



SAN MATEO COUNTY
COMMUNITY COLLEGE DISTRICT

Design Build

City & County's Engineers Association of San Mateo County
and the Peninsula Chapter of the American Council
of Engineering Companies (ACEC)

November 18, 2010

San Mateo County Community College District

- Three Campuses (1.4M GSF / 346 Acres)
 - Cañada College – Redwood City - 1968
 - Skyline College – San Bruno - 1969
 - College of San Mateo – San Mateo – 1963
 - District Office – San Mateo - 1978
- 25,000 Students / 1,000 Staff / Adjuncts
- Capital Improvement Program
 - Multiple Funding Sources
 - Measure C \$207 Million (2001)
 - Measure A \$468 Million (2006)
 - State / Local Resources \$83 Million*

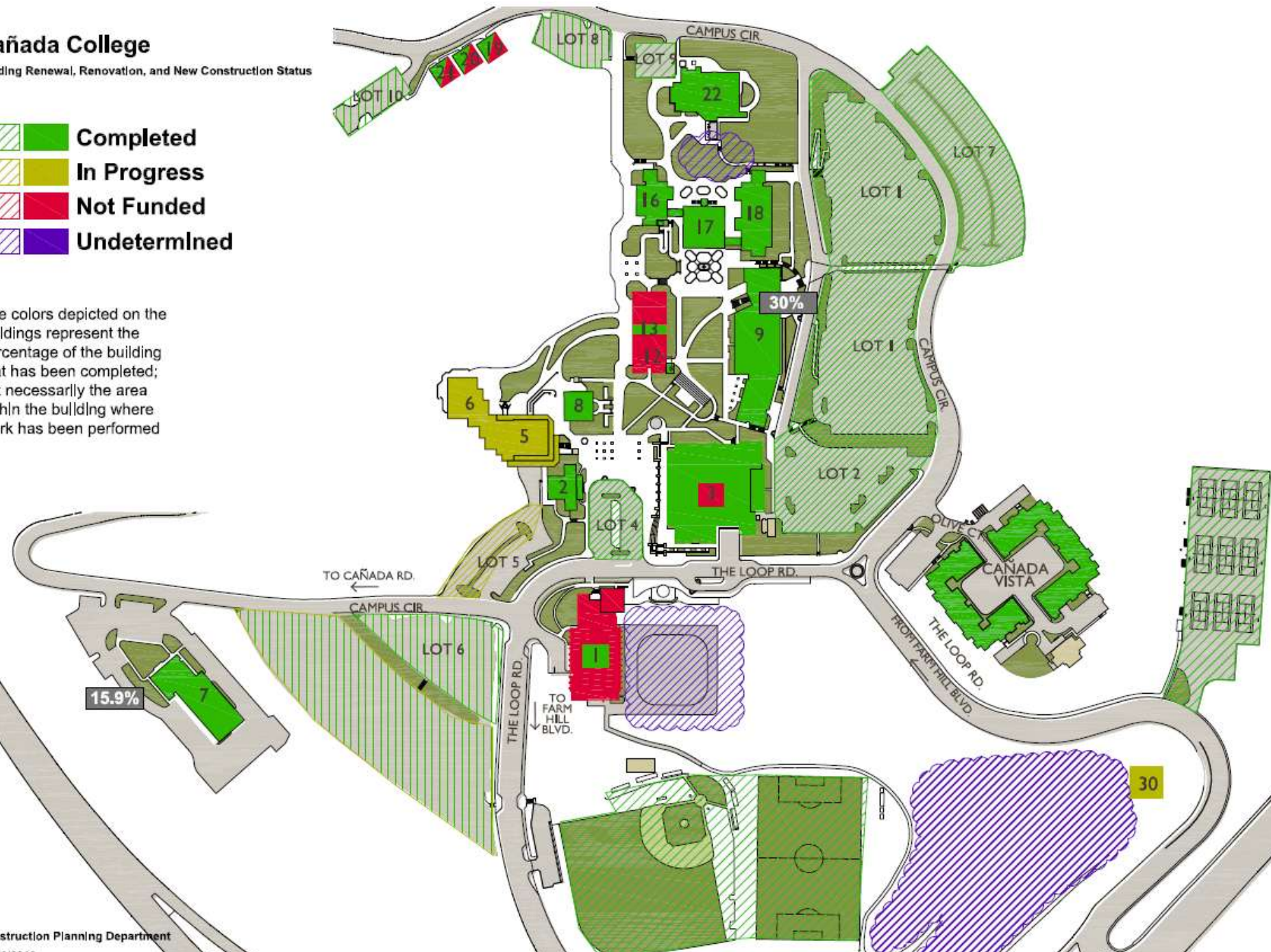
* \$20M Lehman Brothers / \$54M State

Cañada College

Building Renewal, Renovation, and New Construction Status

-  **Completed**
-  **In Progress**
-  **Not Funded**
-  **Undetermined**

The colors depicted on the buildings represent the percentage of the building that has been completed; not necessarily the area within the building where work has been performed



Design Build Legislation

- AB 1402 / EC 17250 (K-12)
- AB 1000 (CCDs)
 - Enacted September 2002
 - Allowed DB to be used by limited number of CCDs as pilot programs until December 2007
 - Threshold \$10M
- ED Code 817000
 - Enacted October 2007
 - All CCDs
 - Lowered the threshold to \$2.5M
- Sample CCD DB Projects
 - Glendale CCD, Adult Training Center Expansion
 - Riverside CCD, Riverside City College Parking Structure
 - Riverside CCD, Moreno Valley Center Parking Structure (approved as pilot October 2006)
 - San Joaquin Delta CCD, San Joaquin Delta College, Gateway Student Services Center
 - Santa Barbara CCD, Santa Barbara City College Parking Structure
 - San Joaquin Delta CCD, San Joaquin Delta College District Support Services Center
 - Los Rios CCD, American River College Parking Structure and Student Center

SMCCCD's Experience with Design Build: New Buildings

- Cañada College
 - Gateways (Parking, Lighting, Entrances, Plazas)
- College of San Mateo
 - Science Building 36 with Planetarium & Rooftop Observatory
 - Health & Wellness Building 5
 - College Center Building 10
 - Buildings 12/15/17/34
- Skyline College
 - Student & Community Center and Science Lab Annex Building 6 & 7A
 - Cosmetology, Administration & Wellness Center Building 4
 - Automotive Transmission Lab Building 11
- 44-unit Faculty & Staff Housing, CSM
- 60-unit Faculty & Staff Housing, Cañada College
- DW Athletic Fields



SMCCCD's Experience with Design Build: Infrastructure

- Energy Efficiency Projects
 - Lighting
 - Controls
 - Air Handlers
 - Boilers
 - Pumps
- Cogeneration (CSM and Skyline College)
- 12kV Electrical Infrastructure System replacement (CSM and Skyline College)
- Chiller Plants (CSM and Cañada College)

Why Design-Build Delivery Method?

- Compressed Schedule: move-in sooner
- Satisfying Professional Relationship between Owner/Architect/Builder
- Flexibility & Quick Response
- Price Certainty

Advantages of Design Build

- Teamwork is promoted because GC and Architect are on the same team
- Earlier knowledge of construction costs guaranteed during design
- Design risk shifted to the DBE
- Single point of responsibility for District with fewer changes
- Only one RFQ and/or RFP required for design and construction
- Only one contract for both design and construction
- DBE may be selected on statutory best value basis rather than traditional low bid
- More District involvement earlier in process with less involvement needed after design
- Potential for faster delivery system

Disadvantages of Design Build

- New learning curve for Districts and agencies
- Districts pushed for earlier decisions
- Different process in the front end of project
- New and unique statutory requirements for selecting DBE and Subcontractors
- Insurance and bonding details are less understood
- Statutorily limited to projects with value greater than \$2.5 Million and regionally counted for CCDs
- Potential for less control by District of design and design details
- Political resistance among those unfamiliar with method

Design Build Points of Consideration

1. Single Responsibility
 - No finger pointing
 - Eliminates Legal Triangle
2. Cost Control
 - Fixed limit of Construction costs
 - Feedback for better Design and Construction documents
3. Better Technology
 - Learn from the people who make and install building systems
 - Designer participation in practical application
 - Flexibility to get the most current technology
 - Perfect Design Build Team
 - Knows Design
 - Knows the Builder
4. Project Specific
 - What one persons knows is available to all
 - Contractor isn't plotting for claims and change orders
 - Communications, Documentation & Costs are transparent

Guidelines / Process

- The Design Build Road Map
 - Selecting a Project for Design Build Delivery
 - BOT Resolution
 - CCCO Project Approval / Notification Process
 - Bridging
 - Public Notification
 - Prequalification
 - Request for Qualification (RFQ)
 - Request for Proposal (RFP)
 - Confidential Meetings (x3)
 - Site Surveys
 - RFP Interviews
 - Selection
 - Stipend
 - Award

Prequalification

- Who
 - General Contractor
 - Architect(s) of Record
 - Principal Engineer(s)
 - Major Design Build Subcontractors
- Criteria
 - Construction Experience
 - Contractor's License
 - Work History
 - Litigation and Arbitration History
 - Disqualification from Previous Projects
 - Compliance with Statutory Requirements and Safety
 - Prevailing Wage Requirements
 - Project Personnel
 - Insurance Requirements
 - Bonding Information
 - Financial Information

DB Proposal Evaluation Criteria

FACTORS	Maximum Points
1. Price and Cost Management Plan	20
2. Technical Expertise	10
3. Life Cycle Costs over 25 Years	10
4. Skilled Labor Force Availability	10
5. Acceptable Safety Record	10
6. Design Management Plan*	10
7. Construction Management Plan	10
8. Schedule	10
9. Legal and Other Program Requirements	5
10. Risk Management Plan	5
TOTAL (Maximum)	100 points

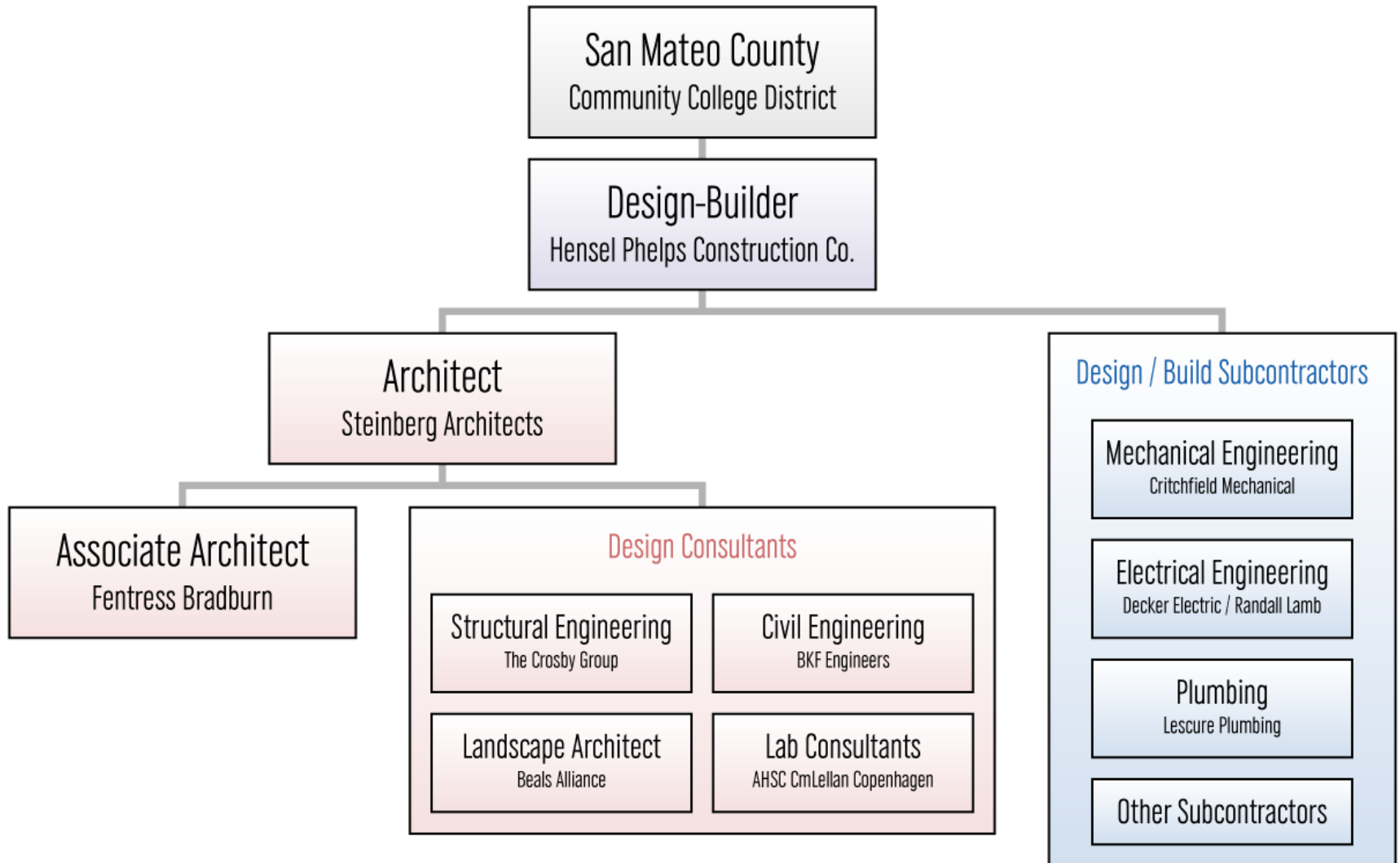
RFP Documents

- Developing the RFP Documentation
- Format and Organization of the RFP Package
 - SMCCCD standard form of DB contract
 - Existing floor plans
 - Schematic floor plans
 - Room data sheets
 - Program information
 - Standards and Design Criteria

RFP Evaluation

- Assemble Review Team
 - Administrators / Faculty / M&O / CM Firm
- Allow Sufficient review time
- Clearly identify evaluation Criteria
- Develop Scoring Matrix (Keep it simple)
 - Price
 - Technical Expertise
 - Life Cycle Costs
 - Skilled Labor Force
 - Acceptable Safety Record
 - Architectural Aesthetics and Design Innovation
 - Project Management Plan
 - Program Requirements
 - Logistics (Occupied Campus)

Design Build Entity



Partnering Session

- Who
 - Owner / Key End-users
 - Contractor
 - Designers
 - IOR
- What
 - Understand Each others Interest
 - Agreed upon Rules of Engagement
 - Establish Chain of Command
 - Establish Forms of Communication
 - Establish Decision & Approval Process

Not a Panacea: Considerations

- Dynamics of an occupied campus
- Construction schedule inflexibility
 - Academic constraints
 - Weather constraints
- Interpersonal dynamics
- Market conditions



Future Opportunities

Draft Project List
Third Local Bond ~ June/November 2011



Cañada College Proposed Projects

Project	Total
Physical Education & Athletics Building 1 Modernization & New Construction	\$15M
Humanities/Arts/Theater Building 3 Modernization	\$5M
Academic/Technical Building 13 Modernization	\$20M
Solar Photovoltaic New Construction	\$6M
Aquatic Center New Construction	\$10M
Workforce & Health Science Center New Construction	\$35M
Modular Buildings 19, 20, 21 Modernization	\$3M
Subtotal:	\$94M

College of San Mateo Proposed Projects

Project	District/Local
Building 1 Demolition and New Construction	\$32M
Gymnasium Building 8 Modernization	\$20M
Library Building 9 Modernization	\$10M
East Hall (Classrooms) Building 12 Modernization	\$3M
Emerging Technologies Building 19 Modernization	\$22M
Theatre Building 3 Modernization	\$4M
Facilities Maintenance Center Building 7 & Corporation Yard Modernization and New Construction	\$20M
Horticulture Buildings 20/20a/Edison Lot	\$5M
Subtotal:	\$116M

Skyline College Proposed Projects

Project	District/Local
Social Science & Creative Arts Building 1 Demolition and New Construction	\$80M
Student Services Building 2 Modernization	\$12M
Library/Learning Resource Building 5 Modernization	\$8M
Micro Wind Turbines New Construction	\$5M
Pacific Heights & North Campus Improvements Demolition, Parking Expansion Loma Chica conversion to Child Development Center Renovation	\$15M
Center for Kinesiology and Human Performance New Construction	\$22M
Workforce & Economic Development Center New Construction	\$16M
Indoor Athletic Facility	\$20M
Subtotal:	\$178M

District wide Proposed Projects

Project	District/Local
Campus Utilities Repairs & Upgrades	\$6M
Hazardous Materials Abatement	\$7M
Site work & ADA Accessibility Upgrades	\$10M
Roadway and Parking Lot Repairs	\$25M
Boiler Plant Air Quality Upgrades	\$5M
Long Term Technology Upgrades/Repair	\$100M
Subtotal:	\$153M

District wide & College Proposed Projects Summary

Site	Total
Cañada College	\$94M
College of San Mateo	\$116M
Skyline College	\$178M
District wide	\$153M
Total:	\$556M

Prequalified A&E / GC Firms

- Prequalified Architects & Engineers:
<http://www.smccd.edu/accounts/smccd/departments/facilities/PrequalAE.shtml>
- Prequalified Construction Contractors:
<http://www.smccd.edu/accounts/smccd/departments/facilities/PrequalCC.shtml>

Why We're All Here Today . . .



Question & Answer

www.smccd.edu/facilities

Karen D. Powell

Program & Project Manager

Facilities Planning, Maintenance & Operations

(650) 378-7359

powellk@smccd.edu