SAFETY OF LEVEL CROSSINGS ON COASTAL LINE RAILWAY FROM PANADURA TO GALLE

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Thesis/Dissertation Submitted in Partial Fulfillment of the Requirement for the Degree of Master of Engineering

Department of Civil Engineering
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Sri Lanka

May 2010

DECLARATION

" I certify that thesis is does not incorporate without acknowledgement any material previously submitted for a degree or diploma in any University to the best of my knowledge and belief it does not contain any material previously published, written or orally communicated by another person or myself except where due reference is made in the text. I also hereby give consent for my dissertation, if accepted, to be made available for photocopying and for interlibrary loans, and for the title and summary to be made available to outside organizations"

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ABSTRACT

The purpose of this research is identification of critical reasons for accidents on railway level crossings, identification of most dangerous top 10 number of railway level crossings based on accident data which were reported during last 4 years, finding of 10 number of most unsafe & dangerous level crossings which are not recorded in the above category using the collected data analysis and identification of appropriate safety measures which can be taken by Sri Lanka Railway, Authorities of roads & public of the area within the level crossing from Panadura to Galle.

Based on the field survey on level crossings within the area & the data analyzing the following factors were found related to safety on level crossing.

- 1. Variability of driver behavior including carelessness & wrong prejudgment at the level crossing locations.
- 2. Due to permanent & temporary obstruction which are on either side of the railway track closer to the level crossing been lacking the visibility to the road users.
- 3. Effect of geometric design and gate operating system on driver behavior
- 4. Short comings of Sri Lanka railway related to gates, gate operators and gate operating systems.

Suitable and possible accidents preventing measures for each unsafe level crossing is discussed in the report.

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