



**DEPARTMENT OF BUILDING
UNIVERSITI TEKNOLOGI MARA
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**PILE CAP CONSTRUCTION AT KUCHAI EAST PROJECT,
KUALA LUMPUR**

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ABSTRACT

Pile caps are constructed to group and link piles together. The number of piles in the group can be three or more. The number of piles and the space between them could determine the shape of the pile cap. This report preclude the necessity of pile cap. There are two objectives which are to study the construction method of pile cap and to identify the problems in constructing it. To gain required information regarding pile cap, four method of study are used which are by own observation, interviewing person in charge for the construction such as Site Engineer, from document review and information from the internet. The construction of pile caps should be carried out with professionalism to ensure the work done reach the highest quality.

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CHAPTER 1.0

INTRODUCTION

1.1 Background

Pile caps are constructed to group and link piles together. The number of piles in the group can be three or more. The number of piles and the space between them could determine the shape of the pile cap. The shape of the pile cap could be either triangular for 3 piles, hexagonal for six to seven piles or in rectangular for other numbers of pile. For this pile cap, it grouped 20 piles in it. So, it is constructed in the rectangular shape.

The pile cap usually constructed of a greater depth than a pad footing as it subject to higher bending moments and shear forces. The pile cap receives higher rigidity from higher depth, which enables it to evenly spread the load to all piles in the group. Factors that could determine the depth of the pile cap includes the shear capacity, shrinkage and swelling of the ground, watertable and the possibility of frost attack. As for this pile cap, it is constructed seven meter deep.

Pile caps also need reinforcements to prevent the piles from splaying outwards from the pile cap. This reinforcement provided at the bottom of the pile cap, projecting from the piles to the pile cap.

1.2 Objectives

This report is prepared to satisfy the following objectives:

- To study the construction method of pile cap
- To identify the problem in constructing pile cap

1.3 Scope of Study

This study is carried out during practical training for project *Cadangan Pembangunan Perdagangan Bercampur : 1 Blok Bangunan Pangsapuri Servis 48 Tingkat* at Jalan