

Construction Contracts

Outline

- Review Lecture 4
- Types Of Contract
- Project Delivery Method
- Contract Change

I. Types of Construction Contracts

1. Fixed-Price Contracts

- Lump-sum contracts
- Unit-price contracts
- Fixed-price incentive contracts

2. Cost Reimbursable Contract

- Time and materials (cost-plus percentage)
- Cost-plus fixed fee
- Cost-plus incentive fee

3. Guaranteed Maximum Price Contract

A. Fixed-Price Contracts

1. Lump Sum/Stipulated-sum

- Contract is one which the contractor quotes one **PRICE WHICH COVERS ALL WORK AND SERVICES** required by the contract plans and specification.
- Lump sum must include **direct costs for labor, machines & indirect costs** (field supervision, secretarial support, equipment maintenance and profit)

A. Fixed-Price Contracts

2. Unit Price Contract

- **The contract** specify a particular **number of units**.

Anything that can be measured in units can be the basis of a unit-price contract.

- Unit-price contracts used in: **situation where it is difficult to calculate quantities in advance** (heavy construction, such as pipelines, highway, earthworks, tunneling).

A. Fixed-Price Contracts

3. Fixed-price incentive contracts (FPI)

- Provides for adjusting profit and establishing a final contract price by application of a formula based on the relationship of total final negotiated cost to total target cost/subject to a price ceiling.

(The price ceiling is the maximum that may be paid to the contractor, except for any adjustment under other contract clauses)

B. Cost Reimbursable Contract

1. Time and materials (cost-plus percentage)

- In this type of contract, the contractor is paid its actual costs + a specified percentage of those costs for overhead.

(provide for 15 percent overhead value and a 10 percent profit).

Used primarily in building construction in which detailed plans and **specification requiring little or no modification can be developed.**

B. Cost Reimbursable Contract

2. Cost-Plus Fixed Fee

- This form is commonly used on large, multiyear industrial plant projects. Does not change due to variation from the original estimate cost.

Ex: The project cost is \$500 millions, a fixed fee of 1% of that figure.

B. Cost Reimbursable Contract

3. Cost-Plus Incentive Fee

- Appropriate where, due to **AN INCOMPLETE** or **VERY COMPLEX DESIGN**, a contractor would be **UNABLE TO GIVE LUMP SUMP** price without including a large contingency for unknown factors.

C. Guaranteed Maximum Price Contract

The owner and contractor agree that the **PROJECT WILL NOT COST THE OWNER MORE THAN A SET PRICE, THE GUARANTEED MAXIMUM.**

It can be a cost-plus fixed fee or percentage cost basis but in no event more than the set maximum price.

II. Project Delivery Method

1. Design-Build (Turn-key)

- All phases of the project (design through construction) handled by the same organization
- Minimal owner coordination is needed between design, construction and other project element.
- There are few checks and balances.
- Final result may not fully comply with expectations.

II. Project Delivery Method

2. Design-Bid-Build

- All phases of the project (design through construction) handled by different organization

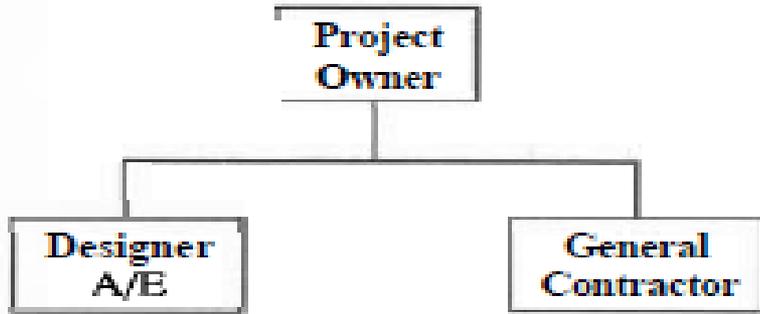
II. Project Delivery Method

3. Construction Management Contract

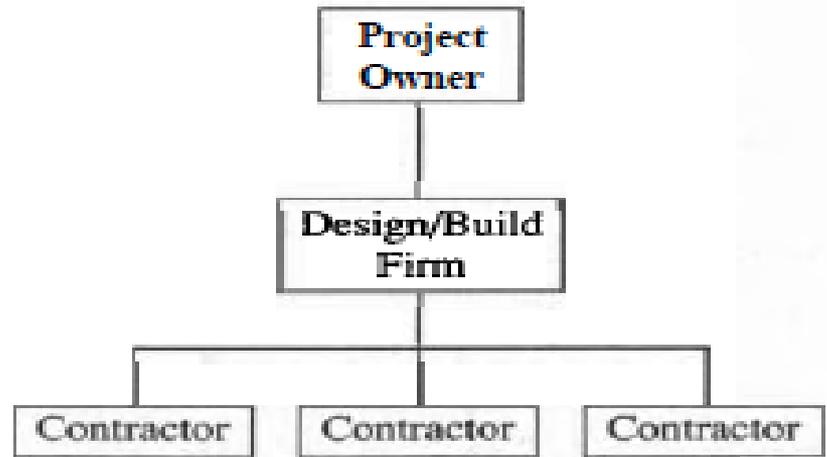
- One firm is retained to coordinate all activities, from concept design through acceptance of the facility. The firm represents the owner in all construction management activities.

Contracting Arrangements.

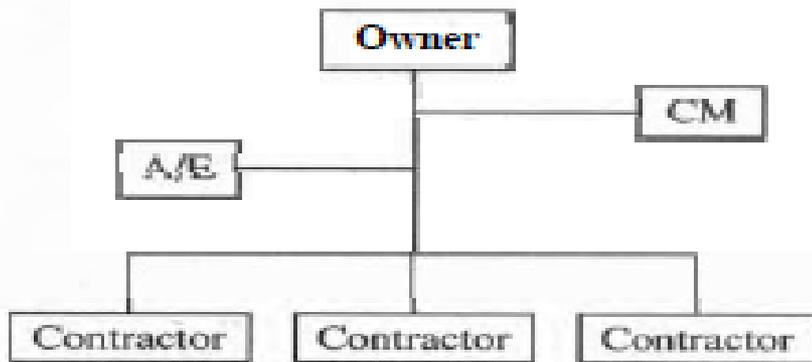
A – Design/Bid/Build



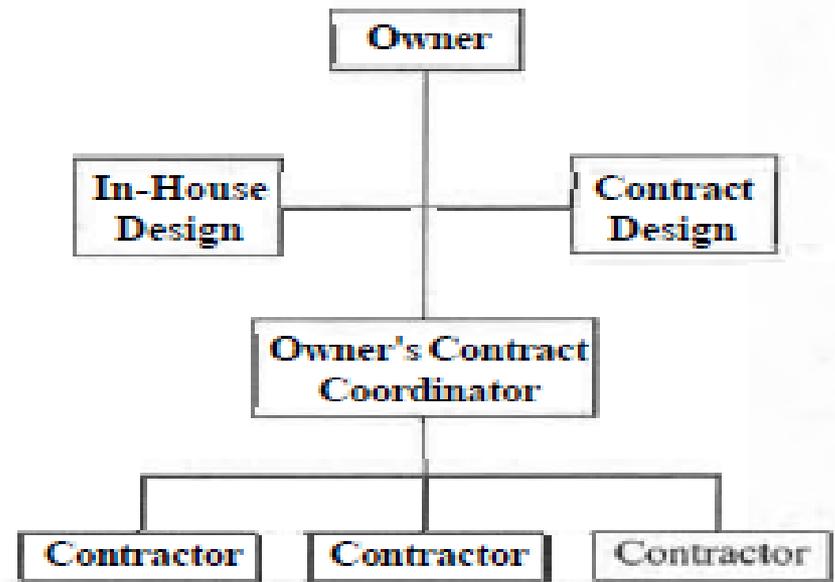
B – Design/Build



C – Construction Management (CM)



D – Owner/Agent



III. Contract Change

1. Common owner or designer changes may include:

- Delay in access to the site
- Delay in furnishing approved for construction design drawings or clarifications
- Major design changes
- Many minor design changes
- Scope additions
- Scope deletions
- Suspension of work
- Nonperformance by owner
- Termination of contract

III. Contract Change

2. Contractor changes may include:

- Failure to start work as planned
- Failure to supply a sufficient workforce
- Contractor, subcontractor, supplier performance failure
- Poor workmanship
- Schedule delay

3. Changes caused by other:

- Change in law
- Other unforeseen site Condition
- Labor disputes
- Third-party interference

Terima Kasih

Question?????????

Type Of Contract

1. Fixed-Price Contracts

- Lump-sum contracts (Group 1)
- Unit-price contracts (Group 2)
- Fixed-price incentive contracts (Group 3)