

Alternative Contracting Methods | Progressive Design-Build

Progressive Design Build (PDB) is an alternative contracting method (ACM) that uses a multi-phase contract to manage both design and construction of a project. After a PDB contract is awarded, the owner and the design-builder work together to advance the design and perform other preconstruction activities, while also developing a construction price that fits within the owner's budget.

The design-builder is usually selected through a one-step, qualifications-based process. Unlike traditional design-build procurements, PDB does not require significant design development during the selection phase, which reduces the design-builder's cost of pursuing the project. While construction cost is generally not considered as an evaluation factor, other cost-related factors, such as preconstruction costs and overhead and profit fees may be considered.

Typical PDB projects use a two-phase approach.

Preconstruction Phase

- NEPA process support; design; risk management activities; cost estimating; and other preconstruction services to develop work packages and a guaranteed maximum price (GMP)

Construction Phase

- Construction of the project, assuming agreement on a Guaranteed Maximum Price (GMP) can be achieved.

In a typical PDB project, the design development is progressed to specific milestones, such as 30% completion or 60% completion. Once a milestone is reached, the design-builder and an Independent Cost Estimator (ICE) for the owner prepare construction estimates. If the estimate exceeds an established threshold (typically 5-10%), the ICE and the design-builder will identify and address the differences in cost principles that caused the discrepancies and work to correct those for the next pricing milestone. Generally, there are no more than three pricing milestones before negotiating a GMP.

In PDB, development of the risk register is a critical process that facilitates alignment on price through detailed planning for specific risks. Design and risk mitigation activities can progress before the GMP is set. This approach attempts to avoid large contingencies being embedded within the GMP by optimizing risk allocation and risk mitigation strategies. It also allows for risk pricing to be reviewed separately from raw costs, accelerating agreement on the construction price. The risk register is continually updated during the preconstruction phase. When risks materialize during construction, the risk register guides potential compensation and schedule adjustments.

Throughout the preconstruction phase, the scope of work may change, requiring tasks to be added or removed from the design-builder's responsibilities. Any changes in scope and adjustments to compensation are managed through preconstruction amendments.

If the design for a specific portion of construction has advanced enough for the Design-Builder to agree on a GMP, that portion of the construction may be started earlier than other components through an early work package.

Construction of a PDB project follows processes similar to that of design-bid-build (DBB) projects.

Primary PDB Benefits

- ❖ Efficient, low-cost procurement process
- ❖ Early contractor engagement
- ❖ Enhanced collaboration between owners and a design-build team
- ❖ Owner control of design decisions is similar to DBB
- ❖ Flexibility in design and construction methods
- ❖ Budget and pricing transparency
- ❖ Optimal risk allocation and management
- ❖ Potential for early work packages