UNIVERSITI TEKNOLOGI MARA

LANDSCAPE DESIGN USING BASED MAP GENERATED FROM UNMANNED AERIAL VEHICLE AERIAL IMAGES.

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Thesis submitted in fullfilment of the requirements for the degree of

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AUTHOR'S DECLARATION

I declare that the work in this thesis/dissertation 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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ABSTRACT

Landscape mapping is a topographic map made to a relatively large scale and showing all details. Such maps are required by architects and landscape gardeners for use in planning building to fit the natural topographic features and for landscaping parks, playgrounds, and private estates. However, the problem statement for this study are to making of landscape mapping must be to preparing a base map that lay the groundwork for an organized approach to more doable and affordable landscape improvement. It is taking long time to subsequent drawing, the site analysis and conceptual, preliminary, locate the house on the map, measure the property lines and final design to use the base map as a starting point. The aim of this study is to produce landscape design that generate from Unmanned Aerial Vehicle (UAV) used to plan the layout for an outdoor area. To achieve the aim, there have three objective of this study that will be to achieved, firstly to generate orthophoto map based on aerial photo taken from UAV platform, secondly to design a landscape drawing based on UAV map generated and lastly, to publish the landscape design. The study area is located in around Academic Heights Universiti Teknologi MARA (UiTM) Arau. To produce the landscape mapping that have four process; Preparing the base map using drone to capture the image specific area for site analysis. Functional diagram as a plan to design the landscape with freehand drawing that use bubbles and diagrammatic symbols to graphically depict of design as to relate the specific condition of the site. Specify the conceptual of landscape to use it. The landscape designs begin with the Preliminary layers which include a topography plan (plot plan), and most include a concept plan (site plan) as well as a hardscape plan and planting plan. The expected outcome for this study is can produce one complete map that combined between base map and landscape design that be to generate from UAV.

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