Study on Work Zone Management in Highway Rehabilitation Projects in Urban Areas

T. M. M. B. Mettananda¹ and H. R. Pasindu²

¹Post Graduate Student, Department of Civil Engineering, University of Moratuwa, Sri Lanka bhathiyasl@gmail.com ²Senior Lecturer, Department of Civil Engineering, University of Moratuwa, Sri Lanka pasindu@uom.lk

The safe and efficient flow of traffic through work zones is a major concern to transportation officials (government authorities, contractors), the public, businesses, and road users. Key areas for performance measures of work zones include delay/queues, user costs, exposure, safety, and public perception.

This paper presents an investigation on current work-zone practices in Highway rehabilitation projects around Colombo and sub-urbs. The prevailing guidelines adopted in Sri Lanka were compared with the guidelines and manuals of USA, Canada and Ireland for the major differences. Five (05) road rehabilitation projects have been identified out of which four (04) currently being ongoing, and the remainder is being recently completed. Separate questionnaire surveys were carried out on Road Users, Nearby Residents, and Contractor's representatives to identify the major difficulties and inconveniences borne by the road users and residents and the probable reasons. The major issues identified are; Dust and Noise pollution, Lack of advanced signage, Increment in travel time, Access and utility disturbances, and Drainage issues. The root causes identified are; Lack of focus on guidelines, Non availability of experienced and qualified officers, Lack of space, Higher traffic volume throughout the day, and Political, Police and public interferences. With the reference with the guidelines of other countries, some alterations to the prevailing RDA guidelines are suggested at the conclusion.

Key words: Work-zone Management, Traffic Management, Road User Safety