# DEPARTMENT OF BUILT ENVIRONMENT STUDIES AND TECHNOLOGY,

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# WASTE TO WEALTH: ENHANCEMENT STRATEGIES OF CONSTRUCTION WASTE RECYCLING IMPLEMENTATION TOWARD SMALL- MEDIUM SIZE CONTRACTORS ORGANISATION

Dissertation submitted in partial fulfillment of the requirement for the award of Bachelor of Quantity Surveying (Honours)

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### **DECLARATION**

"I declare that this dissertation is the result of my own research and that all sources are acknowledged in the references."

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Date: 23 JUNE 2024

#### **ABSTRACT**

This thesis investigates the practices and challenges of construction waste recycling among small- to medium-sized contractor organizations in Johor Bahru, Malaysia. The research aims to understand current recycling methods, identify barriers to effective implementation, and suggest strategies for improvement. Construction waste, including materials like concrete, bricks, wood, metals, and plastics, poses a significant environmental challenge, particularly in developing countries. Despite the industry's rapid growth and contribution to the national GDP, sustainable waste management practices are not widely implemented. The study uses quantitative methodology, using structured questionnaires to gather data from contractors ranging from small to medium contractors. Key findings reveal financial constraints as a major barrier, as contractors often lack the funds to invest in advanced recycling technologies or dedicated waste management departments. Additionally, there is a lack of education and training among stakeholders about the benefits and methods of recycling construction waste. Regulatory hurdles, inadequate policies, and logistical challenges, such as insufficient infrastructure for waste collection and transportation, further complicate efforts to manage construction waste effectively. The thesis suggests several strategies to enhance recycling practices among small and medium-sized contractors, including providing targeted financial incentives, implementing comprehensive education and training programs, streamlining regulations, and improving logistical support for waste collection and processing. The research provides valuable insights for policy-makers and industry stakeholders, highlighting the need for coordinated efforts to improve waste management in the construction sector. The proposed strategies not only support environmental sustainability but also offer economic benefits, such as cost savings and potential revenue from recycled materials

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