Acknowledgement

would like to express my sincere gratitude to Prof. M. T. R. Jayasinghe, without whom this research uld not have been possible. He not only provided direction and guidance through the course of this search, but also inspired me to really learn and understand structural engineering.

addition, I am grateful to the Vice Chancellor, Dean of the Faculty of Engineering and Head of the epartment of Civil Engineering of the University of Moratuwa, for the permission granted for this research ork. Further, I wish to offer my thanks to the Co-ordinator of the Post Graduate research work of ructural Engineering and all the lecturers of the Department of Civil Engineering who helped me in merous ways.

Special thanks go to my parents for their endless support and encouragement and for always believing, d helping me to believe, that I can succeed at anything.

am particularly indebted to Eng. B. A. Dayananda, Managing Director of Dayananda Associates (Pte) td., who encouraged me and helped in numerous ways to make this research a success.

wish to thank the librarian and the staff of the library for the co-operation extended to me for this research ork.

addition, my thanks are due to my fellow graduate students for the academic support and Eng. (Ms.) Leja Thilakaratne, who read parts of the manuscripts and made constructive criticisms.

ere are many who helped me to succeed in Education from my childhood to date. Finally, I regret the ability to thank individually them, but I offer my heartiest thanks to them all.

Buddhika Edirisooriya
September 2009

Contents

Chapter 3

Structural forms and loads applied for case study

List of figures

Chapter 2

Chapter 3

Chapter 4

Appendices

List of Tables

Chapter 2

Chapter 3

Chapter 4

Appendices