

UNIVERSITI TEKNOLOGI MARA

**DESIGN AND FABRICATION OF
ROAD FOOTPATH CLEANER
MACHINE**

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ABSTRACT

This research outlines the design, development, and construction of an environmentally friendly operated sweeper machine. although there are several types of electrically operated sweeping machines in the market, machine cost is excessively expensive. As a result of their high cost, these machines are not commonly used anywhere. It was also observed that the current street sweeper machines are powered by gasoline and diesel engines. This can bring to the potential on pollution the environment. This project has tried to design an environmentally friendly sweeper machine that can be used to clean both small and large areas. Road cleaning, on the other hand, is now done by hand, exposing workers to health risks such as asthma and cause itchy skin. An ecologically friendly operate sweeper machine, and it is cost-effective and comfortable to use in both large and small spaces. It is simple to use and will save user money in the long term. More of that, this machine is an eco-friendly machine because will avoid any use of electricity and diesel engine, so it will avoid the risk of any pollution like noise and air pollution. As result, this machine will save the nature and energy in the long term and help a lot of people in their daily life.

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TABLE OF CONTENTS

	Page
CONFIRMATION BY SUPERVISOR	ii
AUTHOR'S DECLARATION	iii
ABSTRACT	iv
ACKNOWLEDGEMENT	v
TABLE OF CONTENTS	vi
LIST OF TABLES	viii
LIST OF FIGURES	ix
LIST OF ABBREVIATIONS	xi
CHAPTER ONE : INTRODUCTION	1
1.1 Background of Study	1
1.2 Problem Statement	1
1.3 Objectives	2
1.4 Scope of Work	2
1.5 Significance of Study	3
1.6 Expected Result	3
CHAPTER TWO : LITERATURE REVIEW	4
2.1 Introduction	4
2.2 Material	9
2.3 Method	11
CHAPTER THREE : METHODOLOGY	12
3.1 Introduction	12
3.2 Prototype Drawing and Bill of Material, BOM	13
3.2.1 Bill of Material (BOM)	15
3.2.2 Cost Calculation For The Product	16
3.3 Calculation And Computational Analysis	17
3.3.1 Computational Analysis	18

CHAPTER ONE

INTRODUCTION

1.1 Background of Study

Cleaning is an important part of the everyday routine. Cleaning and sanitizing effectively benefit and safeguard human health both directly and indirectly. Our surrounds are kept clean with the help of the road cleaner. So that we can wander around the streets or area feeling revitalized. So, to save energy and the environment, a user-friendly road and floor cleaning machine is required.

1.2 Problem Statement

In general, numerous machines such as electric motors, diesel engines, and robots are utilized to clean the floor and the road in the present period. However, such processes produce a lot of pollutants, require a lot of maintenance, and are difficult to carry out. Other than that, the machine is not portable as it is heavy and big that contains big motor and strong material.

1.3 Objectives

The main objective of this project are:

- a) To increase efficiency of work because it is easy to operate than a motor machine.
- b) To lessen the cost of the machine that used expensive source such as oil to operate a motor.

1.4 Scope of Work

The scope of work for this project are:

- a) This road footpath cleaner machine can reduce the problem of human energy