B.Sc Civil Engineering



Project & Contract Management CE 206

Engr. Omer Altaf

Department of Civil Engineering
UET LAHORE

Lecture #3

Tendering process in Civil Engineering



Tendering Process:

- A Tender Process is a method by which suppliers are selected for the provision of products and services to an organization. The process involves creating a suite of Tender Documents to manage the supplier selection process. The Tender Documents help the organization to select the best possible supplier available.
- Tender means 'to offer' or 'present something formally'

Tendering Process:

- A tender document is a document that explains about a project and its requirements to the intending bidders. A tender document typically contains a notice inviting tenders, instruction to bidders, the conditions, form of submission, and bill of quantities.
- <u>Definition: A written offer to contract goods or services, at a specified cost or rate. (i.e. a bid)</u>

Public Procurement Regulatory Authority

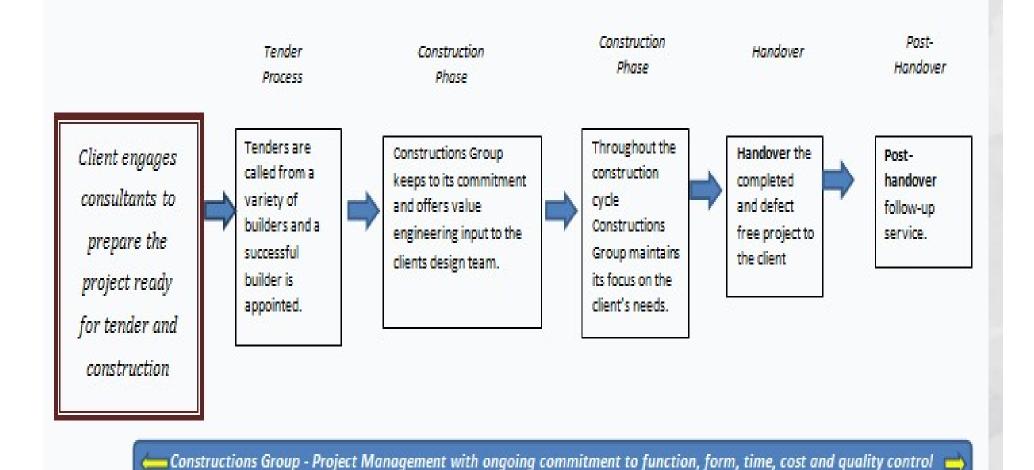
The Public Procurement Regulatory Authority is an autonomous body endowed with the responsibility of prescribing regulations and procedures for public procurements by Federal Government owned public sector organizations with a view to improve governance, management, transparency, accountability and quality of public procurement of goods, works and services.

It is also endowed with the responsibility of monitoring procurement by public sector agencies/organizations and has been delegated necessary powers under the Public Procurement Regulatory Authority Ordinance 2002. www.ppra.org.pk

Steps involved in tendering process

- After the prequalification of selected companies, these companies are brought in stage of tendering.
 Only prequalified company can enter the tender notice.
- For tendering, a minimum number of 3 companies are required.
- It comprises 3 parts in civil engineering.
- Tendering of design consultant
- Tendering of contractor
- Tendering of supervision consultant

The Tender Process with Constructions Group



1-Tendering of design consultant

- Tendering of design consultant can be done immediately after prequalification of design consultant. However, the tendering of contractor is impossible unless the design consultant finishes the preparation of tender documents.
- The fee or charges of design consultant is either based on lump sum basis or %age against the total cost of the project.
- In lump sum contract, design consultants are asked to submit a single lump sum cost for the work and smallest bid is picked by the client.
- Note: normally design consultant rate varies 2-8% of total cost of the projects.
- The minimum design consultant fee, asked or bid by the prequalified design consultant is selected for the project and a formal contract is established between client and design consultant.

1-Tendering of design consultant (cont'd)

- The main tender documents consist of:
- 1. Contract and conditions of contract.
- 2. Project Drawings.
- 3. Technical Specifications (General and Detailed).
- 4. Bill of Quantities (BOQ)
- 5. Design and Analysis calculations.
- 6. Addendum.
- <u>In order to verify the tender work of design</u> consultants vetting consultants are hired.

Bill of Quantity

| <u>Sr.</u> <u>No</u> | <u>Description</u> | Quantity | <u>Unit</u> | <u>Rate</u> | Amount(Quantity* Rate) |
|-------------------------|--------------------|----------|----------------|-------------|------------------------|
| 1 | Excavation | | m ³ | •••• | |
| 2 | Termite Proofing | | m ² | •••• | |
| 3 | Compaction | | m ² | •••• | |
| 4 | P.C.C (1:4:8) | | m ³ | •••• | |
| <u>5</u> | ····· | •••• | •••• | •••• | ····· |

Vetting consultant

The vetting consultant is company involve in the project by client to check the work of design consultant. It is the consultant who is checking the design consultant.

2-Tendering of contractor

- After the preparations of tender documents by design consultant and selection of contractor through the prequalification process, the client or design consultant can start the tendering of contractor.
- Only the pre-qualified contractor is allowed to participate in tendering process. The client or design consultant issues the advertisement in the newspaper and a tender notice with the title "Tender notice". (Tender notice is a legal requirement).
- The client or design consultant also sends official letters to the prequalified companies for participation in the tender.

Tender Notice includes:

- Tender Fee:
- The client or design consultant is issuing the tender document to prequalified contractors, only after the payment of tender fee. A tender fee is a fee that is mutually agreed between the client and design consultant for the cost of printing of tender documents and to hold the tendering process.
 Generally, higher the cost of the project higher is the tender fee.

- Date, time and place of opening of tender:
- In tender notice advertisement in the newspaper the following items are described:
- 1. Tender fee.
- 2. Submission time.
- 3. Time, date and place of opening of tender.
- 4. Representatives for the contractor participation.
- Any tender can be accepted or rejected by the client without any reason.

Security deposit or Tender guarantee:

- Registered contractors are usually required to submit specific sum as security or earnest money deposit to be adjusted against work done, normally in the form of Bank Guarantee or Surety.
- The contractors who are prequalified and interested to participate in tendering are required to deposit 2-5% of the <u>project cost</u> as tender/bid guarantee/security. The tender security can be in the form of demand draft (D.D) or insurance company guarantee. The tender guarantee is required for the reason that the lowest renderer should not withdraw from the project.

 The bank or insurance guarantee is a legal document on stamp paper with undertaking by the bank that if contractor will not take the project than the bank will pay the client the tender security. The tender security of a successful contractor remains with the client and for others it is returned with 30-90 days(for checking BOQ calculations and to determine whether the total price equals to that mentioned in the tender document) after opening the tender.

- The tender document should be properly sealed and submitted to client or design consultant before the official tender opening date.
- The tender document submitted by each company is opened by client in presence of contractor representative.
- Any tender not accompanied by tender security will not be considered during tendering.
- On the day of opening of tender only the cost highlighted on the summary page of BOQ is announced and the unofficial lowest tender is selected.
- Then the complete checking of BOQ is carried out to find any error or mistake in calculation. Based on this final analysis a comparative statement of tendering contractor is established and whichever company has the lowest cost is selected for the project.

Non Responsive Tender:

 Any incomplete or error based tender is known as non-responsive tender and is not entertained in the tendering process. If two tenders come on the same price then it is asked to revise their rates and based on their new BOQ with revised rates the final contractor is selected.

Tendering for supervision consultant

- If for a project the supervision cost of design consultant is more than the budget of client, or design consultant doesn't have an in-house supervision capability or if design consultant is overloaded with a number of other projects, then in that case, an independent supervision consultant can be engaged in the process.
- If design and supervision consultants are same, then at the time of design tendering, supervision charges are also included in the design cost. The design process of the project and preparation of tender documents normally require two months to three years of duration depending on the nature of project.

Tendering for supervision consultant (cont'd)

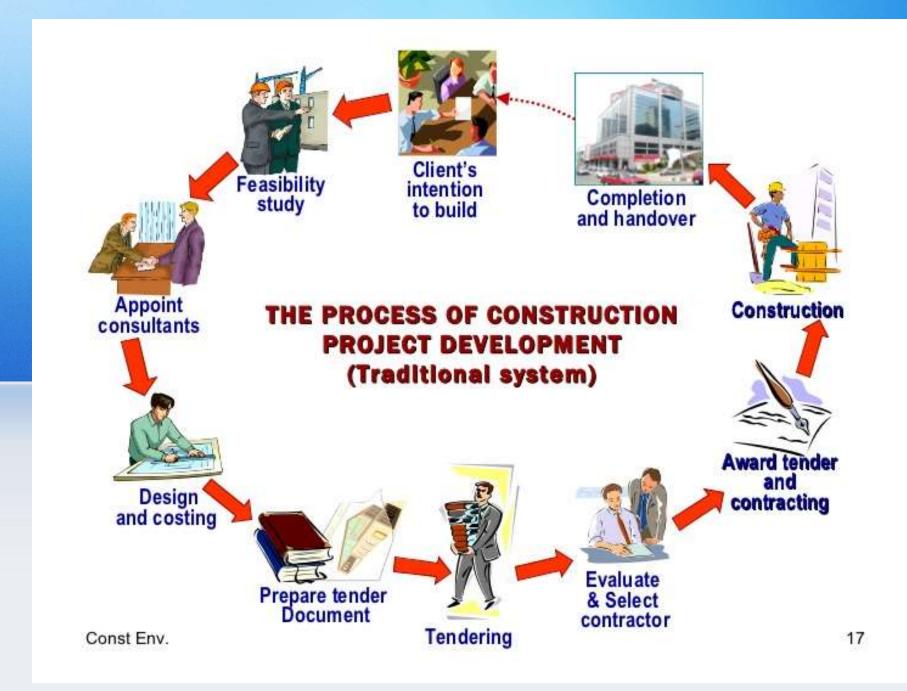
- If supervision consultant is separate then the supervision charges can be asked in tendering process in any of the following modes:
- 1. Lump sum basis
- 2. Percentage against total cost of project
- 3. Charging on monthly basis related with the total duration of project.
- Depending upon the requirement of project, any of the above modes of tender fee is selected. Only the prequalified design consultant can participate in the tendering of supervision consultant.

Tendering for supervision consultant (cont'd)

• The company which tenders the minimum price is selected as supervision consultant.

The scope of services of supervision consultant is to:

 Implement the tender documents with respect to construction practices and to ensure the quality in scope, schedule and budget of the project.



BID INVITATION FOR OFFSHORE DRILLING (Phase-1)

NESPAK invites sealed bids from the companies for the Geotechnical Investigations for 6600MW Power Park Project at Gadani, District Lasbela Balochistan. Geotechnical investigations are required for the design of a jetty and breakwater structure. The companies capable of carrying out offshore drilling are requested to provide their Company's Profile with the following documents along with their sealed bids:

- 1. PEC Registration Certificate
- 2. List of Similar Projects completed during last five years
- 3. Av. Annual Turnover
- 4. Equipment Capability
- 5. Personnel Capability
- 6. Litigation History

The bidding document along with the BOQ and site plan may please be downloaded from PPRA website or www.nespak.com.pk. The whole work (field investigations & laboratory testing) has been divided into two packages which will have to be completed in fifty (50) days time, as both the packages will commence at the same time. Please submit your sealed bid till October 28, 2013 at 1400 hrs.

All bids must be accompanied by a Bid Security in the amount of 2% of total bid price and must be delivered to Vice President GT & GE Division. Bids will be opened at 1430 hours on the same day in the presence of bidders' representatives who choose to attend, at the following address.

National Engineering Services Pakistan 1-C, Block-N, Model Town Extension, Lahore, Pakistan.

Tel:92-42-99090000 (Ext. 307 & 308)

Fax:92-42-99231950

Email: gtnesp@wol.net.pk geotech@nespak.com.pk

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Tender Notice

Procurement of Equipment & Glassware for Civil Engineering Labs

Sealed tenders are invited from well reputed GST registered technically \mathcal{E} financially sound firms/suppliers/companies for the supply of items in the following category:

| Sr No. | Tender Title | Tender Reference No. | Bid Receiving & Opening Date Time |
|--------|--|-------------------------------------|---|
| 01 | Supply, Installation, Testing \mathcal{E} Commissioning of Equipment \mathcal{E} Glassware for Civil Engineering Laboratories | CIIT/17 CIVIL/Equip (2013-14)/01 | Jan 30, 2014, 1130Hrs & Jan 30, 2014, 1200Hrs |
| 02 | Supply Installation, Testing & Commissioning of Universal Testing Machine (UTM) | CIIT/17 CIVIL/UTM (2013-14)/02 | Jan 30, 2014, 1200Hrs & Jan 30, 2014, 1230Hrs |

The tender document containing detailed terms & conditions along with specifications can be obtained from **Purchase Office** on Payment of **Rs.2,500/- (non- refundable)** in form of Demand Draft / Pay Order in favor of CIIT Abbottabad on any working day (Monday-Friday) during office hours (9am to 5pm) up to **three days prior to tender opening date.** Tender document can be obtained through courier on payment of additional **Rs.150/-** as courier charges. The detailed list of the item can be viewed on the website (**http://www.ciit-atd.edu.pk**).

- All tenders should be accompanied by earnest money @ 2% of total bid value in the form of Pay Order / Bank Draft in favor of CIIT Abbottabad.
- 2. Tender complete in all respect shall be received at the address mentioned below at least 30 minutes before opening time given in tender notice / document.
- Quantity at the time of purchase may vary. CIIT reserves the right to accept / reject any or all tenders as per PPRA's rules. Personal interaction is regretted and queries can be accommodated at purchase@ciit.net.pk.

Note: This tender notice is also available on PPRA's website: www.ppra.org.pk

Purchase Officer

COMSATS Institute of Information Technology

University Road, Abbottabad UAN: 0992-111-001-007, Fax: 0992-383441 Cell No: 0343-525 8373

www.comsats.edu.pk

Assignment

Bring tender notice for design consultant, contractor and supervision consultant and paste it in Design Register.