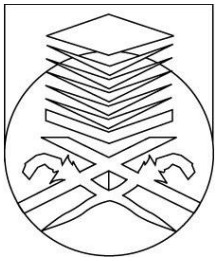

PROGRAMME IN BUILDING SURVEYING
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UNIVERSITI TEKNOLOGI MARA
PERAK BRANCH
SERI ISKANDAR CAMPUS

PROCESS OF PREPARING A TENDER DOCUMENT FOR STATE ROAD IN JELI DISTRICT

MUHAMMAD NAJMI BIN ZULKIFLI

(2018676858)

BACHELOR OF BUILDING SURVEYING (HONS.)

PRACTICAL TRAINING REPORT

FEBRUARY 2022

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This practical training report is fulfilment of the practical training course.

PREPARED BY

NAME : MUHAMMAD NAJMI BIN ZULKIFLI

SIGNATURE : ……

SUPERVISING LECTURER

NAME : SR NURUL FADZILA BINTI ZAHARI

SIGNATURE : ……

DATE : ……

ACKNOWLEDGEMENT

In the name of Allah the most Beneficent and most Merciful, All praises to Allah, Lord of the universe and peace be upon His Messenger. I want to acknowledge Him on top of all for blessing me with patience and tenacity of mind to complete the Internship report. It is undeniably a vital requirement for certified bachelor's degree with flying colours and I have received outstanding helps from many quarters which I would like to put on record here with great pleasure and deep gratitude.

First of all, I dedicate this garland of appreciation to the Pejabat Tanah dan Jajahan Jeli for opening up space and opportunities for me to undergo my Industrial Training for four months. I am very grateful for the willingness of the Pejabat Tanah dan Jajahan Jeli (PTJJ) to accept me as an Industrial Training student. Indeed, the good service and warmth that was established during this period is very much appreciated by me as an invaluable brotherhood. Hopefully this bond will continue to the end of time.

On this occasion as well, I take this opportunity to thank the Universiti Teknologi MARA (UiTM) which is so committed for making this Industrial Internship as one of the compulsory university courses that must be taken as a condition for graduation. This can indirectly reveal to students the real reality of the world of work that will be taken after graduation. This space can also actually help students to prepare themselves to contribute to society and the country in the future. This is in line with the government's goal of producing human capital that is not only excellent, but also productive and competitive in the employment sector.

I would also like to thank TS Sr DR Suriani binti Ngah Abd Wahab, industrial training coordinator, Department of Technology and Built Environment for Bachelor of Building Surveying (Hons) students who helped and advised a lot for industrial training placement so that during industrial training they would benefit correctly related to the course of study taken. Thanks also to the Supervisor of Industrial Training from UiTM, namely Sr Nurul Fadzila binti Zahari who is a lecturer from the Department of Technology and

Built Environment, who has helped a lot in preparing a complete report of this industrial training by following the prescribed procedures.

I would also like to thank my Industrial Training supervisor at Pejabat Tanah dan Jajahan Jeli (PTJJ), namely Puan Norzila binti Zainuddin, Assistant Engineer who has always monitored and guided me during these four months. Throughout being under his supervision, I never once felt awkward with the assignments given as he always gave advice and guidance especially in the construction management system.

I also leave this thread of gratitude to my parents and friends who have always been loyal to support and help me whether it is financial, material or mental and physical encouragement. The same goes for those who were involved throughout my time undergoing this Industrial Training no matter whether it was directly or indirectly.

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CHAPTER 1 : INTRODUCTION

1.1 INTRODUCTION OF INDUSTRIAL TRAINING

This industry training is compulsory for every bachelor's in building surveying (Hons) student as a condition for the award of the degree. The Industrial Training (IT) Program was created to help graduates develop the skills they need to succeed in the workplace. Industrial Training Courses give students the opportunity to study in real situations to increase their marketability.

This course exposes students to technological advances, effective communication, collaborative methods, rules, processes and laws, as well as the professional attitudes and ethics of organizations. Furthermore, the course instills enthusiasm and a proactive attitude in students, which increases their confidence in their ability to be exceptional trainees. Students are allowed to undergo industrial training in government departments, statutory bodies and private companies that are willing to place them in such organizations in connection with the student application. Therefore, students can practice the theoretical knowledge learned while in class applied during industrial training because it is more to the real situation while working later.

For final year students of bachelor's in building surveying (Hons) Universiti Teknologi Mara Perak Branch session 2018/2021 need to conduct industrial training for 16 weeks starting 11 October 2021 until 30 January 2022. Therefore, I have applied and got an industrial training place at the Pejabat Tanah dan Jajahan Jeli and placed in the development unit.

1.2 OBJECTIVE OF INDUSTRIAL TRAINING

The industry training seeks to develop a better individual personality in terms of both personality and thinking. Students can also learn how to communicate successfully with this industry training. It can also teach pupils to have a solid work ethic, follow regulations, and be more disciplined. This industry training is also one of the methods for exposing students to the actual world of work so that they may implement what they have learned once they have completed their industrial training. Students will be able to write good industry reports as a result of their industrial training experience and expertise.

1.3 COMPANY BACKGROUND (PEJABAT TANAH DAN JAJAHAN JELI)

Figure 1.1: Pejabat Tanah dan Jajahan Jeli

The company that I was choose was Pejabat Tanah dan Jajahan Jeli (PTJJ). PTJJ has begun on 1st. July 1982 as a small district, as a result of the fraction of Tanah Merah and Kuala Krai. It is under the administration of the first district officer name Encik Fuad bin Haji Hassan. On 1st January 1986, Jeli's small district was upgraded as a full district. Until today Jeli District is a recent district in the state of Kelantan. PTJJ is the administrative machinery for Jeli district. It was officiated by KDYMM Tuanku Ismail Petra Ibni al-Marhum Sultan Yahya Petra on Tuesday. October 31, 1989. PTJJ has been broken down into 3 Districts and 16 Penghulu Mukim. Those 3 districts are Jeli district, Batu Melintang District and Kuala Balah District. It is located at Bandar Baru Jeli in the state of Kelantan about 98 km from Kota Bharu city through the West East road. PTJJ is currently administered by the 13th district officer Encik Raisnan bin Haji Daud with 69 employees under him. The company is located at the middle of Jeli Town. PTJJ had a very strategic place because of the company is at the middle of Jeli Town. So, the client of PTJJ can easy to go there.

Pejabat Tanah dan Jajahan Jeli is divided into three division which are development division, services management and land management division. From this three main division, it consists of twelve unit which are physical development unit, community development unit, security unit, council and entertainment unit, administrative and financial unit, information technology unit, legal unit, registration unit, revenue unit, land development unit, technical and enforcement unit, and disposal unit. Each of the division play an important role in running the organization.

At the district and colonies level, there are several departments carrying out their respective development tasks such as the Public Works Department, Department of Irrigation and Drainage and so on. However, all the development is made on the ground. To ensure that a project goes smoothly in line with the planning of one area, then the Chief Colonies serves to be a coordinating officer against such development. For example, the Ministry of Education requires a piece of land to develop a school. Thus, the relevant ministry shall apply to the occupancy of the colonies for the necessary land acquisition process. If the land is a land belonging to and if the land is exposed to the land of government or state land, the same application shall be submitted to the Chief Colonies. Next the Colonies will process the application and after it is completed, the applicant will get ownership of the land.

Operation Hour for Pejabat Tanah dan Jajahan Jeli

The operation hour for the Pejabat Tanah dan Jajahan Jeli is from 8:00 am to 5:00 pm for Sunday to Wednesday. For Thursday the operation hour is from 8:00 am to 3:30 pm. But, during pandemic Covid-19, the operation hour had change from 8:00 am to 3:00 pm for Sunday to Thursday.

1.4 LOGO OF PEJABAT TANAH DAN JAJAHAN JELI

Figure 1.2: Logo of Pejabat Tanah dan Jajahan Jeli

In Kelantan, each administrative district was given its own flag. The flags have a regular pattern and the canton is occupied by the Kelantan flag, the bottom right quarter is coloured red as per the Kelantan flag, and the remaining quarters are given the district's respective colour. The logo resembles the Selangor flag in several ways. The Logo of PTJJ was inspired by the district's flag. Therefore, logo of PTJJ consist of three colour which is orange, red and white. The red colour represents the flag of Kelantan state and every land and district office have the colour of red. Meanwhile, the colour of orange is represented the district. Orange colour is to differentiate the logo of each of district. For example, Pejabat Tanah dan Jajahan Kota Bharu has colour of black as it represents the district of Kota Bharu. The logo also consists of Kelantan's flag logo which is consisting of the arm's crescent, five pointed stars, dual spears and unsheathed kris. Then, the red represents the honesty of Kelantan's settlers, citizens and king who is Sultan of Kelantan, while the charge signifies the sanctity of the Sultan of Kelantan.

1.5 OBJECTIVE OF PEJABAT TANAH DAN JAJAHAN JELI

Every government institution has their own objectives in order to provide good services to the public. Pejabat Tanah dan Jajahan Jeli has a few objectives, the purpose of this objectives was created is to implement an efficient and effective system of colonial administration to achieve several goals. The first objective of the organization is to perform the task of planning, managing and coordinating the socio-economic development policies of rural communities. As the Pejabat Tanah is one of the organizations that administer one district, it has become the organization responsibility to ensure the development of the Jeli's district. Second objective is coordinate the work or duties of government departments in implementing infrastructure development projects. In order to ensure the development of the district, infrastructure is needed for the use of public.

Third, manage and spend public money wisely in accordance with approved rules based on the rules that have been set. The money must be spent wisely as it is a public money. The money is use in building the infrastructure and in developing the district. Fourth, to make the land administration capable of planning land development, land disposal and enforcement of land laws fairly and comply with the requirements of development policy to achieve certain objectives. Those objectives are plan the disposal of optimal land use for development and implement land policy fairly and able to benefits of the public.

1.6 MISSION, VISSION AND GOAL OF PEJABAT TANAH DAN JAJAHAN JELI

VISION

- Vision of Pejabat Tanah dan Jajahan Jeli is developing Jeli's district on a par with other colonies.

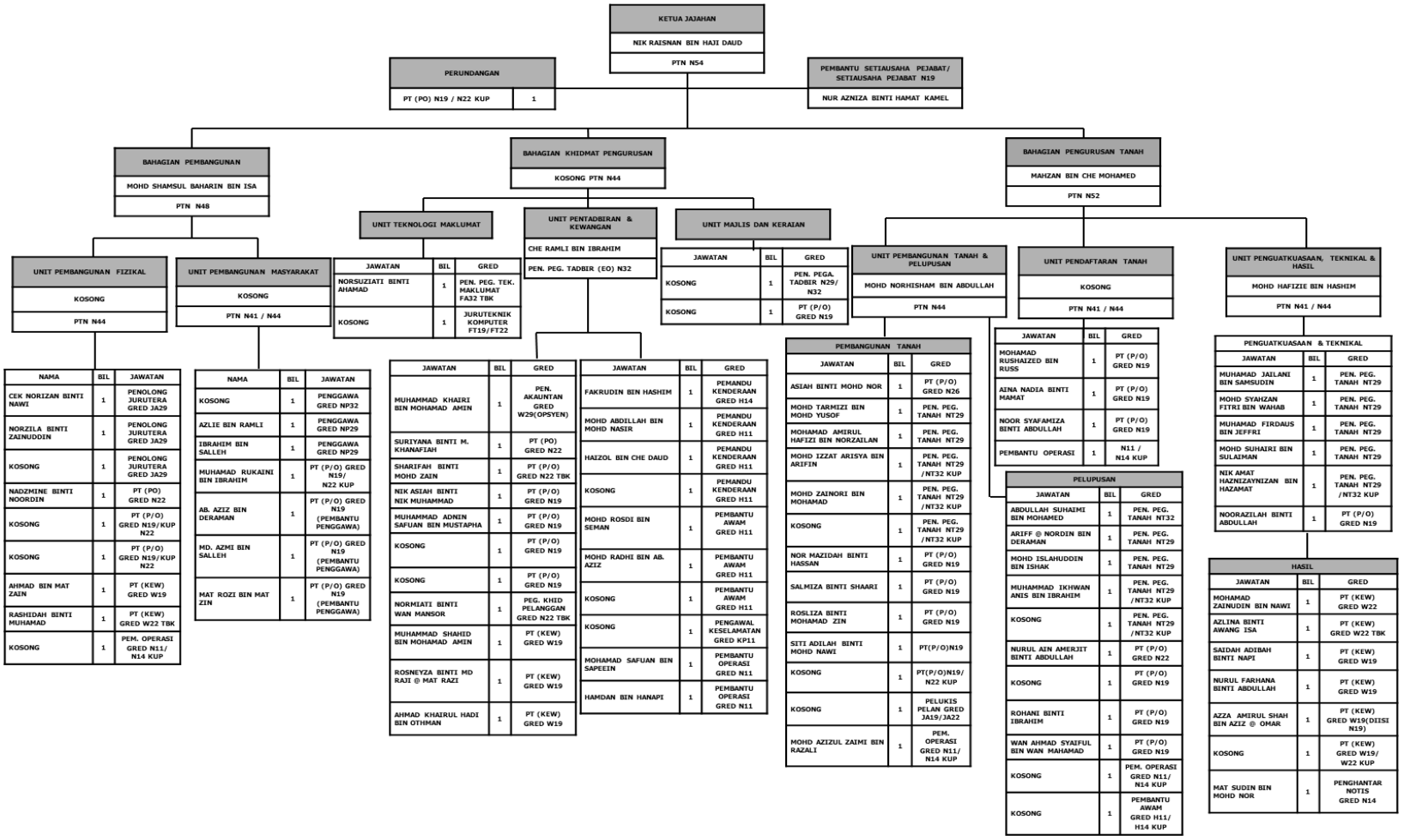
MISSION

- The mission of the organization is fully responsible in providing basic services and facilities to the people. This includes the socio-economic field, the development of new villages, community unity and harmonious relations between groups and nations to describe an ideal society, progressive and developed according to government policies, especially new economic policies.
- The department also has specific responsibilities in managing the affairs of the office. Sections in it such as land administration, development projects, land revenue collection with related matters and general expenses such as operating expenses, staffing and others according to their respective activities.

GOAL

- "To ensure clients are satisfied with the service provided, as it is important to ensure clients are satisfied with the service provided

1.7 ORGANIZATION CHARTS OF PEJABAT TANAH DAN JAJAHAN JELI



NAMA	BIL	JAWATAN
CEK NORIZAN BINTI NAWI	1	PENOLONG JURUTERA GRED JA29
NORZILA BINTI ZAINUDDIN	1	PENOLONG JURUTERA GRED JA29
KOSONG	1	PENOLONG JURUTERA GRED JA29
NADZMINE BINTI NOORDIN	1	PT (PO) GRED N22
KOSONG	1	PT (P/O) GRED N19/KUP N22
KOSONG	1	PT (P/O) GRED N19/KUP N22
AHMAD BIN MAT ZAIN	1	PT (KEW) GRED W19
RASHIDAH BINTI MUHAMAD	1	PT (KEW) GRED W22 TBK
KOSONG	1	PEM. OPERASI GRED N11/ N14 KUP

NAMA	BIL	JAWATAN
KOSONG	1	PENGGAWA GRED NP32
AZLIE BIN RAMLI	1	PENGGAWA GRED NP29
IBRAHIM BIN SALLEH	1	PENGGAWA GRED NP29
MUHAMAD RUKAINI BIN IBRAHIM	1	PT (P/O) GRED N19/ N22 KUP
AB. AZIZ BIN DERAMAN	1	PT (P/O) GRED N19 (PEMBANTU PENGGAWA)
MD. AZMI BIN SALLEH	1	PT (P/O) GRED N19 (PEMBANTU PENGGAWA)
MAT ROZI BIN MAT ZIN	1	PT (P/O) GRED N19 (PEMBANTU PENGGAWA)

JAWATAN	BIL	GRED
NORSUZIATI BINTI AHAMAD	1	PEN. PEG. TEK. MAKLUMAT FA32 TBK
KOSONG	1	JURUTEKNIK KOMPUTER FT19/FT22

JAWATAN	BIL	GRED
KOSONG	1	PEN. PEGA. TADBIR N29/ N32
KOSONG	1	PT (P/O) GRED N19

JAWATAN	BIL	GRED
MUHAMMAD KHAIRI BIN MOHAMAD AMIN	1	PEN. AKAUNTAN GRED W29(OPSYEN)
SURIYANA BINTI M. KHANAFIAH	1	PT (PO) GRED N22
SHARIFAH BINTI MOHD ZAIN	1	PT (P/O) GRED N22 TBK
NIK ASIAH BINTI NIK MUHAMMAD	1	PT (P/O) GRED N19
MUHAMMAD ADNIN SAFUAN BIN MUSTAPHA	1	PT (P/O) GRED N19
KOSONG	1	PT (P/O) GRED N19
KOSONG	1	PT (P/O) GRED N19
NORMIATI BINTI WAN MANSOR	1	PEG. KHID PELANGGAN GRED N22 TBK
MUHAMMAD SHAHID BIN MOHAMAD AMIN	1	PT (KEW) GRED W19
ROSNEYZA BINTI MD RAJI @ MAT RAZI	1	PT (KEW) GRED W19
AHMAD KHAIRUL HADI BIN OTHMAN	1	PT (KEW) GRED W19

JAWATAN	BIL	GRED
FAKRUDIN BIN HASHIM	1	PEMANDU KENDERAAN GRED H14
MOHD ABDILLAH BIN MOHD NASIR	1	PEMANDU KENDERAAN GRED H11
HAIZOL BIN CHE DAUD	1	PEMANDU KENDERAAN GRED H11
KOSONG	1	PEMANDU KENDERAAN GRED H11
MOHD ROSDI BIN SEMAN	1	PEMBANTU AWAM GRED H11
MOHD RADHI BIN AB. AZIZ	1	PEMBANTU AWAM GRED H11
KOSONG	1	PEMBANTU AWAM GRED H11
KOSONG	1	PENGAWAL KESELAMATAN GRED KP11
MOHAMAD SAFUAN BIN SAPEEIN	1	PEMBANTU OPERASI GRED N11
HAMDAN BIN HANAPI	1	PEMBANTU OPERASI GRED N11

PEMBANGUNAN TANAH		
JAWATAN	BIL	GRED
ASIAH BINTI MOHD NOR	1	PT (P/O) GRED N26
MOHD TARMEZI BIN MOHD YUSOF	1	PEN. PEG. TANAH NT29
MOHAMAD AMIRUL HAFIZI BIN NORZAILAN	1	PEN. PEG. TANAH NT29
MOHD IZZAT ARISYA BIN ARIFIN	1	PEN. PEG. TANAH NT29 /NT32 KUP
MOHD ZAINORI BIN MOHAMAD	1	PEN. PEG. TANAH NT29 /NT32 KUP
KOSONG	1	PEN. PEG. TANAH NT29 /NT32 KUP
NOR MAZIDAH BINTI HASSAN	1	PT (P/O) GRED N19
SALMIZA BINTI SHAARI	1	PT (P/O) GRED N19
ROSLIZA BINTI MOHAMAD ZIN	1	PT (P/O) GRED N19
SITI ADILAH BINTI MOHD NAWI	1	PT(P/O)N19
KOSONG	1	PT(P/O)N19/ N22 KUP
KOSONG	1	PELUKIS PELAN GRED JA19/JA22
MOHD AZIZUL ZAIMI BIN RAZALI	1	PEM. OPERASI GRED N11/ N14 KUP

JAWATAN	BIL	GRED
MOHAMAD RUSHAIZED BIN RUSS	1	PT (P/O) GRED N19
AINA NADIA BINTI MAMAT	1	PT (P/O) GRED N19
NOOR SYAFAMIZA BINTI ABDULLAH	1	PT (P/O) GRED N19
PEMBANTU OPERASI	1	N11 / N14 KUP

PELUPUSAN		
JAWATAN	BIL	GRED
ABDULLAH SUHAIMI BIN MOHAMED	1	PEN. PEG. TANAH NT32
ARIFF @ NORDIN BIN DERAMAN	1	PEN. PEG. TANAH NT29
MOHD ISLAHUDDIN BIN ISHAK	1	PEN. PEG. TANAH NT29
MUHAMMAD IKHWAN ANIS BIN IBRAHIM	1	PEN. PEG. TANAH NT29 /NT32 KUP
KOSONG	1	PEN. PEG. TANAH NT29 /NT32 KUP
NURUL AIN AMERJIT BINTI ABDULLAH	1	PT (P/O) GRED N22
KOSONG	1	PT (P/O) GRED N19
ROHANI BINTI IBRAHIM	1	PT (P/O) GRED N19
WAN AHMAD SYAIFUL BIN WAN MAHAMAD	1	PT (P/O) GRED N19
KOSONG	1	PEM. OPERASI GRED N11/ N14 KUP
KOSONG	1	PEMBANTU AWAM GRED H11/ H14 KUP

PENGUATKUASAAN & TEKNIKAL		
JAWATAN	BIL	GRED
MUHAMAD JAILANI BIN SAMSUDIN	1	PEN. PEG. TANAH NT29
MOHD SYAHZAN FITRI BIN WAHAB	1	PEN. PEG. TANAH NT29
MUHAMAD FIRDAUS BIN JEFFRI	1	PEN. PEG. TANAH NT29
MOHD SUHAIRI BIN SULAIMAN	1	PEN. PEG. TANAH NT29
NIK AMAT HAZNIZAYNIZAN BIN HAZAMAT	1	PEN. PEG. TANAH NT29 /NT32 KUP
NOORAZILAH BINTI ABDULLAH	1	PT (P/O) GRED N19

HASIL		
JAWATAN	BIL	GRED
MOHAMAD ZAINUDIN BIN NAWI	1	PT (KEW) GRED W22
AZLINA BINTI AWANG ISA	1	PT (KEW) GRED W22 TBK
SAIDAH ADIBAH BINTI NAPI	1	PT (KEW) GRED W19
NURUL FARHANA BINTI ABDULLAH	1	PT (KEW) GRED W19
AZZA AMIRUL SHAH BIN AZIZ @ OMAR	1	PT (KEW) GRED W19(DIISI N19)
KOSONG	1	PT (KEW) GRED W19/ W22 KUP
MAT SUDIN BIN MOHD NOR	1	PENGHANTAR NOTIS GRED N14

Figure 1.3: Organization Charts of Pejabat Tanah Dan Jajahan Jeli

1.8 SERVICES OFFERED AT PEJABAT TANAH DAN JAJAHAN JELI

1. Management department
    - Make an affidavit
    - To obtain an entertainment liciense

2. Development department
    - Wholesaler registration
    - Project validation
    - Project monitoring
    - Payment of project item

3. Land development department
    - Registration unit counter
        - Issuing title deeds
        - Mortgage and release of mortgage
        - Caveat
        - Lien
        - Land extraction
        - Private official search
        - Certified copies of document
        - QT registration and issuance
        - Issuance of land tittle including state HS (1) grants

    - Revenue unit counter
        - Collect all types of revenue paid by customer

- Land unit counter
    - Land ownership application
    - Inheritance property
    - Land deposit
    - Tol
        - Brick permit
        - Sandstone permit
    - Manage cases for:
        - Change soil condition
        - Boundary breaking
        - Statement/rations
        - Application for extension title
        - Other cases under the National Land Code 120, 104 and 13A
        - Auction application and other

1.10 KEY PLAN, LOCATION PLAN, SITE PLAN

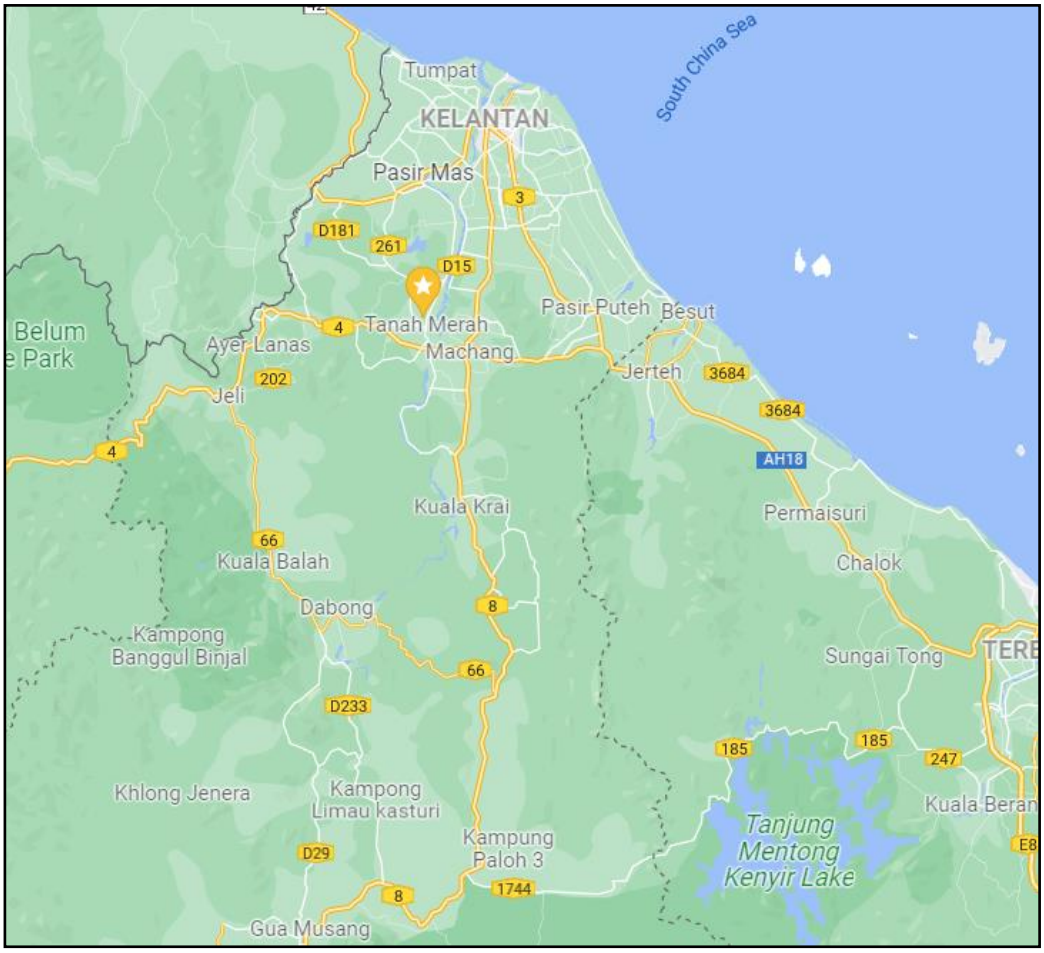


Figure 1.4: Key Plan Pejabat Tanah dan Jajahan Jeli, Kelantan

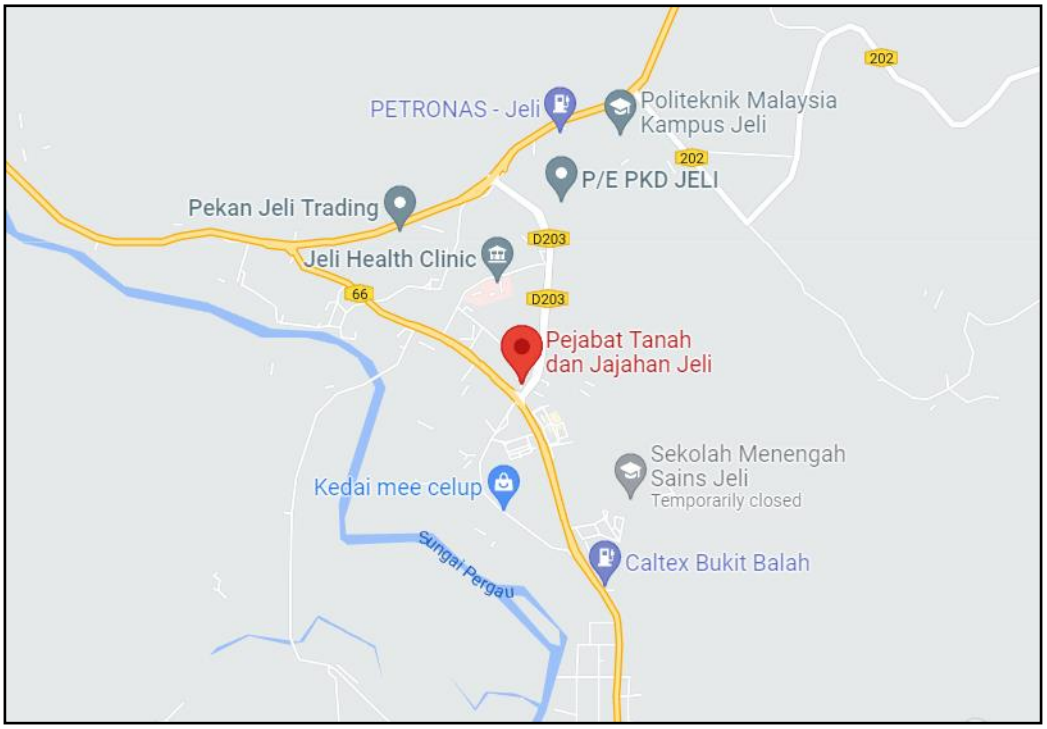


Figure 1.5: Location Plan Pejabat Tanah dan Jajahan Jeli, Kelantan

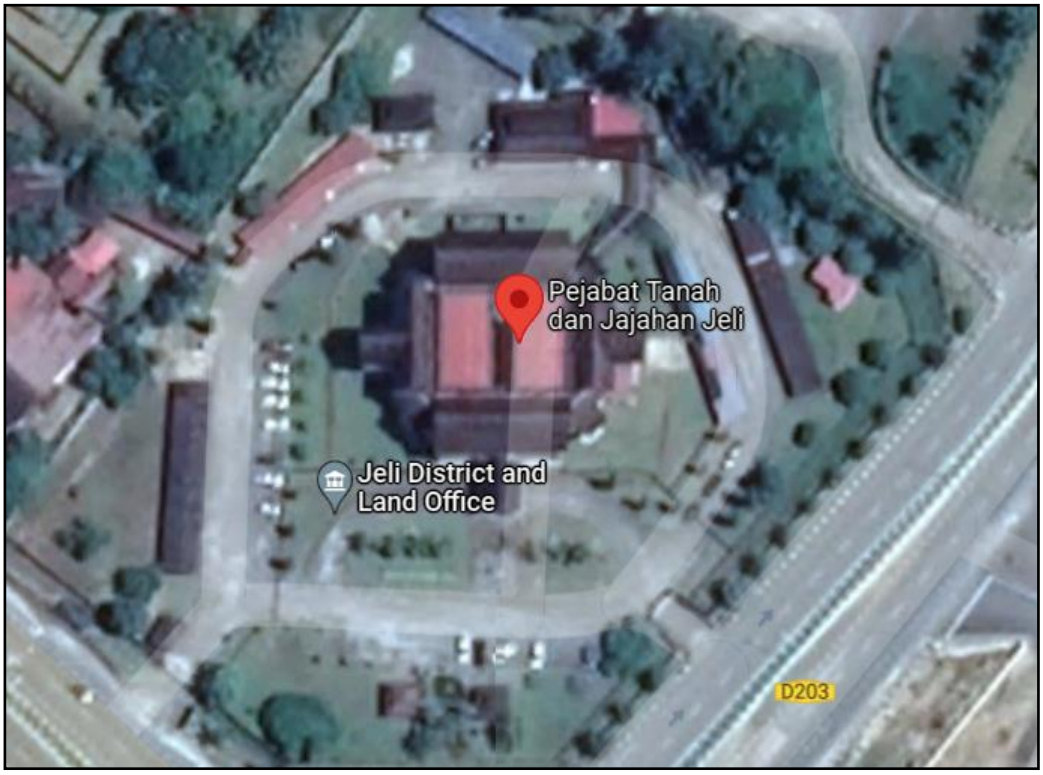


Figure 1.6: Site Plan Pejabat Tanah dan Jajahan Jeli, Kelantan

CHAPTER 2 : THEORICAL STUDY/ LITERATURE REVIEW

2.1 INTRODUCTION

According to Sarifah (2002), the execution of a construction project begins with negotiations between the consultant and the client and continues until the project is finished by the designated contractor. In this setting, the importance of construction project planning and management cannot be overstated. The management of the parties participating in a construction project benefits from knowledge of processes, norms, and legislation. Efficient management is critical in every construction project to guarantee that all work on site is completed on time (Zarabizan Zakaria et al. ,2003).

Every country in the world is in desperate need of road infrastructure since it plays a key role in the relationship between regions and also serves as a stimulant for the local economy. Roads in Malaysia are classified into different categories based on their suitability for the situation, including dirt roads, gravel roads, bitumen paved roads, concrete roads (stiff pavement), and interlocking block pavement roads.

The route surface for dirt roads is natural soil or compacted embankments. This sort of road is often created in the interior, with laterite being the most regularly utilised material. A layer of gravel is laid on the compacted earth to provide a better and stronger surface than the dirt road on the stone/gravel road. Bitumen-paved highways handle more traffic than dirt or gravel roads.

The concrete road (rigid pavement) has a structure almost the same as asphalt concrete but the surface layer uses reinforced concrete. Among the advantages of this pavement compared to elastic pavement is that it is stronger and more durable and also less maintenance even though the construction cost is high while the interlocking block pavement is still not widely used. This type of pavement is often used at intersections, bends and areas where oil spills often occur such as terminals and bus stops.

Throughout Malaysia there are 65,000 km of roads connecting to each state where 75% percent of them are paved. These roads are divided into five categories based on financial sources for construction and maintenance for administrative

purposes and the five categories are Federal Roads, Toll Roads, State Roads, Municipal or District Council Roads and other minor roads.

Federal Roads serve to connect major cities and national gateways (connecting between cities and states). Built and maintained using Federal funds under the Federal PWD. As for the Toll Road, it is built and maintained by the Malaysian Highway Authority (LLM) and it is an alternative to the Federal Road. State Roads are built and maintained to improve domestic connectivity and provide infrastructure roads for areas within a state. Municipal or District Council Roads are constructed within the Municipal or District Council area including roads constructed by housing developers. Finance or construction cost from its own budget is only subsidized by the Federation while other small roads such as village roads are built and maintained by the district office in the state using state funds and they are low standard roads due to low traffic volume.

2.2 HISTORY CONSTRUCTION OF ROADS

The history of road construction began around 2600 BC which is the earliest road built for the silk and ivory trade between China and India which called the Chinese Silk Road. For the earliest brick and asphalt paved roads were found in urban areas in Babylon and roads through mountainous areas in Mesopotamia and in Egypt where the function of the road was to carry stones for the construction of pyramids. While the earliest road construction has a perfect piped surface drainage system is found in India i.e. around the Indus valley.

The most famous street history and a pioneer to the road structure used to date is the Roman Era Road which is 5000km long was built starting from Cadiz on the west coast of Spain through France, Germany, Italy, Turkey, Syria, Africa and back to Tangier form a roundabout where the road uses three road construction structures, namely road construction, namely:

i) First layer - Soil used.

ii) Second layer - Gravel surface.

iii) Third layer – Paved

Each material has a creator and designer, as well as a road where some significant figures in creating and developing modern highways in the eighteenth century, namely:

1. Blind Jack of Knaresborough, John Metcalf (1717). Smallpox rendered him blind at the age of eight. Before becoming a road builder at the age of 40, he worked as a musician, soldier, horse-drawn carriage driver, and horse merchant. Build 290 km of roads in Yorkshire, including all bridges, culverts, retaining walls, and other infrastructure. The need of good drainage and foundation is emphasised (sub-sites).
2. Robert Philips - was a real pioneer in road design. In 1736 he announced in a paper that a layer of gravel placed on a perfectly drained site would be compacted by traffic become a hard road surface.
3. John Macadam (1756) - the first real road engineer. Returned from America in 1783, was inactive until becoming a surveyor in 1816 and a road construction adviser in 1826. Roads were carefully designed with camber formations and using square fine stone as building material resulting in cheaper construction.

2.3 DEFINITION TENDER QUOTATION

A tender is an offer to do a job or supply goods by stating the price or payment required (Dictionary Board Fourth Edition). A tender is an offer to carry out a construction project such as a building, bridge, road, house, and airport. Briefly, tender refers to a two -way process that involves a bid from a client and the acceptance of a contractor to carry out a construction project. Continuing from the statement, contractors who wish to enter the tender must be registered with the Contractor Service Center (PKK) under the relevant heads and sub-heads as well as the Malaysian Construction Industry Development Board (CIDB) in the prescribed grades and categories. Besides, registration must still be within the validity period (Aminah Md Yusof and Rosli Mohamad Zin, 2008).

2.4 TYPE OF TENDER

The kind of tender for a project construction is determined by the customer. The kind of tender in a building project is determined by a variety of elements, including the size of the project, the appropriateness of the time, and the cost. assigned, experience, and so on (Ku Azril Ridzhie, 2005). Tendering procedure open bids, restricted or chosen tenders, negotiated tenders, and tenders' pre-qualifications, each with advantages and disadvantages by itself.

2.4.1 Open Tender

Open Tender is a type of tender that is frequently used in public or private building projects. However, Harban Singh (2002), contends that the popularity of open tenders declined in the 1990s owing to the availability of other forms of tenders that are more successful in choosing contractors to complete a building project within a certain time frame. In addition to attempting to secure the most competitive pricing from the contractor for the work performed on a building project.

Open tenders show healthy competition when the concept of equity is applied to all contractors, including those who are newly registered and have less experience. Open tenders are more competitive in this setting. However, the cost or price that the contractor may give is used to evaluate open tenders. Clients often note that low-cost or low-priced products do not guarantee good performance without sacrificing the quality of work and building materials (Clough and Sears, 1994).

2.4.2 Restricted or Selected Tenders

Restricted or Selected Tenders are tenders that are only available to contractors that have been pre-selected by the customer. Tenders are often limited to or selected by just five to eight contractors. Contractors are found and then chosen based on their building project abilities and expertise. Even in tiny numbers, competition in restricted or chosen tenders persists. According to Mohamed (2002), a construction project may be generated and completed effectively if only potential and competent contractors enter restricted tenders or are selected.

2.4.3 Negotiation Tenders

Tenders of negotiation require the customer to invite a specific contractor to plan the costs of a building project. Clients are given a thorough briefing on the design, building materials, and technology that are employed to contribute to the profitability of a construction project. In a nutshell, it entails direct talks between the client and the contractor. In reality, tender negotiation is only used when a building project must be completed quickly (Mohd Zulfikri, 2010).

2.5 TENDER DOCUMENT

The tender document is a copy of the client's bid when it intends to carry out the project. Contractors interested in participating in the project must fill out and return the tender documents within the time frame specified. The price change condition is one of the papers that must be included in the tender document during the tender document creation process. After the customer has received the contractor who has successfully submitted the tender, this tender paper will also become one of the contract documents.

In Malaysia, it is normal practise for the client to offer a project to a group of contractors, with each contractor competing to submit the best tender, and it is up to the customer to choose a competent contractor. When a contractor's tender is approved by the client, a contract is formed between the contractors chosen by the client.

Tendering is the primary technique used by the customer to find a competent contractor. Contractors are often chosen through a competition that incorporates comparisons of several factors such as pricing and construction duration. This, along with the contractor's reputation and expertise, is one of the most important considerations to consider when hiring a contractor.

2.6 PREPARATION OF TENDER DOCUMENTS

To prepare the tender document, the following items need to be included in the document to facilitate the contractor to view, check the requirements, examine and then to fill it:

1. **Offer Form**

   To prepare the tender document, the following items need to be included in the document to facilitate the contractor to view, check the requirements, examine and then to fill it.

2. **Offer acceptance form**

The offer acceptance form is filled by the client to be submitted to the contractor. This tender acceptance form is intended to inform the contractor that the offer submitted to the client has been accepted. It does not mean that the contractor has been selected but only to inform the contractor that the offer made by the contractor has been accepted by the client for evaluation or review.

3. **Specification of work standards.**

The specification of work standards is a document describing the requirements of the client. It contains a description of the work to be done, the quality of building materials to be used, the method of carrying out the work and the level of quality of work that must be complied with by the contractor during construction.

4. **List of quantities**

List of quantities of materials and work required to complete the project. The list of quantities can facilitate the work of the contractor to calculate the estimated cost of labor wages and the total cost of materials to be used. With this list of quantities, the contractor can also plan the method of work performed.

5. **Drawing work**

Working drawings describe in detail how a project is built and produced. Work drawings can help and facilitate the contractor to calculate the estimated cost of labor wages and the total cost of materials. In addition, the contractor can plan the method of work that will be done to complete the project according to the set time.

6. Price rate schedule

The price table is a list of prices for each work performed by the contractor. It can help and facilitate the contractor to calculate the estimated cost of project work.

7. Letter of acceptance

A letter of acceptance needs to be filled in by the contractor to be submitted to the client. It serves as a sign that the contract has been accepted and agreed to by the contractor.

2.7 PROVISION OF WORK SPECIFICATIONS

Tender specifications are requested from certain Ministries and Departments. A Technical Committee must be formed for this purpose. The specifications must be detailed in order to provide the tenderer with a clear image of what is required or wanted. The specification must be based on function and performance, and conformity with international or equivalent standards may be included.

When a tender or quotation is requested, the determination should be explicit so that the tenderer understands the client's needs. For example, if the PWD wishes to acquire equipment or machinery for which a full determination cannot be made, further data must be supplied to the contractor in order for the contractor to participate in the bidding on a fair basis. For example, if a piece of equipment is required, the minimum capacity of the equipment must be specified, and it is the contractor's responsibility to provide specifics about the equipment they supply, as well as the price.

Tenders may not be determined using trade names or brand names. Specifications pointing to a certain brand or country are absolutely banned. If this is unavoidable, the term or equivalent must be put on the tender document after the trade name or brand name. If the specification refers to a certain brand, the tenderer has 14 days from the day the tender is announced to object. In summary, the exact criteria must be given properly to guarantee that the tenderer receives an accurate image of what the customer desires in a tender.

CHAPTER 3 : THE PROJECT/ CASE STUDY

3.1 INTRODUCTION

A road is a main road that connects one area with another. In general, road construction is divided into 4, namely federal roads, state roads, municipal roads and other roads including village roads and estate roads.

Essentially, road construction is a process whereby the opening of traffic-lanes overcomes various geographical barriers. This process involves the removal of land, the construction of bridges and tunnels, and even the removal of vegetation such as deforestation. The Earth's surface should be tested to see if it is able to withstand the weight of the vehicle. Next, if necessary, the soft soil will be replaced with a harder soil. This layer of soil will be considered as the foundation layer. Next, on top of this foundation layer will be coated with another layer called the face layer. Usually, the face layer is made of tar or concrete.

To ensure the smooth construction of the road, the work that needs to be done at the construction site involves survey work, earthworks, pavement work, bridge work and finishing work. This is important because this work can know the correct pavement spec as well as the correct road reserve with the survey work done.

3.2 BACKGROUND OF JALAN ASMA KAMPUNG KUALA BALAH

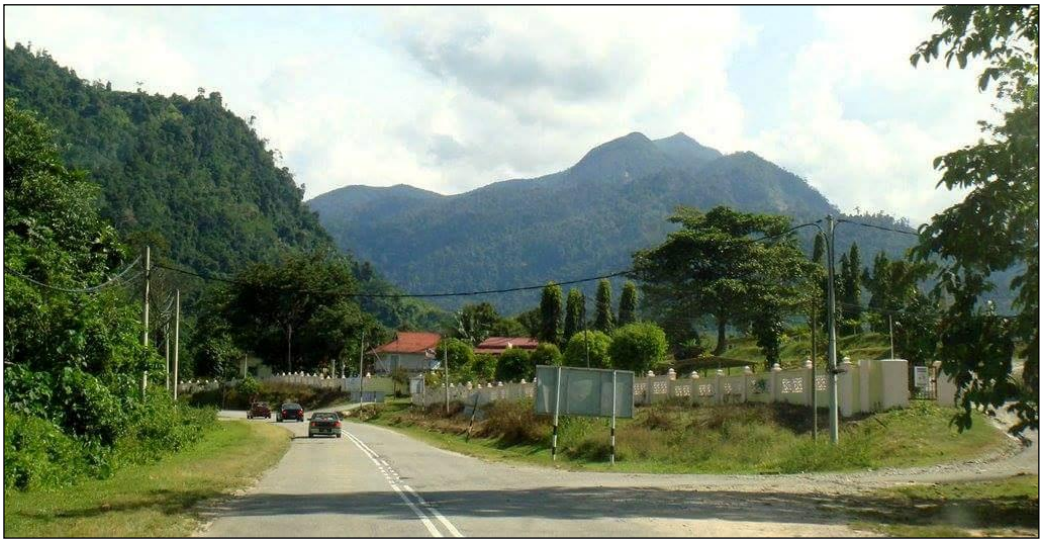


Figure 3.1: Jeli-Dabong Highway in Mukim Kuala Balah

Kuala Balah is a town in the district of Jeli in the state of Kelantan. Its name is derived from its position, which lies at the confluence of two rivers, Sungai Pergau and Sungai Balah. The name Kuala Balah was derived from the name of the river, Sungai Balah.

The overall population of the Kuala Balah district is projected to be 13,700 people. Malays make up the vast majority. In general, inhabitants in the Kuala Balah district dwell in dense settlements along Malaysia's Federal Route 66 and the river. The government is continually upgrading numerous infrastructures in Balah to meet the current demands of the community. Overall, the town's physical condition is excellent, with excellent road infrastructure, enhanced energy and water supply, fixed line and cellular telephone coverage, and internet access. becoming better.

The town of Kuala Balah, apart from the Jeli Town Center, is an important destination for those living in the Kuala Balah district. This town is the focus of residents from 6 mukims located in the small district of Kuala Balah. Mukim Lubok Bongor, Mukim Kubor Datu, Mukim Bukit Selar, Mukim Bukit Jering, Mukim Jerimbong, and Mukim Kuala Balah are among the six.

Jalan Asma, Kampung Kuala Balah is in the district of Kuala Balah. Mukim Kuala Balah consists of one of the agricultural centers such as oil palm, rubber and durian orchards. Jalan Asma is very important for farmers in Kampung Kuala Balah because this road is an alternative road for farmers to get in and out. Therefore, the farmers applied from the Pejabat Tanah dan Jajahan Jeli to build this new road. It further facilitates agricultural activities for the peasant farmers.

Jalan Asma was given by the mukim head of Kampung Kuala Balah in conjunction with the names of the residents who have lived in this mukim for a long time. However, the owner of the name has passed away but would like to give recognition to Puan Asma bin Goni for her many services to the villagers with community activities given in the past.

3.3 KEY PLAN, LOCATION PLAN AND SITE PLAN

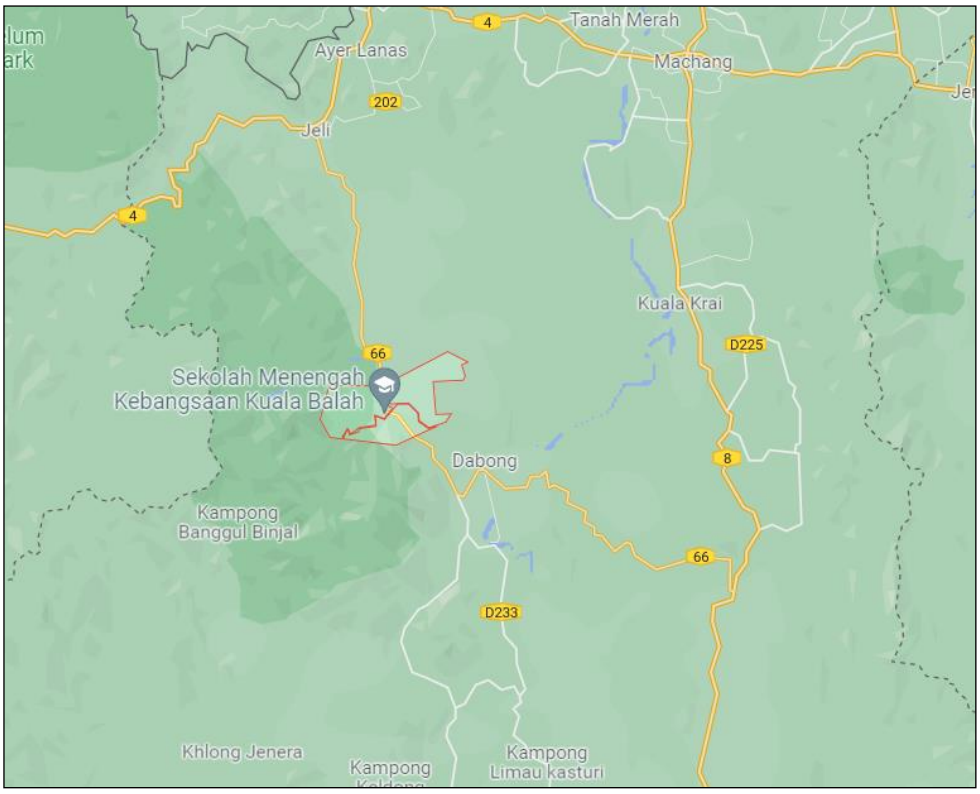


Figure 3.2: Key Plan Kuala Balah

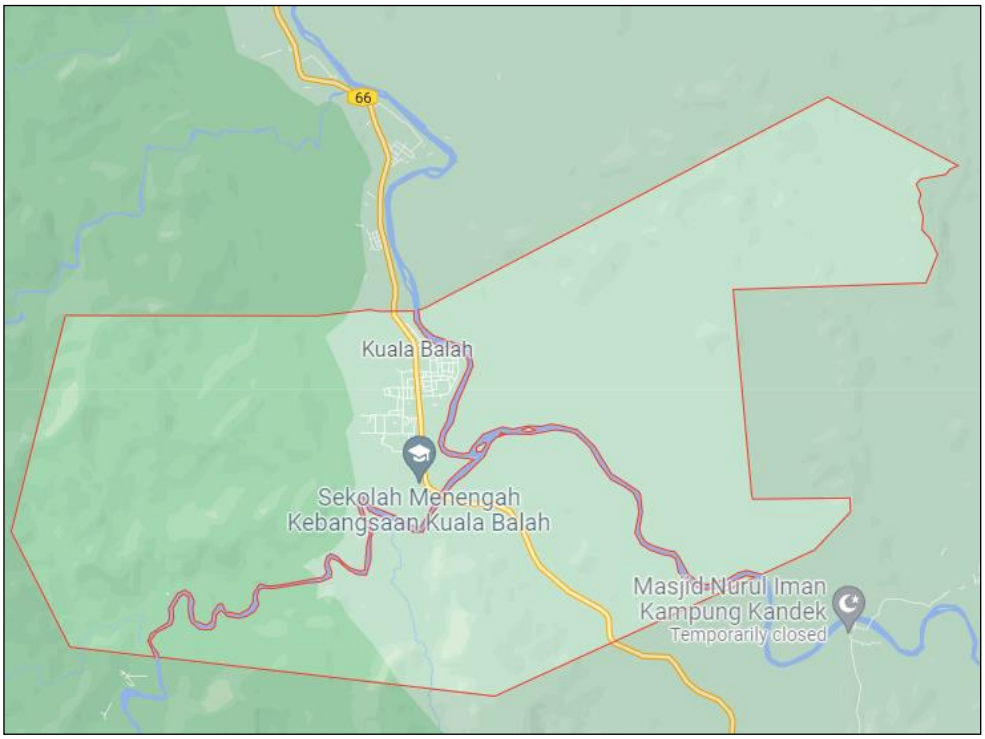


Figure 3.3: Location Plan Jalan Asma, Kuala Balah

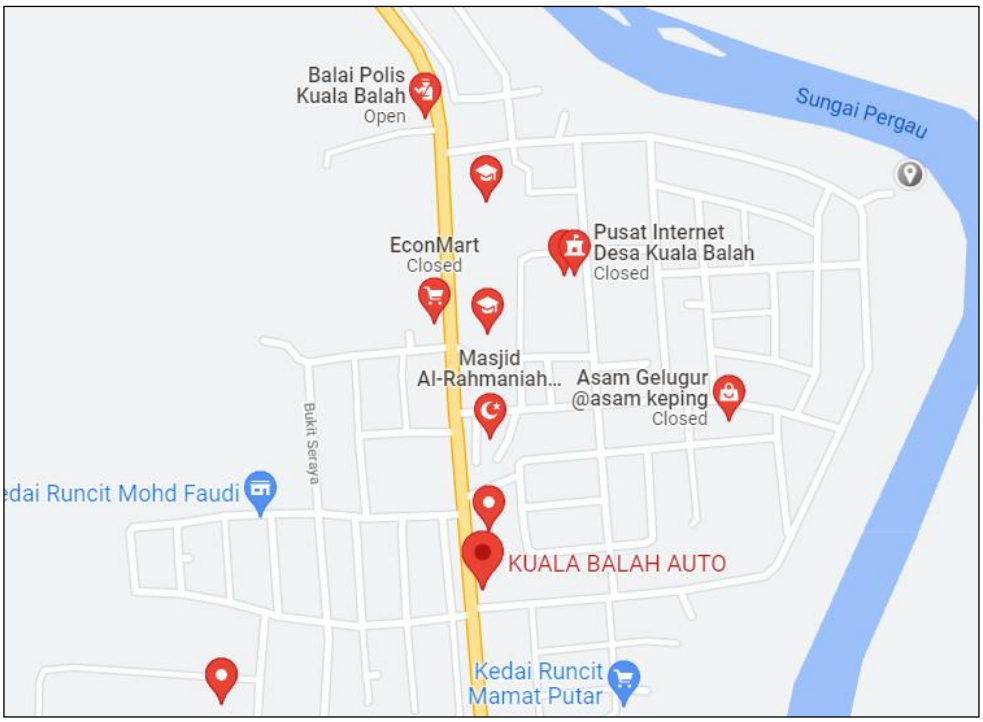


Figure 3.4: Site Plan Jalan Asma, Kuala Balah

Kuala Balah town is in the Kuala Balah district, which is one of the smaller districts of the Jeli district. This town is around 32 kilometres from Jeli Town, the district's primary town centre. It's also 20 kilometres from Kuala Krai Dabong town, 145 kilometres from Kota Bharu City Center, 100 kilometres from Kuala Krai City Center through Jalan Jeli-Dabong-Sungai Sam-Kuala Krai, and 85 kilometres from Gua Musang City Center via Jalan Jeli-Jelawang-Gua Musang.

It is a town in the centre of Malaysia Federal Route 66, which links Bandar Jeli and Dabong in the Kuala Krai district of Kelantan. Jalan Persekutuan 66 connects the Jeli-Gua Musang route, which is an alternate route from Gua Musang to Kota Bharu to the Kuala Krai-Gua Musang Highway (Federal Route Malaysia). Because this town is frequently a stopover for travellers of Federal Route Malaysia 66, a Treatment and Rest facility in the Kuala Balah Town area has been built for the benefit of road users.

3.4 PROCESS OF PREPARING TENDER QUOTATION DOCUMENT

3.4.1 Site Investigation

Site investigations are activities that involve the exploration of the area/site, to test the materials found (on site or brought to the laboratory) and analyze the results and data collected and assess the proposed construction site. It is a detailed and thorough investigation required at an early stage in design work and construction work for civil engineering projects. Site investigations usually depend on the overall size and type of structure in a project. Even in certain circumstances even small civil engineering works require a site investigation.

A site investigation should be conducted to obtain site information before road paving work is carried out. Therefore, to obtain information the engineer in charge should be responsible for obtaining information by conducting a site visit before construction is carried out. The required site information is such as road length, road width, construction method and purpose for which the road was built. The site investigation must include the following:

1. **Soil Investigation**

   Soil investigation for road construction is an important aspect of a civil engineering construction project. It is a precautionary measure in a project that will be carried out, this is to prevent the occurrence of the ground settles inwards, landslides and other possible events. Soil investigation is to obtain information on the condition of the soil and to enable an adequate design to be prepared as well as to identify any difficulties that will arise during construction and how to solve it. For the safety of road users and their occupants, detailed research must be conducted to clearly know the important properties of land occurrences.

Figure 3.5: Soil Investigation at Jalan Asma, Kuala Balah

2. Preliminary investigation

Preliminary investigations were conducted either in the study schedule to gather detailed information related to road construction. For example, investigations related to the status of road reserve land for road construction, and even preliminary investigations were also conducted to ascertain whether the land to be used as a road is on individual lot land. If such a situation occurs usually the engineer will minimize the possibility of building the road on someone else's land lot and change the location of the road construction in the road reserve only. If necessary, the land acquisition process must also be done. If the alignment of the road to be built is affected on individual lots or land, the engineer will make a ROW process which is the process of land acquisition to make the road. The Jeli Land & District Office will choose not to make land acquisition to avoid the state government paying compensation and taking the road to find land that is already classified as a road reserve. Therefore, preliminary investigation is very important to obtain as much information as possible to avoid such issues.

Figure 3.6: Preliminary Investigation Jalan Asma, Kuala Balah

3. Detailed Site Investigation

Engineer will conduct a site visit to make a detailed site investigation by taking soil samples for testing and will see for themselves the condition of the proposed road site. Even engineers can identify suitable road construction methods to be built. Land surveyors are also required to see the boundary alignment of the road reserve to be constructed. Road surveying and alignment work usually involves measuring and calculating horizontal and vertical angles, horizontal distances and elevations. The data obtained is then used to produce a base map, contour map, cross keratin and any drawings required. The width and length of the road can be determined through a site visit.

3.4.2 Determine Construction Method

The method of road paving construction should be carefully determined. The method of road construction must consider the topographic conditions because the topography of an area will affect the capacity of a road, the suitability of the purpose of road construction and the cost that will be involved. For the purpose a new road, it was brought by the state government for the use of the villagers to go in and out of their gardens to carry out gardening activities. Therefore, the construction method must include suitability for use. Previously, Jalan Asma, Kuala Balah was opened but has not been paved. This makes it difficult for the villagers to manage the work to produce their garden produce to the main road to earn their income.

For the construction of a paved road in Jalan Asma, Kuala Balah, it is suitable to build a paved road using concrete because of the hilly area. The layer before the concrete paved road on the village road uses 100mm thick mortar and 100mm grade 30 concrete (readymix) with a road length of 100m and a road width of 2.8m. BRC A6 also provide at the concrete. That example concrete road.

Figure 3.7: Example for Concrete Road

3.4.3 Prepare paperwork (Bil of Quantity and Specification)

Engineers will prepare working papers for new road applications including bill of quantity (BQ) also detail work specifications and construction costs. A quantity bill (sometimes referred to as a ‘BoQ’ or ‘BQ’) is a document prepared by a cost consultant (usually a materials surveyor) that provides project -specific measurable quantities for work items identified by specifications in tender documentation. For projects under the Pejabat Tanah dan Jajahan Jeli, BQ is made by engineers. Therefore, each project under the supervision of an engineer will be responsible for ensuring that each work specification and construction cost is guided by the 'Civil and Building Engineering Work Rate Schedule 2021'.

The tenderer is given a bill of quantity to provide a price for the work. The quantity bill assists tenderers in calculating the construction cost for their tender, and because all tender contractors will set the same quantity price (rather than extracting the quantity from the drawings and specifications themselves), it also provides a fair price and an accurate tender system. Below is an example of the bill of quantity and work specifications calculated for the Jalan Asma construction project, Kuala Balah:

SPESIFIKASI HARGA PEMBINAAN JALAN-JALAN KAMPUNG

PEJABAT TANAH DAN JAJAHAN JELI

NAMA PROJEK: KERJA-KERJA PEMBINAAN JALAN ASMA, KAMPUNG KUALA BALAH, DAERAH KUALA BALAH, DUN KUALA BALAH, JAJAHAN JELI, KELANTAN.

BIL	PERKARA	SRT*	PANJANG (Meter)	LEBAR (Meter)	JUMLAH	UNIT	HARGA SEUNIT	JUMLAH HARGA
1	KERJA-KERJA PERMULAAN							
1	Kerja-kerja pemeriksaan tapak, penyediaan laporan awalan dan penyediaan pengurusan trafik termasuk keperluan keselamatan serta papan tanda lalulintas sementara.				1	L/S	RM300.00	RM300.00
2	Insuran kerja dan tanggungan awam (*CAR*).				1	L/S	RM500.00	RM500.00
3	Papan tanda projek dua mukaan mengikut spesifikasi yang ditetapkan oleh jabatan.				1	L/S	RM450.00	RM450.00
4	Membekal gambar kemajuan projek dalam bentuk *'hardcopy'' dan 'softcopy'*.				1	L/S	RM50.00	RM50.00
5	Kerja-kerja permulaan membina dan membentuk asas jalan serta pembersihan tapak sebelum dan setelah siap kerja, daripada pokok-pokok, belukar, tunggul kayu, dan akar dicabut dan dibuang di tempat buangan yang disediakan oleh kontraktor (Dibenarkan RM500 - RM1,000.00 bergantung kepada jarak jalan).				1	L/S	RM502.00	RM502.00
							JUMLAH	RM1,802.00
2	KERJA-KERJA JALAN	SRT*	PANJANG (Meter)	LEBAR (Meter)	JUMLAH	UNIT	HARGA SEUNIT	JUMLAH HARGA
1	Kerja-kerja membina dan membentuk asas jalan termasuk kerja penggalian, membuang bahan yang tidak sesuai, membentuk curam kember (cembers) dan tambak (embankment), penambunan dengan tanah yang sesuai, menghampar, meratakan, dan memampatkan bagi mendapatkan aras seperti yang dikehendaki serta kerja-kerja yang berkaitan.	SRT 3	100.00	2.80		L/S	RM628.00	RM628.00
2	100mm tebal batu baur hancur atau bahan dasar jalan lain setara yang diluluskan, ditambun dan dimampatkan dengan mesin penggelek 8tan ditempat-tempat yang ditentukan.	SRT 2	100.00	2.80	280.00	M²	RM12.00	RM3,360.00
3	Kerja-kerja pembinaan JALAN KONKRIT GRED 30 (ready mix) dengan ketebalan 100mm termasuk penyediaan BRC A6 dan papan acuan serta UJIAN KIUB.	SRT 1	100.00	2.80	280.00	M²	RM62.00	RM17,360.00
4	Ujian Ketebalan BATU BAUR (Coring Test) bagi setiap keluasan **300M²** untuk 1 lubang.	SRT 2			1	Nos	RM50.00	RM50.00
5	Ujian Ketebalan KONKRIT (*Coring Test*) bagi setiap keluasan **300M²** untuk 1 lubang.	SRT 1			1	Nos	RM200.00	RM200.00
							JUMLAH	RM21,598.00
							JUMLAH KESELURUHAN	RM23,400.00

Figure 3.8: Bill of Quantity (BQ) for Jalan Asma, Kuala Balah

3.4.3.1 Work Specification

Work specifications are very important to determine the items required in the construction of concrete roads in Jalan Asma, Kuala Balah. Work specifications include preliminary work and road construction work. Below are the required work specifications:

Preliminary Work

1. Site inspection works, preparation of preliminary reports and preparation of traffic management including safety requirements as well as temporary traffic signage.
2. Employment and public liability insurance (CAR).
3. Two -sided project signage according to the specifications set by the department.
4. Provide pictures of project progress in the form of 'hardcopy' and 'softcopy'.
5. Preliminary works to build and form the foundation of the road as well as site clearing before and after completion of work, from trees, bushes, tree stumps, and roots uprooted and disposed of at the landfill provided by the contractor (Allowed RM500-RM1,000.00 depending to road distance).

Road Works

1. Road foundation construction and forming works including excavation work, removal of unsuitable materials, forming cembers and embankments, excavation with suitable soil, laying, leveling, and compressing to obtain the required level as well as related works.
2. 100mm thick crushed mortar or other equivalent road foundation material approved, piled and compressed with an 8tan rolling machine at designated places.
3. Grade 30 concrete road construction works (readymix) with a thickness of 100mm including preparation of brc a6 and mold board as well as cube test.
4. Coring test for each 300m² area for 1 hole.
5. Concrete thickness test (coring test) for each area of 300m² for 1 hole.

3.4.4 Submit the Paperwork to State Development Office

Working papers must be submitted to the State Development Office to apply for allocation for the construction of a new concrete road, namely Jalan Asma, Kuala Balah. The State Development Office will receive development papers submitted before construction is carried out. Work specifications are the main thing that needs to be examined as it relates to the items required in the Jalan Asma, Kuala Balah construction project. The attached item must use a solid item as a concrete path.

After reviewing the working paper, bill the quantity and work specifications. The State Development Office will respond by submitting a letter approving the allocation requested according to the quantity bill made. Next, can proceed with the preparation of tender documents.

3.4.5 Tender Advertisement

After obtaining the approval of the allocation from the State Development Office. Tender advertisement can be made by making a tender statement. The tender statement can be found on the Portal website of the Jeli Pejabat Tanah dan Jajahan Jeli and also on the Pejabat Tanah dan Jajahan Jeli Facebook page. Each tender for the project has a reference file, for the reference file for the construction project of Jalan Asma, Kuala Balah is PJJ (P): 469/JLD.3 (12). Therefore, each contractor must carefully identify the no. which reference is used for this project.

The tender statement is usually for the Pejabat Tanah dan Jajahan Jeli to open for 7 days, which is a week. After that period. This statement is closed and the contractor needs to send the tender documents that are downloaded through the website and facebook page before the tender is closed.

Figure 3.9: Portal website of the Jeli Pejabat Tanah dan Jajahan Jeli

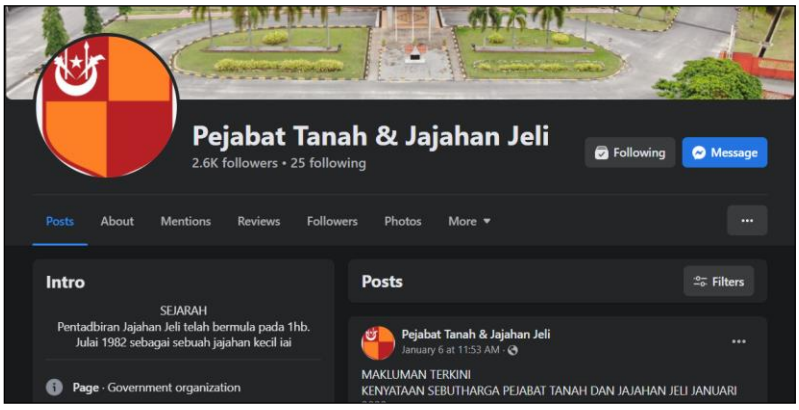


Figure 3.10: Facebook page of Pejabat Tanah dan Jajahan Jeli

3.4.6 Contractor Submits Quotation Form

The contractor will send the completed tender documents. Tender documents must be submitted according to the set date that has been notified in the tender advertisement. Each document submitted must be complete and the contractor must clearly understand the instructions to the quoter as well as the general conditions. A summary of quotation as well as a bil of quantities (BQ) should be made according to the items required according to the specifications of the work in this project.

For the Jalan Asma construction project, Kuala Balah was listed when the contractor downloaded it on the portal website and social media of the Pejabat Tanah dan Jajahan Jeli. Current work experience and list are very important and need to be filled in clearly to facilitate the assessment. While the bank statement for a period of 3 months must also be included in the quotation document sent. This is to facilitate the engineer to assess the bank statement to see the ability of a company that is a contractor to carry out this project if selected during the Quotation Committee is made.

3.4.7 Evaluation of Quotation Form

After the contractor submits the completed tender documents, an evaluation will be done for boring quotations. The assessment is made according to the documents that have been sent in the box provided at the Pejabat Tanah & Jajahan Jeli.

This evaluation is made by the Quotation Committee consisting of the District Officer, Deputy District Officer, Assistant Head District Officer (Development), District Engineer JKR and Assistant Senior Engineer JPS. The basis of evaluation is as follows:

a. The quoter meets all the conditions stated in the quotation document.
b. Ability/capability of the quoter such as past work experience, current work/contract performance, projects being implemented/in hand.
c. Price analysis considering the completion/delivery period.
d. Financial capability must be assessed for quotations valued at more than RM200,000 to RM500,000 in terms of capital.

A minimum of at least 1.5% of the Department's estimated price. The minimum capital shall be in the form of liquid assets which is a mixture of the average positive value of the month -end balance in the bank's monthly statement for the last three (3) months including fixed deposits, balance of credit facility value and value of additional credit facilities eligible/to be obtained by the quoter from the bank or financial institutions.

Next, the Quotation Committee will select after the evaluation is made. The construction project of Jalan Asma, Kuala Balah will be made according to the period that has been agreed in the Quotation Committee according to the period set by the contractor in the document sent by the contractor.

CHAPTER 4: PROBLEM IDENTIFY

4.1 DETERMINING TENDER PERIOD

For each project, the tender period taken to complete the project is very important. In the quotation form, the contractor must state the tender period for a construction project according to the estimated time and in accordance with the cost of the project.

Usually, the contractor does not evaluate carefully to determine the tender period made in a project. Therefore, when the contractor does not make a good decision will affect the completion time of the project. In fact, it will affect the cost and quality of the project. not only that, but the problem also that is always encountered in setting the tender period is due to the client having the specifications for which the project needs to be completed at an immediate rate. although a project requires a longer period to price the work or goods in the tender document at a reasonable price, the tender period becomes shorter due to instructions from the client.

Furthermore, contrary to some tenderers who feel that the tender period given is unreasonable and in line with the documents that need to be completed as well as the overlap of the tender period where at the same time there are other projects that need to be completed. The party that manages the tender needs to arrange according to the importance of the project so that the tender period set can be used well for the preparation of tender documents.

Some also informed that problems from suppliers to provide feedback on the price of goods take time. The stipulated tender period is not sufficient to fill the price of the tender document depending on the feedback.

These problems will result in the contractor not being able to set a suitable tender period for the project to be made. Therefore, the failure of a project to complete the project within the stipulated time period as a result of such problems has a huge impact when the failure to set the correct tender period.

4.2 INACCURATE COSTINGS

Construction costs are very important that need to be provided by the tenderer for a construction project of buildings, roads, drainage and others. If the cost provided by the tenderer in the tender document is incorrect it will be a problem to the tenderer if the project is won by the tenderer.

The problem that arises if the tenderer does not fill the correct cost is that the tenderer does not refer to the Civil Engineering and Building Work Rate Schedule Book provided by the Public Works Department (JKR) in making the costing. It is also a problem because the tenderer makes the bill of quantity (BQ) for the specification of the work according to his own assumptions and does not make according to the current price of goods. It may also be that the tenderer has already referred to the civil and building engineering work rate schedule book but is referring to a series that was previously not a series for that year. Therefore, it is inaccurate costing made because of past references not in the current year.

In addition, the most important factors include insufficient time to make estimates due to the non -short tender document submission period. Not providing adequate estimation time will cause the estimator to miss a critical cost component. This will affect the tenderer to get feedback from suppliers regarding the price of goods in a certain period. The tenderer must ensure the price rate of the goods first before filling the bill of quantity (BQ) so that the price of the goods required is in line with the current rate of goods. For example, details of site drawings and specifications can be easily overlooked, which can lead to errors in estimating. Poor tender documentation is one of the main factors responsible for the inaccuracy of cost estimates.

CHAPTER 5 : RECOMMENDATION AND CONCLUSION

5.1 RECOMMENDATION

5.1.1 Decision Method in Determining Tender Period

Although deciding may appear to be simple, to ensure that the decision is the right one, it must be done intelligently. The decision must be founded on facts, arguments, and sound reasoning. As a result, systematic evaluation is important in the decision-making process. According to Miguel A. Guerro et al. (2013), the success of a building project is determined by time, cost, and quality.

Furthermore, the decision method for defining the time might also be based on previous project experience. Projects with comparable requirements are considered as a guide to determine the tender timeframe. Based on previous experience, decisions may be made intelligently and rapidly in response to the requirements of a building project.

After that, the contractor must explain that the decision was reached because of a shared decision in the meeting. This refers to the conversations that take place throughout the meeting to reach a clear agreement in terms of preferences, interests, and requirements. In cooperation with such an approach, can lessen the likelihood of difficulties arising after the meeting.

The tender type used in a construction project also determines the process used to set the tender time. Ku Azril Ridzhie (2005) also claims that the kind of open tender, for example, necessitates a lengthy procedure, beginning with the production of paperwork and ending with the evaluation and selection of qualified contractors, which is a waste of money and time.

The decision to determine the tender period is made using a variety of ways based on the demands of a construction project. The party in charge of the tender must be sensible in making a choice, particularly in determining the tender time so that there are no complications that might cause the duration of a construction project to be extended.

5.1.2 Make A Reference to The Price of Construction Materials

Construction materials are an important part of a construction project. To ensure each construction material for a construction project before the work and tender obtained. Providing the right construction cost becomes one of the priorities so that the construction project made achieves the goal fully and according to the right budget.

To determine the correct construction cost, the list of items and specifications must be clearly understood in a construction. For example, if you want to make a bridge, you must know what construction materials are needed. After that, the construction item must make a reference regarding the cost of the material. To make a reference, it must be guided by the supplier who sells the material to know the correct price rate if you need the material with the required quantity and specifications. It is also important to get the right and competitive price from the supplier to be included in the offer price. This means that the scope of work requested from the supplier must be clearly known to avoid unnecessary or inaccurate costs.

Not only that, the Public Works Department (JKR) also issued a book on the Schedule of Civil Engineering and Building Work Rates to be used as a guide for tenderers. Therefore, when the tenderer wants to make a bill of quantity (BQ) to determine the cost of a construction project, the tenderer can refer to the book to find out the correct price rate from JKR and be able to ensure the correct item specification. Thus, the tenderer can make the BQ accurately because all the price rates are in the book. In fact, the tenderer needs to ensure that the book is released for the current year's session. Thus, the tenderer can save time as all the references to make the construction cost well are available in one manuscript only.

Determining the correct construction cost is very important in the tender documents submitted because each tender document submitted will be evaluated to ensure whether the price rate is appropriate for the project made.

5.2 CONCLUSION

In conclusion, roads in Malaysia are classified into different categories based on their suitability for the situation, including dirt roads, gravel roads, concrete roads (stiff pavement), and interlocking block pavement roads. Throughout Malaysia there are 65,000 km of roads connecting to each state where 75% percent of them are paved. These roads are divided into five categories based on financial sources for construction and maintenance. Federal Roads, Toll Roads, State Roads, Municipal or District Council Roads and other minor roads are built and maintained.

A tender is an offer to carry out a construction project such as a building, bridge, road, house, and airport. Briefly, tender refers to a two-way process that involves a bid from a client and the acceptance of a contractor. Contractors who wish to enter the tender must be registered with the Contractor Service Center (PKK).The tender document is a copy of the client's bid when it intends to carry out the project. Contractors interested in participating in the project must fill out and return the tender documents within the time frame specified. The price change condition is one of the papers that must be included in the tender document.

Site investigations are required at an early stage in design work and construction work for civil engineering projects. They involve the exploration of the area/site, to test the materials found (on site or brought to the laboratory) and analyze the results and data collected and assess the proposed construction site.Preliminary investigations were conducted either in the study schedule or to gather detailed information related to road construction. If necessary, the land acquisition process must also be done. The Jeli Land & District Office will choose not to make land acquisition to avoid the state government paying compensation. Land surveyors are required to see the boundary alignment of the road reserve. Road surveying and alignment work usually involves measuring and calculating angles. The data obtained is then used to produce a base map, contour map, cross keratin and any drawings needed for the project.

The method of road paving construction should be carefully determined. The topography of an area will affect the capacity and suitability of the road for use. Jalan Asma, Kuala Balah was opened but has not been paved. This makes it difficult for villagers to produce their garden produce to the main road. For projects under the Pejabat Tanah dan Jajahan Jeli, bill of quantity (BQ) is made by engineers. BQ provides project-specific quantities for work items identified by specifications in tender

documentation. The quantity bill assists tenderers in calculating the construction cost for their tender. Work specifications are very important to determine the items required in the construction of concrete roads in Jalan Asma, Kuala Balah. Work specifications include preliminary work and road construction work. Grade 30 concrete road construction works (readymix) with a thickness of 100mm including preparation of BRC A6 and mold board as well as cube test. Working papers must be submitted to apply for allocation for the construction of a new concrete road, namely Jalan Asma, Kuala Balah. The State Development Office will receive development papers submitted before construction is carried out. Work specifications are the main thing that need to be examined as it relates to the items required. Tender advertisement can be made by making a tender statement. Each tender for the project has a reference file, for the reference file for the construction project.

For each project, the tender period taken to complete the project is very important. The party that manages the tender needs to arrange according to the importance of the project. Failure of a project to be completed on time has a huge impact when the failure to set the correct tender period. The success of a building project is determined by time, cost, and quality. The tender type used in a construction project determines the process used to set the tender time. The party in charge of the tender must be sensible in making a choice, particularly in determining the tender period.

Construction costs are very important that need to be provided by the tenderer for a construction project. Poor tender documentation is one of the main factors responsible for cost estimates. Not providing adequate estimation time will cause the estimator to miss critical cost component. The tenderer must ensure the price rate of the goods is in line with the current rate of goods. Determining the correct construction cost is very important in the tender documents submitted. The scope of work requested from the supplier must be clearly known to avoid unnecessary or inaccurate costs. Public Works Department (JKR) is used a book on Civil Engineering and Building Work Rates to be used as a guide for tenderers.

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APPENDICES

Development Unit Pejabat Tanah dan Jajahan Jeli

Site Visit to Inspect the Condition Road

Measure the distance for New Road

Site visit to make new road

Night Futsal with Pejabat Tanah dan Jajahan Jeli staff