

16 January, 2008

Project Reference: 3008552

**WINGECARRIBEE LEISURE CENTRE
DESIGN DEVELOPMENT REPORT
CIVIL CONSULTING ENGINEERING SERVICES**

Civil Engineering

The following civil drawings may be referenced:

3008552-C01 Face Sheet
3008552-C02 Pavement Make Up & Key Plan
3008552-C03 Site Works & Drainage Plan
3008552-C04 Details Plan & Pit Schedule

Existing Stormwater Drainage

The existing drainage system located within the development site conveys runoff from the existing catchments from the north west precinct along Moss Vale Road, the existing rugby and soccer fields and the existing site proposed for the development. Flows are conveyed into the existing drainage system which ranges from 450mm diameter to 900mm diameter pipes.

Discharge from the drainage system is conveyed to the east of the site into 2 No. 600 diameter culverts located under Eridge Park Road.

Overland Flow

A review of the existing topography of the site indicates that the development area is slightly lower than the surrounding levels. An existing depression exists to the east of the development site adjacent to the existing access roadway. An existing inlet pit with associated 900 diameter outlet pipe conveys water from the natural low point.

An investigation of the overland flow volumes will be carried out as part of the design development phase of the project to confirm the adequacy of the existing drainage system to ensure that all overland flows are conveyed to the Eridge Park Road culvert.

Proposed Stormwater Drainage

The proposed drainage associated with the new building and carpark will convey flows from building roofs and pavements into the existing drainage. Any on-site detention requirements will be further investigated if required during the design development phase of the project.

A possible upgrade of the existing 900 dia drain located underneath the access roadway to the east of the development site will be investigated following the review of the sites overland flow analysis.

Flood Mitigation

Base on the plan provided by Wingecarribee Shire Council, the proposed site is not located within the designated flood plain. The estimated 100yr flood level advised by Wingecarribee Council is 656.45m.