

**DESIGN AND DEVELOPMENT OF A SIMPLE DEVICE FOR CLEARING
AND CLEANING MUNICIPAL DRAINAGE SYSTEM**

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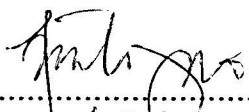
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“I declare that this thesis is the result of my own work except the ideas and summaries which I have clarified their sources. The thesis has not been accepted for any degree and is not concurrently submitted in candidature of any degree.”

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ABSTRACT

The drainage clean-up operation carried by the Local Municipality is manual. Very often the collected materials are left close to the drain. Inevitably they are pushed back into the drain defeating the very purpose of cleaning and clearing. This project aims at developing a simple mechanism of cleaning and clearing drains and delivering the collected material. The device is low cost (economic) and can reduce human labour.

The developed device contains reasonable features such as easy to handle, simple operate, cheap and reasonable size. This project is related with the types of municipal drainage system in housing area. The device will be developed following the housing's drainage system specifications. The approach for this project is to compare with devices already used in Malaysia or other parts use for cleaning and clearing drainage system. Then the chosen designed device is combined features of existing devices.

Parts designed are compared with CATIA analysis tools. Parts are fabricated from the developed blue print (production drawings). Some parts or elements are purchased directly from vendors. The fabricated and purchased parts are accordingly assembled. The assembled device is then tested. Suitable adjustments and modifications are carried out until all requirements are met.

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