

FINAL YEAR PROJECT REPORT
ADV.DIPLOMA IN CIVIL ENGINEERING
SCHOOL OF ENGINEERING
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DESIGN A SEWERAGE SYSTEM A PART
OF TAMAN KANTAN PERMAI, KAJANG

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SYNOPSIS

In this project, the student is doing the design of a sewerage system to serve part of Taman Kantan Permai, Kajang, Mukim Hulu Langat, Selangor, namely the residential area. The design period of this project is 20 years i.e the design is done taking into account development 20 years hence.

Foul sewerage system design based on the number and density of buildings, the number of families per building and the varying habit of the population as regards the use of water. In the design of sewer or a system of sewers, decisions must be made regarding location, size, slope and depth of the sewer and the material of construction. The size and slope or gradient of a sewer must be adequate for the flow to be carried and be sufficient to avoid deposition of solids.

The project area covers about 31 acres out of 101 acres. The present population in the housing area is about 2590 persons and at the end of the design period, the population is estimated to increase to 8835. With this population, the amount of domestic sewage generated is estimated to be

CHAPTER 1

1.0 INTRODUCTION

1.1 GENERAL

Sewer systems are essential to the public health and welfare in all areas of high population and development. Every community produces water borne wastes of domestic, commercial and industrial origin and is subject to the runoff of stormwater. Sewers perform the vitally needed functions of collecting these waters and conveying them to points of discharge or disposal.

The design and the construction of sewers occupy a large and important segment in the field of civil engineering. The Ministry of Science, Technology and Environment have insisted all local governments to provide a comprehensive sewerage system for improving the effluent quality criteria for sewage.

The state government of Selangor through the development agency namely the Perbadanan Kemajuan Negeri Selangor (PKNS) has so far developed several new towns in various districts in the state. Taman Kantan Permai is developed by