

ABSTRAK

EVALUASI SISTEM DRAINASE PERUMAHAN PESONA AKBAR ASRI TIGA KABUPATEN MUARO JAMBI

Putra Permata Andra; Dibimbing oleh Pembimbing I Marhadi, ST. M.Si dan Pembimbing II Ir. Siti Umi Kalsum, S.T., M.Eng.

Observasi lapangan di Perumahan Pesona Akbar Asri Tiga Kabupaten Muaro Jambi terjadi genangan dan banjir, kondisi drainase tidak berfungsi, dimensi saluran tidak seragam dan banyaknya sedimen yang masuk ke dalam saluran drainase sehingga kapasitas tampung berkurang, adanya air limbah domestik dari perumahan yang menambah lagi permasalahan pada saluran drainase. Tujuan penelitian menganalisis debit limpasan dan evaluasi jaringan sistem drainase. Hasil penelitian menunjukkan bahwa Kondisi drainase eksisting di Perumahan Pesona Akbar Asri Tiga Kabupaten Muaro Jambi hanya mengarah pada satu titik pembuangan, sehingga beban buangan akan mengakibatkan beban pada saluran drainase. Kondisi saluran yang masih aman (tidak terjadi overload kapasitas tampung) perlu dilakukan pembersihan secara rutin untuk dapat memfungsikan saluran drainase secara optimal. Untuk kondisi saluran yang tidak aman (terjadi overload kapasitas tampung) perlu dilakukan Rehab saluran, Pembangunan kolam retensi, Pembangunan sumur resapan dan Penambahan runag terbuka hijau.

Kata Kunci : Evaluasi, Sistem Drainase, Perumahan

ABSTRACT

EVALUATION OF THE DRAINAGE SYSTEM OF PESONA AKBAR ASRI HOUSING IN THREE DISTRICTS OF MUARO JAMBI

Putra Permata Andra; Supervised by Advisor I Marhadi, ST. M.Si and Supervisor II Ir. Siti Umi Kalsum, S.T., M.Eng.

Field observations at the Pesona Akbar Asri Tiga Housing Complex, Muaro Jambi Regency, there were puddles and flooding, drainage conditions were not functioning, channel dimensions were not uniform and a lot of sediment entered the drainage channel so that the capacity was reduced, there was domestic waste water from the housing which added to the problem. drainage channel.

The aim of the research is to analyze runoff discharge and evaluate the drainage system network.

The research results show that the existing drainage conditions in Pesona Akbar Asri Tiga Housing, Muaro Jambi Regency only lead to one discharge point, so the discharge load will result in a burden on the drainage channel. If the condition of the channel is still safe (there is no overload of the capacity) it is necessary to clean it regularly to be able to function the drainage channel optimally. For unsafe channel conditions (where there is an overload of the capacity) it is necessary to rehabilitate the channel, build retention ponds, build infiltration wells and add green open spaces.

Keywords : Evaluation, Drainage Systems, Housing