ABSTRACT

MARIA ULFA. ***DRAINAGE SYSTEM PLANNING REPEAT A STATE UNIVERSITY CAMPUS JAKARTA.*** *Essay.* Jakarta*: Educational Program Building Engineering, Department of Civil Engineering, Faculty of Engineering, State of University* Jakarta*.* 2017*. Supervisor : Drs. Prihantono, M.Eng and Drs. Arris Maulana, MT.*

This study aimed to plan the drainage system is already installed on the campus A State University of Jakarta. Channel dimension for changes that have been installed if they are not able to accommodate the discharge of rain which was conducted in July 2016-December 2016.

This research method used survey research methods. Places studied were Campus A State University of Jakarta. Planning a drainage system to calculate the flow of water each channel being investigated. Comparing the discharge capacity can be accommodated with the discharge to be planned in a certain period of time.

Based on the results, it can be concluded that the redesign existing drainage system in the Campus A State University of Jakarta does change the dimensions of the channels on the code S9-S11, S14-S19, S21-S23, S26, and S32 for the discharge capacity of channels available can not afford accommodate the design discharge capacity up to a period of 25 years. The conduct also change the channel on the dimensions of the code because after investigation S39, S39 is smaller channel capacity of the channel S38 thus causing inundation / flooding at Campus A State University of Jakarta. Before the change in dimensions, line S39 only able to accommodate 27.006 m3 / s of discharge which is distributed by S38 amounted to 31.027 m^3/s (27.006 m^3/s ≤ 31.027 m^3/s). Following the change in channel dimensions, the discharge capacity became 34.146 m^3/s so as to accommodate and drain the water from the S38. That's because in order to channel S39 is able to drain the water into the sewer when it receives a maximum discharge chute. The amount of garbage and silt in the channel became one of the factors slowing down the speed of the water.

Keywords : Planning, Drainage, Drainage System.