ACKNOWLEDGEMENTS

The authors wish to thank Rajamangala University of Technology Srivijaya, for their financial aid by means of the annual government statement expenditure 2016 (BE 2555). Furthermore, during undertaking this research project the support for all aspects of consulting and assisting was provided by the people at Research and Development Institute, Trang Campus, for which the authors are gratefully indebted.

Special thanks are due to Mr Tavorn Kuasakul and Mr Sommart Swasdi for their invaluable comments and suggestions, both during the research and writing the report. In addition, the authors would like to extend their gratitude to undergraduate students at Civil Engineering Department for their help in the laboratories as well as miscellaneous work.

Lastly, the author is very grateful and appreciative of all of the assistance and support offered from colleagues, researchers, and lecturers of Civil Engineering Division, Faculty of Engineering. Please be noted that this research was completed in March 2017.