

# 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

## MOHAMAD HAIRUL ASRI BIN JAMALUDIN 2013694264

#### **Entitled**

#### PROJECT HANDOVER

On Proposed Design, Construction, Completion, Commissioning Of Mahallah LTAT At The International Islamic University Malaysia, Gombak, Selangor Darul Ehsan

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

Report Supervisor

: En. Azamuddin Bin Husin.

Practical Training Coordinator

: Pn. Noof Rizalfında Binti Ishak.

Programme Chairman

: Dr. Mohd RoMzi Bin Abdullah.

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#### **SEPTEMBER 2015**

#### STUDENTS'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 Rafta Bina Sdn. Bhd. for duration of 5 months starting from 25 May and ended 9 October 2015. It is submitted as one of the prerequisite requirements for obtaining the Diploma in Building.

Name

: MOHAMAD HAIRUL ASRI BIN JAMALUDIN

UiTM ID No. : 2013694264

Date : 13/10/2015

#### **ACKNOWLEDGEMENT**

Alhamdulilah, praise to Allah, the Most Merciful, the Most graceful.

I would like to extend my heartfelt gratitude for the guidance, advice and help rendered throughout the period of training by the following group of amazing individuals. First and foremost. I would like to thank Ir Rashidi Dol Rasip for the opportunity given, to conduct my training in his esteem company. His team of professionals comprising of Pn. Siti Rahayu Dol Rasip, En. Mohamad Raffique, En. Syaiful Adrul Hidayat, En. Mohd Fadhli, En. Mohd Syarifudin, En. Mohd Nosuraedy, En. Azrul faizal, Cik Siti Nor Ashikin, Pn. Siti Norfatihah, Pn. Norlela Idris, Cik Noor Shamimi, and Pn. Nor Azuraida, have enabled me to learn and develop my understanding, knowledge and feel of real time projects, and the theory involved in analysis of structures, building, and civil works. They are also responsible towards streamlining and assessing my training. Also to the site personnel in both UIA, Jelebu and Stadium DBKL who have extended their cooperation and help to further enhance my ability in understanding the procedures in construction and site administration, tests procedures, site safety and best practices in the industry. It is an honor for me to be given the opportunity to 'work' with all of you.

I would also like to thank ALL the UiTM lectures that have taught and nurtured me in becoming a better student and person. I would also like to extend my deepest appreciation to the lecturers who are directly involved during my training stint. To En. Azamuddin bin Husin, Supervising Lecturer, En Mohd. ReezaYusof, Visiting Lecturer, Puan Noor Rizallinda Binti Ishak, Practical Training Coordinator, and Dr. Mohd Rofdzi bin Abdullah, Faculty Coordinator, I value the time effort, encouragement and ideas that they have contributed towards the successful completion of my training, this report and the valuable knowledge that have been shared over the last few semesters.

Last but not least, my special thanks to my beloved parents for their sacrifices over the years. Thank you so much.

#### **ABSTRACT**

Handover is a very important element to elaborate, therefore this report will discuss about project handing over for the building. This report was conducted for the building hostel Lembaga Tabung Angkatan Tentera (LTAT) at UIA, Gombak. The Objective of this report is to know what, and how it is project hand over. It will focus on, this three segments which are before, during, and after for these project hand over. To illustrate the function of project hand over of building as an important aspect to focus on documentation and then to evaluate how far the potential of the building hand over that could fulfill the building criteria that is prescribes by the standard building requirements in the guideline. This report will also look at the project hand over management based on the guideline by producing the use of effective and to evaluate the quality to hand over project.

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Appendix C: Inspection on antenna work at hostel LTAT, UIA Gombak.

#### **CHAPTER 1.0**

#### **PREFACE**

#### 1.1 Introduction

Project handover of building need to be prepared officially for the purpose of approval. In addition, to handover project, we need to be have warranty and also as built drawing. Next, warranty is very important item because without this warranty company will be highly loss in term of financial. Other than that, warranty can recover any defect on site after, before, or during handover building. A warranty is a guarantee provided by the manufacturer of a product. It assures you the things you buy are of good quality and do not contain manufacturing defects. Warranties give consumers the right to ask the manufacturer to deal with any issues according to their terms and conditions. Beside, handing over session request of client will do checkup inspection on that building to finds out defect on their building. After that, the contractor and client will attend meeting and proceed with agreement on project handing over. Last but not least, arrangement of file document also very important. Records management in an agency has one main goal systematic control of recorded information from original creation to ultimate disposition. A key element in achieving this goal is the establishment of efficient and effective procedures for filing and retrieving information. Agencies with inconsistent or nonexistent files management programs cannot find crucial information when they need it, waste time and money, and may even get into legal trouble because of their inability to document actions fully. Agencies that do not properly manage records cannot hope to control the flood of information with which they are confronted and organize it for effective decision making.

# 1.2 Objectives

- i. To understand what it is project hand over in construction.
- ii. To identify how project hand over on progress.
- iii. To investigate the documentation involved for project handing over.

#### 1.3 Scope of Study

In the proposed study to investigate the project handover on proposed design, construction, completion, and commissioning of mahallah LTAT at The International Islamic University Malaysia, Gombak, Selangor Darul Ehsan. In addition, from the proposed of The International Islamic university Malaysia, Gombak there is special project which is to design at first before construct, completion, and commissioning of the project. In addition, these report of project handover need to be on the following contexts:

- Concerning the processing of documentation related things of LTAT hostel at UIA, Gombak.
- ii. Final inspections by client after project completion construct on the building.
- iii. Care in building defects that have borne.

#### 1.4 Method of Study

#### i. Internet

 Do some kind of research that involves how to do scope of study and more or deeply research that unknown question which is can be resolve by me.

## ii. Question and answer session

 Consequence, ask my supervisor which is all about that matters involve during handing over building. In addition, to know all about world of project construction.

#### iii. Observation

 To observe all about the matters happen in construction. Furthermore, see deeply which is item need to consider or material that need approval.

#### iv. Document project

 To know item, filing system, up to date data and other sequence in documentation. Next, arrangement all documentation must according to dated.

#### v. Company receipt

 In purchasing department, quotation, purchase order and also deliver order are very important in that department. All the quantities must made by right.

#### **CHAPTER 2.0**

#### **COMPANY BACKGROUND**

#### 2.1 Introduction of Company

RAFTA BINA SDN. BHD. was incorporated under the Companies Act 165 on 25 April 1998 in Kuala Lumpur. RAFTA BINASDN. BHD. is managed fully and owned by 100% Bumiputra and is registered with Ministry of Finance Malaysia, status of Bumiputra with Pusat Khidmat Kontaktor (PKK) as well as Lembaga Pembangunan dan Perindustrian Malaysia (CIDB) (GRADE 7). RAFTA BINA SDN. BHD. has a Board of Directors with vast experience and a high spirit of commitment towards ensuring a continuous successful company management. As today, RAFTA BINA SDN. BHD. is ready to offer consultancy and construction services. Through Smart partnership contracts, RAFTA BINA SDN. BHD. has placed the aim that standard, quality and excellence of work are achieved through the field undertaken. With support from the company staff in professionalism and skill, hence, the business opportunities on offered, could effort to be competitive as well as being forging success.

The following is the scope of works on offer by the company to provide the best quality services to our clients:

- a) Management works
- b) Infrastructural works
- c) Building construction works
- d) Design and interior decorating works
- e) Trading business

#### 2.2 Company Profile

Company Name : Rafta Bina Sdn. Bhd.

Business Registration No. : 293759-K

GST ID No. : 000732471296

Date of Incorporation : 25hb April 1998

Registered Office : No. 40, Jalan 2/3E, Bandar BaruSelayang, 68100

Batu Caves, Selangor Darul Ehsan.

Management Office : No. 2-13A, Jalan Prima SG 1, Taman Prima Sri

Gombak, 68100 Batu Caves, Selangor darul Ehsan.

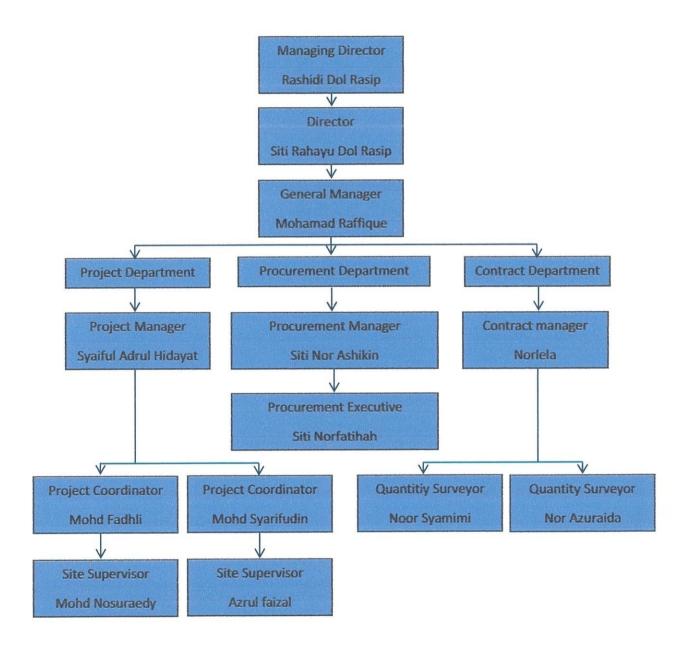
Tel. No. / Fax No.

Email Address : raftabina@yahoo.com

Company Auditor : Azmi Ismail & Co

Authorized Capital / Paid up : RM 1,000,000.00 / RM 1,000,000.00

## 2.3 Organization Chart



## 2.4 List of project

# 2.4.1 Completed Projects

Project	: Proposed Construction of 254 Unitsof 2-storeys Terrace
	Houses (22' x 75') And 1 Unit Electrical Sub-Station, On Lot
	83947 And 83948 (Partial Phase 1A(I), MukimKlang,
	Pandamaran KS%, Klang Bandar DiRaja, Selangor - Main
	Building Works.
Owner	: MAXPROM BINA SDN BHD
Status	: 100%
Cost	: RM42,571,000.00

Project	: Membina Dan MenyiapkanKompleksPentadbiranUniversiti
	Islam Antarabangsa Malaysia, Kampus Kuantan &kerja
	kerjaBerkaitan, Pahang DarulMakmur.
Owner	: UNIVERSITI ISLAM ANTARABANGSA MALAYSIA
Status	: 100%
Cost	: RM42,560,000.00

: CadanganMembina Dan Menyiapkan 1 Blok Bangunan 3
Tingkat Di DalamkawasanUniversitiislamAntarabangsa
Malaysia, Gombak, Selangor Darul Ehsan.
: UNIVERSITI ISLAM ANTARABANGSA MALAYSIA
: 100%
: RM42,560,000.00

Project	: Proposed Design, Construction, Completion And
	Commissioning of His Highness Sheikh Humaid Bin Rashid
	al-Nuaimi self-catered Hostel at The International Islamic
	University Malaysia, Gombak, Selangor Darul Ehsan.
Owner	: UNIVERSITI ISLAM ANTARABANGSA MALAYSIA
Status	: 100%
Cost	: RM4,1880,000.00

Project	: Supply, Lay, Test And Commissioning The Underground
	Chilles Water Pipes and Associated works For District
	Cooling Plant 2, Cyberjaya flagship Zone, Selangor Darul
	Ehsan.
Owner	: PENDINGINAN MEGAJANA SDN BHD
Status	: 100%
Cost	: RM4,498,802.60

Project	: Membina Dan MenyiapkanKompleksPentadbiranUniversiti
	Islam Antarabangsa Malaysia, Kampus Kuantan &kerja –
	kerjaBerkaitan, Pahang DarulMakmur.
Owner	: UNIVERSITI ISLAM ANTARABANGSA MALAYSIA
Status	: 100%
Cost	: RM42,560,000.00

Project	: Proposed Design And Construction Of Security Fencing
	Inclusive Of Conventional Anti Climb And Anti Cut, Single
	Leaf gate And Complete With Barbed Wires AlongLrt
	Coridor-Ampang Line Phase 2 (Plaza Rakyat To maluri
	Station).
Owner	: SYARIKAT PRASARANA NEGARA BHD
Status	: 100%
Cost	: RM2,927,400.00

Project	: Proposed Construction Project Through 'Industrialised
	Building System (IBS)' For Thirty-two (32) Extension School
	Blocks And Four (4) New Schools In Selangor And Federal
	Territories. (Package 1 – SMK Raja Ali)
Owner	: KUB BUILDERS SDN BHD
Status	: 100%
Cost	: RM2,034,048.60

Project	: Proposed Construction Project Through 'Industrialised
	Building System (IBS)' For Thirty-two (32) Extension School
	Blocks And Four (4) New Schools In Selangor And Federal
	Territories. (Package 1 – SMK Bandar BaruSentul)
Owner	: KUB BUILDERS SDN BHD
Status	: 100%
Cost	: RM2,286,410.82

# 2.4.2 Project in Progress

Project	: CadanganTambahan Dan Perubahan Serta MenaikTaraf
	Stadium Kuala Lumpur, JalanYaacobLatiff, Diatas
	Sebahagian Lot 52901, Sebahagian Tanah KerajaanMukim
	Kuala Lumpur, Bandaraya Kuala Lumpur, Wilayah
	Persekutuan.
Owner	: DEWAN BANDARAYA KUALA LUMPUR
Status	: 75%
Cost	: RM49,973,747.50

: CadanganPembinaan Complex BersepaduPengembangan
SosioBudayaKementerianPenerangan, Komunikasi Dan
Kebudayaan (KPKK) Yang Mengandungi 1 Blok Pejabat
Pentadbiran Dan 1 Blok DewanSeberguna Di Atas Lot 8312,
MukimGlamiLemi, Daerah Jelebu, Negeri Sembilan Darul
Khusus.
: KEMENTERIAN KOMUNIKASI DAN MULTIMEDIA
MALAYSIA
: 98%
: RM4,680,000.00

#### 3.2 Case Study

#### 3.2.1 Project handover documentation

#### 3.2.1.1 Preliminaries pricing

One type of items that need to be pricing is levy from CIDB. For every project that need to be work must on CIDB license. In addition, usually cost for levy depend on cost of contract of project with simple calculation from CIDB. Furthermore, if the contractor fail to make payment to CIDB for levy the contractor will be punish up to Rm 50,000.00. Preliminaries are part of the tender documents prepared by the client. Preliminaries provide a description of the project that allows the contractor to assess costs which, whilst they do not form a part of any package of works, are required by the method and circumstances of the works. Preliminaries should not confused with 'preambles' which set out things such as tendering procedure, that will not affect the contractor's price. Other than that, for hostel LTAT at UIA, Gombak these preliminaries pricing have been indicate which is payment for levy that need to be pay to CIDB. Next, these show how project handover in construction progress. Attached together with sample of payment for levy by contractor to CIDB.

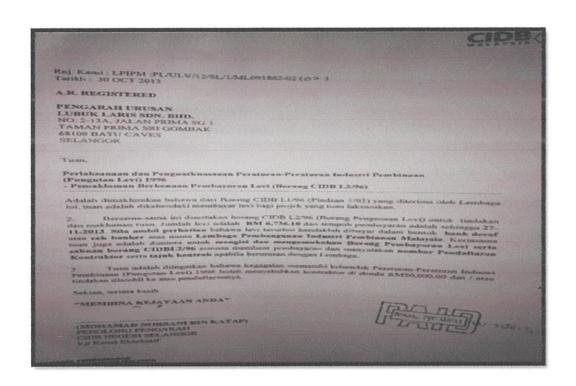


Photo 3.1 Sample of payment for levy by contractor to CIDB

#### 3.2.1.2 Insurance of Contractor All Risk & Workmen Compensation

One of the part that need to be highlight is insurance. The insurance is very important to the contractor and also workmen. Besides, the insurance will cover if there are any incident happen. Other than that, there are two types that very common in construction industry which is contractor all risk schedule and workmen compensation schedule that have been applied in project hostel LTAT at UIA, Gombak. Besides, it is show what have to bring in construction industry. Next, these show how project handover in construction progress. Attached together with sample of contractor all risk schedule and sample of workmen compensation schedule. Firstly, contractor all risks it provides coverage for damage to the project under construction and for material and equipment that are destined for incorporation into the project, including items in storage and in transit to the site.In workmen compensation insurance, is the protection construction and contracting business owners rely on to cover the medical expenses related to an employee's injury or illness or for the earnings the employee missed while recovering. In addition, helps offset some of the risks our cannot avoid by providing coverage that protects your construction and contracting business assets in the event of a costly lawsuit brought by an injured or ill employee.

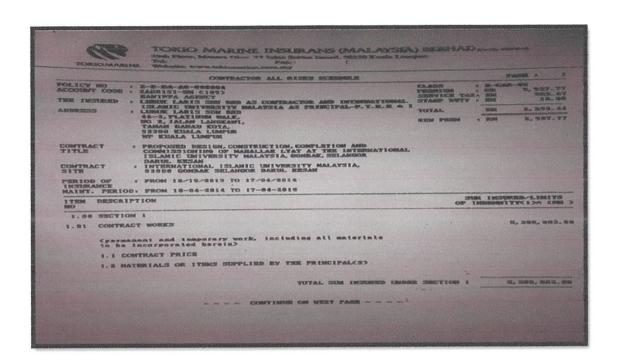


Photo 3.2 Sample of contractor all risk schedule

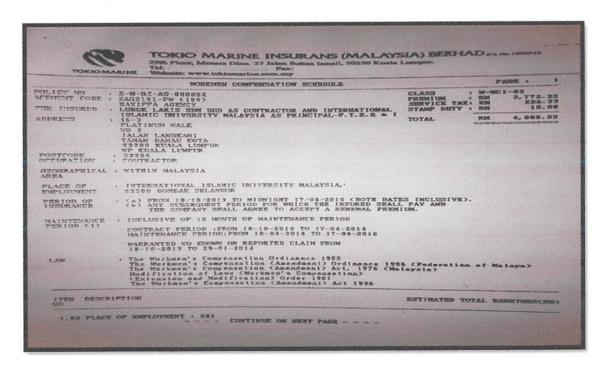


Photo 3.3 Sample of workmen compensation schedule

#### 3.2.1.3 Organization chart

One of the elements need to prepare in any organization is organization chart. The important of the organization chart is to showing graphically the relation of one official to another, or others, of a company. It is also used to show the relation of one department to another, or others. This chart is valuable in that it enables one to visualize a complete organization for the example is construction company which is Rafta Bina, by means of the picture it presents. A company's organizational chart typically illustrate relations between people within an organization. Such relations might include managers to sub-workers, directors to managing directors, chief executive officer to various departments. Furthermore, for project hostel LTAT at UIA, Gombak, Rafta Bina SDN. BHD. have been progress their organization chart to be show relationship people in construction sites.

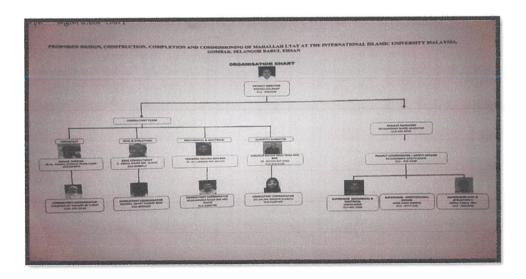


Photo 3.4 Sample of organization chart

#### 3.2.1.4 PMP (project master program)

One type of software in construction industry that need to be have is project master program or 'PMP'. In project of hostel LTAT at UIA, Gombak, the contractor which Is Rafta Bina SDN, BHD. have been provide the data of project master program as proposed by client. Furthermore, it will be done by technical person and also expertise person will conduct it. Usually, the software price is about Rm 1000. Other than that, it is also about method or work need to be done and tally to quantity surveyor (QS) tender document. Next, this software work automatically and also always need to update work have been finish or not. Back to basic concept, which is plan and know all the sequences of work from one to another step. In PMP, there are have one types of chart which is Gantt chart. A Gantt chart is a type of bar chart that illustrate a project schedule. Gantt charts illustrate the start and finish dates of the terminal elements and summary elements of a project. Gantt charts can be used to show current schedule status using percent-complete shadings and a vertical today line as shown here. Although now regarded as a common charting technique, Gantt charts were considered revolutionary when first introduced. This chart is also used in information technology to represent data that have been collected. In addition, attached together is sample of project master program for hostel LTAT at UIA, Gombak. Next, that show the documentation involved in project handing over.

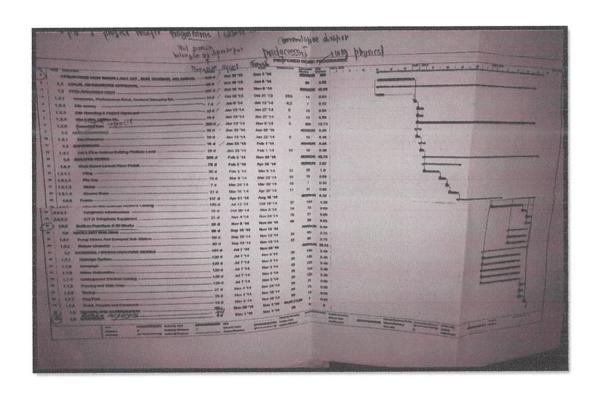


Photo 3.5 Sample of project master programme with gantt chart

### 3.2.1.5 Monthly progress claim

Progress claim assessment are usually undertaken monthly and are a means of providing details to the developer and financier as to how much work has been undertaken and therefore provides details as to how much money is to be paid to the contractor. The monthly flow of funds are progress payments for the achievements of progress in accordance with the contract. Same to the project for hostel LTAT at UIA, Gombak they have been proceed monthly progress claim. A variation causes changes to the contract sum and can either be a positive or a negative amount and are generally assessed by a quantity surveyor and include in the monthly progress claim assessments. Next, attached together is sample claim need to be proposed.

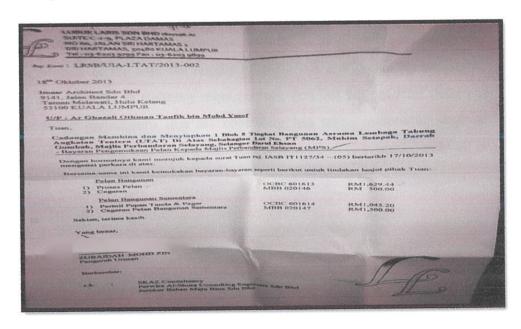


Photo 3.6 Sample of payments on plan process and etc

#### 3.2.1.7 Certificate of fitness (CF/CCC) application

A certificate of fitness is a regular check to ensure that your vehicle meets required safety standards. Vehicles requiring this certification are heavy vehicles likes trucks, larger trailers, and motor homes. Furthermore, all passenger service vehicles likes taxis, shuttles and buses. Other than that, rental vehicles. It is our job to keep our vehicle up to COF condition at all times. For example, while the tires on our vehicle may pass on the day of your certificate inspection, and need to replace them as soon as the tread gets to the minimum depth. Next, there is sample of certificate of fitness (CF/CCC) application that be used in project of hostel LTAT at UIA, Gombak.

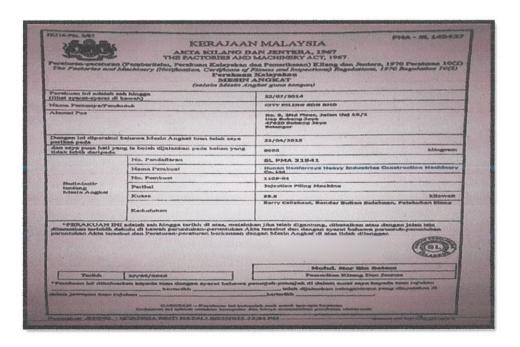


Photo 3.8 Sample of Certificate of fitness for vehicles

#### 3.2.2 Project handover final inspection

#### 3.2.2.1 Meeting content

A project handover meeting provides the new process and systems owners with the information they will need to seamlessly takeover responsibilities. Ensure there is enough time for team members to share thoughts on how to best manage their new responsibilities and share information on specific challenges. A through project handover meeting agenda will include all topics needed for an effective transition. In other views, when the project team has been identified, the project handover meeting is conducted. The project handover meeting, in which project controls are formally transferred from the bid manager to the project manager, is the event that formally marks the beginning of the project. It is most likely the first opportunity for the project director to assemble the entire project team to discuss his/her vision of the project demonstrate support, and advocate project success. Project team members are introduced to each other and given the opportunity to discuss their areas of expertise and how they will contribute to the project. Next, there are some attachment for meeting event which is photo on meeting at hostel LTAT at UIA, Gombak.



Photo 3.9 Sample of meetings on project handover



#### 3.2.2.2 Inspection checklist handover

Handover inspections are carried out to make sure everything is working and built to a good standard. Moreover, it is supposed to be our last chance to make absolutely sure that the building been built exactly the way it was supposed to be built, and that serious issues like compliance with provisions for bushfire safety are met, termite protection is complete and wet area waterproofing is properly installed. Last but least, to make sure the finishing touches are correct - which means ensuring curtain rails are properly secured, that there are not any awkward little gaps around your kitchen bench, and the bases of the doors are sealed or that the gaps under your doors are not usually high. A lot of people go this alone with a sharp eye, a phone camera and a packet of red-dot stickers but better and strongly encourage you to pay a professional building consultant to help with our handover inspections. The important items that need to provide the consultant with copies of basis contract documents things like drawings, specifications, schedules of finishes. These will help the consultant to understand what the builder was required to construct. The last things anyone needs, at this late stage, is a dispute over a reported omission that turns out to not be in the contract. Next, there are some attachment of photo on project handover final inspections at hostel LTAT at UIA, Gombak.



Photo 3.10 Sample of inspections on site



#### 3.2.3 Project handover term

#### 3.2.3.1 Defect list

Defects are aspects of the works that are involved that need to be remove at project of hostel LTAT at UIA, Gombak. Other than that, defects can be 'patent' or 'latent'. Patent defects are those which can be discovered by reasonable inspection. Latent defects are those which cannot be discovered by reasonable inspection, for example problems with foundations which may not become apparent for several years after completion when settlement causes cracking in the building. When a latent becomes apparent, it becomes patent rather than latent. Next is attachment on project hand over term which is defect list for hostel LTAT at UIA, Gombak.

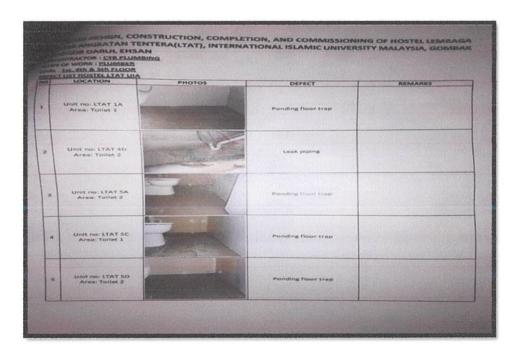


Photo 3.11 Sample of defect list on plumber work

#### 3.2.3.2 Maintenance

Maintenance, repair, and operations (MRO) or maintenance, repair and overhaul involves fixing any sort of mechanical, plumbing or electrical device should it become out of order or broken (known as repair, unscheduled, or casualty maintenance). Moreover, it is have been practiced for project hostel LTAT at UIA, Gombak.MRO may be defined as, all actions which have the objective of retaining or restoring an item in or to a state in which it can perform its required function. The actions include the combination of all technical and corresponding administrative, managerial, and supervision actions.Next is attachment on maintenance for project hostel LTAT at UIA, Gombak.



Photo 3.12 Sample of progress on maintenance

#### 3.2.3.3 Defect liability period

A defect liability period is a set period of time aster a construction project has been completed during which a contractor has the right to return to the site remedy defects. A typical defects liability period lasts for 12 months. Defects liability periods – also known as rectification provisions – can be of benefit to both parties. For the contractor, it is likely to be more economical and efficient for it to carry out remedial works itself than to pay the costs of another contractor hired by the employer. From the employer's perspective, it will not need to hire an alternative contractor to carry out the work, or to carry out the work itself and reclaim the cost. The employer will also not run the risk that any warranties provided by the original contractor may be affected by a third party carrying out works on the site.. After that, at least one year, the contractor which is Rafta Bina will do maintenance accordingly defect liability period (DLP) that have been confirm by client, consultant and also contractor.

#### 3.3 Method Statement

#### 3.3.1 Jack-in pile installation

The jack in pile installation have been proposed to be install at project of hostel LTAT at UIA, Gombak. It is for to reduce the difficulties of work during piling. This machine can be place and remove as portable. Last but not least, this type of pile machine need to be install properly according to safety meaures.

#### Scope:

This procedure refers to the installation of jack-in-pile only

#### Equipment:

- Jack-in-pile machine (system used, maximum pile size, maximum jacking force, gripped system, 150mm 250 mm square, 150 mm 250 mm diameter, and 100 ton).
- Other equipment (air compressor / diamond cutter, welding set, and generator set).

#### Setting out locations:

- The pile position is set out on site using steel peg.
- Two reference steel peg would be installed equidistance from the pile center at about 500mm away.
- The pile would then be pitched and positioned into the exact pile point position such that the reference peg are equidistance from the pile face.

#### Handling, pitching, installation and extension:

- All handling and lifting will be at the design lifting points and support points. During pitching and installation the vertically of the pile will be continuously monitored and plumbed to ensure the pile is centrally in line with the pile axis to receive the ram to prevent pile whip, twist or rotation. Ach pile shall be clearly marked with red ink at 300mm intervals along its length to enable the jacked in pressure/force to be recorded ate every 300mm depth of pile penetration. The pile will be extended by butt-welding the steels plate on the pile heads. On completion of welding the slag will be chipped off and wife brushed to receive bitumen or anti rust paint.
- Installation of pile, the vertical support structure of the jack-in machine is plumbed to ensure vertically by means of a spirit level or plumb line. This is achieved by adjusting the four stabilizers. Pile shall be lifted and inserted into the equipment by crane. The pile shall be position into the grip of the equipment and gripped the pile body. Once the pile vertical and in position, jacking commences. During the pile installation, the hydraulic pressure of main jacks is measured by pressure gauge, and the corresponding pile penetration are recorded by the site staff at regular intervals. The pile may be extended by means of welding. Except for pile jointing, each pile is jacked in continuously until the required resistance or penetration is reached. The required resistance is normally twice the pile working load, or higher of the jack supervising engineer so desired. The corresponding pressure in the main jacks and the penetration are recorded. The portion of the installed piles which is above may be cut to enable movement of rig.
- Termination of criteria, the jack-in-force is determined by the engineer. Once the required pressure corresponds to the required jack-in-force is indicated in the pressure gauge, the pressure is held for 30 seconds. The set criteria is that the same required pressure is achieved consecutively for two times, each time held for 30 seconds and each settlement should not exceed 15mm.

#### 3.3.2 Party wall installation

The party wall act gives owners certain rights over the entire thickness of the party wall which an owner would not otherwise have the ability to legally do, for example:-

- to underpin, thicken or raise a party structure.
- to make good, repair, or demolish and rebuild, a party structure where such work is necessary because of a defect or the wall is in disrepair.
- to demolish a partition which separates buildings belonging to different owners but does not conform with statutory requirements and to build instead a party wall which does conform.
- to demolish a party structure which is of insufficient strength or height for the purposes of any intended building of the building owner.
- to cut into a party structure for any purpose which may include inserting a damp proof course.
- to cut away from a party wall any projection on or over the land of the building owner in order to erect, raise or underpin any such wall or for any other purpose.
- to cut away or demolish parts of any wall or building of an adjoining owner overhanging the land of the building owner or overhanging a party wall, to the extent that it is necessary to cut away or demolish the parts to enable a vertical wall to be erected or raised against the wall or building of the adjoining owner.
- to cut into the wall of an adjoining owner's building in order to insert a flashing or other weather-proofing of a wall erected against that wall.
- to execute any other necessary works incidental to the connection of a party structure with the premises adjoining it.
- to raise a party fence wall, or to raise such a wall for use as a party wall and to demolish a party fence wall and rebuild it as a party fence wall or as a party wall.
- to expose a party wall or party structure hitherto enclosed subject to providing adequate weathering.

#### **CHAPTER 4.0**

#### CONCLUSION

#### 4.1 Conclusion

One of aspects that need to be focus in construction is project handover. Although this topic not too complicated, but it is need to be focus more before our building handover to the client. There are many aspect built in project handover which is project handover documentation, project handover final inspection and also project handover term. In project handover documentation there are a few things that need to be highlight such as preliminaries pricing, insurance of contractor all risk & workmen compensation, organization chart, PMP (project master program), monthly progress claim, extension of time, and certificate of fitness (CF/CCC) application. Other than that, in project handover inspections there is two items that need to have which is meetings content and inspections checklist handover. In addition, for project handover term, the things that need to be focus are defect list, maintenance, and defect liability period. Last but least, there are few things that have been stated that need to be done before, during, and after project handover need to be progress. Furthermore, as a conclusion also as contractor, everything that what have to be done must be perfect to avoid any defect during construction end after project handover.

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Appendix B: Work on floor tiles regarding in error to place the same types of tiles on the  $5^{th}$  floor at hostel LTAT, UIA Gombak.



Appendix C: Inspection on antenna work at hostel LTAT, UIA Gombak.



## **APPENDIX**

Appendix A: Work on party wall in the roof trusses at hostel LTAT, UIA Gombak.



