DEPARTMENT OF BUILDING

UNIVERSITI TEKNOLOGI MARA

(PERAK)

CONSTRUCTION MANAGEMENT

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FACULTY OF ARCHITECTURE, PLANNING AND SURVEYING

UNIVERSITI TEKNOLOGI MARA

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It is recommended that the report of this practical training provided

By

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entitled

Construction Management

be accepted in partial fulfillment of requirement has for obtaining Diploma in Building

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DEPARTMENT OF BUILDING

FACULTY ARCHITECTURE, PLANNING AND SURVEYING

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(PERAK)

AUGUST 2021

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 Tharwa Builders for duration of 20 weeks starting from 23 August 2021 and ended on 7 January 2022. It is submitted as one of the prerequisite requirements of BGN310 and accepted as a partial fulfillment of the requirements for obtaining the Diploma in Building.

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ABSTRACT

Professional construction project management is a highly refined system meant to assist project planning, coordination, and control from the initial phases all the way through project closeout and completion. Qualified construction managers organise a project's schedule, price, and quality using specialist project management skills. And it is orchestrated. Construction management is a highly professional system that facilitates the planning, coordination, and control of a project from start to finish. Construction team members have managerial experience. People can oversee budgets, propose cost-saving solutions, limit risk, and guarantee the flow of information after a clear vision of the project that has been developed. The purpose is to represent the owner's best interests, which to accomplish by ensuring that the project proceeds as smoothly as possible in accordance with schedule and resource objectives. And will be able to do so because as a contractor, they will know how to handle a building project step by step. This report will focus on how to have a smooth journey in construction management. So, this report will be exposed to the most effectives way to manage project that in construct from start to end, and also the problems that might happen during the work. So, all the people that ware involve in the project will already acknowledge the solutions for every problem that come. This report will look at the efficiency management based on the guideline and experiences by producing the continuous effective work and to evaluate the quality by creating efficient environment that gives a better impact for the construction sector in the fture.

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CHAPTER 1.0

INTRODUCTION

1.1 Background of Study

Construction management is a professional service that provides effective management of a project's schedule, cost, quality, safety, scope, and function to the project's owners. All project delivery methods are compatible with construction management. A Construction Manager's responsibility is to the owner and to the success of the project, regardless of the setting.

A capital project is comprised of three parties: the project manager (the owner), who commissions the project and either funds it directly or indirectly through a variety of methods, the architect or engineer, who designs the project, and the general contractor, who oversees day-to-day operations and manages subcontractors. The construction manager represents the owner's interests and directs the entire project for the owner. His or her mandate is to collaborate with all parties to complete the project on time, on budget, and to the owner's expected quality, scope, and function.

Construction management professionals are uniquely qualified by their education and experience to collaborate with the owner, architect, general contractor, and other stakeholders to determine the best possible sequence of construction operations and develop a detailed schedule and budget, all while establishing plans for project safety and security and assisting the owner in risk management. This necessitates the use of project management information systems (PMISs), complex planning techniques such as the critical path method, and knowledge of construction methods.

According to a 2013 study sponsored by the CMAA Foundation and conducted by McGraw-Hill Construction, using professional CMs saved money, avoided or mitigated problems, and produced higher quality results for owners. Professional construction managers use industry-standard to successfully manage projects. The Construction Management Body of Knowledge and Standards of Practice cover all six aspects of construction management services: schedule, cost, safety, quality, function, and scope. There are many types of ways to manage the construction. However, the aim of this is to discover the construction management that are likely used in Malaysia.

1.2 Objectives

i. To investigate the early steps in construction management.
ii. To investigate how to managing the construction projects smoothly.
iii. To determine the problems occurred and solutions taken to solve the problems while in construction site.

1.3 Scope of Study

The study was carried out trough past projects that have been carried out from the company. Most of the projects were construct in Selangor which at Denai Alam, Saujana Putra, Ara Dmansara, Sunway, Desa Putra and more. This study will focus on how to manage a good construction works, so then there will be no problems occur during construction works. For examples, like to know the best early steps to begin the construction works. It will be less problems if the projects have a good and smooth start. In making that way, it is important to know the best ways to manage the construction works that were usually used in Malaysia. Moreover, not just know the process, it will also prevent any problems in construction work and if there will be unprevented problems, then we can think the solutions taken to solve the problems before it happen during construction works.

1.4 Methods of Study

1. Discussion- Discuss with the CEO and the one of the project leader from the company about how the process in construction works.
2. Interviews- When there is task given by one of the project leader, we will asks them about the task that we do not understand and they will explain to us in detail about it.
3. Site Visit- Followed the project leader to the construction site to see how the actual construction works.
4. Document reviews- Review the documents that were given by the CEO and the project leads. For examples, like house plan, house renovation plan, list of construction material, and company's past projects.

CHAPTER 2.0

COMPANY BACKGROUND

2.1 Introduction of Company

Company's name: Tharwa Builders

Tharwa Builders was established in year 2015 as a construction & consultation company serving the private and commercial client. Besides that, Tharwa Builders was already complete with SSM registration, 201603010303 (SA0366675-H) and a registered license company with CIDB Malaysia & SPKK (0120160414-SL173309. They have lots of services that they are provide which are:

- ✓Professional Consultation & Advisory
- ✓ Bungalow Specialist (Design & Build)
- ✓ Renovation & Extension
- ✓ Maintenance & Refurbishment
- ✓ IBS Professional Builder (Certified)
- ✓ Electrical Wiring (PW4)
- ✓ Billboards & Lightboxes
- ✓ Road & Signages

2.2 Company Profile

Tharwa Builders located at No 53-2, E-Boulevard, Jalan Elektron 16/D, Seksyen U16, 40160 Shah Alam, Selangor. The primary focus of this company is providing Engineering Consultation & Construction which covers all aspect of Civil, Mechanical & Electrical as a 1-stop center for all your Engineering & Construction Needs.

2.3 Company Organization Chart

Tharwa Builders comprise by Chief Executive Officer (CEO), technical advisor, operation director, strategic operation, quantity surveyor, draftsperson, project manager, finance admin, sales and marketing and three project leaders.

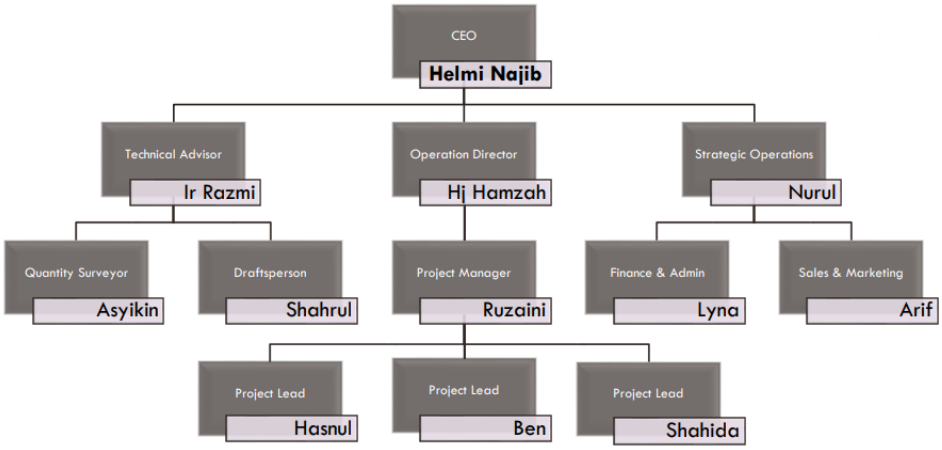


Figure 2.1: Organization Chart of Staff

Source: Tharwa Builder's

2.4 List of Projects

2.4.1 Completed Projects

Table 2.1: List of Completed Project.

No	Project Location	Date	Client
1	Saujana Putra	March 2016	En. Mohd
2	Denai Alam	April 2016	En. Zul
3	D'Kayangan	May 2016	En. Faidzs
4	Ara Damansara	May 2016	Seed Education Centre
5	Sea Park	June 2016	Mrs. Patricia
6	Taman Casa Mekar	June 2016	Pn. Masliza
7	Ara Damansara	July 2016	Seed Education Centre
8	Desa Putra Lot 1	August 2016	Pn. Rubiah
9	Balai Putrajaya	September 2016	Bomba Putrajaya
10	Denai Alam	September 2016	En. Eddin
11	Kg Tunku	October 2016	En. Izairan
12	Desa Putra Lot 2	November 2016	Pn. Rubiah
13	Nilai	December 2016	JMD – D'Bayu Resident
14	Shah Alam – Sek 4	Jan 2017	En. Irwan
15	Sunway	Jan 2017	Quattro House
16	Scenario North Kiara	Feb 2017	Pn. Noni
17	Panorama Sentul	Feb 2017	Cik Aimi
18	Desa Putra Lot 3	March 2017	Pn. Rubiah

19	Menara UOA	May 2017	Semasa Services
20	Denai Alam	July 2017	En. Mazni
21	Desa Putra 4	August 2017	Pn. Rubiah
22	Puspek Bomba Nilai	September 2017	Bomba Nilai
23	D'Kayangan	October 2017	Pn. Azimah
24	Ara Damansara	November 2017	En/ Izazi
25	ONE D'sara Condo	December 2017	JMB – One Damansara
26	Desa Putra Lot 5	January 2018	Pn. Rubiah
27	Shah Alam, Sek 8	February 2018	En. Roslan
28	Rafflesia Condo	March 2018	En. Sani
29	Nilai	March 2018	JMB – D'Bayu Resident
30	Subang Jaya SS15	April 2018	En. Wahab
31	Federal Highway	May 2018	Protasco
32	Nusa Subang	May 2018	Pn. Zainab
33	Hulu Langat	May 2018	En. Rani
34	Shah Alam, Sek 10	June 2018	En. Farhan
35	Jalan Kuching	June 2018	Quattro House
36	Q Sentral	July 2018	Q Sentral
37	Bandar Sunway	August 2018	En. Arif
38	Kota Seriemas	September 2018	En. Azwan
39	Villa Puteri	October 2018	Dato' Sri Wan

Source: Tharwa Builder's

2.4.2 Project in Progress

Table 2.2: List of On-Going Project

No	Project Location	Date	Client
1	Syeksyen 10, 40000 Shah Alam, Selangor, Darul Ehsan	August 2021	En. Muhammad Izzudin dan Pn. Nur Diana Solehah
2	11, Jalan Kayak 13/25, Syeksyen 13, 40100 Shah Alam, Selangor	August 2021	Puan Baiduri dan Encik Herman

Source: Tharwa Builder's

CHAPTER 3.0

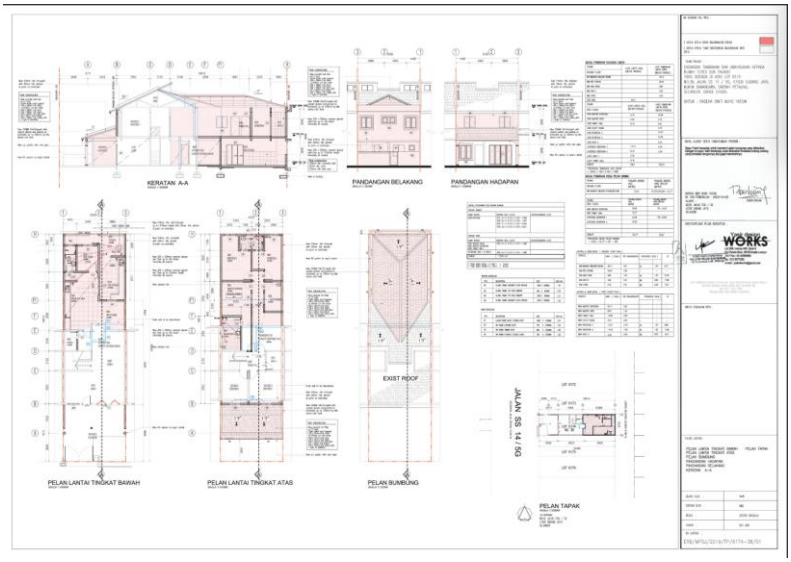
CASE STUDY

3.1 Introduction to Case Study

Most of the projects were construct in Malaysia. Precisely, around Selangor area. The value of all the projects were under company's confidential. For the on-going project, it was held at one of the Bungalow in Shah Alam Syeksyen 13. The project is due to renovation house and upgraded some of the area of the house that were needed to be change after have some discussion with the client and the consultation with the construction company. This project was started in this year which is 2021 and still on going until it done. The house expected to be done by next year which is in January or February. The renovation is focus on extension and others additional area works that needs to be done.

3.2 Early Step in Construction Management

Before starting the project, the first thing to do is after got the project from client, it will start with site visit to the project site to do some of measurement and to see any works and details for the project. Planning and development, also known as project conception, is the first step in the construction process. This is the stage at which a client envisions the building or facility that they desire. Conception is the stage in which ideas are most fluid, but it also (perhaps paradoxically) creates the foundation for the construction process. To ensure a successful build later on, everything must be done with care. Finding a property for the build, initial concept pre-designs, and selecting an architect and possibly a general contractor are all part of this step.



3.1: House Plan

Source: Tharwa Builder's

Next, the design process is where the client's impossible or at least prohibitively expensive dreams collide with what is actually doable. Plans or a design are created once the company managed to be realistic without crushing client's hopes and dreams. Then, all the person involved will get to see what the project will look like when it is finished for the first time. Following the creation of a preliminary design, the construction company must overcome additional constraints and regulations in order to meet the client's "extra" ideas. Then, bid materials are created once the contractor finished bending the rules of reality to bring the client's dreams to life in the final plans. Contractor documents (also known as construction documents or working drawings) provide contractors and construction companies with the information they need to bid on the project.

Next, in the pre-construction phase. This is the "getting ready to begin construction" stage. After the client accepted a bid from a construction company or contractor and instructed them to begin work on the project. Now the general contractor begins to get their ducks in a row. A project management team is the general contractor's ducks. The project team includes:

- A contract administrator – Ensures that the project manager and superintendent have the most up-to-date information on the construction contract.
- A project manager – The construction project management team's head duck. It is possible to be referred to as a construction project manager or a construction manager.
- A superintendent – Controls all construction activities on-site, as well as work schedules and material or equipment order fulfillment.
- A field engineer – Manages and coordinates site inspections, environmental problems at the site, and archeological and historical issues at the site. As the project progresses, the field engineer ensures that safety and regulations are followed.

For the construction project to succeed, the leader of the project must keep the project management team together. Construction platforms that allow team members to easily collaborate and coordinate schedules are extremely helpful and save time at this stage of the process.

Following that is procurement, which is the simplest step in the construction process. Procurement is simply the purchase (or rental) of all the materials required for the construction project. When shopping for groceries for a meal, you need all of the ingredients as well as someone to use the ingredients. In the construction industry, this entails locating labour, equipment, and building materials. This is where schedules can really get tangled. It will have a lot of different delivery schedules and vendors to juggle so that the right materials get into the hands of the right people at the right times.

Lastly, for the early step in construction management is the project has now transitioned from paper (or, more precisely, a CAD drawing) to the physical world. However, this is the step with the most working parts and deadlines to coordinate. For things to work, each contractor and subcontractor must be on time and adhere to the plans. Organization and communication are essential here, or else contractor risk having someone erecting a roof before the foundation is laid. The company really push their clients to use digital process management tools during the construction stage. Creating project workflows for each team and stage of the process is critical, but (with as many dependencies as there are in the construction phase) it's even more important to keep everything running smoothly.

3.3 Work Management at Work Site

Site preparation is always the first phase of any major construction or forestry project. This process involves clearing the land of trees and debris, leveling the ground for building, and moving materials to and from the site. This includes clearing any trees, boulders, or other obstructions in the way of your building, as well as levelling or grading the ground. The process of site preparation is unique to each project, and as such, the necessary steps and equipment will vary. However, most of these projects make use of a few key pieces of equipment common to the worksite.

Next, the process of moving earth, rock, or other materials with tools, equipment, or explosives is known as excavation. It consists of earthwork, trenching, wall shafts, tunnelling, and underground construction. Exploration, environmental restoration, mining, and construction are all important uses for excavation. One of the most common applications for excavation is in construction. Excavation is a construction technique used to create building foundations, reservoirs, and roads.

Trenching, digging, dredging, and site development are some of the excavation processes. To get the job done correctly, each of these processes necessitates its own set of techniques, tools, and machinery. The processes used will be determined by the structure that is created as a result of the construction process.

Before beginning the excavation and heavy earthworks process, the site must be thoroughly examined to ensure that the natural habitat and artefacts surrounding it are preserved throughout the excavation process. Following that, plans for the size and depth of the excavation site are created, and the excavation contractors create drawings based on them to clearly mark the excavation site’s boundaries. After these two critical steps have been completed, excavation work can begin.

For renovation cases, the contractor has to calculate the new suitable foundation for new additional load. For example, the renovation had to add on another floor from 1 storey terrace house to 2 storey terrace house. So, the foundation for the house have to calculate back to strengthen the base of the house, so the house would not collapse after the renovation.

After that, the foundation can be poured once the space in which the building has been cleared and excavated. Depending on the size of the building and the stability of the land, the contractor may need to prepare the subsurface before pouring the foundation. After settle the

foundation, then the work can continue to completing the framing. Frame construction is a building method that entails constructing a supportive framework of studs, joists, and rafters and attaching everything else to this framework. With a skilled crew, this building style can be completed quickly, and it is extremely common all over the world. This style of construction is used in the construction of the majority of wooden homes, for example.

The frame construction process begins with the construction of a sill on the ground, which is then attached to a foundation. Long studs are attached to the sill at regular intervals to form a network that can be connected to the roof or additional stories' joists and rafters. Cross bracing and other techniques can be used to strengthen the frame further. Frame-style construction, in essence, creates a skeleton, and a quick crew can frame a house in just a few days. Walls and other features can be added once the frame is complete. As stiff flooring and walls are added, the structure becomes more stable, providing additional support and resistance to the elements. Builders can distinguish between critical structural walls that provide support to keep the building safe and partitions that can be used to divide and change the shape of various spaces within the structure for utility.

The most common type of this construction style is platform frame construction, in which a structure is built floor by floor. Some older buildings use balloon frame construction, in which long joists run from the sill to the top plate, which meets the roof, regardless of how tall the building is. Balloon frame construction is typically limited to two to three floors for practical reasons, and it is uncommon in new structures due to timber availability issues. Frame construction has traditionally been done with wood, which must be carefully cut and handled to ensure the frame's integrity. Wood that has not been properly cured, for example, will develop warping and twisting, potentially pulling the structure out of alignment. Metal beams can also be used in framing and can significantly reduce costs in areas where timber is expensive.

After the building has been framed, a specialty contractor will be brought in to finish the rough electrical and plumbing work. This entails routing the pipes and wires to their proper locations. Their work will not be finished at this point, but it will help to get the rough work in place so that drywall, insulation, and ceilings can be installed.

Next, plumbing and electrical installations must be coordinated with other trades and contractors, and they typically necessitate multiple visits from plumbers and electricians. Plumbers would have to install pipes under and in the floor slab before casting the ground floor

slab. Electricians would be required to install wires or cable ducts beneath and within the floor slab. Depending on the design of the walls, framed walls may require the installation of pipes, wires, or cable ducts after the frame is erected but before the walls are boarded closed. Taps, plumbing waste pipes, electrical switches, and outlets must all be installed correctly.

Concrete walls and columns would necessitate the installation of all components prior to the pouring of the concrete. Pipes, wires, ducts, and outlets may be cut into rendered block and brick walls after the walls are built but before they are plastered or rendered. Because exposed block and brick walls will not be covered by a finish such as render, plaster, or tiles, pipes, ducts, and wires must be built into the wall as it is built.

Upstairs concrete floor slabs will require pipes, electrical ducts, and wires to be installed before the concrete is poured. Hot water systems and air-conditioning units that go in the roof must be installed after the roof is installed but before the ceilings are installed. Ducting for air conditioning and plumbing pipes should be installed. In many cases, the electrician will need to run wiring or ducts to the light fixtures. Toilets and fitted bathtubs should be installed before tiling the bathrooms. Lights and air-conditioning grilles can be installed after ceilings have been installed. When the walls and floors in bathrooms have been tiled, and the walls in the house have been rendered or finished, free standing bathtubs can be installed.

Electrical switches and sockets can be completed. Because many of these items are expensive and could be stolen, it’s usually best to wait until the house is lockable before completing the last two steps. All external pipes and cables should be installed before the final landscaping, paving, and driveways are completed.

It can be seen that plumbers and electricians may need to return to the project four or more times, and air conditioning contractors usually need to return two or three times. It is critical to ensure that all electrical wires, ducts, and plumbing pipes have been properly installed. However, even these trades must be coordinated among themselves. Plumbing waste and sewer pipes must be installed at precise locations and levels. They typically have little room for customization, so they should be installed first. Unless it’s flexible ducting installed for smaller airflow or at the ends of the main ducts, air-conditioning ducting is usually prefabricated in sections.

As a result, rigid air-conditioning ducts should be installed next. Water pipes can be installed either up or down, and there is some flexibility in their location, so they are installed first. Because electrical wiring is the most adaptable, it can be installed last. Having said that,

it’s important to note that pipes and ducts cannot obstruct the placement of lights, switches, and outlets. When the electrical and plumbing work is finished, it must be inspected before proceeding to the next stage of construction. This inspection will ensure that everything has been completed in accordance with the code. Once approval has been granted, the project can proceed.

After that, roofers arrive around the same time that the rough electrical and plumbing work is completed to finish the building’s roof. This must be completed before any further work inside the building can begin, as rain and outdoor elements can damage the work that is being done in the following steps. Around this time, contractors will be called in to finish the building’s exterior, further protecting the interior work that is about to begin.

Then, interior designers collaborate with clients to create functional and appealing interior spaces. They assist in the layout and decoration of building interiors and may collaborate with contractors to make their designs a reality. Interior design is the art and science of improving the interior of a building in order to create a healthier and more aesthetically pleasing environment for those who use it. An interior designer plans, researches, coordinates, and manages such improvement projects. This includes installing insulation, drywall, and ceilings. During this stage, an electrician is frequently called in to finish installing outlets and lighting fixtures.

All of the fixtures inside a space can be added once the interior walls are up. Toilets, cabinets, windows, doors, and elevators are examples of such items.

Next, the final stage of construction entails putting the finishing touches on the structure. This includes installing flooring, painting the walls, installing countertops, and installing or replacing faucets in the bathrooms. Once this stage is completed, the building process will be completed, and it will be left with a stunning structure.

3.4 Problems Occurred and solutions taken to solve the problems in site.

The construction industry is facing a major challenge which is there are not enough skilled workers to meet the industry's growing demand. The younger generation is being encouraged to attend college rather than vocational trades. The benefits of construction career are not being sold to millennials, and a large portion of today's workforce is nearing retirement.

While industry experts work to address this issue on a national scale, there are things as a contractor or small business owner can do as a mentor. High school students and recent college graduates are looking for work during the summer months. Be willing to introduce the industry to someone who has never considered a career in construction. Mentorship can also be used to train existing skilled labour. For example, if one of the best workers has expressed an interest in the business side of construction, as an expert contractor, they can train an already skilled worker on the ins and outs of construction project management or construction business ownership. Moreover, staffing agencies also can used to solve this kind of problems. Construction staffing agencies can provide skilled workers who are available to work for the company when they require the workers. The agencies handle pre-screening applicants, saving time and getting qualified workers quickly. A staffing agency will typically cover any human resources costs associated with employment, including workers compensation coverage for those employees.

Figure 3.2: View of the site that had no worker to continue the house renovation.

Source: House renovation at Syeksyen 13, Shah Alam

Figure 3.3: View of the site that had no worker to continue the house renovation.

Source: House Renovation at Syeksyen 13, Shah Alam

Figure 3.4: Porch.

Source: House Renovation at Syeksyen 13, Shah Alam

Next, other common problem during construction is also inadequate communication among construction parties. The ability to communicate effectively is critical to the success of any project. Communication breakdowns are most common when things go wrong in a project. With the proliferation of technology, it is likely that nearly everyone on the project owns a smartphone. Contractor can agree on the best ways to keep communication useful during the project in order to have consistent and efficient communication. All parties that were involve in the project can use text messages, emails, or technology apps to communicate about project progress and updates in real time. It is one method of shortening the duration of a communication breakdown by reducing slowdowns.

Other than that, construction time delays also can affect the construction work. One of the most common concerns of homeowners is the certainty that the project will be completed as soon as possible. The construction contract should include a production schedule that the client can use to track the progress of the project. There are some acceptable reasons for project delays that should be aware of ahead of time. However, if delays occur, they should be addressed as soon as possible, and communication should be established between the homeowner and the contractor.

Figure 3.5: View of the house renovation that should be done on July 2021.

Source: House Renovation at Syeksyen 13, Shah Alam

Then, lack of proper organization. The construction project manager is responsible for making decisions and implementing procurement processes that adhere to the project plan's timeline. However, having management that is unable to cope with the speed and scale of demand may pose a significant challenge to the project's success. People with proper management skills should be in charge of construction project management to ensure the project's success on time.

Figure 3.6: View at the site that the work should have been done last year, 2021 but do not have any progress until year 2022.

Source: House Renovation at Syeksyen 13, Shah Alam

Figures 3.7: Skylight

Source: House Renovation at Syeksyen 13, Shah Alam

Figures 3.8: Stair

Source: House Renovation at Syeksyen 13, Shah Alam

Finally, about financial problems. In every project, as a contractor must had experience such as owed payments to workers, vendors, equipment renters, and suppliers, but the amount that was owed to the company is due upon project completion. So, as the contractor, they must have sufficient funds to deal with this issue. Going for an open company line of credit can help to handle such debts and safeguard company reputation.

Figure 3.9: View of art area that had to be stop because of the company can not pay the worker

Source: House Renovation at Syeksyen 13, Shah Alam

CHAPTER 4.0

CONCLUSION

In conclusion, it is important to acknowledge about how to manage works during any construction of project. It is because during the construction, it will be involved lots of things such as, safety and health, big amount of money, satisfaction of client, and also company reputation. So, as a contractor, it is obliged to know the details journey from start to the end of the project. So then, the contractor and other people involved for the project can prevent any problems that might be happen anytime without anyone expect it to be happen. If the company do not take this thing as an important case, then, it will be lots of problems that will come out in the future. Moreover, the method that were used are all the similar method in almost all construction industry.

REFERENCES

S. (2021, May 24). *What is Construction Management?* Stonemark Construction Management. https://stonemarkcm.com/blog/what-is-construction-management/

A. (2017, September 4). *Five common construction problems and solutions*. Common Construction Problems & Solutions. http://www.asranet.com/five-common-construction-problems-solutions/

Site clearance. (2021, June 9). Designing Buildings. https://www.designingbuildings.co.uk/wiki/Site_clearance

Steps in Site Preparation for Construction Projects. (2019, September 27). Back to Basics. https://backtobasics.edu.au/2019/09/steps-in-site-preparation-for-construction-projects/

Rajput, K. (2021, October 19). *How to Building Construction Process Step by Step*. CivilJungle. https://civiljungle.com/building-construction-process-steps/

A. (2017, September 4). *Five common construction problems and solutions*. Common Construction Problems & Solutions. http://www.asranet.com/five-common-construction-problems-solutions/

Westland, J. (2021, July 20). *Construction Project Management: The Ultimate Guide*. ProjectManager.Com. https://www.projectmanager.com/construction-project-management

All of us at monday.com. (2021, November 4). *The 6 steps of a construction process*. Monday.Com Blog. https://monday.com/blog/remote-work/what-is-a-construction-process/

Construction management (500 043). (2020, July). Mr CH. BALAKRISHNA. http://www.nietodisha.com/diplomalecturenote/CONSTRUCTION%20MANAGEMENT.pdf

Hamakareem, M. I. (2018, November 9). What is Construction Management? The Constructor. https://theconstructor.org/building/construction-management/26460/

R. (2021a, August 14). *What is Construction Management? Construction Management Definition & Meaning.* Revizto. https://revizto.com/en/what-is-construction-management/

What is Construction Management? (2020, April 15). Procore. https://www.procore.com/article/what-is-construction-management

Construction Management: Functions and Phases. (2019, May 2). Indeed Career Guide. https://www.indeed.com/career-advice/finding-a-job/what-is-construction-management

Construction manager. (2021, December 28). Designing Buildings. https://www.designingbuildings.co.uk/wiki/Construction_manager