Building and Operating the Davis Woodland Water Supply Project

Davis Water Advisory Committee

Presented by:
Jerome B Gilbert, PE, NAE
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# The Traditional Industry-Standard Public Works Process

<table>
<thead>
<tr>
<th>Separate Activity Phase</th>
<th>Characteristics</th>
<th>Limitations</th>
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</thead>
<tbody>
<tr>
<td>Plan/design</td>
<td>Maximum Agency Control</td>
<td>Conservative design</td>
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<tr>
<td></td>
<td>Selection based on experience</td>
<td></td>
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<tr>
<td>Construction</td>
<td>Maximum Agency Control</td>
<td>Change orders likely</td>
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<tr>
<td></td>
<td>Selection based on price only</td>
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<tr>
<td>Operations</td>
<td>Direct Agency day-to-day control</td>
<td>Hiring of new staff</td>
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<td></td>
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<td>Full regulatory risk</td>
</tr>
<tr>
<td>General</td>
<td>Strong Agency management role</td>
<td>Unpredictable costs</td>
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| The Traditional Industry-Standard Public Works Process |
WHY ALTERNATE DELIVERY?

1. Competitive long-term cost control
2. Single responsible entity
3. Facilitates hiring new qualified staff
4. Risk transfer
5. Encourages optimization and innovation
6. Includes value engineering at all phases
7. Guarantee performance and compliance
8. Repair and replacement budgets
# Project Delivery Options

<table>
<thead>
<tr>
<th>Distinguishing Features</th>
<th>(DBB)&lt;sup&gt;(A)&lt;/sup&gt;</th>
<th>DB&lt;sup&gt;(B)&lt;/sup&gt;</th>
<th>DBO&lt;sup&gt;(C)&lt;/sup&gt;</th>
<th>CM@Risk&lt;sup&gt;(D)&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Level of Integration</strong></td>
<td>None</td>
<td>Partial</td>
<td>Complete</td>
<td>Partial</td>
</tr>
<tr>
<td><strong>Operational Responsibility</strong></td>
<td>Staff/Contract</td>
<td>Staff/Contract</td>
<td>Contract</td>
<td>Staff/Contract</td>
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<tr>
<td><strong>Ownership &amp; Financing</strong></td>
<td>Agency</td>
<td>Agency</td>
<td>Agency</td>
<td>Agency</td>
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</tbody>
</table>

<sup>(A) DBB = Design-Bid-Build: separate contracts for each phase.</sup>  
<sup>(B) DB = Design-Build: Design and construction in one contract; separate operations contract.</sup>  
<sup>(C) DBO = Design-Build-Operate: Design, build, & operate in a single contract.</sup>  
<sup>(D) CM@Risk = Construction Manager at Risk: CM accepting defined risks, selected on qualifications with maximum price; separate operations contract.</sup>
Design Build Operate
Meets Agency Objectives

(Selection of process peer-reviewed by Tchobanoglous and Schroeder)

1. Prices show long term savings **up to 30%+**
2. Known firm price improves grant opportunities
3. Integrates operations and design
4. Offers **competitive optimization of design and innovation**
5. Operations under performance guarantees, **includes early buyout**
6. Provides payment flexibility to fit City rate policies
7. Results in a single contract and retains local contractor competition
DBO will result in...

- Guaranteed price for performance
- More cost-effective operations
- Compliance with drinking water standards
- Guaranteed delivery to meet demands
- Timely project completion
- Facilities repair and replacement program
- Local employment and contracting
- Business ethics policy compliance
- Reduced public agency risk
DBO will not result in…

- Private ownership or privatization
- Establishment or control of water rates
- Changing prices for operation
- Private determination of customer water quality
- Permanent private operation
- Replacement of city staff
Assuring DBO Success

1. Agency controls defined in contract

2. Performance guaranteed by penalty and incentive system

3. Contract can be canceled at any time due to performance or change an Agency policy

4. Agency owns the facilities

5. Agency administers repair and replacement budget

6. Appropriate risks are transferred to contractor
Woodland/Davis Benchmark Concept

- Treatment Train
- Hydraulic Profile
- Energy Efficiency
- Site Layout
- Pump Station
- Environmentally Friendly
- Ease of Operation
- Design of Inlet Pipeline
- Treated Water Transmission
- Treated Water Storage
- Automation
- Project Financing
Existing Davis Contract O&M

1. Davis Municipal Golf Course has contract operation and maintenance

2. Davis recently initiated a contract for tree trimming services

3. Davis contracts with a private waste removal service

4. Davis provides contract operation and maintenance services to non-city water utilities (El Macero, Willow Bank, North Davis Meadows)
Next Steps

1. Release draft Request for Proposals (RFP)
2. Finalize and distribute RFP
3. Receive and review concept proposals
4. Receive and review final cost proposals
5. Select best overall proposal and negotiate contract