An Assessment on the Existing Flood Mitigation System in Village East Executive Homes, Cainta, Rizal Using the Rational Method

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Submitted by:

Wellabelle M. Cuarto

Josen Brian O. Laserna

Nizza Mariel O. Zacarias

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Abstract

This study was intended to assess an existing flood mitigation system for the Village East Cainta Rizal by using the rational method. For this purpose, the researchers gathered data such as rainfall intensity data, location, topographical and land use data and made use of empirical models. Based from the computations made by the researchers, the existing drainage system of the village is unable to accommodate the entire runoff entering the village. The results of the computations presented, showing the flow velocity, flow capacity and the accumulated flow of the existing design can help the Homeowners' Association of Village East Cainta Rizal to further improve their drainage system. They can be also helped in their planning activities relating to the community-level flood-mitigation and disaster response. A program of pipe sizes and discharge flows are also available for use as a guide for their maintenance of their drainage canals.

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