Riba work stages and pre-construction processes

Identification of the steps in construction process: The steps which are identified in construction process through which the construction project passes is important if improvement is occur because it is necessary to every project that goes through similar steps in its assessment and finally the stages vary their intensity or the importance depending up on the project. There are different stages to analysis the process model such as.

- Inception: It defines the about needs and to determine the financial implications and sources.
- Feasibility: For use of preliminary designs, and also the costing and investigations of the alternatives.
- Scheme Design: The scheme design is used for the programming, for budgeting, for briefing, and for the outline design, etc.
- Detail Design: These Detail design is used for the development of all sub-systems within the design, and for the use the detailed cost control, and technical details etc.
- Contract: Specification of the contract, pricing mechanisms, and documentation should be prepared carefully for the selection of contractor, etc.
- Construction: Under these the execution and control of all site works and associated actives are done and further documentation of the contract is done.
- Commissioning: Getting rid of the problems, giving the instructions regarding the operations, maintenance manuals, conducting opening ceremonies, occupation, evaluation, managing the facility, giving training to the staff, etc. comes under these commissioning.

The above sections describe some of the existing design and construction process models in operation and also present the gateway process. This is the process which is adopted by the office of government commerce in the UK, demonstrating multi project management.

RIBA plan of work:

The process of managing and designing building projects and administering the building contracts in to a number of work Stages is organised by RIBA plan of work. The sequence of work stages may vary to suit the procurement method. The choice of the procurement route has a fundamental influence on how different work stages proceed. This was summarised in outline as far as possible but the exact way in which different stages are conducted in the overall project programme needs the careful consideration at the outset. The RIBA plan of work was originally developed to reflect the needs of traditional contract forms. The subsequent development of alternative contract forms such as PFI, BSF. As per the project needs a vision and key performance indicators should be identified. They should assess at each stage and check that they are still appropriate. Here if they are to be successfully implemented, KPLs should be identified in the early project stages such as preparation, design, construct and use cycle.

RIBA Work Stages:

The work stages for the CTG project according to RIBA plan of work is divided into 5 phases as shown below:

1. Preparation
2. Design

3. Pre construction
4. Construction
5. Use

Fig 1: RIBA work stages

Preparation:

Under this stage there are two steps appraisal and describing the design in brief.

Appraisal:

Appraisal is nothing but the identification of the CTG project requirements and possible limits in developing the project. Feasibility studies and assessment of options are prepared to enable the client to decide whether to proceed.

Design brief:

This is the second step, in this step the development of the initial statement is prepared to know the clients requirements and limits. Identification of procurement methods, procedures, organisational structures and range of consultants and others to be engaged for the project.

Design:

In Design there are 3 steps they are as follows.

Concept:

In this step the design brief and preparation of additional data is implemented. This step includes out line proposals for structural and buildings services systems. The main concept is to review the procurement route.

Design Development:

This step includes structural and building services systems. This also gives updates on online specifications and cost-plan. In this step the application for getting the permission for detailed planning is done.

Technical design:

In this step the technical design and specifications are prepared which are sufficient to co-ordinate components and elements of the project and information for statutory standards and construction safety.

Pre- construction:

In this there are three steps

Production Information:

The production information has two steps, the first step involves in the preparation of detailed information for construction. Application for statutory approvals is done. The second step includes in the preparation of further information for construction required under the building contract. The review about the information is provided by specialists.

Tender Documentation:

To enable a tender or tenders to be obtained for the project the tender documentation has to be prepared in detailed.

Tender action:

This step involves in Identification and evaluation of potential contractors for the project. Obtaining and appraising tenders submission of recommendations to the client

Construction: In these there are two steps

Mobilisation:

In these Mobilisation Letting the building contract, Appointing the contractor. Issuing the information to the contractor and arranging site hand over to the contractor.

Construction to practical completion:

The building contract is administered to practical completion. The provision to the contractor for the further information and where as when responsibilities are required. Review the information provided by the contractors and specialists.

Use:

Post Practical Completion:

The administration of the building contractor after practical completion and making final inspections. Assisting building user during initial occupation period. Review of project performance in use.

The Gate Way Process:

This process was developed by the office of government commerce in the UK, and it was developed on the basis of well proven techniques. This is leads to more effective delivery of benefits in sense of outcomes and predictable costs. This is a review of government procurement project which was carried out by taking the decisions of experienced people as a team. These critical points are identified as gateways. The life cycle of the project has six gateways four before the contract is awarded and to more looking at

service implementation and conformation operational benefits. The benefits which are supposed to be come under the process identified as follows:

- Availability of the best skills and experiences deployed on the project
- Understanding the status of the project and the stack holders issues carefully.
- Giving assurance that the project can progress to the next stage of development and implementation, with increased the expectations.
- Achievement of more realistic time and cost target for the projects.

This process can prove to be very beneficial for single project or multiple projects management. Project management is nothing but the overall planning of the project from inspection and completion of the project in time aiming at the CTGs requirements.

The process protocol:

The process protocol is defined in ten distinct phases in which the design and construction process are mentioned. These ten phases are grouped into four stages namely:

- Pre-Project,
- Pre- Construction
- Construction and
- Post- construction

Pre- Project Stage:

Among the ten distinct phases of the process protocol the (0-3) phases comes under the pre- project stage. In this stage strategic business consideration of any potential project was done to fulfil the CTG project

requirements. Applying the gateway process the alignment of process protocol is done which will be helpful in achieving higher benefits. In the pre â€" project phases the CTG project requirements are defined and considered with the aim of:

Determining the need for a construction project solution, and

Securing outline financial authority to proceed to the pre-construction phases.

This is the most important stage of a construction process when compared with the later stages. The knowledge possessed by the building developers and consultants could help the CTG project in the early stages. By this approach the problems faced with the translation of this name can be eliminated through the conventional briefing stage of design have the potential for substantial elimination.