SUMMARY

With the current emphasis on regionalisation and trade globalisation by Singapore's leaders, sectors of the national economy like the construction industry, is under pressure to upgrade and improve on its current position to remain competitive. The Urban Redevelopment Authority (URA), through its Sale of Sites programme, is a major player in the supply of sites to the construction industry. For new residential estates like Kew Drive, Eastwood Park and Lorong Chuan, site preparation forms a vital part of the sale of sites programme. Improving the overall effectiveness and efficiency of operations of URA is vital as inefficiency in support services like site preparation can offset productivity gains actively being pursued in other sectors of the construction industry like prefabrication and building automation.

Various potential applications of Just-In-Time (JIT) systems have been used in developed economies such as Japan and The United States to achieve greater efficiency. In Singapore, however, the philosophy of JIT is still relatively new and applications are largely limited to the manufacturing sector. This study explores the hypothesis that the embodiment of JIT principles can be utilised effectively in URA's site preparation process to improve operational effectiveness and hence, efficiency.

Fundamental JIT principles are examined to gain a better understanding of the techniques commonly employed in the manufacturing industry. With the benefit of learning from hindsight, a case study of the Kew Drive residential estate is taken as an
example of the site preparation process and weaknesses that could be improved upon are identified. These processes were re-examined, rationalised and simplified by adopting JIT principles as the underlying philosophy to achieve better operational efficiency and enable quicker response to market conditions.