

# Utility Programs for Drainage

## Flood calculations



**Sinotech**

**Project name:** 323 - Wellington Erven 15712  
**Analysed by:** Jana Marais  
**Name of river:** Unknown  
**Description of site:** Erf 15712  
**Filename:** C:\Dropbox (Triple 3 Engineering)\T3CivilEng\Projects\323 - Erf 15712 Wellington\design\storm water\UPD Drainage\Erf 15712.fld  
**Date:** 10 May 2018

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### Summary of peak flows (m<sup>3</sup>/s)

| Method                | 1:2   | 1:5   | 1:10  | 1:20  | 1:50  | 1:100 | 1:200 | Design year |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------------|
| Rational              | 5.654 | 8.206 | 11.03 | 14.40 | 19.73 | 25.52 |       | 20          |
| Alternative rational  | 4.731 | 8.514 | 11.83 | 15.48 | 20.46 | 24.81 | 28.09 | 20          |
| Unit hydrograph       | 8.757 | 12.10 | 15.49 | 19.31 | 25.40 | 31.54 |       | 20          |
| Standard design flood | 1.675 | 5.883 | 9.790 | 14.21 | 20.81 | 26.36 | 32.24 | 20          |
| Empirical             |       |       | 12.41 | 15.36 | 20.09 | 23.64 |       | 20          |
| Statistical: LN       |       |       |       |       |       |       |       |             |
| Statistical: LEV1     |       |       |       |       |       |       |       |             |
| Statistical: LP3      |       |       |       |       |       |       |       |             |
| Statistical: EV1      |       |       |       |       |       |       |       |             |

Class of road = Class 2 Regional Distributor

Calculated using Utility Programs for Drainage 1.1.0

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