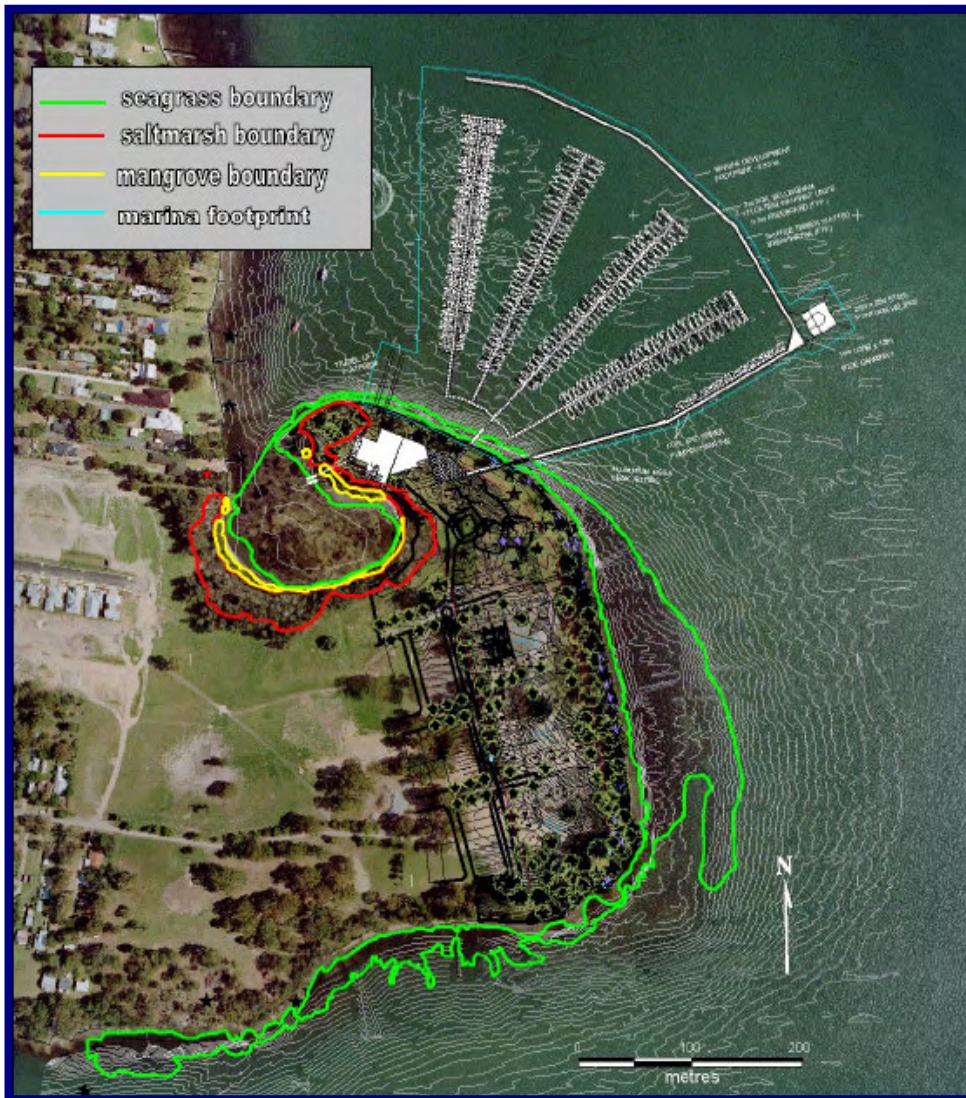


Photo 6: Aquatic vegetation at Trinity Point in Lake Macquarie (mapped in January 2007).

Additional vegetation mapping has been provided by RPS HSO as shown in Photo 7.



Photo 7: Vegetation Mapping.

2.7 GEOTECHNICAL

2.7.1 Mining

The site is located within the Morisset Park mine subsidence area.

2.7.2 Geotechnical and Groundwater

Douglas Partners have studied and reported on the site as part of the Part 3A Concept Plan process.

Tourist & Marina Village Area (on shore)

Sandy soils with variable proportions of clay, silt and gravel, to depths of 5m were encountered. Sandy soils are underlain by clay, sandy clay and gravely clay. Rock was encountered at depths of 12.8m and 11.4m. Groundwater was encountered at depths as shallow as 0.4m in the northern part of the site.