

MITIGATE THE IMPACTS OF OVER VARIATION IN THE CONSTRUCTION OF RESIDENCE PROJECT: A CASE STUDY IN GRAND TOWER RESIDENCIES PROJECT COLOMBO, SRI LANKA

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Abstract: This paper investigates the most of significant causes and effects contribute to the variation orders in the construction of Grand Tower Residence project in the district of Colombo Sri Lanka. So, the objective of this case study is to identify the causes of variation orders in Grand Tower Residence project, to investigate the impact of variation orders and minimize variations in residential buildings. Related data was collected based on the existing, literature reviews and consist of interviews with key stakeholders such as project managers, contractors and relevant persons involved in the construction of Grand Tower Residence project and reviewing archived project documents. The data were analyzed and formulated the findings. The results from revealed four most significant causes variation orders which are Changes of specification by owner, Substitution of materials by owner, Change of scope by owner and Changes of design by consultant. Meanwhile, the effects of the variation of orders are time and cost overrun. The findings conclude that owner is the major source of the variation orders in construction of Grand Tower Residence project and suggested that owner should have adequate planning and resources before initiating a project to avoid variation order during the construction stage.

Keywords: Variation Orders, Causes, Residential Buildings, Impacts of Variation