

Alternative Project Delivery

Methods

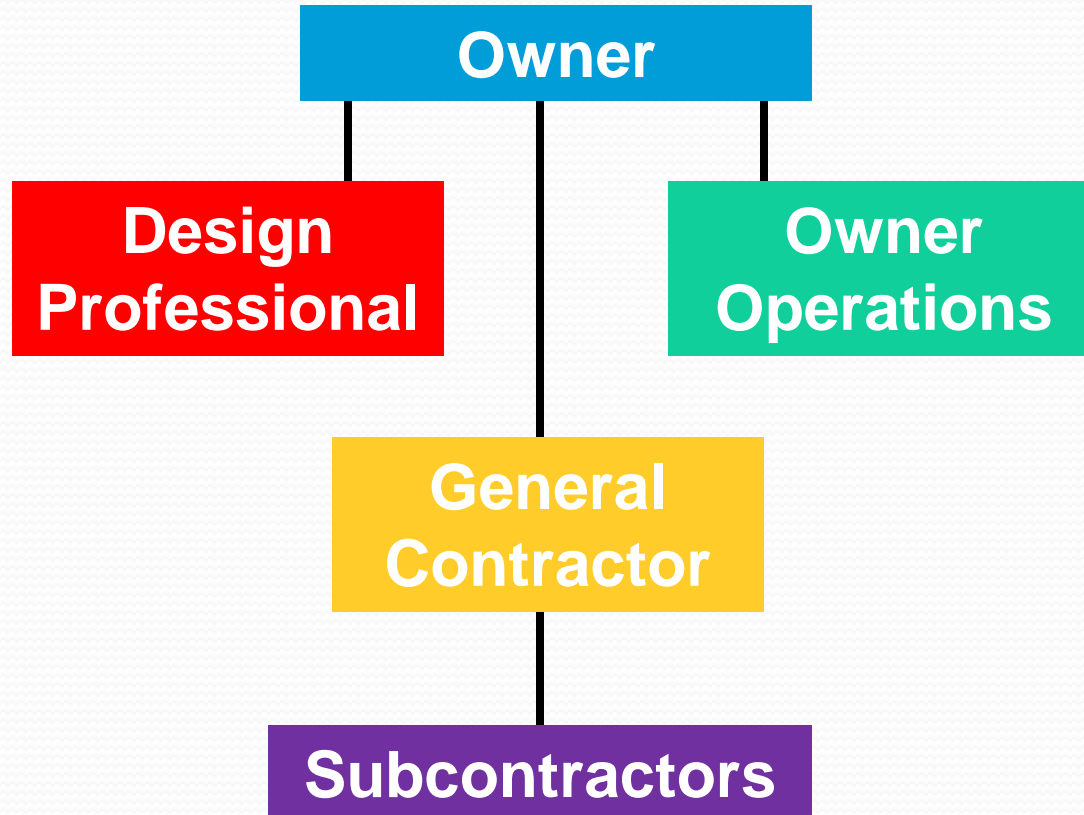


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RWIC Forum and Expo
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Background

In past Design Bid Build (DBB) was only procurement method available to the public sector in Arizona



Background

Title 34 of Arizona Revised Statutes,
“Public Buildings and Improvements” allows for:

- Design Build (DB)
- Construction Manager at Risk (CMAR)
- Job Order Contract (JOC)

RWRD Experience with DBB

Good Experience

- Competitive price
- Good quality
- On Time

RWRD Experience: New Central Laboratory

- Budget: \$28,870,00
- Final Cost: \$21,073,00 (27% under budget)
- Completed 7 months ahead of schedule

RWRD Experience with DBB

Poor Experience

- Project cost overruns – excessive change orders, claims
- Schedule overruns
- Poor quality
- Adverse owner/contractor relationship
- Litigation

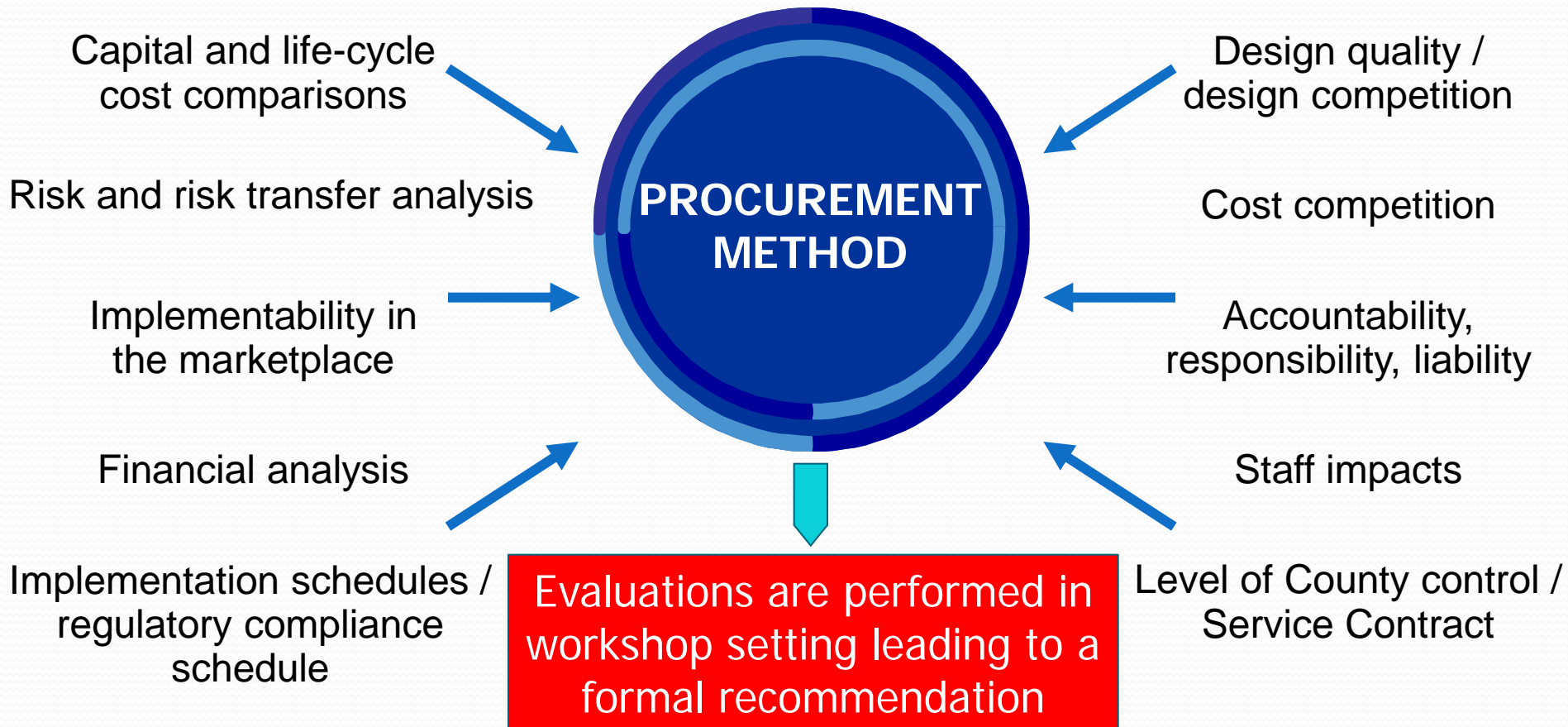
RWRD Experience: Tres Ríos WRF 12.5 MGD Expansion

- Original Budget: \$44,200,00
- Final Cost: \$77,800,00 (76% over budget)
- Original Schedule: 24 months delayed
- Project from award of design contract through litigations:
13 years
- DBBL

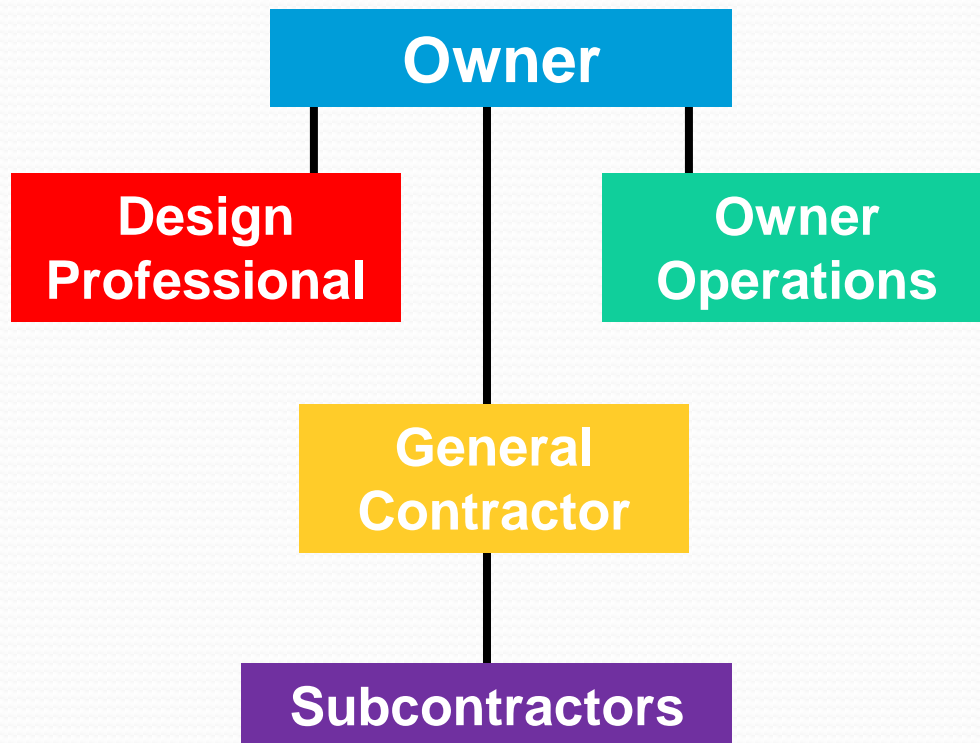
Alternative Project Delivery Methods

All proposed construction contracts within RWRD undergo an in-depth analysis of procurement methods best suited for the particular construction project.

Procurement Method Selection Criteria

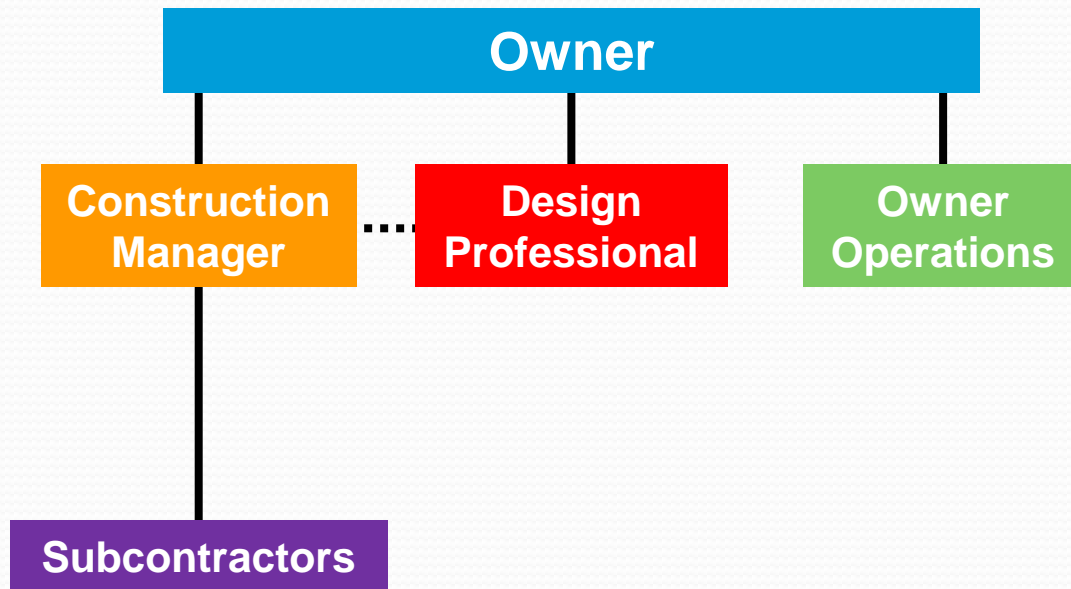


Traditional Design-Bid-Build Project



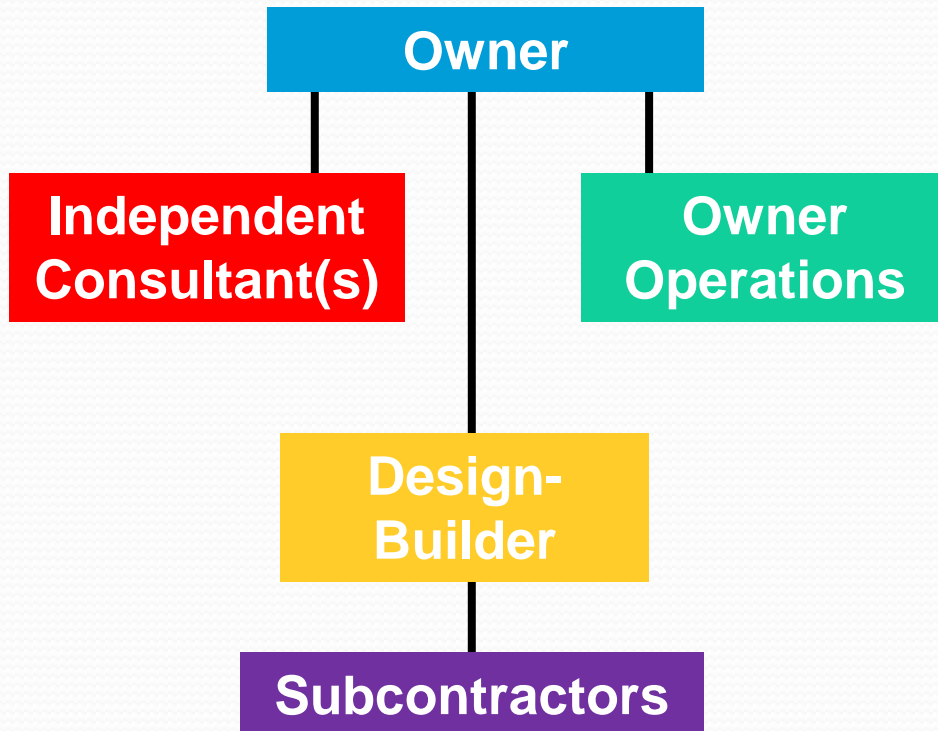
- Traditional well defined method
- History of good and poor experiences
- Lowest (responsive) bid not necessarily most cost-effective final project cost
- Poor history of contract changes, claims and schedule exceedences
- Owner retains high degree of input to design (to the point of over involvement)
- Owner retains significant project risk

Construction Manager at Risk Project



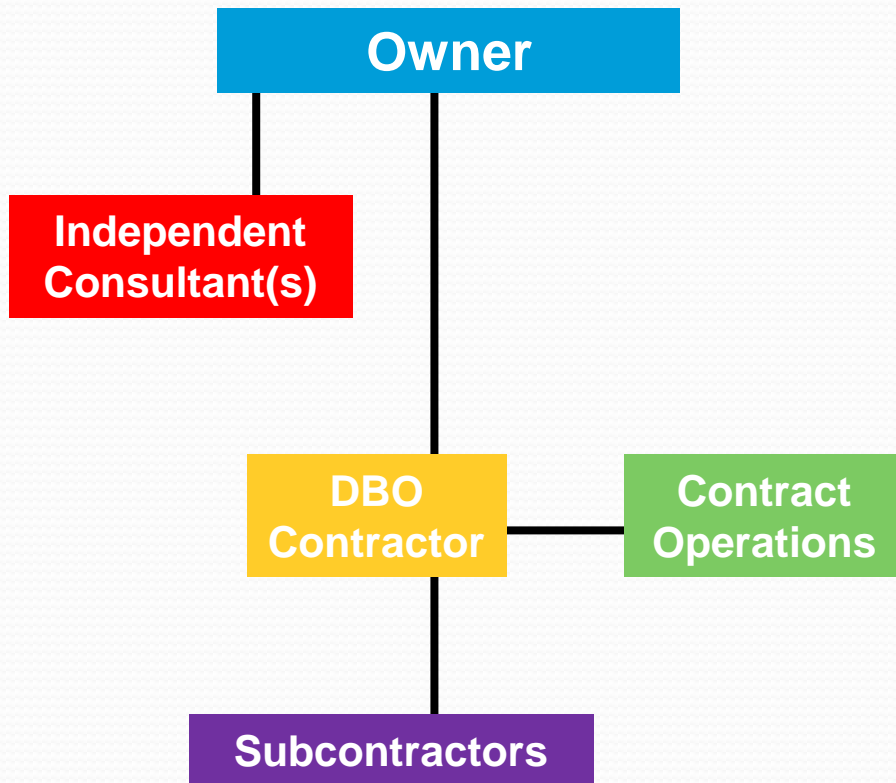
- Usually a procurement method for a complex project
- Owner maintains strong involvement in design development
- Involves the construction manager/contractor early in the design stage to advise on constructability matters, project cost estimating and value engineering
- Design professional/CMAR is Owner forced relationship
- CMAR becomes very familiar with Project before initiation of construction
- Can negotiate Guaranteed Maximum Price for the Project or require CMAR to bid all or portions of the Project

Design/Build Project with Owner Operations



- Self formed partnership between design professional and builder
- DB bid documents can contain specific qualification requirements
- Usually most expeditious project schedule by overlapping design and construction
- Significant risk is transferred to the DB Contractor compared to DBB and CMAR
- Owner receives what Owner prescribes – not anything more

Design-Build-Operate Project



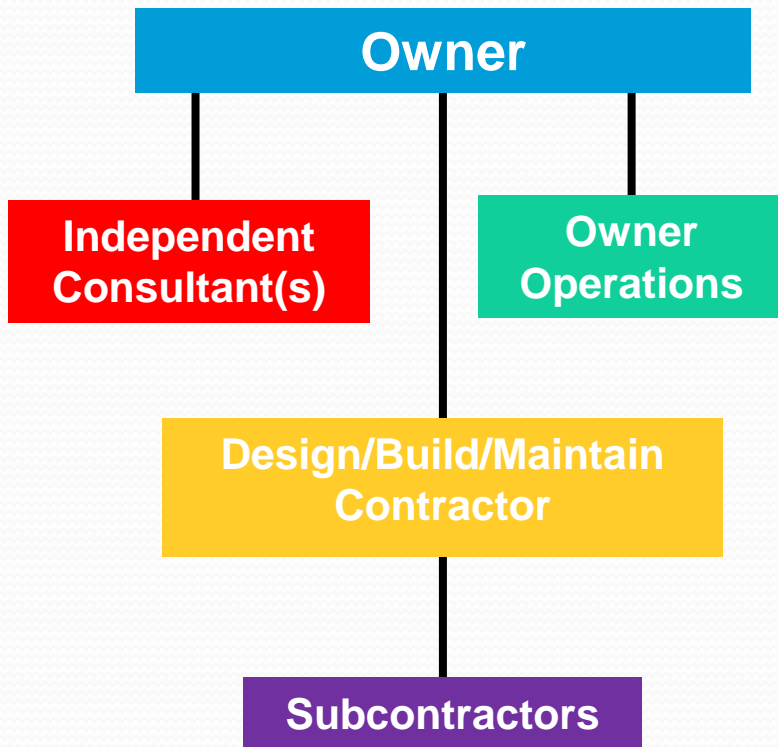
- Single entity responsible for design, construction and long term private sector operations
- Owner retains ownership
- May have impact on existing O & M staff
- Significant transfer of risk to DBO Company
- All costs associated with designing, permitting, constructing and placing the project into operations and meeting all regulatory requirements are transferred to the DBO Company without any additional cost to the Owner
- O & M costs are locked in for the term of the contract subject only to an annual inflation factor

RWRD Agua Nueva WRF

DBO Experience

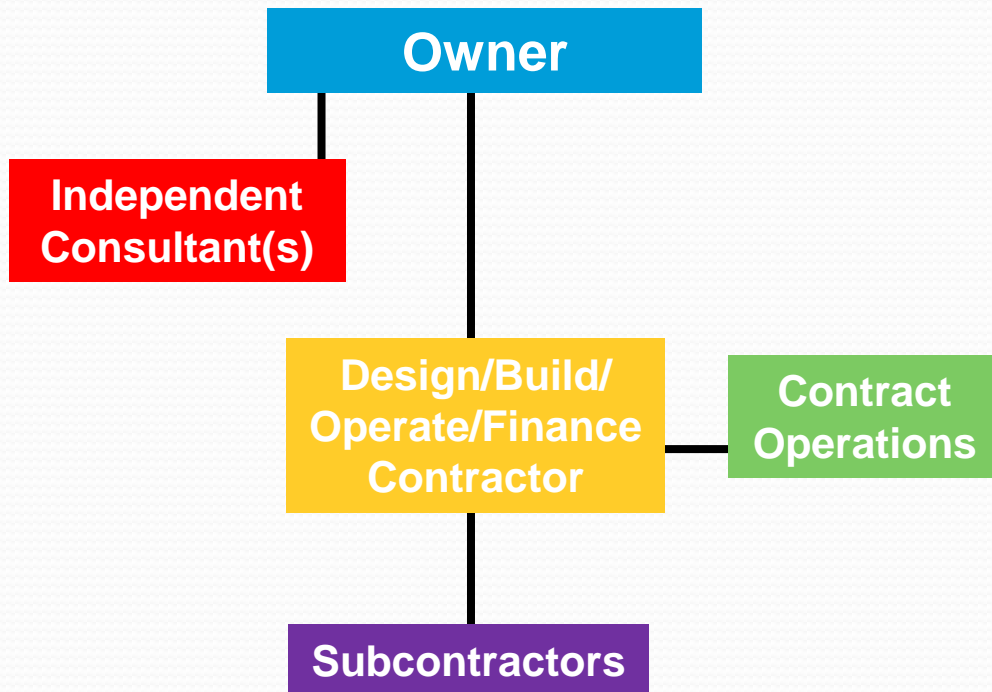
- Not-to-exceed design and construction budget for the Project \$240,00,00
- Actual design-build contract price with DBO Company \$164,063,000
 - Savings difference \$75,937,000
- Contract delivery date August 14, 2014
- Project completed and in operations January 2014

Design-Build-Maintain Project



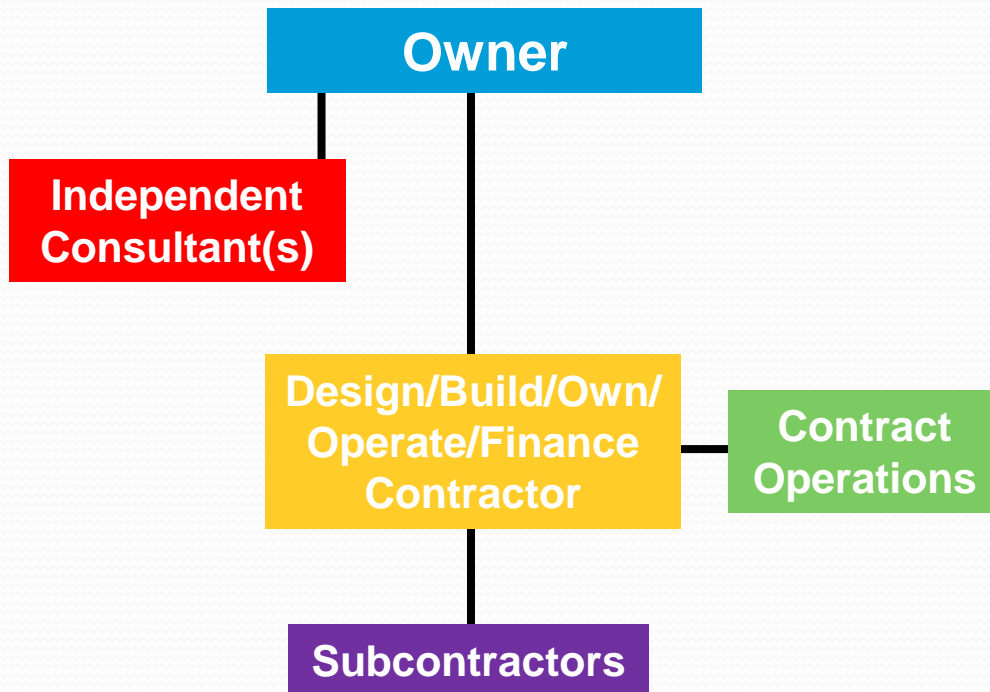
- Similar to DB with added requirement that DB Contractor maintains Project for certain period of time
- Maintenance period is usually shorter (~ 5 years) than DBO operations period (~ 15 years)
- Insures maintenance issues are resolved before Owner assumes maintenance responsibilities
- Can result in conflicts between private sector maintenance responsibilities and public sector operations responsibilities

Design-Build-Finance-Operate Project



- Similar to DBO procurement with added DBO “skin in the game” by providing financing for the Project
- More complicated contract between Owner and DBFO entity
- Significant transfer of risk from Owner to DBFO entity
- Private sector financing usually more expensive than public sector financing

Design-Build-Finance-Own-Operate Project



- Complete transfer of Project to the private sector
- Complete transfer of Risk to the DBFOO entity

Title 34 Procurement Requirements

- Selection Committee
- Request for Proposals (RFP)
- Request for Qualification Statements (RFQ)
- Public Advertisement

Selection Committee

- Committee normally consists of a multi-disciplined group of 4 to 7 members
 - Executive member from department originating Project
 - Proposed Project Manager
 - Engineer familiar with the technical aspects of the Project
 - O & M representative
 - Financial representative (usually from another Department)
 - Other discipline related to the Project
 - Licensed Contractor from outside private firm (Projects exceeding \$2 million)
- Procurement Department administers activities of the Committee and award of the Contract

Request for Proposals (Title 34)

- Basis for the selection of a project delivery method must be presented
- RFP to be publically advertised
- Technical and Cost Proposal are combined
- All Proposals scored and ranked by a Selection Committee

Major Components of a RFP

- Detailed description of the proposed project
- Project delivery method
- Minimum qualifications of the proposer
 - Experience in successfully building similar projects
 - Experience of Proposers team in similar projects
 - Reference to be contacted on similar projects
- Proposers approach to implementation of project
- Financial standing of Proposer
- Owners detailed scoring system
- Proposal submission date
- SBE and MBE preference points
- Project budget
- Draft of Owners proposed contract

RFP Processing

- Technical Proposal and Cost Proposal submitted at same time but separately sealed
 - Cost proposals remain sealed until technical proposals scored
- Interviews and clarification meetings may be held and scored
- Cost proposals are opened, scored and combined with technical scores
- Owner negotiates contract with top ranked Proposer. If Owner unable to arrive at a Contract, Owner then proceeds to negotiate with next ranked Proposer.

Request for Qualifications (RFQ)

- Basis for the selection of a project delivery method must be presented
- RFQ to be publically advertised
- All Qualifications Statements to be scored and ranked by a Selection Committee
 - No cost proposal is submitted

Major Components of a RFQ

- Detailed description of the proposed project
- Selected project delivery method
- Minimum qualifications of the Submitter
 - Experience in successfully building similar projects
 - Experience of Submitter's team in development of similar projects
 - References to be contacted on similar projects
- Submitter's approach to implementation of project
- Financial standing of the Submitter
- Owners detailed scoring system
- Qualification Statement submission date
- SBE and MBE preference points
- Project Budget
- Draft of Owners proposed contract

Processing of Qualification Statements

- All Qualification Statements to be scored and ranked by a Selection Committee
- Interviews and clarification meetings to be held with top ranked firms to arrive at a project scope acceptable to the Owner, and contract terms acceptable to both parties
- Cost proposal requested by Owner
- Submission and scoring of final and best cost offers
- Scores of Qualification Statements and Cost Proposals are combined
- Award to highest ranked firm

Job Order Contracts

- Usually for small non-complex construction contracts
- Publically bid a Job Order Master Agreement
- Bid documents contain minimum qualifications and can contain unit pricing
- A Job Order Master Agreement is awarded to a group of Job Order Contractors to allow for specific Job Orders to be issued (competitive or non-competitive)
- The contract amount for a Job Order Master Agreement can be in \$ millions
 - Example: Pima County has awarded a Master Agreement in amount of \$15 million
- Specific Job Orders are usually limited
 - Example: Pima County individual Job Orders are not-to-exceed \$1,000,000

RWRD Scoring System Example

(DBFOO Project)

Evaluation Categories / Items	Max Score	Score
Team Qualifications		
Respondent DBO team information DB, DBO, or DBFOO experience and past performance on similar projects	50	
Design experience and past performance on similar projects	50	
Construction experience and past performance on similar projects	20	
Operations, maintenance and regulatory compliance experience and past performance on similar projects	20	
Marketing end-product experience to maximize revenue. Success depends on the Project making a profit for the long term.	20	
Qualifications Risk	40	
Team Qualifications Subtotal	200	
Technical Concept		
Project Team Project Leadership, Management and Implementation Environmental Stewardship and Management	60	
Design Concept Process and Equipment Systems	100	
Technical Risk	40	
Technical Concept Subtotal	200	
Preliminary Business Revenue Plan		
Business Plan	200	
Preliminary Revenue Plan Guaranteed Percent Gross Revenue Minimum Annual Revenue	200	
Business Revenue Risk	100	
Revenue Plan Subtotal	500	
Financial Strength		
Financial Resources	60	
Responses to the Direct Financial Questions	40	
Financial Strength Subtotal	100	
Total Points	1,000	

Project Deliver Method Check List

1. Need for Project well defined
 - Political and local support
2. General description of Project
 - Cost estimate range
3. Project schedule
4. Owners Project financial plan in place
 - Rate impact is understood
 - Project budget
5. Owners Project procurement team in place
 - Owners staff
 - Consultants

Project Deliver Method Check List

6. Determine Project Delivery Method and prepare procurement/bid documents
7. Form Selection Committee
 - Diversified credentials
8. Public advertisement of procurement documents
9. Receive responses and review for compliance with procurement requirements
10. Distribute responses to Selection Committee and schedule review meetings
 - May create sub-committees for input
 - May desire consultant involvement

Project Deliver Method

For Qualification Statements

11. Selection Committee initially scores Qualification Statements and develops short list to interview
12. Conduct interviews and clarification meetings with submitters
 - Arrive at scope of project acceptable to Owner
 - Arrive at mutual agreement to contract and score
13. Request and score Cost Proposals
14. Combine Technical Scores and Cost Scores. Award to highest combined score

Project Deliver Method For Proposals

11. Selection Committee initially scores Technical Proposals
 - Cost Proposals not opened
12. Conduct interviews and clarification meetings with submitters
 - Arrive at scope of project acceptable to Owner
 - Arrive at mutual agreement to contract and score
13. Open and score Cost Proposals
14. Combine Technical Scores and Cost Scores. Award to highest combined score

Project Deliver Method

For JOC Contracts

15. Prepare and advertise RFQ with attached Job Order Master Agreement
16. Selection Committee scores and ranks Qualification Statements. Select group of top-ranked contractors to include in one Master Agreement
17. Award Job Order Master Agreement



PIMA COUNTY

WASTEWATER RECLAMATION