PREPARATION OF BILLS OF QUANTITIES AND COSTING FOR THE SUBSTRUCTURE WORK TO A BUNGALOW IN RAWANG, SELANGOR

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ABSTRACT

For my final project, the title which I choose is preparation of bills of quantity and costing for sub-structure work for housing project in Rawang'. In my final report, I need to show out all the result of preparation in Bills of Quantity and costing for the sub-structure work for the housing project in Rawang.

Sub-structure is the lowest support of the structure. The foundation will support for super-structure applied lateral and vertical load like example from column, floor slab, ground beam and others. Preparation few page Bills of Quantity of taking off paper to show all the sub-structure of bungalow base on to Standard Method of Measurement 2nd edition. For the costing, I also need to show each type of material cost in the taking off paper. All the quotation of material price, I will take the actual price from the Local Authority. Besides that, I need to study about what is the sub-structure and include how many parts in the sub-structure depend on soil condition and building requirement.

Lastly, I will prepare the taking off paper of measurement report and understand how to measurement of the sub-structure* include:

- **Excavation** the act of excavating, making hollow, cutting, scooping or digging out a part of solid mass
- **Stump** A part which between the footing and ground beam
- **Concrete** Cement which is mixed by cement, sand, aggregate and water. Commonly use in the construction
- **Formwork** an arrangement of wooden boards, bolts, and others. Use to shape reinforced concrete while it is setting also called as shuttering
- **Steel Bar** a steel bar with projection or indentations to increase mechanical bonding; used o reinforce concrete
- **Reinforcement Bar** a rebar, or reinforcing bar, is a common steel bar, and is commonly used in reinforced concrete and reinforced masonry structures. It is formed from carbon steel, and is given ridges for a better mechanical anchoring into the concrete.
- **Ground Slab** separating element between the ground and habitable space
 - As a structural element receiving part or all of loads of and on the superstructure and transmitting such loads to the foundation soil.

^{*}Please refer to hardcopy for diagrams