

# UNIVERSITI TEKNOLOGI MARA

Declaration by Student

## **TRAFFIC IMPACT STUDY ON NOISE IMPACT IN THE NEW TOWNSHIP AT JALAN SEMENYIH – BERANANG**

Project entitled 'Traffic Impact Study on Noise Impact in the New Township in Jalan Semenyih – Beranang' is my original work. Whenever contributions of others are involved, every effort is made to indicate this clearly, with due reference to this literature, and acknowledge them. This project is carried out under the guidance of Dr K. Subramaniam as my Project Supervisor and Puan Shantakumari as Co-Supervisor. It has been submitted to the Faculty of Health Science in partial fulfilment of the requirement for the Degree of Bachelor in Environmental Health and Safety (Hons).

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**Project paper submitted in partial fulfilment of the requirement for the  
degree of Bachelor in Environmental Health and Safety (Hons.)**

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## Declaration by Student

We hereby declare that this project is from the student's own work and effort, and all other sources of information used have been acknowledged. This project has been submitted with Project entitled 'Traffic Impact Study on Noise Impact in the New Township in Jalan Semenyih – Beranang' is my original work. Whenever contributions of others are involved, every effort is made to indicate this clearly, with due to reference to this literature, and acknowledgement of collaborative research and discussion. The project was done under guidance of Dr K Subramaniam as my Project Supervisor and Puan Shantakumari as Co – Supervisor. It has been submitted to the Faculty of Health Science in partial fulfilment of the requirement for the Degree of Bachelor in Environmental Health and Safety (Hons).

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### ACKNOWLEDGEMENT

Firstly, I would like to thank Allah SWT for the blessing and help that He gave me in conducting and managing the final year project. Thank you also for the strength that He gave me that helps to go through any hardship and finish this final year project on time.

I would like to thank my supervisor, Dr K Subramaniam for his thoughtful guidance, advice, suggestion, opinion and support he gave during conducting final year project as well as during preparation of this report. Thank you also to Puan Shantakumari Rajan for her support, help and guidance during the final year project as well as during preparation of this report. I would like also to thank other lecturers and appreciated their help for giving wise guidance and advice as well as information for the completing my final year project.

Thank you to my family for their support in term of love and moral support and also the encouragement for me to withstand any hardship during conducting final year project. Thank you also to beloved friends for their help during conducting of this final year project and providing valuable information to complete the entire task for the attachment

Lastly, I would like to thank any individual who directly or indirectly involved in this project. Thank you for all the information, support, knowledge and help during conducting of this final year project.

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## Abstract

### Traffic Impact Study on Noise Impacts on New Township In Jalan Semenyih Beranang

Syaffiq Naquiuddin Bin Mohamad Salleh

**Introduction:** Traffic Impact Assessment (TIA) is a systematic and scientific study to analyse the impact of the traffic generated by a new development on the surrounding transportation system. Precisely, a TIA mainly deals with the generation, distribution and assignment of traffic to and from the proposed new developments. TIA is undertaken mainly to ensure that the developer address all relevant transportation issues related to the new development. The TIA provides authorities, planners and developed in a controlled manner. Local Authorities may use TIA as a basis for assessing the developer's contribution to neighbouring road improvements. **Objectives:** The aim of this study to determine existing traffic condition in Jalan Semenyih – Beranang. Besides that, this study is aim to determine hazard, problem and risk related to road safety as well as to propose any mitigation measure related to safety issues of the road. **Methodology:** In general, a TIA comprises of Inspection of the site and the proposed development, understanding the existing land uses and traffic volumes, projecting the traffic volumes using Trip Generation. Analysis of the impact on adjacent roadways and recommendations of mitigations measure has been carried out. A subset of questionnaire (n=105) adapted from Marketing and Development Research Associates (MDRA) New Delhi, 2006 were used to access road user related to road safety. **Results:** It was observed that with continuous development of new township along Jalan Semenyih – Beranang will significantly affect the future traffic congestion. Projected trip showed 45.4 % increase of vehicle trip on AM peak hour and 10.1% for PM peak hour from the existing traffic. The noise levels identified were at higher than standard set by DOE at 60dB at 6 junctions (n=6) along this road. The rush hour during morning peak hour reading 45.40% and evening peak time period was at 36.78%. The noise levels at the receptor area were higher than 65dB which is higher than the set standard for day time and night time. The health effects associated with traffic impacts were stress and increase of blood pressure to the population. It was found that several condition of road needs to be improved to ensure environmental, safety and health as well as convenience of road need to be improved to ensure environmental, safety and health among population in Jalan Semenyih Beranang in well manner. **Conclusion:** There have significantly increased of the future traffic generation with continuous development along Jalan Semenyih – Beranang. Besides that, it was conclude that speed driving increase noise volume and risk of accidents. Therefore there is need for further study on road user behaviour to identify root factor of accidents.

*Keyword: Traffic Impact Assessment, Noise, Traffic Generation, Hazard*

*Kata Kunci: Penilaian Trafik Impak, Bunyi Bising, Penjumlahan Trafik, Bahaya*