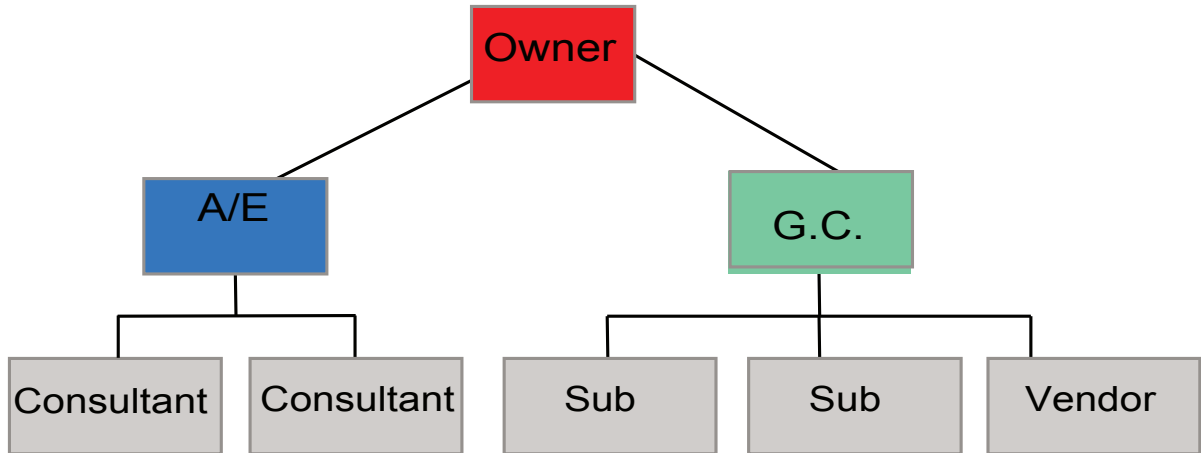


Traditional Tri-Partite Structure



Advantages

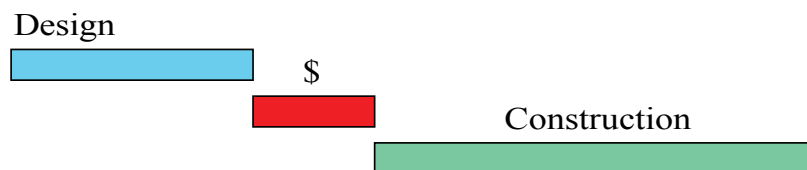
- It is common, so the marketplace is comfortable with it.
- Plans are usually complete prior to bidding or final pricing.

Disadvantages

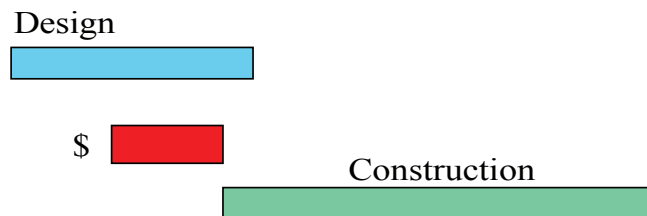
- Often little contractor input during design.
- Slower delivery time due to back-to-back phasing.
- Often adversarial relationship between G.C. and A/E.
- Price competition reduces profits or renders some projects unobtainable.

Traditional vs. Fast Tracking

Traditional



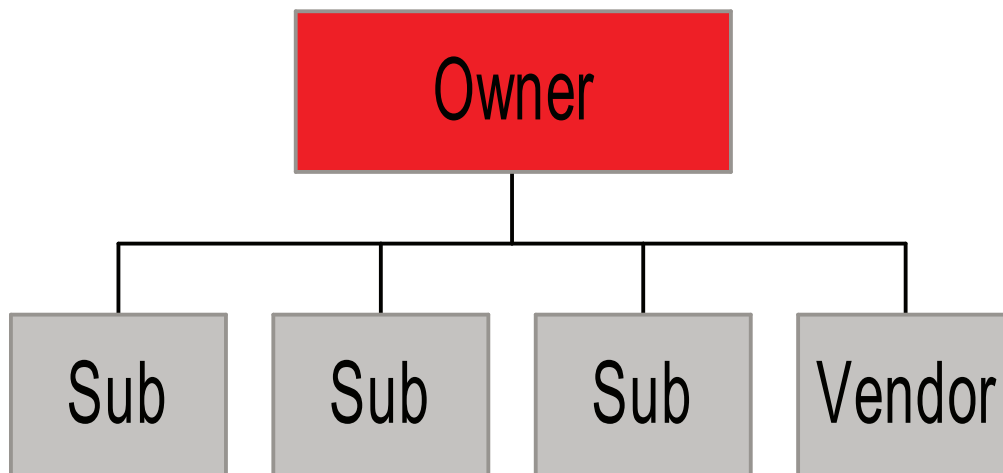
Fast-tracked



Advantage: Delivery Speed

Disadvantage: Loss of Cost Control

Multiple Prime Trade Contractors



- No role for GC.
- Owners rarely able to manage and coordinate project successfully.
- Owner liable for management and coordination problems.

Types Of Design-Build Relationships

- Integrated Company
- Contractor Prime, A/E Sub
- A/E Prime, Contractor Sub
- A/E Prime, Multiple Trade Subs
- Design-Builder Prime, A/E and Contractor Each Subs
- Joint Business Venture by A/E and Contractor

Consequences of Design-Build

- Speed of project delivery.
- Single point responsibility (for Owner).
- Greater and earlier cost certainty.
- Better communication of design intent.
- Less litigation and disputes.
- Greater control of information by design-build team.
- Negotiated pricing.
- A/E and GC not adversarial.
- Need to learn new relationships.

DESIGN-BUILD: DIFFERENCES IN ARCHITECT'S DESIGN PHASE SERVICES

- **System-by-system design with “looping” feedback**
 - **Each system designed semi-independently**
 - **Design of each system constantly modified by feedback from the construction team**
- **Informal communications rather than “defensive detailing”**
- **Greater incentive to explore alternative design concepts**
- **MEP/FP only schematic, design-built by specialty contractors**
- **Greater than usual pricing constraints and pricing input**
- **Out-of-sequence provision of design details to meet contractor's need to price the project**
- **Heavier than usual reliance on performance specifications**

PRICING VARIATIONS IN CONSTRUCTION CONTRACTS

- **Fixed price (lump sum) contracts**
 - contractor bears risk of cost overruns
 - contractor has possibility of windfall profits
 - encourages adversarial relationships
- **Cost-plus (time & materials) contracts**
 - fee can be a percentage, fixed sum or any formula
 - difficult for owner to control costs
 - may have a **Guaranteed Maximum Price (GMP)**
 - may have a savings sharing clause with a **GMP or target price**
 - change orders only change **GMP or target price**
- **Unit pricing –**
 - owner pays a specified cost for a particular quantity of work
 - best for repetitive types of work (concrete, roadways, etc.)

COMPETITIVE BIDDING

- **Required for public projects**
- **Purposes: lowest cost, and an impartial forum for contractor selection**
- **“Short-listing” bidders (pre-qualification)**
- **The usual process**
 - **invitation to bidders**
 - **submittal of bids/proposals**
 - **opening of bids/proposals**
 - **evaluation of bids/proposals**
 - **notification and award of project**
 - **signing a formal contract**
- **Bidding errors**
 - **bids with clerical/arithmetic errors can be withdrawn (but not modified)**
 - **bids with judgment errors cannot be withdrawn**
 - **exception: the “snap-up” rule (where owner should have known of the bidding mistake by comparison to other bids)**