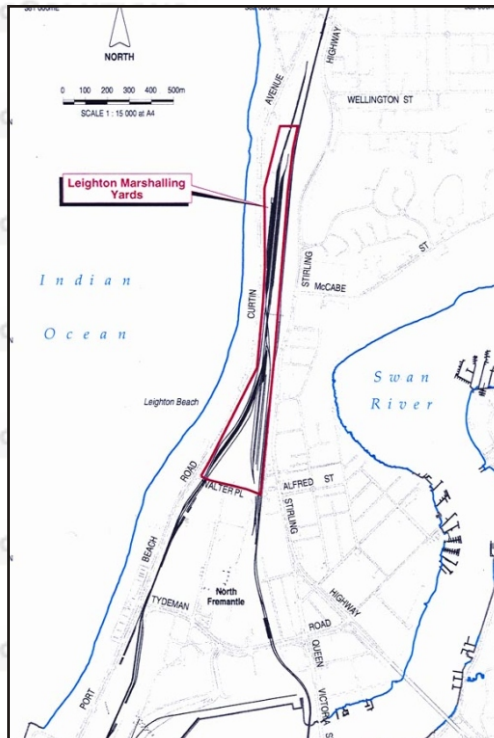




PROJECTS HYDROGEOLOGY

Hydro 9

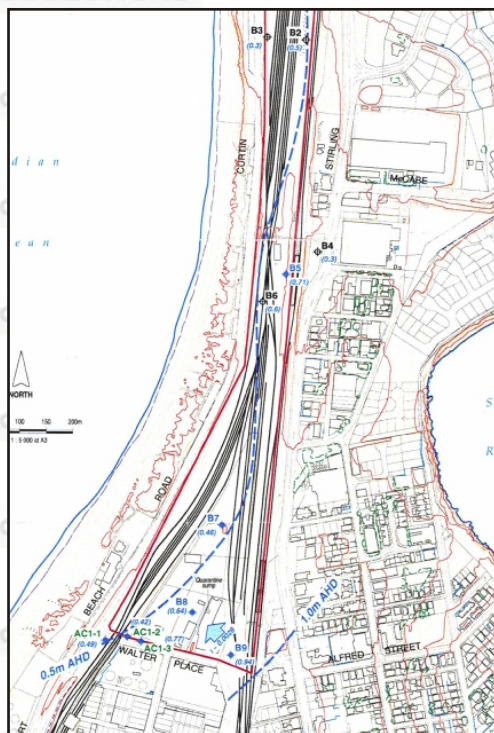


MINISTRY FOR PLANNING:
Assessment of groundwater resources,
Leighton Marshalling Yards, North Fremantle

An initial hydrogeological appraisal of the Leighton Marshalling Yards in North Fremantle was undertaken, to determine the available freshwater resource for the proposed site redevelopment.

Groundwater is present at shallow depth within the sandy Tamala Limestone, flowing west and discharging at the coast. Fresh groundwater is present beneath the majority of the site, with the saline interface at a depth of approximately 21mBGL.

The freshwater volume in storage and the renewable resource available from rainfall recharge was estimated.



Part maps courtesy of DoLA

The maximum sustainable groundwater abstraction rate for irrigation bores to prevent saline up-coning was estimated using a 3-dimensional analytical groundwater model. It was estimated that on-site abstraction could sustainably provide approximately 40% of the site's reticulation requirement.

Recommendations were made for further monitoring to confirm the initial estimates.

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