

Major concrete pavement rehabilitation by rapid slab replacement

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ABSTRACT

Rehabilitation of concrete road pavements by rapid slab replacement using calcium sulfoaluminate cement in single shifts has been established in Australia for ten years. Following a successful demonstration of cost and time reductions using this process in South East Queensland in 2013, a major program of more than 200 slabs over 50 night time shifts was completed on the Pacific Motorway in 2017. This paper describes the history of the motorway pavement and the investigation, planning and execution of this rehabilitation program using registered concrete mixes. On site coordination of work methods and equipment, traffic management and on-site concrete strength testing prior to re-opening to traffic are also presented.