UNIVERSITI TEKNOLOGI MARA

A STUDY TO THE GEOMETRIC DESIGN OF ROAD CURVE IN THREE DIMENSIONAL INFORMATION USING 3D SOFTWARE

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Bachelor of science

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AUTHOR'S DECLARATION

I declare that the work in this disertation was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the results of my own work, unless otherwise indicated or acknowledged as referenced work. This thesis has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Post Graduate, Universiti Teknologi MARA, regulating the conduct of my study and research.

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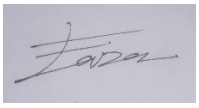
Signature of Student	:	
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ABSTRACT

Developing country whose population is growing rapidly such Kuala Lumpur, indicating that traffic is also increase. The development of rural area also increases, it means of the highways need to design according comfortable and save to the user, increase efficient traffic operation and also reduce cost in construction and maintenance. Construction of highway also need to consider about minimum damage to environment. To construct a highway which is fulfill the requirement, construction information such as design plan must be clearly understood to constructor and any person who are related. Compared to two dimensions (2D) information, three dimensions (3D) design is able to translate and easily to understand the construction information. There are three main parts of road or highway geometric design which is horizontal alignment, vertical alignment and cross section. When three part of geometric design are combined will provide 3D layout for a road or highways. Circular and Transition curve is an element in horizontal alignment of road construction. The aim of this study is to generate 3d information design for horizontal road curve to construction work. In order to achieve the aim of this study, the objective of this study is to: 1) To design work flow of 3D building information modelling model horizontal curve using Aerial Photo, 2) To produce as built 3D building information modelling for existing horizontal curve in Autodesk Infrawork. The study area is carried out at selected curve in UiTM Perlis.

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