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**STORMWATER DRAINAGE REPORT**

**ON**

**LOT 51 MCH 567 PARISH OF POONA**

**FOR**

**MR M. GRUNSKÉ.**

**C94095**

**18 JANUARY 1995.**

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M.C.C. STANDARD DRAWING NO.SD11

"Standard Road Cross Sections"

DRAWING NO.94095-01

"Stormwater Catchment Plan & Legend".

## 1.0 INTRODUCTION.

This report was commissioned by Mr M.Grunske, the owner of Lot 51 MCH 567, Parish of Poona to fulfill items (a) 1,2 & 3 of Maryborough City Council's rezoning conditions dated 9 June 1994 which are as follows:-

1. The overall stormwater catchment, depicted by a plan, which clearly identifies the overland flow paths from adjoining lands and which directly or indirectly discharge across the subject land.
2. The location and dimensions of flow paths which would be needed to be set aside across the subject land to cope with a Q100 event.
3. The manner and method by which the proposed subdivision's underground stormwater drainage pipes, as well as overland surcharge, will be taken to a foreshore outlet.

The subject site is located in Tuan on the western side of Wilkinson Road and south-west of the Wilkinson Road and Turton Street intersection, and has an area of approximately four(4) hectares.

## 2.0 LAND USE.

It is proposed to subdivide the site into 26 Residential A allotments with a minimum lot size of 1200 square metres.

The land to the west and south of the site is managed by the State Forestry Department and is undeveloped wallum which is typical of the Tuan Coastal area.

The occupied rural land to the north of the site has been previously cleared and is grassed with limited grazing and rural residential activities noted on each of the lots.

### **3.0 HYDRAULIC ANALYSIS.**

#### **3.1 Existing Conditions.**

Open drains and berms have been previously constructed to the west and the south of the subject site to divert overland flow around the site.

The size of the external catchment that falls to these drains is approximately 10.1 hectares. The size of the existing drains are inadequate to control discharge from the external catchment for a  $Q_{100}$  event.

Runoff from the subject site discharges into the lots to the north from the low point on the northern boundary, located approximately 100m west of the Wilkinson Road boundary.

Discharge from the above open drains and the subject site eventually flows into the existing table drain in Wilkinson Road. Wilkinson Road falls to a natural gully approximately 280m north of the site where two sets of culverts discharge east into an unnamed creek that flows into Great Sandy Strait.

#### **3.2 Proposed Works.**

The existing drains to the west and south of the subject site are to be either regraded and reshaped or new drains provided in accordance with the details provided in Drawing No.94095-01 to cope with discharge from a  $Q_{100}$  event.

The proposed cul de sac and extension of Wilkinson Road shall be generally constructed to a Rural Access and Collector Standard with table drains as detailed on Council's Standard Drawing Sd11.

It is proposed to provide a 3 to 4m wide drainage easement and open drain along a portion of the northern boundary from the natural low point to a reshaped and deepened table drain in Wilkinson Road.

Three(3) existing access culverts along the western side of Wilkinson Road are to be reconstructed at lower levels and additional cells added to provide acceptable piped discharge and weir flow for a  $Q_{100}$  event.

The proposed allotments' raised building pads (minimum RL 3.0 AHD) are to be constructed in a manner that will not adversely affect runoff into adjoining lots or cause local flooding.

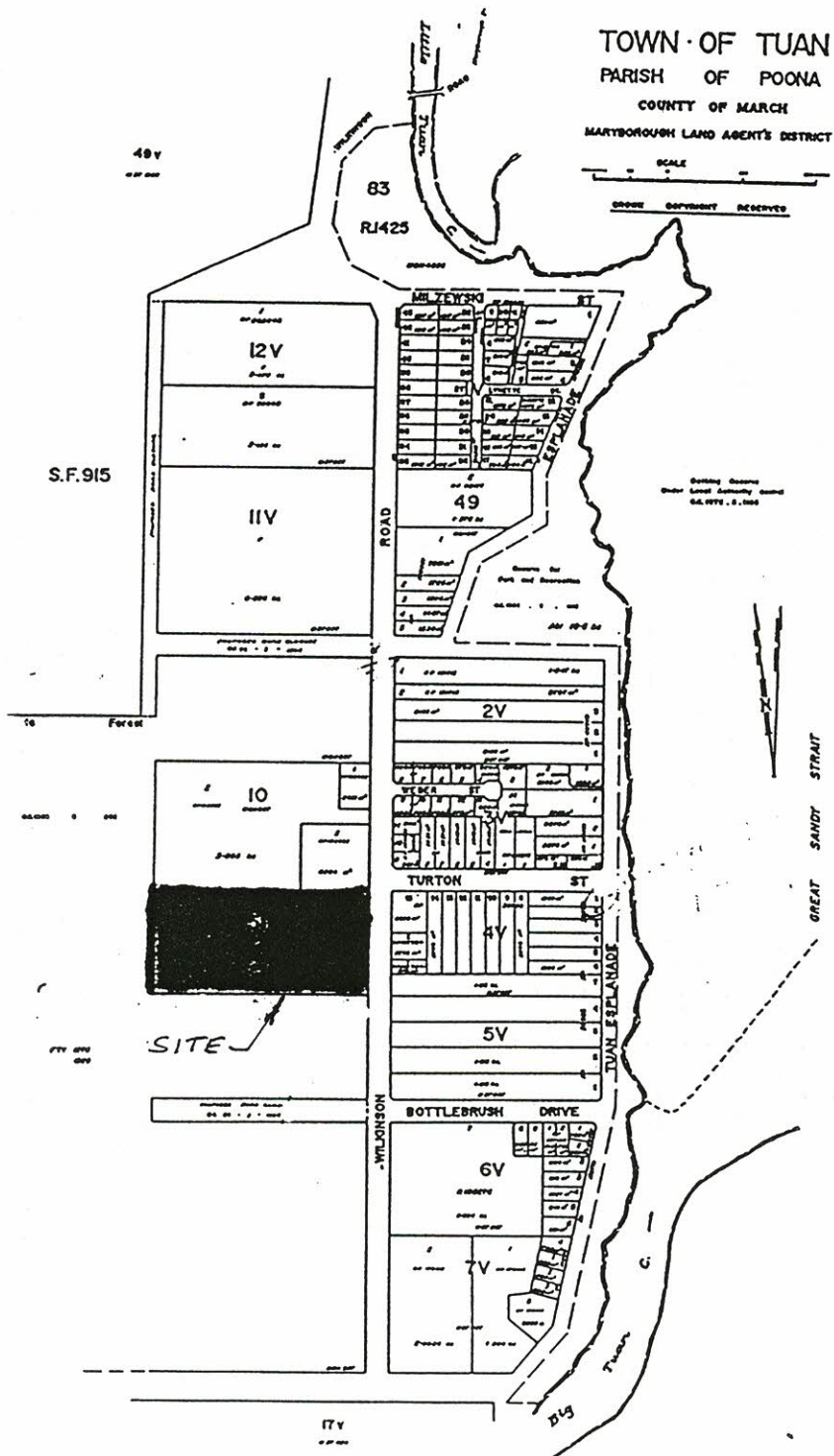
#### 4.0 CONCLUSION.

The proposed drainage works as detailed in Drawing No.94095-01 and the Rural Stormwater Drainage Design Table detail the overall stormwater catchments, overland flow paths, proposed  $Q_{100}$  drains and discharge to a foreshore outlet.

The proposed drainage works provide the proposed lots with acceptable immunity from  $Q_{100}$  events.

The above works have been calculated from data obtained from site survey and 1:2500 orthophoto plans (Maaroom Creek 22 and Boonooroo 33) and as such shall be subject to confirmation at the final subdivisional design stage.

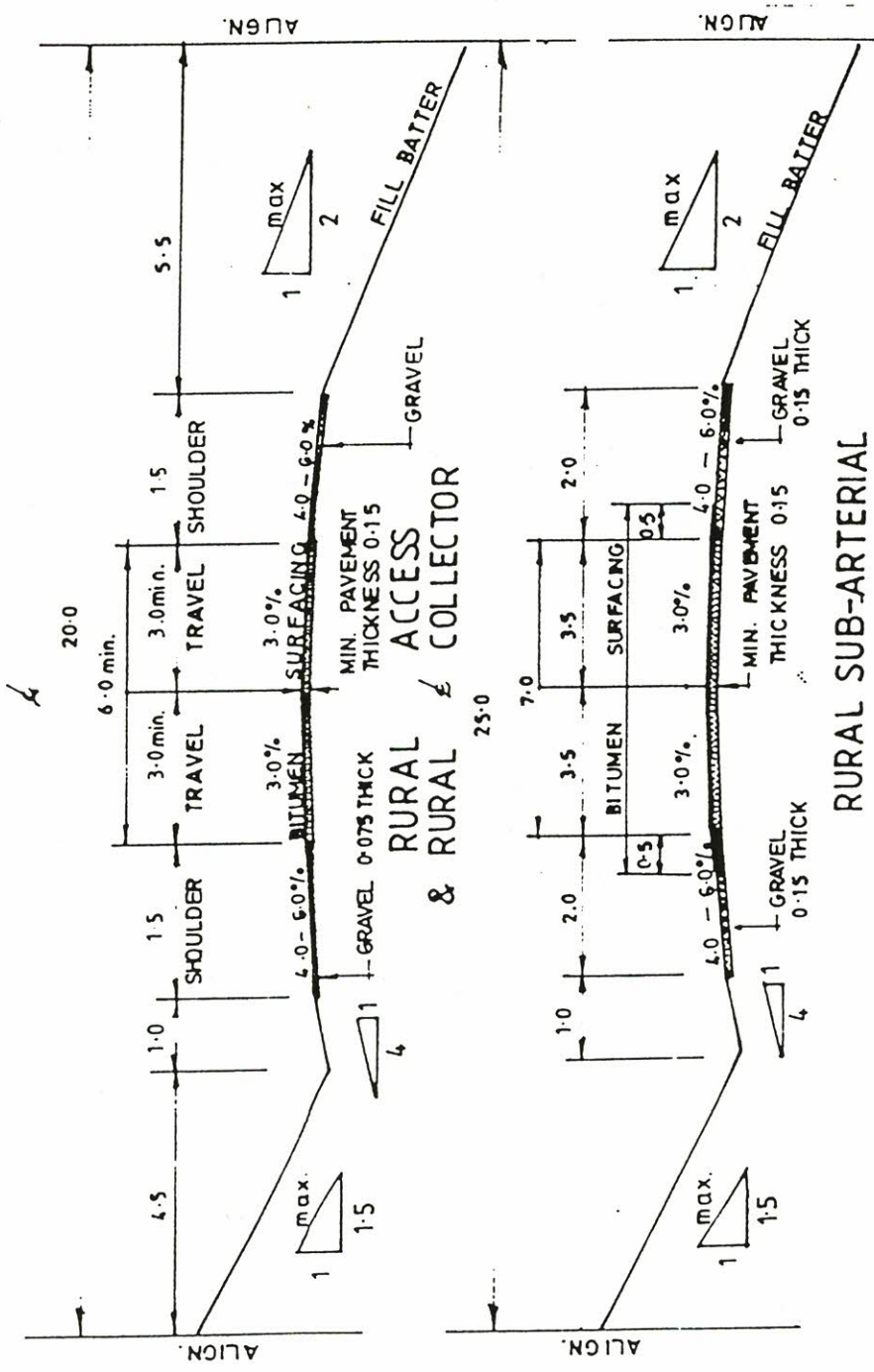
# **Appendix**



# Locality Plan







MARYBOROUGH CITY COUNCIL		
STANDARD ROAD CROSS SECTIONS		
SCALE	N. T. S.	DRG No
DRAWN	J. G.	Sd 11
DATE	12.12.88	