Progressive Design-Build Delivery

Presented by

Mike Dorman, Director of Engineering

Administration Committee

February 14, 2024

Orange County Sanitation District 70th Anniversary
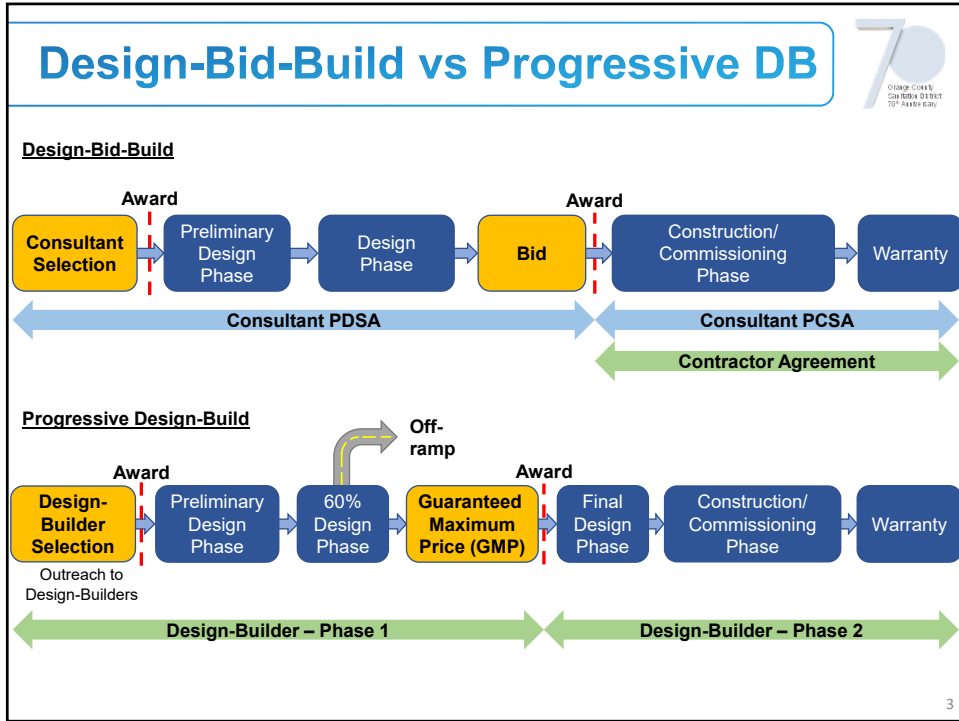
1954 - 2024

1

Construction Delivery Methods

1. **Design-Bid-Build (Low Bid)** **Current Approach**
2. **Collaborative Design-Build Delivery Methods**
   - Fixed-Price Design-Build
     - OC San successfully executed Project No. 3-58, Rehabilitation of Magnolia Trunk Sewer, to slip line an existing sewer (2007-2012)
   - Progressive Design-Build

Senate Bill 706
Until January 1, 2029, can use progressive design-build process for up to 15 public works projects in excess of $5,000,000 for each project.

2

2

Design-Bid-Build vs Progressive DB

Design-Bid-Build

Award — Consultant Selection → Preliminary Design Phase → Design Phase → Bid → Award → Construction/Commissioning Phase → Warranty

Consultant PDSA | Consultant PCSA
Contractor Agreement

Progressive Design-Build

Award — Design-Builder Selection → Preliminary Design Phase → 60% Design Phase → Off-ramp → Guaranteed Maximum Price (GMP) → Award → Final Design Phase → Construction/Commissioning Phase → Warranty

Outreach to Design-Builders

Design-Builder – Phase 1 | Design-Builder – Phase 2

3

Design-Bid-Build vs Progressive DB

Description	Design-Bid-Build	Progressive Design-Build
Number of Bidders	Varies with type and size of project	More limited
Procurement Restrictions	None	15 projects, each >$5M
Contractor Qualifications	Meet bid and contract requirements	**Select most qualified**
Collaboration	Designer	**Design-Builder (including stakeholders)**
Innovation with Contractor	Limited (value engineering)	**Design and construction**
Schedule		**Faster (6-12 months)**
Risk Transfer to Contractor	Specifically defined. Subject to interpretation.	**Reduced risks through collaboration**
Staff Training		Train OC San staff. Identify champions.

Saves time with only one procurement and early work packages (6 - 12 months saving)

4

2

Design-Bid-Build vs Progressive DB

Description	Design-Bid-Build	Progressive Design-Build
Costs		
Construction Costs	Low bid	Fair, open-book price. Price certainty at GMP.
Bidding Competition	Contractor and Subcontractors	Subcontractors
Soft Costs	Higher	**Lower**
Contract Documents		
Design Quality Ownership	OC San	**Design-Builder**
Plans and Specs Detail	More detail (contractor bids what is shown)	**Design-Builder provides required detail to construct**
Constructability	OC San	**OC San/Design-Builder**
Construction Management		
Change Orders	Higher	Lower
Claims, Overhead, and Legal Costs	Higher	**Reduced claims exposure**
Construction Quality Control	OC San enforces	Design-Builder

5

5

Project: J-137 Outfall Rehab

Why Progressive Design-Build?
- Can select most qualified contractor
- Contractor/Designer can inspect, design, and correct short outfall repairs
- Long outfall repairs are well defined
- Means and methods drive costs

Short Outfall Scope:
- Condition assessment
- Essential repairs
- Port cleaning

Long Outfall Scope:
- Replace 47 manholes
- Clean inside pipe
- Replace flap gate
- Add ballast rock

Long Outfall: 120-in pipe, 200-ft deep, 500 diffusers

6

6

Project: J-133 Lab Replacement

Why Progressive Design-Build?
- Project is well defined through a feasibility study
- Procurement type is common for buildings
- Building construction is not OC San's expertise

Mt. Langley

Project Scope:
- Existing Lab Building needs rehabilitation (36,000 sq ft to 56,000 sq ft)
- Replace existing Lab Building

Headquarters Building

7

7

Next Steps

- Hire Owner Advisor to help develop Request for Qualification (RFQ) and Request for Proposal (RFP) documents
- Train OC San's Progressive Design-Build team
- Develop criteria to select future Progressive Design-Build projects
- Issue RFQ and RFP for selected projects

8

8

9