

**B.Sc Civil
Engineering**

CONTRACT



Project & Contract Management CE 206

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Lecture # 4 & 5

Contract



Some Important Terms Related To Tender

- **Bid Opening**: stands for the opening and tabulation of bid at the prescribed time and place.
- **Addenda**: Any change to the tender document after they are released for tendering actually requires issuance of addenda. This formal document changes original tender or bid document and becomes the part of original tender package.

Addenda may not be issued within about five days of tender opening unless tender approval is also extended accordingly.

- **Owner/Employer**: “Owner means the person and legal successor entitled to such a person, e.g. engineer”. Engineer is only representative to contractor or sub contractor.

Some Important Terms Related To Tender

- **Letter of Acceptance:** means the formal acceptance by the employer of the tender.
- **Commencement Date:** means date upon which contractor receive the notice to commence the project.
- **Notice To Proceed:** It is a document that establishes the contractor's right to have access to the owner's property. It is issued after the contract between the owner and general contractor is executed. It establishes the official start date of the contract and also the completion date of the project.

Local Contracts

- If the parties of the project (including client) are the local companies of the country , then the conditions of contract are always based on local contract which is more applicable to the local construction industry practices. The currency of exchange and contract in local contract is always PKR

International Contract

- If an international company is among any party of the project and present either in the capacity of design, construction or supervision, the contract of the client with that party will be “FIDIC” contract. The currency of exchange and contract in FIDIC contract is normally US Dollars.
- In FIDIC contract, any arbitration or litigation is covered at neutral country or neutral court. All the Pakistani companies who are working abroad in various projects are also observing the FIDIC contract.

Major types of Contract in Civil Engineering are :

- Item-Rate Contract.
- Non-scheduled Rate contract.
- Scheduled Rate Contract.
- Lumpsum Contract.
- BOQ Contract
- Cost plus percentage contract
- Cost plus fixed fee contract
- Built Operate and Transfer Contract (BOT)
- Turn key contract
- Design built contract
- Labor contract
- Material Contract
- Machinery contract
- Serial Contract

Detail of each type will be discussed in class and definitions will be dictated

Major conditions of contract include

- Mobilization advance
- Performance bond
- Defect liability period
- Escalation (Price Changes)
- Completion Time of Project
- Project start and finish dates
- Bills and invoices
- Liquidated Damages
- Unforeseen Circumstances
- Retention Money
- Program of work
- Secured Advance

Detail of each
point Included in
course

Contract Administration

- Preconstruction conferences
- Subcontracts
- Submittals
- Pay estimates
- Change orders
- Claims
- Liquidated Damages
- Dispute Resolution

Preconstruction Conference

- Nearly all construction projects being with a preconstruction meeting or conference. It is formally a meeting with an agenda distributed by the owner before the meeting. Minutes of the meeting published by the owner are distributed to all attendees who are : owner's representative, designer, general contractor and authorities. Agenda includes
 - Review policies(hour restriction), critical dates, critical activities and pros and cons of the project)
 - Technical details of the project.
- Safety and environmental protection

Subcontractors:

- It is a construction firm that performs work in a specific area such as electrical or mechanical installation and construction. They do not have the contractual relationship with the owner but they have a functional relationship. The general contractor remains responsible for subcontractors performance. If approval of subcontractor is required by the owner, then an approval must be obtained after a sub-contract is signed.

Submittals:

- They contain information concerning product to be incorporated in construction project. The owner or designer must approve the submittals before products are ordered or purchased to be used on construction site. Submittal consists of technical data sheet, brochures, supplier's details, catalogues.

Pay Estimates:

- Contractors are normally paid monthly, however, it is necessary to go through the contract properly before its implementation. One of the most important aspects of any owner's reputation with the contractor is the time required to process a payment after submission of monthly bills. The actual process of submitting monthly pay estimate involves estimating the percentage of completion of each activity

Change orders:

- These are part of every construction project because each project is a unique object and may have changes in design or process of construction.
- *Change orders do not change the scope of the work. For changes that are outside the scope of the work, a supplement agreement is to be made between the contractor and owner which are different from change orders.*
- The change orders change the detail or conditions of work and are used to add or delete extra work.
- Change orders must be writing and must be issued properly by an issuing authority .
- The contract does not allow contractors to refuse the change orders, but it does entitle the contractor to additional time and compensation for work as additional work. Change order work is more expensive than original contract work.

Claims:

- Claims are a direct result of change orders that cannot be resolved or agreed by the owner.
- Often, claims result from a disagreement on the meaning of terms of contract. Claims often result and compound due to poor communication.
- The contractor cannot refuse to proceed with work i.e. winning original scope of work, but sometimes it is difficult to determine whether work is within the original scope of work or not.
- Successful settlement of claims depends on adequate documentation, daily record of events and minutes of meeting records, record of telephonic conversations and photographs during construction.

Liquidated Damages & Substantial Completion:

- Liquidated damages are paid by contractor to owner if the contractor exceeds the allowed contract time period. A contract may require liquidated damages from a few thousand of rupees per day. The amount is determined well before the contract award and it is based on an estimate of the actual cost. The owner or the public would incur by late completion of work.

Dispute Resolution:

- The predominant method of dispute resolution in construction is litigation , even though, it is not the best way to resolve disputes. There has been a trend over the last decade to find ways to resolve disputes without litigation , however, the results are mixed. Disputes are generally unsolved claims, unsolved disagreements or unsolved change orders that somehow result in a court case. Disputes are not caused by illegal actions but unsolved disagreement about compensation for which contractor sees himself right but the owner sees it as an unnecessary expense that should have been included in the original contract. Contractors try harder to resolve dispute as soon as possible. They try to resolve them in the field and not in the court. There are many alternatives of dispute resolutions given as :
 - **Partnering**
 - **Mediation**
 - **Arbitration**
 - **Mini trials**
 - **Project Neutrals**

Dispute Resolution:

- **Partnering:** Has gained favor as a philosophy of construction management which is based on trust. Partnering meetings are held before the project starts in an effort to develop a level of trust between the owner and contractor. Common goals and objectives are identified. A charter in which all parties resolve to operate in an atmosphere of trust is written and signed. A dispute resolution framework is put in place to solve dispute in limited number of days (3 days usually) or elevated to next level of management.

Dispute Resolution:

- **Mediation:** It is a system of selecting a neutral third party to resolve disputes. The mediator serves as a person to improve communication. There is no binding on the mediation process. It is undertaken by mutual agreement of parties to resolve the disagreement before it becomes a dispute. Often, it is the last step before litigation.

Dispute Resolution:

- **Arbitration:** It is slightly closer to litigation in philosophy than mediation, because, arbitration *imposes* a solution. The arbitrator is selected by mutual agreement to avoid court case or lawsuit, as it is less expensive than a lawsuit. The arbitrators are usually construction experts.

Dispute Resolution:

- **Mini trials:** Mini trials allowed each party to present its position in the dispute and then a judge renders a decision. They are formal judicial proceedings.

Dispute Resolution:

- **Project Neutrals:** It is a new approach to dispute resolution, that is being used on a very large and highly technical project. The project neutral is a person or a team that is hired before the construction contract is avoided who participates in the project throughout the construction period. The project neutral is a technically knowledgeable person or a team and is extremely well informed in matters of construction. The function of project neutrals depends on the provision of the contract.

Assignment

- Give Examples of projects of each type of Contracts explained in slide no. 5
- Go on website of Communication & Works department and search the latest schedule of rate in any government sector client discussed in lecture