**Road Design Report**

REGION

Project Title

Project Number

01/06/17

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Register of Approval of This Report

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| Issue | Significance of this issue | Author | Checked | Approved |
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# Introduction

# Background

# Survey

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# Geotechnical Investigation

# Utilities

# AAPA Restricted Work Area

# Land Council Sacred Site Clearance

# Geometric Design

The geometric design of this section of ……road is based on the following design guidelines and as noted in the Write Back Brief for ………, as provided.

1. Austroad Guide to Road Design Part 3: Geometric Design.
2. Transport Infrastructure Policies.

|  |  |
| --- | --- |
| **Parameter**  | **Suggested Value/Guide** |
| Design Speed | km/hr |
| Design Vehicle | Triple Road Train |
| Clear Zone | 4m absolute minimum |
| Typical Cross Section | 2 x 3m Traffic Lanes, 7m seal over 9m carriageway width |
| Site Drainage | Table drains with regular interval off let drains on both sides |
| Accesses | The accesses have been regraded to match the road. |

Table 1: Geometric Design Parameters

# Intersections

# Extended Design Domain

# Stormwater Drainage

Drainage design parameters have been adopted from the Department of Transport Policy, “Stormwater and Drainage” for a ……..Road.

The drainage design for this section of road is based on “Austroad Guide to Drainage Part 5” with 0.5EY.

The project comprises of table drains with regular interval off let drains and transverse drainage discharge through culverts. No floodways or causeways have been incorporated in this project.

 The following process has been used to define the discharge relevant to and contributing to the culverts.

1. Main Catchments areas and the stream slope for the site have been defined using…...
2. Bransby Williams Formula was used to calculate the time of concentration (tc).
3. Based on the tc, the rainfall intensity was determined for ……… using rainfall intensity data for …………through the Rainfall Intensity Frequency Duration software.
4. Rational method was used to determine the Discharge flow for …EY for each catchment.
5. The culverts have been sized based on the calculated discharge flow from a …..EY.

The culverts have been designed at the following location for transverse drainage.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Culvert No** | **Chainage** | **Catchment Area (km2)** | **Discharge Q5 (m3/sec)** | **Size** | **Remarks** |
| 1 |  |  |  |  |  |
| 2 |  |  |  |  |  |
| 3 |  |  |  |  |  |
| 4 |  |  |  |  |  |

Table 2: Culvert Design Details

# Landscaping

# Road Safety Audit

A Road Safety Audit has not been requested for this project, however, it can be organised on request by Transport Infrastructure Planning Division (TIPD).

1. Design Drawings
2. Cost Estimate
3. Drainage Calculations
4. Minutes of Design Review Meeting
5. Geotechnical Report
6. Environmental Risk Assessment
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9. Write Back Brief