California State Capitol Annex

Demystification of the Restoration Process | July 10, 2017

MOCA

Meet Our Presenters

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Capitol Projects

- 2000 – 2004 Utah House and Senate Extension
- 2000 – 2010 Utah Capitol Restoration and Base Isolation
- 2011 – 2017 Minnesota State Capitol Restoration
- 2014 – 2016 Minnesota New Legislative Office Building
- 2015 – 2019– Wyoming State Capitol and Herschler Office Building Remodel

Capitols and Capitol Project

Characteristics of Capitol Project

1. Ownership is largely elected and changes every 4 to 6 years
2. Political by Design – Varying degrees of trust between Legislative, Executive and Judiciary
3. Many Stakeholders, Voices and people who believe they are capable of making the right decision
4. Lack a Constituency for the Capitol or Complex – No one speaks for the Capitol
5. Restoration is expensive due to the grandeur of the building and schedules
6. Government never takes a break – Legislature meets annually – Work must adjust to Legislature
7. Programing and Planning is not the typical process that proceeds the design process, it is resolved later
8. Imposition of Modern Concerns – Technology, Security, Life Safety, Committee Rooms……
9. Tourist destinations even during construction
10. Swing Space during construction poses challenges in logistics, communications, work flow
11. Confusion about how to get started

There is a positive way forward – These projects are able to be done and done well!

Common Capitol Pit Falls

Typical Steps in the Design Process

1. Owner identifies an internal need for a facility
2. Budget is developed quickly with many assumptions – political pressure drives the budget
3. Schedule is assumed based on past projects of similar size
4. Seek funding for design and construction services
5. Hire a design firm to do programing, planning, studies
6. Stakeholder are talked to, designs are completed
7. Owner retains Contractor/CMr or other to construct
8. Owner retains PM to basically manage the relationship between the architect and the contractor

Outcomes:

1. Capitols are not like other projects – Large, Complex, Politically Messy, - Challenges Occur immediately
2. Changes, schedule impacts, delays can all occur with change
3. Tensions increase between the Legislative and Executive Branch's of Government and Finger Pointing occurs
4. News coverage is not positive, Anxiety levels increase.

Recommended Capitol Process

Change the Process:

1. Identify a need
2. Seek council from an Owner Representative who has done Capitols or Legislative projects successfully
3. Create a Governance Committee, Board, Commission that has broad authority to act
4. Listen to Leadership, Executive Branch – Governor, Legislature Branch – Assembly/House and Senate
5. Understand and identify the expectations and guiding principles from Leadership – project to follow
6. Clearly Define the project, quality, quantity, scope and schedule – Comprehensive Master Plan
7. Align the type of Procurement Method with the guiding principles and project definition
8. Work with Leadership to determine feasibility and funding
9. Retain the right professionals (Architects, Engineers, Builders….) for the project
10. Allow the Professionals to do what they do best, while the Owner Representative work with Leadership

We call this Early Project Definition and Alignment (EPD&A)

Project Definition and Alignment - MOCA

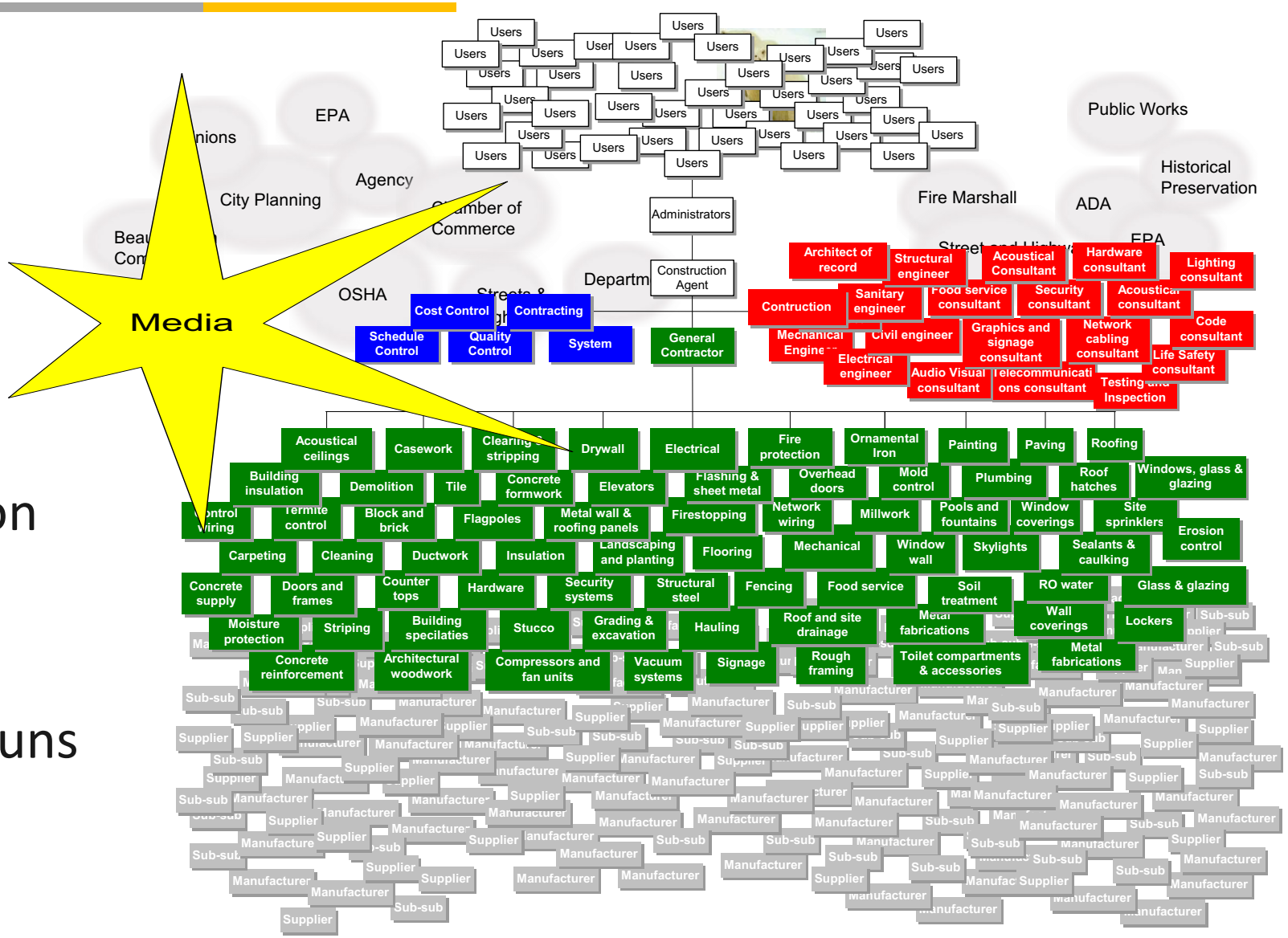
Outline for Today's Discussion

Recommended Process (Demystification)

- Procurement – Project delivery methods
- Project establishment and organization framework and structure
    - Budget management
    - Schedule management
    - Design management
    - Security
    - Seismic consideration – Structural information
    - Overall Owner Involvement
- Management Planning – Outline development of overall process

The Truth Behind Project Procurement

- Conflict
- Unknown results
- Change orders
- Arguments, hurt feelings and litigation
- Missed schedule commitments
- $$$$$$ Cost over-runs



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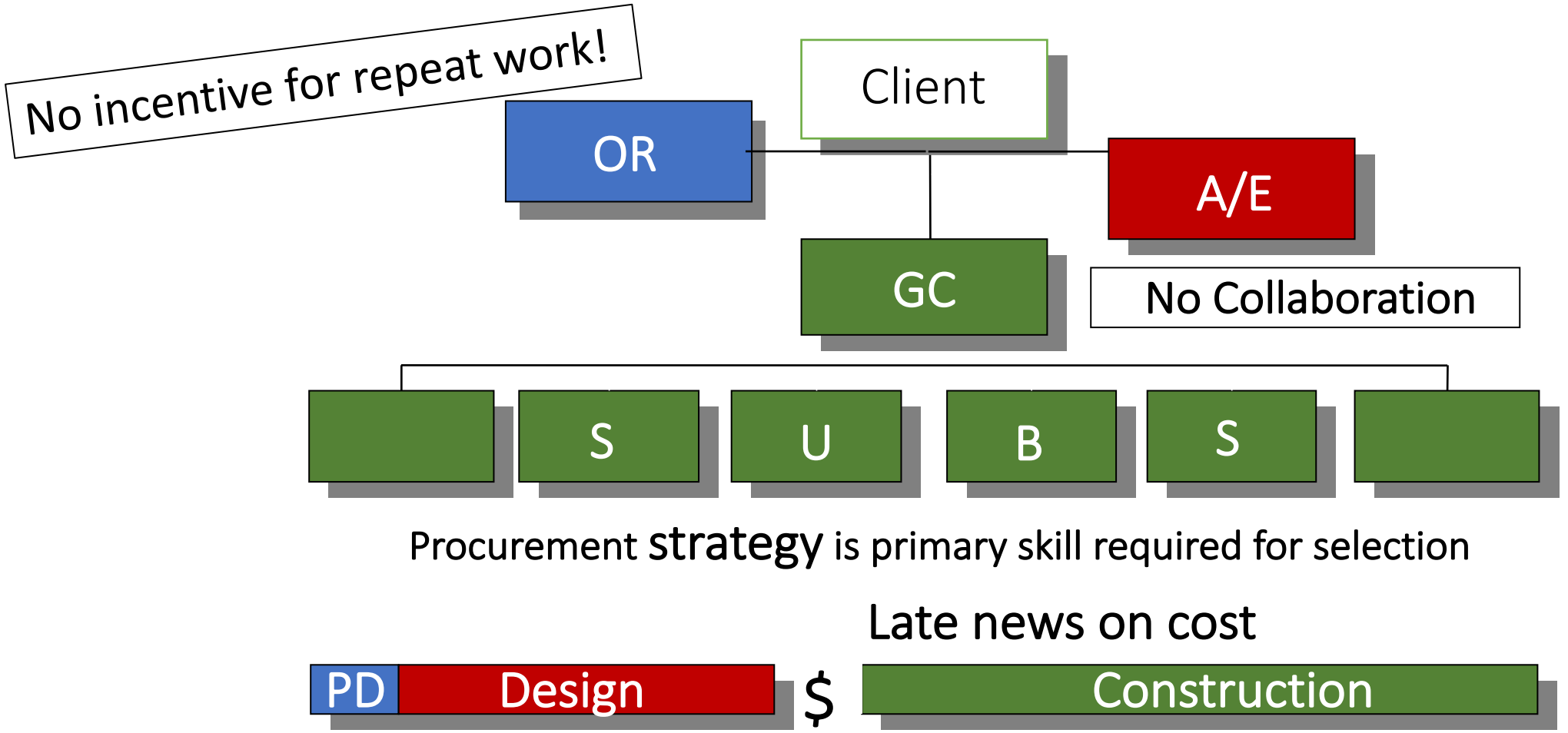
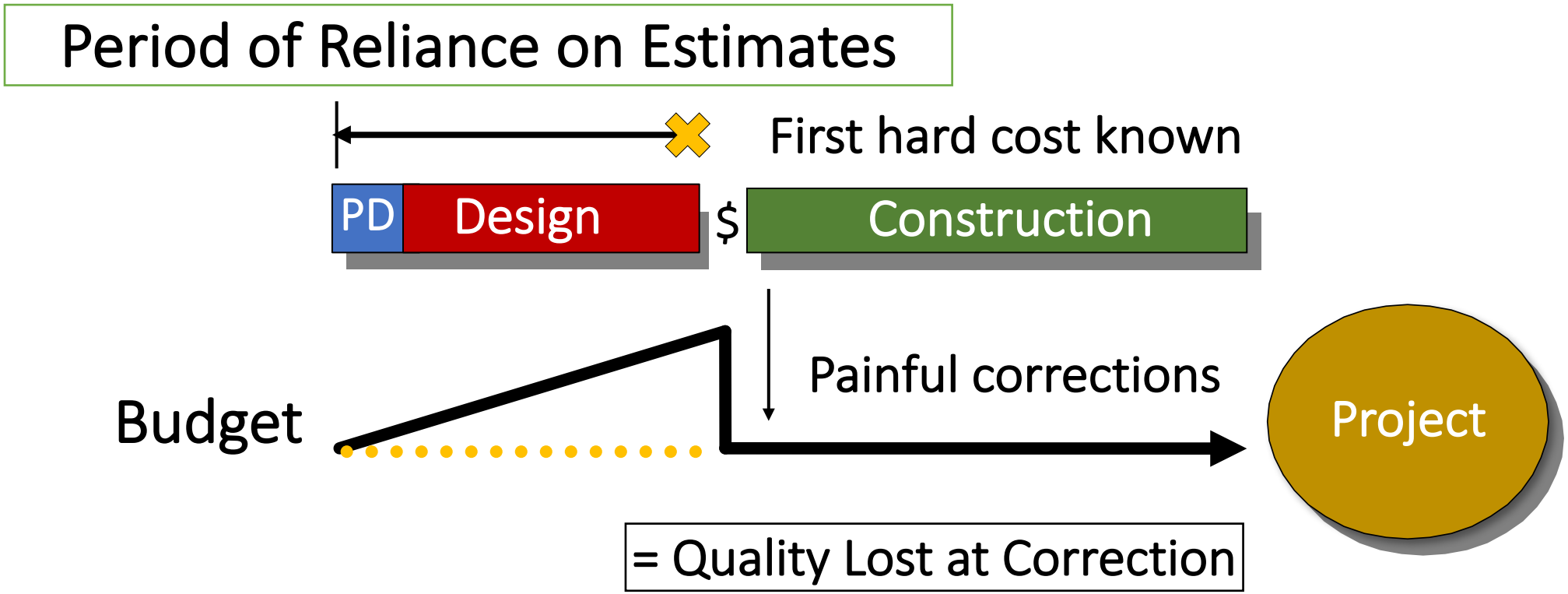
Understanding Design-Bid-Build

Contractor's incentive is to maximize job profits through ambiguities, errors and changes



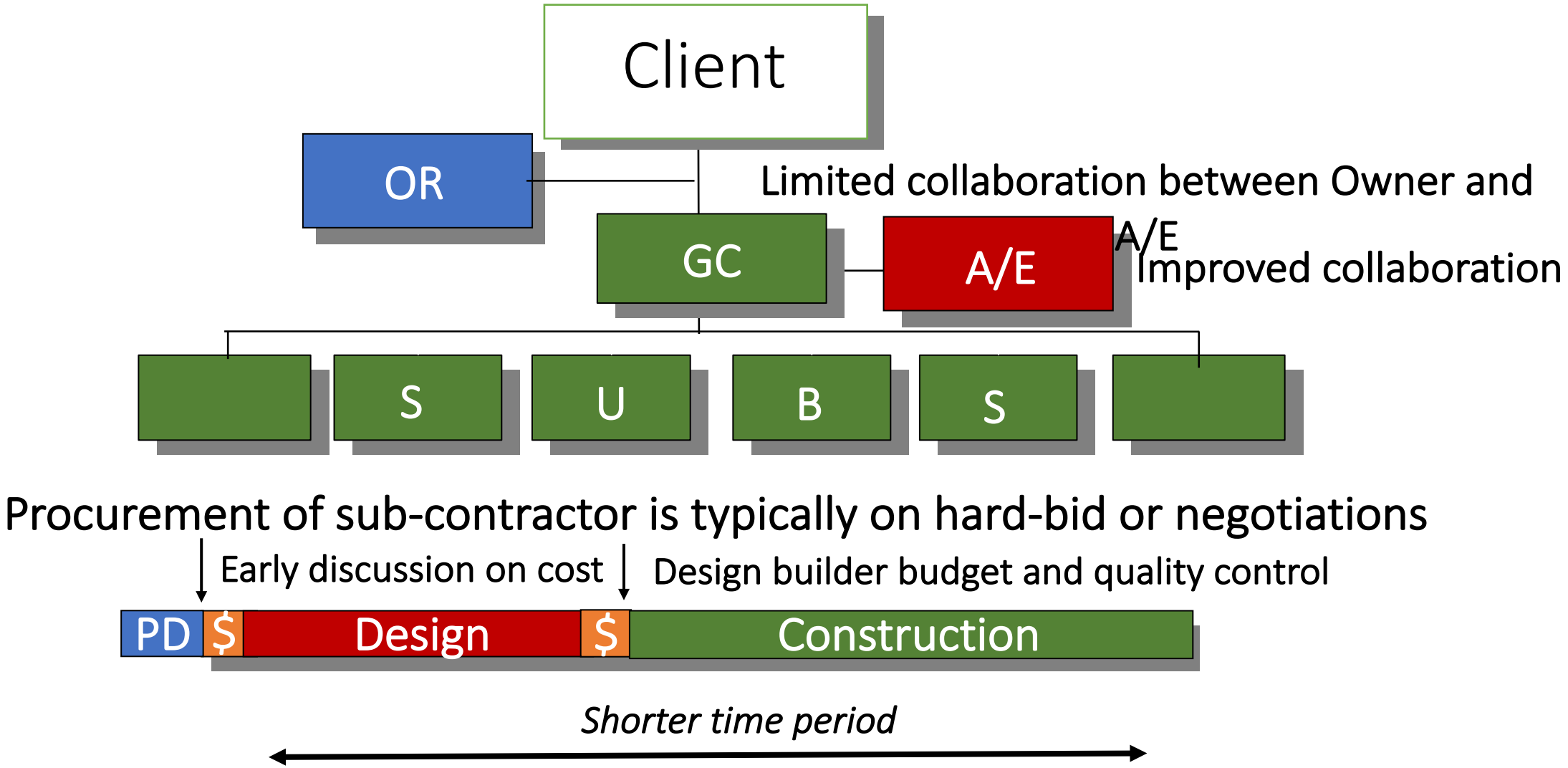
Truth of Design-Bid-Build Organization

Innovations in Process Management



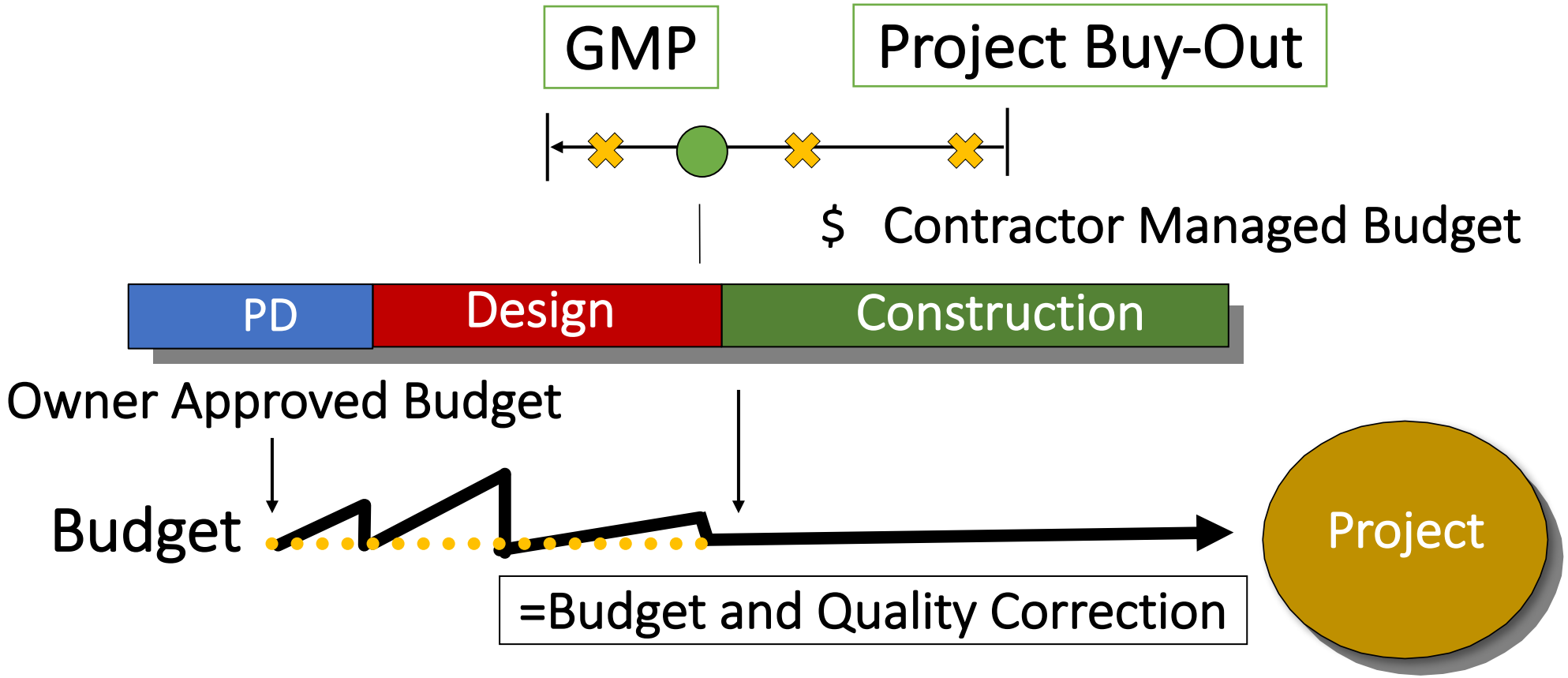
Design/Build

Contractor's incentive is to maximize job profits through Management of Design and quality incentive shared savings



Design/Build

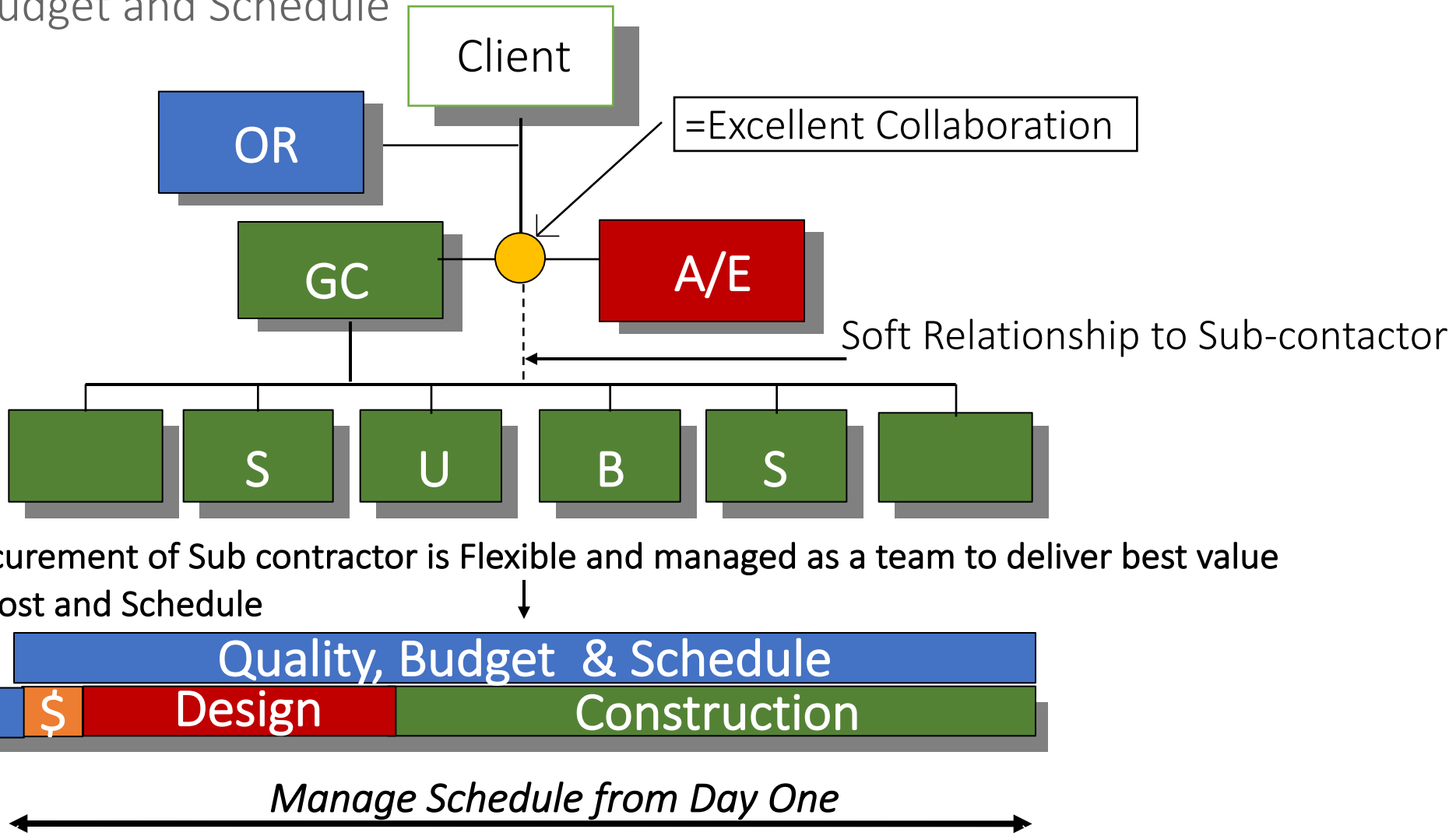
Period of Reliance on Estimates



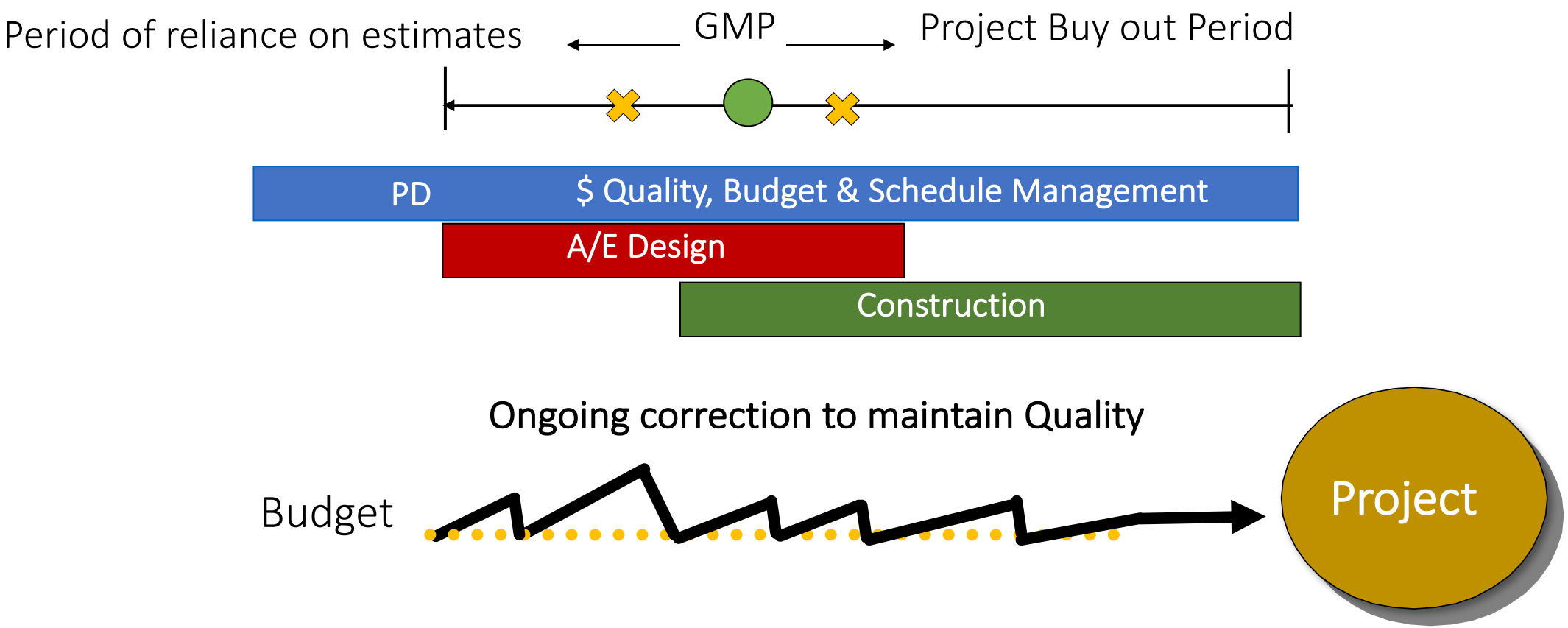
Construction Management at Risk

CM/GC is selected at the beginning of the project
Provide flexibility on hiring of Sub contractors
Incentive Shared Savings

Primary role is Manage Budget and Schedule



Construction Management at Risk



Project establishment and organization framework and structure

How the project is set up is the single most important aspect of the project

The Project Delivery Method should be selected based upon:

- Guiding Principles which will govern the project
- Owner Expectation around quality, cost and budget
- Hierarchy of priorities that the owner care the most about – Project Definition

This information is then built into a "Procurement Matrix" which will help identify the delivery method and contract provisions.

Project establishment and organization framework and structure

Selecting a delivery method is as critical as selecting the:

- Owner Representative
- Architect
- Contract

This process must be driven by the:

- Governing Principles
- Hierarchy of priorities
- Owner Expectation on Quality, Cost and Schedule.

Where do you Start?

A Delivery Strategy that Best Fits the Project

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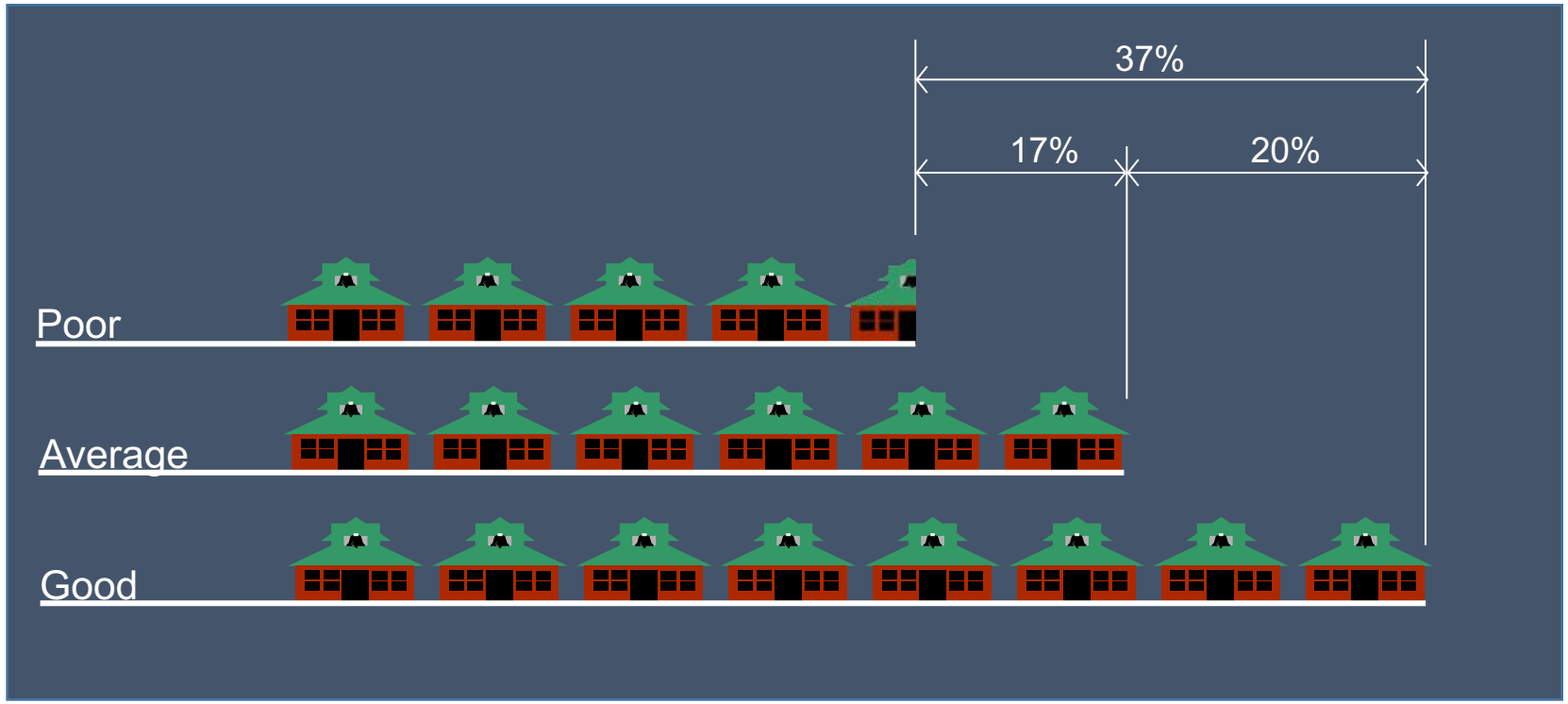
Project establishment and organization framework and structure



- **Well defined projects cost 17% less than the average**
- **Poorly defined projects cost 20% more**

Edward Merrill Independent Project Analysis Corp., Reston, VA

Project establishment and organization framework and structure

The cost of a change in a project increases by a factor of about 10 each time the project changes its state.

Without out developing the principles by which the project is governed and the hierarchy of expectations the project is subject to political outside pressures that can and will increase costs and lengthen schedules.

Written requirements

Design drawings

Construction drawings

Construction

Occupancy

Project establishment and organization framework and structure

Understanding the Professions Roles on a Project

OWNERS REPRSENTATIVES

- Assist the owner in establishing expectations and setting the and hierarchy of owner priorities.
- Oversee and participate in decision making with users, builders and designers.
- Coordinates with Leadership to maintain consistent communications

ARCHITECTS

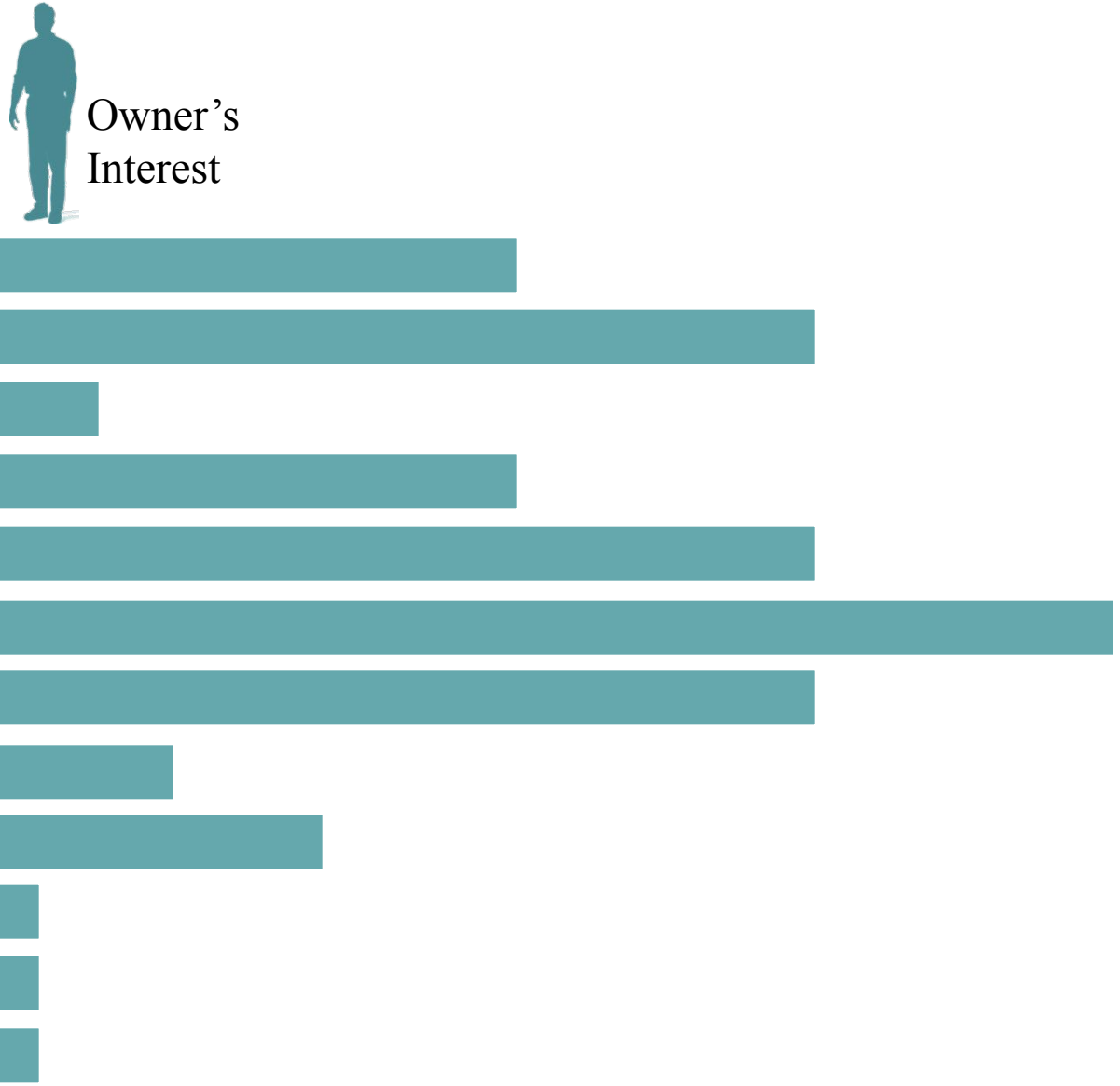
- Manage other design professionals and consultants.
- Responsibility for the design process.

CONSTRUCTION MANAGERS

- Integrate and manage subcontractors.
- Responsible for the construction process.

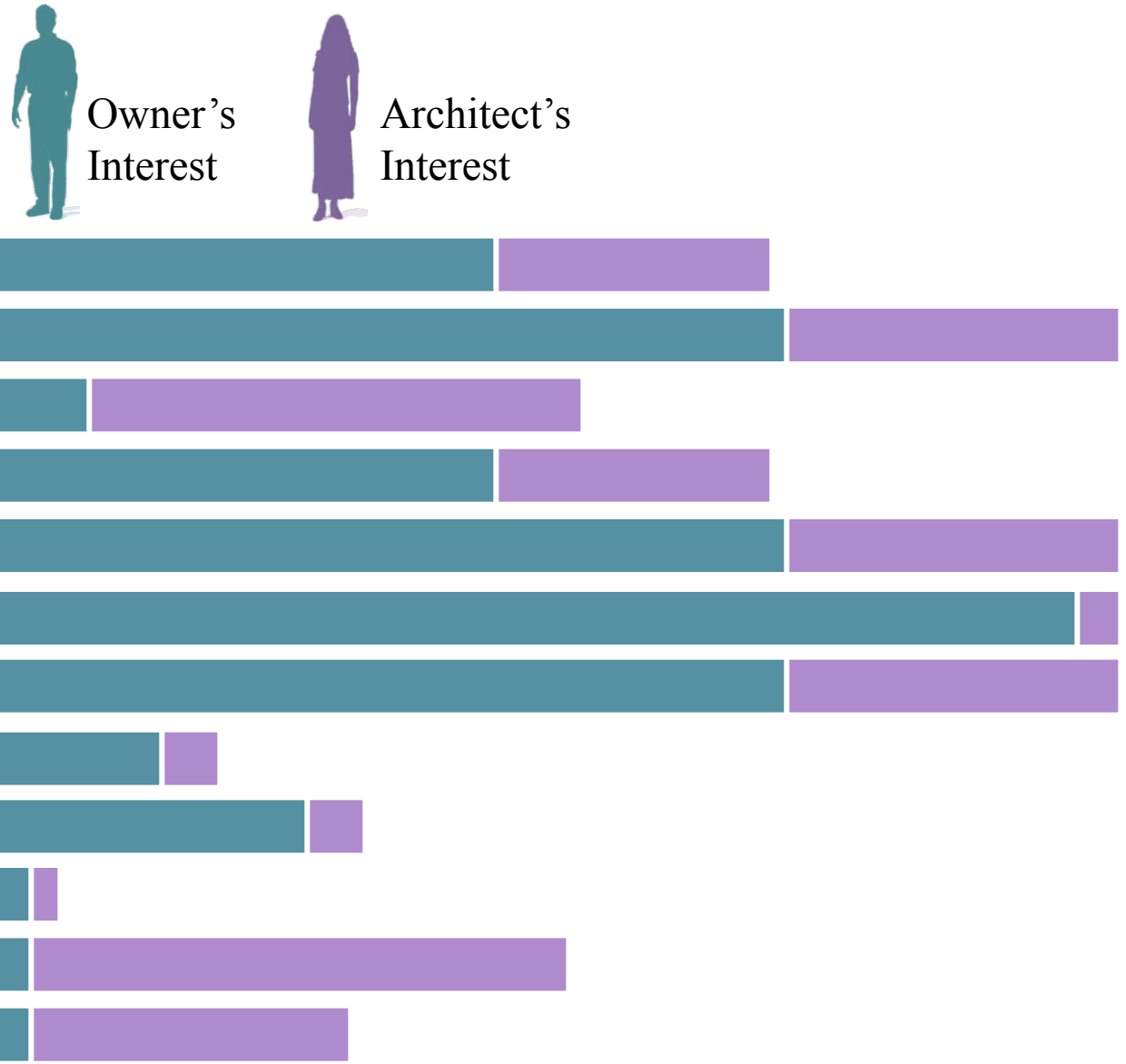
Project establishment and organization framework and structure

Sharing the Vision



Project establishment and organization framework and structure

Sharing the Vision



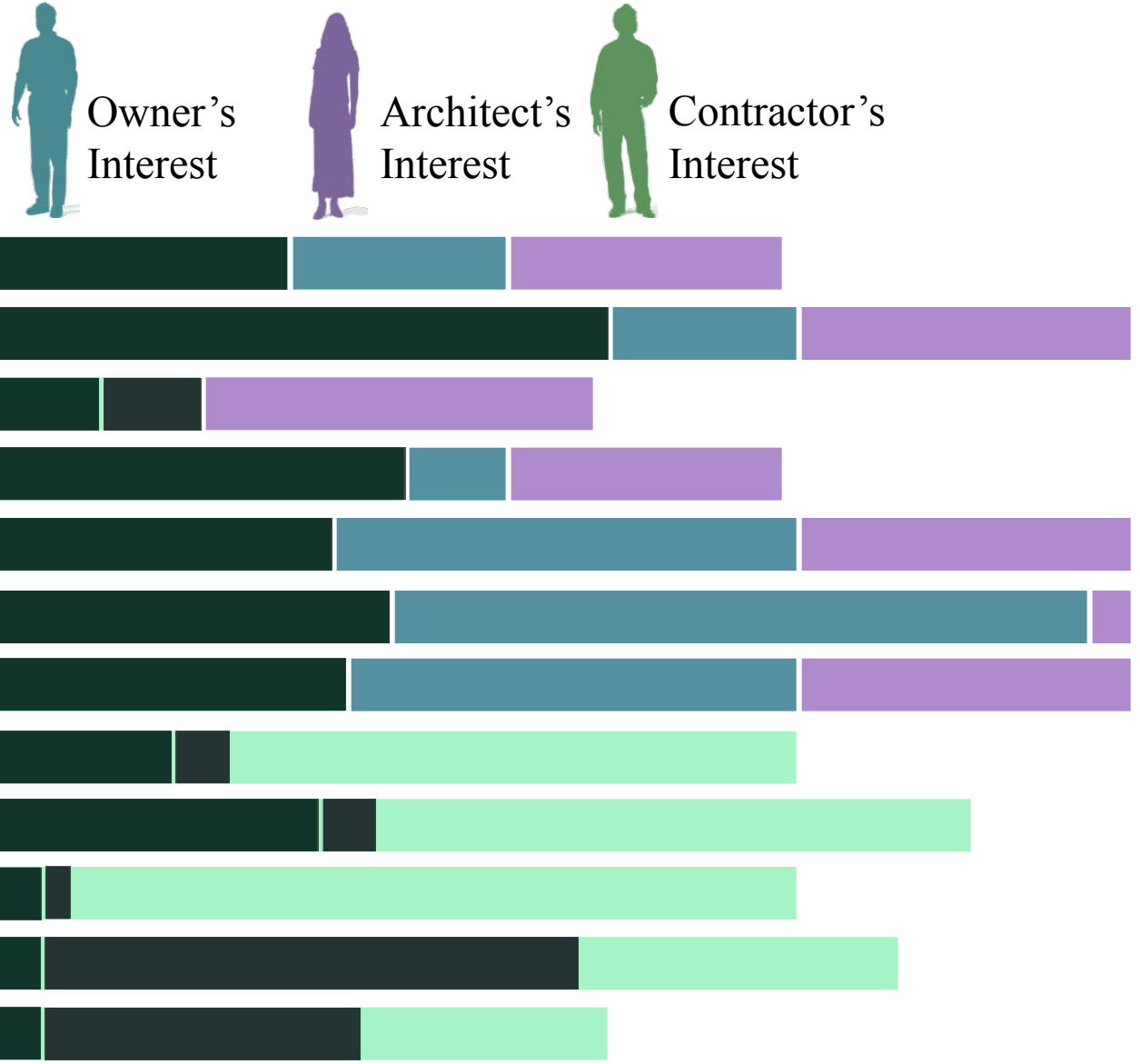
Project establishment and organization framework and structure

Sharing the Vision

By aligning early the owners:

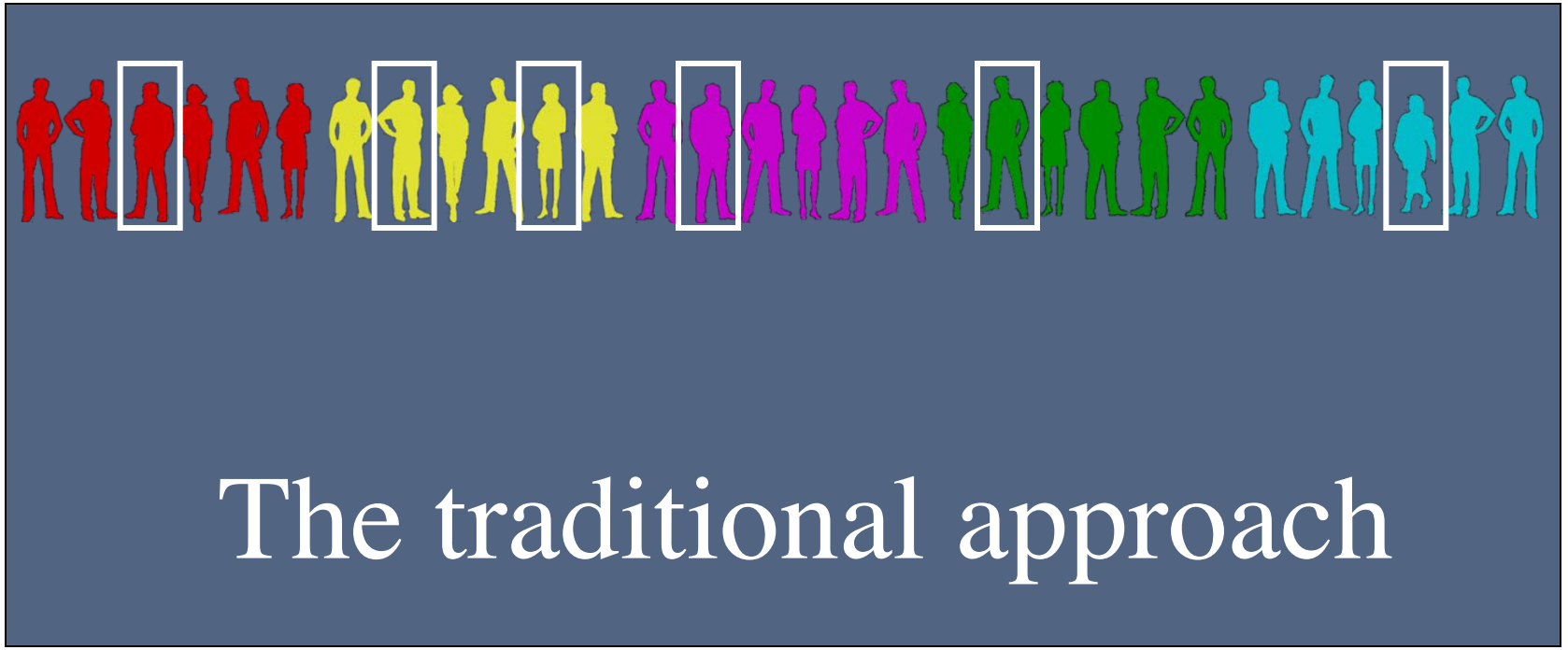
- Governing principles,
- Expectations
- Hierarchy

The project avoids a blurred vision and delivers the quality on time and budget.



Project establishment and organization framework and structure

Selecting the Right Team



Selecting the whole team at once can lead to some members of the team being weaker that what would be desired.

Project establishment and organization framework and structure

Selecting the Right Team

a paradigm shift

Project establishment and organization framework and structure

Design Management

Project establishment and organization framework and structure

Design Management

Design Scoping Workshops

- Bring all brain power to the workshop
- Utilizing the Governing Principles, expectations and hierarchy of priorities
- Create a collaborative environment
- Develop trusting project relationships

Summary Sessions

- Resolve cost and schedule impacts
- Everyone has an assignment for the next workshop

Project establishment and organization framework and structure

Budget Management

Consistency in review the numbers and understanding the constrains and trade offs.
The project organizational structure (workshops) must allow for continuous live budget evolution and management

CSI Number	Section	Orignal MOCA Estimate	MOCA Estimate	Combined J.E. Dunn	MOCA Cost Model 12/2012	J.E. Dunn	Workshop #2	Difference 11/12 vs Workshop #2	Workshop #3	Difference Workshop	# 2 vs Workshop #3	Difference Workshop	# 3 vs Workshop # 4	Difference Workshop	# 4 vs Workshop #5	Difference Workshop	# 5 vs Workshop #6	Difference Workshop	# 6 vs Workshop #7	Difference Workshop	# 7 vs Workshop # 8	Difference Workshop
		$ 10,312,799.00	10,312,799.00	8,872,000.00	8,872,000	8,872,000	8,872,000	0	8,872,000	0	8,971,262	99,262	8,971,262	0	8,971,262	0	8,971,262	0	8,971,262	0	8,971,262	0
1	General Requirements/ General Conditions	$ 5,750,000.00	5,750,000.00	5,491,250.00	4,338,803	4,338,803	5,397,142	1,058,339	4,964,384	(432,758)	5,082,939	118,555	5,175,403	92,464	5,215,704	40,301	5,780,503	564,799	5,780,503	0	5,780,503	0
2	Existing Conditions	$ 5,750,000.00	5,750,000.00	5,491,250.00	1,150,000	1,150,000	1,150,000	0	1,150,000	0	1,161,615	11,615	1,161,615	0	1,161,615	0	1,161,615	0	1,161,615	0	1,161,615	0
2A	Hazaradous Materials Abatement	$ 7,475,000.00	7,475,000.00	7,138,625.00	5,000,000	5,000,000	5,000,000	0	5,000,000	0	5,050,500	50,500	4,848,480	(202,020)	4,848,480	0	3,186,711	(1,661,769)	3,132,052	(54,659)	2,930,032	(202,020)
3	Concrete	$ 17,556,791.00	-	$ -	750,000	750,000	750,000	0	750,000	0	757,576	7,576	757,576	0	757,576	0	757,576	0	757,576	0	757,576	0
4	Masonry	$ -	$ -	$ -	2,949,262	2,949,262	3,234,922	285,660	3,218,892	(16,030)	3,134,096	(84,796)	3,583,435	449,339	3,512,502	(70,933)	3,929,961	417,459	4,126,278	196,317	4,126,378	0
5	Metals	$ -	$ -	$ -	1,794,613	1,794,613	1,705,966	(88,647)	1,691,228	(14,738)	1,698,703	7,475	1,698,703	0	1,580,599	(118,104)	1,580,599	0	1,580,599	0	2,848,741	1,268,142
6	Wood, Plastics and Composites	$ 6,025,390.00	6,025,390.00	5,754,390.70	6,104,390	6,104,390	7,889,326	1,784,936	6,207,250	(1,682,076)	6,667,671	460,421	6,667,671	0	6,667,671	0	6,667,671	0	6,667,671	0	6,667,671	0
7	Thermal and Moisture	$ 3,573,680.00	36,700.00	70,508.80	3,441,954	3,441,954	3,420,932	(21,022)	2,945,293	(475,639)	3,515,025	569,732	3,515,025	0	3,515,025	0	3,515,025	0	3,515,025	0	3,515,025	0
8	Openings	$ 31,375,786.00	31,375,786.00	30,057,763.49	11,897,504	9,334,367	10,162,263	827,896	9,243,346	(918,917)	9,362,442	119,096	9,362,442	0	9,523,513	161,071	10,140,114	616,601	10,225,232	83,118	10,333,294	110,062
9	Finishes	$ -	$ -	$ -	650,000	1,115,935	1,103,440	(15,495)	1,109,599	6,159	1,125,737	20,138	1,129,737	0	1,016,328	(113,409)	1,016,328	0	1,017,354	1,026	1,267,613	250,259
10	Specialties	$ -	$ -	$ -	28,835	11,725	11,726	1	11,726	0	0	(11,726)	0	0	0	0	0	0	0	0	303,330	303,330
11	Equipment	$ -	$ -	$ -	209,631	209,631	219,327	9,696	0	(219,327)	0	0	0	0	0	0	0	0	0	0	201,323	201,323
12	Furnishings	$ -	$ -	$ -			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Special Construction	$ 1,775,680.00	1,775,680.00	1,701,024.80	3,000,000	3,000,000	3,000,000	0	3,000,000	0	1,939,392	(1,060,608)	1,939,392	0	2,094,443	155,051	2,094,443	0	2,094,443	0	2,094,443	0
14	Conveying Equipment	$ 1,795,107.00	1,795,107.00	1,719,626.29	2,020,113	2,020,113	1,836,459	(183,654)	2,074,949	238,490	1,877,835	(197,114)	1,877,835	0	1,877,835	0	1,877,835	0	1,877,835	0	1,877,835	0
21	Fire Suppression	$ 2,841,258.00	2,841,258.00	2,722,272.56	2,816,503	2,816,503	2,739,764	(76,739)	2,686,153	(53,611)	2,645,970	(40,183)	2,645,970	0	2,645,970	0	2,645,970	0	2,645,970	0	2,645,970	0
22	Plumbing	$ 32,707,922.00	32,707,922.00	31,333,997.68	34,270,334	34,270,334	35,248,157	977,823	34,996,240	(251,917)	35,331,055	335,815	35,331,055	0	35,332,055	0	35,332,055	0	35,332,055	0	35,332,055	0
23	HVAC	$ -	$ -	$ -			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Integrated Automation	$ 17,791,922.00	17,791,922.00	17,044,038.58	14,682,515	14,988,226	16,300,267	1,315,041	15,741,642	(558,625)	15,916,892	177,250	15,916,892	0	15,916,892	0	15,916,892	0	15,916,892	0	15,916,892	0
26	Electrical	$ -	$ -	$ -	7,854,242	8,619,059	8,680,923	62,864	8,118,939	(561,984)	8,212,049	93,110	8,212,049	0	8,212,049	0	7,743,212	(468,837)	7,743,212	0	6,717,632	(1,025,580)
26A	Historic Lighting	$ -	$ -	$ -	150,000	150,000	150,000	0	150,000	0	150,000	0	150,000	0	150,000	0	150,000	0	150,000	0	150,000	0
27	Communications	$ -	$ -	$ -			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	Electrical Safety and Security	$ 234,696.00	234,696.00	224,746.80	225,000	225,000	225,000	0	225,000	0	227,273	2,273	227,273	0	227,273	0	227,273	0	0	(227,273)	0	0
31	Earthwork	$ -	$ -	$ -																		
32	Exterior Improvements	$ -	$ -	$ -	150,000	150,000	150,000	0	150,000	0	151,515	1,515	151,515	0	151,515	0	151,515	0	1,169,163	1,169,163	1,041,943	(127,220)
33	Utilities				112,340,899	111,311,115	117,247,614	5,936,499	112,306,641	(4,940,973)	112,983,547	679,906	113,323,330	339,783	113,380,307	53,977	112,843,560	(531,747)	114,013,352	1,167,792	114,751,848	778,496
	SUBTOTAL																					
	Insurance and Bond Cost	$ -	$ -	$ 2,703,660.00	2,831,217	2,805,040	2,954,640	149,500	3,369,199	414,559	3,546,535	177,336	3,557,372	10,837	3,559,085	1,713	3,542,208	(16,877)	3,634,093	91,885	3,665,578	31,485
	Contractors Fee	$ 4,511,388.00	4,511,388.00	2,116,800.00	1,958,079	1,939,975	2,043,438	103,464	1,966,489	(76,949)	1,981,062	14,573	2,071,430	90,368	2,072,428	998	2,062,600	(9,828)	2,081,640	19,040	2,099,675	18,035
	State Satisfaction Fee Match										NIC	0	NIC	0	NIC	0	NIC	NIC	NIC	NIC	NIC	NIC
	Escalation to May 2013 @ 1.01 %										incl	0	incl	incl	incl	incl	incl	incl	incl	incl	incl	incl
	Contingency	$ (5,382,162.00)	6,080,000.00	5,856,960	5,802,806	6,112,285	309,478	5,882,116	(230,168)	5,925,707	43,591	5,947,757	22,049	5,950,591	2,834	5,922,668	(27,923)	5,986,604	63,936	6,028,005	41,401
	Total	$ 149,475,693.00	123,000,000.00	128,491,903.69	122,996,155	121,886,936	128,357,977	6,499,041	123,524,446	(4,833,531)	124,439,852	915,406	124,902,889	463,037	124,962,411	59,522	124,375,036	(586,375)	125,719,689	1,342,653	126,583,106	869,417
	Variance To Budget				(3,845)	(1,146,064)	5,357,977	5,357,977	524,446	524,446	209,352	209,352	672,889	672,389	732,411	732,411	146,036	146,036	1,486,689	1,486,689	287,306	287,306
	BUDGET w / ESCALATION				123,000,000						124,230,000		124,230,000		124,230,000	0					124,230,000	

				Add Millwork	1,300,000
		339,783	53,977	112,848,560 Add Wayfinding	1,167,792 250,000 778,496
		463,037	59,522	124,376,036 Add Wd Blinds	1,342,653 200,000 869,417
				Add Technology	300,000
				Subtotal	2,050,000
				Escal @ 1.01%	20,500
					2,070,500
				REV BUDGET =	126,300,500

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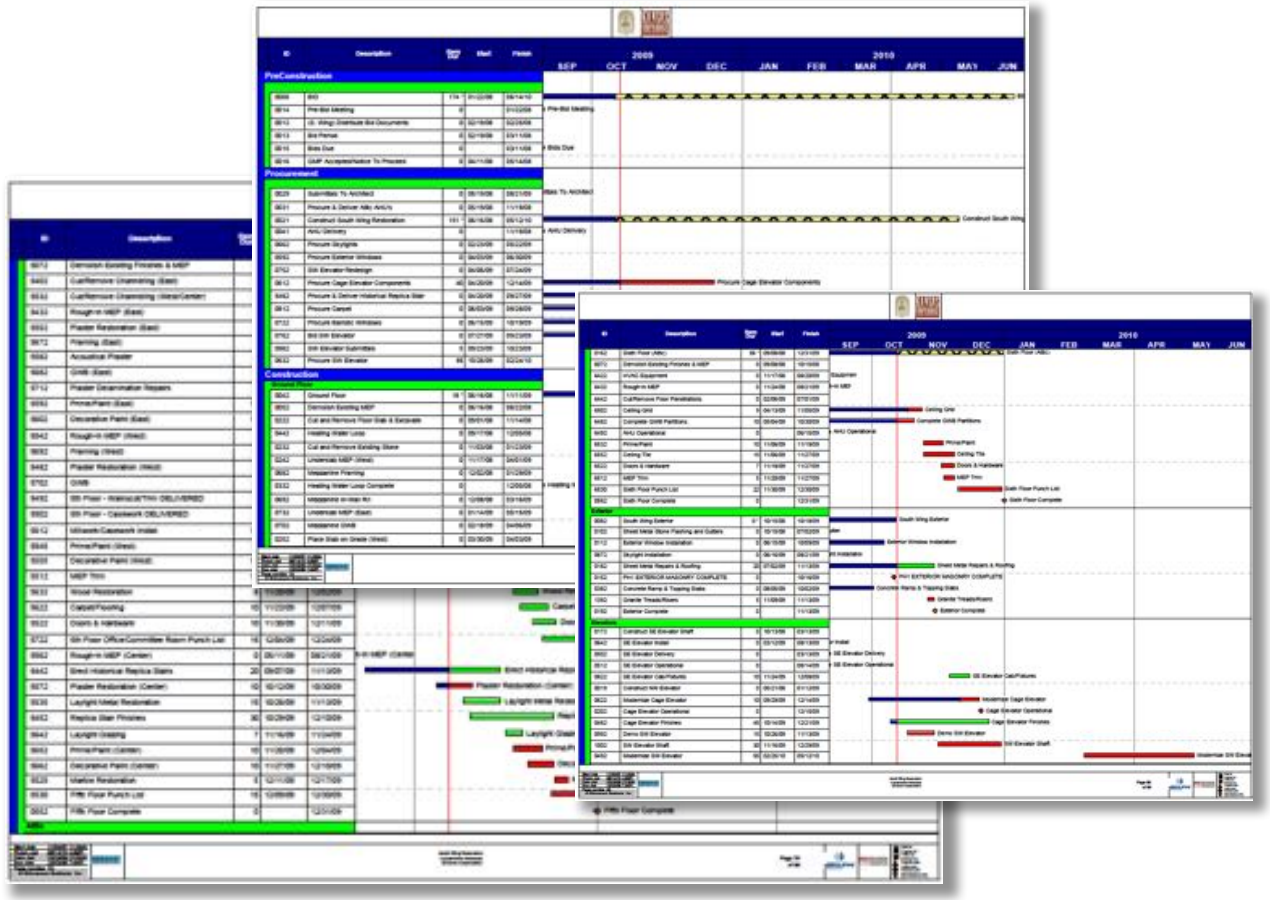
Project establishment and organization framework and structure

Schedule Management

Must start with where you want to go. Need to develop the overall project schedule – best guess.

Schedule management is then all about managing tasks.

- **Schematic Design** - 30,000 foot view
  - 100 to 200 tasks
- **Design Development** – 10,000 foot view
  - 1000 to 5000 tasks
- **50% Construction Documents** – 2,000 foot view
  - 10,000 to 20,000 tasks
- **100% Construction Documents** – Focused view
  - 25,000 to 50,000 tasks.



Project establishment and organization framework and structure

Security

Project establishment and organization framework and structure

Seismic Consideration

Seismic design has a huge impact on the:

- Cost
- Schedule
- Architecture design and expression

Seismic building safety is typically the reason for many renovation and seismic upgrades to government building.

The goals and objectives for the project along with the seismic design (life safety to immediate re-occupancy) must be decided before the design team is engaged.

This should be considered as on of the governing principles and should be clearly defined as to what the owners expectations are.

Project establishment and organization framework and structure

Overall Owner Involvement

Creating a process to move forward

Capitols & Capitol Annex have complex and varying ownership roles, However there are some fundamental that are required

- Owners have to be involved early in setting the governing principles, hierarchy, and expectations
- Owners must be the constituency and champions for the project.
- Authority to take actions that are going to be questioned in pubic
- Ability to continue despite electoral changes
- Other elected officials outside of the designated owner must allow the owner to make the decisions

Project establishment and organization framework and structure

Overall Owner Involvement

Creating a process to move forward

The typical owner structure is:

- Board
- Commission
- Leadership group

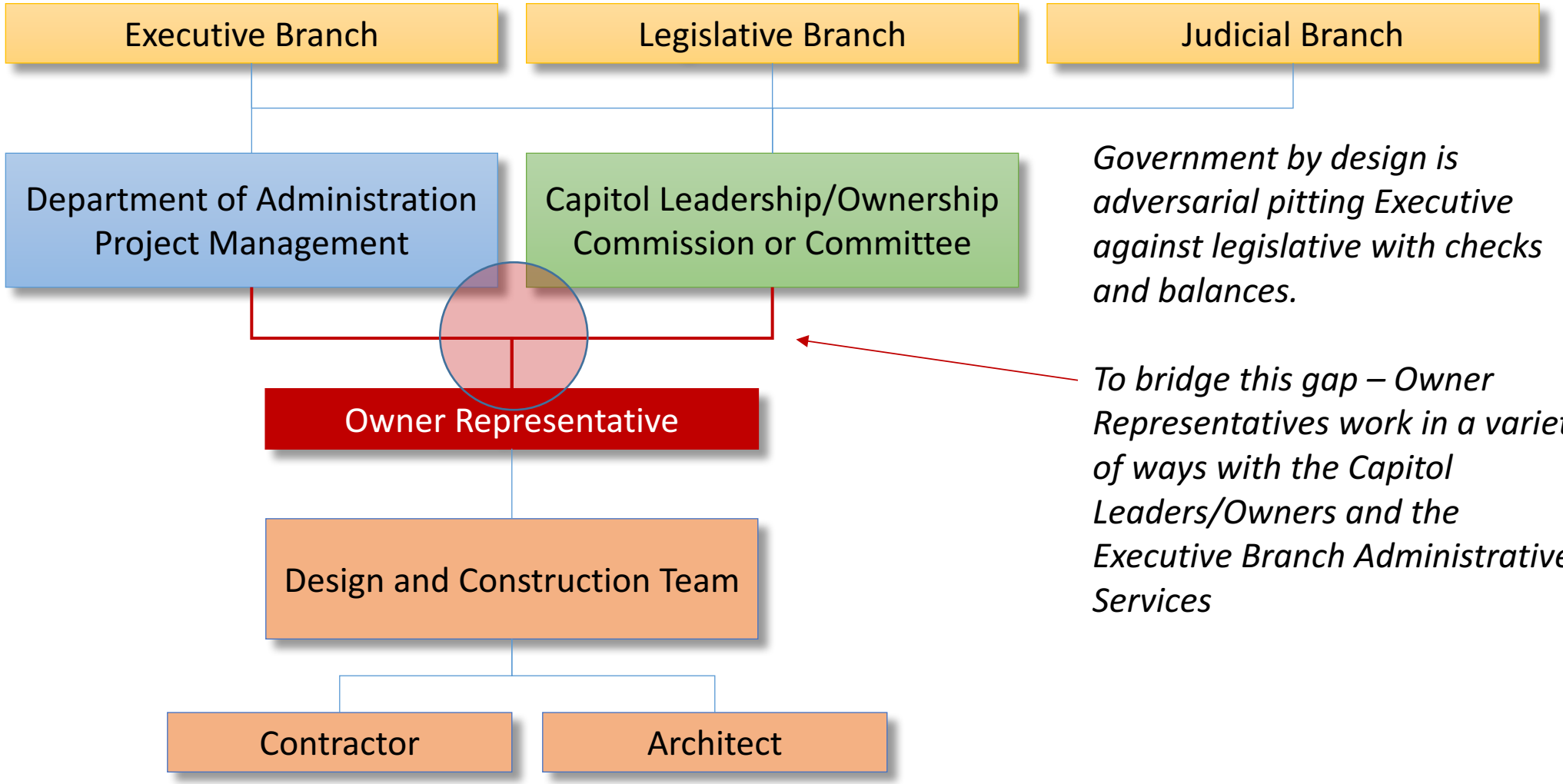
Composition is typically made up of the State Leadership or if there is a separate governance body for the facility that can be empowered to act as the owner.

They should be empowered to:

- Develop the comprehensive master plan
- Commitment funding
- Make financial decision associated with construction

Project establishment and organization framework and structure

Overall Owner Involvement and Working Relationships - Trust



Government by design is adversarial pitting Executive against legislative with checks and balances.

To bridge this gap – Owner Representatives work in a variety of ways with the Capitol Leaders/Owners and the Executive Branch Administrative Services

Project establishment and organization framework and structure

Management Planning – Outline of Overall Process

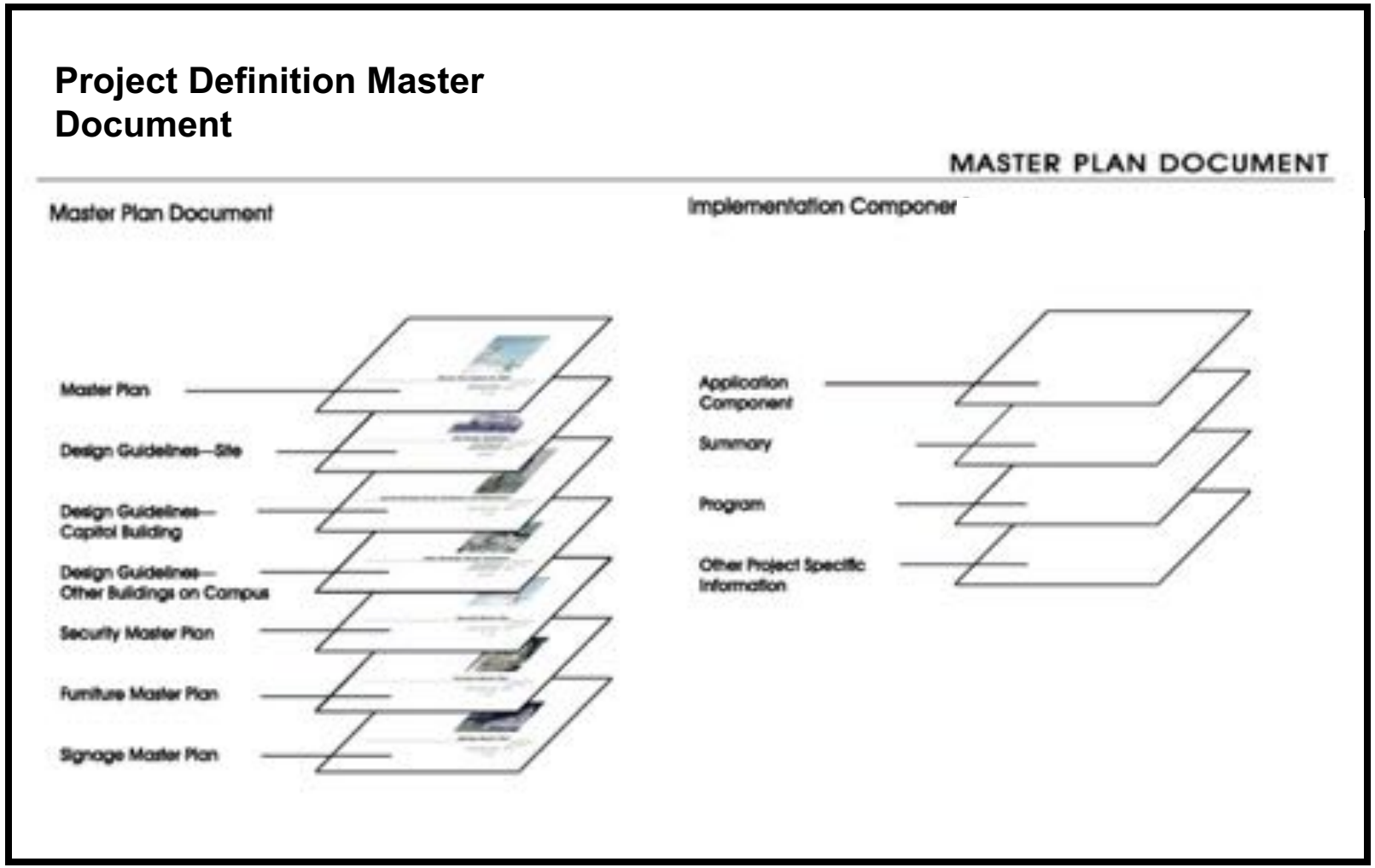
Case Study 1
Utah State Capitol

- Senate and House Buildings
- Capitol Renovation

Utah State Capitol

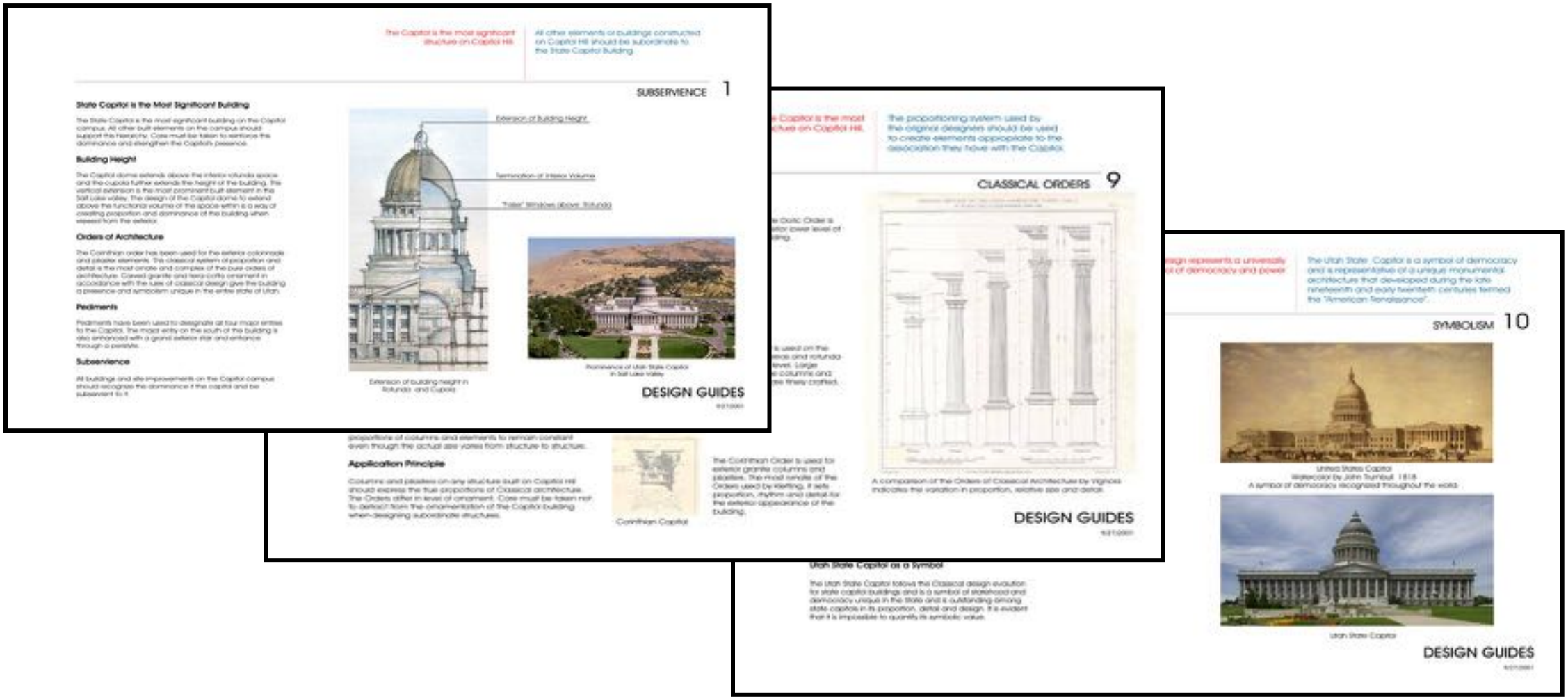
Procurement - Project Definition Comprehensive Plan

Project Definition Master Document



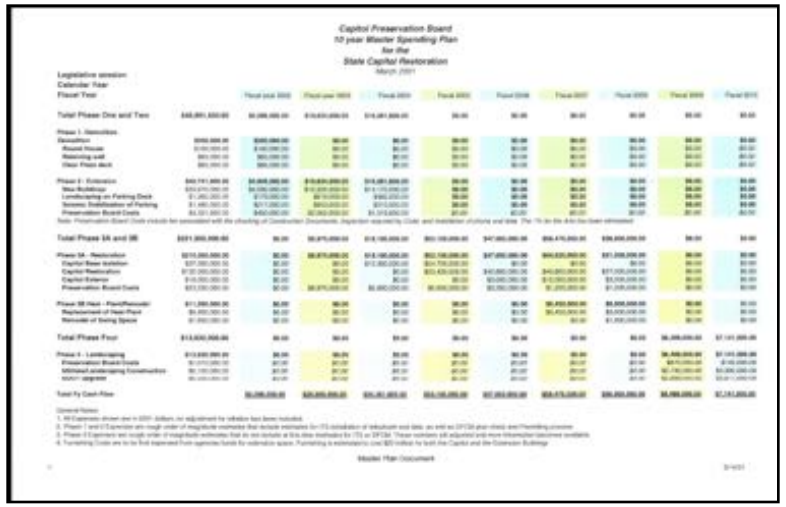
Utah State Capitol

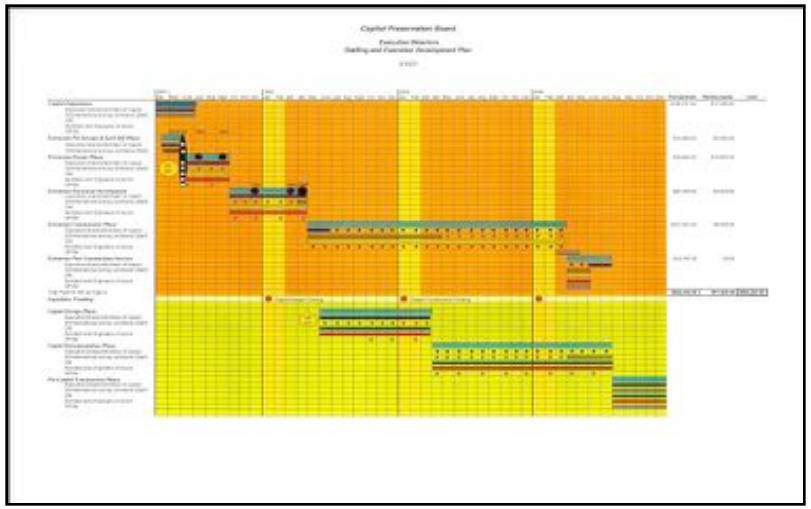
Procurement - Design Guidelines

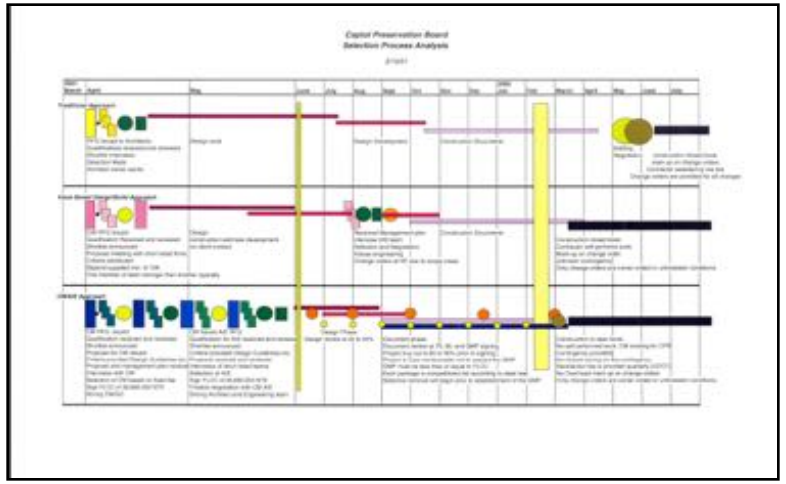


Utah State Capitol

Comprehensive Master Plan Funding, Schedule and Alignment of Process







Funding

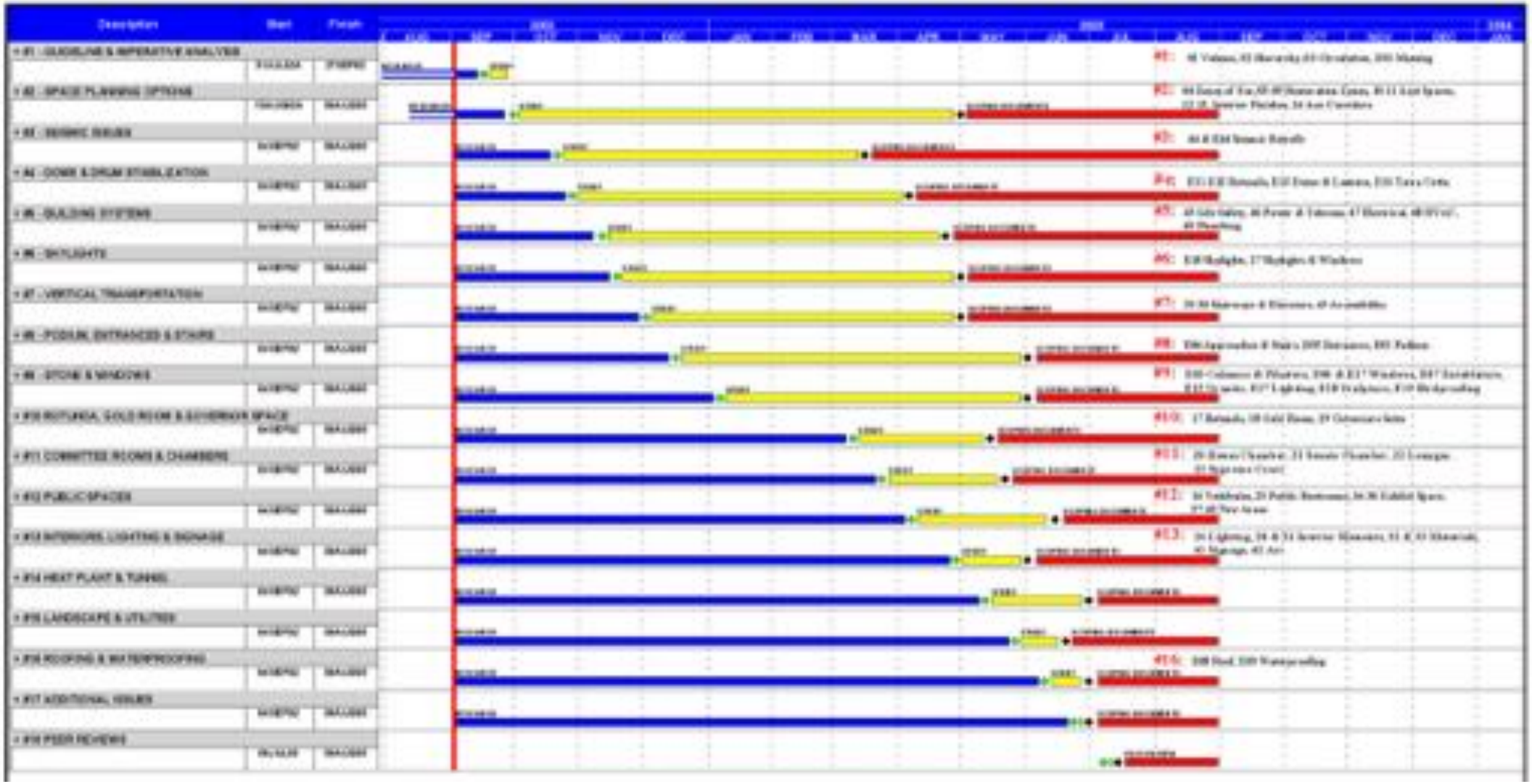
Process Organization

Schedule of Procurement

Overall Project Schedule

Construction Management at Risk

Capitol Design Scoping Workshops



Construction Management at Risk

Capitol Design Scoping workshops

17 workshops brought together all interested parties: Owners, Users, Sub-contractors, Manufacturers, Officials, Professionals etc.

Construction Management at Risk

Capitol Design Scoping Workshops

The finishes in the Capitol should exhibit the original character of the building when first constructed.

Restore this finely finished, detailed pair of spaces to an appearance as close as possible to that of 1915 as compatible with their function.

SENATE CHAMBER **21 d**

Expand the Senate Chamber using Auxiliary Corridors.

Cost Model impacts
1. TBD - Current cost model does not carry costs for expansion of the chamber. This will be an added cost to the project. A cost analysis for this option is being prepared.
2. Relocation of shearwall may cost more than anticipated

Schedule impacts
1. TBD - the current schedule does not anticipate the expansion of the chamber.

Linkages
1. House Chamber
2. Supreme Court Chamber
3. Rotunda
4. Preservation Zones

Means and Methods
1. TBD

Risks
1. Resolution of this item may impact the project cost and schedule.
2. Inability to find original materials for the project.
3. In the end it does not achieve the intended space utilization.

In order to enhance the working environment of the Chamber, the workshop investigated the following expansion options:
1. **Enlarge overall volume**
2. **Expand east and west by removing side walls to the greatest extent possible to reveal the Auxiliary Corridor.**
3. **Expand north into the lounge**
4. **Expand south into existing back rooms.**
   - **By use of doorways**
   - **Removal of walls**
   - **Modifying vestibule**

After study it was determined that the number of legislators could grow to the 30 member constitutional limit. The increased useable space on the floor is accomplished by relocating the press, pages and other visitors to the perimeter of the expanded room in the auxiliary corridors and other locations.

Further Study
1. Configuration of expansion.
2. Availability of materials that match the existing.
3. Configuration of space using the existing furniture.
4. Study mechanical and electrical locations.
5. Level of finish in the Auxiliary Corridors. Study material availability.

Progress Towards Scope Documents
1. Develop parallel building space plans.

Policy Development for Capitol Preservation Board
1. House to develop policy on governing the chamber

Remove side walls in the Senate expose the Auxiliary Corridor as side aisles to the Chamber

WORKSHOP 11 SUMMARY

3/6/2003

MOCA

Utah State Capitol

Results

1. Senate and House Building – 3 Months ahead of Schedule - $1,000,000 saved and use to complete fountain
2. Capitol - Grand opening on Statehood day, completion 1 Month ahead of schedule - $3.5 Million below budget
3. Parking Structures – completed on time and with in budget.




Utah State Capitol

Management Planning – Outline of the Overall Process

1. Establish the Organization and Ownership structure – Capitol Preservation Board Statute
2. Develop an Overall Comprehensive Master Plan including:
    1. Quality Expectation of the Owner – Guiding Principles for the entire project
    2. Design Guidelines and Imperative
        1. Extension Building (Senate and House Building) – With Bridging Documents
        2. Capitol Base Isolation and Restoration
        3. Security
        4. Signage
        5. Furniture
    3. Preliminary Architectural Program and Space Ownership diagrams
    4. Budget expectations
        1. Comprehensive budget development for entire project.
    5. Schedule expectations
        1. Overall comprehensive Schedule of all work, moves, furniture acquisition and move in.
        2. Design Management Planning – Design Scoping Workshops schedule and process
    6. Delivery Strategy based upon the Procurement Matrix for each selection
    7. Design/Build with Bridging Documents for New Structures & CM@Risk for Historic Structures.
        1. Team development strategy (who is selected first, second …)
3. Design Scoping Workshops and Colocation of Design Team and Contractor on site for Management

Case Study 2
Idaho State Capitol

- Capitol Renovation
- Underground Wings

Idaho State Capitol

Procurement - Project Definition Comprehensive Plan

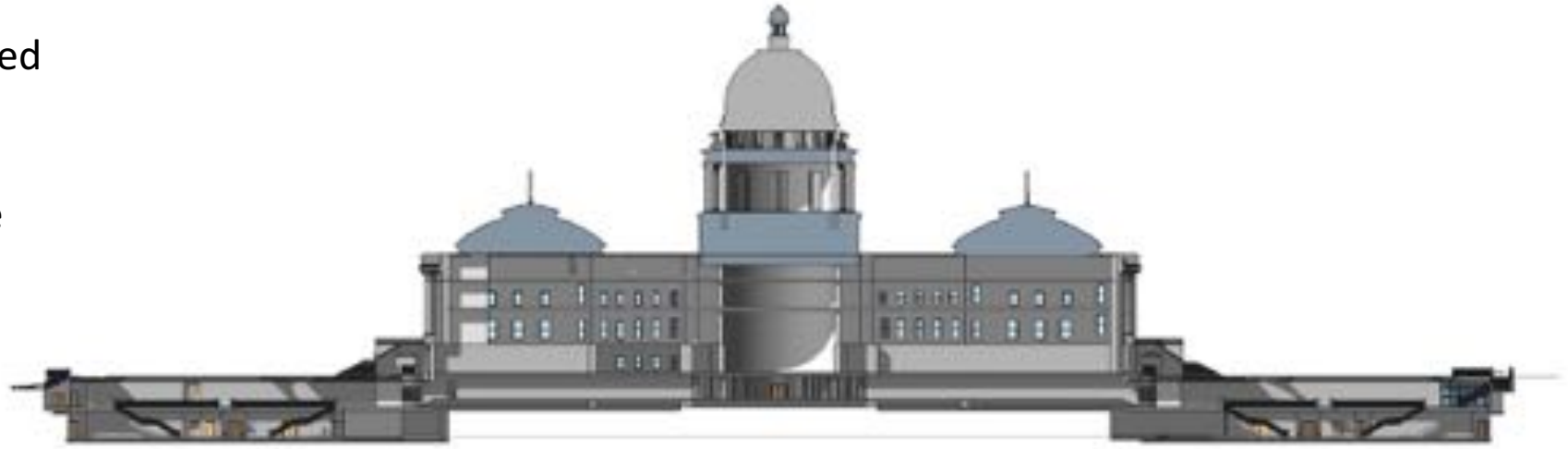
Department of Public Works lead the overall team

Owner Representative collaborated together to develop the comprehensive plan and Project Definition & Bridging Documents

Design/Build Team developed the expansion shell.

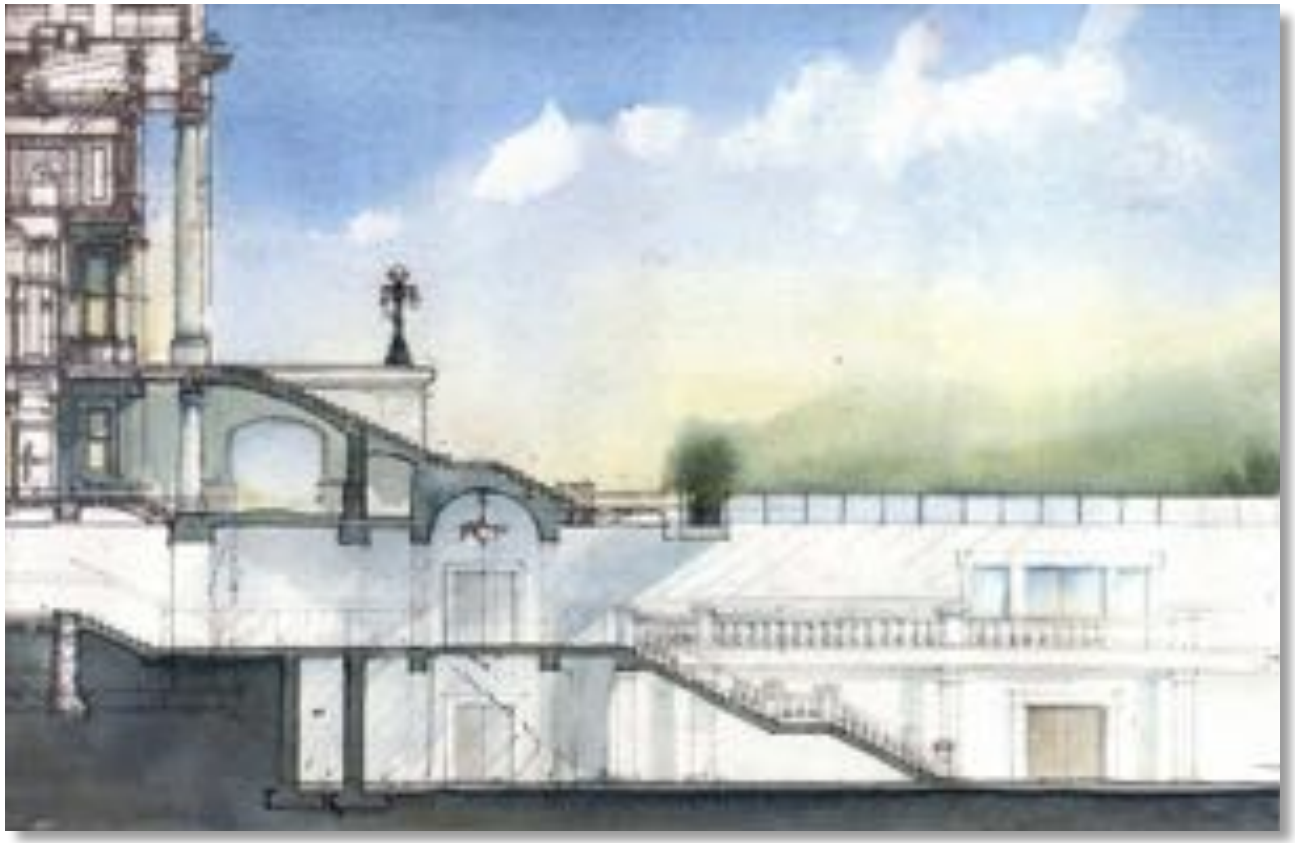
Architects implemented the project definition.

Collaboration occurred in workshops and through the architectural process.



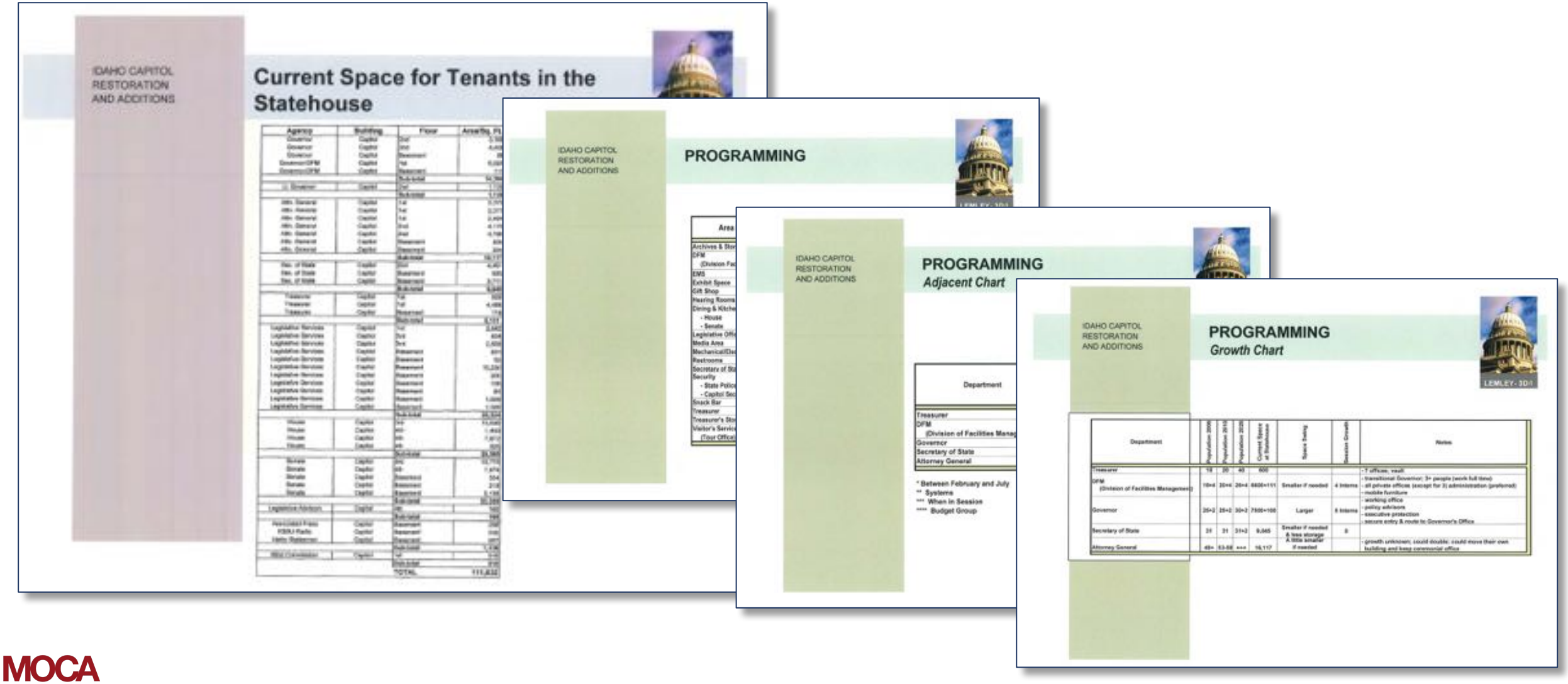
Idaho State Capitol

Procurement - Project Definition Comprehensive Plan – Design Guidelines and Imperatives to shape desired outcome



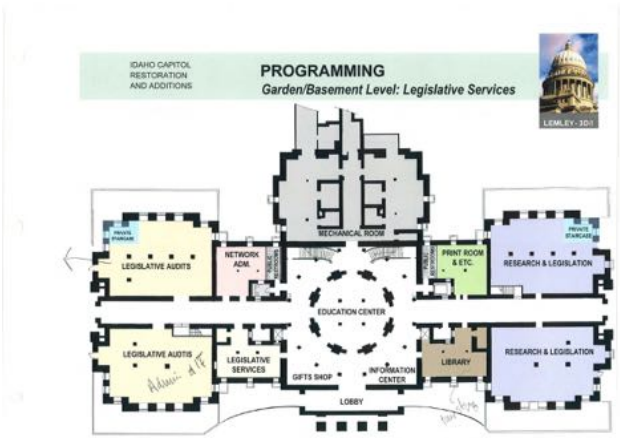
Idaho State Capitol

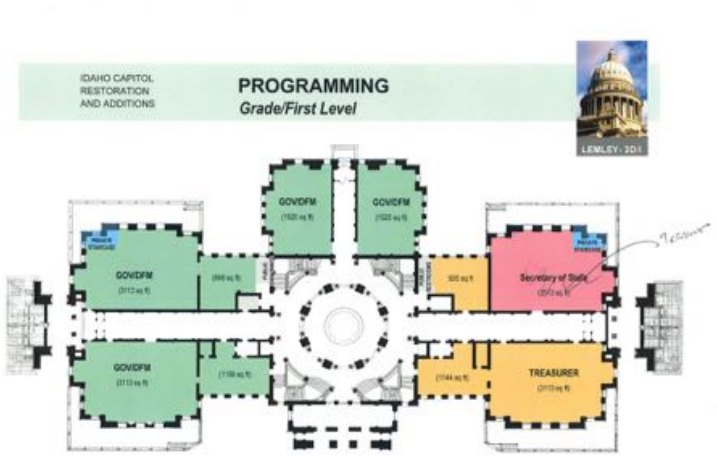
Procurement - Project Definition Comprehensive Plan - Programing

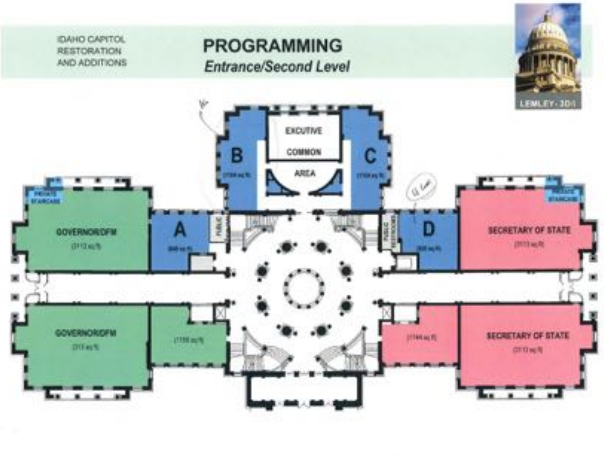


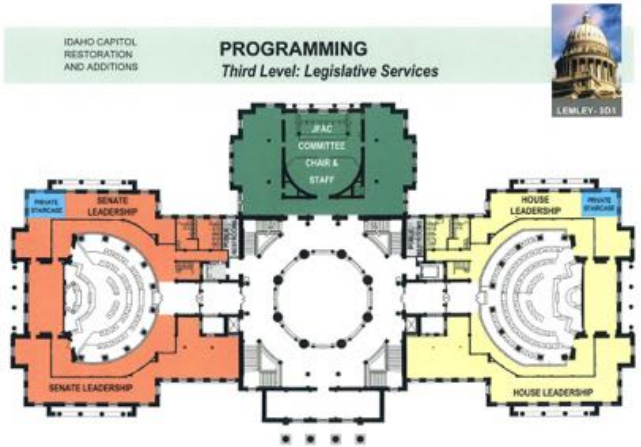
Idaho State Capitol

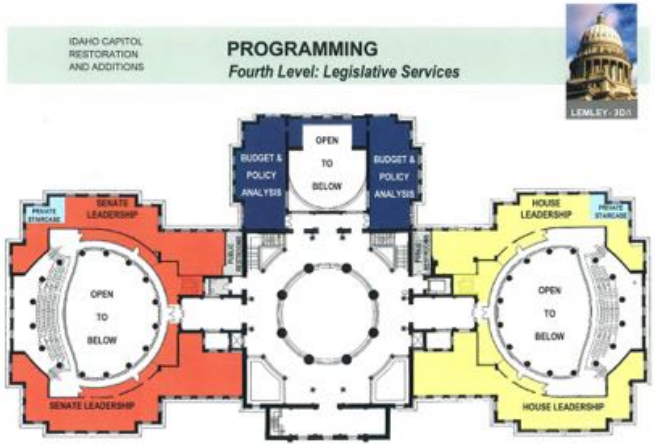
Procurement - Project Definition Comprehensive Plan - Programing











Idaho State Capitol

Procurement - Project Definition Comprehensive Plan

Options for Expansion

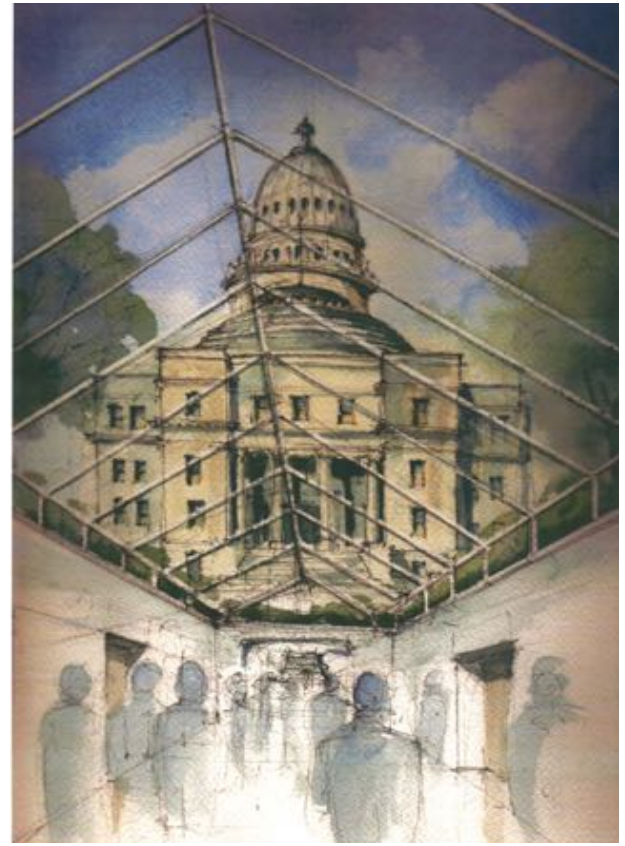
1. Below Grade Wing Expansion
2. Two Story Deep solution
3. One Story Deep solution
4. South Garden Level Expansion

All options were evaluated on:

1. Consistency with the Principles
2. Constructability
3. Cost
4. Schedule impact

Solution:

- **One Level below grade expansion**



Idaho State Capitol

Security

Idaho State Police Provide Security for the Capitol

Private Unarmed Security provide 24 hour 7 day a week support – they notify a officer for law enforcement

Idaho State Police Provide Security for the Governor

Executive Protection is co-located with the Governor

Idaho State Capitol

Security – Operation Center

There are 10 public entrances.

All entrances are monitored from security operation center by camera

Security is located within the Capitol

There is not security in the Rotunda, however office is very close to Rotunda

Two security officers in the SOC at all times.

- Dispatching to calls within the Capitol
- Monitoring camera's within surrounding State buildings
- Monitoring camera's within the Capitol campus:
- Monitoring all campus panic alarms
- Responsible for campus lockdown
- Answer all security related phone calls

Idaho State Capitol

Security Policies

Evacuation Plan

There is an evacuation plan for every office that covers evacuation procedures for employees.

Major events

Protests have to be requested and authorized via permit.

If a major event is requested, there are usually 2 to 3 security guards present.

Threat Levels:

Currently there is not a threat level program in place

Idaho State Capitol

Results

1. Project was completed on Budget and on Schedule

Idaho State Capitol

Management Planning – Outline of the Overall Process

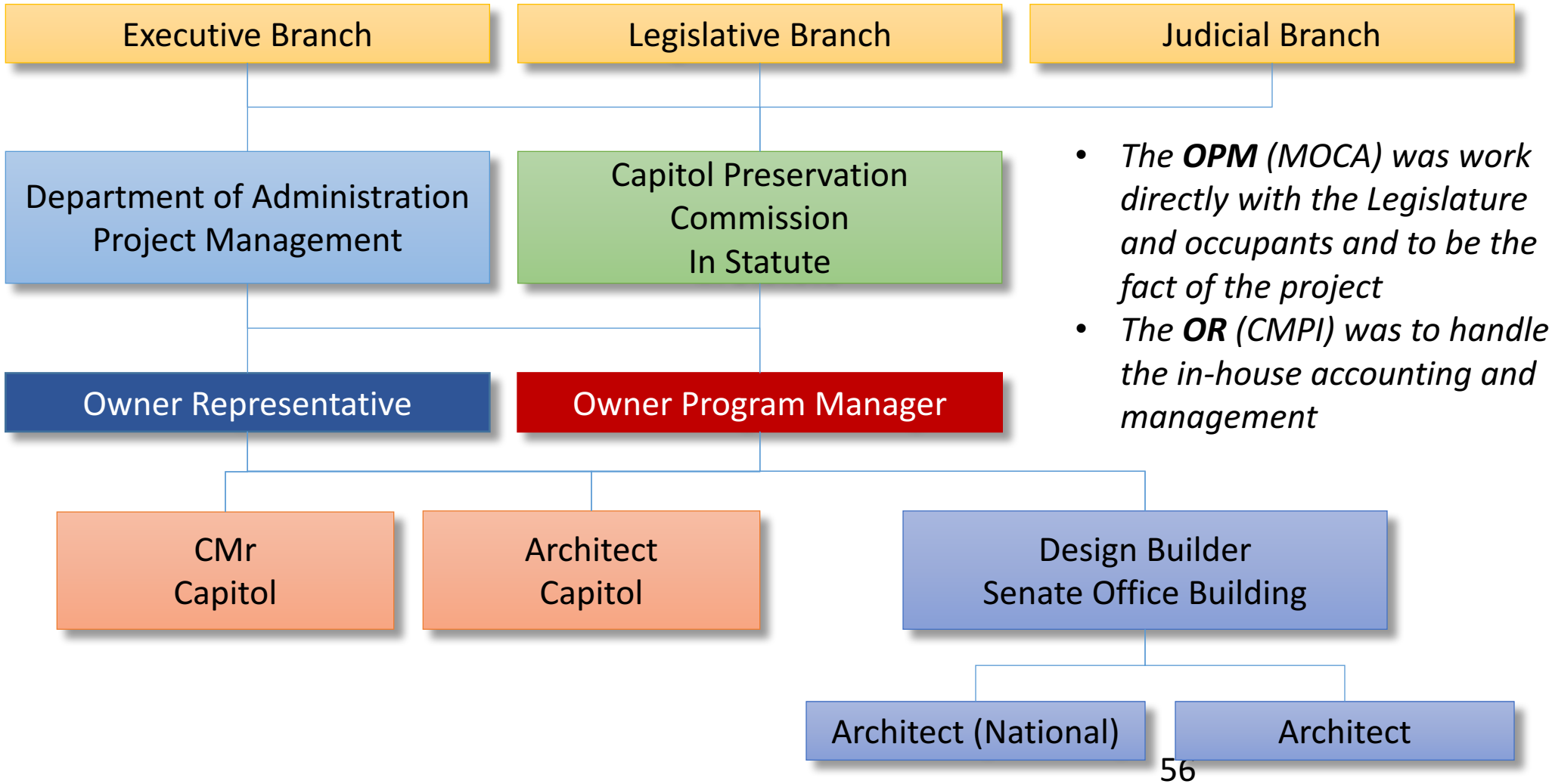
1. Establish the Organization and Ownership structure – Department of Public Works
2. Develop an Overall Comprehensive Master Plan including:
    1. Quality Expectation of the Owner – Guiding Principles for the entire project
    2. Design Guidelines and Imperative
    3. Programing and Space Planning working with Leadership
3. Two Delivery Methods
    1. Design Build for Extensions
    2. CM@ Risk for Capitol and interior of Extensions
4. Budget expectations
5. Comprehensive budget development for entire project.
6. Team collaboration with Design Builder and CM@Risk
7. Security Operations and Management very involved.

Case Study 3
Minnesota State Capitol

- Capitol Renovation
- Senate Office Buildings

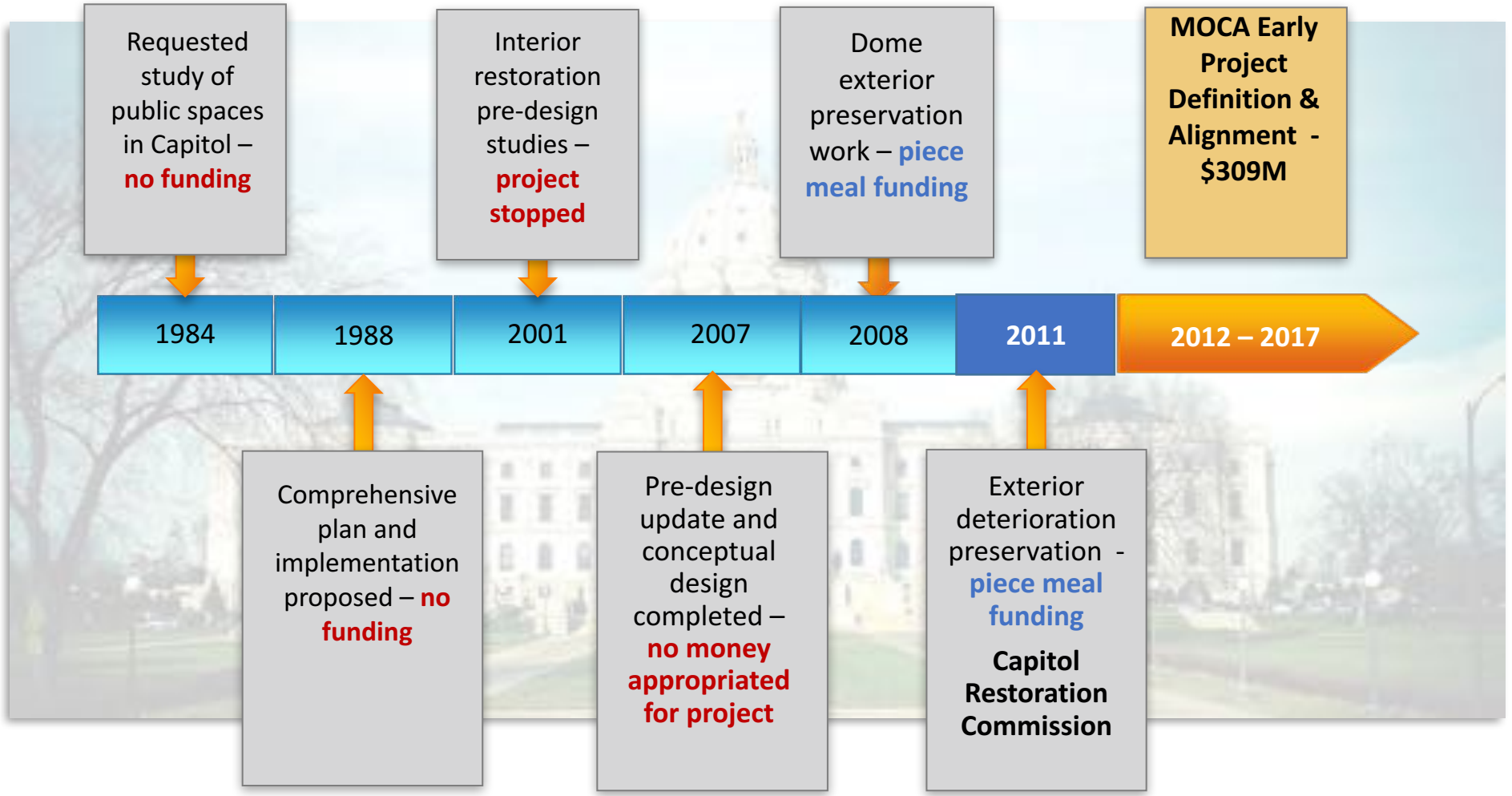
Minnesota State Capitol

Organization and Structure of the Ownership



- *The **OPM** (MOCA) was work directly with the Legislature and occupants and to be the fact of the project*
- *The **OR** (CMPI) was to handle the in-house accounting and management*

History of the Minnesota State Capitol Restoration



Minnesota State Capitol

Organization and Structure of the Ownership

Guiding Principles developed by Capitol Preservation Commission

1. Architectural Integrity

- It is critical to preserve the integrity of the building and its great architecture.
- Consideration should be given to original 1905 plan.
- The building must work for the next 100 years.

2. Building Function

- The building must work to support the function of Government.
- Functional relationships should be improved both within and between the different branches of government.

3. Life Safety and Security

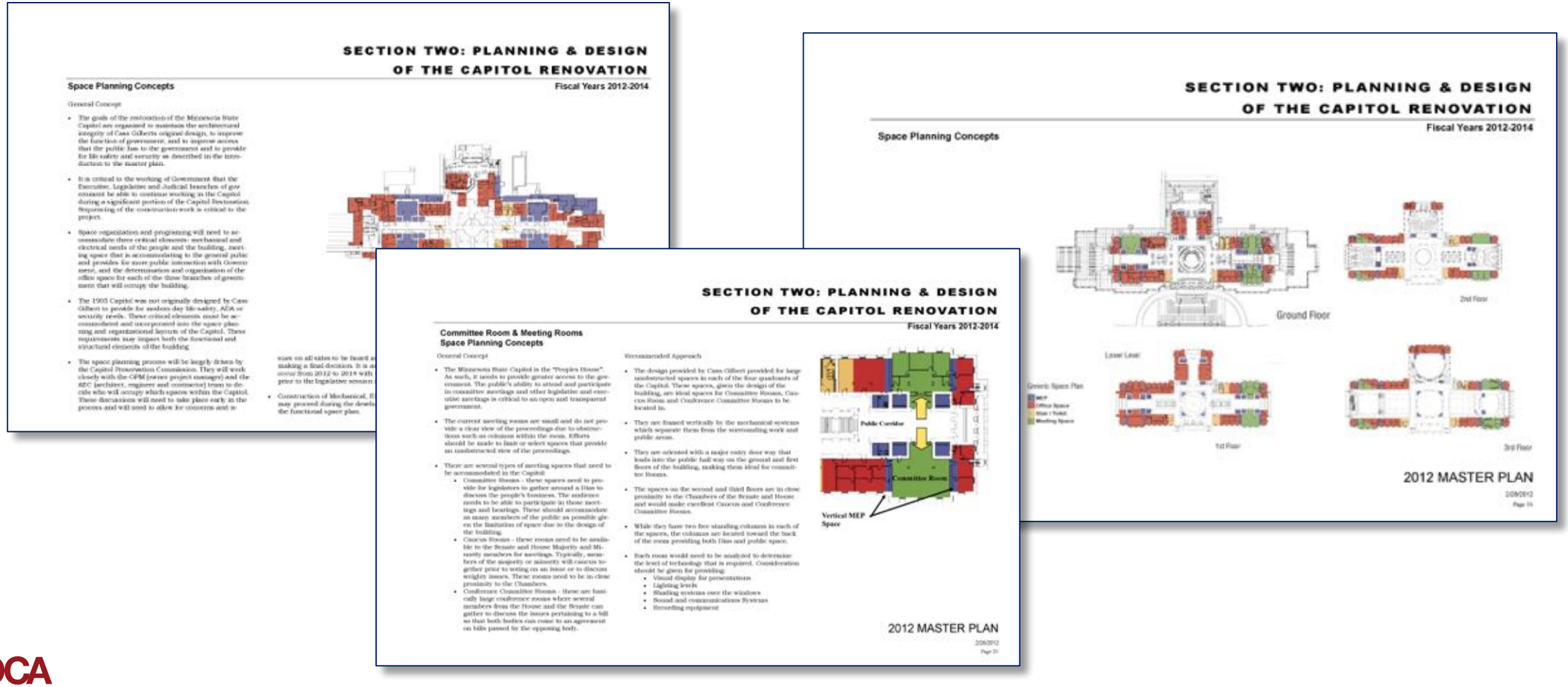
- Capitol must be safe from security threats, fire and deterioration of systems.
- It must provide for accessibility of all Minnesotans.
- The building needs to be current on life safety codes.

Organization and Structure of the Ownership
Comprehensive Master Plan

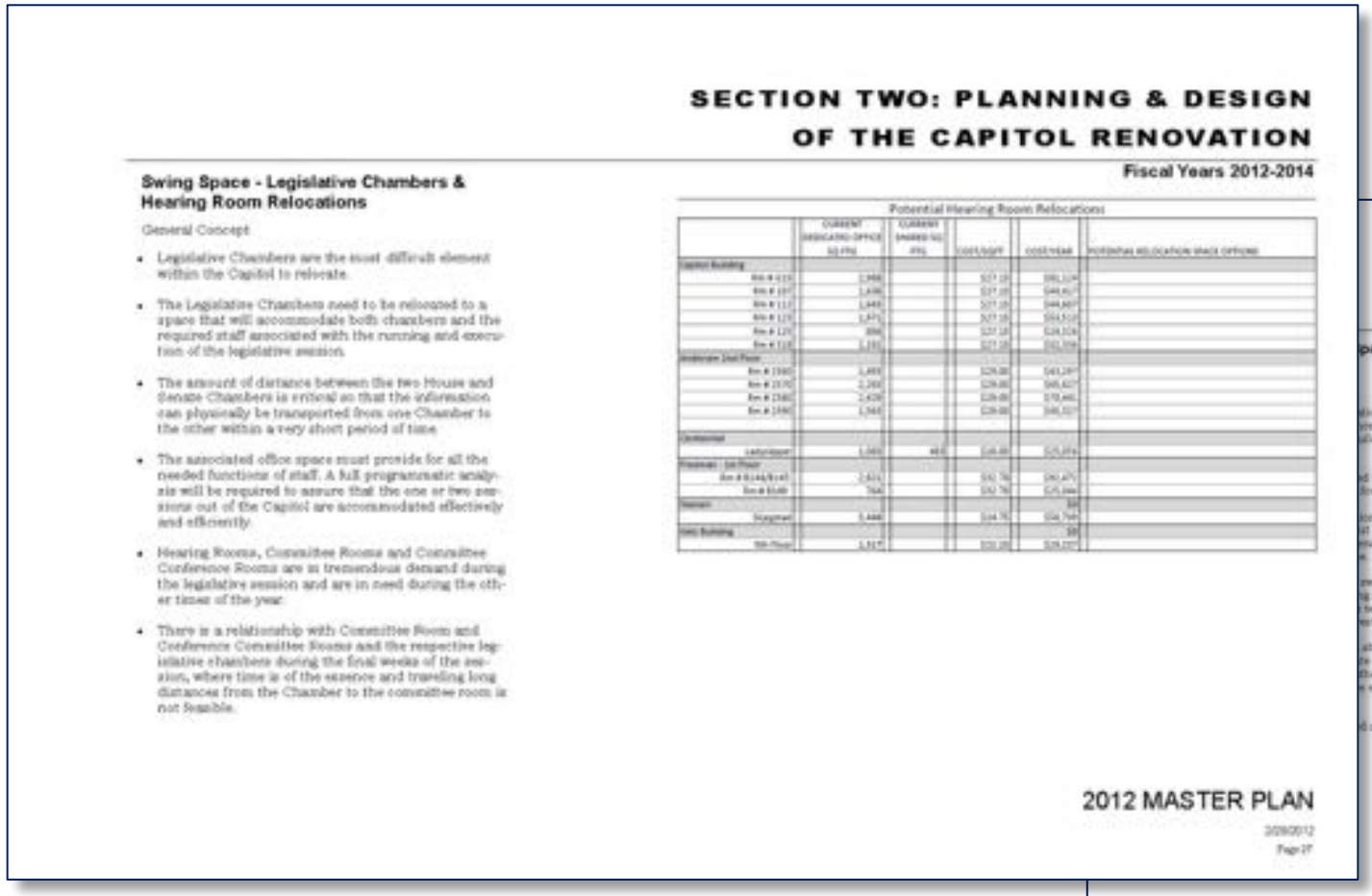
A 20 year plan that covers:

- Comprehensive Planning
  - Restoration 2012 – 2017
  - Maintenance & Stewardship 2017 - 2032

Organization and Structure of the Ownership
Comprehensive Master Plan – Understanding the Building Structure & Function



Organization and Structure of the Ownership
Comprehensive Master Plan – Keeping the Building open & Swing space



SECTION TWO: PLANNING & DESIGN
OF THE CAPITOL RENOVATION

Fiscal Years 2012-2014

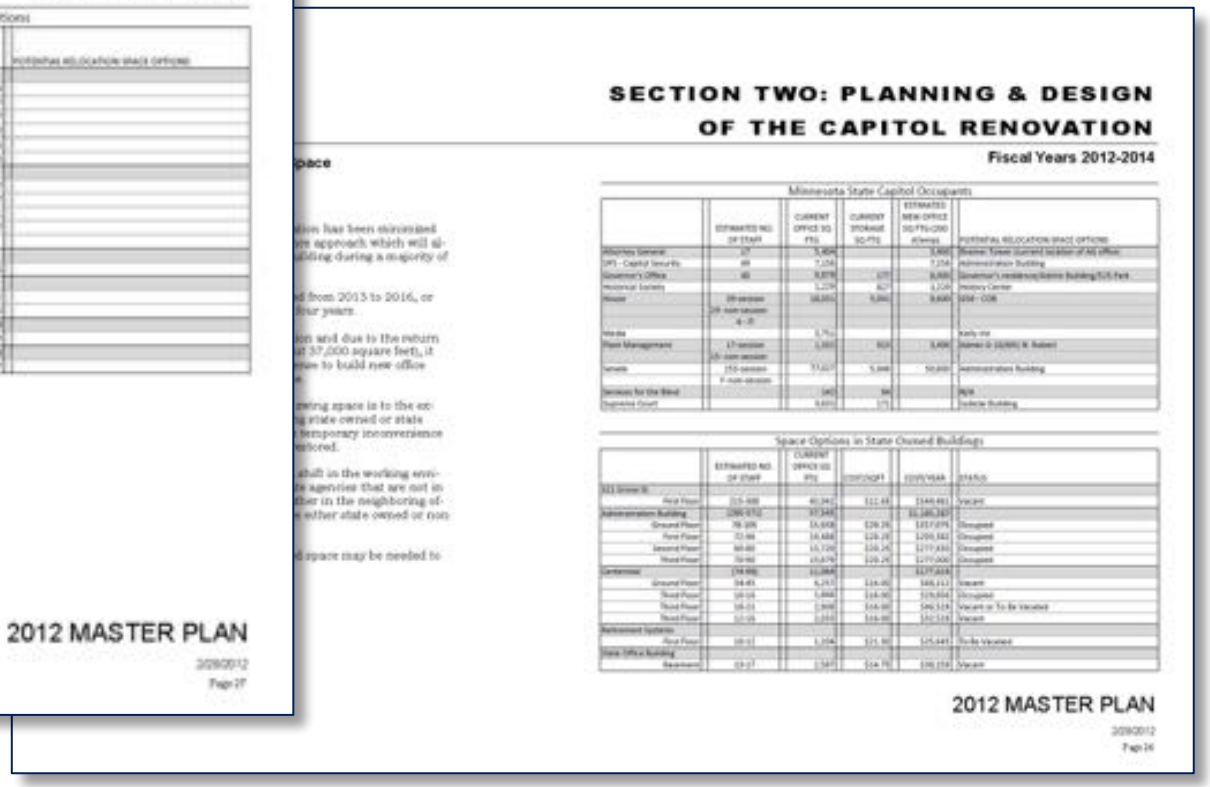
Swing Space - Legislative Chambers & Hearing Room Relocations

General Concept

- Legislative Chambers are the most difficult element within the Capitol to relocate.
- The Legislative Chambers need to be relocated to a space that will accommodate both chambers and the required staff associated with the running and execution of the legislative session.
- The amount of distance between the two House and Senate Chambers is critical so that the information can physically be transported from one Chamber to the other within a very short period of time.
- The associated office space must provide for all the needed functions of staff. A full programmatic analysis will be required to assure that the one or two persons out of the Capitol are accommodated effectively and efficiently.
- Hearing Rooms, Committee Rooms and Committee Conference Rooms are in tremendous demand during the legislative session and are in need during the other times of the year.
- There is a relationship with Committee Room and Conference Committee Rooms and the respective legislative chambers during the final weeks of the session, where time is of the essence and traveling long distances from the Chamber to the committee room is not feasible.

Potential Hearing Room Relocations

2012 MASTER PLAN



SECTION TWO: PLANNING & DESIGN
OF THE CAPITOL RENOVATION

Fiscal Years 2012-2014

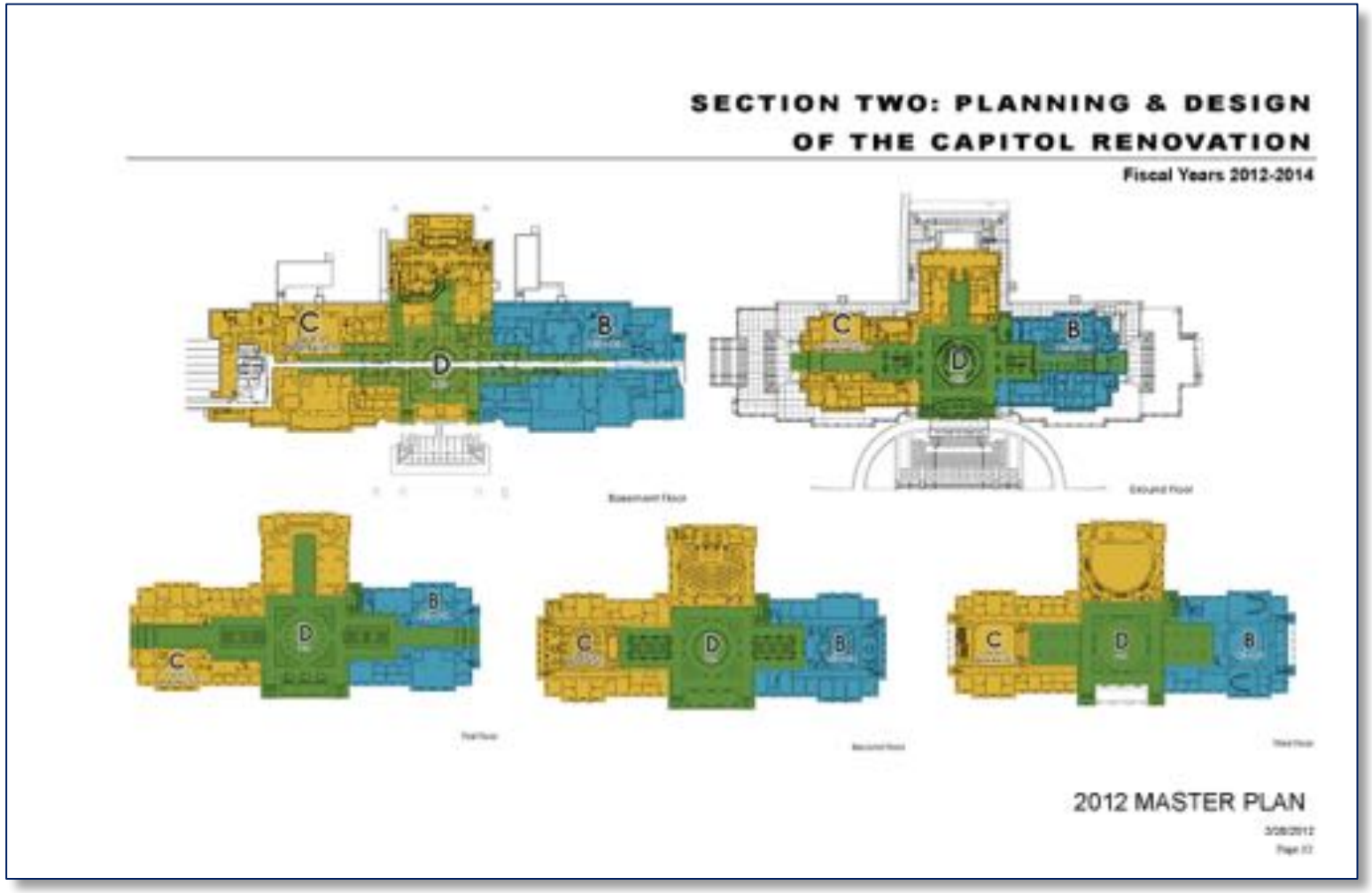
Minnesota State Capitol Occupants

Space Options in State Owned Buildings

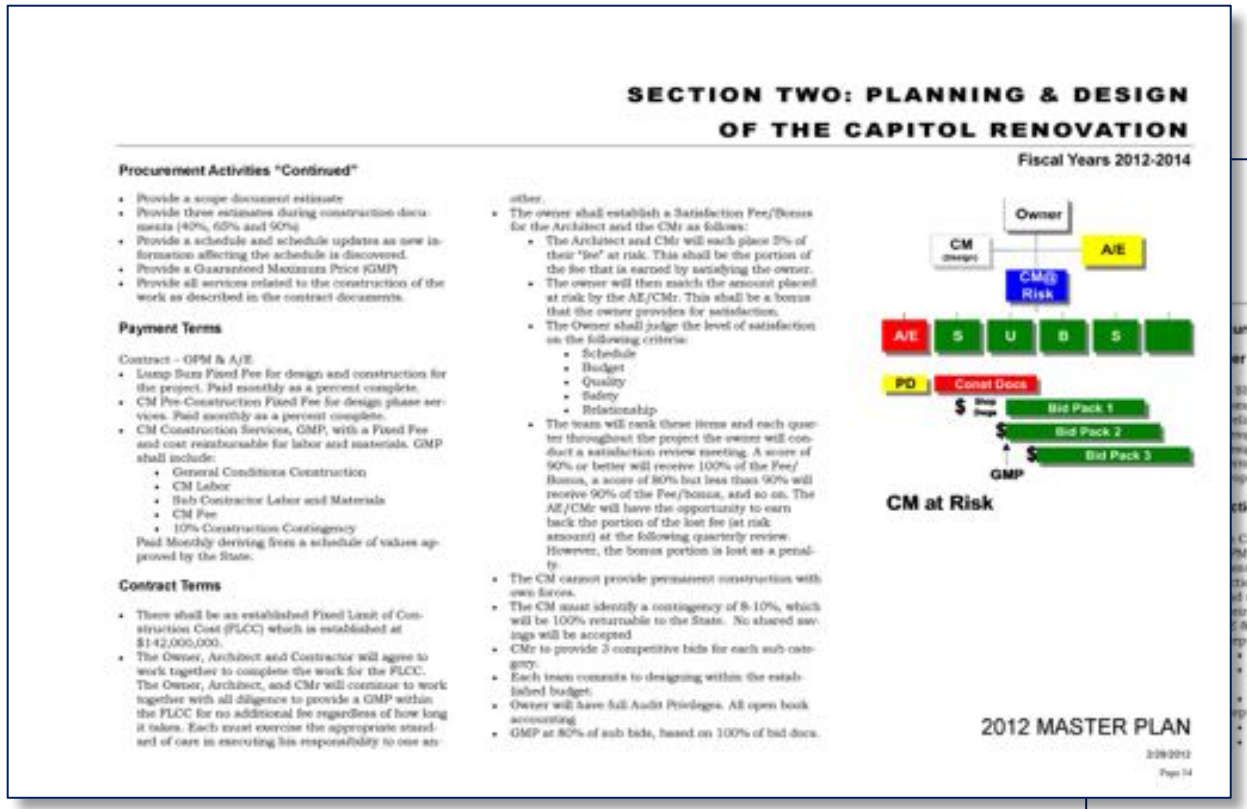
2012 MASTER PLAN

MOCA

Organization and Structure of the Ownership
Comprehensive Master Plan – Phasing of the Project



Organization and Structure of the Ownership
Comprehensive Master Plan – Procurement – Goals and Objectives



SECTION TWO: PLANNING & DESIGN
OF THE CAPITOL RENOVATION

Fiscal Years 2012-2014

Procurement Activities "Continued"

- Provide a scope document estimate
- Provide three estimates during construction documents (40%, 65% and 90%)
- Provide a schedule and schedule updates as new information affecting the schedule is discovered.
- Provide a Guaranteed Maximum Price (GMP)
- Provide all services related to the construction of the work as described in the contract documents.

Payment Terms

Contract – OPM & A/E

- Lump Sum Fixed Fee for design and construction for the project. Paid monthly as a percent complete.
- CM Pre-Construction Fixed Fee for design phase services. Paid monthly as a percent complete.
- CM Construction Services, GMP, with a Fixed Fee and cost reimbursable for labor and materials. GMP shall include:
  - General Conditions Construction
  - CM Labor
  - Sub Contractor Labor and Materials
  - CM Fee
  - 10% Construction Contingency

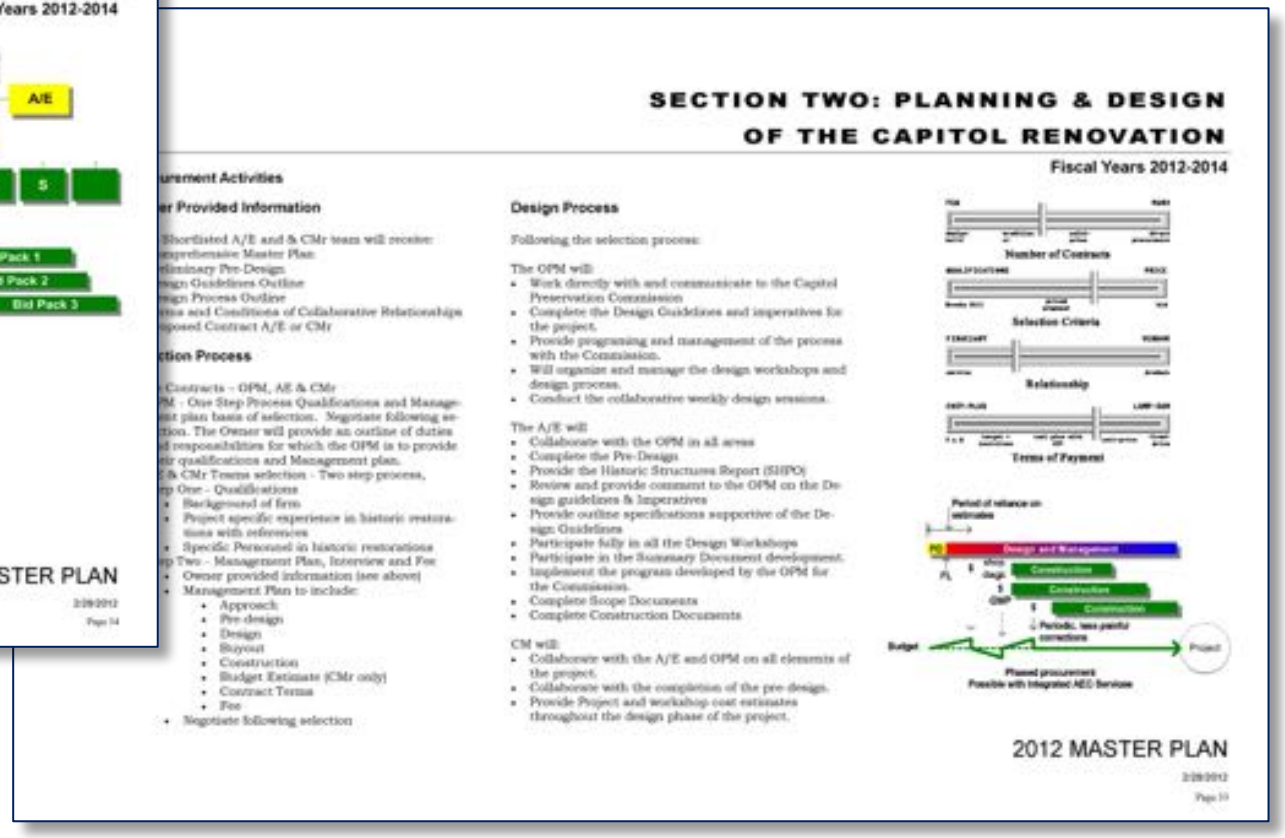
Paid Monthly deriving from a schedule of values approved by the State.

Contract Terms

- There shall be an established Fixed Limit of Construction Cost (FLCC) which is established at $142,000,000.
- The Owner, Architect and Contractor will agree to work together to complete the work for the FLCC. The Owner, Architect, and CMr will continue to work together with all diligence to provide a GMP within the FLCC for no additional fee regardless of how long it takes. Each must exercise the appropriate standard of care in executing his responsibility to one another.
- The owner shall establish a Satisfaction Fee/Bonus for the Architect and the CMr as follows:
  - The Architect and CMr will each place 5% of their "fee" at risk. This shall be the portion of the fee that is earned by satisfying the owner.
  - The owner will then match the amount placed at risk by the AE/CMr. This shall be a bonus that the owner provides for satisfaction.
  - The Owner shall judge the level of satisfaction on the following criteria:
    - Schedule
    - Budget
    - Quality
    - Safety
    - Relationship
  - The team will rank these items and each quarter throughout the project the owners will conduct a satisfaction review meeting. A score of 90% or better will receive 100% of the Fee/Bonus, a score of 80% but less than 90% will receive 90% of the Fee/bonus, and so on. The AE/CMr will have the opportunity to earn back the portion of the lost fee (at risk amount) at the following quarterly review. However, the bonus portion is lost as a penalty.
- The CM cannot provide permanent construction with own forces.
- The CM must identify a contingency of 8-10%, which will be 100% returnable to the State. No shared savings will be accepted
- CMr to provide 3 competitive bids for each sub category.
- Each team commits to designing within the established budget.
- Owner will have full Audit Privileges. All open book accounting
- GMP at 80% of sub bids, based on 100% of bid docs.

CM at Risk

2012 MASTER PLAN



SECTION TWO: PLANNING & DESIGN
OF THE CAPITOL RENOVATION

Fiscal Years 2012-2014

…urement Activities

…er Provided Information

…Shortlisted A/E and & CMr team will receive:
…mprehensive Master Plan
…liminary Pre-Design
…sign Guidelines Outline
…sign Process Outline
…ms and Conditions of Collaborative Relationships
…posed Contract A/E or CMr

…tion Process

…Contracts – OPM, AE & CMr
…M - One Step Process Qualifications and Manage…nt plan basis of selection. Negotiate following se…tion. The Owner will provide an outline of duties …d responsibilities for which the OPM is to provide …ir qualifications and Management plan.
…& CMr Teams selection - Two step process,
…p One - Qualifications
- Background of firm
- Project specific experience in historic restora…tions with references
- Specific Personnel in historic restorations

…p Two - Management Plan, Interview and Fee
- Owner provided information (see above)
- Management Plan to include:
  - Approach
  - Pre-design
  - Design
  - Buyout
  - Construction
  - Budget Estimate (CMr only)
  - Contract Terms
  - Fee
- Negotiate following selection

Design Process

Following the selection process:

The OPM will:

- Work directly with and communicate to the Capitol Preservation Commission
- Complete the Design Guidelines and imperatives for the project.
- Provide programing and management of the process with the Commission.
- Will organize and manage the design workshops and design process.
- Conduct the collaborative weekly design sessions.

The A/E will:

- Collaborate with the OPM in all areas
- Complete the Pre-Design
- Provide the Historic Structures Report (SHPO)
- Review and provide comment to the OPM on the Design guidelines & Imperatives
- Provide outline specifications supportive of the Design Guidelines
- Participate fully in all the Design Workshops
- Participate in the Summary Document development.
- Implement the program developed by the OPM for the Commission.
- Complete Scope Documents
- Complete Construction Documents

CM will:

- Collaborate with the A/E and OPM on all elements of the project.
- Collaborate with the completion of the pre-design.
- Provide Project and workshop cost estimates throughout the design phase of the project.

2012 MASTER PLAN

MOCA

Organization and Structure of the Ownership
Comprehensive Master Plan - Stewardship

SECTION EIGHT: FURNITURE AND ART

Fiscal Years 2013 - 2016

Art

Condition of Art in the Capitol

- Over the years, leaks have caused deterioration of the plaster in various areas of the Capitol building. Some of these areas need simple repairs while other will require full-scale restoration. This plaster deterioration has impacted the decorative finish artwork that adorns the walls of the Capitol.
- Likewise, many areas have been decorated and redecorated multiple times over the years. Some forensic work will need to be performed by restoration artists to determine the historical timeline of color and design in order to determine the proper path for restoration.
- There are areas of the Capitol that have been used in different ways than was originally designed by Cass Gilbert. There are being returned to their original plan and possibly use. These areas will require analysis to determine the extent to which restoration can occur. It is anticipated that there are some areas that will require completely new decorative art work to be installed. Every effort should be made to identify and replicate the original decorative art.

Restoration of Decorative Art

- The process of identifying and repainting these historically significantly decorative art works is a tedious process. In recent restoration work within the Capitol, artists hand-mixed paint colors to match the original documented colors. The AOR will need special consultants to assist in the restoration process. All artists and artisans who work on these important art pieces must be familiar with and conform to the "Policy for Works of Art in the Minnesota State Capitol"

2012 MASTER PLAN

2/29/2012

Page 50

SECTION EIGHT: FURNITURE AND ART

Fiscal Years 2013 - 2016

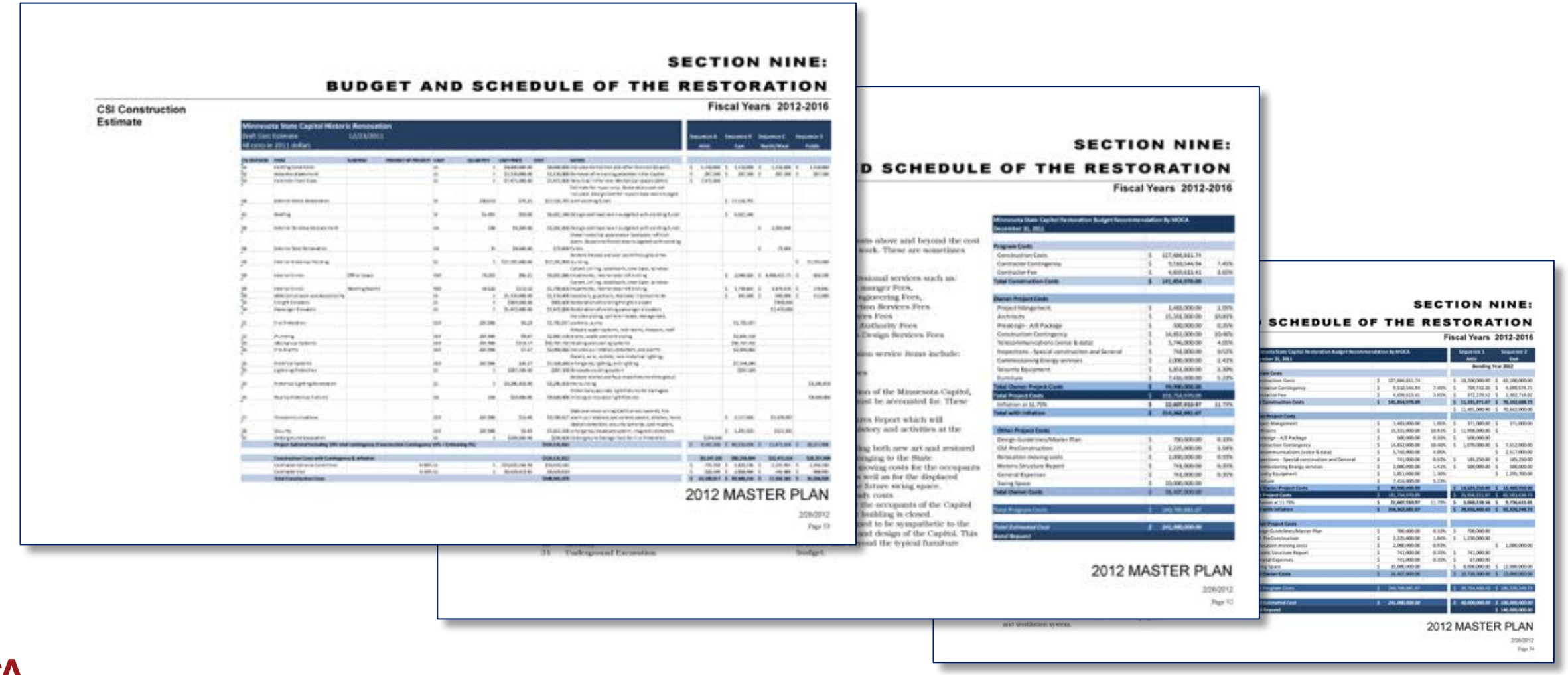
2012 MASTER PLAN

2/29/2012

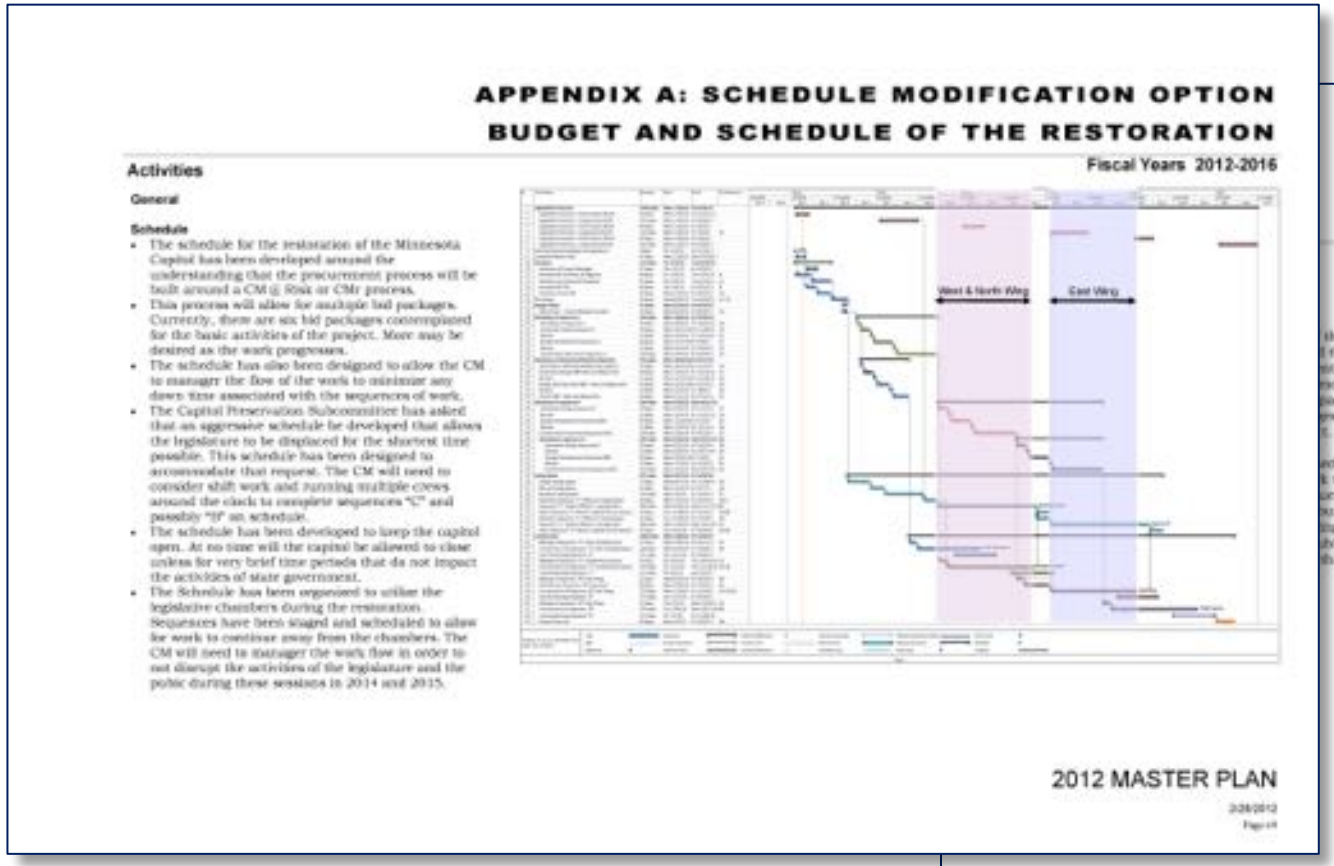
Page 49

MOCA

Organization and Structure of the Ownership
Comprehensive Master Plan – Budget Projection and Budget Management



Organization and Structure of the Ownership
Comprehensive Master Plan – Schedule and resequencing the work



APPENDIX A: SCHEDULE MODIFICATION OPTION
BUDGET AND SCHEDULE OF THE RESTORATION

Activities

General

Schedule

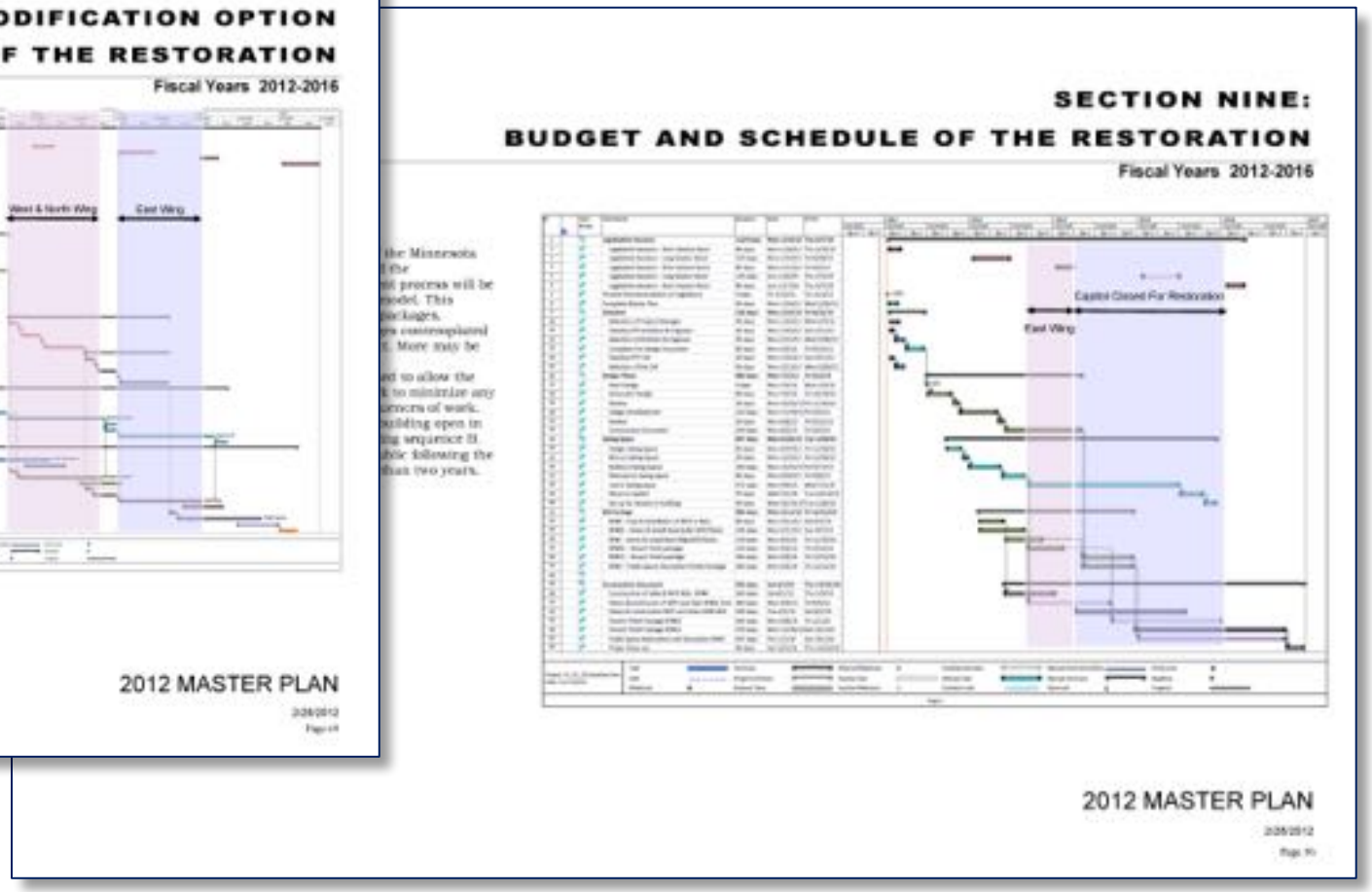
- The schedule for the restoration of the Minnesota Capitol has been developed around the understanding that the procurement process will be built around a CM @ Risk or CMr process.
- This process will allow for multiple bid packages. Currently, there are six bid packages contemplated for the basic activities of the project. More may be desired as the work progresses.
- The schedule has also been designed to allow the CM to manage the flow of the work to minimize any down time associated with the sequences of work.
- The Capitol Preservation Subcommittee has asked that an aggressive schedule be developed that allows the legislature to be displaced for the shortest time possible. This schedule has been designed to accommodate that request. The CM will need to consider shift work and running multiple crews around the clock to complete sequences "C" and possibly "B" on schedule.
- The schedule has been developed to keep the capitol open. At no time will the capitol be allowed to close unless for very brief time periods that do not impact the activities of state government.
- The Schedule has been organized to utilize the legislative chambers during the restoration. Sequences have been staged and scheduled to allow for work to continue away from the chambers. The CM will need to manager the work flow in order to not disrupt the activities of the legislature and the public during these sessions in 2014 and 2015.

Fiscal Years 2012-2016

West & North Wing

East Wing

2012 MASTER PLAN



SECTION NINE:
BUDGET AND SCHEDULE OF THE RESTORATION

Fiscal Years 2012-2016

Capitol Closed For Restoration

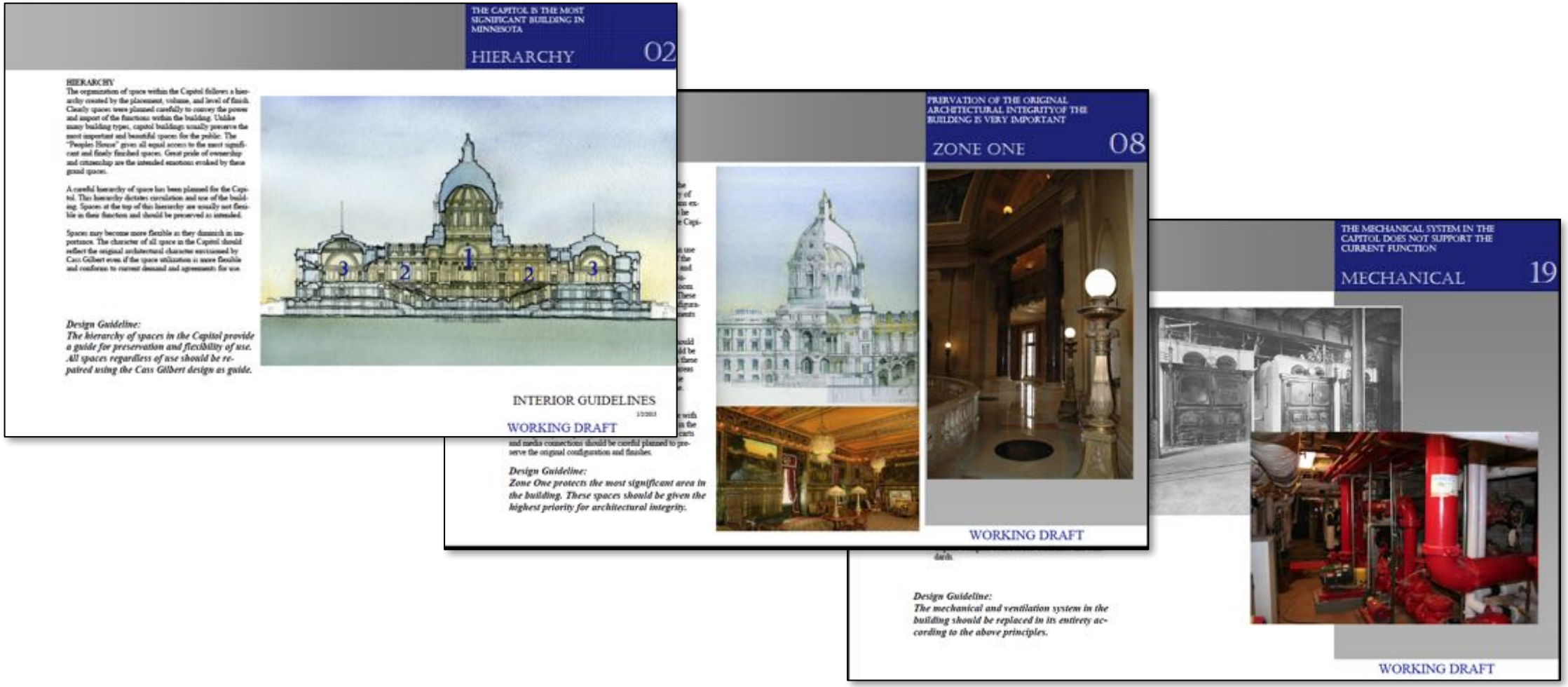
East Wing

2012 MASTER PLAN

MOCA

Minnesota State Capitol

Organization and Structure of the Ownership
Design Guidelines



MOCA

Minnesota State Capitol

Organization and Structure of the Ownership
Design Guidelines

Minnesota's workshops were held in the Capitol.

Discussion and Activities included:

Design and Design Discussion

Cost impact discussion and resolutions

Schedule impacts and resolutions

Organization and Structure of the Ownership Communication

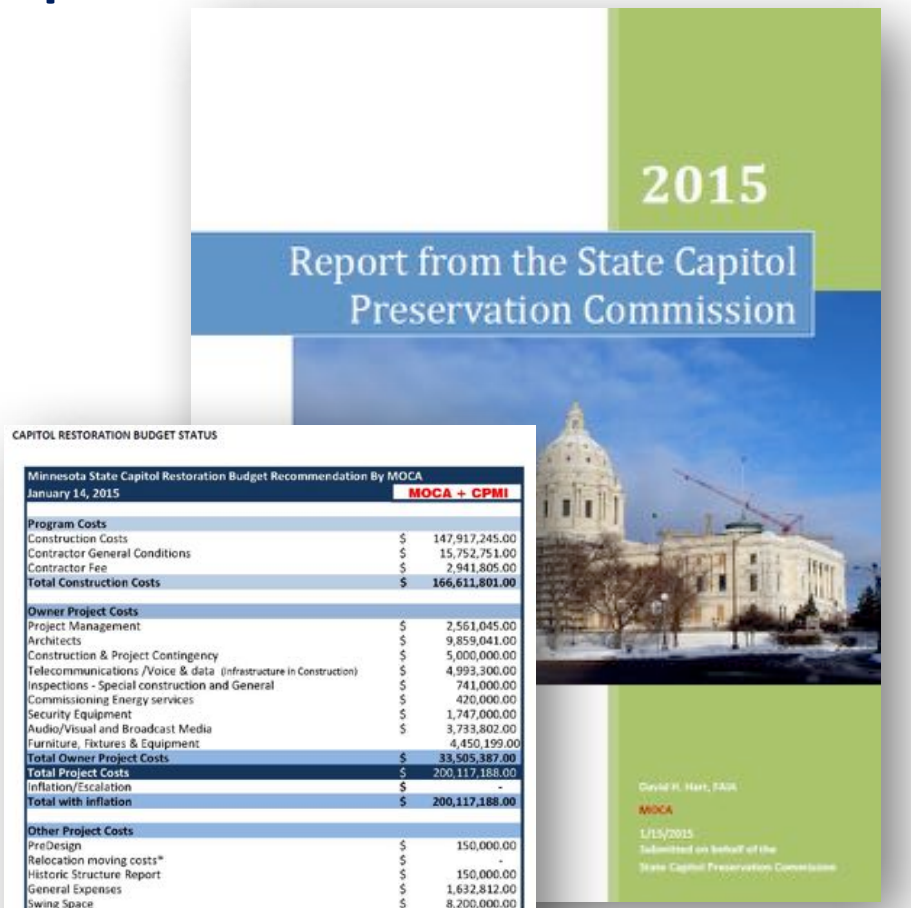
Annual Report

Budget

- Detailed Budget Included

Out of Scope

- Water Infiltration Settlement
- Lot N and Lot O Modifications
- Aurora Avenue Modifications
- Ground Floor – North Hall Decorative Paint
- Fine Art Conservation (Attached)
- Additional Decorative Paint
- Reopening South Loggia



CAPITOL RESTORATION BUDGET STATUS

Minnesota State Capitol Restoration Budget Recommendation By MOCA January 14, 2015	MOCA + CPMI
Program Costs	
Construction Costs	$ 147,917,245.00
Contractor General Conditions	$ 15,752,751.00
Contractor Fee	$ 2,941,805.00
Total Construction Costs	**$ 166,611,801.00**
Owner Project Costs	
Project Management	$ 2,561,045.00
Architects	$ 9,859,041.00
Construction & Project Contingency	$ 5,000,000.00
Telecommunications /Voice & data (Infrastructure in Construction)	$ 4,993,300.00
Inspections - Special construction and General	$ 741,000.00
Commissioning Energy services	$ 420,000.00
Security Equipment	$ 1,747,000.00
Audio/Visual and Broadcast Media	$ 3,733,802.00
Furniture, Fixtures & Equipment	4,450,199.00
Total Owner Project Costs	**$ 33,505,387.00**
Total Project Costs	**$ 200,117,188.00**
Inflation/Escalation	$ -
Total with inflation	**$ 200,117,188.00**
Other Project Costs	
PreDesign	$ 150,000.00
Relocation moving costs*	$ -
Historic Structure Report	$ 150,000.00
General Expenses	$ 1,632,812.00
Swing Space	$ 8,200,000.00
Exterior Stone, Windows & French Doors	$ 30,750,000.00
Total Owner Costs	**$ 40,882,812.00**
Subtotal Program Costs	$ 241,000,000.00
Operable Windows and Tier 3 Stone	$ 31,700,000.00
Total Program Cost	***$ 272,700,000.00***

* Relocation Costs are not bondable - General Fund Appropriation is Required
**Operating Costs are not included in the above.
***Past asset preservation appropriations not included.

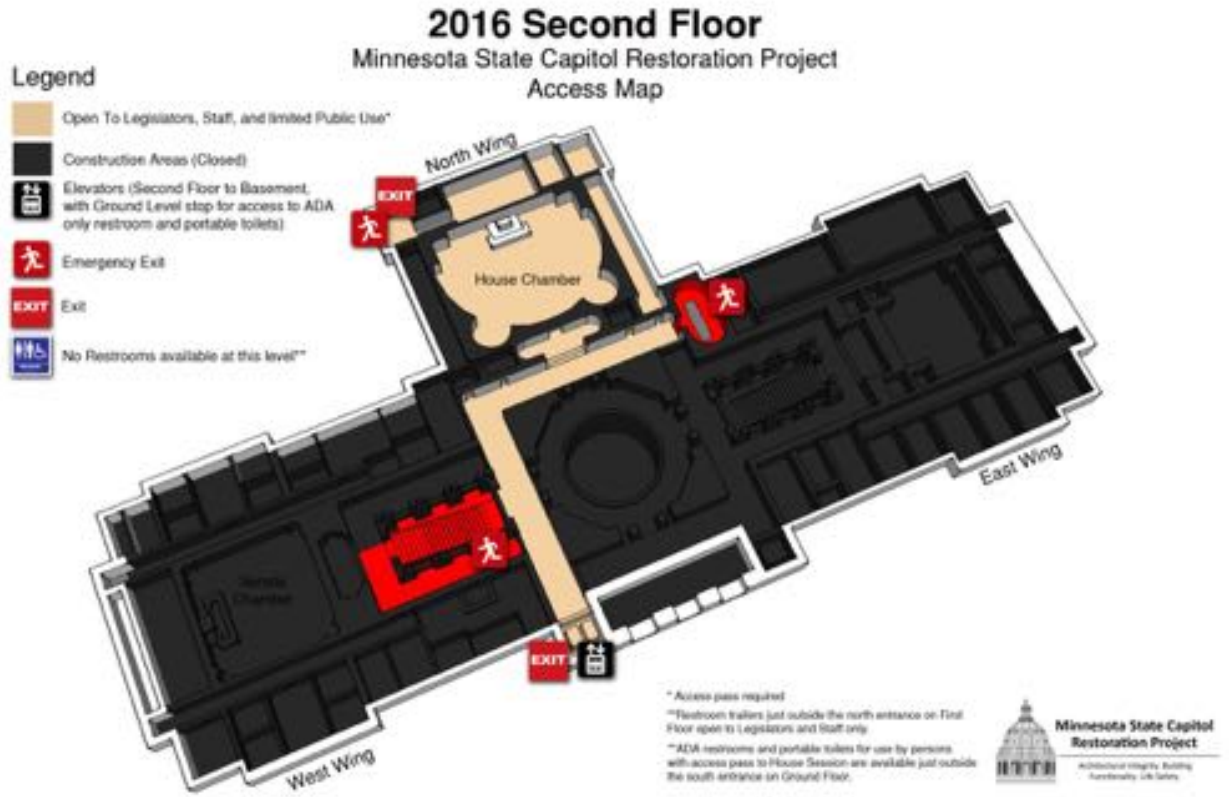
Project establishment and organization framework and structure

Security

1. Established a “Large” Security Committee that met monthly – Lead by the Highway Patrol who provided security for the capitol campus.
2. Non-public meetings
3. Utilized both cameras and card readers
4. Ballistic glazing was a huge issue, How much and where to locate it.
    1. Initially it was going to be located at all lower level windows – Budget Problems
    2. Final decision was to limit its use to location that were of critical importance our housed critically important people.
5. No written plan (created problems for the design team and took a long time for the committee to come to resolution since they had to revisit items each time.)

Organization and Structure of the Ownership
Keeping the Building Open

- Continuing to utilize the guidelines
- Realizing the vision
- Seeing collaboration through
- Benefiting from trusting project relationships
- Shared understanding of schedule impacts
- Providing temporary accommodations
- Assistance and guidance in phasing
- Providing necessary information and materials
- Continued communication and collaboration on schedule



Minnesota State Capitol

Results

1. Capitol was the home of the House during renovation – Chamber was successfully used for all sessions.
2. Workshop process resulted in a clear understanding the need for a new Legislative Office Building
3. Project was completed on Budget – separate budgets for Interior, Exterior, Roof, Window and Landscaping.
4. Capitol - Grand opening on scheduled for August of 2017

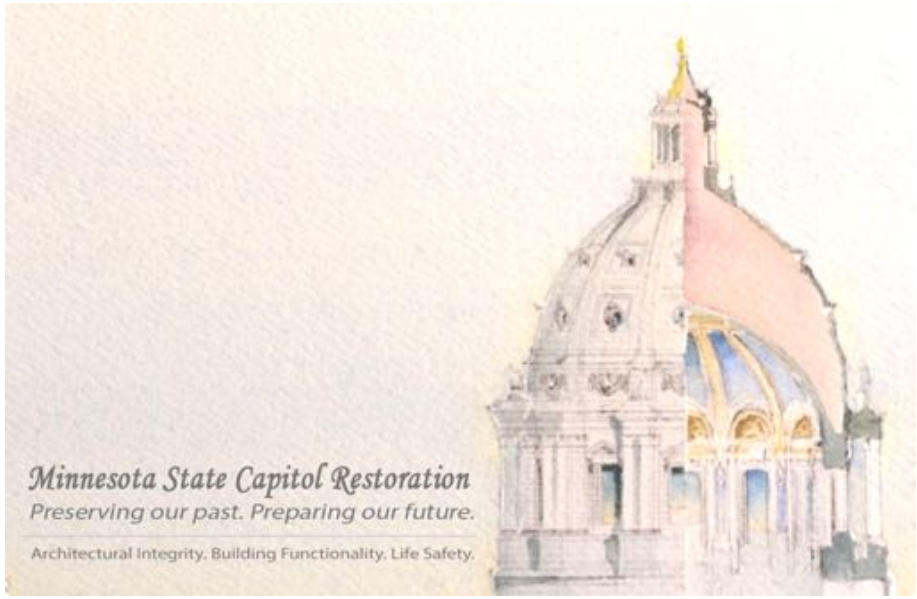
Organization and Structure of the Ownership | New Legislative Office Building

Result of the Capitol Restoration

1. Everyone realized that there was not enough physical space in the Capitol during the workshops.
2. Senate Offices were spread throughout the Capitol no ability for collaboration or impromptu meeting of senators.
3. No real Senate facilities. Everything in the Capitol is shared while the House has separate Hearing rooms
4. Senate Staff was likewise spread throughout the Capitol no real head or leadership location
5. Senate Needed a location for the 2 session they were going to be out of the Capitol.

The Capitol is not the Office Building the Senate wanted it to be.

Solution = Build a New Legislative Office Building



LEGISLATIVE OFFICE BUILDING
Vision Workshop 8/21/2013

Organization and Structure of the Ownership | New Legislative Office Building

Vision Workshop	Discovers Values, Guiding Principles and Major Project Drivers
Design Scope Guideline	Captures ideas from Vision Workshop and creates a Design Guideline for each relevant idea
Design Scope Workshops	Collaborative environment with Owner, build team, design Team to test and refine Project Scope based on Design Guideline. •Dynamic Cost Model •Trade Specific Expert collaboration
Design Imperative	Design Imperatives describe the Scope and Quality of the work as tested in the Collaborative Workshops. •Scope and Program Defined Clearly •Cost Defined by Dynamic Modeling •Schedule refined based on better information about Quality and Project Scope

Minnesota State Capitol

Results

1. 5 design workshops and summary documents
2. Strict Design Build process
3. Completed 1 month ahead of schedule – Critical in order to hold the scheduled legislative session.
4. Completed for Less than the budget
5. Opened up the Capitol and Provide additional public space within the Capitol:
    1. Lounge
    2. Two reading rooms/Small Conf. Rm.
    3. Library
    4. Art Gallery
    5. Large Conference Room

Minnesota State Capitol

Management Planning – Outline of the Overall Process

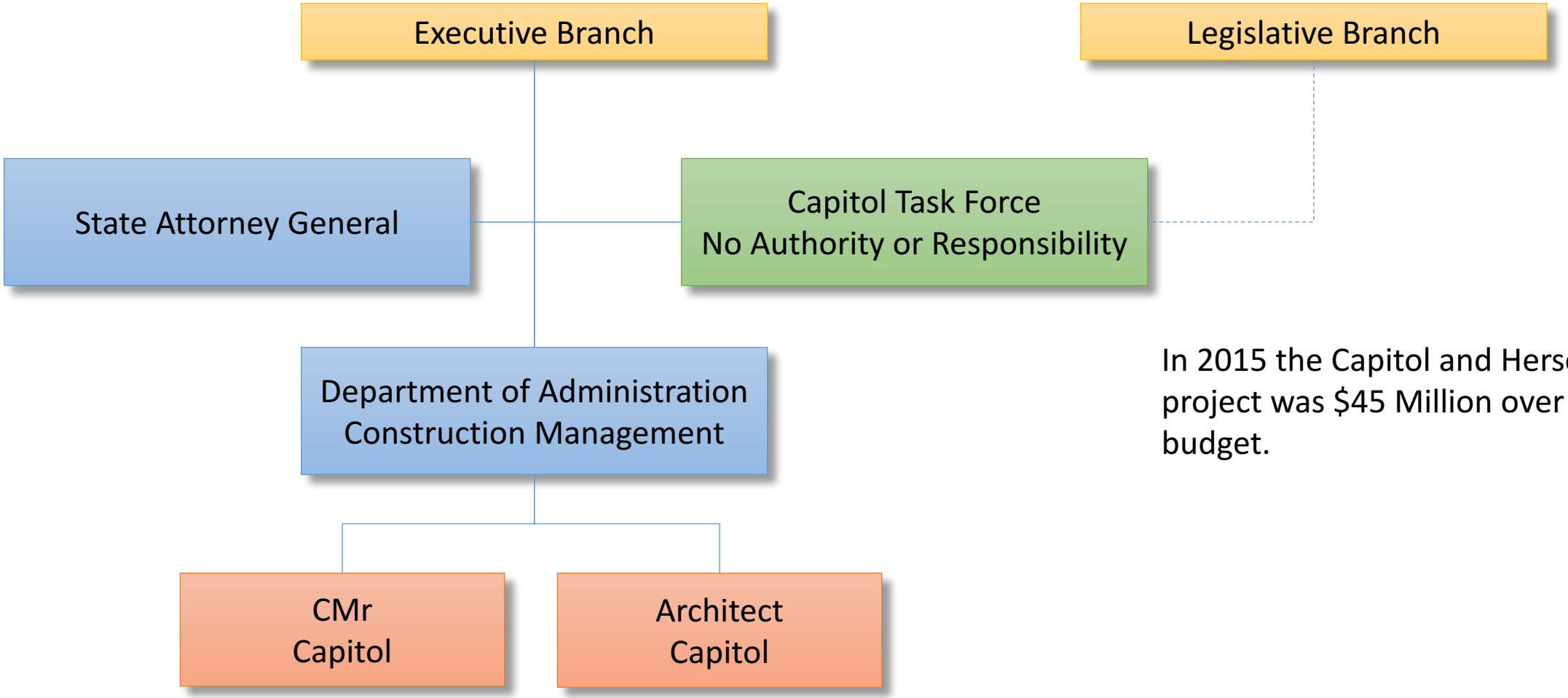
1. Establish the Organization and Ownership structure – Capitol Preservation Commission
2. Great working relationship with the Department of Administration
3. Owner Program Manager (MOCA) was retained to bridge the Trust Gap between Executive and Legislative
4. Develop an Overall Comprehensive Master Plan including:
    - Quality Expectation of the Owner – Guiding Principles for the entire project
    - Design Guidelines and Imperative
        - Capitol Restoration
        - New Legislative Office Building (Senate Building) – QBS selection used Guidelines
    - Preliminary Architectural Program
        - Space Ownership diagrams for the Capitol
        - Space Ownership and functional programing and planning for the NLOB
    - Budget expectations
        - 4 different budget, Interior renovation, Stone renovation, Site Restoration and NLOB all managed independently
    - Schedule expectations – based upon keeping the House Chamber operational for each session
    - Delivery Strategy
        - Capitol was delivered as CM@Risk
        - New Legislative Office Building was delivered as D/B Qualification (QBS)
    - Team development collocated off site by about 2 miles from site

Case Study 4
Wyoming State Capitol

- Capitol Renovation
- Herschler Office Buildings

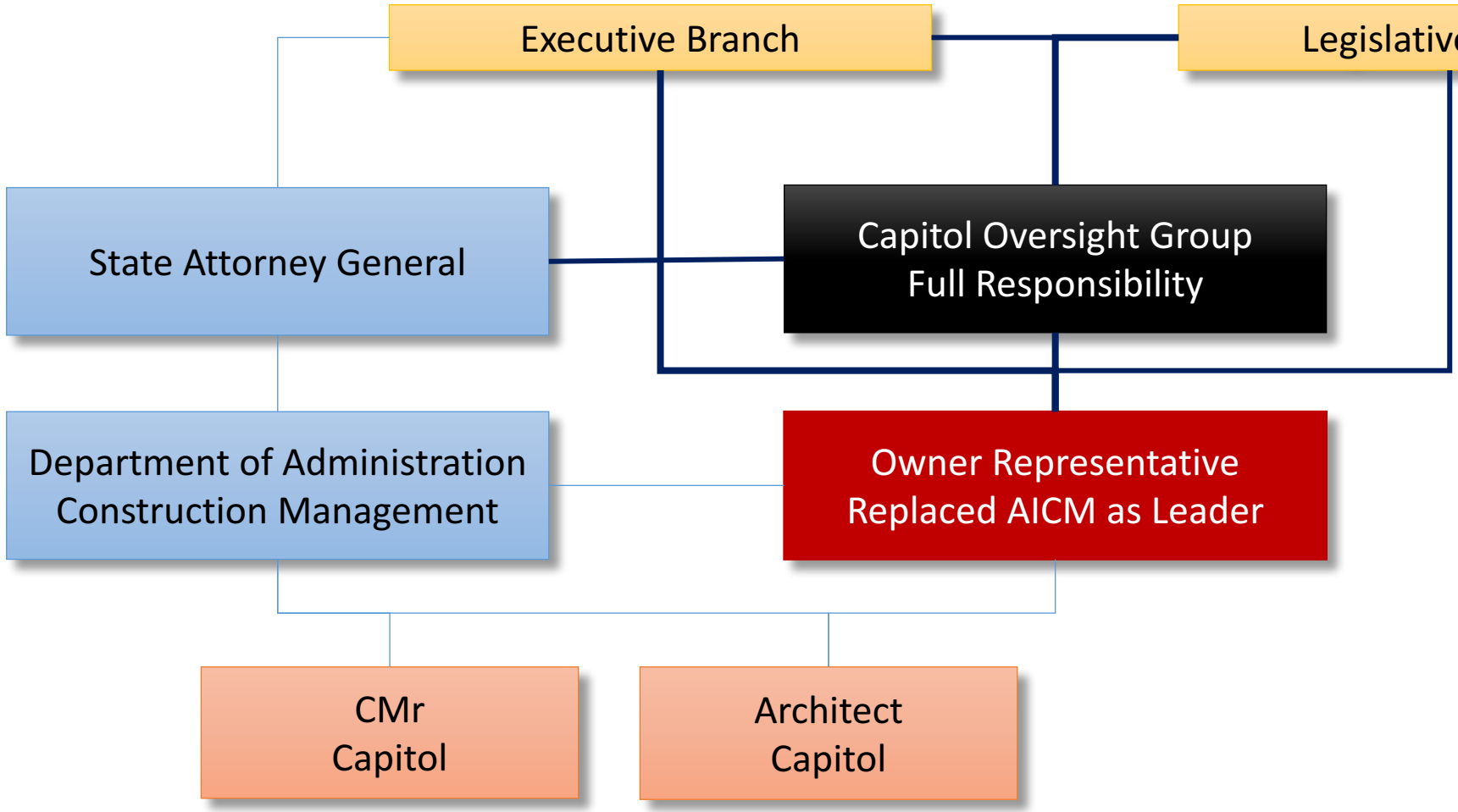
Wyoming State Capitol

Organization and Structure of the Ownership Up to 2015



In 2015 the Capitol and Herschler project was $45 Million over budget.

Organization and Structure of the Ownership Up to 2015 to Present



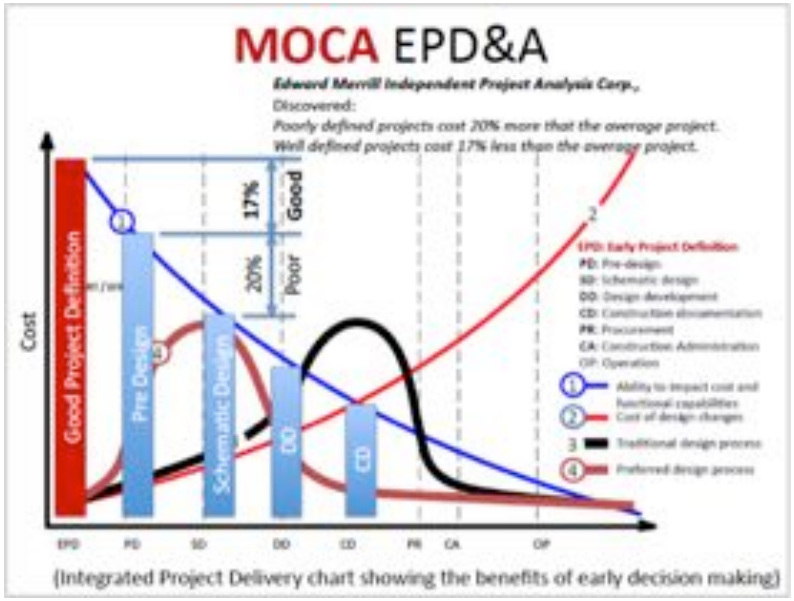
In 2015 the Capitol Oversight Group took control of the project.

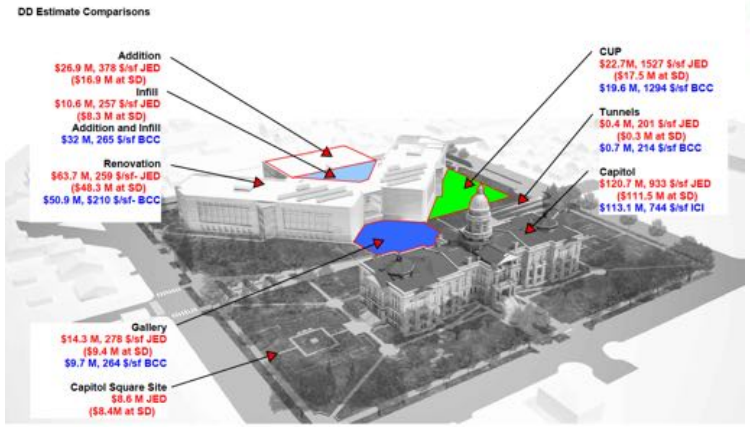
MOCA was retained as Owner Representative by the Oversight Group.

MOCA was to lead the State through the process, reduce cost and schedule.

Wyoming State Capitol

Stop! – Introduce Early Project Definition and Alignment – Restart!

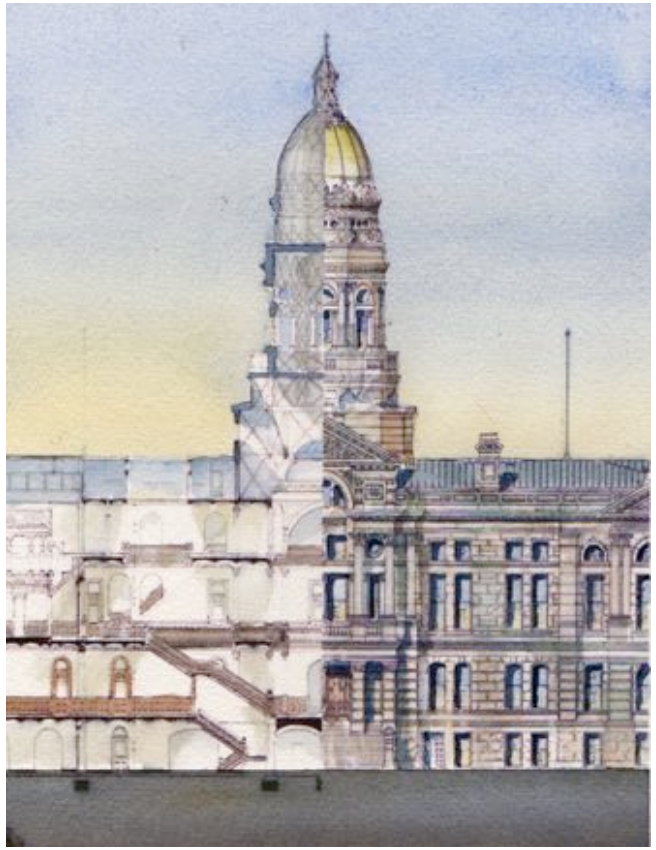




Capitol Oversight Group – Guiding Principles

- **Public Access**
  - Public Meeting Rooms
    - 4 Committee Rooms in Capitol
    - 6 Committee Rooms in Extension,
    - Auditorium and conference center in Herschler
  - Restored Public Corridors in Capitol and Extension
  - New Public Restrooms in Capitol and Extension
- **Function**
  - New MEP Systems
  - Efficient office utilization 83%
- **Preservation and Restoration**
  - Water Management – Stone Repair and Entablature
  - Fire and Smoke Protection
  - Windows

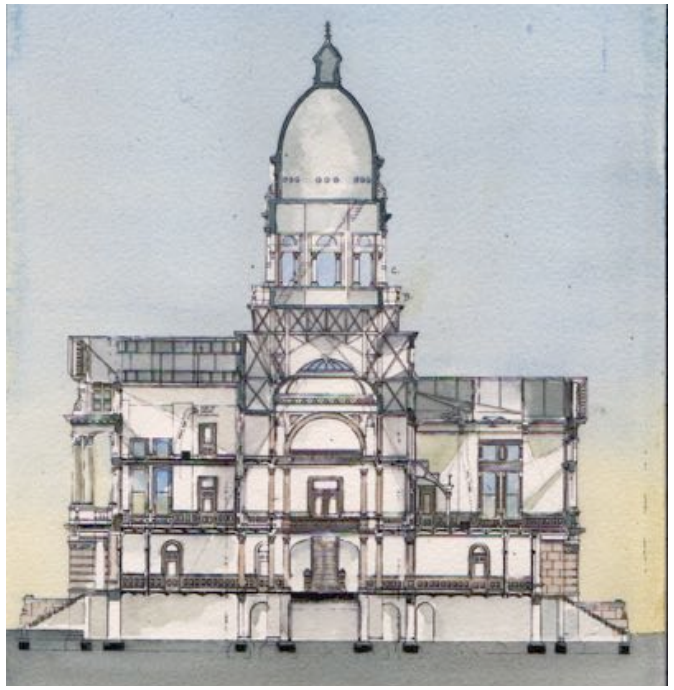
Organization and Structure of the Ownership Up to 2015 to Present
Re-Alignment Process for the Capitol



Capitol Building

- ***Alignment*** – Quality Expectations, Scope with Cost and Schedule
- ***Collaborative Workshops*** – Following the Vision sessions with the Oversight group the team them embarked on a number of Design Scoping Workshops to realign the project and cut $50M
- ***Dynamic Cost Modeling*** – Collaborative process of aligning the owner expectations for quality and budget with the design.
- ***GMP*** – The Cost for which the CM will agree to construct the project, based upon completed design documents and sub bids.

Organization and Structure of the Ownership up to 2015 to Present
Re-Alignment Process for the Herschler



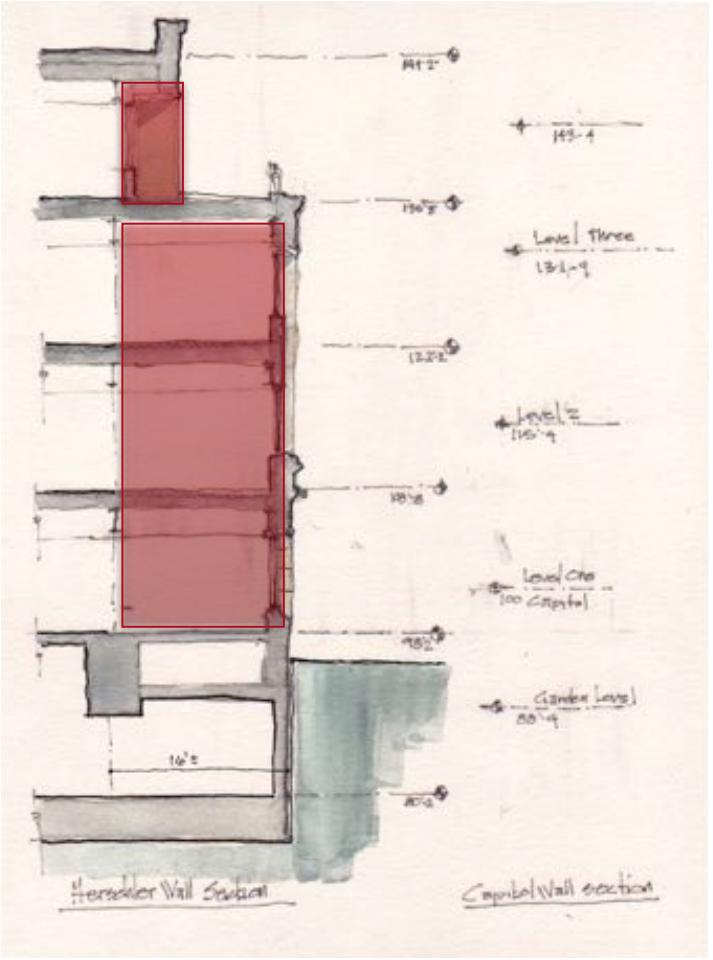
Capitol Building

- *Alignment of Owner Quality Expectations* - The Guidelines and Imperatives have provided guidance to the Architect regarding the priority of project elements.
- *Alignment of Scope or Functional Program* – Functional program (Space Plan 8A) identifies the project space needs to comply to use. Created more Space in the Garden Level.
- *Alignment of Cost with the Construction Cost Limitation by Owner* – Design to Budget $110,300,000.
- *Alignment of Schedule* – reconcile the schedule to the scope and expectations, CM has indicated that he thinks that we have picked up 4 to 6 months based upon windows, MEP, Roof

Wyoming State Capitol

Herschler Redesign Workshop – Reduce cost maintain functional square footage

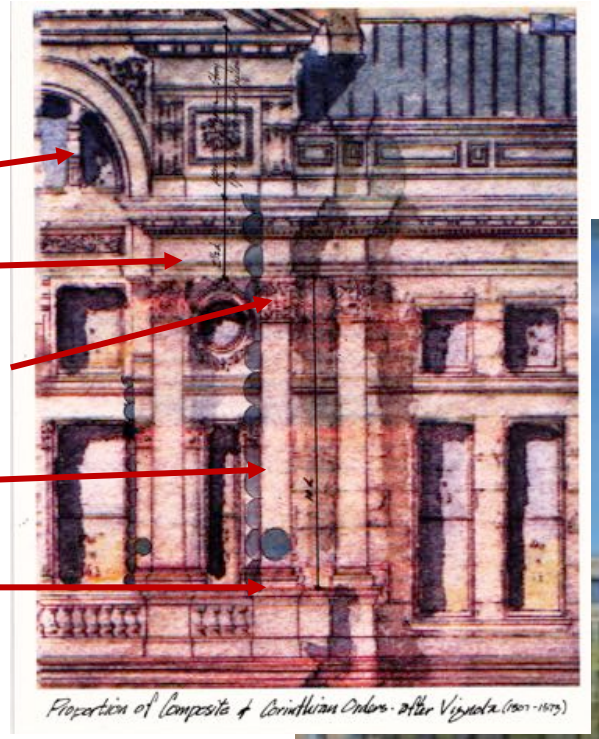
Original Design (North Building) =	53,550 NSF
New South Extension to Herschler =	52,985 NSF
• **Net Difference**	**-556 NSF**
Original Conference Center (6 Exec.) =	12,220 NSF
New Conference Center (4 E. 2 L.) =	13,697 NSF
• Conference Center=	9,039 NSF
• Committee Rooms =	4,658 NSF
• **Net Difference**	**1,477 NSF**



Wyoming State Capitol

Herschler Redesign Workshop – Sympathetic Exterior to the Capitol

- **Classical Orders**
  - Athenian Story
  - Entablature
  - Composite/Corinthian order
  - Column
  - Pedestal



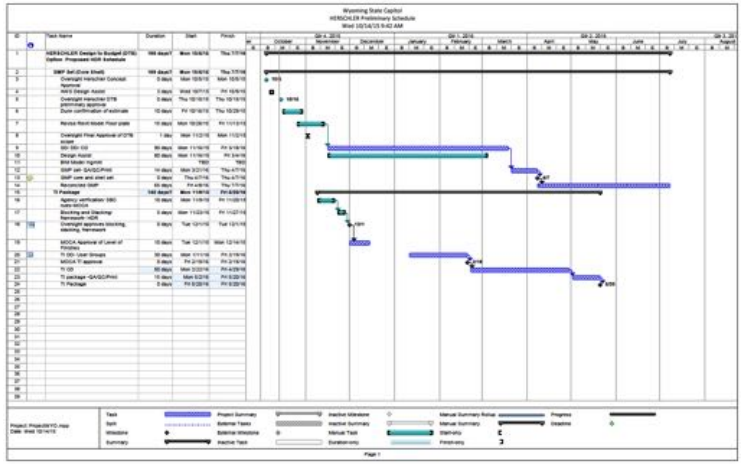
Cost Analysis

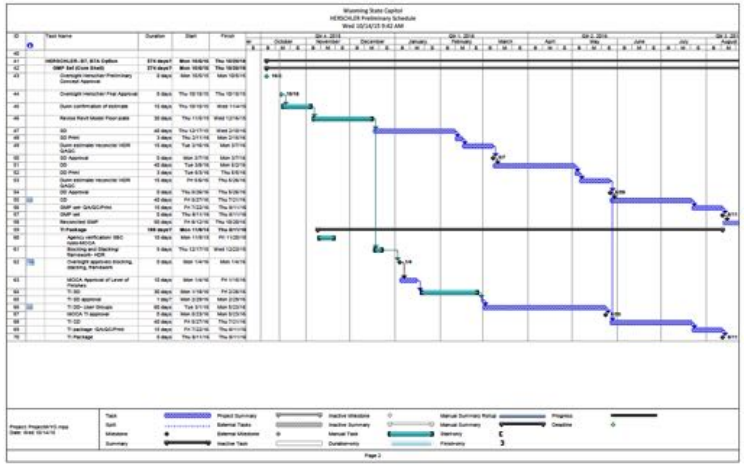
GMP Summary				
	Budget	Proposed GMP budget	Difference	
Construction Cost Limitation	$ 219,382,000.00	$ 219,382,000.00		
Proposed GMP		$ 219,359,697.00		
Variance		$ 22,303.00		
Capitol Cost	$ 110,215,226.00	$ 116,045,398.00	$ (5,830,172.00)	
Herschler Cost	$ 100,770,919.00	$ 95,107,399.00	$ 5,663,520.00	
Site Cost	$ 8,395,855.00	$ 8,206,900.00	$ 188,955.00	
	$ 219,382,000.00	$ 219,359,697.00	$ 22,303.00	

In July 2015 the project was approximately $45,000,000 over the approved construction cost limitation. Alignment was the only way to recover the project

Wyoming State Capitol

Schedule – Re-sequencing of both design deliverables and construction





- **Completion of Herschler**
  - Impacts
    - Sequence of relocation of employees in East and West wings
  - Original November 2018
  - **End of first quarter of 2019**
- **Completion of Capitol**
  - Impacts:
    - Additional underpinning & entablature
  - Original November 2018
  - **Early second quarter of 2019**
- **Completion of the Site and Landscape**
  - Impacts
    - Winter of 2018/2019
  - **Spring of 2019**

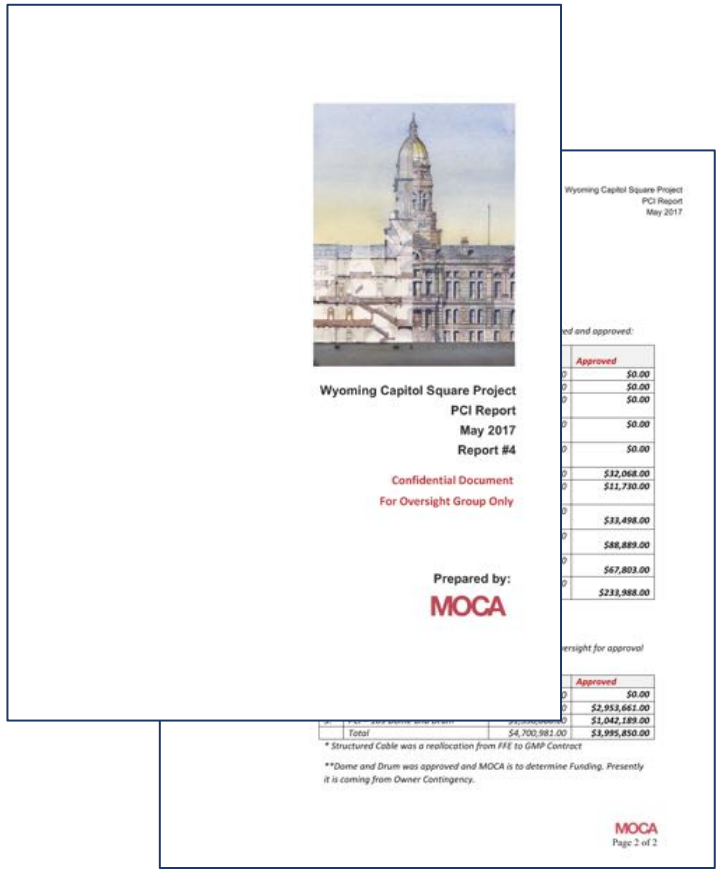
- **Grand Opening July 10, 2019 – Statehood Day**

Wyoming State Capitol

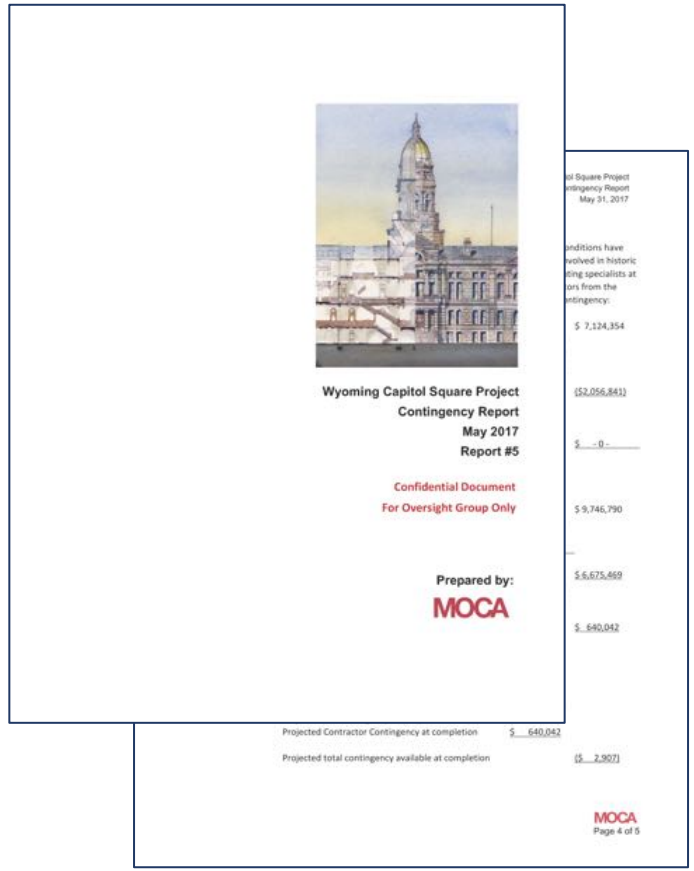
Reporting - Monthly

Monthly Report - Overview

Monthly Report – PCI Report



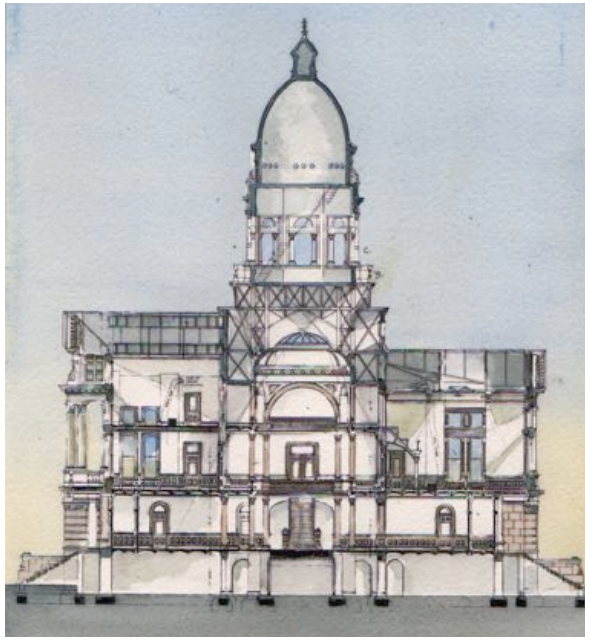
Monthly Report – Contingency



Wyoming State Capitol

Results – To Date (presently under construction)

1. Project Definition was completed within 3 months – Provided clear direction to A/E and CM.
2. Herschler has been redesigned to provide more square footage at a higher efficiency ratio and lower cost.
3. Signed a GMP for $219 M in July of 2016, one year after being $45,000,000 over the budget.
4. Due to early expenditures on Swing Space and other items Owner Contingency was reduced by 50%.
5. Capitol - Grand opening on scheduled for July 2019 (only 3 months beyond the original date of April 2019).



Wyoming State Capitol

Management Planning – Outline of the Overall Process

1. Project was initially over budget by $45,000,000
2. Delivery Strategy – In place = CM@risk
3. Establish the Organization and Ownership structure – Capitol Oversight Group With Authority
4. Stopped the Project. Initiated a complete restart quickly. (No Masterplan)
    1. Quality Expectation of the Owner – Guiding Principles for the entire project
    2. Design Guidelines and Imperative (developed in 3 months)
        1. Capitol – retained the space planning
        2. Herschler building – Redesigned completely the project to save cost
        3. Site – Reverted to historic design
    3. Budget expectations
        1. Budget was re-crafted to get back to construction cost limitation (12 month recovery period)
        2. Design Management Planning – Design Scoping Workshops schedule and process
        3. Scope was scientifically modified to reduce cost and align with the expectations of the Owner
        4. Signed GMP July 2016 at the construction cost limitation $219M.
    4. Schedule expectations
        1. Original delivery date was November 2018 – New Dates summer of 2019 (7 month adjustment)
    5. Team Development partially collocated on site in construction trailers (office distance – Problem)

Summary

Summary

	Utah	Idaho	Minnesota	Wyoming
Procurement – Project Delivery	Matrix	DPW Decision	Matrix	CMD Decision
Design/Build - Bridging	House/Senate	Shell of Wings	New Senate	None
CM at Risk (CMR)	Capitol	Capitol/Int. Wings	Capitol	All
Project Establishment & Organization	OR Before A/E	OR Before A/E	OR Before A/E	Re-established
Comprehensive Master Plan	Yes	Yes	Yes	No
EPD&A	Yes	Yes	Yes	Late PD&A
Budget Management	EPD&A	By PM	EPD&A	PD&A
Schedule Management	EPD&A	By PM	EPD&A	PD&A
Design Management	EPD&A	By PM	EPD&A	PD&A
Security	Master Plan	Master Plan	Committee	Committee
Seismic Considerations	Yes	Limited	No	Limited
Overall Ownership Involvement	Preservation Board	Commission	Commission	Group
Authority	Yes- Complete	Limited	Limited	Yes - Complete
OR Relationship with State	Integrated w/CPB	Integrated w/DPW	Integrated w/DA	Over CMD

Final Thoughts
California Capitol Annex

Final Thoughts

California Capitol Annex Recommendations

- Clearly identify the Ownerships rolls:
  - What authority Rules Committee will have and expectations
  - What roll will the Governor and Lt. Governor have and expectations
  - What authority DGS will have and how will they collaborate
- Retain a knowledgeable Owner Representative
  - Who knows Capitol and Capitol Buildings
  - Will Lead the Owners group through the right process
- Project Definition and Alignment Process
  - A clearly defined project with a comprehensive plan will cost less and be completed earlier.
  - Include a well defined swing space plan that is acceptable to the Leadership
  - Provide a comprehensive budget
  - Schedule out the entire project
- Communicate upward to both political parties – always!
  - Political change can impact the project – it is important to always communicate with both parties – the project should be not be one parties or the others.

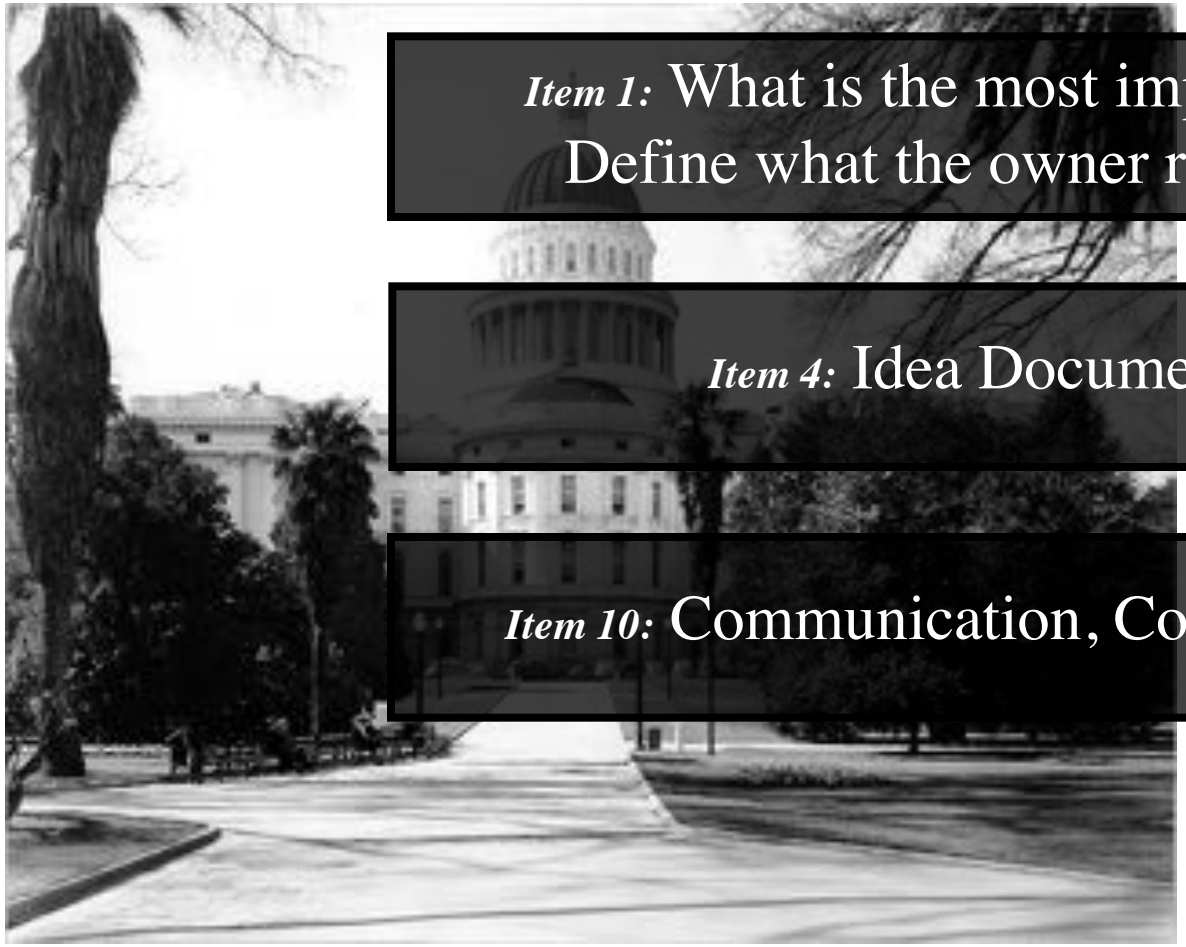
Final Thoughts

California Capitol Annex Recommendations

- Avoid the urge to do what you have always done.
  - Capitol are unique politically complex building and require a different process
- Create contractual clauses that promote Collaboration & Trust
  - Through the use of the procurement matrix identify those qualities you want in to come out in the project and write them in to the contract.
- Retain the right professionals at the right time not before!
  - Design & construction professionals are critical to a team, however you must know what expertise and collaborative skills you are looking for in order for them to be successful
  - Give the professional the luxury to do what they are best at
- Hold to the plan – or be prepared to manage unintended consequences
  - Complex project can be solved by stick with the comprehensive plan, changes and deviations result in consequences that will require management.
- Recognize the Human Element
  - Feeling are reciprocal – issues and problems will occur they always do – be prepared to work through the problem not assign blame.

Final Thoughts – Lessons Learned

10 Keys to Creating A Clear Project Definition



10 Keys to Creating
A Clear Project Definition

Item 1: What is the most important thing to the Owner?
Define what the owner really cares the most about

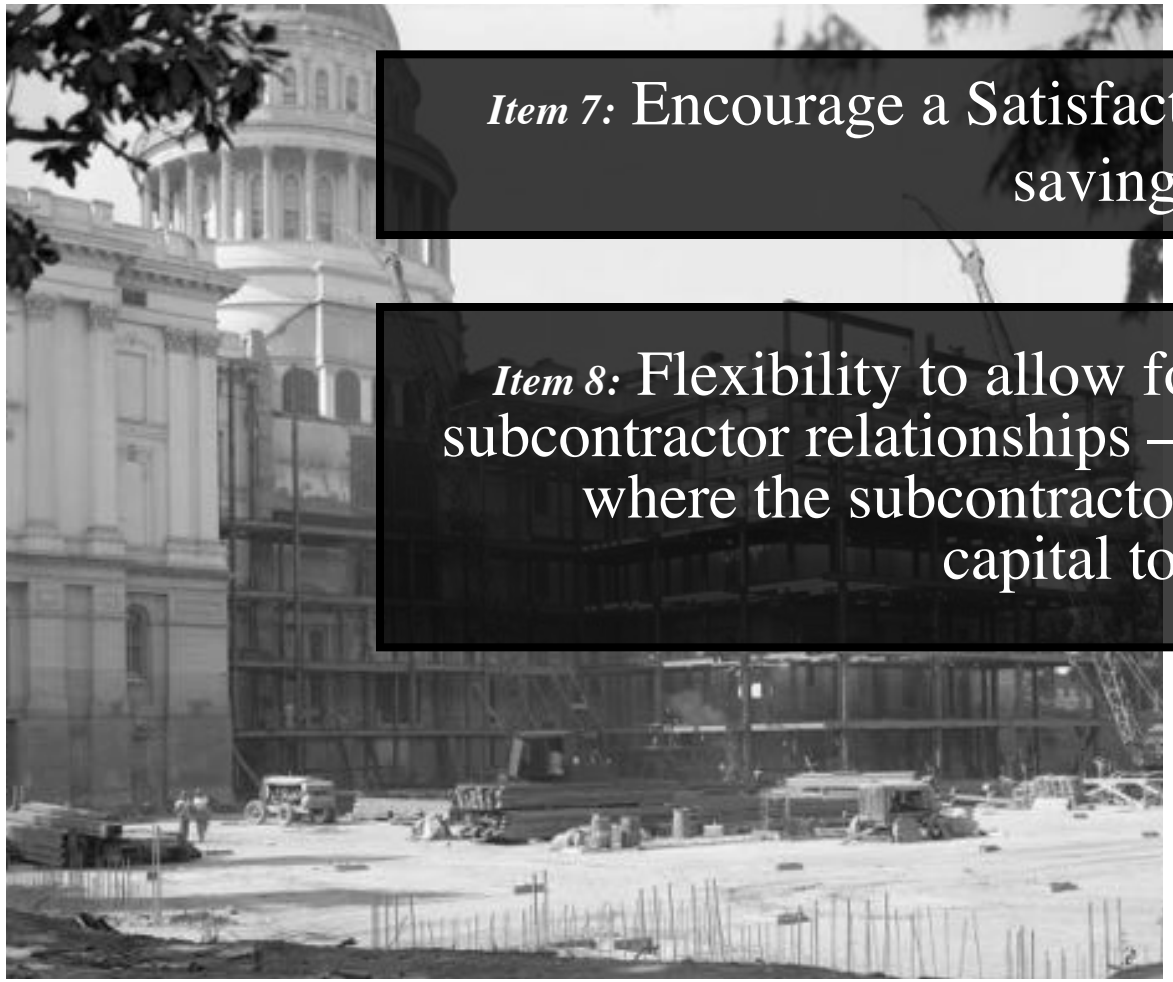
Item 4: Idea Documentation & Hierarchy

Item 10: Communication, Collaboration, Communication

6. Master Planning
9. Continual Cost Modeling
10. Communication, Collaboration, Communication

Final Thoughts – Lessons Learned

10 Keys to Contractual Modifications



Item 7: Encourage a Satisfaction Fee – eliminate a shared savings clause

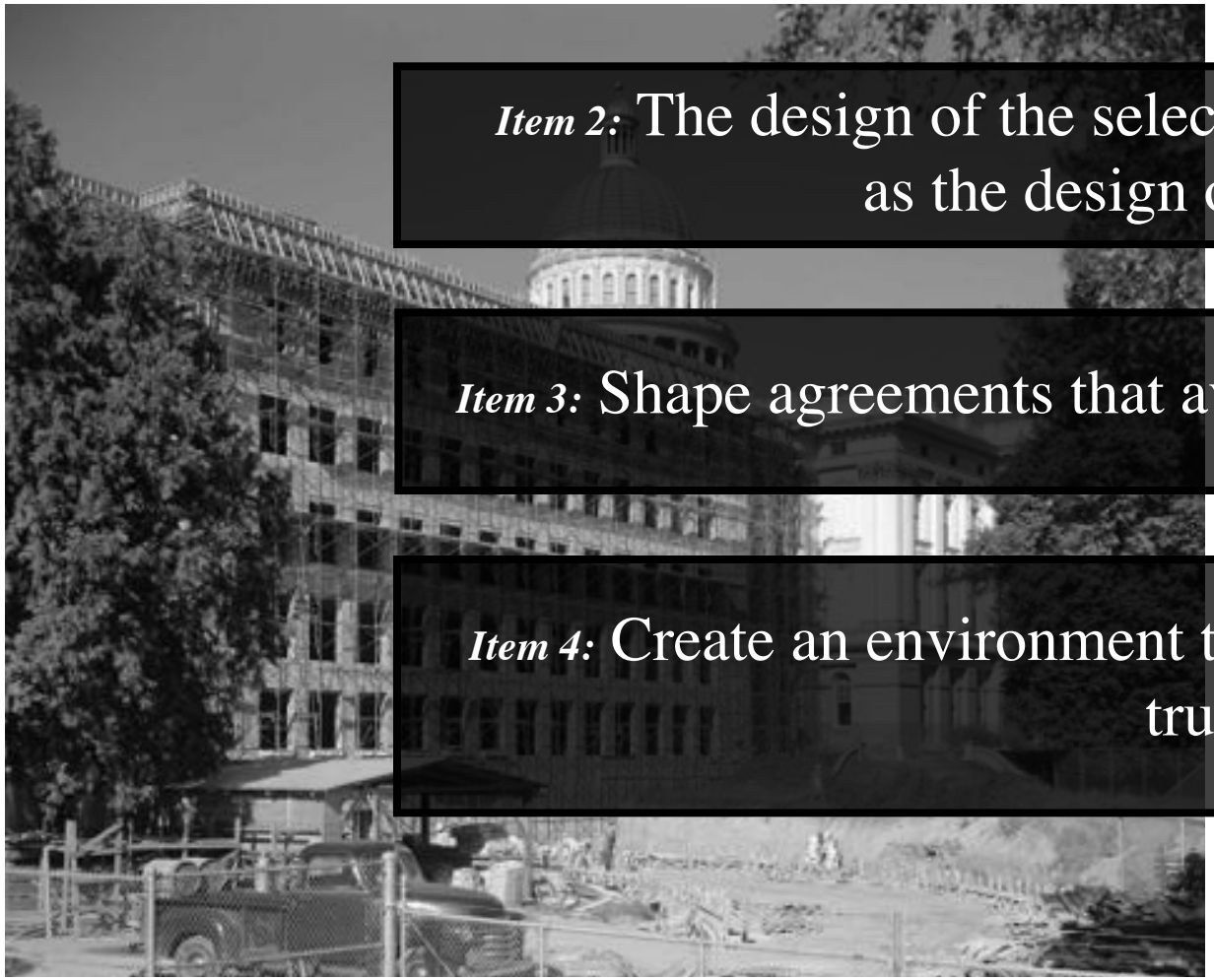
Item 8: Flexibility to allow for a multitude of a variety of subcontractor relationships – this engenders an atmosphere where the subcontractor can provide intellectual capital to the project

10 Keys to Contractual Modifications

1. Create an environment that fosters collaboration and trust
5. Everyone wins - not one loses at the expense of the other. It's about fairness and trust
8. Flexibility to allow for a multitude of a variety of subcontractor relationships - this engenders an atmosphere where the subcontractor can provide intellectual capital to the project
9. Maintain a Cost Model - make sure it is realistic and based on Definition Documents that fully describe the project
10. Define Contingencies Management and Ownership – open book accounting

Final Thoughts – Lessons Learned

10 Keys to Facilitating Collaboration



Item 2: The design of the selection process is as important as the design of the project

Item 3: Shape agreements that avoid adversarial relationships

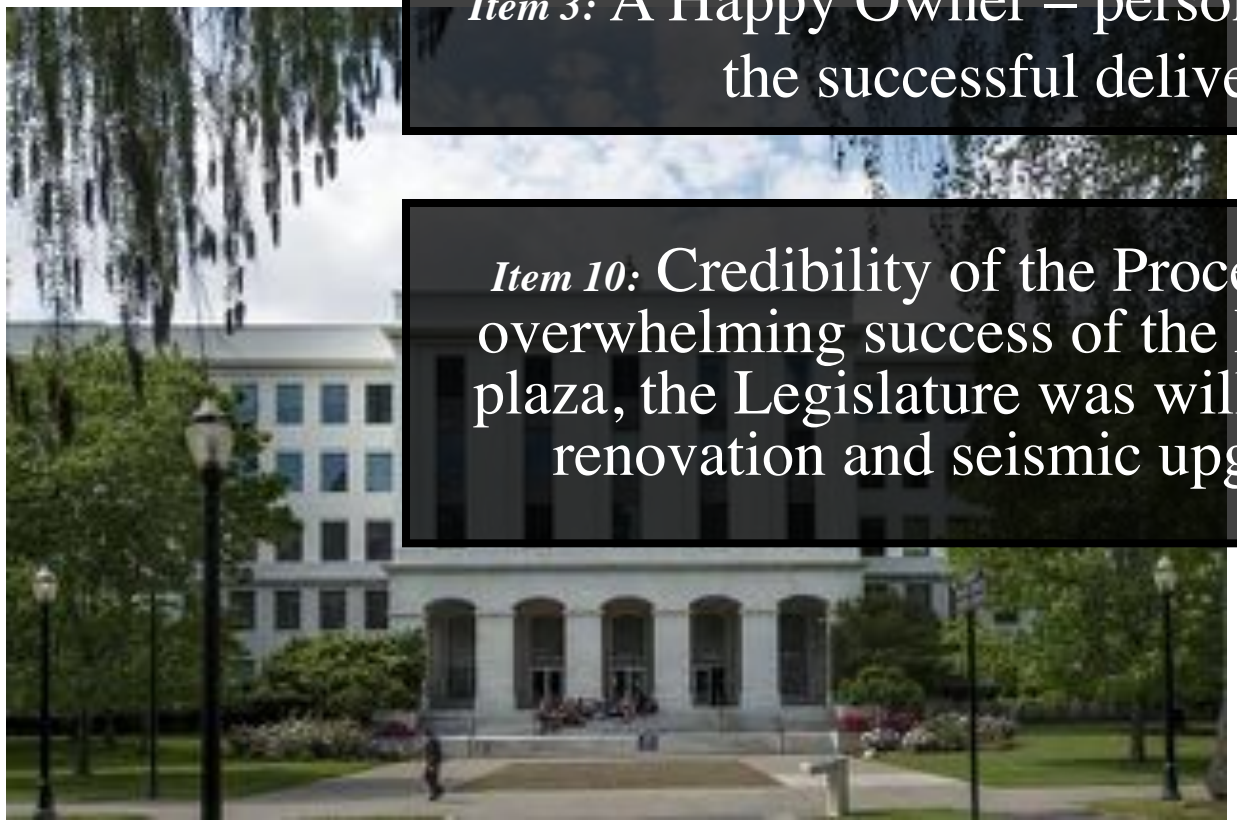
Item 4: Create an environment that fosters collaboration and trust

10 KEYS TO
FACILITATING COLLABORATION

1. Prior to team selection the project must be clearly defined to aid in selecting the right team
   a. The design of the selection process is as important as the design of the project
   b. Process to select the very best people
   c. Qualification and price should be used - with qualification receiving the higher weight in the decision
   c. The selection should be a shared process where those brought on early are involved in the selection of the other team members
   d. Interview – should be used to select the best team, not to eliminate the bad ones
3. Shape agreements that avoid adversarial relationships
4. Create an environment that fosters collaboration and trust
5. Budget for the cost of collaboration
6. Owner leads collaborative team by respecting contributions of others and participating as team member
7. Architects innovate, evaluate, select and integrate materials and systems
8. CM or CM / GC organizes, sequences and schedules work and understands what it will cost
9. Recognize that all knowledge does not reside with just a few - everyone has something valuable to add
10. Each team member will provide his / her best efforts - no slacking!

Final Thoughts – Lessons Learned

10 Benefits that have resulted from this process



Item 3: A Happy Owner – personal credibility increased with the successful delivery of the buildings

Item 10: Credibility of the Process – as a direct result of the overwhelming success of the East and West Buildings and plaza, the Legislature was willing to fund the $212 million renovation and seismic upgrade of the State Capitol.

10 Tangible Benefits that Resulted from This Process

1. **On-time Completion** - we were able to move in where we told the agencies we would - huge benefit in credibility

9. **Greater Value in Enhancements** - because of the FLCC and management of the contingency, the owner received greater value in enhancements (bronze doors, granite spandrels, etc.). The enhancements were items not originally on the "what the owner cares the most about list or the cost reduction list" - these were just plain wants.

10. **Credibility of the Process** - as a direct result of the overwhelming success of the East and West Buildings and plaza, the Legislature was willing to fund the $172 million renovation and seismic upgrade of the State Capitol.

Questions

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