

**EVALUATION OF DRAINAGE CHANNEL DIMENSIONS IN
THE REGION UPSTREAM VILLAGE Gg. MERAK
KECAMATAN BATHIN SOLAPAN**

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Abstract

The problem that occur of drainage system in Gg. Merak Kecamatan Bathin Solapan in every year was flooded, especially in rainy season. Some of drainage in resident's house as well as primary drainage, it would be overflowed, inundate a resident and the roads when the rain was heavy. Based on the result, it was found existing drainage. The first drainage have wide 1,3 m, height 1,2 m, the second drainage have some of dimension. The research used Log Pearson Type III method. It was found debit value (Q) for the periode project in 2, 5, dan 10 years they were $Q_{tr} = 1,41013 \text{ m}^3/\text{second}$, $Q_{right} = 0,974 \text{ m}^3/\text{second}$, $Q_{left} = 0,285 \text{ m}^3/\text{second}$, based on the result, the primary drainage could not intercept and retain of rainfall. Therefore the solution to resolve the flood need to be an effort recovery function and addition drainage cross section dimension to be able to intercept and retain of rainfall with the result that no more flooding during the rainy season.

Keyword: drainage, debit, hidrologi analysis, hidrolika analysis