



## Design Build Contracts: Key to cost efficiency

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### Abstract

Fast track construction, aesthetics, sustainability and economy are the pre-requisites of the built environment. Realization of aesthetical yet economical structures through fast track construction is a creative process. This necessarily warrants:

- Project based design approach
- Value engineering at every stage
- Complementing the design with the resources of contractors
- Constructability to suit fast track nature

If one keenly peruses the award winning structures all over the world, they belong to design and build organizations. Of course, we want to leave behind our urban ambience to our posterity which should match with what our predecessors have left us with incredible, Mandirs, Masjids and Mahals. To achieve this, it is argued in this paper that the 'Design and Build' organizations have to be encouraged as they can have undivided vision of overall objective. They are well equipped with the components of Construction Techno-Management (CTM) viz: Design, Technology and Construction management. It can be stated with confidence that the organizations that do not possess the time tested technical department, a separate construction system department and plant engineering capabilities will not be able to evaluate and price the technical intricacies and nuances when the conception and design is carried out by a separate agency. It is very imperative that the organization structure vis-à-vis in house technical support in terms of Design, Technology and Management is given paramount importance during pre-qualification stage.

It is often the case that the contractor and consultant position themselves on the opposite side of the divide leading to over runs, arising out of non-appreciation of contractor's available resources and expertise during conception and design stage by the external consultants.

Thus, to facilitate value engineered, fast tracked, aesthetically pleasant, sustainable and economically built environment, 'Design and Build' contracts with adequate stress on aesthetics appear to be having advantages over traditional contracting. In the paper above nuances are discussed in detail.

**Keywords:** Design-Build; Traditional; Contracting; Sustainability; Construction Techno management ; Structural Design.

## 1 Introduction

It is the ethical and moral responsibility of civil engineering fraternity to build facilities to society. Our society demands that their facilities become asset to the communities and posterity while they perform well, cost less, look good, and causes least inconvenience during realisation with the

shortest possible duration from conception to completion.

These prerequisites impose on our civil engineering fraternity to ingrain the aspects of sustainability, economy, durability (performance), fast track construction through technology and aesthetics.