



# Design-Build Contract Risks

## Design-Build In Road Building *Legal and Practical Issues*

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# Design-Build Contract Risks

## We Will Discuss:

- Perceived advantages of Design-Build project delivery process;
- Legal and Practical Issues presented by Design-Build:
- Significant Prime Contractual Provisions:
- Teaming Agreements
- Contractor/Designer Relationship; and
- Warranties.



# Design-Build Contract Risks

## Perceived Advantages of Design-Build :

- Early “guarantees” of project cost;
- Transfer of design liability risk from owner to contractor -- the party having more control to manage such risk;
- All risks are assigned to party having control to manage such risk (if contract properly assigns risks among the parties);
- Guaranteed project delivery date;
- Reduction in time from project inception to completion;
- Design and construction in one party’s hands- reduces “buck passing”;
- Value engineering in design phase reduces overall costs;



# Design-Build Contract Risks

## Perceived Advantages of Design-Build :

- Design and construction in a single party's hands increases quality potential;
- Decreases Owner's administrative burden (long term overhead);
- Reduction in change orders (design errors); and
- Overall project risk is better managed because design and construction under one roof.



# Design-Build Contract Risks

## Florida (FDOT) Experience

- Award Cost Increases 4.59% on D-B Projects;
- Post-award Cost Growth = 1.99% Compared with 8.78% on D-B-B
- Overall Cost Savings = 2%
- Construction Time Savings = 21.1%
- Design/Construction Time Savings = 54%



# Design-Build Contract Risks

## Florida (FDOT) Experience

### Conclusion

1. Design-Build Produces Slight Cost Savings;
2. Design-Build Produces Great Time Savings (Inception to In-Service)
3. Design-Build Introduces Great Budget Stability for the DOT



# Design-Build Contract Risks

## Risk of Design Error Under Traditional Design-Bid-Build Spearin Doctrine

*An owner who issues detailed design drawings warrants to the contractor that the design represents what the owner desires to be built and if the contractor builds the project in accordance with such plans, the contractor is not liable for costs to modify the end product.*



# Design-Build Contract Risks

## Risk of Design Error Under Traditional Design-Bid-Build

*What happens when Owner turns to Design Professional after paying Contractor an extra as a result of Owner's breach of implied warranty of plans and specifications?*





# Design-Build Contract Risks

## Risk of Design Error Under Traditional Design-Bid-Build

### *The Owner's Dilemma*

*A problematic or “defective” design is not necessarily a breach by the professional designer of its contract with the Owner -- Professional Negligence Standard Applies!!!*



# Design-Build Contract Risks

## Risk of Design Error Under Design-Build

- *Contractor may be strictly liable to Owner for defective construction and defective design*
- *Owner's position is that "if there's a problem . . . fix it!"*
- *Design Professional liable to Contractor only for defective design if defect constitutes "professional negligence"*
- *Potential dispute between Contractor and Designer -- "Defective Design or Defective Construction"?*



# Design-Build Contract Risks

***If Agency's Contract Places Greater Design Risk Upon the Design Builder Than Designer Would Assume in Typical Agency-Designer Contracts, Design Builder Must Pass Risk on to Designer or Include Provisions in Pricing for the Risk***



# Design-Build Contract Risks

## Legal & Practical Issues of Design-Build

- *Unbalanced Design Liability/Risk That State DOT's Experienced for Years Now Belongs to Design-Builder;*
- *Designers Must Adhere Strictly to a Detailed Project Schedule;*
- *Insurance & Bonding Products Are Behind the Curve;*
- *RFQ/RFP & Selection Process Prone to Challenges From Disappointed Proposers;*



# Design-Build Contract Risks

## Legal & Practical Issues of Design-Build

- *State DOT's Must Optimize Design Criteria and Constraints in RFP to Realize Benefits From D-B Process;*
- *State DOT Design Oversight & Review is Critical to Project Success;*
- *State DOT's Must Resist Urge to Use D-B as a Means to Transferring Risks That Contractor Cannot Control*



# Design-Build Contract Risks

## I. Designer Must Adhere Strictly to Project Schedule

- A New Challenge for the Design Professional
- Loss of Time on Critical Path Has Real Costs
- D-B Entity Must Realize That The Costs of Accelerating Design Work to Make Up Lost Time on the Critical Path are Usually Lower Than Accelerating Construction
- What Liability Does Designer Have For Delay?



# Design-Build Contract Risks

## II. Insurance and Bonding “Behind the Curve”

- Some CGL policy forms cover “design” incidental to means and methods (bodily injury and property damage only)
- E&O -- usually “claims made” -- tail coverage usually demanded to adhere to warranty requirements which are longer
- Concern of sureties for liability extending to design



# Design-Build Contract Risks

## II. Insurance and Bonding “Behind the Curve” (con’t)

- Project specific policies demanded
- Builder’s Risk now being required from contractor (from building industry)





# Design-Build Contract Risks

## III. RFP/RFQ Process Prone to Challenges

- Traditional D-B-B Procurement Process Almost Completely Objective
- Additional Judgment Injected Into D-B in Both the Qualification and Final Selection Process



# Design-Build Contract Risks

## Attributes of a Fair RFQ/RFP Process

- Two-step -- First Pre-Qualify based upon experience, financial strength, and organizational resources
- First step reduces final competitors down to from three to five
- Provides for stipend in appropriate circumstances
- Individuals on selection panel should be knowledgeable about design, permitting and construction



# Design-Build Contract Risks

## Attributes of a Fair RFQ/RFP Process

- Selection criteria must be set forth in RFP and must be appropriately weighted
- The End Product = Qualitative Score
- Key factors should include quality, life-cycle costs, maintenance, price, aesthetics, etc.
- Reasonable Proposal Deliverables -- require only that information which is necessary to adequately judge competing proposals



# Design-Build Contract Risks

## Attributes of a Fair RFQ/RFP Process

- Over-Prescribed Design Criteria -- limits D-B teams from bringing innovative solutions to the table;
- Under-Prescribed Design Criteria -- Bidders must making sweeping assumptions and proposals are unlikely to satisfy owner expectations. Proposals cannot be accurately compared.



# Design-Build Contract Risks

## Attributes of a Fair RFQ/RFP Process

- Articulate functional requirements; external constraints; performance requirements (30% design optimal)
- Price and Qualitative Proposals in Separate Sealed Envelopes
- Prices Opened After Qualitative Scores are Established



# Design-Build Contract Risks

## IV. DOT's Must Optimize Baseline Engineering

- Too much inhibits creativity and innovation
- Too little inhibits DOTs' ability to objectively evaluate and differentiate proposals
- 30% optimum



# Design-Build Contract Risks

## V. Department Oversight/Approval of Design

- Department acceptance of D-B Proposal constitutes acceptance of the design concept
- Subsequent reviews at design development intervals should be advisory and for purpose of ensuring conformance with criteria
- QA/QC Program is primary “quality-checking” mechanism



# Design-Build Contract Risks

## V. Department Oversight/Approval of Design (con't)

- Agreement should include specific design review response time standards (build into CPM)
- Fast-track design review dispute resolution system (Partnering, DRB, etc.)
- If D-B contractor must control schedule, it must have reasonable control and certainty over all activities impacting schedule!





# Design-Build Contract Risks

## V. Department Oversight/Approval of Design (con't)

*If the Department takes overly active role in reviewing and commenting on design OR over-prescribes the design requirements up front, it may assume some of the design liability intended to belong to the DB Contractor*



# Design-Build Contract Risks

## VI. State DOT Must Resist Urge to Use Process As A Means of Transferring Risks To D-B Teams Which They Cannot Control

- Subsurface Conditions
- Environmental Permitting
- Environmental Hazards
- Existing Utilities (caveat)
- Right-of-Way & Easements



# Design-Build Contract Risks

*Design-Build is Not a Panacea for Risks Properly the Responsibility of the Owner*



# Design-Build Contract Risks

## Design-Build Contract

- **Contract Provisions**
  - **Contract Documents and Order of Precedence**
    - **Design-Builder Wants Its Proposal to be a Part of the Contract Documents and Take Precedence Over Conflicts in the RFP**
    - **Agency Wants RFP to Take Precedence**



# Design-Build Contract Risks

## Design-Build Contract

- **Contract Provisions**
  - **Responsibility for Differing Site Conditions**
    - **Many Public Agencies Make the Contractor Responsible without exception**
    - **Some agencies handle like D-B-B Contracts**
    - **Others Provide a Contingency, Deductible or Allowance**



# Design-Build Contract Risks

## Design-Build Contract

- **Contract Provisions**
  - **Responsibility for Obtaining Permits and Easements**
    - **Will Increasingly Be Placed on Design-Builder (except eminent domain)**
    - **In Some RFPs Experience in Compliance with Permits Considered as Part of Evaluation**



# Design-Build Contract Risks

## Design-Build Contract

- **Contract Provisions**
  - **Responsibility for Finding and Relocating Utilities Within the Project**
    - **Clauses May Shift Risk to Design-Builder**
    - **Covers Both Known and Unknown**
    - **Problem occurs with responsiveness of public/private utility**



# Design-Build Contract Risks

## Design-Build Contract

- **Contract Provisions**
  - **Responsibility for Compliance with Changes in Applicable Law and Regulations**
    - **Clauses Generally Make Design-Builder Responsible for Compliance with the Law (including changes in the law?)**





# Design-Build Contract Risks

## Design-Build Contract

- **Contract Provisions**
  - **Responsibility for Environmental Hazards and Remediation**
    - **Design-Builder Should Make Sure It Is Not Responsible for Existing Conditions and That It Will Be Indemnified for Handling and Disposing (absent negligence the exacerbates)**



# Design-Build Contract Risks

## Design-Build Contract

- **Contract Provisions**
  - **Responsibility for Delays**
    - **Many Agencies Using Incentive/Disincentive Clauses and place all risk of delay upon contractor**
    - **Force Majeure -- trend in narrowing events that constitute force majeure**
    - **Some Include Time as a Component to be Considered in Making Award**



# Design-Build Contract Risks

## Design-Build Contract

- **Contract Provisions**
  - **Responsibility for Overruns in the Design or Construction Budget**
    - **Generally Design-Builder Bears Risk**
    - **Depends on How Much Design Done by the Public Agency**



# Design-Build Contract Risks

## Design-Build Contract

- **Contract Provisions**
  - **Force Majeure Events**
    - **Not Addressed in Some Contracts**



# Design-Build Contract Risks

## Design-Build Contract

- **Contract Provisions**
  - **Indemnification, Insurance and Bonding**
    - **Issue: Extent of Potential Liability**
    - **Issue: What is Covered in Indemnification**



# Design-Build Contract Risks

## Design-Build Contract

- **Contract Provisions**
  - **Default and Termination**
    - **What is a Default?**
    - **Is There a Cure Period?**
    - **What Remedies Does the Agency Have?**



# Design-Build Contract Risks

## Design-Build Contract

- **Contract Provisions**
  - **Design-Builder's Duties and Responsibilities**
    - **May Change From Negligence Standard to Strict Liability**



# Design-Build Contract Risks

## Design-Build Contract

- **Contract Provisions**
  - **Public Agency's Duties and Responsibilities**
    - **Single Most Important Duty, Other Than Payment, is to Adequately Describe Scope of Work**





# Design-Build Contract Risks

## Design-Build Contract

- **Contract Provisions**
  - **Public Agency's Duties and Responsibilities**
    - **Site Availability is a Second Important Duty**



# Design-Build Contract Risks

## Design-Build Contract

- **Contractors Should Seek**
  - **Limitation on Liability**
  - **No Consequential Damages**
  - **No Indemnification for Agency Negligence**



# Design-Build Contract Risks

## Options for Structuring the D-B Team

- **Integrated**
- **Prime-Subcontractor Relationship**
  - **Builder-Led**
  - **Designer-Led**
- **Special Purpose Entity**
  - **Joint Venture / Partnership**
  - **Corporation**



# Design-Build Contract Risks

## Teaming Agreements (integrated)

- **Pre-Contract Agreement - Designer and Builder**
- **Team Formation Considerations**
  - **Compatibility (Designers are from Venus; Builders are from Mars)**
  - **Efforts to Get Award of Contract**
  - **Risk Management**
  - **Value Engineering**



# Design-Build Contract Risks

## Teaming Agreements

- **Team Formation Considerations**
  - Financial Considerations
  - Definitions of Roles
  - Interface with Owner
  - Sharing of Costs - Honorarium
  - Noncompete
  - Ownership of Proprietary Information



# Design-Build Contract Risks

## Teaming Agreements

- **Termination of Agreement**
  - Owner Will Not Proceed
  - Team Disqualified
  - Another Team Wins
  - Award to Team Leader
  - Portion of Team's Proposal Unacceptable



# Design-Build Contract Risks

## Teaming Agreements

- **Termination of Agreement**
  - **Joint Venture Agreement or Prime / Subcontract Signed**
  - **Loss of Licensure / Enforcement Action as to a Team Member**



# Design-Build Contract Risks

## Teaming Agreements

- **Post-Award Considerations**
  - Matrix of Responsibilities
  - Flow Down of Prime Contract Terms
  - Coordinate Design with Construction and Budget





# Design-Build Contract Risks

## Contractor/Designer Relationship

- **Designer Quality Essential to Get to Phase II**
- **Designer's Financial Condition Can be Important**
- **Important to Clearly Establish Relationship Prior to Submitting Proposal**



# Design-Build Contract Risks

## Contractor/Designer Relationship

- **Big Issue “Growth” of Project – Requires Close Work Between Designer and Contractor**
- **Most Experts Suggest Contractor Take Lead Role**
- **Contractor Must Make Sure Limitations on Design Risk Are In Contract with Agency**



# Design-Build Contract Risks

## Contractor/Designer Relationship

- **Suggested Subjects for Contractor-Designer Subcontract**
  - Accuracy of Reports Prepared by Outside Consultants
  - Design Error
  - Overrun in Design Budget
  - Delay in Design



# Design-Build Contract Risks

## Contractor/Designer Relationship

- **Suggested Subjects for Contractor-Designer Subcontract**
  - Time and Cost Overruns Due to Performance by the Designer's Consultants
  - Time and Cost Overruns in Design Caused by Owner
  - Acceleration Costs to Bring Design Within the Design Schedule



# Design-Build Contract Risks

## Contractor/Designer Relationship

- **Suggested Subjects for Contractor-Designer Subcontract**
  - **Construction Defects**
  - **Overrun in Construction Budget**
  - **Construction Cost Overruns Due to Estimating Errors**
  - **Delay in Completion of Construction**



# Design-Build Contract Risks

## Contractor/Designer Relationship

- **Suggested Subjects for Contractor-Designer Subcontract**
  - Acceleration Costs to Bring Construction Within the Construction Schedule
  - Discovery of Hazardous Materials on Site
  - Force Majeure Which Results in Time and Cost Overruns



# Design-Build Contract Risks

## Contractor/Designer Relationship

- **Suggested Subjects for Contractor-Designer Subcontract**
  - Unforeseen Site Conditions Which Are Not the Owner's Contractual Responsibility
  - Owner Failure to Pay
  - Indemnification for Performance and Labor and Material Payment Bonds



# Design-Build Contract Risks

## Contractor/Designer Relationship

- **Suggested Subjects for Contractor-Designer Subcontract**
  - **Carrying Costs Associated with Fulfilling Unwarranted Demands of the Owner**
  - **Liability to Subcontractors Resulting From Subcontractor or Supplier Defects**
  - **Insurance Obligations**





# Design-Build Contract Risks

## Contractor/Designer Relationship

- **Suggested Subjects for Contractor-Designer Contract**
  - **Indemnification Obligations in the Subcontract**
  - **Fees and Expenses for Pursuing Claims**



# Design-Build Contract Risks

## What Will Designer Want?

- To be held to “ordinary standard of care” (E&O Insurance Policy requirement)
- Not to name contractor as additional insured under PL Policy (usually prohibited)
- Limited liability / waiver of consequential damages
- An equity position? (With limited downside?)



# Design-Build Contract Risks

## Warranties - Distinguish

### Warranty of Adequacy

vs.

### Call-Back Warranty



# Design-Build Contract Risks

## Warranty of Adequacy

**A Guarantee That Construction Materials and Equipment Are New and Free From Defects; Construction Services Are of a Good and Workmanlike Quality; and the Design Is Free From Unreasonable Defects and Will Accomplish the Purposes Intended.**



# Design-Build Contract Risks

## Call-Back Warranty

**An Agreement That If Defects in the Project Should Become Apparent After Completion, the Contractor Will Return to the Site to Make Necessary Repairs or Adjustments.**



# Design-Build Contract Risks

## Project Components Most Frequently Warranted

	<u>Years</u>	<u>States</u>
Asphalt Concrete	3-8	11
Asphalt Crack Treatment	2	1
PCCP	5	2
Bridge Components	5-10	6
Bridge Painting	2-10	6



# Design-Build Contract Risks

## Project Components Most Frequently Warranted

	<u>Years</u>	<u>States</u>
Chip Sealing	1-2	2
ITS Components	2-3	2
Landscaping, Irrigation	1	1
Pavement Marking	2-6	6



# Design-Build Contract Risks

## Effect of Warranties in D-B Upon Traditional Designer's Implied Warranty

- Under the Traditional Design-Bid-Build Approach Design Work Judged by the Reasonable Designer “Yardstick”





# Design-Build Contract Risks

## Effect of Warranties in D-B Upon Traditional Designer's Implied Warranty

- When Design-Build Entity Warrants a Particular Part of a Project, It Warrants Overall Performance (Design and Construction)



# Design-Build Contract Risks

## Effect of Warranties in D-B Upon Traditional Designer's Implied Warranty

- The “Negligence” of the Designer Is Not Relevant
- Is Strict Liability the New Standard?



# Design-Build Contract Risks

## A New Twist: Maintenance

- **Logical Next-Step to Long Term Warranties**
- **Allows Contractor to Control Maintenance**
- **States Maintain Non-Pavement and Non-Structure Maintenance (Mowing, Snow Removal, etc.)**



# Design-Build Contract Risks

State DOT Must Resist Urge to Use Process As A Means of Transferring Risks To D-B Teams Which They Cannot Control

- Subsurface Conditions
- Environmental Permitting
- Environmental Hazards
- Existing Utilities (caveat)
- Right-of-Way & Easements



# Design-Build Contract Risks

## Design-Build In Road Building *Legal and Practical Issues*

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