

#### DEPARTMENT OF BUILDING

# FACULTY OF ARCHITECTURE, PLANNING AND SURVEYING UNIVERSITI TEKNOLOGI MARA

(PERAK)

#### **SEPTEMBER 2015**

It is recommended that the report of this practical training provided

By

Muhammad Afif Bin Aidid 2013492602

## **Inspection Defect**

Accepted in partial fulfillment of requirement has for obtaining Diploma In Building.

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#### STUDENT'S DECLARATION

I hereby declare that this report is my own work, except for extract and summaries for which the original references stated herein, prepared during a practical training session that I underwent at Mega Rowano Sdn Bhd for of 4 month starting from 25 May and ended 25 September 2015. It is submitted as one of the prerequisite requirement of DBN307 and accepted as a partial fulfillment of the requirement for obtaining the Diploma in Building.

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Date

: 25 May 2015

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mother, father for their sacrifices over the years. They also always give

me support during I was practical training at Mega Rowano.

Thank you so much.

#### **ABSTRACT**

This report almost covers about inspection of defects and rectification work by explaining method of statements, and problem about the inspection of defects. The information in addition, was gained through almost 5 month industrial practical training at Kampung Tok Kamis, Pasir Putih, Kelantan. The content has been arranged by introducing the company followed by main concept of Mega Rowano Sdn Bhd. Therefore, with in 5 month of practical the writer can gained a lot of important things in this industries which is to arrange the workers by ourself, deal with the supervisor on ourself, and solve the defects and more. Besides that, in this report the writer also had the opportunity to know how to make inspection of each work that was being carried out. When the installation is unsatisfactory or unsafe to run, then the writer will awaken them to work more safely and carefully. This is because, whatever happens can invite a substantial risk to each worker.

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#### **CHAPTER 1.0**

#### **PREFACE**

#### 1.1 Introduction

A house inspection is a limited, non-invasive examination of the condition of a home often in connection with the scale of that unit house. This is usually conducted by a inspector who has the training and certifications to perform such inspections. According to Marshall, D. (2005) state that, the inspector prepares a written report, often using housing inspection software, and delivers it to client, typically the home buyer. The client then uses the knowledge gained to make informed decisions about their pending real house purchase. The inspector describes the condition of the unit home at the time of inspection but does not guarantee future condition, efficiency, or life expectancy of systems or components.

According to Marshall, D (2005) state that, an inspector will check the roof, wall, structure, plumbing, electrical, and many other aspect of building looking for improper building practices, those items that require extensive repair, items that general maintenance issues, as well as some fire and safety issues. However, it should also be noted that a some inspection is not technically exhaustive and does not imply that every defect will be discovered.

A general list of exclusions include but are not limited to: code or zoning violations, permit research, property measurements or surveys, boundaries, easements or right of way, conditions of title, proximity to environment hazards, noise interference, soil or geological conditions, well water system or water quality, underground sewer lines or waste disposal systems, buried piping, cisterns, underground water tanks and so on.

An inspector in sometimes confused with a real appraiser. A home inspector determines the condition of a structure, whereas an appraiser determines the value of a property.

According to Marshall, D. (2005) state that, a unit home cannot "fail" an inspection, as there is no score or passing grade, a professional home inspection is an examination of the current condition of a unit house. It is not an appraisal. It it not a municipal inspection, which verifies local building code compliance. An inspector, therefore, will not pass or fail a house, but rather describe its physical condition and indicate what components and system may need a major or minor repairs or replacement.

## 1.2 OBJECTIVE

This report is prepared to provide general construction Inspection Defect, hence the following objectives are as follow:

- > To identify how the method of inspection defect.
- > To identify types of defect.
- > To determine the prevention of inspection defect.

## 1.3 Scope Of Study

The study of Defect Of inspection took place at one area of 30 housing, 1 mosque and hall for office service project under management of Mega Rowano Sdn Bhd as a main contractor with collaboration of MOZA HB SDN. BHD as a sub-contractor at Kampung Tok Kamis, Pasir Puteh, Kelantan. Build as stratified residential building for poor people or in generally for village people. What consists of 30 units of houses and several units of offices.

Inspection is a type of home inspection ordered by the buyer or owner of a houses that consists of a walk through inspection of the interior systems of the unit. A house inspection is a visual inspection like electrical system, ductwork and vents, interior structural elements, including windows, walls, floors, doors, and plumbing system, including faucets, toilets, bathtubs and showers.

Some inspectors may check the appliances, including a recall-check which, as the name describes, lets we know if any of the appliances in the home have been recalled. However, it's important to note that any inspection of appliances is not mandatory and inclusion of this in an inspection will differ from one inspector to another.

Typically, and understandably, an inspection on a house will be easier to do it than an inspection in a biggest building. It is because, we need to check many of thing in that biggest building than small housing. While it is true that there are less systems to examine in a small housing. Besides that, we do not use lot of money if that house have some broken thing such as a wall, window, door and so on.

#### 1.4 METHOD OF STUDY

#### 1.4.1 Interview

Interview is the first and major method used to study that cases involved. Interview in fact increases theorical knowledge directly of the exact situation. This method could embrace more than one party that involved in the construction such as En. Azizul as a Site Supervisor, En. Hakim as a Site Engineer and the workers who work in a particular field itself. Between of them, a site supervisor help me a lot to get more information about their site place. For examples, he will show me something what have already happening in their site or his just story to me. Besides that, he also show me some of structure have broken or in generally in low quality and it need to be repair to make sure that structure in good quality. Next, En. Fairuz is a Project Manager will come at the site to do a survey on his site and to get some of report about improvement or incident in his site project. Then, I will take opportunity to ask him about some of defect at his project such as what are defect at the wall, doors, window and how their workers will solve that matters. Hence, information obtained is sufficient where no technical information required. Interview had been done to several figures related on construction Defect Of Inspection. Information obtained shall be kept for future abstraction.

#### 1.4.2 Site Visit

The next methods is site visit. Site visit is an on-site inspection of a facility, functions, documentation and personnel. All facilities applying for accreditation are required to sign a legal document called an Accreditation Agreement. The Accreditation Agreement states that the facility consents to one or more random.

#### 1.4.3 Observation

Besides that, the next method is from my observation. This method is the easiest method for me because what I saw it would be a materials for my report. For example, I see the workers at the site were not concerned about the safety because they do not use every appliance needs such as safety helmet and so on. I also have observe many of defect at that site project and it have some of defect on their structure and components for example, doors, windows for component and the column and wall for their structure. Then, their workers will repairs or solve that matter. My company also have teach me, how to observe and define any defect of the structure or any mistakes what there are do it. Then, I should to take some of pictures to make a report to my company for inform them what are improvement on the site before I can going back to office. At the same time, it also can help me to make my report done on the time and it also can improve my knowledge.

#### **CHAPTER 2.0**

#### COMPANY BACKGROUND

## 2.1 Introduction of Company

Mega Rowano SDN. BHD was incorporated on 17<sup>th</sup> MARTH 1988 as a Bumiputera Civil and Mechanical construction company by its Managing Director, Nik Ainul Mubin Bt. Che Hamat. She also have best qualification at Bachelor Communication Universiti Putra Malaysia. She also have a lot of career experience in construction industry from February 1992 until now. The authorized capital is RM 500,000.00 with the paid capital of RM 500,00.00.

Mega Rowano SDN. BHD is registered with the Pusat Khidmat Kontraktor (PKK) as a CLASS "B" and Construction Industry Development (CIDB) as a "G6" Civil and Mechanical Contractor. The company also is managed by a team of qualification professional and semi-professional personal and each of them having more than 10 years of working experiences in construction industry.

Mega Rowano SDN. BHD is concentrated on the following fields of engineering works :-

- I. Drainage, Irrigation and Flood Mitigation.
- II. Coastal and River Bank Revetments.
- III. Infrastructure and Earthworks.
- IV. Building Construction.
- V. Construction of Bridge and Roads
- VI. Water Treatment and Sewage Treatment Plants.
- VII. Design and Install and Commision Tidal Gates C/W Control.

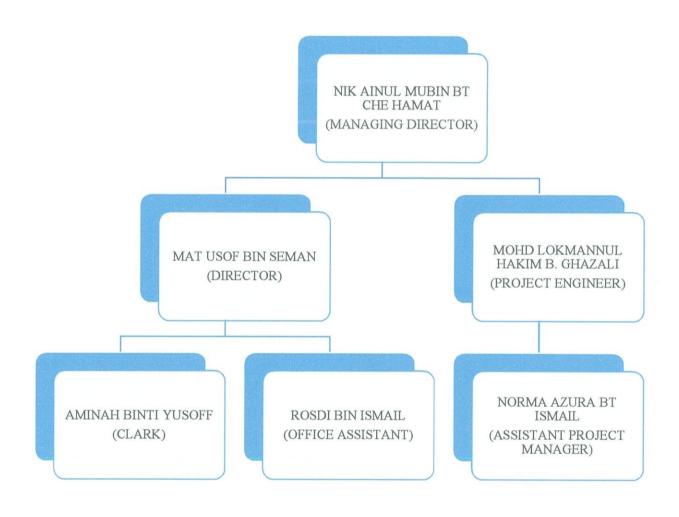
# 2.2 Company Profile

Table 2.1: Mega Rowano Sdn. Bhd profile

Tittle	Description
Company Name	Mega Rowano Sdn. Bhd
CEO	Nik Ainul Mubin Bt. Che Hamat
CO. registration Number	169281-K
Head Offices Address	Lot 1197 Tingkat Satu, Taman Uda Murni, 15400 Kota Bharu, Kelantan Darul Ehsan.
Telephone Number	
Email Address	megarowano@yahoo.com
Fax Number	+609-773 2457
License and Registration	CIDB G6
	1961101-KN011514
	(29-05-2015 to 28-15-2018)
	PKK BUMIPUTERA STATUS
	191101-KN011514
	(29-05-2015 to 28-15-2018)
Authorized Capital	RM 500,000.00
Paid Up Capital	RM 500,000.00

# 2.3 Organization Chart

Figure 2.3: MEGA ROWANO SDN BHD



# 2.4 List of Project

# 2.4.1 Completed Projects

Table 2.2: Show the pass projects under the management of Mega Rowano Sdn. Bhd.

No.	Tittle	Location	Cost	Date	Owner
1.	Picture 2.5: Sekolah Kebangsaan Gual Jedok, Tanah Merah, Kelantan  Sources: Mega Rowano Sdn. Bhd	Tanah Merah, Kelantan	RM 4.6 million	(February until December 2002)	JKR Negeri Kelantan
2.	Picture 2.6: Sekolah Kebangsaan Ampangan, Seremban, Negeri Sembilan.  Sources: Mega Rowano Sdn. Bhd	Seremban, Negeri Sembilan.	RM 2.8 million	(June 1990 until 1992)	JKR Negeri Sembilan

3.		Tanah	RM 4.5	(April	JKR Kelantan
		Merah,	million	1993 until	
	The second secon	Kelantan		1994)	
	Picture 2.7: Sekolah Kebangsaan Legeh				
	Sources : Mega Rowano Sdn. Bhd				

# 2.4.2 Project in Progress

Table 2.3: Shows the ongoing project still under construction

No.	Tittle	Location	Cost	Date	Owner
1	Picture 2.8: Penempatan Berkelompok Orang Pertani  Sources: Mega Rowano Sdn.Bhd	Kampung Tok Kamis	2.4 million	(February 2015 until December 2015)	Lembaga Zakat Selangor

#### **CHAPTER 3**

#### **CASE STUDY**

## 3.1 Introduction of project



Picture 3.1: Residential Building

Source: Mega Rowano Sdn Bhd (2015)

This is a purpose-built housing for the farmers and the poor. The housing is provided by 30 units of houses and about 4.5 feet per 4.5 feet large, it also has 3 bedrooms and 2 bathrooms are not very large. It also quite comfortable housing for those who are not families are many. It also has a car park that can put two cars. Besides that, actually this project must to build 30 houses, a mosque and multi-purpose hall.

Leader parties involved under this project management is Mega Rowano Sdn Bhd as a main contractor with collaboration of Moza HB Sdn. Bhd as a sub-contractor and Lembaga Zakat Selangor as the client at Kampung Tok Kamis, Pasir Puteh, Kelantan. Build as stratified residential building for poor people or in generally for village people.

The main contractor must completed their project before a year what had been agreed in the contract with Lembaga Zakat Selangor. The total cost for this project is 1.4 million consist 30 houses, a mosque for the muslim people, multi-purpose hall and car parks.

## 3.2 Case study

The construction industry all around the world is getting modern, advance and growing day by day. Inspire of the development, construction industry is dealing with one major problem it is building defects. Structural Engineers are always striving to overcome challenge of defects in buildings but it is difficult to deal with it completely. A construction defect is a condition in your home that reduces the value of the home.

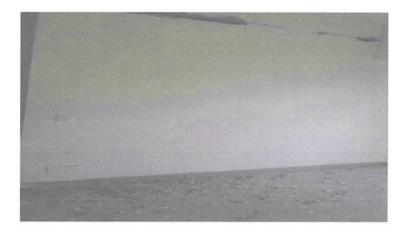
According to James, D. (2003) state that, come defects are obvious such as water seepage, wall have crack, ceiling, doors, windows but many are less obvious and do not become apparent until years after the home was built. Then, we will see many of defect on our house and it will make trouble to us someday. For example, when we have some crack at the wall then it will be see not well and it will not safe for people in that houses.

A construction defect can arise from a variety of factors, such as poor workmanship or the use of inferior materials. According to John, H. (2002) state that, some common defects caused by agents such as atmospheric pollution, poor workmanship or the use of inferior materials and climatic conditions are more frequent. Defective building construction not only contributes to the final cost of the product but also to the cost of maintenance, which can be substantial. Defective construction includes activities such as compaction not done to specifications leading to ground subsidence and eventual early deterioration of foundations. This may lead to the complete failure of a structure.

The defect is capture by inspection on site. And based on the client company quality control under classic or architect comment. The defect area will be mark on to be repair, and it will be clean by company workmanship. Detecting area such as wall, ceiling, door, paint, lockset, plastering, and other that been notified from inspection and comment to replace or repaired, under warranty period that been on contract for a few month warranty.

#### 3.3 Method Statement

#### 3.3.1



Picture 3.2: Wall Crack

Cracks sometimes indicate more serious, structural issue. If the wall has large, deep canyons running through it, mesh tape and joint compound are unlikely to provide a satisfactory repair. In that case, it may be time to call a professional who can get to the root of the problem. Cracks in your walls aren't just ugly, they can be warning signs for very serious problems in your home. Some cracks are normal and come from the natural aging process of a home. When it comes to cracks, horizontal cracks are more indicative of trouble than vertical cracks.

Actually, there are many causes of causes which lead to the occurrence of crack in the wall of our housing. Firstly, wall crack because of cold weather it is because, changes in weather can cause changes in our homes. That because when things get warmer or colder, it can cause the building materials in your home to expand or shrink.

Secondly, wall crack because of too much weight from heavy loads places on floors and ceiling. For example, putting up a lighting fixture that is too heavy can cause cracks to appear in your ceiling. A very heavy piece of furniture like a large bookcase can put more strain on a room than it can handle.

Last but not least, too much of moisture also can make the wall be a cracks. Water can cause the materials in our home to bloat, mold, rot and weaken. It can cause the walls to crack and crumble. If some of parts of our home beginning to crack and crumble and see mold or notice a bad smell.

Conclusion, the wall crack must be repair to prevent something bad happen. There are some of method to repair the wall cracking.

Table 3.3.1: Method statement for wall crack

PICTURE	DESCRICTION	REMARK
Picture 3.3: Material of skim coat	<ul> <li>The skim coat work is to cover the wall or ceiling from crack. The material usage of skim coat is ASG refer to picture 3.3 and picture 3.4</li> <li>First step, for skim coating the worker have to dig a hole on the wall to mark the place for skim coating on the crack wall.</li> <li>Example refer picture 3.5</li> </ul>	
Picture 3.4: Material of skim coat	Second step is the workers have pour the water on the wall which have been mark and they have to wait for a few minutes. The worker also must to wait until the wall to dry then they can proceed with their work. Example refer picture 3.6	



**Picture 3.5:** The worker dig a hole on the wall



**Picture 3.6:** The workers have pour the water on the wall



**Picture 3.7:** The worker put the skim coat

- First layer.

  Third step is after waiting for the wall to dry, the workers put the skim coat material on the crack wall carefully and smoothie for the first layer.
- Next step, after the worker put the first layer of skim coat, they must put the second layer of skim coat to ensure the wall can be smooth and strong.
- Lastly, they can paint the wall with the colour their client want for make the wall look better.



Picture 3.8: Fungus at the wall

Mold needs these conditions before it can begin to grow in a home. The examples of condition are mold spores, darkness, warmth, humidity, oxygen, and moisture to help them to grow in short time. Moisture is really the key cause of mold growth since the other conditions on the list are always going to be present in homes. Actually have many of reason why mold grow in house or generally at our wall and timber.

There are many of factor why mold or fungi exist in our home. Humidity is the first factor why mold exist at our home. If the weather's been very humid for a few days in a row you might notice mold starting to grow in our home basically at the wall. When it rains for several days it's especially common to see mold start to grow on walls, benches and other surfaces because of the wet air. Humidity in the air is naturally high, like by the coast or another large body of water, then mold growth in your home can also be a recurring problem.

Second factor is leaking pipe also can cause mold or fungus at the wall or any timber near with it. The worst leaks are the ones that go undetected because they are hidden out of view, like inside a wall. By the time you discover these leaks mold has usually started to grow already.

Next, poor ventilation also can cause mold or fungus exist at our homes. Poorly ventilated it can create pockets of stagnant moist air which mold thrives in. Steam and water evaporating into the air creates humidity inside which then needs to be circulated outdoors through windows to keep the moisture level balanced. Poor ventilation also means wet surfaces dry out more slowly. Ventilation is especially important in rooms such as the bathroom and the kitchen where there is a lot of steam.

Table 3.3.2: Method statement to remove fungus or mold at the wall

PICTURE	DESCRICTION	REMARK
Picture 3.9: The example scraper to scrape the fungus	The fungus can appeared on the building of the wall because of the humidity, leaking pipes, condensation, and poor ventilation.	
on the wall.	<ul> <li>Sometimes the fungus can spread to other places because the same problem.</li> <li>First step to remove the fungus is you need</li> </ul>	
Picture 3.10: Spray protective fungicidal	to use the scraper to scrape the fungus on the wall.	
Pioture 3 11s Correy at the	Use scraper and scrape at the fungus until it totally cleaned of mold to prevent the mold to grow in the	
Picture 3.11: Spray at the wall surface	future	

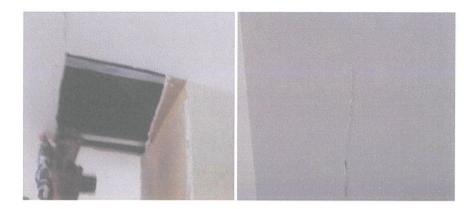


**Picture 3.12:** Clean the wall surface



Picture 3.13: Paint the wall

- After that, we use spray protective fungicidal at the wall surface totally to kill any remaining for example on the Picture 4.0 and Picture 4.1.
- ➤ It also can protect the wall from fungus and mold.
- ➤ Then, we clear the wall surface totally.
- After cleaning prosess, cover the wall with paint.



Picture 3.14: Ceilling Crack/Broken

Like an unwanted spider edging across the wall, a hairline crack appears, seemingly overnight, before creeping across the ceiling or downward to a door or window frame. Cracks can be superficial nuisances that occur soon after the completion of a new home, or they can be the result of a more serious problem.

There are many of reason that make ceiling crack at our home. Firstly, the soil movement is one of the reason why the ceiling crack at our home. Various issues can cause soil movement, which then results in foundation settling and cracks in the walls and ceilings. If the builder did not adequately compact the soil beneath the poured basement or around the basement walls, shifting may occur. Improper yard grade can add to the problem. The soil should slope downward, away from the foundation.

Besides that, the substandard installation also can make the ceiling be crack. Ceiling construction isn't rocket science, but a few mistakes can increase the risk of cracking. If the ceiling is not aligned, the ceiling panel can bend slightly during installation, creating a weak spot that may crack. Incorrect wall framing for windows and doors can contribute to cracks that extend vertically from the window or door frame.

Last but not least, the climate also can make the ceiling be crack. This is because, all things expand when hot and contract when cold, and ceiling also are no exception. In a home that's climate controlled, where temperatures do not vary greatly, the ceiling and wall panels are less likely to suffer from temperature related cracks.

Conclusion, there are many of factor why ceiling and the wall crack at our home. It is also very common happen at our surrounding and anywhere. Then, it is very dangerous because many unwanted things can be happen in the house.

Table 3.3.3: Method statement ceiling crack

PICTURE	DESCRICTION	REMARK
Process of the same of the sam	<ul> <li>Step one, use gypsum board and screw the board to the ceiling to close the holes at the ceiling.</li> <li>Screw at the necessary</li> </ul>	
Picture 3.15: Worker screw the board to the ceiling	spaces only.	
Picture 3.16: Fiberglass	<ul> <li>Use fiberglass tape to cover the ceiling holes.</li> <li>Stick fiberglass tape on the rest at the ceiling.</li> <li>Make sure the workers stick fiberglass tape.</li> </ul>	



**Picture 3.17:** Use fiberglass tape to the ceiling



Picture 3.18: Worker skim the ceiling

- Then, use material of skim to the ceiling to close the holes.
- Need to skim the ceiling twice for the first step of skimming is to close the holes, for the second times is to make sure the ceiling and the skimming are level to make it look perfect.
- And for the last but
  not least, after all step
  you have done then
  only you can paint the
  ceiling with the color
  that you want.



Picture 3.19: Skirting Tiles Broken

Many of reason why skirting tiles broken happen for several building or anywhere and that actually because of poor installation. Because of weakness of worker that all are happen. Maybe they are installing that skirting tiles in not proper for skirting tiles.

Besides that, maybe because of quality of material make the skirting tiles easy to broken. Maybe this is because of the contractor want to get more profit then they are used low quality skirting tiles for the client. Because that, the skirting tiles easy to broke and non-durable.

Table 3.3.4: Method statement skirting tiles broken

PICTURE	DESCRICTION	REMARK
Picture 3.20: Worker cut the tiles (damage)	<ul> <li>Step one, the workers have to cut the tiles that already damage to replace</li> <li>The workers have to be careful and make sure to not bake the tiles.</li> </ul>	
Picture 3.21: Worker use hammer to break the skirting damaged	<ul> <li>Step two, use hammer to break the skirting damaged.</li> <li>Be careful when remove the tile, because other places can also be affected if not careful.</li> <li>Remove all cement at skirting damaged.</li> </ul>	



Picture 3.22: The worker put cement and replace the new tiles



**Picture 3.23:** Worker fill up the cement at grid line



Picture 3.24: Worker take water and a sponge for cleaning

- Thrid step, after remove all cement and tile damaged, the worker must replace the new tiles and fill up cement at area tiles.
  - This work must be done with care and clean.
- Last step, replace and fill up cement tiles.

  And the worker must take water and a sponge for cleaning and beautifying the tiles.

### **CHAPTER 4**

## CONCLUSION

In conclusion, the objective for the inspection of defects and rectification work is to provide the building better and complete, then satisfy heart client and architecture and to improve the building construction or for more perfect and orderly the building.

Next, every building that been construct will happen to facing defects either timber or concrete building. Most of defect happens because of several causes such as weather, temperature, poor worker and etc. These defects will occur many problem to the building loss its aesthetic value. Every defect can be solved by doing rectification work or rebuild. If any defect on that building we must to repair or rebuild that building until we get perfect building. We also can prevent any bad things happen in the future.

There are several defects such as wall crack, skirting tiles broken, fungus, dented door frame/door damage, and ceiling crack/ broken. To do rectification work for wall crack we will use skim coat. The skim coats the process applying a layer of muddy compound to smooth out wall. In easiest way, this skim coat will cover wall crack from crack back. As for skirting tile broken, this defects can be solved by replace the broken tile to new tile. Other, defects is fungi at wall. This may be happen because of the weather, condensation or poor ventilation. To solve fungi is by replacing insulation on wall.

However, all defects mentioned will occur in a building. The architect is responsible for ensuring that a building is tidy and more beautiful.

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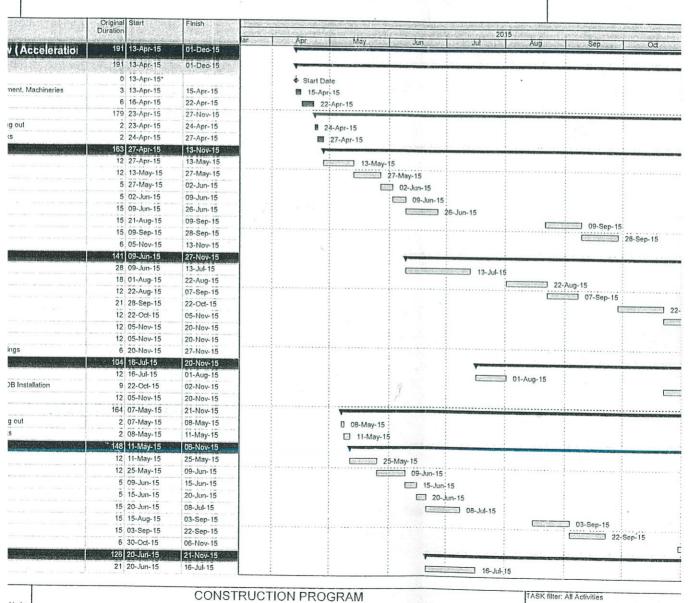
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## Interview,

En. Fairuz Rahman Bin Zakarian (Project Manager, MOZA HB SDN. BHD)
 En. Ahmad Azizul Bin Rosman (Site Supervisor, MOZA HB SDN.BHD)
 Haji Mazmin Bin Jusoff (Consultant, Lembaga Zakat Selangor)

# **APPENDIX**





Page 1 of 5

Work



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Adalah dengan ini diperakui bahawa kontraktor yang dinyatakan di bawah ini telah berdaftar dengan Lembaga mengikut Bahagian VI Akta Lembaga Pembangunan Industri Pembinaan Malaysia 1994. Pendaftaran ini adalah tertakluk kepada syarat-syarat yang telah ditetapkan di belakang Perakuan ini

No Pendaftaran:

1961101-KN011514

Nama Kontraktor: MEGA ROWANO SDN. BHD.

Alamat Berdaftar : LOT 1197,TINGKAT 1 TAMAN UDA MURNI JALAN PENKALAN CHEPA 15400 KOTA BHARU

KELANTAN

Gred, kategori dan pengkhususan berdaftar

G3 ME G6 B

M15 M19 B04 B12 B02

G6 CE CE02 CE01 CE36 CE03 CE14 CE21 CE06

Tarikh Mula Berkuatkuasa:

29 MAY 2015

Tarikh Habis Tempoh Perakuan:

28 MAY 2018\*

\*Perakuan ini hendaklah diperbaharui selewat-lewatnya 60 hari sebelum tarikh habis tempoh.

STATUS: AKTIF - Kontraktor yang diawardkan projek semasa perakuan pendaffaran ini dikeluarkan.

JASMI BIN MOHD. SALLEH

b.p. Ketua Eksekutif Bertarikh: 20 MAY 2015

A 104123



## Sijil Perolehan Kerja Kerajaan

NO. SIJIL PENDAFTARAN 1961101-KN011514

Adalah disahkan Syarikat/Firma seperti butir-butir berdaftar dengan Lembaga Pembangunan Industri Pembinaan Malaysia dan tertakluk kepada syarat-syarat termaktub di belakang sijil.

Tarikh Mula Berdaftar Dengan CIDB: 01/11/1996

## NAMA DAN ALAMAT BERDAFTAR

MEGA ROWANO SDN. BHD. LOT 1197,TINGKAT 1 TAMAN UDA MURNI JALAN PENKALAN CHEPA 15400 KOTA BHARU KELANTAN

## TEMPOH SAH LAKU:

DARI : 20/05/2015 HINGGA: 28/05/2018

SKED	KATEGO	<u>PRI</u>
G3	MF	/ Makanikal Barrati
G6	В	( Mekanikal Dan Elektrikal )
G6	CE	( Pembinaan Bangunan ) ( Pembinaan Kejuruteraan Awam )

PEGAWAI SYARIKAT YANG DITAULIAHKAN

NO. K/P

Jawatan

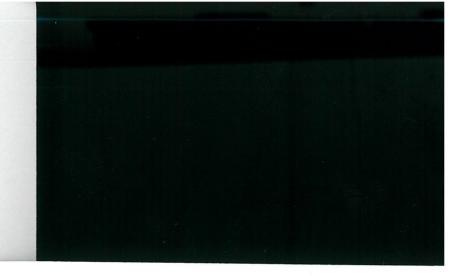
NIK AINUL MUBIN BINTI CHE HAMAT MAT USOP BIN SEMAN

PENGARAH URUSAN(PPU) PENGARAH(PPU)

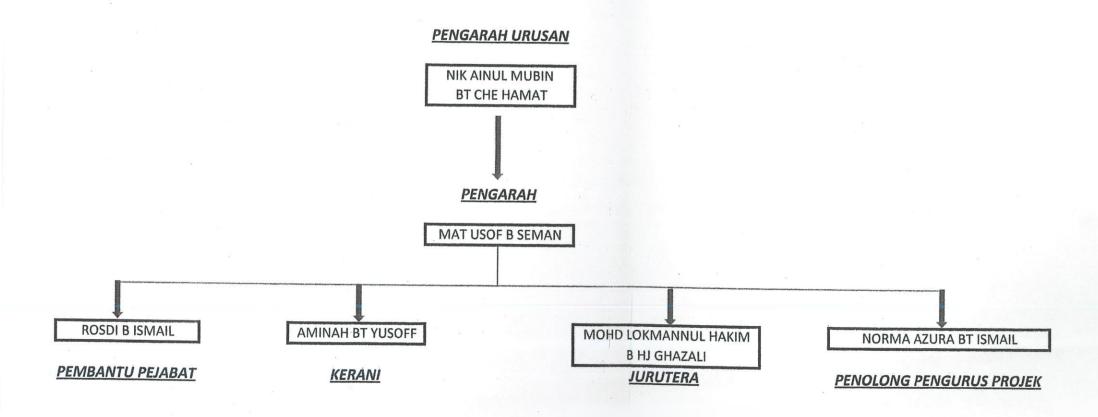


( JASMI BIN MOHD-SALLEH b.p. Ketua Eksekutif

Bertarikh: 20 MAY 2015



# MEGA ROWANO SDN BHD CARTA ORGANISASI SYARIKAT



## APPENDIX D

