

**A FRAMEWORK TO MINIMISE PUBLIC NUISANCE  
RELATED ISSUES OF URBAN CONSTRUCTION  
PROJECTS IN SRI LANKA**

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Degree of Master of Science in Construction Law and  
Dispute Resolution

Department of Building Economics

University of Moratuwa

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June 2022

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## DECLARATION

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I declare that this is my own work and this dissertation does not incorporate without acknowledgement any material previously submitted for a Degree or Diploma in any other University or Institute of higher learning and to the best of my knowledge and belief it does not contain any material previously published or written by another person except where the acknowledgement is made in the text. I retain the right to use this content in whole or part in future works (such as articles or books).

***UOM Verified Signature***

.....  
S.I. Mahawatta

.....  
Date

The above candidate has carried out research for the Masters dissertation under my supervision. I confirm that the declaration made above by the student is true and correct.

.....  
Prof. Y.G. Sandanayake

.....  
Date

## **ACKNOWLEDGEMENT**

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Saman Indrajith Mahawatta

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## ABSTRACT

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The construction industry is one of the major economic drivers of any country. Comparing to rural areas many construction projects are happened in urban areas. Urban construction projects usually have high risk processes with several constraints. Public nuisance is an aspect that is linked with urban construction projects due to its operations in congested environment. Although there are some researches have been carried out over public nuisance related issues of urban construction projects for the global context, there is a lack of an investigation about public nuisance related issues, and the causes behind them in urban construction projects of Sri Lanka. Hence, there is a need to investigate public nuisance related issues, their causes, mechanisms to minimize them in urban construction projects and legal provisions available in Sri Lanka. Therefore, this research aimed to develop a framework to minimise public nuisance related issues in urban construction projects in Sri Lanka.

The research followed a qualitative research approach with a case study method selecting three similar urban construction projects in Colombo metropolitan area. Semi structured interviews were conducted in collecting data from each selected case study along with observations and document review. Then the collected data were analysed through content analysis. As it was found from literature there are seven types of public nuisance related issues namely, noise & vibration, dust & smoke, mosquito breeding, odour effect, traffic impact, waste and water & air pollution. These issues were found in selected cases for the study and operation of concrete pumping machines, generators and drilling and grinding works, wall chasing, sanding putty for painting, and demolitions, incomplete concrete tanks, flower buckets, pool area and disposed water containable items, food waste and toilets, entering of heavy vehicles to the site, disposal of chemicals and polluted water were the causes for above mentioned nuisance issues. Court injunctions due to the noise & vibration and dust & smoke issues, additional cost due to mitigation works and delays in certain actions can be pointed out as the impacts of the issues of mosquito breeding, odour effect, traffic impact, waste and water & air pollution. Furthermore, through proper planning and executing, the impact of public nuisance in urban construction projects can be minimised. Moreover, conducting noise generating activities at night, using sound barriers, destroying mosquito breeding places, treating water stagnated areas, removing food and construction waste to the approved yards appropriately, educate workers to minimize water and air pollution, using filtration system before discharging water in to water resources were the strategies taken to minimise the issues due to public nuisance. In Sri Lanka, there are several legal provisions related to the public nuisance issues. Moreover, Nuisances Ordinance, National Environmental Act, Code of Criminal Procedure Act, Penal Code, Municipal Council Ordinance, Urban Councils Ordinance, and Pradeshiya Sabha Act are the commonly used public nuisance related legal provisions in Sri Lanka. Eventually, a framework was developed to minimise the Public Nuisance of urban construction projects by integrating the types of Public Nuisance, the causes for them, their impact to the construction projects and Nuisance Acts and Ordinances available in Sri Lanka.

***Keywords: Construction Industry; Legal Provisions; Public Nuisance; Sri Lanka; Urban Construction Projects.***

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## LIST OF ABBREVIATIONS

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BOD	Biochemical Oxygen Demand
CEA	Central Environmental Authority
CMC	Colombo Municipal Council
dB	Decibel
EAG	Environmental Authority Guidance
MBD	Mosquito-borne Diseases
PHI	Public Health Inspector
VOCs	Volatile Organic Compounds