Preliminary Assessment of Existing Surface Water Runoff - Revision A

Estimate of pre-development surface water runoff

Existing impermeable area = 2,900m^2

For estimating peak runoff (outfall pipe flow) from site average intensity rainfall to be used.

Critical storm duration = 15mins winter.

Average intensity for **1 in 1 year** return period = 30.2 mm/hr

30.2 / 3600 = 0.008 l/sec/m^2

2900 x 0.008 = **23.2 l/sec**

Average intensity for **1 in 30 year** return period = 74.7 mm/hr

74.7 / 3600 = 0.02 l/sec/m^2

2900 x 0.02 = 58 **l/sec**

Average intensity for **1 in 100 year (+ 20%)** return period = 116.3 mm/hr

116.3 / 3600 = 0.032 l/sec/m^2

2900 x 0.032 = **92.8 l/sec**