UNIVERSITI TEKNOLOGI MARA

BUILDING DEPARTMENT

FACULTY OF ARCHITECTURAL, PLANNING AND SURVEYING

UNIVERSITI TEKNOLOGI MARA

(PERAK)

OCTOBER 2013

It is proposed that this Practical Training Report prepared

By

Nurhamizah binti Mazlan

2011890068

Titled

Pad Foundation Construction

to be accepted in partial fulfilment of the requirements for obtaining a Diploma in Building.

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STUDENT'S DECLARATION

I hereby declare that this report is fully my own work, except for extract and summaries for which the original references stated herein, prepared during a practical training session that I undertook for 5 months starting on May 13th 2013 and has ended on September 28th 2013 at DMA Vision Inter Trade (M) SDN BHD. It is also as one of the requirements the pass the course DBN 307 course and to fulfill a partial fulfilment of the requirements for obtaining the Diploma in Building.

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ACKNOWLEDGEMENT

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With that, I thank you.

ABSTRACT

This Practical Training Report is on pad foundation construction which includes the theories, method statements and suggestions based on the practical training site in Gua Musang new town. The site construction is in the middle of the city, occupied with a project proposed by KFC (Peninsular Malaysia) Sdn Bhd and is currently handled by DMA Vision Inter Trade (M) Sdn Bhd, a contractor company which also manages dining and cleaning supply businesses for schools. The said project is to build 1 storey drive-thru restaurant of 1 unit KFC and Pizza Hut combination, using pad foundations for substructure. Within the practical training period, the writer has experienced directly for the foundation construction that takes about a few weeks to complete. In this report, the writer has explained the general facts about foundations and their types before explaining further through the specific pad foundation. In the case study session, comparison can be made by readers on the difference or similarity between the standard and the actual aspect of both constructions. Following this are some suggestions the writer has come up towards the better. References are stated on the last chapter to give the readers more information to gain a full understanding.

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LIST OF ABBREVIATIONS

PM	Peninsular Malaysia
UiTM	Universiti Teknologi Mara
PKK	Pusat Khidmat Kontraktor
CIDB	Construction Industry Development Board
USIM	Malaysia Islamic Science University
MOF	Ministry of Finance
GLC	Government-link Company
IPTA	Institut Pengajian Tinggi Awam
TNB	Tenaga Nasional Berhad
KB	Kota Bharu
LAD	Liquidated Ascertained Damage
DLP	Defect Liability Period
LA	Letter of Acceptance / Letter of Award
PPE	Personal Protective Equipment
VIT	Vision Inter Trade

CHAPTER 1.0

PREFACE

1.1 Introduction

Foundation is standardly used to enhance load distribution from various building superstructure load above to spread it naturally into the underground soil. The foundation itself has variety of designs in which to be constructed based on the building's functionality and purpose. Generally, foundation is not limited to be used for buildings only, while it is also for other infrastructures and elements. As such, the obvious supported strength in bridge construction is in need of bigger foundation to withstand both sea current and the occupied road load above. A big signboard which has been erected increasingly nowadays, especially beside the highway makes the use of foundation is necessary.

Conversely, it depends on the soil investigation result, as the soil condition is likewise plays a factor in constructing a foundation, as at some point, there may be at a certain place, foundation is unlikely essentials. "Not all buildings need foundations. For example, in areas where the bedrock is close to the surface it is possible to level it off and build directly onto it. Why try cutting a trench into rocks like granite and dense limestone, then to fill it up with concrete mainly composed of granite or limestone? Soils, however, are not as strong as rock so therefore foundations will be required" (Blackwell Publishing, n.d.)

Findings from GeotechniCAL (2001) clearly indicate that there are two categories of foundation to take note before choosing any design, such as shallow and deep. Shallow foundations, often called 'spread footings', are said to have depth less than 3m from the ground level. It is simply a guideline to indicate the type difference. Shallows foundations are for surface soils that adequately strong and firm to support the imposed loads (also known as live load), in which, they are normally unsuitable for weak or highly compressible soils, as instance, poorly-compacted fill, peat, recent lacustrine and alluvial deposits and the list goes on. This category of foundations have several designs to be contemplate; pad foundation, raft foundation, and strip foundation.

In addition, deep foundations are at depths of more than 3m below finished ground level. Deep pad or strip foundations are also included. Deep foundations are able to transfer the loading to a deeper, more competent strata at depth if unsuitable soils are near the surface. The designs are termed as piles, pile walls, diaphragm walls and caissons. For high amount of occupants and heavy loads building, these foundations are suggested. The national proud, Kuala Lumpur City Center (KLCC) have used thousands of piles that constructed deep down into the ground.

This report will only reveal the study of foundation with centring on pad foundation for buildings. Well-known as one of the shallow foundation, it is regularly used for houses and any other buildings that is under three storeys high, though the building load itself is also taken account when deciding such foundation. In this case study, the DMA Vision Inter Trade (M) SDN BHD has applied pad foundations in its current project; 1 unit of KFC and Pizza Hut 1 storey restaurant at Gua Musang new town as instructed by engineers.

1.2 Objective of Study

This study aims to cover both theories (facts) and practical (case study) concerning pad foundation used for buildings. Specifically, the objectives are:

I. To identify types of foundation for certain building
II. To identify proper method of constructing foundation

1.3 Scope of Study

This study will range from foundation types and selections to the case study done at DMA Vision Inter Trade (M) SDN BHD up-to-date site project. Focus matter will be restricted to:

I. Type of foundation used by the company based on the project requirement, which is one and only pad foundations
II. The company's own construction process of foundation building carried out for the site project
III. Capability and skills of DMA Vision Inter Trade (M) SDN BHD workers to build the foundation
IV. Period of completion for the foundation construction which based on the company's current worker numbers and weather condition
V. Safety measurement taken by the contractor's workers while handling the materials and equipment

1.4 Methodology of Study

Numerous approaches have been conducted in order to complete the progress of this study. Sources are eventually available by any means of senses, ranging from one's personal experience and intellectual to media mass materials whether in printed version or by image. Such methods are summarised as below for proper information and clear data to be in details to obtain a fact-based study report with respected credits. A note to remind, in which, some of the methods are need to be done in casual manner rather than considering professional act, especially when interacting with an old timer workers, to bring out more comfortable conversation from time to time.

1.4.1 Interview

Interviews are seem to be the easiest and fastest way to attain various information. Sub-contractors in charge of reinforcement bars structure and carpentering are always available at the site construction. Several occasional interviews are taken when there is a task involves foundation construction. The interviews are include as both dialogue and discussions that take places many times particularly whenever problems arise. Skilled and unskilled workers are also helpful in conversation that takes place most of the time during work hours. The site manager which seldom to be seen at site due to over piles of work at different areas assures the gained information.

1.4.2 Lectures

It is undeniable for lecture sources are assisting the study towards this report completion. Notes that have been taken when hearing lectures by Department of Building lecturers for the first two years of diploma study simplify the report point sequences and elaboration. Theories that emphasize by the lecturers are applied in this case study.

1.4.3 Observation

This is a very common method used to gain any data which is always voluntary done. By means of basic knowledge and theories in mind, making a comparison with the actual scene that being witnessed is unavoidable. From here, any dissimilarity is to be noticed and an inference is to be draw out as explanation. The obvious difference is the construction technique which clashes between traditional way and modern practise or any method to build the foundation faster and easier. Observation is sorted out mostly during work hours including recess time and the least during off hours.

1.4.4 Reading

Variety of materials to be read is available regarding the study, albeit most of them are documents, internet webpages and drawings. There are a few books to refer here than outside of the town, which emphasis international standard or specifically to British Standard (BS). Other reading materials are available in the site office based on the past and current construction projects with also some records from the sub-contractors. Internet online reading is significant for a quick and worldwide research, in order to widen the elaboration for this report and for the sake of detail information to state.

CHAPTER 2.0

COMPANY'S BACKGROUND

2.1 Company's Introduction

DMA VISION INTER TRADE (M) SDN BHD is established on February 20th 2011, which originally it used to be registered under a name of GRADZ INTER TRADE before deciding the later title for broadening business purpose. Owned by a local entrepreneur with IPTA acknowledgement and quite experienced in financial management sector, construction industry, materials and services supplying to both private and government, the said managing director has had his company based in Gua Musang, Kelantan and another office in Kuala Lumpur.

Figure 2.1 DMA VIT logo (all black version)
Source: DMA VIT company's profile

The company is recorded with Pusat Khidmat Kontraktor (PKK) for Class C, Construction Industry Development Board Malaysia (CIDB Malaysia) Grade G5 and also licensed with Ministry of Finance (MOF) besides enumerated through several private agencies and GLC. It is generally managing in two different segments; construction projects and supplying business. The mean of supplying is rather involving schools and hostels for students, such as providing cleaning materials and dining ingredients that relate to more than five schools in both city area and rural region.

2.2 Company's Profile

2.2.1 Over-all Company's Data

Company's Name	:	DMA Vision Inter Trade (M) SDN BHD
Company's Registration No.	:	933100-K
Company's Status	:	Local (Bumiputera)
Registration Date	:	February 20th 2013
Modal Allowance	:	RM1000000.00
Modal Payment	:	RM1000000.00
Registered Address	:	PT 2975 Bangunan Kedai KDSB, Jalan 4/1B Taman Kesedar Jaya, 18300 Gua Musang, Kelantan Darul Naim
Telephone/Fax	:	
Email	:	dzezee22@yahoo.com
Registered Branch Address	:	No 16-2 Block B, Zenith Corporate Park, No.1, Jalan SS 7/26 Kelana Jaya, 47301 Selangor Darul Ehsan
Telephone/Fax	:	
Bank Account/Account No.	:	CIMB Bank Berhad/03070004754056
Registration Committee	:	PKK Class C CIDB Grade G5 MOF TNB
Main Activity	:	Contractor in Civil and Mechanical Engineering Contractor in Materials and Services Provider Contractor in Cultivation General Management

2.2.2 Company's Staff and Management Information

Managing Director	:	Mohd Azizi bin Abu Naim
Qualification	:	B. Eco. Hons. (UKM)
		Diploma in Business Study (UiTM)
Director	:	Noorzilawati binti Ab Rahim
Qualification	:	Bachelor (Unisza)
Project Manager 1	:	Eddy Erzukiey bin Abu Naim (Site Agent)
Qualification	:	Diploma in Civil Engineering (KB Politechnic)
Project Manager 2	:	Siti Nur Jehan binti Mohd Hanapiah
Qualification	:	Bachelor in Construction Management (UiTM)
		Diploma in Geomatic Science (UiTM)
Site Supervisor	:	Mohd Yusni bin Abdullah
Qualification	:	Diploma in Civil Engineering (UiTM)
Site Supervisor	:	Aswan bin Ab Ghani
Qualification	:	Diploma in Mechanical Engineering (UiTM)
Site Officer	:	Siti Nur Hazirah binti Zahari
Qualification	:	Bachelor in Information Management & Sunnah (USIM)
Operation Officer	:	Nur Sadrina binti Abd Rahman
Qualification	:	Bachelor in Park and Amenity Management (UiTM)
Operation Officer	:	Tengku Fatin Nabila binti Ku Aziz
Qualification	:	Bachelor in Human Resources Management (UiTM)
Financial Clerk	:	Mat Yusoff bin Taib
Qualification	:	SPM

2.2.3 Organisation Chart (General)

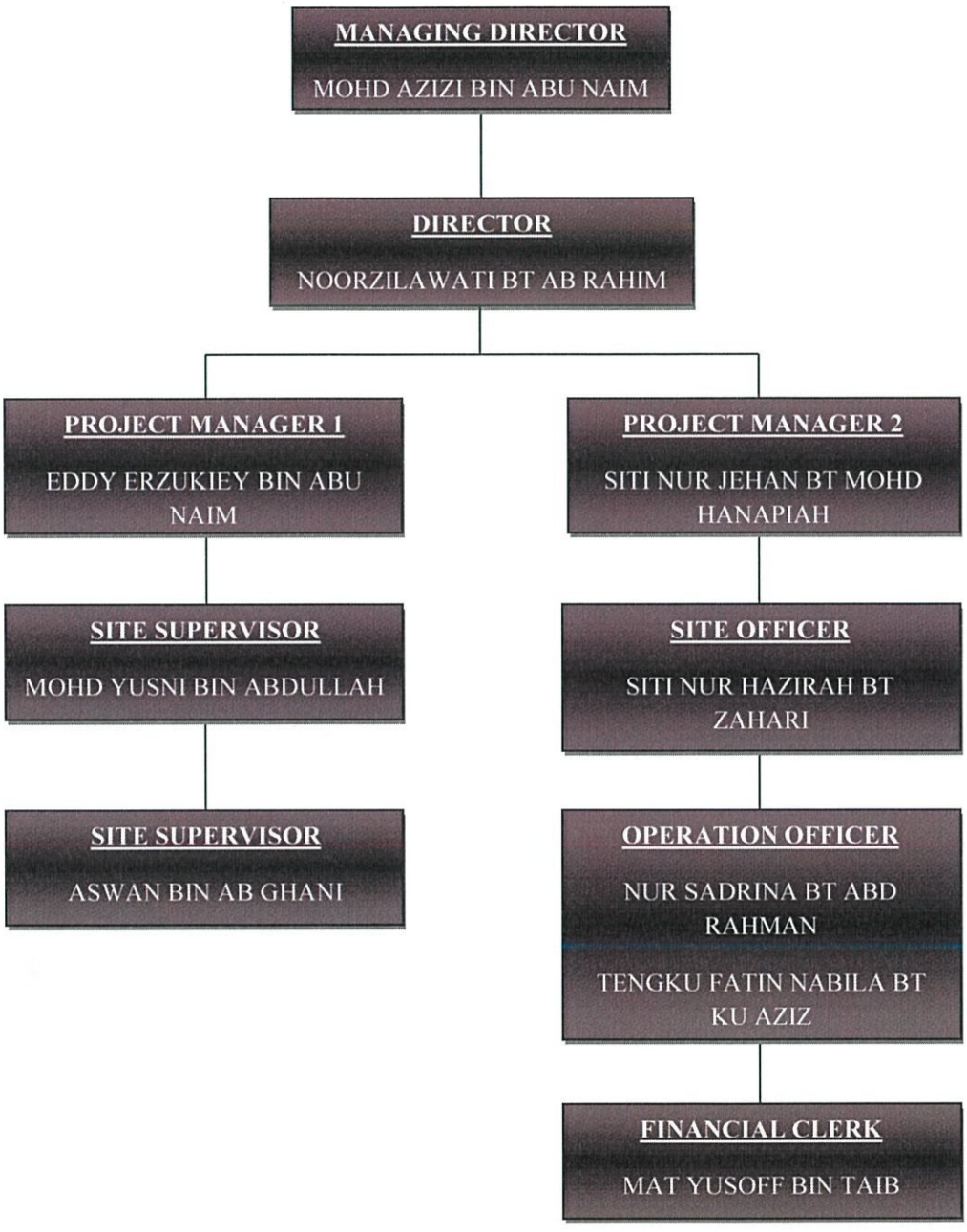


Figure 2.2 Organisation Chart

Source: DMA Vision Inter Trade (M) Sdn Bhd profile

2.2.4 Company's Construction Projects

Records below are the list of construction projects contracted to DMA Vision Inter Trade (M) SDN BHD or under GRADZ Inter Trade (old company's label) since its establishment. The project titles and corporations' names are as stated in the tender documents.

Project title	: Cadangan Membina dan Menyiapkan Restoran Pandu Lalu 'KFC' & 'Pizza Hut' di atas Lot PT. 12632, Mukim Bandar, Daerah Galas, Jajahan Gua Musang, Kelantan
Owner	: KFC (Peninsular Malaysia) SDN BHD
Consultant	: Rekajati Arkitek (RJA) –main consultant-
Contract sum	: RM 4,475,000.00
Period	: 20 weeks
End date	: October 16th 2013
Remarks	: Currently in progress

Project title	: Membina Sekolah Rendah Jenis Kebangsaan Cina Pulai, Gua Musang, Kelantan
Owner	: Jabatan Pembangunan Persekutuan Kelantan
Consultant	: PSA Consultant
Contract sum	: RM 2,487,766.00
Period	: 88 weeks
End date	: July 9th 2014
Remarks	: Currently in progress

Project title	: Projek Program Bekalan Air Estet 2011 Selangor Darul Ehsan Zon 1B
Owner	: Kementerian Kemajuan Luar Bandar & Wilayah
Consultant	: PZK Consultant Sdn Bhd
Contract sum	: RM 2,132,782.00
Period	: 34 weeks
End date	: October 30th 2012
Remarks	: Completed

Project title	: Projek Bekalan Air Luar Bandar (BALB) Sistem Retikulasi Tahun 2011/2012 bagi Negeri Terengganu (Zon 1C)
Owner	: Kementerian Kemajuan Luar Bandar & Wilayah
Consultant	: Mega Teknik Konsultan Sdn Bhd
Contract sum	: RM 4,280,332.00
Period	: 6 months
End date	: December 26th 2011
Remarks	: under GRADZ Inter Trade name

Project title	: Membina dan Menyiapkan Satu Blok Kuarters Kelas 'F' 4 Tingkat Pangsa 8 Unit di Sekolah Kebangsaan Perasu Gua Musang, Kelantan
Owner	: Kementerian Pelajaran Malaysia
Consultant	: Unit JKR Kesedar Tanah Merah Kelantan
Contract sum	: RM 2,453,682.50
Period	: 9 months
End date	: May 24th 2009

Project title	: Membina dan Menyiapkan Perumahan Kos Sederhana Rendah di atas Sebahagian Lot 2623, Mukim Ulu Bernam, Daerah Batang Padang, Tanjung Malim, Perak Darul Ridzuan
Owner	: Syarikat Perumahan Negara Bhd
Consultant	: Prima Reka Konsultan Sdn Bhd
Contract sum	: RM 838,000.00
Period	: 4 months
End date	: April 13th 2007
Remarks	: sub contract from BINA UTAMA TIMUR Sdn Bhd company

Project title	: Construction and Completion of Temporary Water Reticulation to Vendor Area at Proton City, Tanjung Malim, Perak Darul Ridzuan
Owner	: Proton City Development Corporation Sdn Bhd
Consultant	: Jurutera Perunding Tegap Sdn Bhd
Contract sum	: RM 560,000.00
Period	: 2 ½ months
End date	: March 20th 2007
Remarks	: sub contract from BINA UTAMA TIMUR Sdn Bhd company

CHAPTER 3.0

CASE STUDY

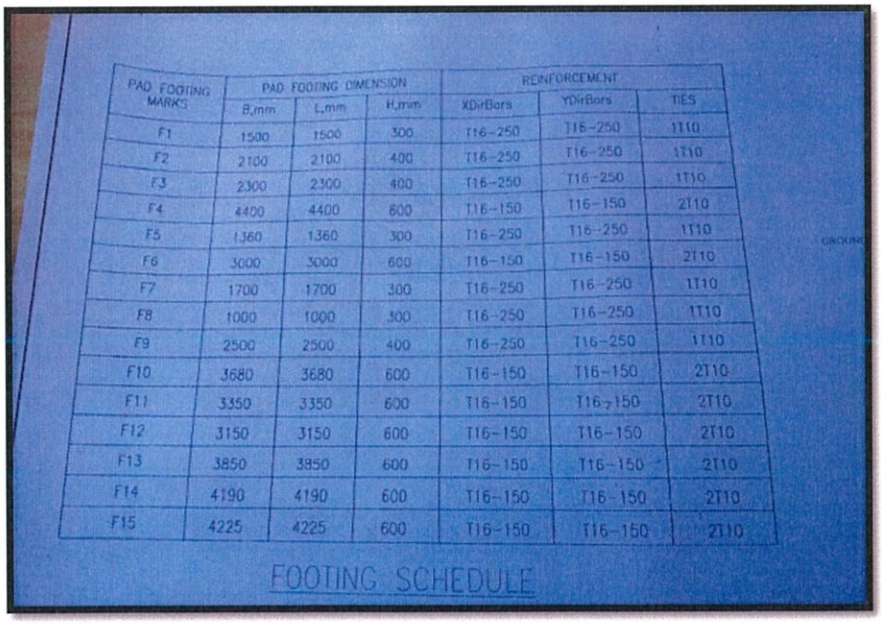
3.1 Introduction

1 unit of KFC & Pizza Hut 1 storey restaurant, Gua Musang, is one of the new projects proposed by KFC (PM) SDN BHD in collaboration with Pizza Hut Restaurants SDN BHD for the year 2013. Letter of Acceptance later be awarded to DMA Vision Inter Trade (M) SDN BHD to carry out the construction project. The proposed site is then owned by the company on May 30th 2013. Approximate site area is about 58357 ft^2 at the central of new town.

Photo 3.1 Project Summary Signboard

Source: Nurhamizah (June 12th 2013)

Buildings to be constructed are the main block; restaurants separated with walkway between them, and the rubbish & pump house. These buildings require pad foundation type, with a quite numbers of it for a restaurant. Method of applications are mainly in standard without any special system to be taken in measure, considers the soil condition for the project. Bearing capacity of the soil is hard enough to withstand the proposed 1 storey buildings by applying pad foundation. However, the numbers are tremendous with more than 20 pad foundations to be implement for the main block only and plus eight pad foundations for rubbish and pump house all together. Some of the pad foundations are different in volumes with one another depend on individual functionality of the building rooms that amount more than 15 areas. Average depth for the foundations is range from 5 to 6 feet and the smallest foundation footing area comprised is 1000 mm x 1000 mm. Figure below shows the instructions of foundation footing volumes. The marks shown are not the actual number of foundations to construct.



PAD FOOTING MARKS	PAD FOOTING DIMENSION			REINFORCEMENT		
	B,mm	L,mm	H,mm	XDirBars	YDirBars	TIES
F1	1500	1500	300	T16-250	T16-250	1T10
F2	2100	2100	400	T16-250	T16-250	1T10
F3	2300	2300	400	T16-250	T16-250	1T10
F4	4400	4400	600	T16-150	T16-150	2T10
F5	1360	1360	300	T16-250	T16-250	1T10
F6	3000	3000	600	T16-150	T16-150	2T10
F7	1700	1700	300	T16-250	T16-250	1T10
F8	1000	1000	300	T16-250	T16-250	1T10
F9	2500	2500	400	T16-250	T16-250	1T10
F10	3680	3680	600	T16-150	T16-150	2T10
F11	3350	3350	600	T16-150	T16-150	2T10
F12	3150	3150	600	T16-150	T16-150	2T10
F13	3850	3850	600	T16-150	T16-150	2T10
F14	4190	4190	600	T16-150	T16-150	2T10
F15	4225	4225	600	T16-150	T16-150	2T10

FOOTING SCHEDULE

Photo 3.2 Foundation Footing Schedule

Source: Rekajati Arkitek (RJA) architectural drawing

3.2 Project's Background

3.2.1 Project Title and Location

The said project is a propose to construct 1 unit of 1 storey KFC and Pizza Hut restaurant combination with grouped rubbish and pump house. Location anticipated on a part of Lot PT. 12632, Mukim Bandar Gua Musang, Jajahan Gua Musang, Gua Musang, Kelantan Darul Naim. The main entrance is at the right side of **Figure 3.1**.

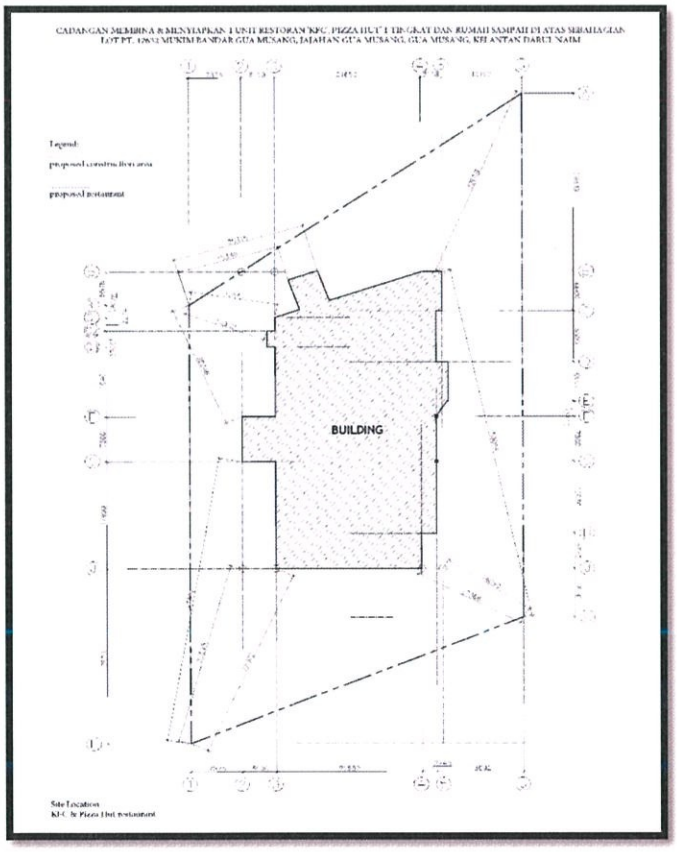


Figure 3.1 KFC & Pizza Hut Gua Musang Project Site Boundary

Source: DMA VIT contract document profile

3.2.2 Project Hierarchy

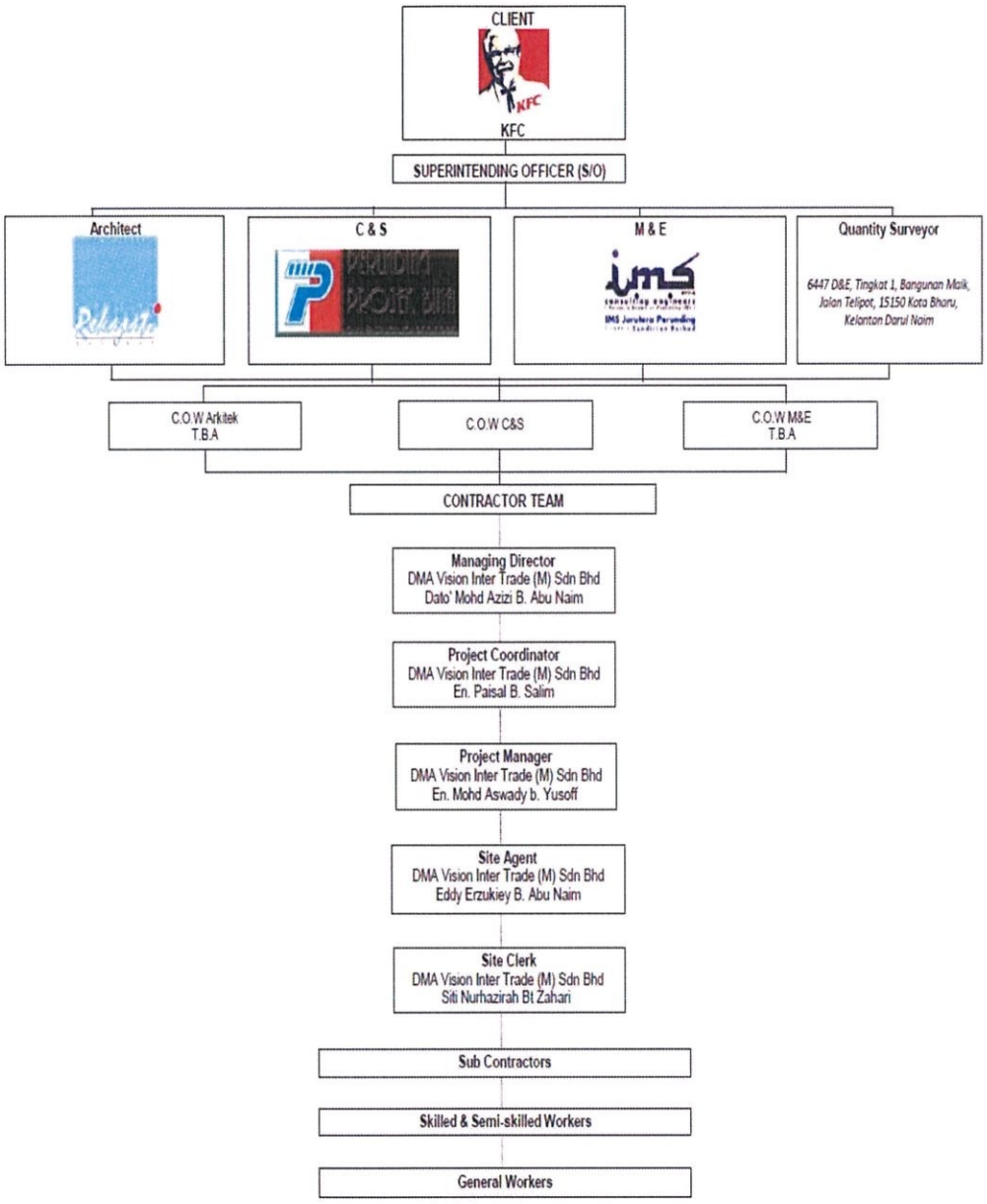


Figure 3.2 KFC & Pizza Hut Gua Musang Project Hierarchy
Source: DMA VIT contract document profile

3.2.3 Tenacity and Contract Summary

KFC™ and Pizza Hut™ are determined to fill the need and want of their current customers which increase throughout every year, while attracting future customers by introducing the respective products at any potential cities and regions. Average scheming for franchise establishment of the international branded products is one to two projects a year in Malaysia. One of the implicate areas is in Gua Musang, Kelantan. This project is more to modification type, as the old KFC™ franchise is already existed at the old town of Gua Musang.

The growth of society in the city, especially when there are two towns available, with large scale of on-going housing and school constructions encourage both KFC™ and Pizza Hut™ to propose the said project at the most strategic area in which near the occupied main road that extended from Kuala Krai to Kuala Lumpur. The advancing potential for the market is logically to be achieve. Other branded product currently presence; Marrybrown™ in the new town will be the closest rival.

Contract document in regards to this proposed project is précised as below:

No.	Title	Remarks
1	Contract number	RJA/KFC/13/2972 (2871)
2	Contract heading	" Cadangan Membina dan Menyiapkan Restoran Pandu Lalu 'KFC' & 'Pizza Hut' di atas Lot PT. 12632, Mukim Bandar, Daerah Galas, Jajahan Gua Musang, Kelantan"
3	Land Owner	**Majlis Daerah Gua Musang** 18000 Gua Musang, Kelantan Darul Naim

No.	Title	Remarks
4	Client	**KFC (Peninsular Malaysia) SDN. BHD.** Level 14-17, Wisma KFC, No. 17, Jalan Sultan Ismail, 50250 Kuala Lumpur
5	Architect Consultant	**REKAJATI ARKITEK (RJA)** 1460-C, Jalan Sultan Yahya Petra, Lundang 15200 Kota Bharu, Kelantan Darul Naim Tel: Fax: 09-7442007
6	Civil & Structural Engineer (C & S)	**PERUNDING PROJEK BINA** Lot 2548 - Level 2, Jalan Merak, Taman Guru, Pintu Geng, 15100 Kota Bharu, Kelantan Darul Naim Email: myppbina@gmail.com
7	Mechanical & Electrical Engineer (M & E)	**IMS JURUTERA PERUNDING SDN. BHD. (IMS)** 6447-B&C, 1st Floor, Jalan Telipot, 15150 Kota Bharu, Kelantan Darul Naim Tel: Fax: 09-7483488
8	Quantity Surveyor Engineer Consultant	**PERUNDING UKUR BAHAN SERASI** 6447 D&E, Tingkat 1, Bangunan Maik, Jalan Telipot, 15150 Kota Bharu, Kelantan Darul Naim Email: nsjaafar@yahoo.com.my
9	Contractor	**DMA VISION INTER TRADE (M) SDN. BHD.** PT 2975, Bangunan Kedai KDSB, Jalan Kesedar Jaya 4/1b, Taman Kesedar Jaya, 18300 Gua Musang, Kelantan Darul Naim Tel: Fax: 09-9125223

No.	Title	Remarks
10	Company Registration (Contractor)	933100-K
11	Contract Sum	RM 4,475,000.00
12	Date of Site Possession	May 30th 2013
13	Date of Project Completion	October 16th 2013
14	Contract Period	20 weeks
15	Liquidated Ascertained Damage (LAD)	RM 5,728.00 per calendar day
16	Defect Liability Period (DLP)	18 months from the date of Certificate of Completion

Diagram 3.1 Contract Summary

Source: Rekajati Arkitek (RJA) memorandum

3.2.4 Tender Document

Letter of Acceptance (LA) is received by the company on April 24th 2013 by KFC (Peninsular Malaysia) SDN BHD through Rekajati Arkitek consultant. Summarisation for the accepted tender document is as follows:

Bill No. and Descriptions:

a) Preliminaries RM153,900.00
b) Pylon RM306,963.70
c) Main Block RM1,567,873.50
d) External Work RM945,643.80
e) Provisional Sum RM516,000.00
f) Mechanical and Electrical Works RM984,619.00

Total contract sum is RM 4,475,000.00 as agreed upon, while the date of cut off week and the proposed progress are as follow:

Week	Cut Off Date	Planned (%)	Cumulative Planned (%)
W1	09/06/13	2	2
W2	16/06/13	4	6
W3	23/06/13	3	9
W4	30/06/13	1	10
W5	07/07/13	2	12
W6	14/07/13	1	13
W7	21/07/13	4	17
W8	28/07/13	4	21
W9	04/08/13	3	24
W10	11/08/13	5	29
W11	18/08/13	4	33
W12	25/08/13	5	38
W13	01/09/13	7	45
W14	08/09/13	10	55
W15	15/09/13	10	65
W16	22/09/13	9	74
W17	29/09/13	10	84
W18	06/10/13	9	93
W19	13/10/13	5	98
W20	16/10/13	2	100

Diagram 3.2 Physical S-curve Data

Source: DMA VIT Tender Document

3.3 Case Study

3.3.1 Pad Foundation

Before going further, it is rational to have a clear view on the foundation functions. To put it simply, the function of a structure is to do nothing, in other words, the most successful structures stay still which is the goal of the exercise. Technically, foundations are having two functions:

I. To transfer the live and dead loads of the building to the soil over a large enough area so that neither the soil nor the building will move.
II. To prevent frost from moving the building (in areas where frost occurs).

The said dead loads are the weight of the building materials and the soil surrounding the foundations, meanwhile live loads are include the weight of people, furniture, snow, rain, and wind or anything that often movable. Wind can be an uplift force, a vertical force downward or a horizontal force. (imacC, 2003)

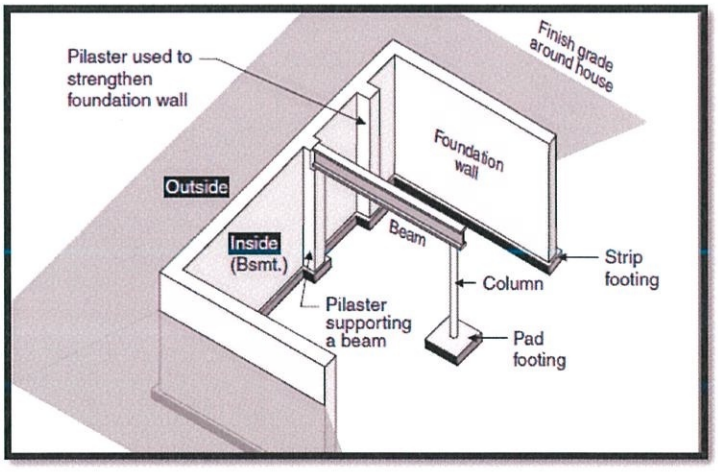


Figure 3.3 Foundation with Several Types of Footings
Source: imacC online journal

Barry (1971) contends that foundation pad of concrete to piers of brick, reinforced concrete, steel columns and masonry is frequently in the form of a square or rectangular one. Its area depends on the load on the foundation itself, the bearing and shear strength of subsoil, and thickness on the foundation material strength. For instance, if its load is 150kN and the capacity of the soil is 150kN/m^2, thus the pad needs bearing area of 1m^2.

It is said that the simplest form of pad foundation contains of a block of mass concrete, for example, a pier and foundation beam base for a single storey building. Framed buildings heavily loaded pad foundations supporting columns are commonly reinforced, such as a reinforced concrete column and a steel grillage foundation to a steel column. While the pad foundations spread to a framed building is designed as such the adjacent separate foundations edge are adjacent together, it is eventually to form one continuous column foundations (the named foundation is a strip foundation).

Pad foundation is easily categorised as one of the shallow foundation, but there is a deep pad foundation as well, which its depth is more than 3 metres. It is usually on a sticky soil with less bearing capacity to hold the above impose load, but capable to withstand the weight pressure that makes a slight different than piling depth. Usual size of a pad foundation is 1200mm x 1200mm x 300mm (footing volume) and height of 1450mm from ground level. Pad foundation generally consists of a stump and a footing.

3.3.2 Method Statement for Pad Foundation

These method statements are based on the site observation, skimming, reading, and as in site diary report. Handled by DMA Vision Inter Trade (M) Sdn Bhd, the construction of pad foundations are controlled by the site manager, sub-contractors, and rules & regulations of contract. Sub-contractors involved at this moment is chief of carpenters and chief of steel rebar, including concreting work. As this is centred exactly as the actual work done at the site, there are a few things to emphasise for clearance of details:

I. Some of the works are carried out in parallel, which means, once there are parts that already completed, the next tasks for the said parts will receive a green light to resume first rather than waiting for one whole element to fully complete.

II. There are several date gaps on some tasks, which may not tally with one another in these method statements, due to the fact of some issues in management, documentation and material obtainability.

III. Surveyor seems not getting too much involvement in foundation construction over an unknown cause, thus the sub-contractors use traditional method for any levelling work of element.

PROJECT : PAD FOUNDATION CONSTRUCTION PAGE : 1

PREPARED BY : NURHAMIZAH BINTI MAZLAN DATE : JUNE 23rd 2013

NO.	OPERATION	METHOD	SEQUENTIAL/DIAGRAM	PLANT/ EQUIPMENT	MAN POWER	DURATION
1	Setting Out	Accurate position of foundations are needed to be identified within building site perimeter. Location for its stump is marks with a peg to ease measuring work and lining up its footing size using flour. Knitting/ Nylon thread is used to extend the gridlines, based on the drawing, within the site rail set up by surveyor. The measurement is larger than the foundation actual size to simplify excavation work.	 **Photo 3.3** Setting Out  **Photo 3.4** Measuring Gridlines	1) Knitting/ Nylon thread 2) Pegs 3) Nails 4) Flour 5) Measuring tape 6) Hammer 7) Theodolite 8) Tripod 9) Staff	3 skilled workers, surveyor	$1^{1/2}$ day

PROJECT : PAD FOUNDATION CONSTRUCTION PAGE : 2

PREPARED BY : NURHAMIZAH BINTI MAZLAN DATE : JUNE 24th 2013

NO.	OPERATION	METHOD	SEQUENTIAL/DIAGRAM	PLANT/ EQUIPMENT	MAN POWER	DURATION
2	Excavation Work	Excavation starts right after setting out is done. From the site entrance, the excavation begins at the left side first. Average depth to excavate is about 5 to 6 feet for every foundation. There are about 20 and more of pad foundations to be construct while most of them are to be build close with one another. To smooth the work, a wider excavated soil pit is made.	 **Photo 3.5** Excavation Work  **Photo 3.6** Combining Soil Pit	Excavator	1 driver	1 week

PROJECT : PAD FOUNDATION CONSTRUCTION PAGE : 3

PREPARED BY : NURHAMIZAH BINTI MAZLAN DATE : JUNE 25th 2013

NO.	OPERATION	METHOD	SEQUENTIAL/DIAGRAM	PLANT/ EQUIPMENT	MAN POWER	DURATION
3	Footing Formwork Installation	Once there is an excavated soil, the carpenter workers prepare to place the footing formwork according to its size. The thread lining is re-made as reference for positioning the foundation precisely. A diesel black oil is used to reflect the lined thread under the bright weather and lessen parallax error.	 **Photo 3.7** Tracing Thread-lining Gridline  **Photo 3.8** Installing Footing Formwork	1) Wooden formwork 2) Nails 3) Saw 4) Measuring tape 5) Diesel black oil 6) Knitting/ Nylon thread	2 to 3 skilled workers (each fdn.)	10 days

PROJECT : PAD FOUNDATION CONSTRUCTION PAGE : 4

PREPARED BY : NURHAMIZAH BINTI MAZLAN DATE : JUNE 29th 2013

NO.	OPERATION	METHOD	SEQUENTIAL/DIAGRAM	PLANT/ EQUIPMENT	MAN POWER	DURATION
4	Casting Lean Concrete	As soon as the footing formwork is casted, concreting work for lean cover is poured. Thickness of the lean concrete is about 50 mm. The poured concrete is then being trowelled before it eventually becomes stiff.	 **Photo 3.9** Spreading Concrete for Cover  **Photo 3.10** Pouring Concrete for Cover	1) Crane 2) Ready-mix concrete G15 3) Levelling 4) Measuring tape 5) Trowel	1 to 2 skilled workers (each fdn.)	1 day (½ day on June 29th and ½ day on July 4th)

PROJECT : PAD FOUNDATION CONSTRUCTION PAGE : 5

PREPARED BY : NURHAMIZAH BINTI MAZLAN DATE : JUNE 30th 2013

NO.	OPERATION	METHOD	SEQUENTIAL/DIAGRAM	PLANT/ EQUIPMENT	MAN POWER	DURATION
5	Footing and Stump Reinforcement Bars Instalment (Footing)	Installation of footing reinforcement bars are done after the lean concrete cover has dried up. For small size of footing,the reinforcement bars are assembled together and pre-shaped first before putting it in the formwork. Otherwise, for the bigger footing size, the reinforcement bars are bonded together in the formwork itself as it is too heavy to lift it up without using a crane.	 **Photo 3.11** Footing Rebar  **Photo 3.12** Prepared Rebar	1) Rebar pliers 2) Wires	2 to 4 skilled workers (each fdn.)	10 days

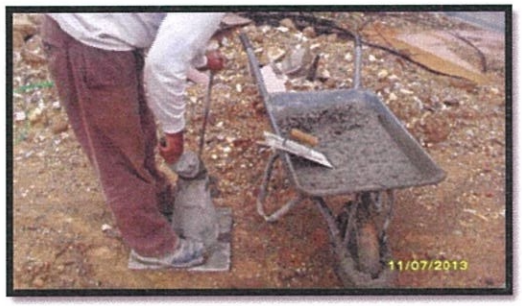
PROJECT : PAD FOUNDATION CONSTRUCTION PAGE : 6

PREPARED BY : NURHAMIZAH BINTI MAZLAN DATE : JUNE 30th 2013

NO.	OPERATION	METHOD	SEQUENTIAL/DIAGRAM	PLANT/ EQUIPMENT	MAN POWER	DURATION
	Footing and Stump Reinforcement Bars Instalment (Stump)	Stump reinforcement bars are setting in with the settled footing reinforcement bars. The anchored of the stump rebar is tied tightly to the footing rebar underneath. Some of the foundations have more than one stump each. Stump positions are directed by using the knitting / nylon thread prepared earlier as reference of gridlines. Spacer blocks are placed under the footing rebar and its sides for cover.	 **Photo 3.13** Installing Stump Rebar  **Photo 3.14** Rebar Adjustment	1) Rebar pliers 2) Wires 3) Concrete spacer blocks	2 to 4 skilled workers (each fdn.)	10 days

PROJECT : PAD FOUNDATION CONSTRUCTION PAGE : 7

PREPARED BY : NURHAMIZAH BINTI MAZLAN DATE : JULY 11th 2013

NO.	OPERATION	METHOD	SEQUENTIAL/DIAGRAM	PLANT/ EQUIPMENT	MAN POWER	DURATION
6	Concreting Work for Footing (Slump Test)	Two tests are carried out on the ready-mix concrete before pouring it into the footing formwork. The first one is the slump test, handled by the experienced worker of the concreting company, the concrete is compacted in the cone by 25 times each layer of three while both feet holding down the base plate. The top of the cone is levelled before lifting it carefully. This slump measurement is 80 cm.	 **Photo 3.15** Measuring Slump for Footing  **Photo 3.16** Making Slump Test	1) Slump base plate 2) Slump cone 3) Steel rod 4) Trowel 5) Ready-mix concrete G35	1 skilled worker	¼ hour

PROJECT : PAD FOUNDATION CONSTRUCTION PAGE : 8

PREPARED BY : NURHAMIZAH BINTI MAZLAN DATE : JULY 11th 2013

NO.	OPERATION	METHOD	SEQUENTIAL/DIAGRAM	PLANT/ EQUIPMENT	MAN POWER	DURATION
	Concreting Work for Footing (Cube Test)	Cube test is carried out for nine cubes. Done by the same worker, first cube of three are compacted with concrete by the steel rod, three layers for 25 – 35 compaction each layer. The next six cubes are completed later as the concrete is taken from different ready-mix lorries (to ensure concrete grade quality). These nine cubes are named and taken to the lab the following day for curing and compression.	 **Photo 3.17** Making Test Cube for Footing  **Photo 3.18** Test Cube Prepared	1) Steel rod 2) Cube moulds 3) Trowel 4) Ready-mix concrete G35	1 skilled worker	½ hour

PROJECT : PAD FOUNDATION CONSTRUCTION PAGE : 9

PREPARED BY : NURHAMIZAH BINTI MAZLAN DATE : JULY 11th 2013

NO.	OPERATION	METHOD	SEQUENTIAL/DIAGRAM	PLANT/ EQUIPMENT	MAN POWER	DURATION
	Concreting Work for Footing	Concrete is poured into the footing formwork while poking in the poker vibrator to bring out any trapped bubbles in the concrete. The vibrator should not be too closed to the formwork to avoid it from bursting. The fresh concreted footing is then levelled by trowelling the surface smoothly.	 **Photo 3.19** Pouring Concrete for Footing  **Photo 3.20** Poker Vibrator Usage	1) Crane 2) Ready-mix concrete G35 3) Poker vibrator 4) Trowel	3 to 5 skilled workers (each fdn.)	$1^{1/4}$ days

PROJECT : PAD FOUNDATION CONSTRUCTION PAGE : 10

PREPARED BY : NURHAMIZAH BINTI MAZLAN DATE : JULY 13th 2013

NO.	OPERATION	METHOD	SEQUENTIAL/DIAGRAM	PLANT/ EQUIPMENT	MAN POWER	DURATION
7	Fixing of Stump Formwork	As the concreted footing dried up, stump formwork is fix securely. Few woods are needed to act as the lock and support to the formwork. Spacer blocks are put at the sides of the stump rebar before wrapping it with formwork to make instructed cover.	 **Photo 3.21** Installing Stump Formwork  **Photo 3.22** Stump Formwork Done	1) Nails 2) Hammer 3) Saw 4) Measuring tape 5) Wooden formwork 6) Concreted spacer blocks	2 to 3 skilled workers (each fdn.)	2 days

PROJECT : PAD FOUNDATION CONSTRUCTION PAGE : 11

PREPARED BY : NURHAMIZAH BINTI MAZLAN DATE : JULY 13th 2013

NO.	OPERATION	METHOD	SEQUENTIAL/DIAGRAM	PLANT/ EQUIPMENT	MAN POWER	DURATION
8	Concreting Work for Stump (Slump Test)	At the very same day, once there are some stump formwork installed completely, concreting work is carried out into the stump formwork. Slump test is done first, by compacting 25 times for each layer of three in the slump cone before trowelling the top and then measuring the slump after the cone is lift up. The slump is 90 cm. This test is handled by the concreting company worker.	 **Photo 3.23** Slump Test for Stump  **Photo 3.24** Measuring Slump	1) Ready-mix concrete G35 2) Slump cone 3) Steel rod 4) Base plate 5) Trowel	1 skilled worker	¼ hour

PROJECT : PAD FOUNDATION CONSTRUCTION PAGE : 12

PREPARED BY : NURHAMIZAH BINTI MAZLAN DATE : JULY 13th 2013

NO.	OPERATION	METHOD	SEQUENTIAL/DIAGRAM	PLANT/ EQUIPMENT	MAN POWER	DURATION
	Concreting Work for Stump (Cube Test)	Three cubes are used to undergo cube test. Concrete is compacted in the moulds by 25 – 35 times each layer of three by steel rod before trowelling the surface. The three cubes are titled and send to the lab for curing and compression test.	 **Photo 3.25** Prepared for Stump Cube Test  **Photo 3.26** Cube Test for Stump	1) Ready-mix concrete G35 2) Cube moulds 3) Steel rod 4) Trowel	1 skilled worker	¼ hour

PROJECT : PAD FOUNDATION CONSTRUCTION PAGE : 13

PREPARED BY : NURHAMIZAH BINTI MAZLAN DATE : JULY 13th 2013

NO.	OPERATION	METHOD	SEQUENTIAL/DIAGRAM	PLANT/ EQUIPMENT	MAN POWER	DURATION
	Concreting Work for Stump	Concrete is poured into the stump formwork cautiously. An inclined wooden plank is cast-off to guide the slipped concrete into the formwork without spilling over the sides. Poker vibrator is used to release out trapped bubbles in the concrete.	 **Photo 3.27** Pouring Concrete for Stump  **Photo 3.28** Poker Vibrator Used in the Concrete	1) Ready-mix concrete G35 2) Crane 3) Poker vibrator 4) Inclined wooden plank	2 to 3 skilled workers (each fdn.)	1 day (½ day on July 13th and ½ day on July 14th)

PROJECT : PAD FOUNDATION CONSTRUCTION PAGE : 14

PREPARED BY : NURHAMIZAH BINTI MAZLAN DATE : JULY 15th 2013

NO.	OPERATION	METHOD	SEQUENTIAL/DIAGRAM	PLANT/ EQUIPMENT	MAN POWER	DURATION
9	Taking off Stump and Footing Formwork	When the concreted foundation is dried, the formwork is taken off with watchful. Some of the formwork are usable for another round. The woods are arranged properly at the very sides within site perimeter.	 **Photo 3.29** Formwork is Taken Off  **Photo 3.30** Concreted Pad Foundations	1) Saw 2) Hammer 3) Steel bar	2 to 4 skilled workers (each fdn.)	2 days

PROJECT : PAD FOUNDATION CONSTRUCTION PAGE : 15

PREPARED BY : NURHAMIZAH BINTI MAZLAN DATE : JULY 18th 2013

NO.	OPERATION	METHOD	SEQUENTIAL/DIAGRAM	PLANT/ EQUIPMENT	MAN POWER	DURATION
10	Applying Anti-Termite on the Foundations	Anti-termite liquid specifically for site construction use is added with water into the anti-termite pump. The whole foundation areas are then sprayed with the pump on every side. Purposely it is to avoid insects from destroying the concreted foundation while being beneath of the soil.	 **Photo 3.31** Anti-Termite Spray  **Photo 3.32** Applying Anti-Termite to Foundations	1) Anti-termite pump 2) Anti-termite liquid	1 worker	½ day

PROJECT : PAD FOUNDATION CONSTRUCTION PAGE : 16

PREPARED BY : NURHAMIZAH BINTI MAZLAN DATE : JULY 18th 2013

NO.	OPERATION	METHOD	SEQUENTIAL/DIAGRAM	PLANT/ EQUIPMENT	MAN POWER	DURATION
11	Backfilling Foundation Area	Backfilling is performed at foundation area. The soil level is based on the reduced level (RL) temporary benchmark (TBM) prepared by the surveyor. This backfilling is all but to get ready for installing ground beam formwork.	 **Photo 3.33** Backfilling Work  **Photo 3.34** Backfilled Foundation Area	1) Backhoes 2) Lorries	1 to 3 drivers	5 days

CHAPTER 4.0

RECOMMENDATIONS AND CONCLUSION

4.1 Recommendations

In common sense, it is impossible for a construction site to be one hundred percent of perfect shape and following every standard available to imply, however, there is no restriction to be as close as to such perfection. Anything that against the rules and less pre-cautions taken which related to the construction project can be minimise as low as possible if they are unavoidable. These problems stated below are given the recommendations as alternative actions to solve them.

4.1.1 Constant Injuries

Whether it is a small cut or a large bruise, injuries are frequently happen during construction works to the workers, even at the substructure stage; pad foundation to be build. The factor is not fully to be push onto the workers' careless only, but the lack of personal protective equipment (PPE) given to them is also need to be notice already. It is suggestive that the company gives sufficient PPE to the workers or to any visitor within the site perimeter, in order to minimise wounds of a person. For at least, basic PPE is considered, such as safety helmet and safety boots. In addition, it is also preferable to check the validation of workers' green cards and keeping them updates.

4.1.2 Prompt Damage of Wooden Formwork

The prepared formwork for foundations are easily destroyed and defected by weathering and microorganisms in a short period of time. It is a relative connection, which if the wooden formwork is made from a low quality of wood, a proper preservations to the formwork is most essential (for instance, covering it with plastic sheet to lengthen its usability or applying oil / paint to it instead), so thus vice versa. However, none of those are carried out and most of the formwork are left rotten in a long time. Some of the completed formwork are housing multi-fungi as shown in **Photo 4.1**. This is a non-economic way, though there are some tactics to practice.

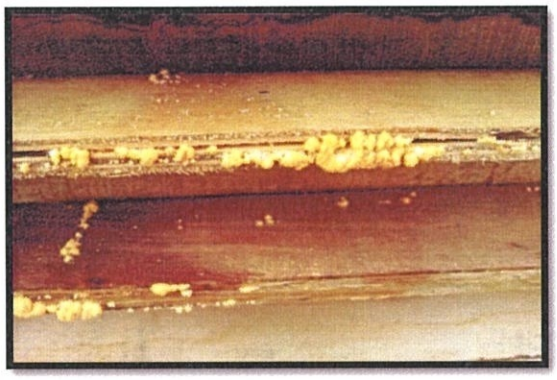


Photo 4.1 Fungi growth at wooden formwork

Source: Project site area (July 14th 2013)

One of them is buying waterproofing sheet to cover the formwork, the other one is by coating the formwork with any suitable preservative. There is also by getting more refined quality of formwork, albeit the price is a bit higher, but it is worth as it can be use couple of times at the very least without much modifications to go through.

4.1.3 Water Clogged in Foundation Area

The current weather is often inclement, the site area is mostly clog with water. Water pooling is easy to form, taking advantages of the soil condition and rough surface of ground level at site. This is a common thing to happen in construction work, nevertheless, it will slow down the task of the day and drag the work unable to be finished according to schedule. It is best to pump out the water quickly, then again, it will not be any faster if the company prepares one water pump only. The foundation area is large and deep enough to make a swimming pool, thus it needs more than one water pump to flow out the water from within the site region.

4.2 Conclusion

In a nutshell, everything I have learned from the first day of practical training until the end are very precious, in both knowledge and skill that have contented me for this semester. Although this report is all about a study of pad foundation installation, which no offense there is nothing anew to reveal a huge discovery, it is undeniably fun to experience the construction of such matter first-hand without the need to catch up with thick books all the times. Moreover, I manage to point out a comparison between two different projects controlled by government and private sector respectively. The construction management on both sides has a slight dissimilarity, especially when it comes to documentation and quality.

To have actually witnessing the real tough and lean circumstances regarding construction problems are priceless, which are likewise picturing the kind of

situations I will face in the future if I ever implicate myself in construction industry. No matter how talented one party is, there is always problem arises if the other party is reluctant to give a single commitment. Such case will definitely affects the whole construction progress and eventually slows it down. For the sake of smooth work, documentation and literally management of site are wise to do in the same pace.

Pad foundation is often to be constructed for less than three-storey buildings, though its amount is unlimited as it is also depends on the soil investigation result. Before this, I have only seen eye to eye of a pad foundation, a very small size, which usually presented under a traditional Malay house. I find it quite amusing to be able to watch the whole progress of pad foundation construction at my practical training site, particularly when the numbers are surprisingly many and different sizes to be built at close range with each other are something new to me, considering they are for a single one storey restaurant in moderate dimension. The only pylon work to be done soon is for the enormous restaurant signboard.

In all honesty, I am fairly grateful to have the chance to carry out my practical training here, in Gua Musang. I have been placed at two construction sites that are currently in progress; a Chinese Elementary School project at Pulai and KFC & Pizza Hut restaurant development at Taman Mesra, along with my other classmate that undergoes the training under the same company. Talking and discussing with the workers, giving out orders and instructions to them, attending site meetings, getting yelled by the director, feeling worn out, being bullied jokingly by the project manager and constant rush to finish a pile of site works are moments that I will hold on very dear until the end of life.

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LIST OF APPENDICES

DMA VISION INTER TRADE (M) SDN BHD

(Company No : 933100-K)

Kelantan Office

PT 2975 Bangunan Kedai KDSB
Jalan 4/1B Taman Kesedar Jaya
18300 Gua Musang.
Kelantan Darul Naim
TEL : FAX : 609-9125223

Kuala Lumpur Office

No 16-2 Block B, Zenith Corporate Park
No 1, Jalan SS 7/26
Kelana Jaya
47301 Selangor
TEL : FAX : 603-40450049

LAPORAN KEMAJUAN KERJA
BULAN OGOS
29/8/2013

PROJEK : CADANGAN MEMBINA DAN MENYIAPKAN 1 UNIT RESTORAN 'KFC', 'PIZZA HUT' 1 TINGKAT DAN RUMAH SAMPAH DI ATAS SEBAHAGIAN LOT PT.12632, MUKIM BANDAR GUA MUSANG, JAJAHAN GUA MUSANG, GUA MUSANG, KELANTAN DARUL NAIM

PEJABAT PENYELARAS & PENYELIA

ARKITEK
REKAJATI ARKITEK
1480-C JALAN SULTAN YAHYA PETRA, LUNDANG
15200 KOTA BHARU, KELANTAN

JURUTERA AWAM
PERUNDING PROJEK BINA
LOT 2546 LEVEL 2 JALAN MERAK, TAMAN GURU, PINTU GENG
15100 KOTA BHARU, KELANTAN

JURUTERA MEKANIKAL
IMS JURUTERA PERUNDING
5447-C JALAN TELIPOT
15150 KOTA BHARU, KELANTAN

JURUKUR BAHAN
PERUNDING UKUR BAHAN SERASI
5447 D&E TINGKAT 1, BANGUNAN MAIK, JALAN TELIPOT
15150 KOTA BHARU, KELANTAN

PELANGGAN

KFC (PENINSULAR MALAYSIA) SDN BHD
LEVEL 14-17 WISMA KFC
NO.17 JALAN SULTAN ISMAIL
PUSAT PENTADBIRAN KERAJAAN PERSEKUTUAN
50250 KUALA LUMPUR

REKAJATI ARKITEK
1460-C, JALAN SULTAN YAHYA PETRA, LUNDANG,
15200 KOTA BHARU KELANTAN DARUL NAIM
Telefon: Faksimili : 609-7442007
Email : rekajati@gmail.com, rekajati@streamyx.com

MAKLUMAT KONTRAK:-

1.	No. Kontrak		
2.	Tajuk Projek	**Cadangan Membina Dan Menyiapkan Restaurant Pandu Lalu "KFC & Pizza Hut" Di Atas Lot PT 12632, Mukim Bandar, Daerah Galas, Jajahan Gua Musang, , Kelantan Darul Naim.**	
3.	Pemilik Tanah	**YANG DIPERTUA** Majlis Daerah Gua Musang 18000 Gua Musang, Kelantan Darul Naim.	
4.	Pemaju	**KFC (PENINSULAR MALAYSIA) SDN. BHD** Level 14-17, Wisma KFC, No. 17, Jalan Sultan Ismail, 50250 Kuala Lumpur	
	Perunding Projek		
5.	Arkitek	**REKAJATI AKITEK (RJA)** 1460-C, Jalan Sultan Yahya Petra, Lundang 15200 Kota Bharu, Kelantan Darul Naim. No. Tel : / No. Fax:09-7442007	
6.	Jurutera C&S	**PERUNDING PROJEK BINA** Lot 2548, Level 2, Jalan Marak, Taman Guru, Pintu Geng, 15100 Kota Bharu, Kelantan Darul Naim	
7.	Jurutera M & E	**IMS JURUTERA PERUNDING SDN. BHD (IMS)** 6447-B&C, First Floor, Jalan Telipot, 15150 Kota Bharu, Kelantan Darul Naim No. Tel : / No. Fax :09-7483488	
8.	Jurukur Bahan	**PERUNDING SERASI** 6447-E, Tingkat 1, Bangunan MAIK, Jalan Telipot, 15150 Kota Bharu, Kelantan Darul Naim.	
9.	Kontraktor	**DMA VISSION INTER TRADE (M) SDN. BHD (933100-K)** Lot 2957, Bangunan Kedai KDSB, Jalan Kesedar Jaya 4/1B, Taman Kesedar Jaya, 183000 Gua Musang Kelantan Darul Naim. TEL : FAX : 609-9125223 Pendaftaran Syarikat : **933100-K** Pendaftaran PKK : Pendaftaran CIDB :	
10.	Harga Kontrak	RM 4,475,000.00	
11.	Tarikh Milik Tapak	30hb. May 2013	
12.	Tarikh Siap Projek	16hb. Oktober 2013	
13.	Tempoh Kontrak	20 Minggu	
14.	Denda Kelewatan	RM 5,728.00	
15.	Tempoh Tangungan Kecacatan	18 Bulan	
16.	Insuran ▪ Contractor All Risk		Cover Note No:
	▪ Workman Compensation		Cover Note No:
	▪ Tempoh Tanggungan		
	▪ Bon Perlaksanaan		

CADANGAN MEMBINA & MENYIAPKAN 1 UNIT RESTORAN KFC, PIZZA HUT 1 TINGKAT DAN RUMAH SAMPAH, GUA MUSANG

QA FORM
REQUEST FOR INSPECTION

Part 1 (to be completed by DMA)

DMA/KFC/RFI/C&S 001

Consultant : PERUNDING PROJEK BINA

Date : AUGUST 26th 2013

Drawing Nos :

Inspection stage : KFC & PIZZA HUT RESTAURANT

Location of Works : WBLFF

Type of inspection (Tick if application)

[ ] Visual [/] Survey [ ] Test

1. The following works are ready for inspection at : 4^00 ~~am~~/pm on ~~This~~ MONDAY (26/8/13)

   Works description : SAND FILLING BY BACKFILLING BELOW CONCRETED FLOOR SLAB

2. After approval to work outlined in 1, we wish to carry out the following works:

   Works description : SPRAYING ANTI-TERMITE ON THE WHOLE SAND FILLING BEFORE PUTTING IN HARDCORE

	~~Issued~~ by DMA	Received by Consultant
Signature		
Name	EDDY ERZURLEY ~~ABU~~ NAIM	
Designation	SITE AGENT	
Date	26/8/13	

Part 2: (to be completed by Consultant)

Comments upon inspection

Received by : _____ at _____ am/pm _____ on _____ Initial _____

Inspection by : _____ at _____ am/pm _____ on _____ Initial _____

COMMENTS:

1. Tick as appropriate

[ ] Inspection passed. The contractor is allowed to proceed with works

[ ] Remedial works listed below to be completed and but not further re-inspection is required

[ ] Remedial works listed below to be completed and/ no inspection is required

2. Remedial works to be completed

NCR issued, ref No: _____

	Received by Consultant	~~Issued~~ by DMA
Signature		
Name		EDDY ERZURLEY BIN ABU NAIM
Designation		SITE AGENT
Date		26 AUGUST 2013

DMA VISION INTER TRADE (M) SDN. BHD. (No. 433100-K)
Lot 2975 Bangunan Kedai KDSE
Jalan Kesedar Jaya 4/13
Taman Kesedaran Jaya
18300 Gua Musang, Kelantan.

consulting engineers
(Formerly known as Perunding IMS)
IMS Jurutera Perunding
(1991) Sendirian Berhad
6447-E1&C, 1st Floor, Jalan Telipot,
15160 Kota Bharu, Kelantan,
Tel : / +609 743 1053
Fax : +609 748 3488
Email : ims@perundingims.com

Rujukan Tuan:
Rujukan Kami: IMS/120010/KFC-GM/GEN/DMA/002
Tarikh: 25hb Julai 2013

Pengarah Urusan,
DMA Vision Inter Trade (M) Sdn. Bhd.
Lot 2975, Bangunan Kedai KDSB,
Jalan Kesedar Jaya,
18300 Gua Musang, Kelantan
Tel: Faks : 09-9125223/6522
U/P : En. Mohd. Azizi b. Abu Naim

Tuan,

CADANGAN MEMBINA DAN MENYIAPKAN 1 UNIT RESTORAN 'KFC', 'PIZZA HUT'1 TINGKAT DAN RUMAH SAMPAH DI ATAS SEBAHAGIAN LOT PT. 12632, MUKIM BANDAR GUA MUSANG, JAJAHAN GUA MUSANG, GUA MUSANG, KELANTAN D.N.

- Kerja-Kerja Pemasangan Sistem Paip Air Dalaman (Cold Water & Sanitary Plumbing)

Dengan segala hormatnya perkara di atas adalah dirujuk.

Merujuk kepada maklumat terkini yang diperolehi di tapak, pihak tuan sedang giat menjalankan pemasangan kerja-kerja sistem paip air dalaman di tapak bagi kerja-kerja di bawah 'ground slab'.

Mengikut rekod pihak kami, pihak tuan masih lagi belum mengemukakan **sampel bahan** yang akan digunapakai dan **lukisan kerja (shop drawing)** bagi sistem paip air dalaman kepada pihak kami untuk kelulusan pihak kami.

Oleh itu, bagi mengelakkan kerja-kerja berulang kali (double handling) di tapak, pihak tuan dinasihatkan untuk **menghentikan sementara** kerja-kerja 'back-filling' di kawasan yang terlibat dengan pemasangan sistem paip air dalaman. Pihak kami tidak akan melayan sebarang permohonan untuk pemeriksaan dan tuntutan kerja bagi kerja-kerja ini selagi perkara-perkara yang tersebut di atas tidak dikemukakan kepada pihak kami dengan kadar segera untuk kelulusan.

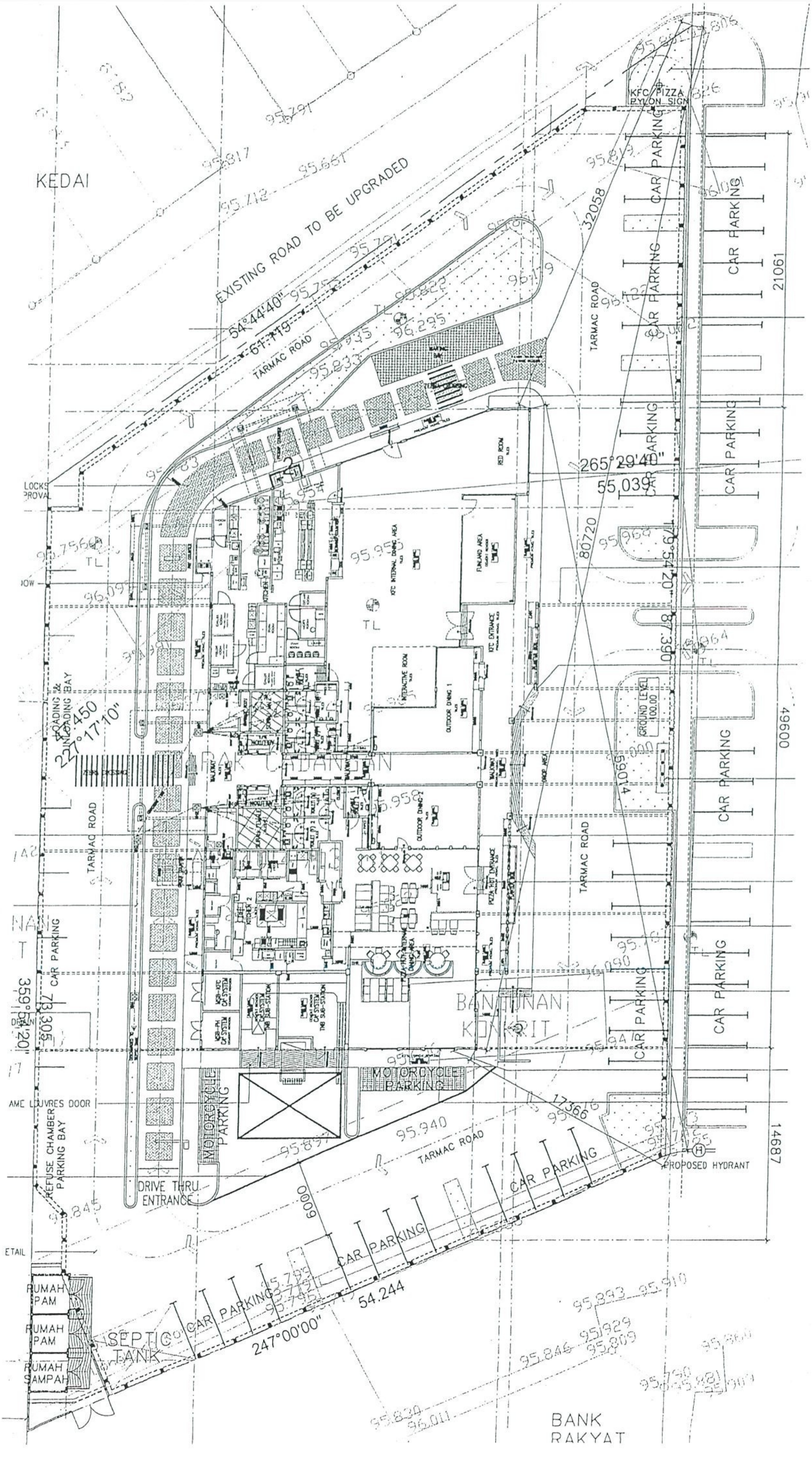
Sekian dimaklumkan, terima kasih.

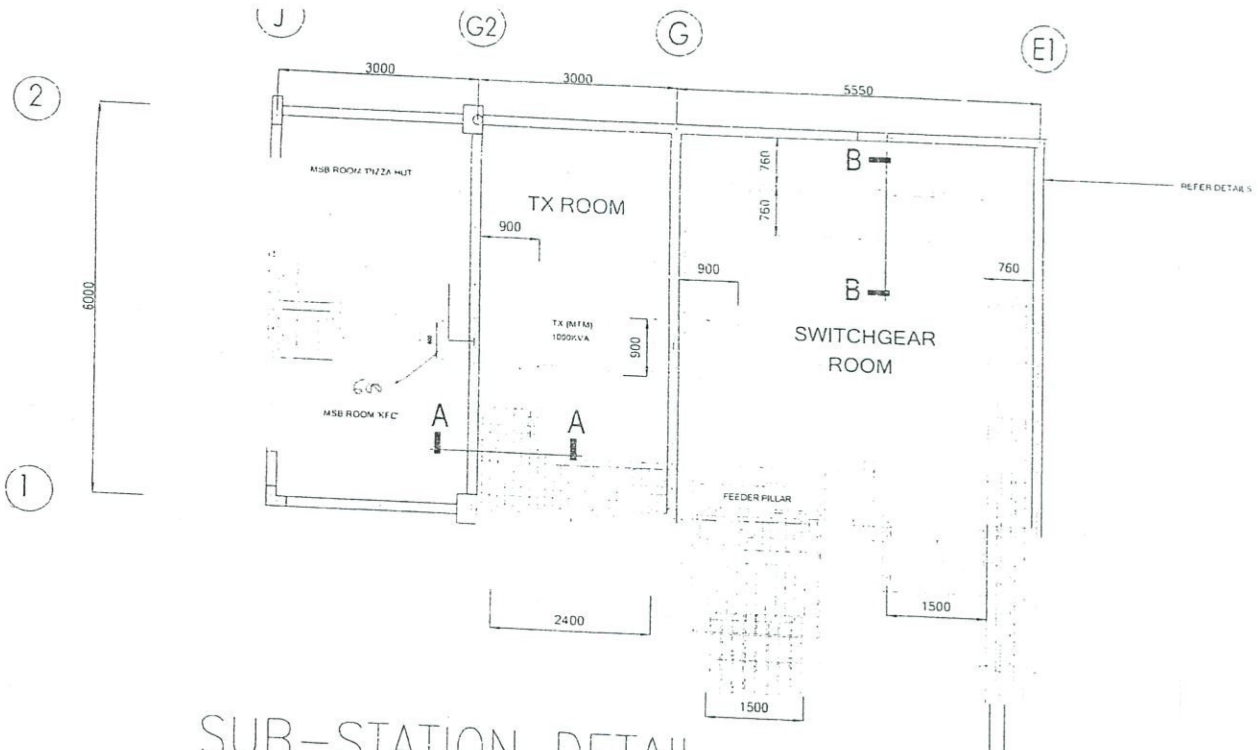
Yang benar,
IMS Jurutera Perunding
(1991) Sdn. Bhd.,

Mazlan Hassan

s.k

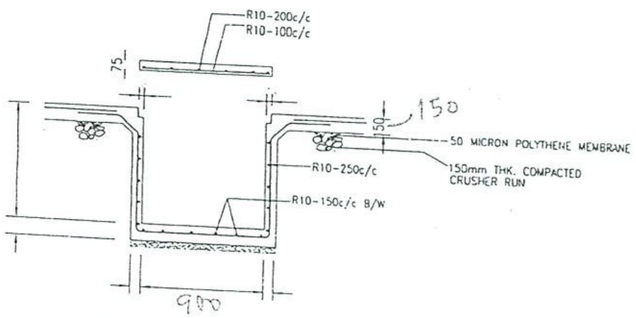
1. KFC Peninsular (Malaysia) Sdn. Bhd. (U/P : Pn. Rose Hamimah bt. Abdul Hamid)
2. Rekajati Arkitek (U/P: Tuan Hj. Saharizon Ismail)
3. Perunding Projek Bina (U/P : Ir. Kamaruzaman Che Kar/Puan Nor Aemila Husin)
4. Perunding Ukur Bahan Serasi (U/P : En. Noorshah Jaafar)


KEDAI
EXISTING ROAD TO BE UPGRADED
TARMAC ROAD
KFC PIZZA PYLON SIGN
CAR PARKING
265°29'40"
55,039
54°44'40"
61.119
LOADING & UNLOADING BAY
DRIVE THRU ENTRANCE
MOTORCYCLE PARKING
PROPOSED HYDRANT
GROUND LEVEL 100.00
BANGUNAN KONKRIT
247°00'00"
54.244
SEPTIC TANK
RUMAH PAM
RUMAH PAM
RUMAH SAMPAH
REFUSE CHAMBER PARKING BAY
BANK RAKYAT
21061
49600
14687
32058
80720
6000
17366



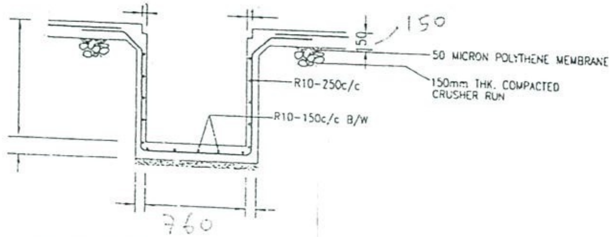
SUB-STATION DETAIL

SCALE 1:40



SECTION A-A

SCALE 1:20



SECTION B-B

SCALE 1:20

SUB-STATION TRENCHES DETAIL

TAJUK PROJEK

CADANGAN MEMBINA & MENYIAPKAN 1 UNIT RESTORA 'KFC' & 'PIZZA HUT' 1 TINGKAT D RUMAH SAMPAH DI ATAS SEBAHAGIAN LOT PT 12632, MUKIM BANDAR GUA MUSANG, JAJAHAN GUA MUSANG, GUA MUSANG, KELANTAN DARUL NA

PEMILIK TANAH

(SIGNATURE)
YANG DIPERTUA
MAJLIS DAERAH GUA MUSANG
18300 GUA MUSANG
KELANTAN DARUL NAIM

PEMAJU

KFC (PENINSULAR MALAYSI SDN. BHD.
Level 14-17, Wisma KFC
No. 17, Jalan Sultan Ismail
50250 Kuala Lumpur
TEL
FAX 03-20757756

(SIGNATURE)

PERUNDING UTAMA ARC

REKAJATI ARKITEK

(SIGNATURE)

PERUNDING SEKONGAN M&E

PERUNDING IMS
5447-B, Jalan Telipot
15150 Kota Bharu
Kelantan Darul Naim
Tel :-
Fax :- 09-7483488

(SIGNATURE)

PERUNDING SEKONGAN C&S

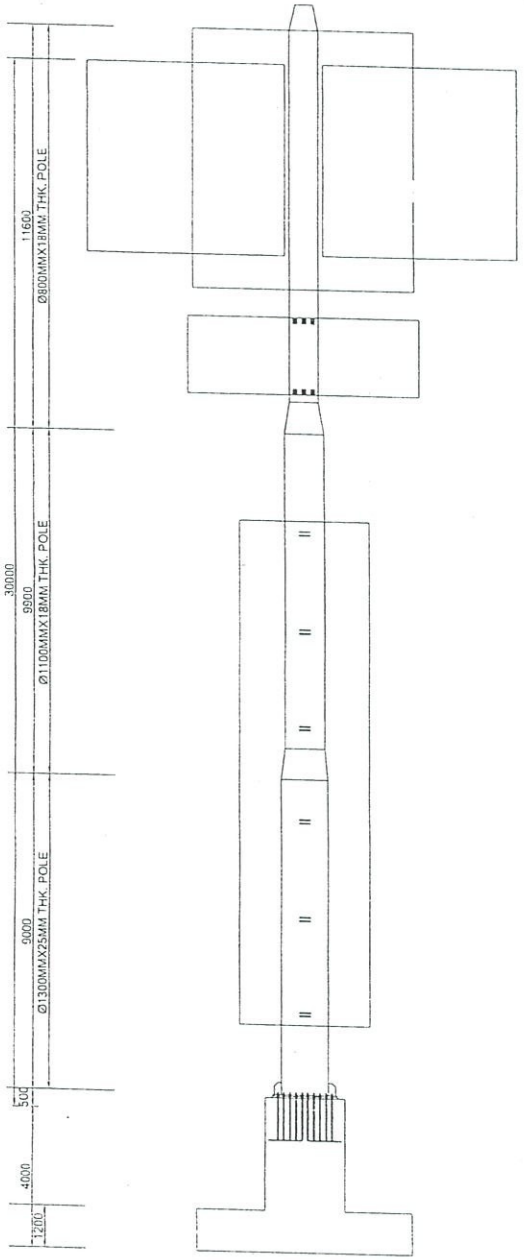
PERUNDING PROJEK BINA
civil & structural engineers
Lot 2545 - Level 2, Jalan Merah
Taman Guru, Pintu Geng
15100 Kota Bharu
Kelantan Darul Naim
E-mail: myppbina@yahoo.com

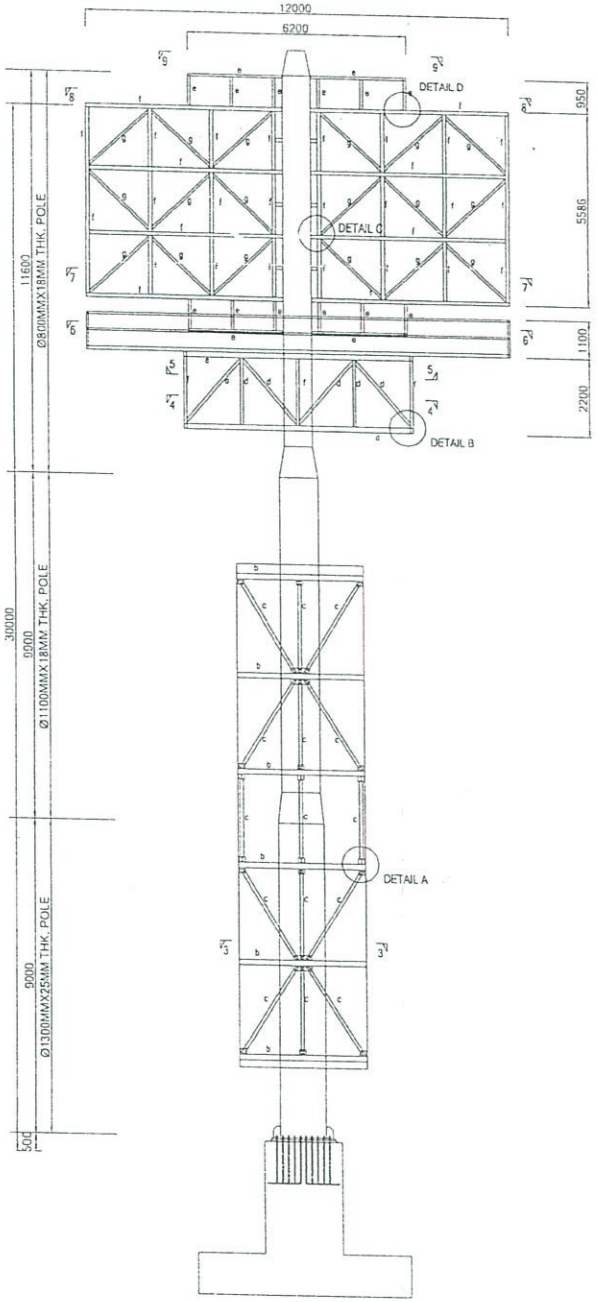
REVISION	DESCRIPTION	DA

TAJUK LUKISAN

RESTORANT
-SUB-STATION

PPB12-02/KFCH/SS-01A





LEGEND:

a - 100X150X6.0MM THK. RHS
b - 80X120X5MM THK. SHS
c - 75X75X8MM THK. EA
d - 80X80X5MM THK. SHS
e - 70X70X5MM THK. SHS
f - 100X100X5MM THK. SHS
g - 90X90X8MM THK. EA

TAJUK PROJEK:

CADANGAN MEMBINA & MENYIAPKAN
1 UNIT RESTORAN 'KFC', 'PIZZA HUT'
1 TINGKAT DAN RUMAH SAMPAH
DI ATAS SEBAHAGIAN LOT PT 12632
MUKIM BANDAR GUA MUSANG
JAJAHAN GUA MUSANG
GUA MUSANG
KELANTAN DARUL NAIM

PEMILIK TANAH :

(SIGNATURE)
Yang Dipertua
Majlis Daerah Gua Musang
18300 Gua Musang
Kelantan Darul Naim

PEMAJU :

KFC (PENINSULAR MALAYSIA) SDN. BHD.
Level 14-17, Wisma KFC
No. 17, Jalan Sultan Ismail
50250 Kuala Lumpur
TEL:
FAX: 03-20787786

(SIGNATURE)

PERUNDING UTAMA/ARC :

REKAJATI ARKITEK
1460-C, Jalan Sultan Yahya Petra
Lundang, 15200 Kota Bharu
Kelantan Darul Naim
Tel: Fax: 09-7442007

(SIGNATURE)

PERUNDING SOKONGAN M&E :

PERUNDING IMS
jurutera perunding mike
6447-B, Jalan Telipot
15150 Kota Bharu
Kelantan Darul Naim.
Tel :
Fax - 09-7453488

(SIGNATURE)

PERUNDING KEJURUTERAAN C&S :

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civil & structural engineers
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Taman Guru, Pintu Geng
15100 Kota Bharu
Kelantan Darul Naim
E-mail: myphinaDyahoo.com

(SIGNATURE)

REVISION	DESCRIPTION	DATE

TAJUK LUKISAN

PYLON SIGN
- ELEVATION

Drawn	Disemak Oleh	Tarikh	Skala
MILA		JUN 2013	1:75

RUJUKAN PELAN

PPB12-02/KFCH/PS-01A

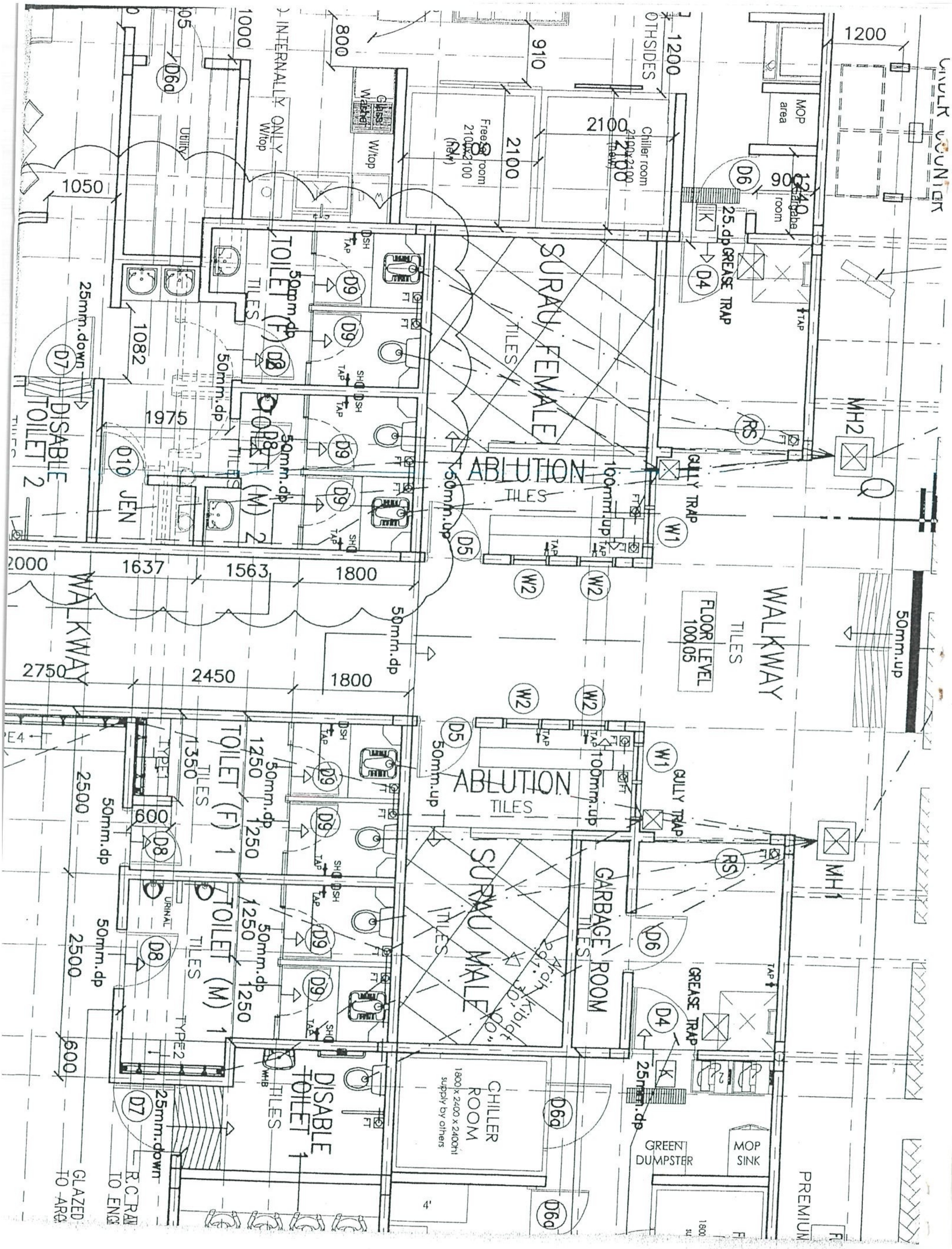
Finishes Lukisan: A B C D E F

CADANGAN MEMBINA & MENYIAPKAN 1 UNIT RESTORAN KFC, PIZZA HUT 1 TINGKAT DAN RUMAH SAMPAH, GUA MUSANG	FORM **REQUEST FOR INFORMATION**	Issue no.	1
		Revision No.	
		Doc. No.	
		Page	1

REF. NO :	
FROM : EDDY ERZURIEY BIN ABU NAIM DMA VISION INTER-TRADE (M) SDN BHD	LOCATION/STRUCTURE: GREASE TRAP
TO : EN. AZIZUL AZMI BIN ABD AZIZ PERUNDING IMS (IMS JURUTERA PERUNDING)	
COPIES [/] REKAJATI ARKITEK [/] PERUNDING PROJEK BINA	

Reference	Matter Arising	Notes
	GREASE TRAP POSITION AND PROPERTIES FOR MAIN BUILDING	
	BASED ON THE MATTER ABOVE, I HUMBLY REQUEST FOR DETAIL DATA ON GREASE TRAP FOR BOTH KFC & PIZZA HUT RESTAURANTS. ITS PROPERTIES INCLUDE SIZE, TYPE, AND EXACT POSITION IN THE MAIN BUILDING AS SUCH / EITHER ABOVE FLOOR OR UNDERGROUND.	
	WITH THIS, I INCLUDE THE 2DDMED SCAN CONSTRUCTION DRAWING AS REFERENCE. (DRAWING NO: RJA/2012/2871/02)	
	ANY FEEDBACK IS APPRECIATED, THANK YOU.	

Originator by:	Received by:	Acknowledge by :
Name : EDDY ERZURIEY ABU NAIM Position : PROJECT MANAGER Date: SEPTEMBER 4TH, 2013	Name : Position : Date:	Name : Position : Date:



SURAU FEMALE
TILES
ABLUTION
TILES
TOILET (F) 2
TOILET (M) 2
DISABLE TOILET 2
JEN
WALKWAY
TILES
FLOOR LEVEL 100.05
ABLUTION
TILES
TOILET (F) 1
TOILET (M) 1
SURAU MALE
GARBAGE ROOM
TILES
DISABLE TOILET 1
CHILLER ROOM
1800 x 2400 x 2400ht supply by others
GREEN DUMPSTER
MOP SINK
GREASE TRAP
GULLY TRAP
MH1
MH2
Chiller room
Freeze room
MOP area
Garbage room
25mm.down
50mm.dp
50mm.up
100mm.up
25.dp
INTERNALLY ONLY
Utility
W/top
Glass Washer
PREMIUM