

MAXIMIZING THE BENEFITS OF DESIGN-BUILD FOR JUSTICE FACILITIES

DESIGN-BUILD INSTITUTE OF AMERICA
Western Pacific Region

Tuesday, April 26, 2016
11:30 am – 1:30 pm
San Jose Marriott, San Jose

Featured Speakers

Robert Oates

Project Director III

BOARD OF STATE AND COMMUNITY CORRECTIONS (BSCC)

Michael Meredith, DBIA, LEED

Project Director – Project and Construction Management

CALIFORNIA DEPARTMENT OF CORRECTIONS AND REHABILITATION (CDCR)

DBIA-WPR Board Member, Owners Council Director

Sean Carolan, DBIA, LEED AP

Operations Manager

HENSEL PHELPS

DBIA-WPR Board Member, Membership Chair



Featured Speakers

Robert Oates

Project Director III
BOARD OF STATE AND COMMUNITY CORRECTIONS (BSCC)

- More than 27 years of professional experience performing program and construction management for institutional, commercial, educational, and capital projects.
- Graduated from Chico State University with a Bachelor of Science Degree in Construction Management
- Previous experience included roles with Kaiser Permanente, Jonas and Associates, RBF Engineering and the State of California, Department of General Services, Real Estate Services Division - Project Management Branch (RESD-PMB)



Featured Speakers

Michael Meredith, DBIA, LEED

Project Director – Project and Construction Management

CALIFORNIA DEPARTMENT OF CORRECTIONS AND REHABILITATION (CDCR)

DBIA-WPR Board Member, Owners Council Director

- Graduated from Bowling Green State University, in Construction Technology.
- 34 years in the construction industry
- 17 years experience in the private sector working for large general contractors on a variety of project types, including county jails, high rise, medical, nuclear power, oil platforms, and civic projects.
- Spent ten years at the California Department of General Services, in part as Project Director for the well known \$392 million dollar, 1 mil sf Capitol Area East End Complex.
- Project Director on the award winning \$906 million dollar California Health Care Facility (CHCF). The award winning 1722 bed 1.2 million sf facility is the first of its kind in California.
- Recently completed the very successful Mule Creek Infill Complex, a \$350mil, 1584 bed facility critical to achieving the Departments court ordered bed count mandate.



Featured Speakers

Sean Carolan, DBIA, LEED AP

Operations Manager
HENSEL PHELPS

DBIA-WPR Board Member, Membership Chair

- Graduated from California Polytechnic State University at San Luis Obispo with a Bachelor of Science Degree in Construction Management
- 20 year veteran of Hensel Phelps,
- Significant design-build experience, particularly on detention centers, including the Stanislaus County Public Safety Center Expansion - Projects 1 & 3; the \$370 Million Mule Creek Infill Complex Expansion, the Alameda County Juvenile Justice Center; and the San Quentin State Prison Health Services Building.



SB-863

Lease Revenue Bond Financing Overview



AGENDA

Who's on Our Team?
Lease Revenue Bond Authority
Lease Revenue Bond Financing
Project Development
State Fire Marshal
Challenges that Delay the Project
County X SB-863 LRB Project

STATE TEAM SUPPORTING LRB FUNDING

BSCC – County Facilities Construction

SPWB – State Public Works Board

PMIB – Pooled Money Investment Board

DOF – Department of Finance

DGS – Department of General Services.

SFM – Fire & Life Safety\Plan Review

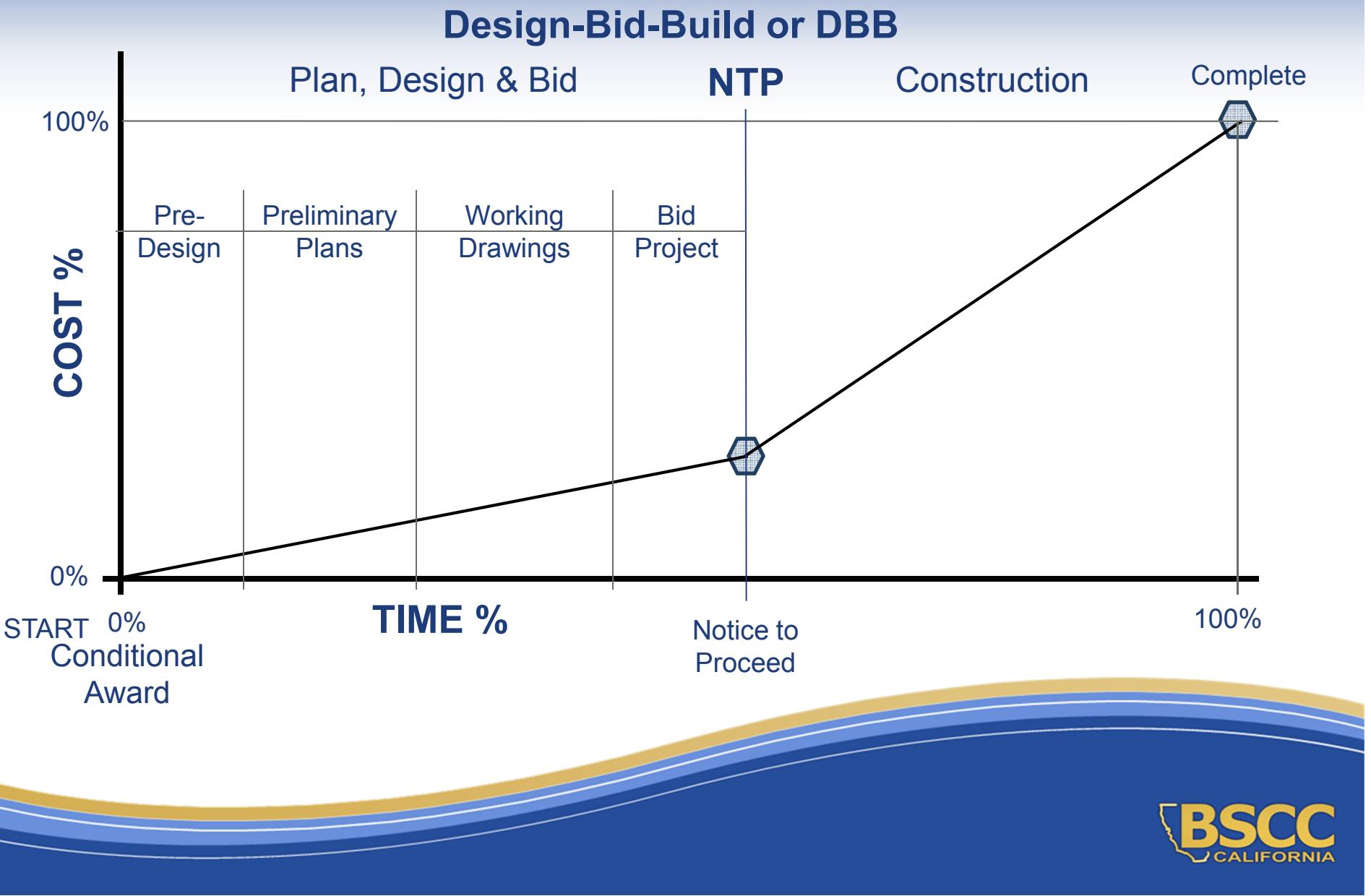
LEASE REVENUE BOND FINANCING AUTHORITY

Senate Bill 863 was chaptered June 2014 authorizing 500 million dollars in SLR bond financing for Adult Local Criminal Justice Facility construction.

LEASE REVENUE BOND FINANCING

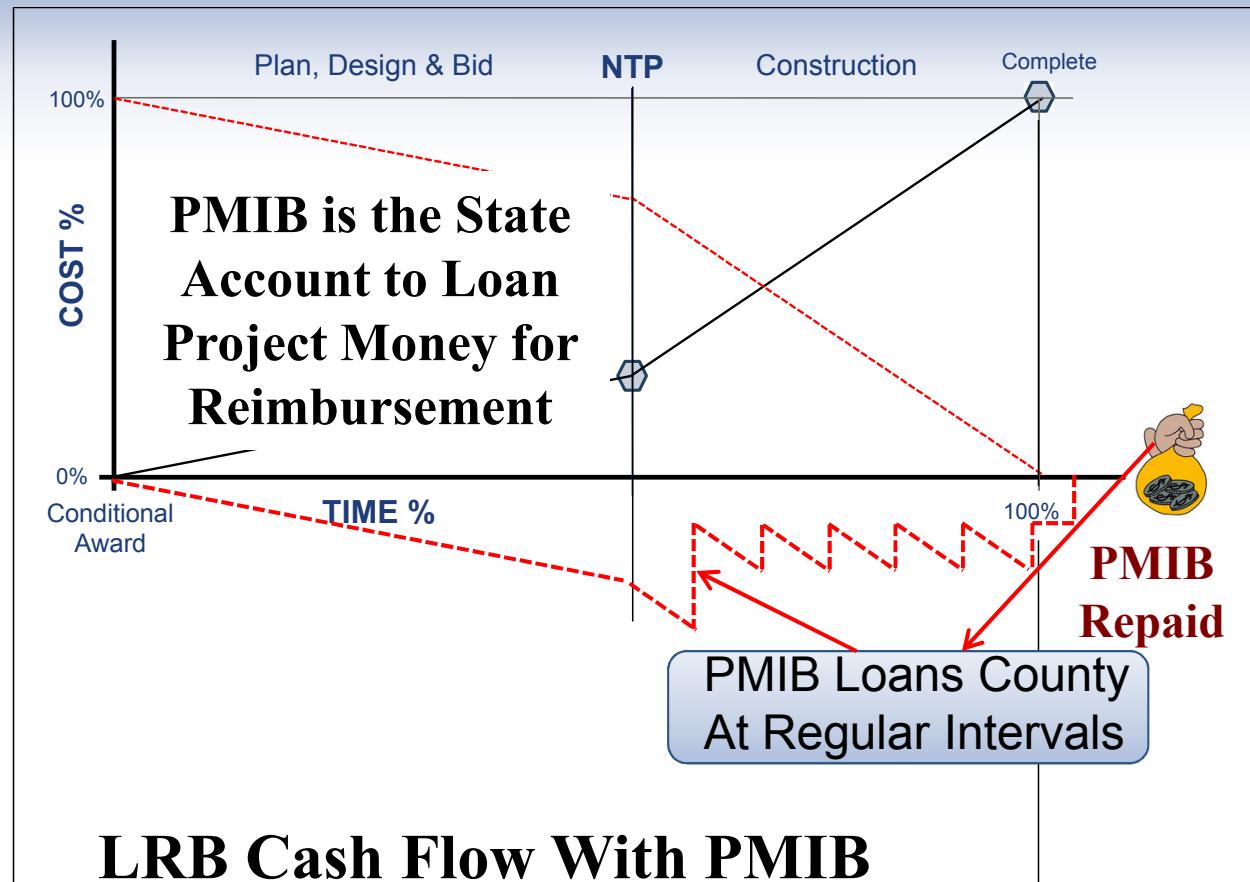
1. Typical Project Cost vs Time
2. LRB and the PMIB
3. Reimbursement Details

1. TYPICAL PROJECT COST VS. TIME



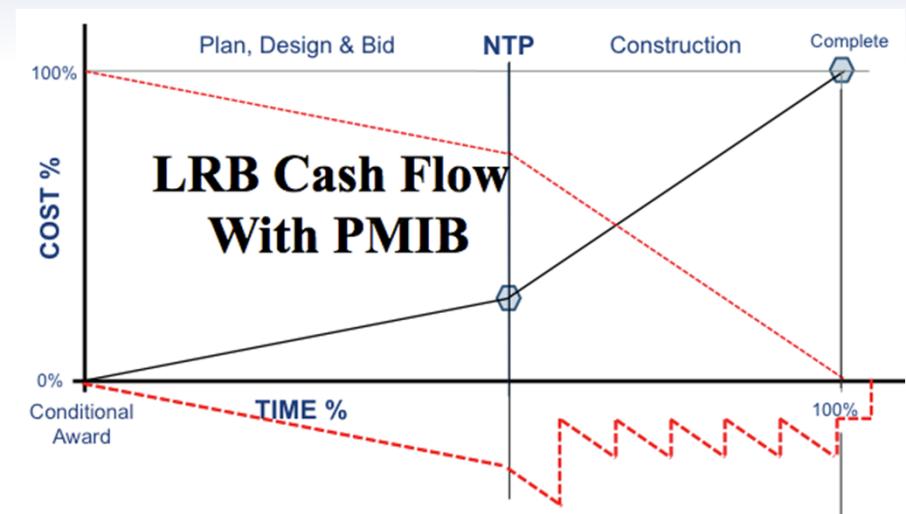
2. LRB CASH FLOW WITH PMIB LOAN

1. Pooled Money Investment Board (PMIB)
2. County Finances project, but is reimbursed at specific intervals
3. Reimbursement is available after NTP.
4. Bonds Sold After Project is Complete
5. PMIB is repaid.



3. REIMBURSEMENT DETAILS

1. State Reimbursement = \$15 M
2. Match Requirement = \$ 0 M
3. Plan, Design, Bid Cost = \$ 3 M
4. Construction Cost = \$12 M
5. Construction Duration = 12 Month
6. Construction Cost/Mo = \$1 M/Mo
7. Cost to NTP = \$ 3 M
8. Construction Cost = \$ 2 M
9. Cost Before Payment = \$ 5 M
10. First Payment is \$3M

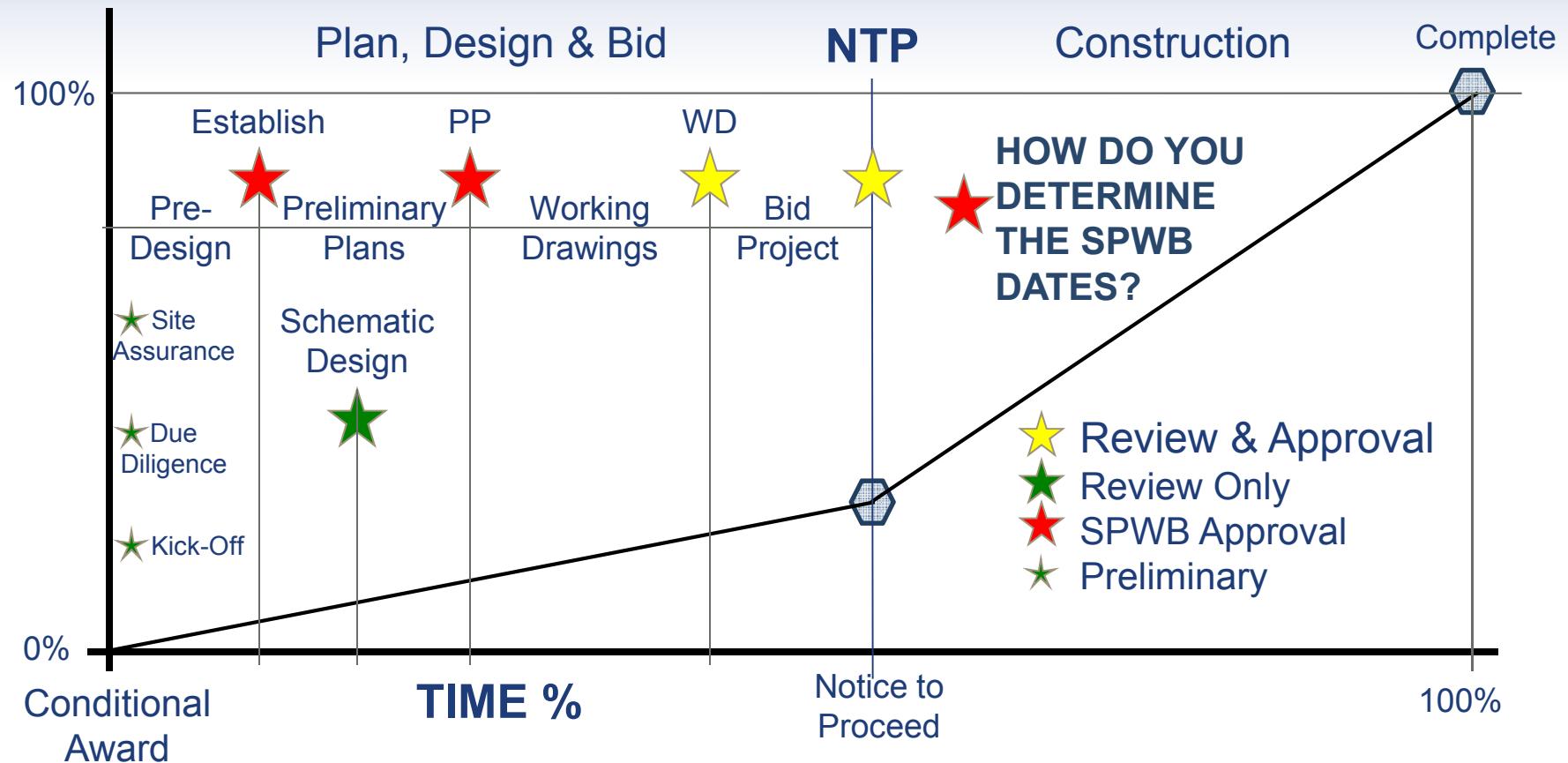


- a. No Cash or In-Kind match requirements.
- b. Match requirements add additional burden. ($10\% = \$1.5\text{ M}$, $5\% = \$750\text{ k}$)
- c. Counties may take out recurring construction loans for 3-month window
- d. Interest payments are not reimbursable.

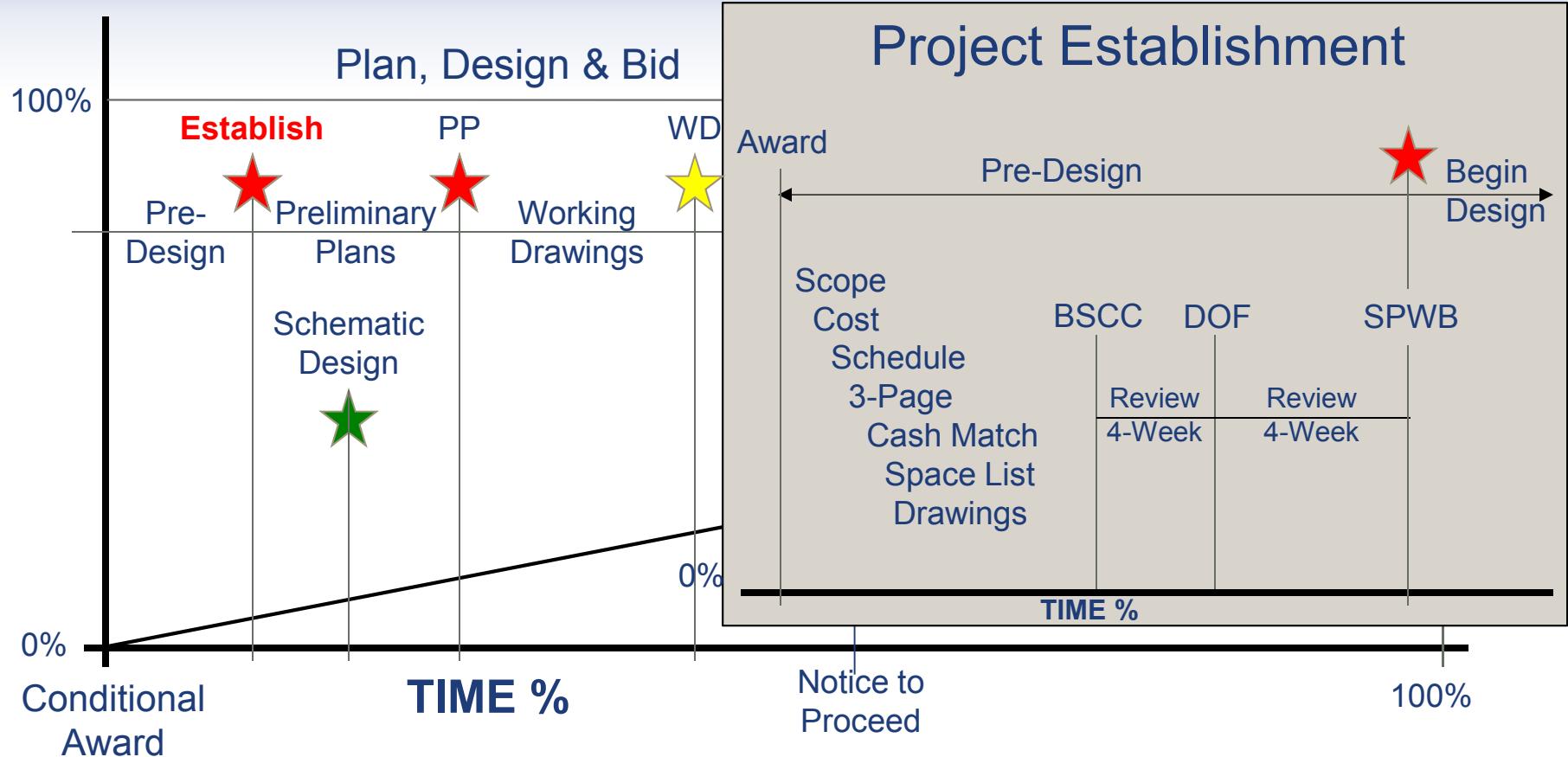
PROJECT DEVELOPMENT STEPS:

1. Reviews & Approvals
2. Determine the Approval Date
3. Project Establishment
4. Schematic Design
5. Preliminary Plans
6. Working Drawings
7. Bidding
8. Design-Build (DB)

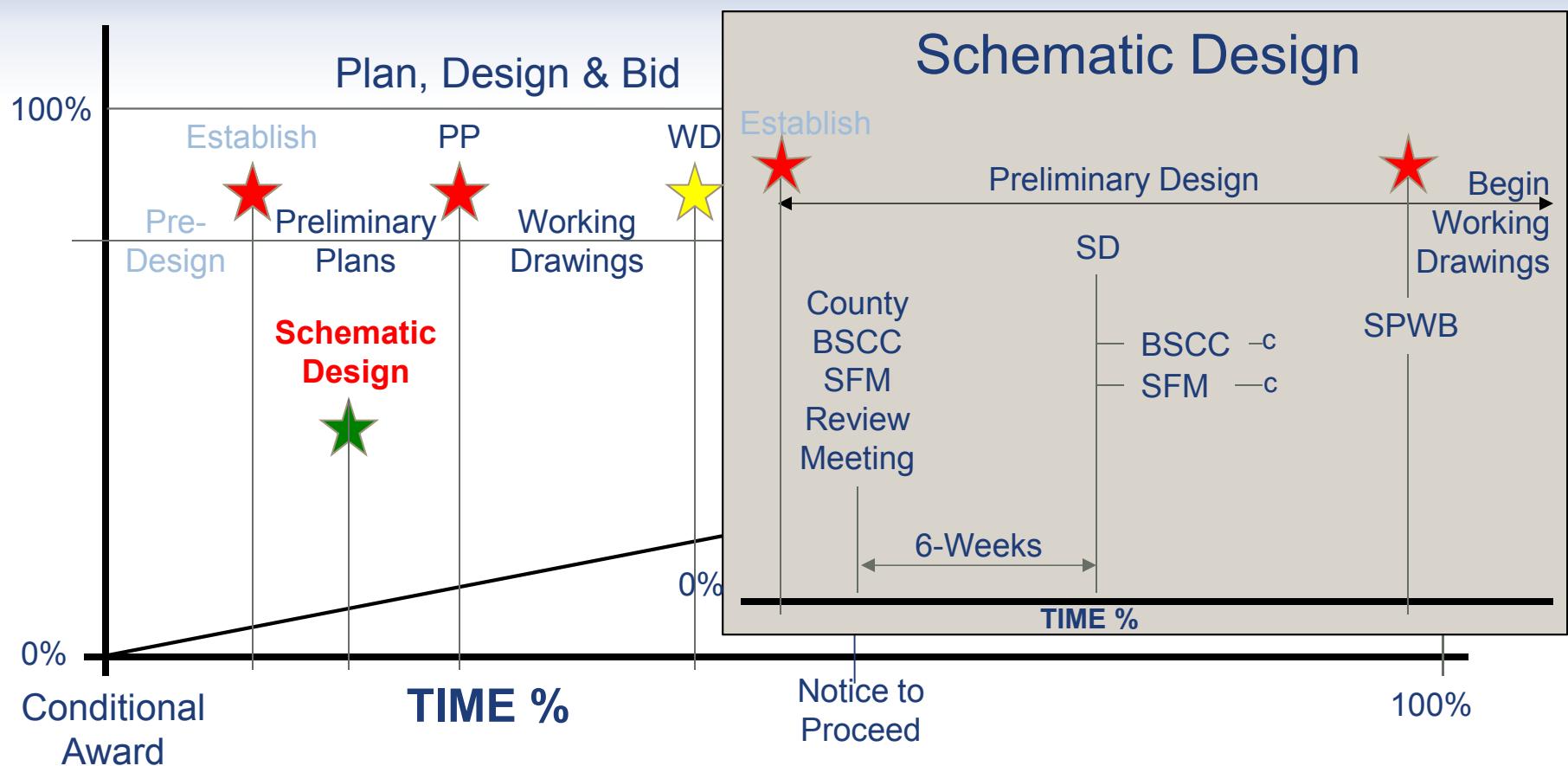
1. REVIEWS & APPROVALS



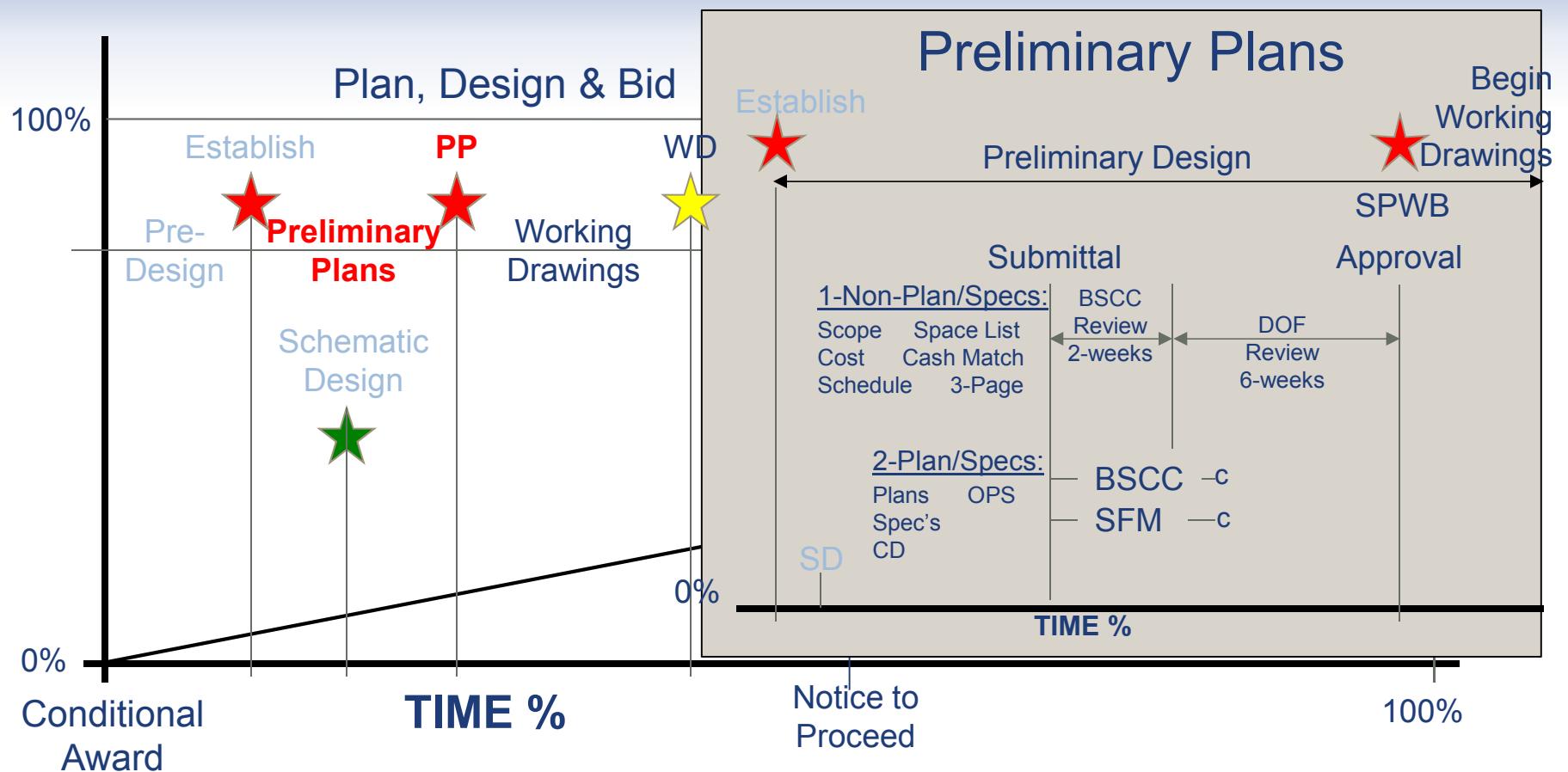
3. PROJECT ESTABLISHMENT



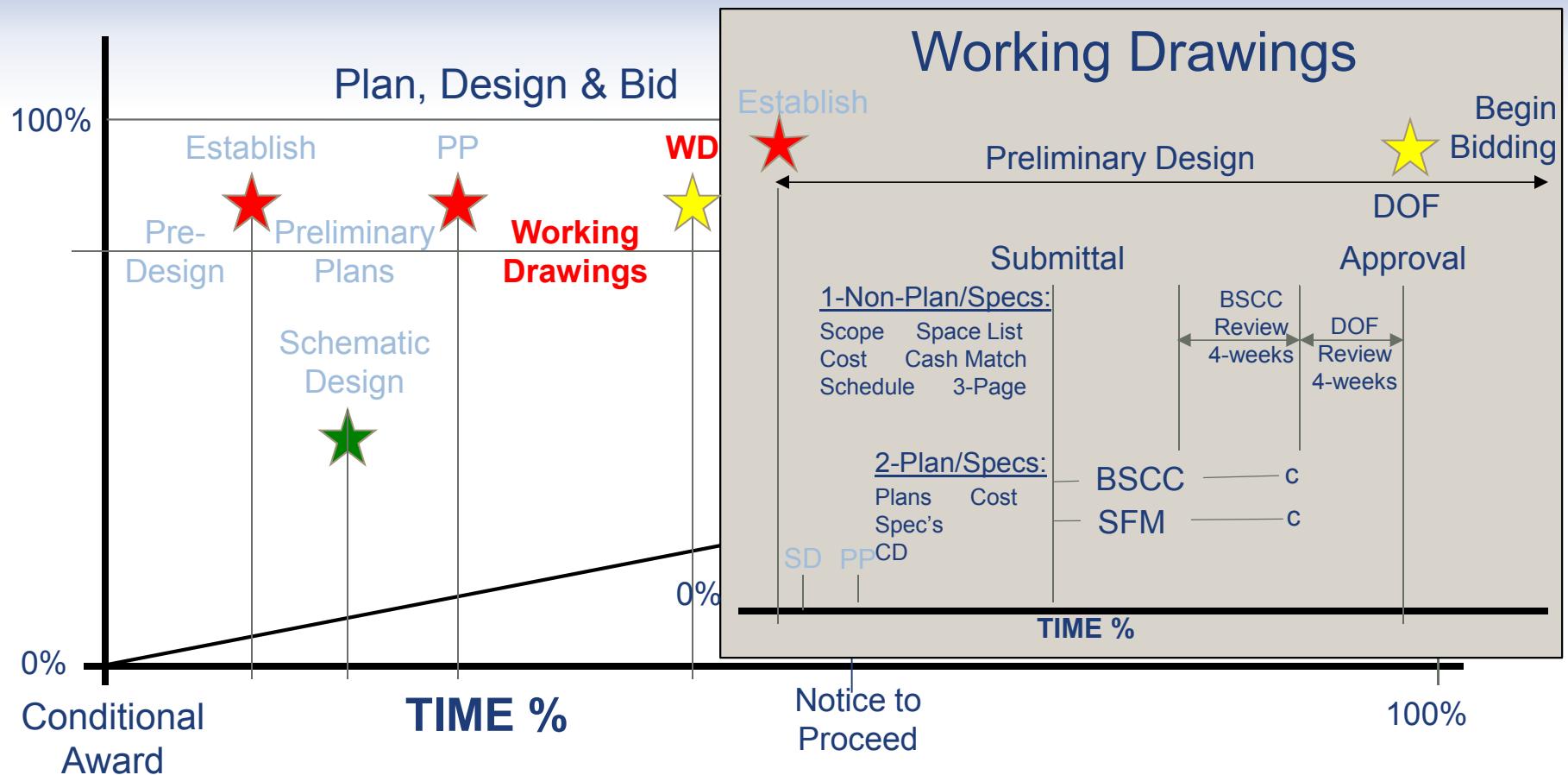
4. SCHEMATIC DESIGN



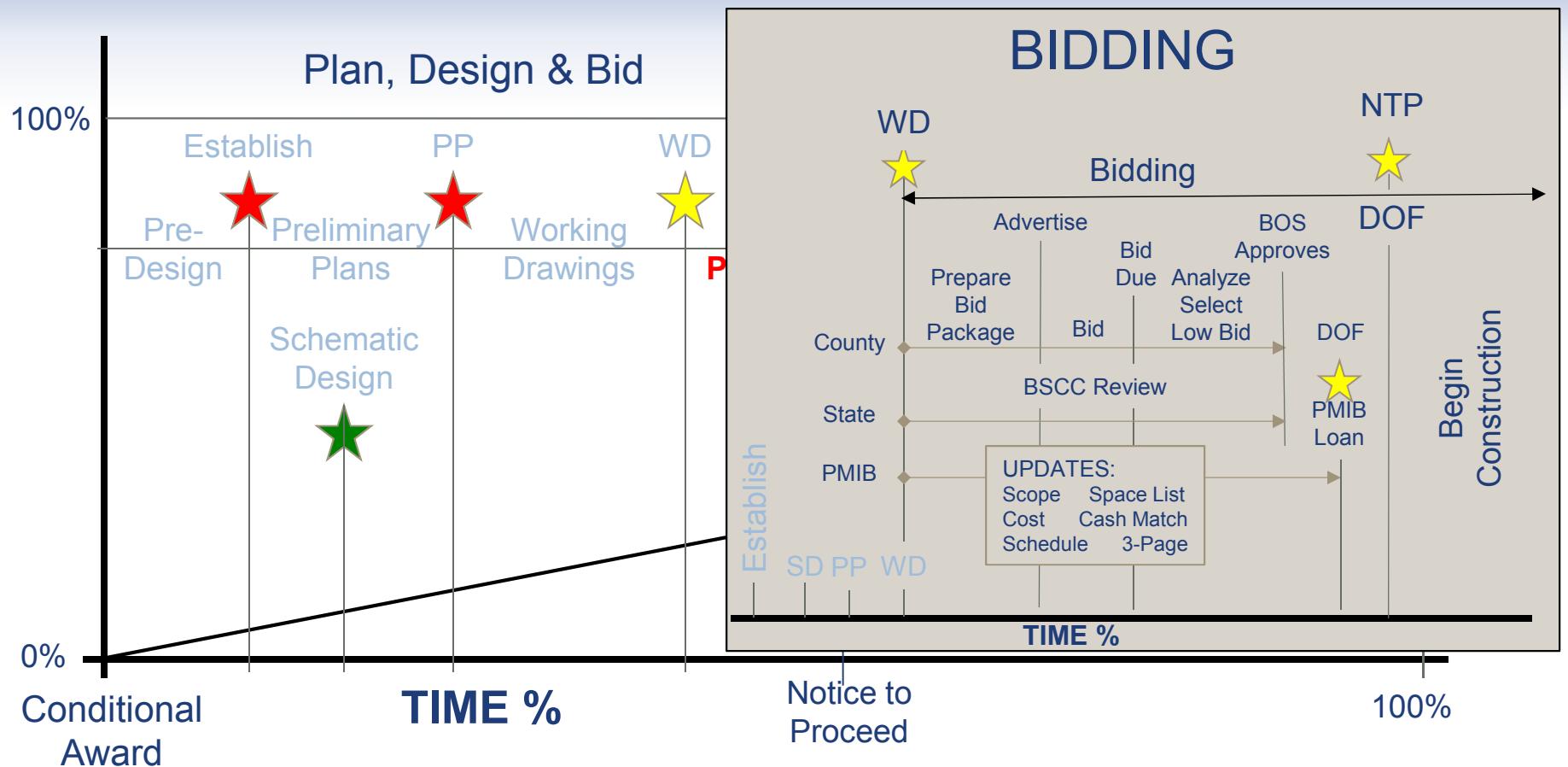
5. PRELIMINARY PLANS



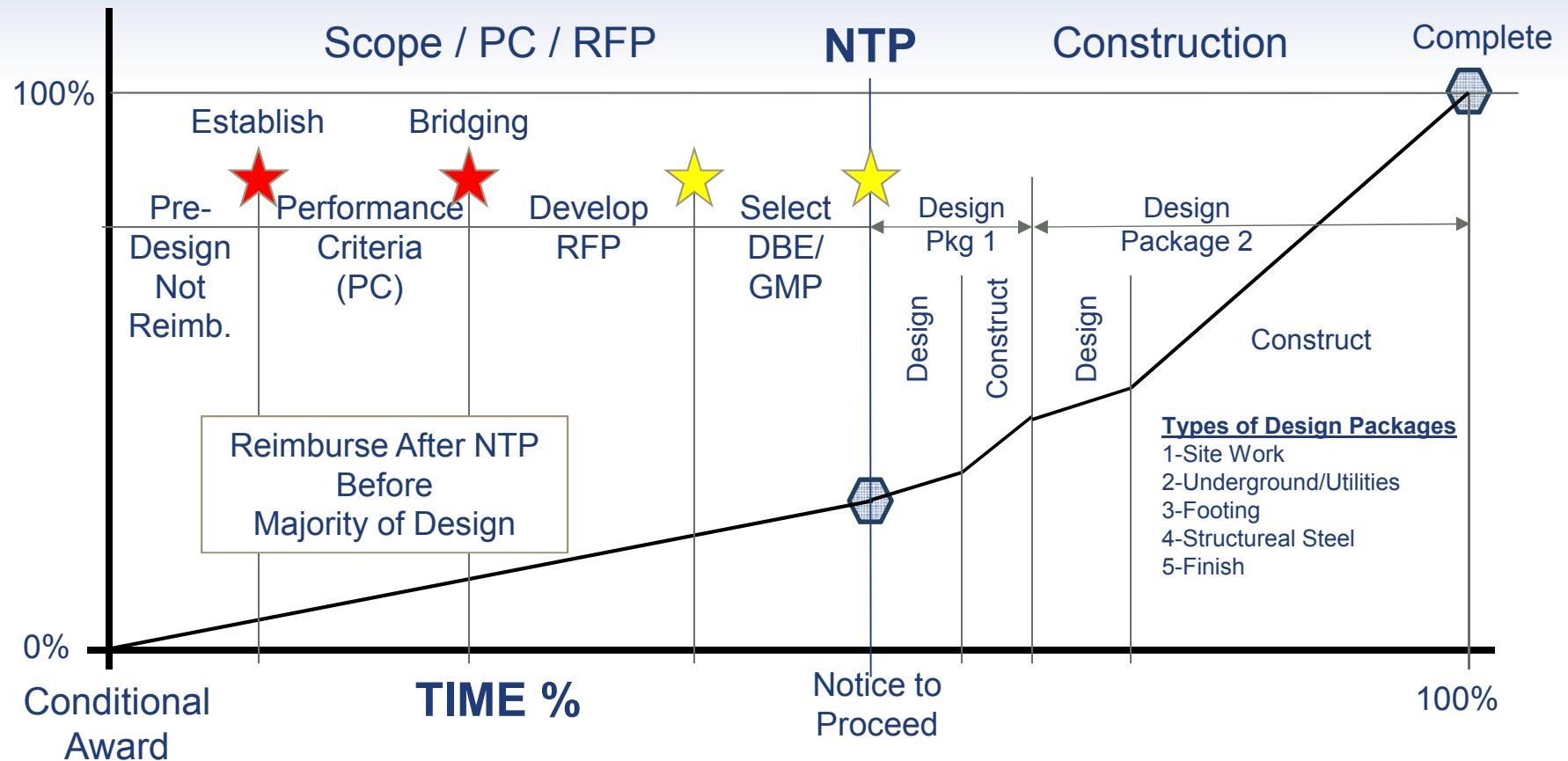
6. WORKING DRAWINGS



7. BIDDING



8. DESIGN-BUILD (DB)

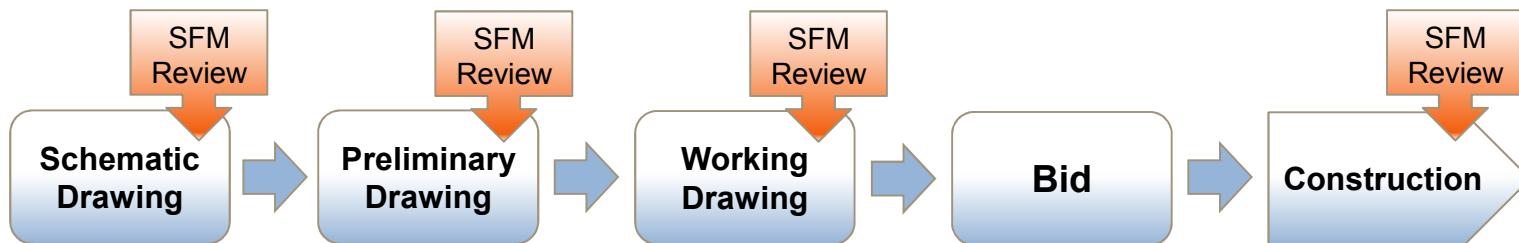


STATE FIRE MARSHAL

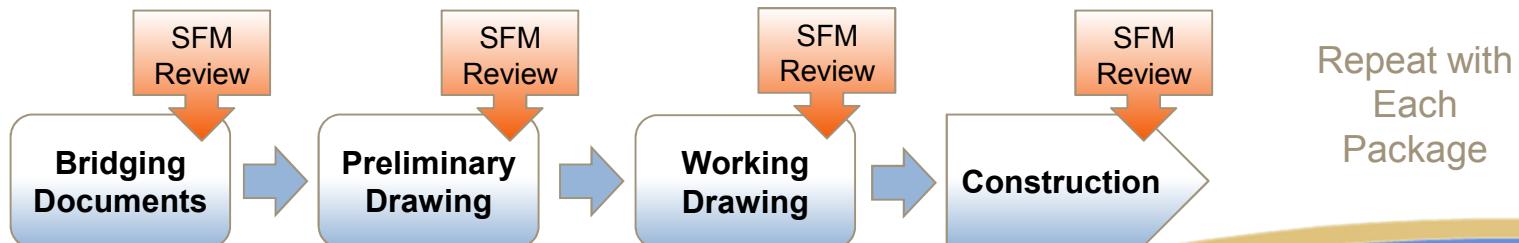
SB 863- SFM fees are the responsibility of each County

SFM review and approval is required for all State projects. The hourly rate \$237.39 The county must receive a “Certificate of Occupancy” prior to occupying the facility.

Typical Design-Bid-Build (DBB)

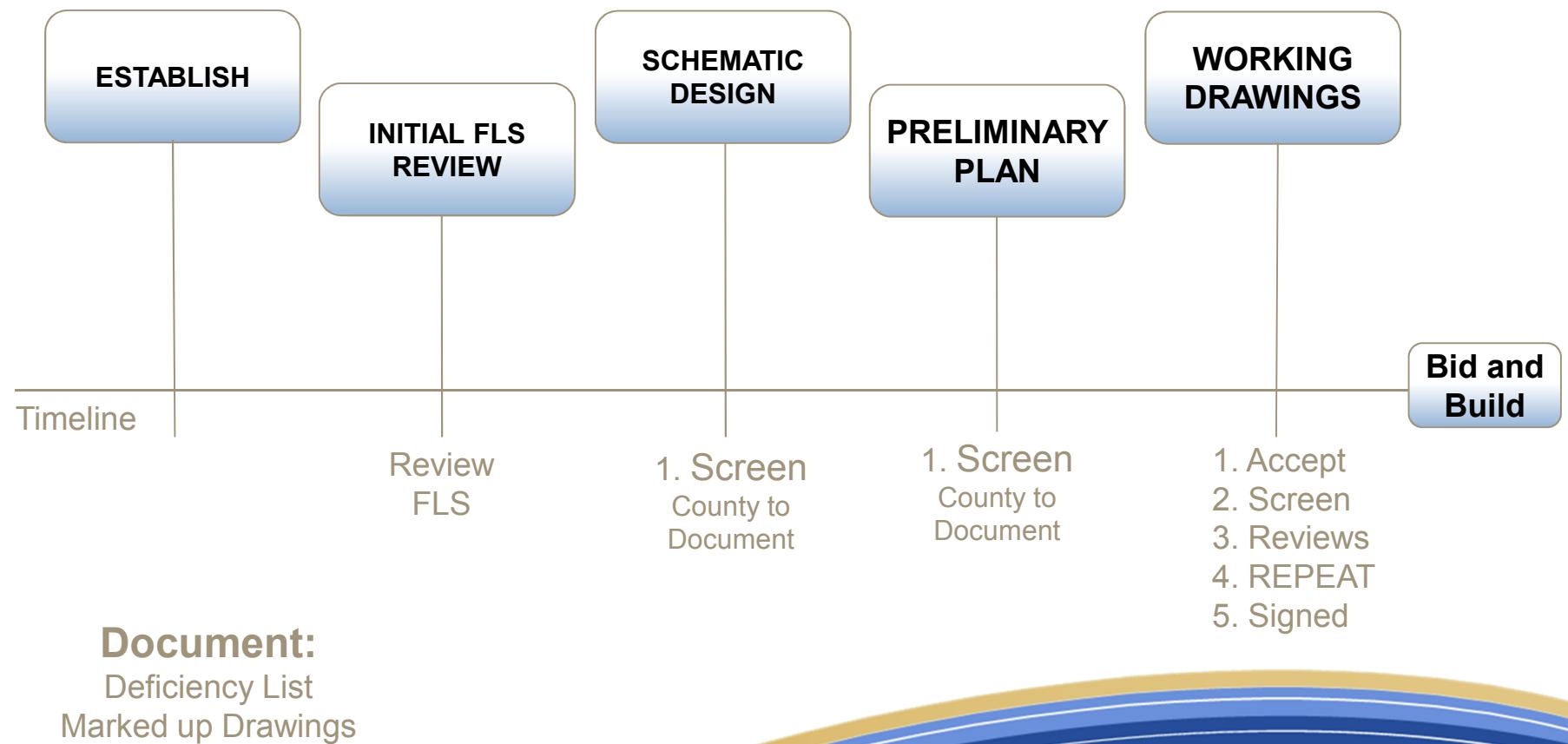


Typical Design-Build (DB)



STATE FIRE MARSHAL REVIEW

BSCC Involvement with SFM REVIEW



QUESTIONS

Any Questions?

Maximizing the Benefits of Design-Build for Justice Facilities

Design-Build Done Right
Mule Creek Infill Complex Case Study



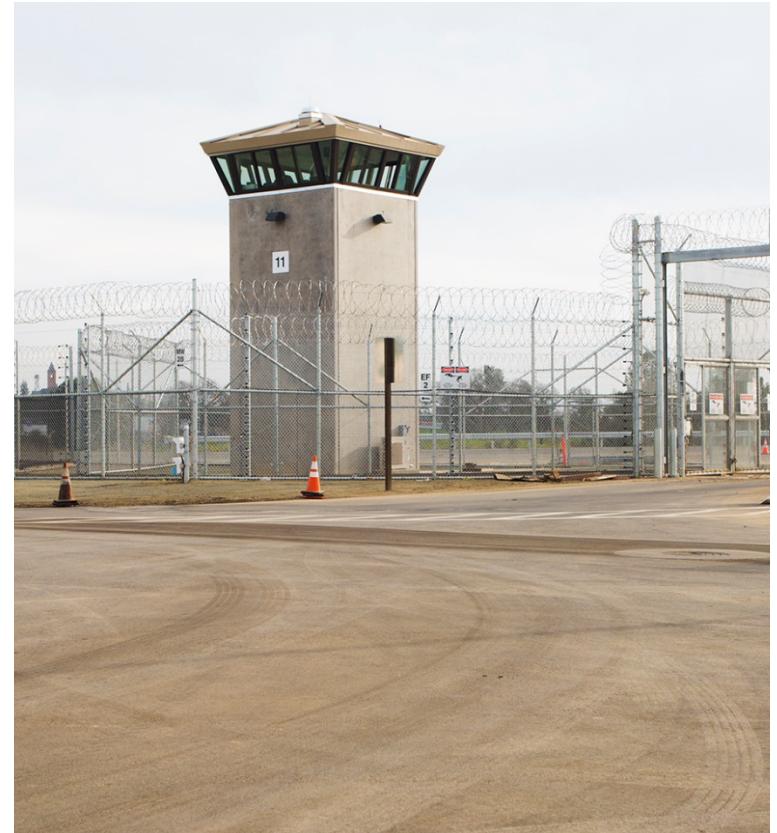
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What makes Justice Facilities Unique?

- Quantity of Stakeholders
- Strict Security Criteria
- Staff Safety
- ADA Compliance Challenges
- LEED Compliance
- Life Safety Complexities
- Acoustical Requirements



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Mule Creek Infill Complex Ione, California



The Project Team



Gibane in association with
 **KITCHELL**



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 **Dewberry**®



 **KJELDSEN SINNOCK NEUDECK**
CIVIL ENGINEERS & LAND SURVEYORS



 **FMB** FRANK M. BOOTH
DESIGN BUILD CO.

 **Bergelectric**



 **ACCURATE
CONTROLS, INC.**

GRANITE

 **CORNERSTONE**
Building on the Foundation of Success

Mule Creek Infill Complex Level II Dormitory Housing Complex



Project Overview

- Project Value: \$331 Million
- 23 Month Schedule
- 80 Acre Site
- 1.2M CY of Earth Moved
- 24 Buildings
- 550,000 SF
- 1584 Dormitory Style Beds
- Upgrade work @ MCSP



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Project Challenges

- Un-rippable Rock
- Extensive Earthwork
- Accelerated Schedule
- Multiple Stakeholders
- Legacy Criteria
- Precast Module Schedule
- Added Scope

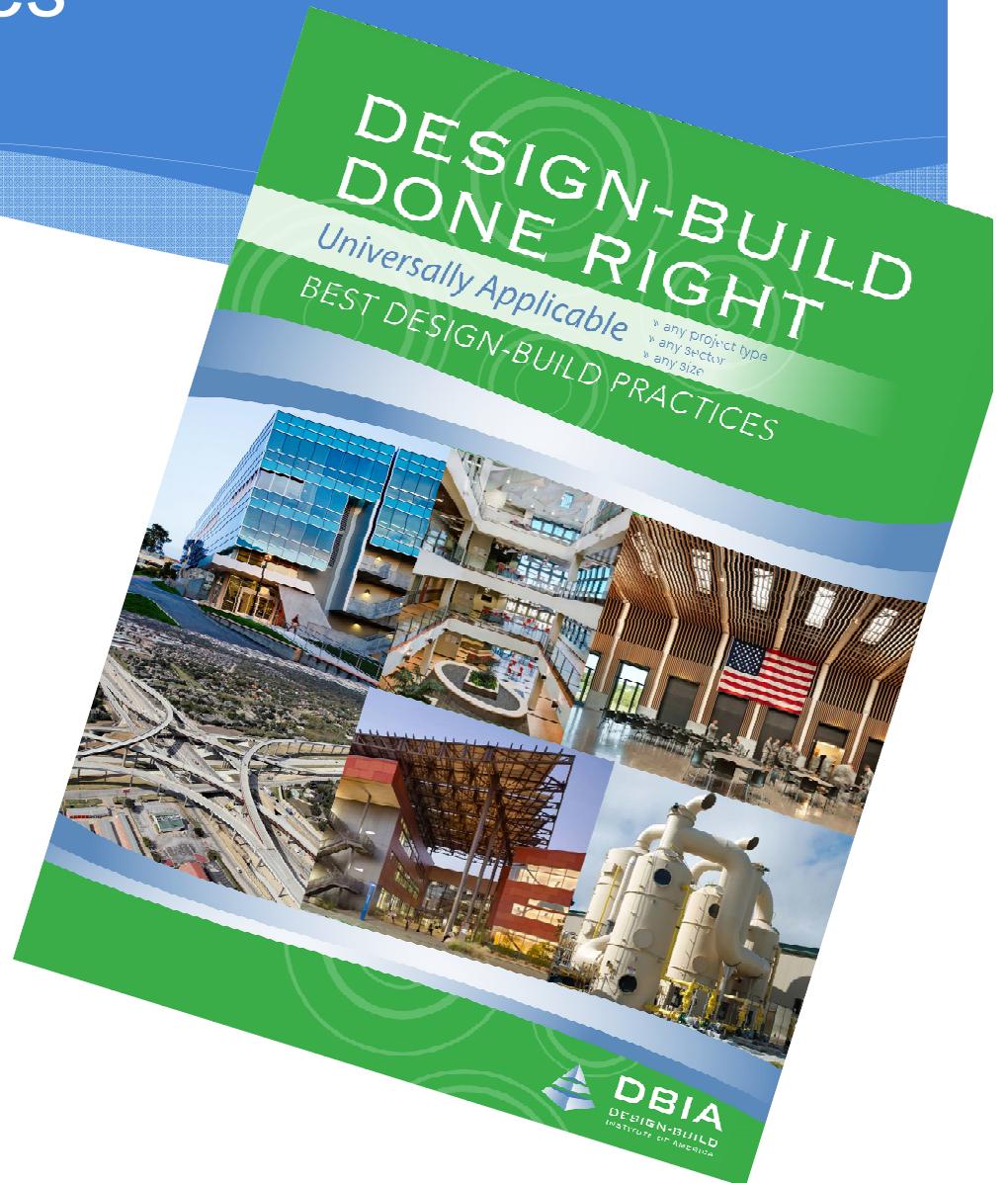


Utilizing Best Practices

- Best Practice Principles
- Universally Applicable
- Directly Affect Project Performance
- Implementing Techniques
- Goal = Successful Project



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Maximizing the Benefits of Design-Build for Justice Facilities | Mule Creek Case Study

- These Best Practices are broken down into three Primary sections:
 - **(I) Procuring Design-Build Services**
 - **(II) Contracting for Design-Build Services**
 - **(III) Executing the Delivery of Design-Build Projects**

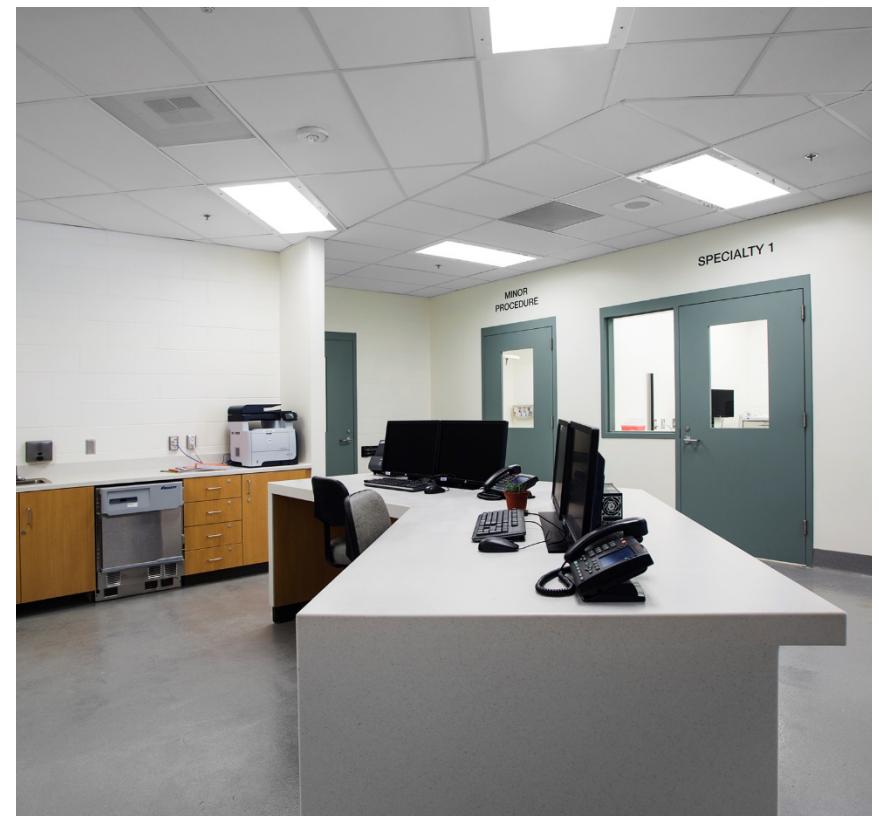


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PROCURING DESIGN-BUILD SERVICES

An Owner should conduct a proactive and objective assessment of the unique characteristics of its program/project and its organization before deciding to use design-build.

- Stakeholder Orientation
 - Evaluators Handbook
 - Critical Success Factors
- Collaborative Environment
 - Set the Tone
- Risk Assessment
 - Site Selection



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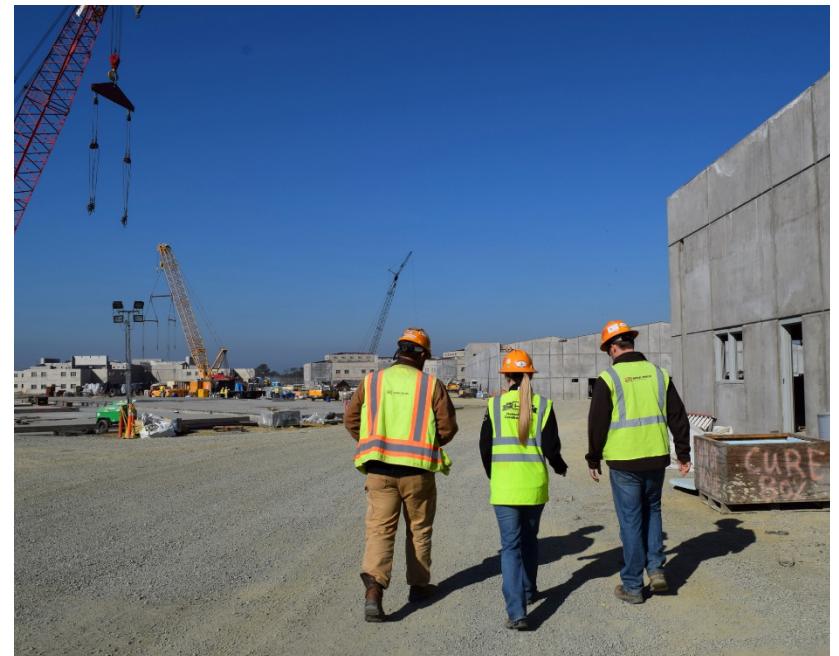
PROCURING DESIGN-BUILD SERVICES

An Owner should implement a procurement plan that enhances collaboration and other benefits of design-build and is in harmony with the reasons that the owner chose the design-build delivery system.

- Key Trade Contractors
- Prescriptive vs. Performance
- Recognize Proposer's Costs



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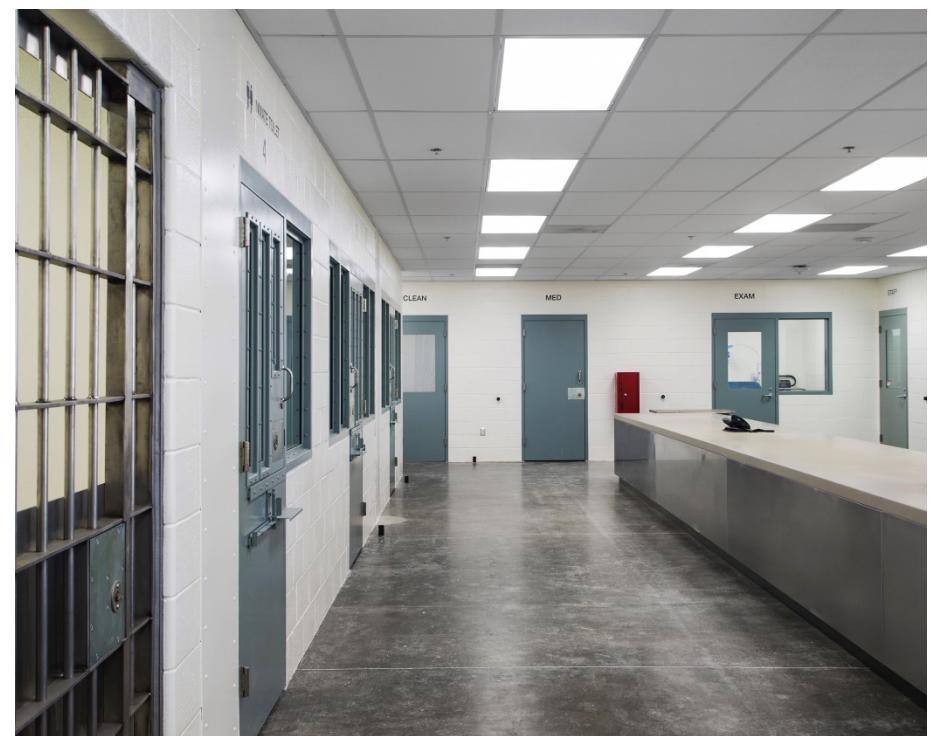
PROCURING DESIGN-BUILD SERVICES

An owner using a competitive design-build procurement that seeks price and technical proposals should: (a) establish clear evaluation and selection processes; (b) ensure that the process is fair, open and transparent; and (c) value both technical concepts and price in the selection process.

- Stipulated Sum/Best Value Selection
- Confidential Meetings
- Reasonable Stipend
- Debrief Meeting



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CONTRACTING FOR DESIGN-BUILD SERVICES

Contracts used on Design-Build projects should be fair, balanced and clear, and should promote the collaborative aspects inherent in the design-build process.

- Project Specific Risks
 - Un-rippable Rock
- Project Stakeholder Communication
 - Direct Access
 - Primary Stakeholder Leader
- Resolution of Changes
 - Timely Direction



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CONTRACTING FOR DESIGN-BUILD SERVICES

The contract between the owner and the Design-Builder should address the unique aspects of the design-build process, including expected standards of care for design services.

- The Owner's Role
 - Communication
 - Decisions
 - Design Reviews
- Clear Project Milestones
 - 9 Contract Milestones



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CONTRACTING FOR DESIGN-BUILD SERVICES

The contracts between the design-builder and its team members should address the unique aspects of the design-build process

- Designer of Record Involvement
- Roles & Responsibilities
- Communication



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EXECUTING THE DELIVERY OF D-B PROJECTS

All design-build team members should be educated and trained in the design-build process, and be knowledgeable of the differences between design-build and other delivery systems.

- Creating Trust
- The Right Project Staff
- Experienced D-B Trade Partners



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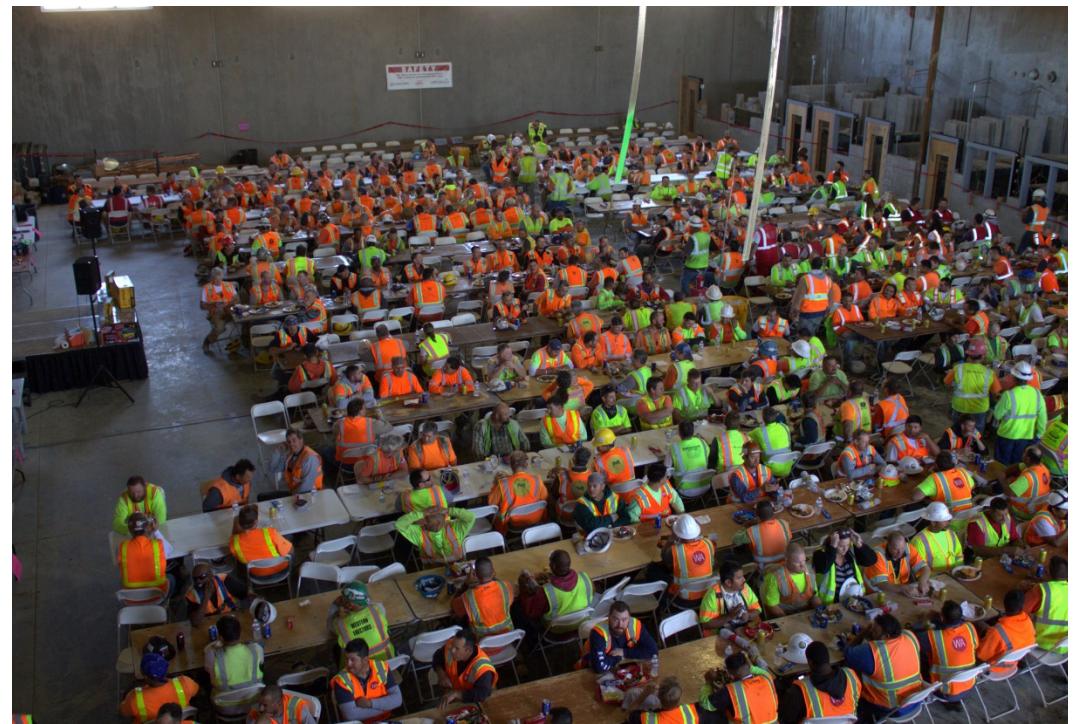
EXECUTING THE DELIVERY OF D-B PROJECTS

The project team should establish logistics and infrastructure to support integrated project delivery.

- Co-Location
- Established Administrative Processes



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EXECUTING THE DELIVERY OF D-B PROJECTS

The project team, at the outset of the project, should establish processes to facilitate timely and effective communication, collaboration, and issue resolution.

- Executive Partnering Group
- Partnering Focus Groups
- Timely Decisions by Owner



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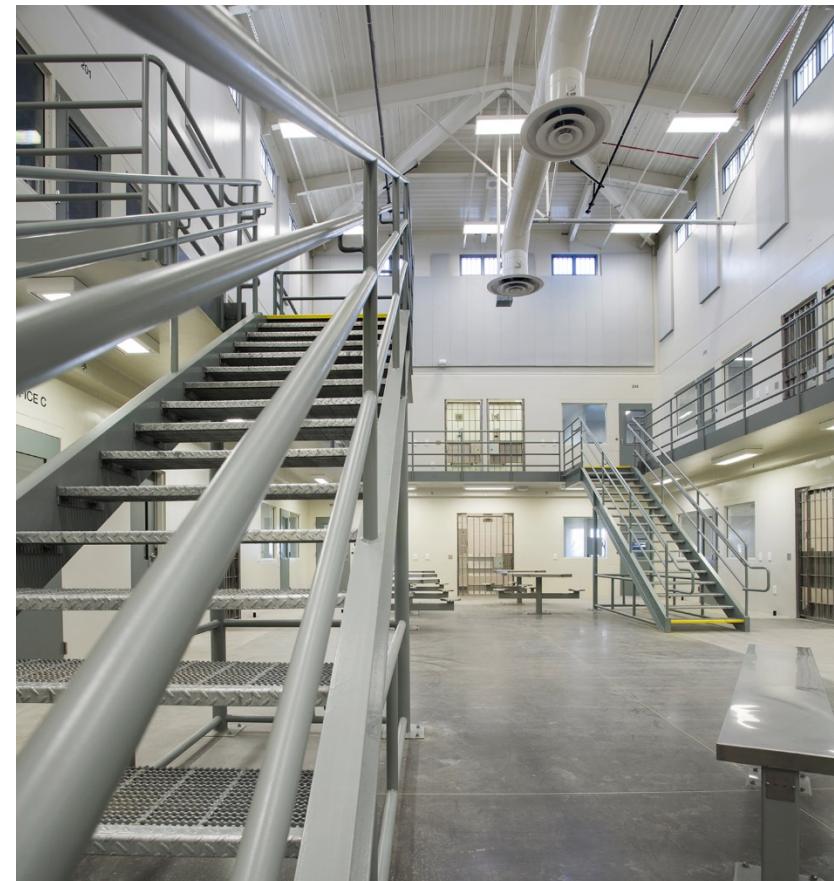
EXECUTING THE DELIVERY OF D-B PROJECTS

The project team should focus on the design management and commissioning/turnover processes and ensure that there is alignment among the team as to how to execute these processes.

- **Realistic Design Development Plan**
- **Design Approvals**
- **Commissioning & Activation**



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Mule Creek Results

- Accelerated Process
- Early Completion & Occupancy
- Project Team incorporated Added Scope
- Integrated Team



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Questions

Any Questions?



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