

CONTENTS

Title	Page
DECLARATION	iii
ACKNOWLEDGEMENT	iv
ABSTRACT	v
CONTENTS	
CHAPTER 1: INTRODUCTION	
1.1:BACKGROUND INFORMATION	1
1.2:LITERATURE REVIEW	5
1.3:OBSERVATIONS FROM LITERATURE REVIEW	15
1.4:AIM AND SCOPE OF PRESENT WORK	16
1.5:ORGANISATION OF THE THESIS	17
CHAPTER 2:EXPERIMENTAL STUDIES	
2.1:MATERIALS USED	19
2.2:METHOD OF MIXING OF CHEMICALS AND THEIR PROPORTIONS	20
2.3:METHODOLOGY FOR MINERAL IDENTIFICATION	21
CHAPTER 3:RESULTS AND DISCUSSIONS OF X-RAY DIFFRACTION (XRD) STUDIES AND INDEX PROPERTIES OF SAMPLE-1 (PU3 CLAY-DENGKIL CLAY) AND SAMPLE-2 (PTD CLAY-PETALING TIN CLAY)	
3.1:INTRODUCTION	30
3.2:MATERIALS STUDIED	31
3.3:INFLUENCE OF LIME ON THE PLASTICITY CHARACTERISTICS	33
3.4:X-RAY DIFFRACTION(XRD) STUDIES	36
3.5:DETAILS OF EQUIPMENT USED AND THE METHOD ADOPTED	37
3.6:XRD STUDIES OF TREATED SAMPLES	43

CHAPTER 4:SCANNING ELECTRON MICROSCOPIC STUDIES (SEM)OF SAMPLE-1 (PU3 CLAY-DENGKIL CLAY) AND SAMPLE-2(PTD CLAY-PETALING CLAY)	53
4.1:DESCRIPTION OF SEM UNIT	55
4.2:PREPARATION OF TEST SPECIMEN AND TEST PROCEDURE	57
4.3:DISCUSSION ON THE MICROGRAPHS	58
CHAPTER 5:SUMMARY AND CONCLUSIONS	66
5.1:SUGGESTIONS FOR FUTURE WORK	68
REFERENCES	69
APPENDIX-A	78