



Item No. 1 Town of Atherton

CITY COUNCIL STAFF REPORT – REGULAR AGENDA

**TO: HONORABLE MAYOR AND CITY COUNCIL
GEORGE RODERICKS, CITY MANAGER**

THROUGH: ROBERT OVADIA, PUBLIC WORKS DIRECTOR

**FROM: MARTY HANNEMAN, INTERWEST CONSULTING GROUP
PROJECT MANAGER**

DATE: AUGUST 17, 2018

**SUBJECT: RECEIVE CIVIC CENTER PROJECT UPDATE; REVIEW,
DISCUSS AND PROVIDE DIRECTION ON DESIGN CHANGES
AND VALUE ENGINEERING OPTIONS FOR THE LIBRARY;
DIRECT STAFF TO REQUEST A RE-DESIGN PROPOSAL FROM
WRNS STUDIOS; RECEIVE UPDATE ON PROGRESS OF VALUE
ENGINEERING OPTIONS FOR THE ADMINISTRATIVE/POLICE
BUILDING; RECEIVE, DISCUSS AND PROVIDE DIRECTION ON
FUNDING ISSUES RELATED TO THE OVERALL PROJECT; AND
PROVIDE DIRECTION ON POTENTIAL DEMOLITION OF
LIBRARY BUILDING**

RECOMMENDATION

Receive the Civic Center Project Update; review, discuss and provide direction on design changes and value engineering options for the Library; direct staff to request a re-design proposal from WRNS Studios; receive update on progress of value engineering (VE) options for the Admin/PD building; review, discuss and provide direction on funding issues related to the overall project and provide direction on potential demolition of library building.

BACKGROUND

At the June 20, 2018, Council meeting staff presented the two bids received and provided Council with the four Options recommended by the PMC for consideration. The City Council directed that all bids be rejected and that the project be redesigned to include more VE options, reduced in scope as necessary, and rebid to the open market by the end of the calendar year.

Furthermore, Council provided the following direction:

Civic Center Project Monthly Status Report

August 17, 2018

Page 2 of 5

- Design both buildings as base Cal-Green Buildings adding any LEED items as Add Alternates
- Hold monthly Check-In/Work Sessions with the Council (joint meetings of PMC & CC)
- Establish a target baseline budget for the VE and scope reduction based on the original design estimates of City Hall/PD budget at \$24M with site improvements and the Library budget was set at \$16M with site improvements
- Get a Peer Review firm on board to review and confirm project estimates
- Provide final bid documents for Council approval by December 2018
- Hold weekly PMC & Design Team meetings until complete

At the meeting, the Council had an opportunity to review the cost differential between bidding the projects separately or together and chose to move forward with one modified bid package.

On July 18th, staff held a follow up meeting with the design team and PMC to develop VE options for the Admin/PD building. Attachment 1 is the meeting summary.

Also, on July 18th, staff presented proposed library VE options for City Council's discussion and direction. There were no decisions made on the VE options since net saving costs were not yet available. Council directed staff to continue to refine the net savings for each of the VE options, confirmed that Option 3b - reduce overall project costs and rebid to open market by end of year, did not change the target budget of \$16M (building and site work), stated the Historic Town Hall renovations and north deck are Council priority, and additional funds may be available for Library and will be further reviewed.

On July 25th, staff held a meeting with the design team and PMC to develop VE options for the Admin/PD building. Attachment 2 is the meeting summary.

On August 1, 2018 staff held another meeting with design team, Library staff and PMC discuss the potential value engineering options to meet the City Council's target budget of \$16M. Attachment 3 is the meeting summary.

Today the design team is presenting the VE options and estimated net cost savings for the Library recommended by the PMC, design team and Library staff (Attachment 4). These costs have been refined by Mack5 and are currently being peer reviewed by TBD Consultants for current market conditions. Attachment 5 is the current Library floor plan. If all VE options identified are selected, the Library cost estimate can be aligned with the goal set by the Council. However, there were several VE options that the Library staff recommended be included in the project rather than be deferred or eliminated. These include renovation of the Historic Town Hall, completion of the North Deck, completion of the Maker Space Deck, inclusion of all square footage, and inclusion of the Rammed Earth Wall. The City Council Civic Center Subcommittee and Library staff may opine on these issues.

On August 8th, staff held another meeting with the PMC and design team to continue reviewing and refining potential Admin/PD building VE options and respective net saving costs. Attached (Attachment 7) are the VE options and net costs that have been reviewed to date. The PMC and

Civic Center Project Monthly Status Report

August 17, 2018

Page 3 of 5

design team continue their work on this and these numbers are likely to change. It is expected that final VE options with the complete net saving costs will be presented to Council at its September 5, 2018 special meeting. It is not suggested that the Council review these items in depth, rather have a general discussion of the items only.

Library Demolition Pre-Bid

Staff is also requesting direction on whether to prepare for Council's authorization a limited bid package to demolish the library building prior to contracting with a General Contractor to perform the remainder of the Civic Center project work. Since the temporary trailers are completed and ready for the Library to move in to, demolishing the library by years end is estimated to reduce project schedule by at least one month and cost approximately \$140,000. The Library may move into the temporary facilities at any time and are able to use the temporary trailers ad hoc as needed.

Council direction is required to authorize staff to proceed with some or all of the value engineering options being recommended for the Library and should staff prepare a bid package for Council's consideration to demolish the Library. Staff will return with a scope of work for WRNS for Council approval as needed.

Project Funding

As the Council is aware, part of the challenge for the Civic Center Project has involved securing funding for its completion. The original premise of the City Hall and Police building, to include site work, was that the design and construction of the project would be funded primarily from donations or grants. However, over time and via clarification by an Advisory Measure, the funding premise for the building has changed.

Identified funding for the Project is a combination of saved General Funds, donations/grants, and building funds to meet the full project estimate. However, it was noted that the use of saved Town General Funds will result in a cash flow issue which the Town will have to remedy through either construction timing or short-term gap funding (private placement funding or certificates of participation).

Staff suggests that the Council continue to have a discussion to brainstorm around possible funding options for the Project. Staff has previously presented options for consideration by the Council related to Certificates of Participation and Private Placement Loans. Representatives from Urban Futures discussed these options with the Council in April 2017. Urban Futures will return on September 5 at the Study Session with an update to that presentation.

POLICY ISSUES

There are no policy issues associated with this report.

Civic Center Project Monthly Status Report

August 17, 2018

Page 4 of 5

FISCAL IMPACT

Attachment 8 is a summary of the project finances via the Monthly Budget Summary.

PUBLIC NOTICE

Public notification was achieved by posting the agenda, with this agenda item being listed, at least 72 hours prior to the meeting in print and electronically. Information about the project is also disseminated via the Town's electronic News Flash and Atherton Online. There are approximately 1,200 subscribers to the Town's electronic News Flash publications. Subscribers include residents as well as stakeholders – to include, but be not limited to, media outlets, school districts, Menlo Park Fire District, service providers (water, power, and sewer), and regional elected officials. The Town maintains an active and up to date Project Website at <http://ca-atherton.civicplus.com/index.aspx?NID=290>.

COMMISSION/COMMITTEE FEEDBACK/REFERRAL

This item X has or has not been before a Town Committee or Commission.

- Audit/Finance Committee (meets every other month)
- Bicycle/Pedestrian Committee (meets as needed)
- X PMC - Civic Center Advisory Committee (meets as needed)
- Environmental Programs Committee (meets every other month)
- Park and Recreation Committee (meets each month)
- Planning Commission (meets each month)
- Rail Committee (meets every other month)
- Transportation Committee (meets every other month)

ATTACHMENTS

- Attachment 1: PMC Meeting Summary 7-18-18
- Attachment 2: PMC Meeting Summary 7-25-18
- Attachment 3: PMC Meeting Summary 8-1-18
- Attachment 4: PMC Meeting Summary 8-8-18
- Attachment 5: PMC Proposed Library VE Options 8-13-18
- Attachment 6: CD - Library Floor Plan
- Attachment 7: Proposed Admin/PD VE Options 8-13-18
- Attachment 8: Monthly Budget Summary

Attachment 8

Monthly Budget Summary

Fund Allocations	Library Fund	Building Facilities Fund	General Fund	Civic Center Donations	Total
FY 17-18 Budget	\$4,568,071	\$1,573,849	\$881,500	\$4,049,218	\$11,072,638
Expenditures to Date					
Design	\$993,216	\$433,724	\$581,357	\$2,479,255	\$4,487,553
Project Management	\$556,253	\$180,427	\$44,383	\$656,989	\$1,438,052
Geo-Tech/Environmental	\$48,706	\$95,442	\$53,222	\$0	\$197,371
Totals	\$1,598,176	\$709,594	\$678,963	\$3,136,244	\$6,122,976
Remaining FY 17-18 Budget	\$2,969,895	\$864,256	\$202,537	\$912,974	\$4,949,662

Atherton Now Cash Donations (Received)	Amount
Master Plan & Conceptual Design Phases 1 & 2	\$250,457
Schematic Design Phase 3	\$200,838
Design Development	\$506,870
Construction Documents Phase	\$783,026
Total Contributions to Date	\$1,741,191

Meeting Minutes

Date	July 23, 2018
Date of Meeting	July 18, 2018
Place of Meeting	City Hall Conference Room/Video Conference
Prepared By	Eileen Ong
Project Name	Atherton CC: City Hall VE Meeting
Project No.	WRNS: 15007.00
Purpose	Discuss VE goals and approach for City Hall
Participants	Marty Hanneman George Rodericks Rose Hau Elizabeth Lewis Paul Beamer Pauline Souza John Schlueter Eileen Ong Didi Fisher Steven McCulley Robert Ovadia Steve Dostart Rick de Golia Theresa DellaSanta Eric Glass
Distributed	Participants Clive Merredew Adam Woltag

Item No.	Description	Action Req'd by
3.1	Review of July 11th Meeting Summary	
3.1.1	Clarified most current spreadsheet with Library VE suggestions to be presented to City Council	
3.2	City Hall Construction Budget	
3.2.1	Lowest Bid for City Hall was \$25.07M Site work (60% of \$12M) \$7.20M Total of \$32.27M	

PMC City Hall VE Meeting Minutes: Meeting No 3

July 18, 2018

Page 2 of 4

	3.2.2	Budget for City Hall and Site work is \$24M City Hall & Site work \$21.6M (Target estimate) 10% Contingency \$2.4M	
	3.2.3	Budget Building Cost presented was \$14.4M Budget Site Cost presented was \$7.2M <ul style="list-style-type: none"> • Above numbers places all reduction on Building and should be reduced for both. • Site cost to be adjusted with 10% contingency per below. • Budget Building cost to adjust to \$15.12M • Budget Site cost to adjust to \$6.48M 	
3.3		Overview of funds available & square footage cost WRNS presented spreadsheet demonstrating City Hall Building areas and cost. <ul style="list-style-type: none"> • \$32.27M/30,508 sf = \$822 per square foot cost. 	
	3.3.1	Current bid documents with current square footage yield \$472/sf building cost. <ul style="list-style-type: none"> • Concluded current building could not be built. 	
	3.3.2	Reduced square footage based upon \$822/sf. This requires 13,000 square footage reduction in building area. See attached spreadsheet <ul style="list-style-type: none"> • Discussion of where reductions could be easily taken <ul style="list-style-type: none"> • Remove Council Chamber 2,853 sf • Remove Lobbies make access via exterior. • Make Admin/Comm. Dev. one story structure without Lobby 3,606 sf • Approx 6,460 sf x \$822 = \$5.3M savings • Meeting budget would require substantial removal of program areas for each department. • VE balance of project to remain (\$5.4M reduction needed) • May still require area reductions (see VE spreadsheet for possible areas) 	
	3.3.3	Build Police Department facility only and renovate existing City Hall for Administration and Community Development Center. <ul style="list-style-type: none"> • Previous study was done and cost of remodel would be comparable to new construction. Mack5 also advised remodeling was not cost effective. • An alternative to renovation is to provide modular buildings as temporary housing until funds are available to build new Admin/Comm. Dev. • If phased correctly the existing modular building could be retained in current location at Maple for admin or community development use. 	
3.4		VE Building Suggestions see attached spreadsheet	
	3.4.1	Reduction thru limiting Essential service building area <ul style="list-style-type: none"> • Provide seismic joint at lobby to separate Admin/Comm. Dev. from PD • Change Ancillary building to non-essential service building. Determine what areas would need to move to 	

PMC City Hall VE Meeting Minutes: Meeting No 3

July 18, 2018

Page 3 of 4

		<p>main building.</p> <ul style="list-style-type: none"> • Separate buildings for PD and Admin/Comm. Dev. 	
	3.4.2	<p>Miscellaneous Exterior Assembly possible cost savings:</p> <ul style="list-style-type: none"> • Change construction of Ancillary to metal framed plaster and walls around Secure Parking to fencing. • Reduce areas of Clay Tile roof by providing flat roof at lower level and Gable roof at 2 story portions of building • Change exterior steel window to aluminum storefront at Lobby Entrances • Ballistic window assemblies, reduce level of protection. 	
	3.4.3	<p>HVAC System:</p> <ul style="list-style-type: none"> • Option 1: Conventional HVAC System <ul style="list-style-type: none"> • Larger packaged unit with gas boiler and chiller • Delete radiant ceilings and floors • Lower ceiling height • Option 2: Air Source Heat Pump with Air Handler <ul style="list-style-type: none"> • 60 ton heat pump (needed if 120 ton Heat Pump deleted from Library scope) • More energy efficient method (electric only). • Keeps radiant ceilings and floors (can look at deleted radiant floor from Lobby) • Keeps design integrity. • Alternate Option: VRF system without radiant ceilings and floors. <ul style="list-style-type: none"> • Newer technology which may require more maintenance 	
	3.4.4	<p>Miscellaneous MEP items</p> <ul style="list-style-type: none"> • Separate systems monitoring and life safety systems monitoring (possible cost savings) • Microgrid ready (add for future) • PV infrastructure (base bid, CalGreen required) 	
	3.4.5	<p>Possible savings reduction in materials discussed:</p> <ul style="list-style-type: none"> • Study acoustic fabric ceiling, replace with acoustic plank ceiling. • Study downgrade casework finishes and eliminate teak wood • Study ballistic wall assemblies, reduce level of protection • Remove interior veneer plaster 	
3.5		Comments:	
	3.5.1	<ul style="list-style-type: none"> • Study adding second level to Ancillary building of non-essential service program. [GR] • Study providing area adjacent to council exterior south wall for EOC Includes flipping of police Uni-sex toilet rooms to the Briefing room side of the corridor. (note: EOC was to use Briefing Room in lieu of Council Chamber) [GR] • Concern raised about amount of time available VE projects and prepare for bid in January. • Decisions cannot be made without cost estimated for the 	

PMC City Hall VE Meeting Minutes: Meeting No 3

July 18, 2018

Page 4 of 4

		different VE suggestions. Cost reconciliation of the bid documents along with cost option pricing is anticipated in late July [PB] <ul style="list-style-type: none">• Study if two car exits needed from Police Secure Parking? [GR] While not required, it is strongly encouraged due to safety and first response concerns. [EG]	
	3.5.2	Next Steps:	
		<ul style="list-style-type: none">• Develop information on VE options for pricing by Mack5• Provide feedback on studies requested above.	
		<i>The above constitutes our understanding of items discussed and agreed upon at the subject meeting. Any additions or corrections should be forwarded to WRNS Studio immediately.</i>	

Meeting Minutes

Date	July 27, 2018
Date of Meeting	July 25, 2018
Place of Meeting	City Hall Conference Room/Video Conference
Prepared By	Eileen Ong
Project Name	Atherton CC: City Hall VE Meeting
Project No.	WRNS: 15007.00
Purpose	Discuss VE goals and approach for City Hall
Participants	Marty Hanneman George Rodericks Rose Hau Elizabeth Lewis Paul Beamer Pauline Souza John Schlueter Eileen Ong Didi Fisher Steven McCulley Robert Ovadia Steve Dostart Rick de Golia Theresa DellaSanta Eric Glass Robert Barron
Distributed	Participants Clive Merredew Adam Woltag

Item No.	Description	Action Req'd by
4.1	Review of July 18th City Council Meeting Direction	
4.1.1	Summary of Library comments: <ul style="list-style-type: none"> • Option 3b, bid as one project was confirmed • Historic Town Hall renovations and North Deck are priority. • Additional funds may be available for Library • No decisions on VE as cost were not available 	

PMC VE Meeting Minutes: Meeting No 4

July 25, 2018

Page 2 of 3

		<ul style="list-style-type: none"> PMC to prioritize and recommend VE items for Library at next PMC meeting. 	
	4.1.2	Special Meeting of City Council August 17th at 8:00 am To review PMC recommendations	
4.2		City Hall VE <ul style="list-style-type: none"> Building should be built to provide what is needed. [RG] Need to demonstrate to City Council that options have been studied and rejected i.e. seismic joint at lobby. [GR] Need to show what needs to be done to reach budget. If project bid with Library should campus heat pump be removed from project? [SD] Would like to minimize redesign if cost savings do not justify. 	
	4.2.1	Comments on VE Options Spreadsheet <ul style="list-style-type: none"> Savings of 1.2 M for removing lobby may not justify removing Lobby areas. [SD] Remove Option 1B and keep Option 1A (see Essential Service Study below 4.3.2) Show future Council Chamber on Option 1A. Summary sheet should include reconciled cost estimate. Add list of items considered and eliminated from consideration. 	
4.3		Essential Service Study Saving for strengthening structure for essential service are only on material side of cost. Materials only make up 30% of overall cost and savings would be minimal. <ul style="list-style-type: none"> Adding seismic joint at lobby to separate buildings incurs additional cost. Separating Police and Administration/Comm. Dev., minimal cost difference between 1 and story building. Moving non-essential service areas in to Ancillary Building 	
	4.3.1	Separating Police and Administration/Community Development <ul style="list-style-type: none"> Minimal cost savings for one story versus two story building. One story building requires larger footprint and impacts Historic Trees. 	
	4.3.2	Move non-essential service areas to new Level 2 of Ancillary Building. <ul style="list-style-type: none"> Tactical Training/Fitness, Officer Resting Rooms and Computer Storage areas moved. Would need to add stairs and elevators for access. Restrooms and shower would need to be provided for Officer Resting Rooms and Training/Fitness areas. Cost of building second story would outweigh savings of moving areas. 	
4.4		Alternate Facilities	
	4.4.1	If new Council Chamber not constructed: <ul style="list-style-type: none"> If Historic Town Hall renovated, council would need 	

PMC VE Meeting Minutes: Meeting No 4

July 25, 2018

Page 3 of 3

		<p>facilities to meet at.</p> <ul style="list-style-type: none"> EOC needs approximately 800 – 900 sf of space to function, plus storage area. Study of including at PD does not provide adequate facilities and does not provide separated facilities. 	
	4.4.2	<p>Administration and Community Development</p> <ul style="list-style-type: none"> Temporary housing for Administration during construction. If new building not built Administration and Community Development would be in temporary trailers. 	
	4.4.3	<p>Police Department Areas</p> <ul style="list-style-type: none"> Offsite Tactical Training/Fitness could be housed at Holbrook Palmer Park 	
4.5		Comments:	
	4.5.1	<ul style="list-style-type: none"> Provide documents for meetings earlier than evening prior. Provide number or way to identify handouts for discussion. 	
	4.5.2	Next Steps:	
		<ul style="list-style-type: none"> Update City Hall VE spread sheet and provide cost for options. August 1 meeting to focus on Library recommendations to City Council. Should have cost for options. 	
		<p><i>The above constitutes our understanding of items discussed and agreed upon at the subject meeting. Any additions or corrections should be forwarded to WRNS Studio immediately.</i></p>	

Meeting Minutes

Date	August 2, 2018
Date of Meeting	August 1, 2018
Place of Meeting	SMCL Administrative Conference Room/Video Conference
Prepared By	Eileen Ong
Project Name	Atherton CC: Library VE Meeting
Project No.	WRNS: 15007.00
Purpose	Discuss VE recommendations for Library
Participants	Marty Hanneman George Rodericks Elizabeth Lewis Paul Beamer John Schlueter Adam Woltag Eileen Ong Didi Fisher Rick de Golia Anne-Marie Despain Carine Risley Rachel McDonnel Francesco Vargas
Distributed	Participants Clive Merredew Pauline Souza Didi Fisher Steve Dostart Rose Hau Steven McCulley Robert Ovadia

Item No.	Description	Action Req'd by
5.1	Meeting to determine recommendation to City Council for VE of Library for bid.	
5.1.1	Mack5 provided Reconciled Cost Estimate for Library of \$23,267000 <ul style="list-style-type: none"> Numbers based upon scope provided in Bid Documents, 	

PMC VE Meeting Minutes: Meeting No 5

August 1, 2018

Page 2 of 3

		<p>including Addendums and Overaa Bid</p> <ul style="list-style-type: none"> • Estimate includes 40% of site work cost. • Estimate is based upon having a minimum of 5 bidders. • Major differences between Overaa Bid and current Mack5 estimate are: Mechanical System cost and Alternate cost. 	
	5.1.2	<p>Goal is to reduce estimate to \$14.4 million.</p> <ul style="list-style-type: none"> • Additional funds may be available to increase budget. To be discussed at City Council meeting. 	
5.2		<p>VE Option Decisions City Council decided Town Hall to be kept in project scope.</p>	
	5.2.1	<p>Exterior Assemblies</p> <ul style="list-style-type: none"> • Cement plaster was eliminated as exterior finish option • Rammed earth to remain as a Recommended Option with Board Formed Cast-in-place Concrete as pricing alternate. • Favored by Library staff for acoustic properties. • Curtain Wall window system in lieu of Teak Windows at windows over 11' tall. Storefront at windows 11' high or less. • Retain exterior Mock-up • Replace glazing with Solarban 70 XL 	
	5.2.2	<p>Building Systems</p> <ul style="list-style-type: none"> • Eliminate Conventional HVAC system. • Retain underfloor supply system and provide Library only heat pump. • Favored by Library staff in lieu of overhead forced air system. • Pricing alternate for HVAC with Electric Heat if PVs are accepted as base bid. • Retain Gender Neutral Toilet rooms as designed. • Retain PVs as designed. 	
	5.2.3	<p>Site</p> <ul style="list-style-type: none"> • Eliminate south deck and deck outside Library Offices. Maker Space and North Deck to remain as designed. • Library staff wants to maintain North Deck and West Deck at Maker space for program use. • Estimate should include pathways and design for seating areas without decks. • Deck wood to remain as Garapa. Garapa is lower maintenance, more durable and has longer lifespan than Cedar. • Library staff prefers Garapa for low maintenance and ability to withstand heavy use. • Fencing wood to be Cedar in lieu of Garapa • Remove fencing between Shade Garden and Maker Space. • Separate cost of Hydroseed & Irrigation from other site items. 	

PMC VE Meeting Minutes: Meeting No 5

August 1, 2018

Page 3 of 3

	5.2.4	<p>Interior Assemblies and Furniture</p> <ul style="list-style-type: none"> • Remove Acoustic Fabric Ceiling and replace with 1'x6' acoustic ceiling system. • Change interior teak windows to interior aluminum framed teak windows with acoustic panels above. • Retain wood veneer casework. • Delete RAKKS shelving system and mobile casework from bid documents. Shelving and mobile casework to be part of FF&E. • Library concurred with placing shelving system in FF&E budget. 	
	5.2.5	<p>Phasing</p> <ul style="list-style-type: none"> • Administrative Offices to be moved offsite during construction. • Police to be provided access to secure parking via Fair Oaks during construction. 	
5.3		<p>Next Steps City Council to meet August 17 at 8:00 a.m.</p>	
	5.3.1	<p>WRNS to update spreadsheet with the following:</p> <ul style="list-style-type: none"> • Eliminate Bare Bones + Reduced SF column. Only show Recommended Options and Pricing Alternate/Deferred Design columns. • Incorporate decisions made above to Recommended Option. • Update cost. 	
	5.3.2	<p>Mack5 to complete pricing for new items.</p>	
		<p><i>The above constitutes our understanding of items discussed and agreed upon at the subject meeting. Any additions or corrections should be forwarded to WRNS Studio immediately.</i></p>	

DRAFT

Meeting Minutes

Date	August 9, 2018
Date of Meeting	August 8, 2018
Place of Meeting	City Hall Conference Room/Video Conference
Prepared By	Eileen Ong
Project Name	Atherton CC: City Hall VE Meeting
Project No.	WRNS: 15007.00
Purpose	Discuss City Hall VE Options
Participants	Marty Hanneman George Rodericks Elizabeth Lewis Paul Beamer John Schlueter Eileen Ong Didi Fisher Steven McCulley Rick de Golia Theresa DellaSanta Eric Glass Robert Barron
Distributed	Participants Clive Merredew Adam Woltag Rose Hau Pauline Souza Robert Ovadia Steve Dostart

Item No.	Description	Action Req'd by
6.1	Meeting to discuss City Hall VE Options only City Council to Meet on August 17 to discuss Library Only	
6.2	Discuss Summary Sheet <ul style="list-style-type: none"> • Shows four columns for - As Bid; Reduced/Deferred to meet Budget; Recommended Option; Pricing Alternates • Reconciled Estimate includes cost of sitework. 	

PMC VE Meeting Minutes: Meeting No. 6

August 8, 2018

Page 2 of 3

6.2.1	<p>Reduced/Deferred Option Comments:</p> <ul style="list-style-type: none"> • Include Hydroseed in lieu of planting • Clarified savings for eliminating Temporary Admin Trailer only if Admin. Office is not housed on site • Clarified extents of CMU (concrete block walls) at Secure Parking area. No cement plaster finish, provide plant screening at walls. • Clarified changed wood from Garapa to Cedar is for wood fencing along New Ashfield Road • Microgrid should be Pricing Alternate • Clarified cost savings for VRF (Variant Refrigerant Flow) system is only for Police Dept. • Include savings from reduced security Level in walls and windows
6.2.2	<p>Recommended Option Comments:</p> <ul style="list-style-type: none"> • Include Cost Savings for Composite Asphalt Shingle roofing in lieu of Clay tile. • Clarified there is cost savings for VRF system. As opposed to providing City Hall Heat Pump would be added cost, per Mack5 analysis. <ul style="list-style-type: none"> • WRNS to discuss with Mechanical Engineer operational cost and maintenance in using VRF system. • Leave City Hall Heat Pump as Pricing Alternate • At Secure Parking, CMU walls to remain cement plaster finish and extents per bid documents • Eliminate gate at Community Development Counter • Include secure walls and windows to be Security Level 3. • Move Defer Council Chamber to Pricing Alternates • Include Reduced Phasing.
6.2.3	<p>Pricing Alternates/ Deferred Design Comments:</p> <ul style="list-style-type: none"> • Add Clay Tiles (where PVs not installed) with cost. • Add as Pricing Alternate base bid Heat Pump at Library • Add Microgrid and cost of system. • Add PV's and cost of system. • Remove "Do not build Ashfield Road" • Move Level 3 secure walls to Recommended Option.
6.3	<p>VE Description Comments:</p>
6.3.1	<ul style="list-style-type: none"> • Mechanical Distribution for VFR system shows 8' ceiling height. <ul style="list-style-type: none"> • Verify ceiling will not need to be lowered for deeper ductwork with VRF system. • In description for Remove Corp Yard Scope, con does not indicate which authority in non-compliance with. <i>Authority having Jurisdiction: San Francisco Bay Area Regional Water Quality Control Board</i>
6.4	<p>Next Steps:</p>

PMC VE Meeting Minutes: Meeting No. 6

August 8, 2018

Page 3 of 3

	6.4.1	<ul style="list-style-type: none">Update City Hall VE spread sheet and provide cost for options.	
		<i>The above constitutes our understanding of items discussed and agreed upon at the subject meeting. Any additions or corrections should be forwarded to WRNS Studio immediately.</i>	

100% CD BID DRAWINGS DESIGN		BARE BONES +REDUCED SF		RECOMMENDED OPTIONS		PRICING ALTERNATES / DEFERRED DESIGN	
Exterior Assemblies / Superstructure							
Exterior Materials & Building Structure	Rammed Earth double Wythe Cedar Rainscreen at west	Cement Plaster Exterior Metal Panels & Flashing No Exterior Mock-up	\$854,057	Retain Rammed Earth double wythe as designed Metal Panels and Flashing	\$75,584	Board Form Concrete w/metal Stud Interior Walls Metal Panels & Flashing	\$765,552
Exterior Windows & Glazing	Teak Framed Windows and Doors Solarban 72 glazing	Storefront Windows Solarban 70XL Glazing	\$905,713	Curtain Wall Windows Storefront Windows @ West Solarban 70 XL Glazing	\$896,951		
Building Systems							
Mechanical System	Heat pump for Campus Underfloor air supply	Conventional HVAC System Overhead air supply & return	\$366,540	Heat pump for Library Only Retain Underfloor supply	\$466,000	HVAC with Electric Heat 20 kw PVs on roof (add 123k in savings if PVs in bid)	\$447,000
Plumbing (Restroom VE)	Gender Neutral Restrooms	Toilet Partition in lieu of walls Wall Mounted Lavatories	\$35,430	Restrooms as designed		Toilet Partition in lieu of walls	\$31,984
Electrical		VE Light Fixtures Remove spare site conduits	\$18,659	VE Light Fixtures Remove spare site conduits	\$18,659		
	Microgrid	Microgrid for 8 hours of operation	\$606,058	Delete Microgrid	\$570,000		
	PV system	Net Zero Energy PV system	\$848,454	Delete PVs and retain infrastructure		Delete PVs and retain infrastructure Provide stantions	\$751,038
Site							
Decks	Garap wood decks at North, West and South	Eliminate all exterior decks	\$644,745	Eliminate decks at South & Southwest Keep decks 'Garapa"	\$147,090	Eliminate decks at west, reduce size of north deck	\$256,422
Planting, Irrigation	Ground cover, trees, plants and irrigation	Hydroseed & Irrigation	\$272,658	Planting & Irrigation as designed			
Fencing & Furnishings	Garapa wood fencing Charis and Tables	Cedar Fencing, eliminate fence at south Remove Site furnishings & shade garden	\$59,160	Cedar Fencing, eliminate fence at south Remove Site furnishings & shade garden, provide utility infrastructure	\$49,160		
Interior Assemblies							
Interior Materials	Acoustic Fabric Ceilings Acoustic Wall panel full height of book wall	Ceilings - Acoustic Tile Caseowrk - Plastic Laminate Reduce Acoustic Wall Panels	\$321,469	Ceilings - Acoustic Tile 1'x6' Reduce Acoustic Wall Panels	\$296,976		
Interior Glazing / Windows	Interior teak window system with acoustic wood panels	Interior Aluminum Window System Reduced Glazing	\$222,482	Interior Aluminum Window System with acoustic fabric panels above	\$175,482		
Furniture							
Casework	Teak veneer wood dividers with RAKKS shelving system Custom design mobile casework	Remove shelving system to FF&E Remove mobile furnishings from casework	\$604,914	Remove shelving system to FF&E Remove mobile furnishings from casework	\$604,914		
Area Reduction							
Adult Quiet Reading Room		750 sf	\$705,000				
Small Meeting Rooms		350 sf	\$329,000				
Additional Area TBD		150 sf	\$141,000				
Phasing							
Town Hall Seismic Upgrade & Renovation		Town Hall Seismic Upgrade & Renovation	\$1,796,000				
Demolition of Library		Demolition of Library	\$140,000				
Library & City Hall as one Contract						Reduce Phasing	Savings unknown
Reconciled Estimate							
Building		\$17,397,000					
Site		\$5,870,000					
Total		\$23,267,000	Estimated Savings	\$8,871,339	Estimated Savings	\$3,300,816	
Construction Cost Goal							
Target		\$16,000,000					
Contingency		\$1,600,000					
Goal		\$14,400,000	Estimated Construction Cost	\$14,395,661	Estimated Construction Cost	\$19,966,184	
Gap		\$8,867,000	Budget Gap	\$4,339	Budget Gap	\$5,566,184	

Summary Notes:
 1. All Estimated Cost based upon information provided by Mack5, including Reconciled Construction Cost Estimate
 2. **Italicized** cost are only removed from Construction Cost and will be accounted for in project soft cost.
 3. Cost shown are only construction cost and do not include any additional fees.

ATHERTON CIVIC CENTER

City Council Meeting August 17, 2018

Library Value Engineering Options

(+) Good Value - Minimal Impact

(=) Balanced Value - Includes Trade-offs

(-) Poor Value - Constrains other criteria

100% CD BID DRAWINGS DESIGN

BARE BONES + REDUCED SF

RECOMMENDED, BALANCED OPTION

PRICING ALTERNATES / DEFERRED DESIGN

Exterior Assemblies / Superstructure

Materials: Rammed Earth - Double Wythe

7" Double wythe rammed earth wall with minimum 4" rigid insulation fill. Fluid applied waterproofing on exterior. Interior wall is exposed and supports structure above. (18" thick total)

Materials: Cedar Rainscreen Secondary Walls

Metal framed exterior wall with wood rainscreen system. 6" metal stud, R-19 batt, 1/2" exterior sheathing, vapor air barrier, 1" mineral wood board insulation and vertical cedar rainscreen. R-Value 27. Located on East elevation return walls and portions of the west elevation.

Materials: Metal Panels and Flashing

Zinc panels and flashing, natural finish

Building Structure

Structural Framing: Stabilized Rammed Earth wall is exposed to the interior and supports structure above.

Structural Foundations : Piles and continuous grade beam with rigid steel structural plate connections

(=) Similar requirements to bid design

Cement Plaster Stucco

3-Coat Cement Plaster System: on 1" Insulation over waterproofing membrane over 1/2" ext. sheathing. LA Habra, Santa Barbara Mission Finish
Includes: 6" metal stud, R-19 Batt, interior GWB finish.

- (+) Thermal Performance: R-25 total wall
- (-) Less durable finish, requires more maintenance.
- (-) Quality control of installation is difficult
- (-) Moisture intrusion issues difficult to remedy

Cement Plaster Stucco Secondary Walls

Metal framed exterior wall with plaster system. 6" metal stud, R-19 batt, 1/2" exterior sheathing, vapor air barrier, 1" mineral wood board insulation and vertical cedar rainscreen. R-Value overall 20. Located on East elevation return walls and portions of the west elevation.

- (=) Thermal Performance: R-19 total wall
- (-) Less durable finish, requires more maintenance.
- (-) Quality control of installation is difficult
- (-) Moisture intrusion issues difficult to remedy

Metal Panels and Flashing

3-coat metallic painted aluminum metal panel and flashings in lieu of zinc panel
Provide: Coating to meet AAMA 621 criteria

- (+) Durable exterior coating
- (+) Increased UV resistance

Eliminate Exterior Visual Mockup

Eliminate Exterior Visual Mockup, in-place performance mockup to remain.
~~Remove:~~ requirements for stand-alone visual mockup

- (+) Not required for more customary construction
- (-) Limits ability to verify construction application of finish

Building Structure

Structural Framing: Steel structure with brace frames, exposed painted columns and beams.

- (-) Structure and Exterior are separate, less program flexibility

Structural Foundations : Piles and continuous grade beam with rigid steel structural plate connections

(=) Similar requirements to bid design

Rammed Earth - Double Wythe

Ramed Earth walls per bid documents

- (+) Structure and exterior finish are the same system.
- (+) Thermal Performance: R-25 Min. plus thermal mass
- (-) Wall construction comprised of multiple trades
- (-) Limited Future Flexibility

Cedar Rainscreen Secondary Walls

Cedar Rainscreen Secondary Walls per bid documents

- (+) Thermal Performance: R-27 total wall
- (+) Improved moisture control
- (+) Finish is naturally insect & rot resistant

Metal Panels and Flashing

3-coat metallic painted aluminum metal panel and flashings in lieu of zinc panel
Provide: Coating to Meet AAMA 621 criteria

- (+) Durable exterior coating
- (+) Increased UV resistance

Building Structure

Structural Framing: Concrete structural wall per bid documents

- (+) Structure and exterior finish are the same system.

Structural Foundations : Piles and continuous grade beam per bid documents

Poured Concrete Wall - Single Wythe

10" Reinforced poured concrete structural wall, single Wythe.
Includes: Metal framed interior furring wall with R-19 batt insulation on inside face of concrete structural wall, interior GWB finish

- (+) Structure and exterior finish are the same system.
- (+) Thermal Performance: R-25 Min. plus thermal mass
- (+) Similar to design intent
- (-) Wall construction comprised of multiple trades
- (-) Limited Future Flexibility

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Exterior Windows

Teak framed windows and door system . North wall includes 2x6 steel tube frame within window system

Exterior Glazing

Solarban 72.
1" IGU Includes: 1/4" Starphire outer lite, 1/2" airspace, 1/4" Starphire inner lite.
U-Value: 0.29, SHGC: 0.30, VLT: 71%

Building Systems

Mechanical System

120 ton Air source heat pump for campus with **air handler on roof for library** . Piping runs and pumps for cold and hot water supply and return to City Hall.

Mechanical Distribution

Underfloor supply with Fan-powered diffusers . Return air from above with passive system of gravity vents and exterior louvers.

Mechanical Screening - Roof

Equipment Well to conceal roof top AHU & Noise reducing equipment enclosure and acoustic fence at Ground mounted heat pump located at NW corner of the building.

BARE BONES + REDUCED SF

Exterior Windows

Painted Aluminum framed Storefront at North entry, fixed lites, no operable doors. Kawneer 451T, thermally broken frame, 2 "W, 4 1/2"D, 16'-6"H with steel tube frame to support storefront system.

(+) *Simplified management of acoustic and security concerns*
(-) *Loss of indoor/outdoor program flexibility*

Painted Aluminum framed Storefront at all other glazing locations, reduced quantity from Bid set. Fixed in lieu of operable Transom windows. Kawneer 451T, thermally broken frame

(-) *Reduced Thermal performance*
(-) *Requires additional metal panel above windows*

Exterior Glazing

Solarban 70XL in lieu of SB72,
1" IGU Includes: 1/4" Starphire outer lite, 1/2" airspace, 1/4" Clear inner lite.
U-Value: 0.28, SHGC: 0.27, VLT: 64%

(+) *Comparable Thermal performance*
(-) *Reduced daylighting capability*
(-) *Greener reflective hue, less transparent*

Mechanical System

Packaged AC Unit with Boiler Plant
Remove: air source heat pump, remove site piping, and main distribution piping within the mechanical room.
Add: (2) 150 MBH boilers, (2) hot water pumps, expansion tank, air separator, etc. on a roof skid.
Provide: 30 ton packaged AC unit to consist of outside air intake damper section , mixed air section with connection to return air plenum, MERV-8 pre-filters, MERV-13 final filters, DX, coil and heating coils.
Gas service to be expanded to allow for larger load than currently installed.

(+) *Reduction in campus distribution piping*
(=) *deferred cost for city hall HVAC system*
(-) *Poor energy performance*
(-) *Combustible energy source (gas)*
(-) *Increased long-term energy costs*

Mechanical Distribution

Above-head
Replace: underfloor system with standard terminal units. Approximately 15 terminal units are required.
Provide: Hydronic reheat is required for terminal units with Option 1 and Option 2. Electric resistance heat is required for Option 3.
Requires: 1' Additional height to building (10,000sf exterior enclosure), approximately 60,000 sf of compacted site fill to bring slab on grade to 100 year flood level requirement. (101.98' ASL)

(-) *Requires increased depth to serve the building*
(-) *System is louder*
(-) *Above head distribution requires higher velocity, less comfortable and higher energy use.*

Mechanical Screening - Roof

Metal Panel Screening enclosure on roof
Remove: Acoustical fence in West Yard.
Provide: 8' high wood fence in West Yard

(+) *Elimination of acoustical louvers at rear-yard west Mech enclosure*
(-) *Additional structure required to support screen, sim to roof well design*
(-) *Screen is visible from exterior and neighboring vantage points*

RECOMMENDED, BALANCED OPTION

Exterior Windows

Curtain Wall: Painted Aluminum Curtain Wall at North entry, two operable doors in lieu of four. CW also located at East and South walls
Kawneer 1600 thermally broken frame 2 1/2"W, 7 1/2"D, height per original bid documents
Remove: 2x6 steel tube support at north elevation.

(+) *Simplified management of acoustic and security concerns*
(+) *Maintains indoor/outdoor program flexibility*

Painted Aluminum Storefront at west elevations.

(-) *Reduced Thermal performance*
(-) *Requires additional wood rainscreen wall*

Exterior Glazing

Solarban 70XL in lieu of SB72
1" IGU Includes: 1/4" Starphire outer lite, 1/2" airspace, 1/4" Clear inner lite.
U-Value: 0.28, SHGC: 0.27, VLT: 64%

(+) *Comparable Thermal performance*
(-) *Reduced daylighting capability*
(-) *Greener reflective hue, less transparent*

Mechanical System

Air source heat pump with Air Handler
Reduce: Size of air source heat pump capacity from 120 to 30 tons. Ref. Multistack ARA-030XN.
Revise: AHU from Energy Labs to more cost effective option with same capacity as currently designed, 10,000 CMF / 350 MBH Heating
Remove: Site Piping

(+) *Reduction in campus distribution piping*
(+) *Improved energy performance*
(+) *All-electric service, simplified energy sourcing, renewable.*
(+) *Reduced long-term energy costs*
(=) *deferred cost for city hall HVAC system*
(-) *Air Handler physical dimensions may increase, occupying more roof area.*

Mechanical Distribution

Underfloor – Terminal Units in lieu of fan-powered diffusers. Approximately 10 underfloor terminal units are required. Hydronic reheat is required for terminal units with Option 1 and Option 2. Electric resistance heat is required for Option 3.

(+) *ability to zone the library heating and cooling*
(+) *reduced acoustic interference*
(+) *Increased thermal comfort*
(+) *reduced energy load*
(-) *more expensive than above-head distribution*

Mechanical Screening - West Side

Roof Equipment Well & West Acoustical fence remain
Acoustical Louver fence requirement remains at rear-yard west Mech enclosure

(-) *Safety and Maintenance issue with exposed Acoustical Louvers*
(-) *Doesn't meet original design intent, industrial material finish adjacent historic Town Hall.*

PRICING ALTERNATES / DEFERRED DESIGN

Mechanical System

Packaged AC Unit with Electric Heat, requires Roof Mounted PV
Remove: Air source heat pump, site piping and main distribution piping within the mechanical room, all distribution piping.
If Underfloor distribution system is utilized, gravity ventilators remain
If Above-head distribution system is utilized, gravity ventilators remain.
Add: 20kW of PV to offset heating load. This is required to provide code compliance for this option.
Provide: 30 ton packaged AC unit to consist of outside air intake damper section , mixed air section with connection to return air plenum, MERV-8 pre-filters, MERV-13 final filters, DX coil and electric heat.

(+) *Reduction in campus distribution piping*
(+) *Improved energy performance*
(+) *All-electric service, simplified energy sourcing, renewable.*
(+) *Reduced long-term energy costs*
(=) *deferred cost for city hall HVAC system*
(-) *Air Handler physical dimensions will increase, occupies more roof area*

Mechanical Distribution

Underfloor Air System, with individual fan powered diffusers, per bid set drawings

(+) *Maximum heating/cooling zoning flexibility & control*
(+) *increased energy efficiency*
(+) *Improved acoustic performance*
(+) *Displacement air, maximum occupant comfort*
(-) *more expensive than above-head distribution*

Mechanical Screening - West Side

West Acoustical fence remains with wood cladding
Acoustical Louver fence requirement remains at rear-yard west Mech enclosure
Provide: Acoustical louver fence with wood Cladding at Fence

(+) *Meets original design intent*
(+) *Improved durability and safety, no exposed louvers*

ATHERTON CIVIC CENTER

City Council Meeting August 17, 2018

Library Value Engineering Options

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100% CD BID DRAWINGS DESIGN

BARE BONES + REDUCED SF

RECOMMENDED, BALANCED OPTION

PRICING ALTERNATES / DEFERRED DESIGN

Plumbing

Gendered Toilet Rooms with wall partitions to ceiling.
Includes: Each stall with dedicated exhaust, lighting, sprinkler.

Poured concrete trough wash basin

Electrical

Microgrid with 3 battery units . To provide emergency power for 8 hours of Library operation and 96 hours of Heat Pump operation.
Includes: batteries, inverters and conduit and panel distribution.

PV system for Net Zero operation of Library
Includes: Panels and roof-mounted racking system, conduits and power-inverters

Plumbing

Gendered Toilet Rooms with toilet partitions
Remove: Floor to ceiling partitions, dedicated exhaust, lighting & sprinklers removed for each stall. Plan the toilet fixture spacing to allow for future renovation of space to upgrade to Non-gendered Toilet room infrastructure.

- (+) reduced cost
- (+) Short term energy reduction
- (-) Doesn't meet requirement from SMCL group & Council
- (-) Less flexible use of space

Standard ADA compliant lavatory
Remove: Poured concrete trough wash basin

- (-) More difficult Maintenance
- (-) Decreased flexibility

Electrical

Delete Microgrid
Remove: Microgrid and all conduit infrastructure, inverters and panels.

- (+) Less infrastructure, increased service room space
- (-) Less energy adaptability
- (-) No future storage capacity,
- (-) Inability to shunt power to PD

Provide PV-ready conduit and roof flashing in lieu of PV panels and stanchions

- (+) Future ability to generate power
- (=) Code compliant
- (-) Limits energy independence, ability to shunt power to Police Department in outage

Electrical

Delete Microgrid, but maintain conduit infrastructure
Provide: conduit infrastructure and associated distribution panels/disconnects for the batter system. (excluding battery inverters and microgrid control equipment (Spirae controls and utility relays) and associated wiring.

- (=) Potential energy adaptability
- (=) Potential future storage capacity
- (=) Future ability to shunt power to PD
- (-) Infrastructure installed without immediate benefit

PV system as designed.

- (+) Net Zero Energy

Plumbing

Non-Gendered Toilet Room with full-height toilet partitions in lieu of walls. Include dividing wall per current design due to direction from Council.

- (+) Meets SMCL & Council requirement
- (+) Most flexible use of space
- (-) Increased cost and energy demand

PV & Stanchions

Provide: library roof mounted PV & stanchions, per Bid Drawings

- (+) Ability to generate power for library, direct support of electrical systems design

ATHERTON CIVIC CENTER

City Council Meeting August 17, 2018

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BARE BONES + REDUCED SF

RECOMMENDED, BALANCED OPTION

PRICING ALTERNATES / DEFERRED DESIGN

Site			
North Deck - Adjacent Town Hall & Children's	North Deck Removed	Maintain Original Front Deck Design	North Deck Reduced in size
<p>North Deck: Garapa wood deck from Library connected to Historic Town Hall. <i>Includes:</i> Integral benches and stair access to Historic Town Hall</p>	<p>North Deck Removed Provide: Pavers and landscape planting between Town Hall & library, maintain ramp entry design</p> <p><i>(+) reduced demolition of Town Hall Site</i> <i>(+) supports removal of operability, doors, in north facing curtain wall</i> <i>(-) Reduction of library & heritage program space</i> <i>(-) Loss of flexibility indoor outdoor space for library</i> <i>(-) Loss of direct connection to Town Hall</i></p>	<p>North Deck in Garapa per original bid documents. Provide: Ramp and north entry deck per bid drawings.</p> <p><i>(+) Increases openness between library children's area and exterior site</i> <i>(+) Maintains library & heritage program space</i> <i>(+) Allows flexibility for indoor/outdoor space for library</i> <i>(+) Provides direct connection to future Town Hall</i> <i>(-) Requires modular installation to remove sections for future Town Hall construction</i></p>	<p>North Deck reduced to 1000 sf, previously 4000sf Provide: Pavers and landscape planting between Town Hall & library, maintain ramp entry design</p> <p><i>(+) reduced demolition of Town Hall Site</i> <i>(+) supports reduction of operability, doors, in north facing curtain wall</i> <i>(-) Reduction of library & heritage program space</i> <i>(-) Reduced flexibility for indoor/outdoor space for library</i> <i>(-) Loss of direct connection to Town Hall</i></p>
South Deck	South Deck Removed	South Deck Removed	Maintain Original South Deck Design
<p>Quiet Reading Deck : Garapa wood deck with integral benches and stairs. Also serves as second exit from Library.</p>	<p>South Deck Removed: Provide: Pavers and landscape planting at south edge of building, maintain deck for exiting to path.</p> <p><i>(+) reduced structure for deck</i> <i>(-) Reduction of library program space</i></p>	<p>South Deck removed. Provide: Exit Pathway and landscaped seating area</p> <p><i>(+) Library program space included</i> <i>(-) Program space not at adjacent grade to Adult Quiet Reading room.</i></p>	<p>South Deck Design Maintained Provide: design per bid documents</p> <p><i>(+) Increased flexible indoor/outdoor space for Adult quiet reading room</i> <i>(+) Library program space included</i></p>
West Deck	West Decks Removed	West Deck Removed at Library Office	West Decks Removed
<p>Maker Space and Library Office Decks : Garapa wood deck with integral benches. Provides exterior exit from Maker Space.</p>	<p>West Decks Removed: Provide concrete stoop and continue PV-3 pathway to Maker Space.</p> <p><i>(=) Defers construction of decks</i> <i>(-) No outdoor program area for Maker Space.</i></p>	<p>West Decks Remove at Library Offices . Deck at Maker space to remain Provide concrete stoop and continue PV-3 pathway to Maker Space.</p> <p><i>(=) Defers construction of decks</i> <i>(-) No outdoor program area for Maker Space.</i></p>	<p>West Decks Removed: Provide concrete stoop and continue PV-3 pathway to Maker Space.</p> <p><i>(=) Defers construction of decks</i> <i>(-) No outdoor program area for Maker Space.</i></p>
Site Planting & Irrigation	Site Planting & Irrigation	Site Planting & Irrigation	Site Planting & Irrigation
<p>Conventional design with ground cover, trees, shrubs and irrigation.</p>	<p>Hydroseed typical planting type, irrigation included</p> <p><i>(-) Requires irrigation system</i></p>	<p>Combination Hydroseed and Native Planting</p> <p><i>(=) reduced irrigation demand</i></p>	<p>Drought tolerant native planting palette</p> <p><i>(+) low-demand irrigation bubbler system</i></p>
Site Fence Materials	Site & Mechanical Fence Material	Site & Mechanical Fence Material	
<p>Metal frame with Garapa wood horizontal slats</p>	<p>Cedar Fencing in lieu of Garapa <i>(-) Less durable, requires more maintenance</i> <i>(-) Lighter wood, greater deflections</i></p>	<p>Cedar Fencing in lieu of Garapa <i>(+) Consistent with other exterior wood species, at the rainscreen, decks.</i> <i>(-) Less durable, requires more maintenance</i> <i>(-) Lighter wood, greater deflections</i></p>	
Site Furnishings	Site Furnishings	Site Furnishings	
<p>Low table and chairs on Front Deck. Bike racks and bike repair station with air pump.</p>	<p>Remove site furniture (on decks) and bike repair station.</p> <p><i>(-) Deferred cost for furnishings</i></p>	<p>Remove site furniture (on decks), maintain bike repair station.</p> <p><i>(+) Supports Class-C Bike path designation on-site</i> <i>(+) Community asset & teaching tool</i> <i>(-) Deferred cost for furnishings</i></p>	
Shade Garden	Shade Garden Removed	Shade Garden Deferred	
<p>Shade Garden with Garapa fence , 6' high, boulders and salvaged redwood seating logs. 1,800 sf</p>	<p>Shade Garden Removed , do not construct shade garden Remove: 1,800 sf shade garden located east of the existing historic Town Hall Building. Remove fence between shade garden and Maker Space</p> <p><i>(-) Library outdoor children's programming to be hosted elsewhere</i> <i>(-) No screened protected outdoor space available onsite</i></p>	<p>Shade Garden Deferred , do not construct shade garden, but provide future infrastructure. Remove Fence between shade garden & Maker Space. Provide: Electrical and domestic water connections to support future 1,800 sf shade garden.</p> <p><i>(+) Future install of shade garden made easier, more cost effective</i> <i>(-) Library outdoor children's programming to be hosted elsewhere</i> <i>(-) No screened protected outdoor space available onsite</i></p>	

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Library Value Engineering Options

(+) Good Value - Minimal Impact**(=) Balanced Value - Includes Trade-offs****(-) Poor Value - Constrains other criteria****100% CD BID DRAWINGS DESIGN****BARE BONES + REDUCED SF****RECOMMENDED, BALANCED OPTION****PRICING ALTERNATES / DEFERRED DESIGN****Interior Assemblies****Ceiling Acoustical Fabric System**

Acoustic stretched fabric ceiling at 13'-6" AFF
1" acoustic backing and fabric wrap, by Eurospan.
NRC: 0.80

Casework

Teak wood veneer casework with solid surface countertops at Public spaces
Sealed plywood casework with solid surface at
Maker Space

Wall Finishes

Acoustical Fabric Panel , Ref: FW-2, NRC: 0.90 at
bookwall and meeting rooms
Acoustical Wood Veneer Paneling , WDW-1, Ref.
Navy Island, NRC: 0.90 at rading room interior
window walls

Interior Glazing / Windows

Teak wood interior window system with inset
acoustic wood panels (see wall finish above)

Furniture**Book Wall Casework**

Teak wood veneer casework + Rakks shelving book wall. Back wall of book wall includes acoustic fabric panels, see Wall Finishes.

Mobile Casework

Custom teak veneer casework for mobile bookshelves, seating and library help desk.

Ceiling - ACT

Acoustical plank ceiling 1x4, 11' AFF. Ref. Armstrong Ultima High NRC w/
Interlude XL HRC Dimensional Tee
Provide: Underdeck black-faced insulation, edge trim
Remove: Eurospan Fabric Ceiling
NRC: Up to 0.80, CAC: 35

(+) Maximized access
(-) Decreased acoustical performance
(-) Detailing and installation at system edges more complicated

Casework

Plastic Laminate casework with solid surface countertop

(+) Widely available
(-) Decreased durability
(-) Difficult to maintain

Wall Finishes

Acoustical Fabric Panel , Ref: FW-2, NRC: 0.90, at interior window walls, in lieu
of wood veneer paneling WDW-1.
Reduce: along book walls

(+) Widely Available
(-) More difficult to maintain

Interior Glazing / Windows

Painted Aluminum Framed Interior windows, painted metal doors . Reduced area
from Bid set.
Remove: Interior Storefront system with wood framing and paneling.
Provide: Wilson Series 200, Aluminum 1 1/2" profile with glazed solid wood doors
to replace glazing by approx. 50% of previous glazing area, incl drop bottoms &
perimeter gaskets at doors. Include wood wall panel at transom only.

(-) Largest reduction in natural daylight distribution to meeting rooms
(-) Reduced Acoustic performance
(-) Larger profiles and limited glazing dimensions

Book Wall Shelving to FF&E**Cantilevered Metal Furniture Shelving System**

Remove: Wood casework + Rakks shelving book wall
Shelving and end panels to be included in FF&E

(=) Assortment of shelf profiles available,
(-) Trims and transitions not included, see pricing alternate

Mobile Furniture in lieu of Casework**Movable Furniture System in lieu of Casework**

Replace: Casework Units: C01, C02, C03, C04 and C05 with furniture. Ref.
Russworld Mobile Shelving unit

(=) Assortment of shelf profiles available,
(-) Trims and transitions not included, see pricing alternate
(-) Metal finish in lieu of wood, louder.

Ceiling - ACT

Acoustical plank ceiling 1x6, 13'-6" AFF. Ref Armstrong Ultima High NRC w/
Interlude XL HRC Dimensional Tee
Provide: Underdeck black-faced insulation, edge trim
Remove: Eurospan Fabric Ceiling

(+) Maximized access
(+) Increased daylight
(+) Increased acoustics related to ceiling height
(-) Decreased acoustical performance related to ACT in lieu of fabric
(-) Detailing and installation at system edges more complicated

Casework

Wood veneer casework with solid surface countertop

(+) Increased durability, workability
(+) Maintains design intent

Wall Finishes

Acoustic Fabric Panels, reduce at bookwalls
Acoustical Wood Veneer Paneling, WDW-1, Ref. Navy Island, NRC: 0.90 remove
at interior window walls.

(+) Not required where books are located at walls
(+) Maintains design intent

Interior Glazing / Windows

Painted Aluminum Framed Interior windows, wood doors with glazing.
Remove: Interior Storefront system with wood framing and paneling
Provide: Wilson Series 200, Aluminum 1 1/2" profile with glazed solid wood doors
to replace 80% of previous glazing area, incl drop bottoms & perimeter gaskets at
doors. Include wood wall panel at transom only.

(+) More profile and window size options
(-) Reduction in daylight distribution to meeting rooms

Book Wall Shelving to FF&E**Cantilevered Metal Furniture Shelving System**

Remove: Wood casework + Rakks shelving book wall
Shelving and end panels to be included in FF&E

(=) Assortment of shelf profiles available,
(-) Trims and transitions not included, see pricing alternate

Mobile Furniture in lieu of Casework**Movable Furniture System in lieu of Casework**

Replace: Casework Units: C01, C02, C03, C04 and C05 with furniture.
Ref. Worden Pinfast Collection, mobile furnishings

(+) Variety of wood veneer finishes available
(=) Assortment of shelf profiles available
(-) Trims and transitions not included, see pricing alternate.

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100% CD BID DRAWINGS DESIGN

BARE BONES + REDUCED SF

RECOMMENDED, BALANCED OPTION

PRICING ALTERNATES / DEFERRED DESIGN

Area Reduction

Area Reductions

Remove Adult Quiet Reading Room , This space is on the south end of the building is approximately 750sf.

(-) *Library usable space is reduced*
 (-) *Space needs to be distributed to other areas to accommodate*

Remove (2) Small Meeting Rooms , These spaces on the south end of the building are approximately 350sf.

(-) *Library usable space is reduced*
 (-) *Space needs to be distributed to other areas to accommodate*

Phasing

IT Scope

IT conduit, wiring and equipment.

Deferred IT Scope

Defer IT Scope
 Remove: IT Scope from project, deferred approval

(-) *Deferred Cost*
 (-) *Requires future coordination*
 (-) *Unpredictable future market costs*

Town Hall Seismic Upgrade & Renovation

Seismic renovation of Town Hall along with Café addition. Removal of existing access ramp, stairs and trash area. Removal of council dias. Renovation of toilet room and Heritage spaces.

Defer Town Hall Seismic Upgrade & Renovation

Defer Town Hall Remodel
 Remove: Seismic upgrade, sitework, fire & electrical upgrades, renovation and expansion to the existing historic Town Hall

(-) *Deferred Cost*
 (-) *Requires future coordination*
 (-) *Unpredictable future market costs*

Demolition of Library

Demolition of library , hazardous material removal and site utility removal/capping per original bid documents

Demolition of Library Under Separate Contract

Demolish Existing Library prior to Construction

(+) *Maintains more site area for Library construction*
 (+) *Utilize temporary housing*
 (-) *Possible risk if demo occurs prior to bid completion*

Library & City Hall as one Contract

Library and City Hall to be constructed as one project.

Library Construction Under Separate Contract

Complete Library prior to City Hall

(+) *Maintains more site area for Library construction*
 (+) *Utilize temporary housing*
 (+) *Opportunity for additional bidders*

Benchmarking

CalGreen Requirements

Prescriptive approach to meet CalGreen/Title 24 requirements

(+) *Less restrictive than performance approach*
 (+) *Allows systems/assembly trade offs to meet goals*
 (-) *Must run energy model to validate system/assembly changes.*

Provide Only CalGreen Mandatory Requirements

Remove Task lighting for IEQ6.1 (Controllability of Systems – Lighting).

(-) *Reduction in occupant control*
 (-) *Less energy efficient*

Remove PV Provisioning

Other items such as EA2 (On-Site Renewable Energy) and EA5 (Measurement and Verification) would need to be **provisioned for a future PV system** under CalGreen requirements.

Remove: PV modules, inverters and associated AC and DC wiring.
 (-) *Limited future energy adaptability*

LEED Requirements

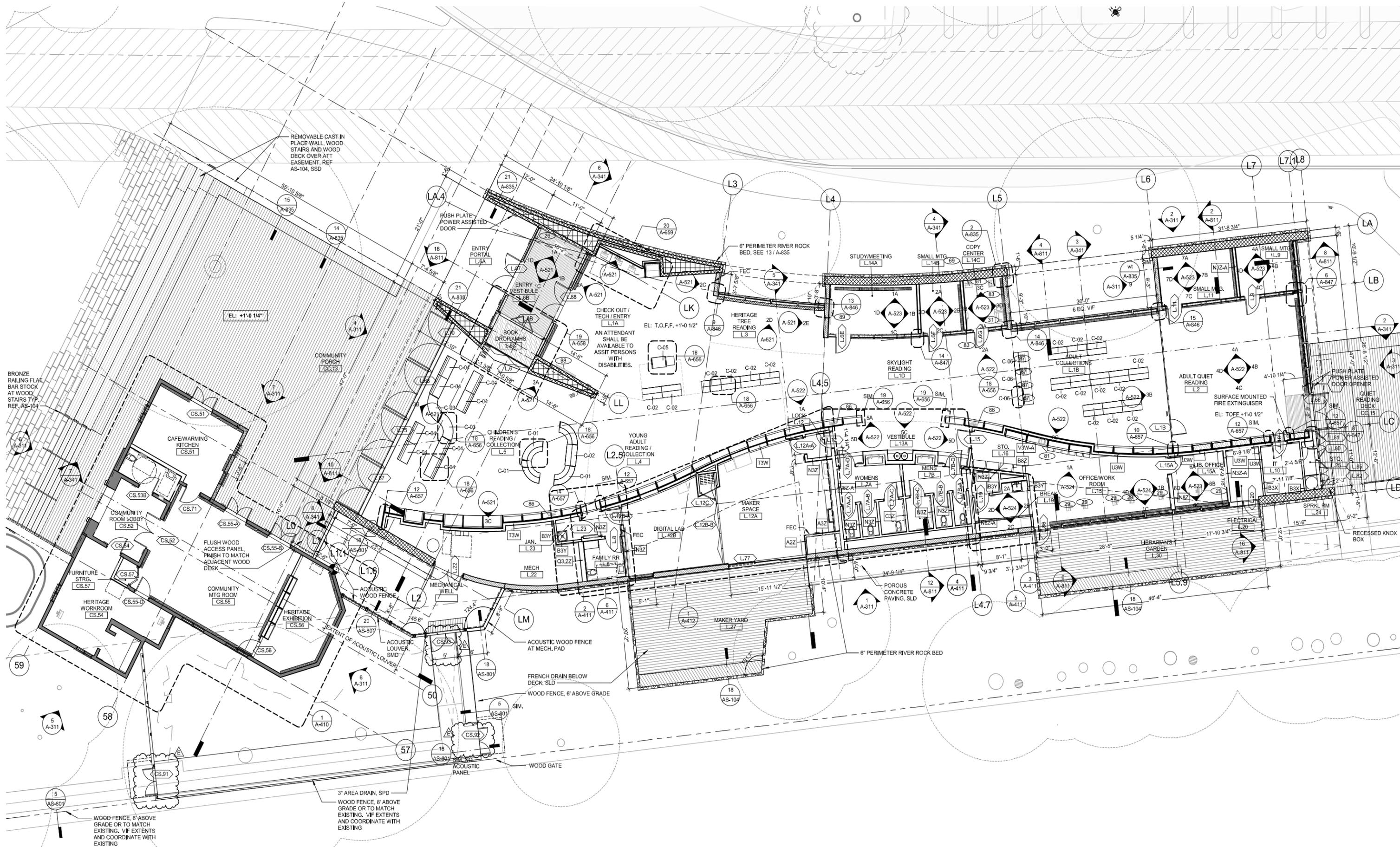
Delete or reduce LEED Requirements (not recommended)

(=) *1989 Waste Management Act already requires 50% diversion from landfill*

VE Options Considered - Not Recommended

Change wood deck from Garapa to Cedar

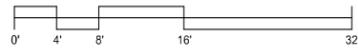
Maintenance and durability of Garapa provided limited savings against cedar



REMOVABLE CAST IN PLACE WALL, WOOD STAIRS AND WOOD DECK OVER ATT EASEMENT, REF AS-104, SSD

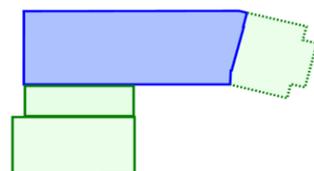
BRONZE RAILING FLAT BAR STOCK AT WOOD STAIRS TYP. REF. AS-104

1 FLOOR PLAN LIBRARY - LEVEL 1
1/8" = 1'-0"

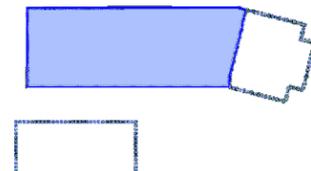


100% CD BID DRAWINGS DESIGN		REDUCED PROGRAM, MATERIALS & SYSTEMS / DEFERRED DESIGN		RECOMMENDED OPTION REDUCED MATERIALS & SYSTEMS		PRICING ALTERNATES / DEFERRED DESIGN	
Exterior Assemblies / Superstructure							
2 Story Building(s)	Police, Administration and Community Development Center are 2 story building. Council Chamber is single story.	Build Police Dept. defer Administration & Comm. Development Center (7266 sf), remove Lobby (3606 sf)	\$7,374,196	Existing building w/reduced finishes (itemized below)	Remove Lobby, Level 2 walkway Remove Clay Tile over Level 1 roof	\$1,282,964	
Exterior Materials	Cement Plaster walls w/precast base and window sills. Decorative concrete at arched openings. Clay tile roofs with wood deck overhang and wood rafter tails. Aluminum window systems with steel windows and doors at Lobby	Exterior glazing Solarban 70XL Reduce Security Glazing to Level 3 Eliminate Exterior Mock-up	\$92,900	Aluminum storefront windows in lieu of steel Exterior glazing Solarban 70XL Reduce Security Glazing to Level 3 Eliminate Exterior Mock-up Reduce exterior precast elements Asphalt Shingle Roof in lieu of Clay Tile	Clay tile Roof as designed in lieu of Asphalt Shingles	\$291,879	
Ancillary Building & Secure Parking	CMU (concrete block) walls with cement plaster finish	CMU walls at Ancillary & Secure Parking, eliminate plaster finish & precast cap. Secure Parking wall extends along Fair Oaks to Ancillary Building	\$81,734				
Building Systems							
Mechanical System and Distribution	Campus air source heat pump. Radiant ceilings and Lobby floor.	VRF system w/o Radiant Ceiling and floors (PD only)	\$200,385	VRF system w/o Radiant Ceiling and floors	Add air source heat pump for City Hall, remove site piping and downsize pumps	\$572,392	
System Monitoring	All System monitoring thru single program. Control of systems thru individual programs	Per original scope HVAC & Lighting monitored and controlled thru single program. All other systems to be monitored & controlled thru individual programs		Per original scope HVAC & Lighting monitored and controlled thru single program. All other systems to be monitored & controlled thru individual programs			
Electrical		VE Lighting Remove site spare conduits	\$25,918	VE Lighting Remove site spare conduits			
Emergency Power	500 kw Generator with 4000 gal fuel supply				Microgrid system for Emergency Power in lieu of Generator and Fuel Storage Tank system	\$1,654,545	
Alternate PV System	Alternate PVs and supports, Fall Arrest system and changing roof below to Asphalt Shingles				Provide & Install PVs, Replace clay tile roof with asphalt shingles add savings (-\$59,258)	\$650,300	
Site							
Planting & Irrigation	Ground cover, trees, plants and irrigation.	Hydroseed in lieu of planting as designed	\$161,703	Hydroseed in lieu of planting as designed			
Furnishing & Fencing	Site Benches, chairs and table Garapa wood fence at New Ashfield Road property line	Remove site furnishings Change wood fencing to Cedar	\$30,652	Remove site furnishings Change wood fencing to Cedar			
Corp Yard Scope	Canopies over waste staging & mixing area. Metal fencing & gates at new boundry. Relocate (e)generator. Demolish (e) Public Works bldg.	Delete Corp Yard canopies, fencing & paving	\$837,000	Delete Corp Yard canopies, fencing & paving			
Interior Assemblies							
Lobby Finishes	Acoustic fabric ceiling between wood clad beams. Iron railing system with teak top rail. Acoustic wood panel ceiling at Level 1 bridge. Wood sliding gate at Comm. Dev. Ctr. Veneer plaster to match acoustic Plaster. Tile, carpet & wood flooring	see above		Eliminate Acoustic Fabric Ceiling, acoustic wood panel ceiling, veneer plaster & wood cladding & wood beams Simplify railing and replace teak with alternate wood Eliminate Sliding wood gate at Comm. Dev. Reception			
Casework Finishes	Wood veneer casework			Reduce casework at Comm. Dev. Office (provide as FF&E)	Plastic Laminate finish on casework (additional savings)	\$13,078	
Secure Walls	Dimising walls between PD & Lobby are security Level 5	Reduce to security Level 3	\$142,895	Reduce to security Level 3			
Ceiling Fans	Fans located in Office spaces, fitness & breakrooms	Remove ceiling fans	\$37,400	Remove ceiling fans			
Area Reduction							
Council Chamber		Defer Council Chamber	\$1,654,545		Defer Council Chamber	\$1,654,545	
Administrative/Comm. Development Areas		Eliminate Temporary Admin Trailer pad & utility connections	\$38,745	Eliminate Temporary Admin Trailer pad & utility connections			
Police Areas							
Phasing							
Reduced Phasing		Estimated Saving for Reduce Phasing	\$400,000				
Reconciled Estimate							
Building	\$24,208,000						
Site	\$8,454,000						
Total	\$32,666,000	Estimated Savings	\$11,078,073	Estimated Savings	\$2,791,270		
Construction Cost Goal							
Target	\$24,000,000						
Contingency (10%)	\$2,400,000						
Goal	\$21,600,000	Estimated Construction Cost	\$21,587,927	Estimated Construction Cost	\$29,874,730		
Gap	\$11,066,000	Budget Gap	\$12,073	Budget Gap	\$8,274,730		

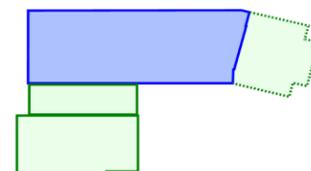
Summary Notes:
 1. All Estimated Cost based upon information provided by Mack5, including Reconciled Construction Cost Estimate
 2. Italicized cost are only removed from Construction Cost and will be accounted for in project soft cost.
 3. Cost shown are only construction cost and do not include any additional fees.



PROJECT AS BID



REDUCED PROGRAM/DEFERRED



INCREASE BUDGET

ATHERTON CIVIC CENTER

PMC Meeting, August 15, 2018

City Hall Value Engineering Descriptions

(+) Good Value - Minimal Impact
 (=) Balanced Value - Includes Trade-offs
 (-) Poor Value - Constrains other criteria

100% CD BID DRAWINGS DESIGN

REDUCED PROGRAM, MATERIALS & SYSTEMS / DEFERRED DESIGN

RECOMMENDED OPTION REDUCED MATERIALS & SYSTEMS

PRICING ALTERNATES / DEFERRED DESIGN

Exterior Assemblies / Superstructure

Essential Service Building

City Hall and Ancillary Building are designed as Essential Service Building with 1.5 importance factor used in the structural design of building and attachment of equipment. Only Police Department and EOC need to be designed as Essential Service

Material: Clay Tile Roof Assembly

Hipped roof with Clay Tile at Roofs.

Material: Exterior Windows

Steel window and doors at Lobby levels 1 and 2.

Secure Windows at Police Dept. Level 1.

Secure exterior windows and Reception Desk windows are design with Ballistic Level 5 glazing and frames. Protects against automatic rifles.

Material: Exterior Glazing

Solarban 72,
 1" IGU Includes: 1/4" Starphire outer lite, 1/2" airspace, 1/4" Starphire inner lite.
 U-Value: 0.29, SHGC: 0.30, VLT: 71%

Material: Precast Concrete Elements

Precast Concrete sills, bases & entry arch decoration

Ancillary Building and Secure Parking

CMU walls with Cement Plaster Finish, on exterior side of walls. Metal deck on CMU walls and beams at larger spaces. CMU walls along north side of Police Secure Parking with cement plaster finish on public side of wall. Walls topped with precast concrete cap.

New Police Facility defer Admin & Comm. Dev. Center

Build new Police Building and Secure Parking. Defer City Hall: Administration and Community Development Center and house in temporary facilities

(+) Removes approximately 10,500 sf of new construction
 (+) Simplifies phasing.
 (=) Defer building of new Admin/Comm. Dev
 (-) Housing of City Administration and Community Development Center in temporary facilities for unknow length of time.

High Gable Roof Clay Tile only

Eliminate clay tile roof at Level 1 roofs. Provide parapet and built-up roofing. Eliminate rafter tails.

(+) Simplify structure
 (+) Reduct clay tile
 (+) Reduce soffit, gutters and rafter tails
 (-) May need fall protection or raised parapet

Exterior Windows

Reduce secure windows to ballistic Level 3.

(+) Improved light transfer thru windows
 (-) Decreases in security protection (handgun)

Exterior Glazing

Solarban 70XL in lieu of SB72
 1" IGU Includes: 1/4" Starphire outer lite, 1/2" airspace, 1/4" Clear inner lite.
 U-Value: 0.28, SHGC: 0.27, VLT: 64%

(+) Comparable Thermal performance
 (-) Reduced daylighting capability
 (-) Greener reflective hue, less transparent

CMU Wall no Cement Plaster

CMU wall, no cement plaster finish. Provide CMU "4" soap" at top of walls. Provide additional planting at walls

(+) Wall cap to match CMU
 (+) Additional planting softens wall
 (-) More commercial material.
 (-) Will take several years for plants to grow in

Essential Service Building with Reduced Materials

See Exterior and Interior Finish descriptions of material reductions

Asphalt Shingle Roof

Asphalt Shingles in lieu of clay tile

(+) no redesign of roof required
 (+) elevator and HVAC equipment fits below roof
 (-) does not meet original design intent

Exterior Windows

Painted Aluminum Storefront and doors at Lobby Entries. Aluminum windows at Level 2

(+) Matches storefront system at Level 1 PD Lobby entrance .
 (+) Matches window system at Level 2.
 (-) Departs from design intent

Reduce secure windows to ballistic Level 3.

(+) Improved light transfer thru windows
 (-) Decreases in security protection (handgun)

Exterior Glazing

Solarban 70XL in lieu of SB72
 1" IGU Includes: 1/4" Starphire outer lite, 1/2" airspace, 1/4" Clear inner lite.
 U-Value: 0.28, SHGC: 0.27, VLT: 64%

(+) Comparable Thermal performance
 (-) Reduced daylighting capability
 (-) Greener reflective hue, less transparent

Exterior Precast

Remove precast concrete at base and arched openings. Stucco finish in lieu of precast at arched openings. Extend concrete curb at base. Delete precast concrete cap at CMU.

(-) Provides protection of finishes at corners .

Separate Building with Level 2 Bridge

Remove lobby spaces at Levels 1 and 2. Provide walkway connecting Level 2 Admin/Comm. Dev. building.

(+) No additional elevator and stair required.
 (=) Design of walkay parapet/railing & finishes required.
 (-) Open walkway between buildings
 (-) Some redesign of entries into each level

Clay Tile Roof as designed

Retain Clay Tile Roof as designed. Where PVs installed provide Asphalt Shingles (cost savings included in PVs below)

(+) no redesign of roof required
 (+) elevator and HVAC equipment fits below roof
 (-) complex roof framing

100% CD BID DRAWINGS DESIGN

REDUCED PROGRAM, MATERIALS & SYSTEMS / DEFERRED DESIGN

RECOMMENDED OPTION REDUCED MATERIALS & SYSTEMS

PRICING ALTERNATES / DEFERRED DESIGN

Building Systems

Mechanical System

120 ton Air source heat pump for campus with **air handler on roof for library** .
 Piping runs and pumps for cold and hot water supply and return to City Hall.

Mechanical Distribution

Radiant Panel Ceiling at spaces through building. Allows for tempering of spaces to lower heating and cooling requirements.

Radiant Floor at Level 1 Lobby. Provides for tempering of space to lower heating and cooling requirement

System Monitoring

Single system provides monitoring of HVAC, Lighting, Power, Irrigation and Water use along with Life Safety systems.

Adjustments to systems via each system software

Electrical

Emergency Power

Diesel run emergency generator with 1,000 gallon belly tank and 3,000 gallon above grade fuel tank.
 Require monthly testing and annual permit renewal by BAAQMD and MPFPD.
 (Microgrid is Bid Alternate)
 Required 96 hours of emergency power and 128 hours of fuel supply.

PV System

PV system for City Hall building

Includes: Panels and roof-mounted racking system, conduits and power-inverters
 (PV system is Bid Alternate)

Mechanical System

VRF system without Radiant Ceiling and Floors
Remove: DOAS air handlers to be removed
Add: (3) outside air fans with MERV-13 filter bonaks
Provide: 60 tons of VRF condensing units, dedicated fan coil in each room.

- (+) Reduction in campus distribution piping
- (+) Removes radiant ceiling and floors
- (+) Duct sizes do not increase.
- (+) All-electric service, simplified energy sourcing, renewable.
- (+) Reduced long-term energy costs
- (=) deferred cost for city hall HVAC system
- (-) VRF condensing unit will need to be accommodated.

Mechanical Distribution

Eliminate Radiant Panel Ceilings and floor
Remove: radiant panel ceilings and radiant floor system with associated piping and pumps.

- (+) Eliminates piping to radiant ceiling and floors

System Monitoring

Limit system monitored. Provide combined monitoring of HVAC and Lighting only.

- (-) Simpler system
- (=) Monitoring of power, water and irrigation systems through each system software,

PV Ready all roof areas

Provide PV-ready conduit and roof flashing in lieu of PV panels and stanchions

- (+) Future ability to generate power
- (=) Code compliant
- (-) Limits energy independence, ability to power Police Department in outage

Mechanical System

VRF system without Radiant Ceiling and Floors
Remove: DOAS air handlers to be removed
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- (=) deferred cost for city hall HVAC system
- (-) VRF condensing unit will need to be accommodated.

Mechanical Distribution

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Remove: radiant panel ceilings and radiant floor system with associated piping and pumps.

- (+) Eliminates piping to radiant ceiling and floors

System Monitoring

Limit system monitored. Provide combined monitoring of HVAC and Lighting only.

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- (=) Monitoring of power, water and irrigation systems through each system software,

PV Ready all roof areas

Provide PV-ready conduit and roof flashing in lieu of PV panels and stanchions

- (+) Future ability to generate power
- (=) Code compliant
- (-) Limits energy independence, ability to power Police Department in outage

Mechanical System

Air source heat pump with Air Handler
Provide: 60 tons air source heat pump for City Hall Ref. Multistack ARA-030XN.
Remove: Site Piping and downsize pumps
Remain: Radiant ceiling and floors as currently designed.

- (+) Reduction in campus distribution piping
- (+) Improved energy performance
- (+) All-electric service, simplified energy sourcing, renewable.
- (+) Reduced long-term energy costs
- (-) Add Air Handler cost to City Hall.
- (-) Locate near City Hall

Mechanical System

Retain Campus Heat Pump at Library

- (+) No redesign of system required.
- (+) Cost savings over City Hall only Heat Pump
- (-) Larger Heat Pump connected to Emergency Power
- (-) Piping runs between buildings

Electrical Alternate

Microgrid with 12 battery units. To provide emergency power for 96 hours of Police/EOC operation.
 Includes: batteries, inverters and conduit and panel distribution.

- (+) Less maintenace than Generator and Fuel Tank.
- (+) Energy adaptability
- (+) Storage capacity

Electrical Alternate

Provide and Install PV system.

Includes: Panels and roof-mounted racking system, conduits and power-inverters.
Replace: Clay tile roof with Asphalt Shingle where PVs installed.

- (+) Ability to generate and offset power cost
- (+) With Microgrid can provide power beyond required time frame.

100% CD BID DRAWINGS DESIGN

REDUCED PROGRAM, MATERIALS & SYSTEMS / DEFERRED DESIGN

RECOMMENDED OPTION REDUCED MATERIALS & SYSTEMS

PRICING ALTERNATES / DEFERRED DESIGN

Site

Site Planting & Irrigation

Conventional design with ground cover, trees, shrubs and irrigation.

Site Furnishings

Low tables and chairs at public courtyard. Benches at City Hall Entries.

Fence along Ashfield Road property line. Metal frame with Garapa horizontal slats.

Corp Yard Scope

Demolish Public Works building and relocated generator. New aluminum fencing around perimeter. Canopies over vehicle wash, waste staging and mixing areas. Vehicle charging stations for two cars.

Site Planting & Irrigation

Hydroseed typical planting type, irrigation included

(-) Requires irrigation system
 (-) Less variety
 (-) Does not provide seasonally expressive design intent

Site Furnishings

Remove site furniture

(-) Deferred cost for furnishings

Cedar Fencing in lieu of Garapa

(-) Less durable, requires more maintenance.

Remove Corp Yard Scope

Remove new fencing, canopies and electric vehicle charging stations

(-) Vehicle wash area, Waste staging and mixing areas non-compliant with BARWQCD

Site Planting & Irrigation

Hydroseed typical planting type, irrigation included

(-) Requires irrigation system
 (-) Less variety
 (-) Does not provide seasonally expressive design intent

Site Furnishings

Remove site furniture

(-) Deferred cost for furnishings

Cedar Fencing in lieu of Garapa

(-) Less durable, requires more maintenance.

Remove Corp Yard Scope

Remove new fencing, canopies and electric vehicle charging stations.

(-) Vehicle wash area, Waste staging and mixing areas non-compliant with BARWQCD

Site Planting & Irrigation

Combination Hydroseed and Native Planting

(+) reduced irrigation demand

100% CD BID DRAWINGS DESIGN

REDUCED PROGRAM, MATERIALS & SYSTEMS / DEFERRED DESIGN

RECOMMENDED OPTION REDUCED MATERIALS & SYSTEMS

PRICING ALTERNATES / DEFERRED DESIGN

Interior Assemblies

Ceiling Acoustical Fabric System

Acoustic stretched fabric ceiling at Lobby Level 2
 1" acoustic backing and fabric wrap, by Eurospan.
 NRC: 0.80

Ceiling Acoustic Wood Panel & Beams

Acoustic wood panel ceiling (AWC-1) & beams at Lobby Level 1 and Comm.
 Dev. Counter
 AWC-1: Navy Island
 NRC: 0.90

Railings and Wood Trim

Ornamental wrought iron railings with teak wood trim at Lobby

Casework

Teak wood veneer casework with solid surface countertops at Lobby spaces
Wood veneer casework with solid surface countertops at back of house spaces

Wall Finishes

Veneer Plaster, IP-1 at Lobby to match look and texture of Acoustic Plaster IP-2.

Ceiling Fans

Ceiling Fans located in offices and training rooms.

Secure Walls

Secure walls designed with ballistic **Level 5 protection**.

Protects against automatic rifles.

Remove Ceiling Fans

Remove all ceiling fans. Electrical connection to remain for later installation.

(-) Removes occupant ability to control comfort level. More reliance on HVAC system.

Secure Walls

Provide secure walls with ballistic **Level 3 protection**.

(+) Simplifies construction
 (-) Decreases in security protection (handgun)

Eliminate Acoustic Fabric Ceiling and Wood Beams

Remove Sloped Acoustical fabric ceiling 1x6,Ref Armstrong Ultima High NRC w/ Interlude XL HRC Dimensional Tee
 Provide: Underdeck black-faced insulation, edge trim
 Remove: Eurospan Fabric Ceiling and wood beams

(+) Maximized access
 (+) Increased daylight
 (+) Increased acoustics related to ceiling height
 (-) Decreased acoustical performance related to ACT in lieu of fabric
 (-) Detailing and installation at system edges more complicated

Eliminate Acoustic Wood Ceiling and Wood Beams

Remove Acoustical Wood panel ceiling replace with 1x6,Ref Armstrong Ultima High NRC w/ Interlude XL HRC Dimensional Tee
 Provide: Underdeck black-faced insulation, edge trim
 Remove: Navy Island Ceiling and wood beams

(+) Maximized access
 (+) Increased acoustics related to ceiling height
 (-) Decreased acoustical performance related to ACT in lieu of fabric
 (-) Detailing and installation at system edges more complicated

Simplify Railing and Trim

Simplify railing design and replace teak wood trim with alternate wood.

Casework

Wood veneer casework with solid surface countertop for all casework. Reduce casework and move to FF&E. Remove wood sliding screen at Community Development Reception Desk

(+) Increased durability, workability
 (+) Maintains design intent

Wall Finishes

Veneer Plaster, remove at lobbies, paint to match Acoustic Plaster IP-2 Acoustic Plaster wall to remain.

(+) Reduces cost
 (-) Texture of painted walls different than Acoustic Plaster wall

Remove Ceiling Fans

Remove all ceiling fans. Electrical connection to remain for later installation.

(-) Removes occupant ability to control comfort level. More reliance on HVAC system.

Secure Walls

Provide secure walls with ballistic **Level 3 protection**.

(+) Simplifies construction
 (-) Decreases in security protection (handgun)

Casework

Plastic Laminate casework with solid surface countertop
 Remove wood sliding screen and replace with accordian gate.

(+) Widely available
 (-) Decreased durability
 (-) Difficult to maintain

ATHERTON CIVIC CENTER

PMC Meeting, August 15, 2018

City Hall Value Engineering Descriptions

(+) Good Value - Minimal Impact
 (=)Balanced Value - Includes Trade-offs
 (-) Poor Value - Constrains other criteria

100% CD BID DRAWINGS DESIGN

REDUCED PROGRAM, MATERIALS & SYSTEMS / DEFERRED DESIGN

RECOMMENDED OPTION REDUCED MATERIALS & SYSTEMS

PRICING ALTERNATES / DEFERRED DESIGN

Area Reduction

City Council Chamber (2853 sf)
Lobbies (3606 sf)
Meeting Room (72 sf)
Open Office (183 sf)
General Storage (163 sf)
Tactical & Physical Training (819 sf)
Tactical Training Storage (93 sf)
Officer Resting Rooms (2@ 107 sf = 214 sf)
Computer Equip. Storage (96 sf)
Asphalt Pad and Utility Connections for Temporary Administration Trailer

City Council Chamber (2853 sf)
Lobbies (3606 sf)
Administration (3708 sf)
Community Development Center (3558 sf)

Eliminate Asphalt Pad and Utility Connections for Temporary Administration Trailer

Eliminate Asphalt Pad and Utility Connections for Temporary Administration Trailer

City Council Chamber (2853 sf)

Phasing

IT Scope

IT conduit, wiring and equipment.

Deferred IT Scope

Defer IT Scope
 Remove: IT Scope from project, deferred approval
 (-) *Deferred Cost*
 (-) *Requires future coordination*
 (-) *Unpredictable future market costs*

New City Council Chamber

Construction of new Council Chamber/EOC and associated storage, restrooms and pantry.

Defer New City Council Chamber

Defer construction of new City Council Chamber/EOC
 (=) *Deferred Cost*
 (-) *Requires EOC to occupy Town Hall or Briefing Room*
 (-) *Requires storage space for EOC supplies*
 (-) *Requires future coordination*
 (-) *Unpredictable future market costs*

Benchmarking

CalGreen Requirements

Prescriptive approach to meet CalGreen/Title 24 requirements

(+) *Less restrictive than performance approach*
 (+) *Allows systems/assembly trade offs to meet goals*
 (-) *Must run energy model to validate system/assembly changes.*

Provide Only CalGreen Mandatory Requirements

Remove Task lighting for IEQ6.1 (Controllability of Systems – Lighting).

(-) *Reduction in occupant control*
 (-) *Less energy efficient*

Remove PV Provisioning

Other items such as EA2 (On-Site Renewable Energy) and EA5 (Measurement and Verification) would need to be **provisioned for a future PV system** under CalGreen requirements.
 Remove: PV modules, inverters and associated AC and DC wiring.
 (-) *Limited future energy adaptability*

VE Options Considered - Not Recommended

Separate/Minimize Essential Service Areas

Seismic Joint between PD and Admin/Comm Dev: More costly than base bid

Reduce area in Essential Service Building: Add second level to Ancillary Building, no cost benefit. Would require redesign of PD and Ancillary.

Miscellaneous Cost Savings studied

Provide temporary facility for Administration and Community Development Center in existing City Hall. Cost of remodel would not provide enough cost savings.

Provide EOC in PD : Could not provide enough space without redesign of future council chamber and providing separation of EOC from PD secure areas.

Construct Ancillary building w/Metal Studs and Cement Plaster in lieu of CMU. No cost savings.

Packaged AC Unit with Boiler Plan t VAV reheat with boiler and air colled chiller
 Remove: Remove site piping, and main distribution piping within the mechanical room and radiant panel ceilings (see below).
 Police Dept.
 Add: (2) 400 MBH boilers, chiller
 Replace: AHUs with 10,000 cfm units
 Provide: 40 ton packaged AC unit to consist of outside air intake damper section, mixed air section with connection to return air plenum, MERV-8 pre-filters, MERV-13 final filters, DX, coil and heating coils.
 Admin/Comm Dev (separate bldg)
 VAV Reheat w/Packaged 25 ton AC Unit. VAV boxes and reheat coils.

(+) *Reduction in campus distribution piping*
 (-) *Poor energy performance*
 (-) *Combustible energy source (gas)*
 (-) *Increased long-term energy costs*
 (-) *Duct sizes increase throughout building.*