

MARCH '16

APRIL

03

063-303 THURSDAY

Appointments 21-04-2020

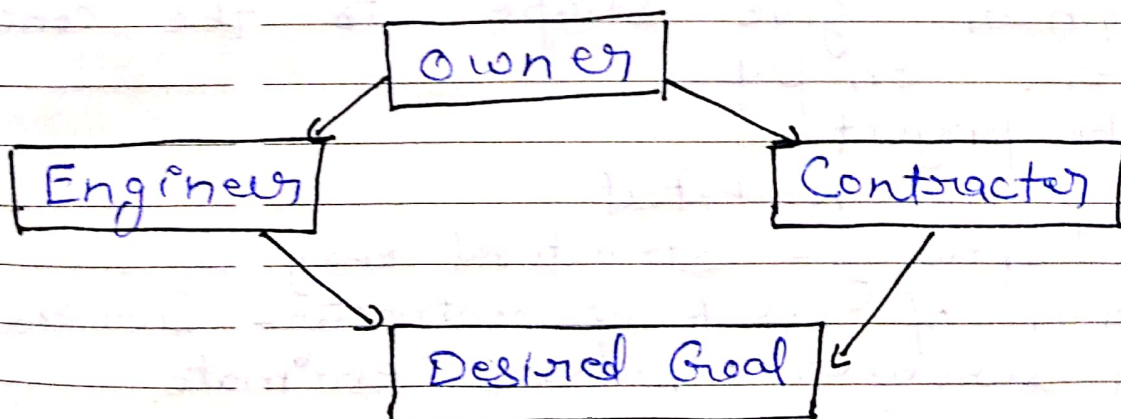
WK - 10

CMAE

Construction Team

It is a individual member or group of members required to co-ordinate each other to complete project as per specification.

Team consist of :- Owner
Engineer
Contractor



Inter-relationship.

04

FRIDAY 064-302

WK - 10

MARCH

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05.08-10-18 Appointments

Owner → The Individual, firm or public body which conceives idea.

- Arrange finance for completion
- Provide land or site.
- Co-ordinate.
- To engage an engg. (architect, structural engg.) for design & drawing & estimation.

Engineer → Professional man having a qualified degree

- An engineer give shape to the concept of owner on paper.
- Design the project.
- Prepare plan - Architect
- Prepare drawing - Structural Engg.
- Supervision of work of contractor - Civil Engg.
- Quantity surveyer prepare estimate.
- Suggest site investigation
- To bring overall economy without compromising quality of construction.
- Act as mediator b/w owner & contractor.

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Appointments

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05

065-301 SATURDAY

WK - 10

Contractor → Professional builder who take in ~~out~~ the charge of construction.

- It is infact a person or a firm
- Submit bid to the owner
- Should own equipment & machines
- optimum utilisation of available resources. ~~in~~ for economy.
- Planning regarding completion in time.

Inter relationship b/w owner, engg. & contrd.

(i) owner & engineer

As owner finance the project but engg. is a technical adviser of owner.

- Guide the owner.
- Engineer satisfy the need of owner at lowest practical cost.
- Engg. should be familiar with modern construction project.

06

066-300 SUNDAY

APR

07

MONDAY 067-299

WK - 11

MARCH

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Appointments

(ii) Engineer & Contractor.

- Both are employee of owner.
- Contractor has to execute work as per design, drawing prepared by engineer.
- As Contractor has to work under the supervision of engineer so a healthy relation b/w them is necessary.

(iii) Owner & Contractor

- Appointed by owner.
- Owner must realise that this is business & he has to make certain profit out of it.
- At the same time contractor should understand that the project can be completed with a satisfactory profit only.
- Contractor job must be satisfactory to his client.
- By keeping above points in mind there could be a healthy relationship among two.

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15 08

068-298

TUESDAY

Appointments

Unit - 2.

WK - 11

Construction Planing.

Planning is refers to all the operations & activities which are necessary prior to the beginning of the project in order to ensure its successful completion.

Aim:-

- To complete project economically, within stipulated time.
- Systematic arrangement or orderly establishment of all the construction activities.
- Type quantity & duration of equipment used.
- Skilled & unskilled worker needed.
- Time required to complete the project.

Advantages

- 1- Executing project at lowest practical cost.
- 2- Essential for contractor for successful bidding.

09

WEDNESDAY 069-297

MARCH

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- 3- Helpful for contractor in terms of quality, type & exact time for delivery of materials to avoid unnecessary stacking of material in site.
- 4- Also helps to estimate type no & duration of equipment required.
- 5- Planning divides project in no. of phases or events to make it simple.
- 6- It also helps contractor to utilise maximum available resources like man, material, money.

Stages of Construction Planning.

- 1- Pre-tender Stage
- 2- Post-tender Stage or Contract Stage.

Pre-tender stage.

Tender $\Rightarrow$ tendering is the process by which bids are invited from contractors to carry out specific work.

It is document of agreement b/w two parties.

Construction bidding :- It is the process of submitting a tender by contractor to the client as a proposal to conduct a construction project.

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070-296

THURSDAY

Appointments

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1. Pre-tender Stage.

The planning of various activities required between the notification inviting tenders & the submission of bid by contractor is pre-tender stage.

Data to be collected in Pre-tender stage.

- 1- To find factors affecting the cost of project.
- 2- Detailed information about nature of site
- 3- Type of construction equipment required at site
- 4- Soil profile & water table condition of site.
- 5- Approximate time period for completion.
- 6- Type of skilled & special staff required
- 7- Preparation of rough estimate.
- 8- Availability of construction material & labour near construction site.
- 9- Problems to be encountered during construction

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FRIDAY 071-295

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2- Post tender Stage or Contract Planning.

The planning which is to be done by the contractors after the acceptance of the tender by the concerned authorities is Contract planning.

Functions to be performed in Contract Planning

- 1) To divide entire project into different events.

- 2- Prepare master plan, bar chart.

- 3- To prepare material chart showing type & quantity.

- 4- To prepare labour chart.

- 5- To prepare bar chart showing construction activities.

- 6- To decide all safety measures to be avoided to prevent any accident.

- 7- To make arrangements for repair & maintenance of plants & equipments.

- 8- Arrangement of security at site.

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Appointments

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- 9- To appoint Supervisors
- 10- To study & compare diff alternative of construction & choose most economical.

11 Scheduling

12 It gives an idea about the time at which each activity or event of construction should occur.

or

14 Process of setting up various activities in order by proposing the starting & finishing date to each activity in convenient & systematic manner.

13 like time table

073-293

SUNDAY

10 Rescheduling

11 After proper planning & scheduling the entire work does not work as per schedule due to events like climate change, labour shortage, material shortage etc. So Rescheduling is rearrangement of various planned activities by fixing new dates.

14

MONDAY 074-294

WK - 12

MARCH

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Advantages of Scheduling

- 1) It helps to find out actual progress of work.
- 2) Helps to analyse interdependency of certain activities.
- 3) Helps to utilize the resources.
- 4) Helps to arrange labour, material as per requirement & specific time.
- 5) Equipment schedule prepared helps to determine type, no & duration of use of equipment.
- 6) It helps to make a project economical.