



50% Design Development Cost Estimate
for
Atherton Civic Center

October 3, 2016

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50% Design Development Cost Estimate

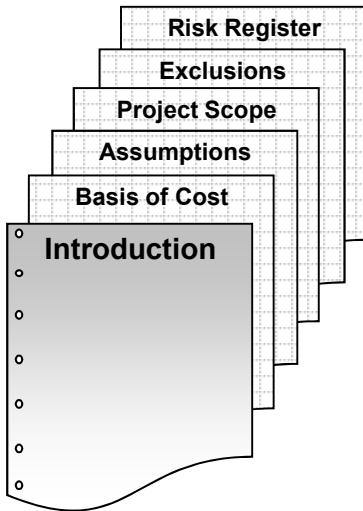
Commentary

Atherton Civic Center

Introduction
Basis of Cost
Assumptions
Exclusions
Risk Register

October 3, 2016

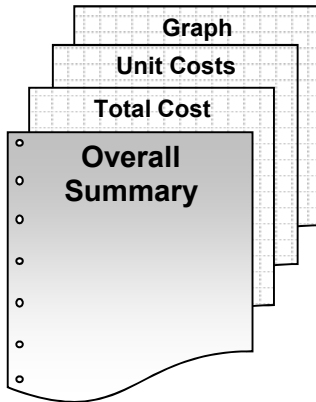
introduction



mack5 was requested to carry out a 50% Design Development Cost Estimate for the proposed Atherton Civic Center located in Atherton, CA.

The first part of the Report contains the basis of the report, the assumptions made, description of the project scope, the exclusions to the costs and a risk register which contain items that have potential to impact cost at some point in the future.

The Overall Summary section contains a Summary of Gross Floor Areas, an Overall Project Summary, and Component and Trade Cost Summaries with Graphs.



Each section contains Control Quantities, a Cost Summary and Graph, and a Detailed Breakdown of Costs.

project introduction

The Town of Atherton intends to build a new Civic Center on the existing 5 acre Civic Center Site. The old building date from 1920s and include several temporary trailer offices. Many buildings are near, or at the end of their useful life. The Site itself is under utilized and split apart by several roads.

The entire site will be remade to maximize use and provide an efficient functioning town government. The new project will contain a new Library and City Hall Building. The new City Hall Building will contain council chamber, city administration offices, community development offices and police station. The existing Corporate yard will remain largely intact.

On-site development includes Ancillary Support building, public/visitor parking, secure department parking, vehicle sallyport, trash enclosure, light pole at front of station, station sign and on-site fire hydrant.

All projects will involve phased renovation and/or relocation of existing roads, utilities, parking and landscaping

items used for cost estimate

general Architectural drawing prepared by WRNS, dated 9/12/2016
G-001, G-101, G-102

civil Architectural drawing prepared by Sherwood, dated 9/12/2016
C010, C020, C100, C101, C200, C201, C300, C301, C400,
C401

landscaping Landscape drawing prepared by swa, dated 9/12/2016
L0.00, L0.01~0.03, L1.01, L1.02, L3.01, L3.02, L4.01, L4.02,
L4.11, L4.12, L5.01, L6.01, L6.02, L7.00, L7.01, L7.02, L8.01,
L8.02, L9.01~9.06

structural Structural drawing prepared by Mar Structural Design,
dated 9/12/2016
S1.0, S2.0, S2.1~2.4, S4.11, S4.31

architectural Architectural drawing prepared by WRNS, dated 9/12/2016
AN-001, AS-101, AS-105, A-101~103, A-111, A-112, A-201,
A-202, A-211, A-301~303, A-311, A-331, A-332, A-341, A-410,
A-501~511, A-521~524, A-601, A-801, A-802, A-811, A-831,
A-832, A-841, A-842, AI-001, AI-101, AI-102, AI-111

items used for cost estimate

- mechanical Mechanical drawing prepared by Interface Engineering, dated 9/12/2016
M-001, M-100, M-101Z, M-102Z, M-111Z, M-201, M-202, M-201, M-211, M-212, M-401
- plumbing Plumbing drawing prepared by Interface Engineering, dated 9/12/2016
P-001, P-002, P-200, P-201~203, P-210~212
- electrical Electrical drawing, dated 7/20/2016
E-000, E-001, E-101, E-201, E-202, E-211, E-301, E-302, E-311, E-401, E-501, E-502, E-701, E
- PV PV Site plan PV-101

assumptions

- (a) Construction will start in August, 2017
- (b) A construction period of 19.5 months
- (c) The general contract will be competitively bid by a minimum of five (5) qualified contractors
- (d) The general contractor will have full access to the site during normal business hours
- (e) There are no phasing requirements
- (f) The contractor will be required to pay prevailing wages

inclusions**Police/City Hall and Library**

- foundations This section includes reinforced concrete grade beams and drilled pier, elevator pit, slab on grade, perforated drain pipe, perimeter concrete curb/stemwall and allowance for mechanical pads.
- superstructure This section includes structural steel framing, metal deck with concrete fill, bare roof deck and miscellaneous metal and rough carpentry.

inclusions**Police/City Hall and Library**

- enclosure This section includes exterior wall finishes, exterior storefront/curtainwall system, exterior windows, mechanical roof screen, parapet wall, and misc band and trims.
- roofing This section includes clay tile roof at Civic Center and modified bituminous roof system at the library. It also includes roof flashing, gutter, downspouts, allowance for mechanical roof pad, roof hatches, caulking and sealants.
- interior construction This section includes interior partitions, glazed wall and sidelights, interior balustrades and guardrails, interior doors, protective bumpers, toilet partitions and accessories, shelving and millwork, casework and countertops, chalkboards and signages.
- stairs This section includes exit/egress stairs complete with finishes, handrail and guardrail.
- interior finishes This section includes floor, wall and ceiling finishes.
- conveying This section includes 1-elevator at Police/City Hall Building.
- plumbing This section includes plumbing fixtures, domestic water distribution, sanitary waste piping, storm water piping and miscellaneous trade specialties.
- heating, ventilation, and air-conditioning This section includes mechanical equipments, piping, ductwork and miscellaneous trade specialties.
- fire protection This section includes automatic wet-pipe sprinkler system
- electrical This section includes main service and distribution, emergency power, photovoltaic roof mounted system (at library only), equipment power, user convenience power, lighting & lighting control, telecomm, fire alarm, security, audio/visual rough-in and miscellaneous trade specialties.
- equipment This section includes kitchen and breakroom equipment, and allowance for fitness room equipments.
- furnishings This section includes window shades, projection screens, entrance mats, fire extinguisher cabinets, bike storage, benches and lockers.

inclusions**Site Improvement**

- site preparation This section includes demolition of existing buildings and removal of existing hardscape surrounding the buildings. It also includes site protective construction, earthwork and erosion control
- site improvement This section includes vehicular and pedestrian paving, site structures, landscaping and miscellaneous site furnishing. It also includes ancillary support building and police secured parking.
- site mechanical utilities This section includes allowance for site drainage
- site electrical utilities This section includes site lighting and site communications and security, and allowance for site demolition and relocation

exclusions

- (a) Cost escalation beyond a start date of August, 2017
- (b) Existing corporation shed and train depot to remain in place
- (c) PV system at Police/City Hall Building & Site
- (d) Relocation of displaced management and staff
- (e) Loose furniture and equipment except as specifically identified
- (f) Hazardous materials handling, disposal and abatement
- (g) Compression of schedule, premium or shift work, and restrictions on the contractor's working hours
- (h) Soft Cost such as testing and inspection fees, architectural design and construction management fees, assessments, taxes, finance, legal and development charges
- (i) Scope change and post contract contingencies
- (j) Environmental impact mitigation

50% Design Development Cost Estimate

Overall Summary

Atherton Civic Center

Gross Floor Areas
Overall Summary
Component Summary
Trade Summary

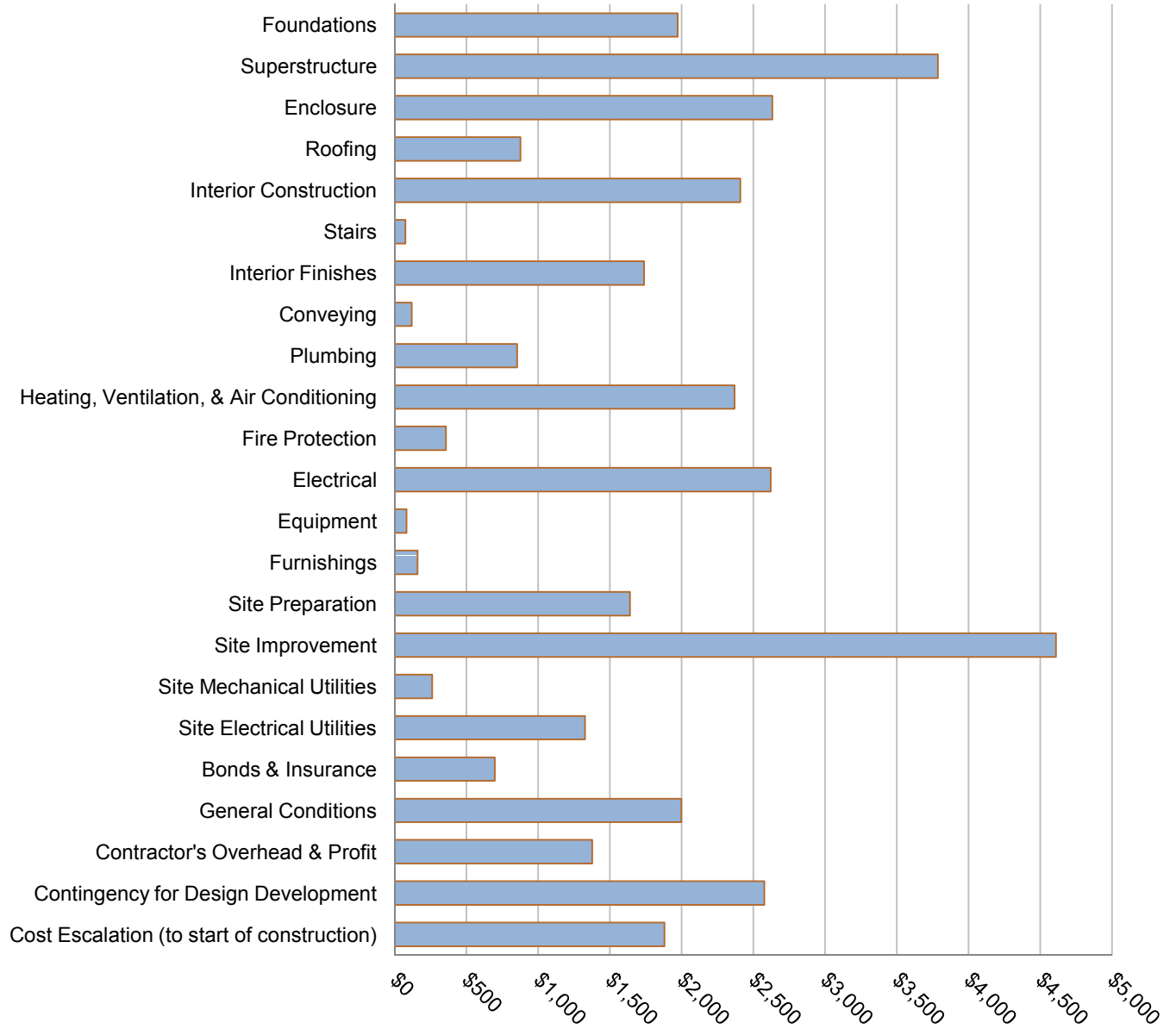
October 3, 2016

<i>Atherton Civic Center</i>	<i>GFA</i>	<i>%</i>	<i>\$/SF</i>	<i>,\$000</i>
City Hall	28,564	46%	\$591.03	\$16,882
Library	10,269	23%	\$815.04	\$8,370
Renovate existing Heritage Town Hall	1,875	3%	\$517.38	\$970
Site Improvement (Police Station Scope)	122,120	13%	\$38.77	\$4,734
Site Improvement (Library Scope)	134,532	15%	\$40.88	\$5,499
TOTAL CONSTRUCTION & SITEWORK:	40,708		\$895.55	\$36,456

CSI UniFormat Summary	297,392 SF	%	\$/SF	\$,000
Foundations		5%	\$6.64	\$1,974
Superstructure		10%	\$12.73	\$3,787
Enclosure		7%	\$8.85	\$2,633
Roofing		2%	\$2.95	\$878
Interior Construction		7%	\$8.10	\$2,409
Stairs		0%	\$0.25	\$75
Interior Finishes		5%	\$5.85	\$1,740
Conveying		0%	\$0.40	\$120
Plumbing		2%	\$2.87	\$855
Heating, Ventilation, & Air Conditioning		6%	\$7.97	\$2,369
Fire Protection		1%	\$1.20	\$358
Electrical		7%	\$8.82	\$2,622
Equipment		0%	\$0.28	\$83
Furnishings		0%	\$0.54	\$160
Selective Building Demolition		0%	\$0.06	\$18
Subtotal - Building Construction		55%	\$67.52	\$20,081
Site Preparation		5%	\$5.52	\$1,641
Site Improvement		13%	\$15.50	\$4,611
Site Mechanical Utilities		1%	\$0.88	\$263
Site Electrical Utilities		4%	\$4.47	\$1,328
Subtotal - Sitework		22%	\$26.37	\$7,842
Total - Building and Sitework Construction		77%	\$93.89	\$27,923
Bonds & Insurance	2.50%	2%	\$2.35	\$698
General Conditions		5%	\$6.72	\$1,999
Contractor's Overhead & Profit	4.50%	4%	\$4.63	\$1,378
Subtotal		88%	\$107.60	\$31,998
Contingency for Design Development	8.00%	7%	\$8.66	\$2,577
Cost Escalation (to start of construction)	5.44%	5%	\$6.33	\$1,881
TOTAL CONSTRUCTION BUDGET	August 2017	100%	\$122.59	\$36,456

NOTE: Inclusions and Exclusions listed in the Commentary Section.

CSI UniFormat Summary





Fair Oaks View

City Hall

Atherton Civic Center

Control Quantities
Summary
Detailed Cost Breakdown

October 3, 2016

Enclosed Areas

Level 1	15,770
Level 2	11,134

Subtotal of Enclosed Area	26,904
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Covered Area

Roof Overhang	3,320
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Subtotal of Covered Area at half value	1,660
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Total of Gross Floor Area	28,564
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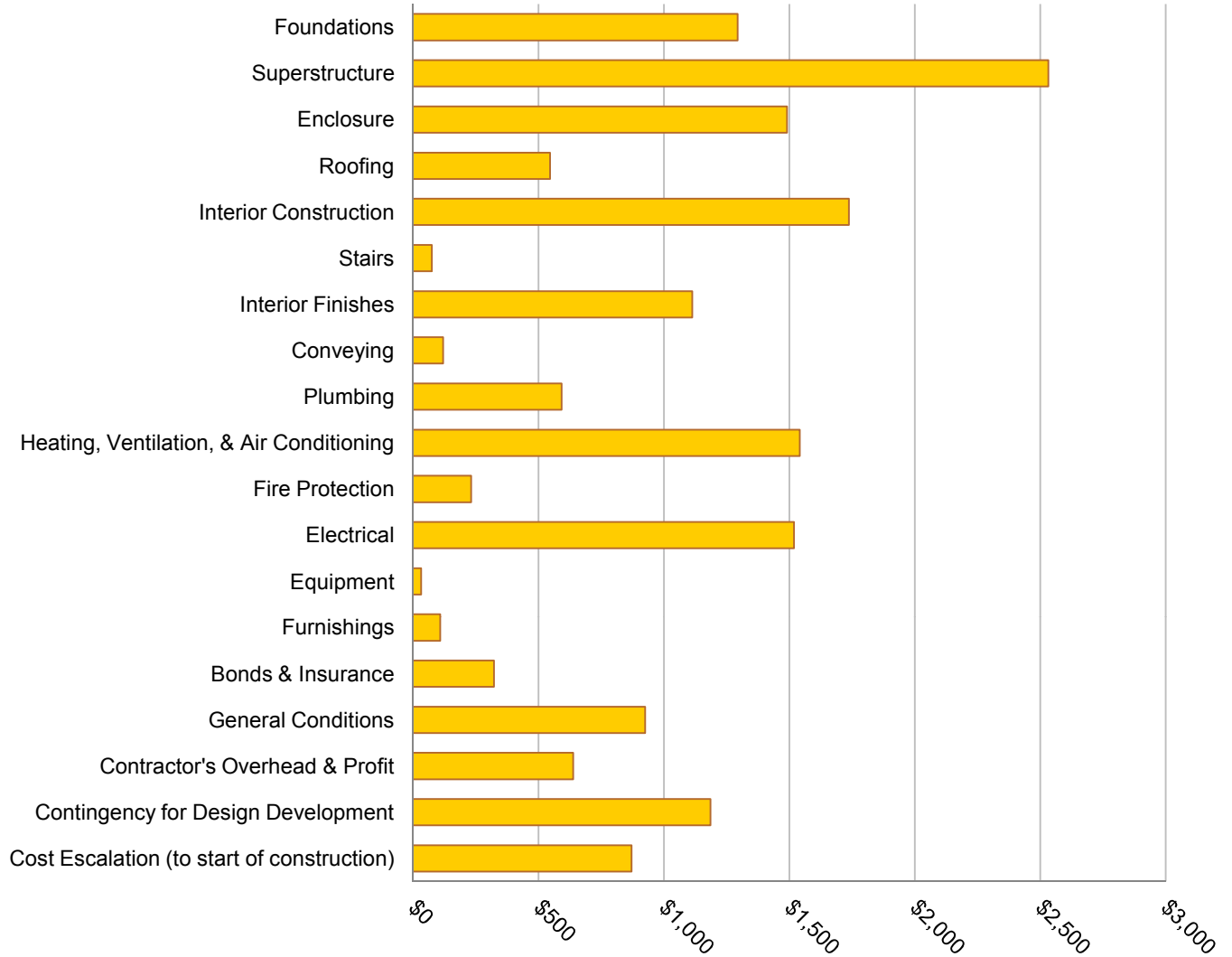
CONTROL QUANTITIES

			Ratio to Gross Area
Number of stories (x1,000)	2	EA	0.070
Gross Area	28,564	SF	1.000
Enclosed Area	26,904	SF	0.942
Covered Area	3,320	SF	0.116
Footprint Area	15,770	SF	0.552
Volume	355,778	CF	12.455
Gross Wall Area	20,052	SF	0.702
Finished Wall Area	17,848	SF	0.625
Windows or Glazing Area	11% 2,204	SF	0.077
Roof Area - Flat	590	SF	0.021
Roof Area - Sloping	18,500	SF	0.648
Roof Area - Total	19,090	SF	0.668
Roof Glazing Area	26	SF	0.001
Interior Partition Length	2,544	LF	0.089
Elevators (x10,000)	1	EA	0.350
Plumbing Fixtures (x1,000)	46	EA	1.610

CSI UniFormat Summary	28,564 SF	%	\$/SF	\$,000
Foundations		8%	\$45.31	\$1,294
Superstructure		15%	\$88.67	\$2,533
Enclosure		9%	\$52.20	\$1,491
Roofing		3%	\$19.13	\$546
Interior Construction		10%	\$60.82	\$1,737
Stairs		0%	\$2.63	\$75
Interior Finishes		7%	\$38.96	\$1,113
Conveying		1%	\$4.20	\$120
Plumbing		4%	\$20.74	\$592
Heating, Ventilation, & Air Conditioning		9%	\$54.00	\$1,542
Fire Protection		1%	\$8.13	\$232
Electrical		9%	\$53.19	\$1,519
Equipment		0%	\$1.16	\$33
Furnishings		1%	\$3.80	\$108
Subtotal - Building Construction		77%	\$452.92	\$12,937
Bonds & Insurance	2.50%	2%	\$11.32	\$323
General Conditions		5%	\$32.42	\$926
Contractor's Overhead & Profit	4.50%	4%	\$22.35	\$638
Subtotal		88%	\$519.02	\$14,825
Contingency for Design Development	8.00%	7%	\$41.52	\$1,186
Cost Escalation (to start of construction)	5.44%	5%	\$30.50	\$871
TOTAL CONSTRUCTION BUDGET	August 2017	100%	\$591.03	\$16,882

NOTE: Inclusions and Exclusions listed in the Commentary Section.

CSI UniFormat Summary



FOUNDATIONS	Quantity	Unit	Rate	Total (\$)
Standard Foundations				
Reinforced concrete grade beams, at perimeter				
36"w x 36"deep				
Excavation and disposal offsite	220	CY	\$35.00	\$7,700
Concrete, 4000psi	220	CY	\$250.00	\$55,000
Gravel bedding and subgrade	1,980	SF	\$1.50	\$2,970
Formwork	3,960	SF	\$8.00	\$31,680
Rebar, 200pcy	44,000	LB	\$1.25	\$55,000
Reinforced concrete grade beams, at interior				
braced frames 36"w x 36"deep				
Excavation and disposal offsite	123	CY	\$35.00	\$4,317
Concrete, 4000psi	123	CY	\$250.00	\$30,833
Gravel bedding and subgrade	1,110	SF	\$1.50	\$1,665
Formwork	2,220	SF	\$8.00	\$17,760
Rebar, 200pcy	24,667	LB	\$1.25	\$30,833
Reinforced concrete grade beams, at interior				
28"w x 36"deep				
Excavation and disposal offsite	91	CY	\$35.00	\$3,171
Concrete, 4000psi	91	CY	\$250.00	\$22,653
Gravel bedding and subgrade	1,166	SF	\$1.50	\$1,748
Formwork	2,100	SF	\$8.00	\$16,800
Rebar, 150pcy	13,592	LB	\$1.25	\$16,990
Elevator pit	1	EA	\$20,000.00	\$20,000
Special Foundations				
Drilled concrete pier				
18" diameter x 25'deep (64EA)	1,600	LF	\$100.00	\$160,000
24" diameter x 30' deep (1EA)	30	LF	\$150.00	\$4,500
24" diameter x 40' deep (40EA)	1,600	LF	\$150.00	\$240,000
24" diameter x 60' deep (18EA)	1,080	LF	\$150.00	\$162,000
Mobilization/demobilization and testing	1	LS	\$25,000.00	\$25,000
Slab On Grade				
5" thick reinforced concrete slab on grade, reinforced with #5 @ 16" o.c., e.w.	16,778	SF	\$7.00	\$117,446
"Stegowrap" water vapor membrane, 15mil	16,778	SF	\$0.75	\$12,584
2" thick rigid foam	16,778	SF	\$2.50	\$41,945
Thickened slab at perimeter	2,016	SF	\$14.00	\$28,224
Excavation and removal	3,170	CY	\$25.00	\$79,247
4" thick crushed rock	207	CY	\$75.00	\$15,535
12" thick class 2 aggregate	621	CY	\$75.00	\$46,606

FOUNDATIONS	Quantity	Unit	Rate	Total (\$)
Slab On Grade				
30" thick reworked/compacted engineered fill, extend pad 5' beyond edge of building on all sides				<i>see Site Preparation</i>
6~12" thick scarified/moisture conditioned/compacted native soil				<i>see Site Preparation</i>
Miscellaneous				
Perimeter perforated drain pipe	672	LF	\$25.00	\$16,800
Perimeter concrete stemwall/curb	672	LF	\$30.00	\$20,160
Allowance for mechanical pads	1	LS	\$5,000.00	\$5,000
Subtotal For Foundations:				\$1,294,166

SUPERSTRUCTURE	Quantity	Unit	Rate	Total (\$)
Vertical Structure				
Structural steel columns	113	T	\$5,200.00	\$587,600
BRB	25	EA	\$5,000.00	\$125,000
Base plates	133	EA	\$350.00	\$46,550
Level2 Construction				
Structural steel framing and miscellaneous connection	91	T	\$5,200.00	\$473,200
Metal deck with 4-1/2" thick normal weight concrete (6-1/2" thick total depth)	11,134	SF	\$13.00	\$144,742
Headed studs at 18" o.c.	1,817	EA	\$3.00	\$5,450
Roof Construction				
Structural steel framing and miscellaneous connection	114	T	\$5,200.00	\$592,800
3/4" thick fire treated plywood	19,830	SF	\$4.00	\$79,320
N-16 deck	19,830	SF	\$6.00	\$118,980
Architecturally exposed glulam beam				
GLB 10 3/4 x 39	53	LF	\$800.00	\$42,400
GLB 10 3/4 x 45	37	LF	\$920.00	\$34,040
Miscellaneous wood framing	8,096	BF	\$12.00	\$97,152
Sprayed-fireproofing				NIC, Not required

SUPERSTRUCTURE	Quantity	Unit	Rate	Total (\$)
Miscellaneous				
Miscellaneous metal	28,564	GSF	\$2.00	\$57,128
Miscellaneous rough carpentry	28,564	GSF	\$1.50	\$42,846
Desig/build seismic bracing of equipment and non-structural components, and for seismic certification of equipment (seismic risk category IV)	28,564	GSF	\$3.00	\$85,692
Subtotal For Superstructure:				\$2,532,900

ENCLOSURE	Quantity	Unit	Rate	Total (\$)
Exterior Walls				
Cement plaster (3-coat plaster system) with decorative texture and reveals, over exterior rigid insulation and 3/4" drainage mat, over 5/8" thick fire-rated plywood, over metal stud framing, insulation and water vapor membrane	17,648	SF	\$45.00	\$794,144
Exterior Windows				
Storefront/window system; steel framed, bronze finish with insulated low-e glazing	2,204	SF	\$105.00	\$231,420
Premium for level-5 security low-e glazing at police department	276	SF	\$195.00	\$53,820
Premium for operable windows	56	EA	\$350.00	\$19,600
Interior finish of exterior wall				
Painted gypwall	17,648	SF	\$5.00	\$88,238
Exterior Doors, Frames and Hardware				
Wood core and frames, oak finish with custom bronze finished hardware to match				
Double leaf door	3	PR	\$10,000.00	\$30,000
Steel framed door, bronze finish with insulated low-e vision glazing & custom hardware				
Single leaf	4	EA	\$3,500.00	\$14,000
Double leaf	3	PR	\$8,000.00	\$24,000
Hollow metal door				
Single leaf	6	EA	\$2,000.00	\$12,000
Double leaf	3	PR	\$3,500.00	\$10,500
Premium for special door hardwares	1	LS	\$20,000.00	\$20,000

ENCLOSURE	Quantity	Unit	Rate	Total (\$)
Fascias, bands, screens, trim, wood articulation at doors, etc.				
Precast concrete veneer base	819	LF	\$30.00	\$24,570
Window sill, 4"~6" precast concrete sill to match precast wall base	200	LF	\$75.00	\$15,000
Decorative custom iron grille/rail	72	SF	\$100.00	\$7,200
Soffits				
Exterior soffit - allowance	3,320	SF	\$35.00	\$116,200
Balustrades, parapets and roof screens				
Mechanical roof screen, allow	200	SF	\$45.00	\$9,000
Miscellaneous Work				
Rough carpentry	28,564	GSF	\$0.75	\$21,423
Subtotal For Enclosure:				\$1,491,115

ROOFING	Quantity	Unit	Rate	Total (\$)
Roof Coverings				
Modified bituminous roofing system over tapered rigid insulation, flat roof area	590	SF	\$16.00	\$9,440
Clay tile roof over fire-treated battens, over adhered membrane, sloped roof area	19,240	SF	\$25.00	\$481,000
Roofing upstands and sheetmetal				
Roof flashing, gutters and downspouts; bronze painted aluminum	19,830	SF	\$1.50	\$29,745
Roof Lights				
Vented skylight	26	SF	\$200.00	\$5,200
Roof or deck traffic surfaces				
Allowance for mechanical roof pad, 25% of flat roof area	148	SF	\$15.00	\$2,213
Miscellaneous work				
Roof access hatches with ladder	1	EA	\$4,500.00	\$4,500
Caulking and sealants	28,564	GSF	\$0.50	\$14,282
Subtotal For Roofing:				\$546,380

INTERIOR CONSTRUCTION	Quantity	Unit	Rate	Total (\$)
Interior Partitions				
Non-rated Partitions				
2 1/2" metal studs	1,042	SF	\$6.50	\$6,774
3 5/8" metal studs	7,628	SF	\$6.75	\$51,486
4" metal studs	23,108	SF	\$7.00	\$161,756
5" metal studs	240	SF	\$7.25	\$1,742
6" metal studs	10,607	SF	\$7.50	\$79,552
Batt insulation	42,625	SF	\$1.25	\$53,281
Backerboard	817	SF	\$1.50	\$1,225
1 1/8" fire rated plywood	3,885	SF	\$1.50	\$5,828
Wire mesh	1,272	SF	\$1.50	\$1,908
Level 5 bullet resistant fiberglass panel	2,843	SF	\$60.00	\$170,597
5/8" gypsum wallboard underlayment	34,185	SF	\$3.50	\$119,646
5/8" gypsum wallboard, finished	64,720	SF	\$4.00	\$258,881
Rated Partitions, 1 hour				
4" metal studs	136	SF	\$7.00	\$953
Batt insulation	136	SF	\$1.25	\$170
Level 5 bullet resistant fiberglass panel	136	SF	\$60.00	\$8,173
5/8" gypsum wallboard underlayment	272	SF	\$3.50	\$953
5/8" gypsum wallboard, finished	272	SF	\$4.00	\$1,090
Backing and blacking	28,564	GSF	\$1.25	\$35,705
Elevator and mechanical shaft walls	2,449	SF	\$25.00	\$61,233
Moveable Partitions				
Sliding wood panels, 8' x 15'	2	EA	\$12,000.00	\$24,000
Sliding wood panels, 5' 1/2" x 12'	2	EA	\$7,200.00	\$14,400
Window Walls				
Sidelights	383	SF	\$85.00	\$32,521
Bullet resistant glazing	48	SF	\$275.00	\$13,200
Balustrades and rails				
Architectural handrail/guardrail at double-height lobby	100	LF	\$350.00	\$35,000
Interior Doors				
Single leaf	70	EA	\$1,800.00	\$126,000
Single leaf, with glazing	7	EA	\$2,000.00	\$14,000
Double leaf	4	PR	\$3,200.00	\$12,800
Double leaf sliding door at closet	1	PR	\$2,800.00	\$2,800
Premium for armory and vault door	1	LS	\$20,000.00	\$20,000
Premium for special door hardware	1	LS	\$25,000.00	\$25,000

INTERIOR CONSTRUCTION	Quantity	Unit	Rate	Total (\$)
Fittings				
Protective guards, barriers and bumpers				
Allowance	28,564	GSF	\$0.25	\$7,141
Prefabricated compartments and accessories				
Toilet Partitions				
Standard	2	EA	\$1,100.00	\$2,200
Disabled	6	EA	\$1,400.00	\$8,400
Toilet Accessories				
Toilet seat cover dispenser	13	EA	\$150.00	\$1,950
Toilet paper dispenser	13	EA	\$100.00	\$1,300
Soap dispenser	13	EA	\$100.00	\$1,300
ADA grab bar	11	SET	\$500.00	\$5,500
Tecessed paper towel dispenser/waste receptacle combo	4	EA	\$450.00	\$1,800
Recessed baby changing station	2	EA	\$500.00	\$1,000
Shower stall and accessories	2	EA	\$2,500.00	\$5,000
Shelving and Millwork				
Vanity countertop	38	LF	\$200.00	\$7,600
Reception desk and self-service counter	15	LF	\$600.00	\$9,000
Wall mounted shelf	10	LF	\$100.00	\$1,000
Janitor's shelf and mop rack	1	EA	\$500.00	\$500
Cabinets and Countertops				
Upper cabinets	106	LF	\$300.00	\$31,710
Lower cabinets	190	LF	\$350.00	\$66,430
Full height cabinets	8	LF	\$750.00	\$5,625
Countertops	187	LF	\$150.00	\$28,005
Stainless steel upper and lower cabinets	20	LF	\$1,000.00	\$20,000
Stainless steel countertops	20	LF	\$200.00	\$4,000
Evidence processing, storage and armory patrol; shelving, weapons storage, evidence refrigerator, weapons cleaning, drying cabinet, evidence lockers, ammo storage	650	SF	\$75.00	\$48,750
Brochure rack	1	EA	\$500.00	\$500
Display case (OFCI)	1	EA	\$300.00	\$300
Key cabinet	1	EA	\$500.00	\$500

INTERIOR CONSTRUCTION	Quantity	Unit	Rate	Total (\$)
Chalkboards and Graphics				
Directional/wayfinding signs	28,564	GSF	\$1.50	\$42,846
Door signage	82	EA	\$150.00	\$12,300
Building signage - exterior	1	LS	\$20,000.00	\$20,000
Markerboards	500	SF	\$50.00	\$25,000
Tackboards	258	SF	\$50.00	\$12,900
Media display board	100	SF	\$75.00	\$7,500
Mail boxes	66	EA	\$100.00	\$6,600
Flagpoles	1	LS	\$10,000.00	\$10,000
Subtotal For Interior Construction:				\$1,737,331

STAIRS	Quantity	Unit	Rate	Total (\$)
Stair Construction				
Exit/egress stair, complete with finishes and guardrail/handrail	3	FLT	\$25,000.00	\$75,000
Subtotal For Stairs:				\$75,000

INTERIOR FINISHES	Quantity	Unit	Rate	Total (\$)
Flooring				
Sealed concrete	1,640	SF	\$1.50	\$2,459
Rubber flooring	1,091	SF	\$8.00	\$8,731
Linoleum	6,427	SF	\$8.00	\$51,414
Porcelain tile	4,056	SF	\$20.00	\$81,126
Cement tile	75	SF	\$20.00	\$1,502
Carpet tile	7,397	SF	\$5.50	\$40,682
Epoxy resin flooring	213	SF	\$12.00	\$2,550
Wood	820	SF	\$15.00	\$12,303
Resilient athletic flooring	821	SF	\$10.00	\$8,214
Water vapor emission control system, under the resinous and carpet finishes - allowance	16,557	SF	\$3.50	\$57,948
Bases				
Allowance	6,481	LF	\$3.50	\$22,684

INTERIOR FINISHES	Quantity	Unit	Rate	Total (\$)
Walls				
Porcelain tile	3,367	SF	\$20.00	\$67,342
Cement tile	240	SF	\$20.00	\$4,798
Ceramic tile	6,890	SF	\$20.00	\$137,798
Tile niche	15	SF	\$25.00	\$375
Plaster	3,000	SF	\$20.00	\$60,000
Acoustical plaster	2,610	SF	\$25.00	\$65,250
Stone veneer	400	SF	\$30.00	\$12,000
Wood	150	SF	\$20.00	\$3,000
Fabric panel	62	SF	\$25.00	\$1,558
Tackable wall panel	549	SF	\$25.00	\$13,728
Mirror	92	SF	\$50.00	\$4,590
Paint	48,321	SF	\$1.25	\$60,401
Ceiling				
Acoustical ceiling tile	11,324	SF	\$7.50	\$84,928
Gypsum board	4,901	SF	\$18.00	\$88,218
Abuse-resistant gypsum board	297	SF	\$20.00	\$5,944
Security gypsum board	609	SF	\$25.00	\$15,215
Wood deck	1,435	SF	\$35.00	\$50,236
Wood valance	25	SF	\$35.00	\$875
Acoustic stretched fabric	2,987	SF	\$45.00	\$134,429
Assume paint exposed ceiling	7,140	SF	\$1.75	\$12,495

Subtotal For Interior Finishes: \$1,112,790

CONVEYING	Quantity	Unit	Rate	Total (\$)
Elevators and Lifts				
Elevator, 2-stops	1	LS	\$120,000.00	\$120,000

Subtotal For Conveying: \$120,000

PLUMBING	Quantity	Unit	Rate	Total (\$)
Plumbing Equipment				
Plumbing equipment	26,904	SF	\$5.00	\$134,520

PLUMBING	Quantity	Unit	Rate	Total (\$)
Plumbing Fixtures				
Water closet	13	EA	\$2,500.00	\$32,500
Lavatory	13	EA	\$1,800.00	\$23,400
Lavatory(Kitchen)	1	EA	\$1,000.00	\$1,000
Lavatory (in casework)	7	EA	\$975.00	\$6,825
Urinal	3	EA	\$3,000.00	\$9,000
Shower with valve, drain & enclosure	3	EA	\$5,000.00	\$15,000
Mop sink	2	EA	\$1,300.00	\$2,600
Drinking fountain	1	EA	\$4,500.00	\$4,500
Kitchen sink	1	EA	\$1,200.00	\$1,200
Floor clean out	4	EA	\$565.00	\$2,260
4" Roof drain	3	EA	\$850.00	\$2,550
3" Roof drain	3	EA	\$750.00	\$2,250
Water closet (Detention)	1	EA	\$3,500.00	\$3,500
Lavatory (Detention)	1	EA	\$2,500.00	\$2,500
Domestic Water Distribution				
2 1/2" Domestic water piping	750	LF	\$45.00	\$33,750
2" Domestic water piping	500	LF	\$42.00	\$21,000
1 1/2" Domestic water piping	600	LF	\$36.00	\$21,600
1" Domestic water piping	500	LF	\$34.00	\$17,000
3/4" Domestic water piping	800	LF	\$30.00	\$24,000
Domestic water pipe insulation	3,150	LF	\$12.00	\$37,800
Sanitary Waste & Vent Piping				
6" Sanitary	700	LF	\$50.00	\$35,000
4" Sanitary underslab	800	LF	\$48.00	\$38,400
Storm Water Piping				
4" Storm drain piping	400	LF	\$49.00	\$19,600
3" Storm drain piping	500	LF	\$45.00	\$22,500
Natural Gas Piping				
Black steel pipe with fittings & hangers (Allowance)	26,904	SF	\$1.00	\$26,904
Miscellaneous				
Disinfecting & flushing	1	LS	\$15,000.00	\$15,000
Coring, sealing and firestopping	1	LS	\$10,000.00	\$10,000
Coordination & management	1	LS	\$20,000.00	\$20,000
Fees & permits	1	LS	\$6,200.00	\$6,200

Subtotal For Plumbing: \$592,359

**HEATING, VENTILATION, & AIR-
CONDITIONING**

	Quantity	Unit	Rate	Total (\$)
Equipment				
EF-4 ?	1	EA	\$5,000.00	\$5,000
EF-5 900cfm	1	EA	\$5,000.00	\$5,000
EF-6 ?	1	EA	\$5,000.00	\$5,000
In-line exhaust fan ?	5	EA	\$3,000.00	\$15,000
Ceiling bathroom exhaust fan ?	4	EA	\$2,500.00	\$10,000
Transfer fan ?	2	EA	\$2,000.00	\$4,000
CHW/HW Fan coil ?	3	EA	\$3,500.00	\$10,500
AHU-1 2000cfm	1	EA	\$35,000.00	\$35,000
AHU-2 4500cfm	1	EA	\$70,000.00	\$70,000
AHU-3 1800cfm	1	EA	\$30,000.00	\$30,000
Cooling only VAV box ?	8	EA	\$1,800.00	\$14,400
Electric water heater	11	EA	\$2,000.00	\$22,000
CHWP-7 1HP 55gpm	1	EA	\$7,500.00	\$7,500
CHWP-8 1HP 55gpm	1	EA	\$7,500.00	\$7,500
HWP-7 1HP 55gpm	1	EA	\$7,500.00	\$7,500
HWP-8 1HP 55gpm	1	EA	\$7,500.00	\$7,500
Back up split system	1	EA	\$15,000.00	\$15,000
AS-7 ?	1	EA	\$8,000.00	\$8,000
AS-8 ?	1	EA	\$8,000.00	\$8,000
VFD ?	4	EA	\$3,500.00	\$14,000
Piping				
Heating hot water pipe with fittings & hangers	26,904	SF	\$4.00	\$107,616
Chilled water pipe with fittings & hangers	26,904	SF	\$3.50	\$94,164
Refrigeration piping with fittings & hangers	26,904	SF	\$0.65	\$17,488
Condensate drain piping with fittings & hangers	26,904	SF	\$0.50	\$13,452
Valves & accessories	26,904	SF	\$2.00	\$53,808
Pipe insulation	26,904	SF	\$2.75	\$73,986
Ductwork				
Galvanized ductwork with fittings & hangers	40,912	LB	\$11.00	\$450,032
Duct insulation	18,000	SF	\$4.00	\$72,000
Registers, grilles & diffusers	26,904	GSF	\$1.50	\$40,356
Miscellaneous sheet metal accessories	26,904	GSF	\$0.75	\$20,178

HEATING, VENTILATION, & AIR-CONDITIONING

	Quantity	Unit	Rate	Total (\$)
Miscellaneous				
Automatic temperature control DDC	26,904	GSF	\$8.00	\$215,232
Test and balance	26,904	GSF	\$0.75	\$20,178
Coring and firestopping	1	LS	\$7,000.00	\$7,000
Rigging & equipment rental	1	LS	\$15,000.00	\$15,000
Coordination & management	1	LS	\$25,000.00	\$25,000
Fees & permits	1	LS	\$16,000.00	\$16,000

Subtotal For Heating, Ventilation, & Air-Conditioning: \$1,542,390

FIRE PROTECTION

	Quantity	Unit	Rate	Total (\$)
Wet Pipe Sprinkler Distribution				
Double check valve	1	EA	\$15,000.00	\$15,000
Wet alarm valve	1	EA	\$5,500.00	\$5,500
Fire department connection	1	EA	\$1,200.00	\$1,200
Sprinkler head	238	EA	\$200.00	\$47,600
Miscellaneous valves	1	LS	\$7,500.00	\$7,500
Main sprinkler pipe with fittings & hangers	950	LF	\$30.00	\$28,500
Branch sprinkler pipe with fittings & hangers	2,850	LF	\$26.00	\$74,100
Special systems (Allowance)	1	LS	\$35,000.00	\$35,000
Miscellaneous				
Hydraulic calculations	1	LS	\$4,500.00	\$4,500
Coring and firestopping	1	LS	\$3,000.00	\$3,000
Coordination & management	1	LS	\$5,000.00	\$5,000
Drawings	1	LS	\$3,000.00	\$3,000
Fees & permits	1	LS	\$2,200.00	\$2,200

Subtotal For Fire Protection: \$232,100

ELECTRICAL

	Quantity	Unit	Rate	Total (\$)
Electrical Service and Distribution				
Energy monitoring	1	LS	\$15,000.00	\$15,000
3000A distribution panelboard	1	EA	\$100,000.00	\$100,000
400A panelboard	2	EA	\$12,000.00	\$24,000
250A panelboard	4	EA	\$8,500.00	\$34,000
125A panelboard	6	EA	\$2,150.00	\$12,900
100A panelboard	3	EA	\$2,000.00	\$6,000

ELECTRICAL	Quantity	Unit	Rate	Total (\$)
Electrical Service and Distribution				
400A feed	45	EA	\$126.00	\$5,670
250A feed	110	LF	\$68.00	\$7,480
125A feed	190	LF	\$38.00	\$7,220
100A feed	360	LF	\$30.00	\$10,800
Grounding and bonding	1	LS	\$7,500.00	\$7,500
Emergency power				
400KW emergency generator	1	EA	\$125,000.00	\$125,000
Make connection to existing generator	1	EA	\$2,500.00	\$2,500
1000A ATS	1	EA	\$19,350.00	\$19,350
400A ATS	1	EA	\$8,270.00	\$8,270
225A ATS	1	EA	\$6,200.00	\$6,200
Equipment wiring				
Mechanical equipment feed and connections	28,564	GSF	\$0.25	\$7,141
AHU feed and connection	3	EA	\$4,500.00	\$13,500
EF feed and connection	14	EA	\$1,500.00	\$21,000
FCU feed and connection	3	EA	\$1,000.00	\$3,000
Fan feed and connection	2	EA	\$1,000.00	\$2,000
WH feed and connection	11	EA	\$750.00	\$8,250
Pump feed and connection	4	EA	\$1,500.00	\$6,000
Split feed and connection	1	EA	\$3,000.00	\$3,000
VFD feed and connection only	4	EA	\$950.00	\$3,800
Lighting and Branch Wiring				
Lighting fixtures				
Type P1A	64	LF	\$150.00	\$9,600
Type P1B	8	LF	\$150.00	\$1,200
Type P1D	10	LF	\$150.00	\$1,500
Type P3	12	EA	\$750.00	\$9,000
Type P4	1	EA	\$1,500.00	\$1,500
Type P7	20	EA	\$400.00	\$8,000
Type PIC	11	LF	\$130.00	\$1,430
Type R1	94	EA	\$275.00	\$25,850
Type R2	1	EA	\$375.00	\$375
Type R3	20	EA	\$375.00	\$7,500
Type R4	14	EA	\$275.00	\$3,850
Type S1	11	EA	\$275.00	\$3,025
Type S2A	10	EA	\$175.00	\$1,750
Type S2B	7	EA	\$150.00	\$1,050
Type S3	36	EA	\$275.00	\$9,900
Pit light	1	EA	\$175.00	\$175

ELECTRICAL	Quantity	Unit	Rate	Total (\$)
Lighting not shown at this scope level	28,564	GSF	\$4.00	\$114,256
Exit and emergency lighting	28,564	GSF	\$1.00	\$28,564
Exterior building lighting	1	LS	\$15,000.00	\$15,000
Lighting controls				
Lighting control panel	5	EA	\$2,500.00	\$12,500
Single pole switch	14	EA	\$40.00	\$560
Sensor	86	EA	\$200.00	\$17,200
Dimmer switch	61	EA	\$75.00	\$4,575
Branch devices				
Double Duplex receptacle	20	EA	\$72.00	\$1,440
Double Duplex receptacle in floor box	12	EA	\$72.00	\$864
Duplex receptacle	108	EA	\$36.00	\$3,888
Duplex receptacle (controlled)	117	EA	\$52.00	\$6,084
Duplex receptacle in floor box	5	EA	\$36.00	\$180
GFCI duplex receptacle	30	EA	\$40.00	\$1,200
2 gang floor box	17	EA	\$350.00	\$5,950
Device box	700	EA	\$38.00	\$26,600
3/4" EMT	3,000	LF	\$10.00	\$30,000
3/4" PVC	1,200	LF	\$10.00	\$12,000
#12 THHN	20,000	LF	\$1.10	\$22,000
12-2 MC cable	8,000	LF	\$5.30	\$42,400
12-2 MC cable	3,000	LF	\$6.20	\$18,600
Communications and Security				
Fire Alarm				
Fire alarm control panel	1	EA	\$7,500.00	\$7,500
Graphic annunciator	1	EA	\$4,500.00	\$4,500
LCD annunciator	1	EA	\$1,500.00	\$1,500
Initiating device	40	EA	\$150.00	\$6,000
Audio visual device	50	EA	\$125.00	\$6,250
Visual device	10	EA	\$115.00	\$1,150
Modules	16	EA	\$150.00	\$2,400
Device box	120	EA	\$30.00	\$3,600
3/4" EMT	3,600	LF	\$8.00	\$28,800
FA cable	5,800	LF	\$1.50	\$8,700
Testing and programming	1	LS	\$3,500.00	\$3,500
Bi-Directional amplification				
Bi-Directional amplification	1	EA	\$25,000.00	\$25,000

ELECTRICAL	Quantity	Unit	Rate	Total (\$)
Telecommunications				
IDF fit out	1	EA	\$6,500.00	\$6,500
MDF fit out	1	EA	\$8,500.00	\$8,500
Device box with conduit stub to ceiling	165	EA	\$130.00	\$21,450
2 gang floor box	44	EA	\$350.00	\$15,400
1-port device	125	EA	\$25.00	\$3,125
1-port device in floor box	38	EA	\$25.00	\$950
2-port device	40	EA	\$50.00	\$2,000
2-port device in floor box	6	EA	\$50.00	\$300
WAP	46	EA	\$350.00	\$16,100
Cat.6 cable	60,000	LF	\$1.75	\$105,000
Grounding	1	LS	\$1,500.00	\$1,500
PA/Clock system				NIC
AV system				
AV system rough-in & power	28,564	GSF	\$0.25	\$7,141
Communications and Security				
Security system				
Head end	1	LS	\$15,000.00	\$15,000
Camera WP	22	EA	\$1,750.00	\$38,500
Camera	14	EA	\$1,200.00	\$16,800
Card reader	41	EA	\$350.00	\$14,350
Door contact	21	EA	\$250.00	\$5,250
Electric strike (connection only, strike provided by DHC)	20	EA	\$250.00	\$5,000
REX	15	EA	\$250.00	\$3,750
Motion detector	4	EA	\$250.00	\$1,000
Device box	140	EA	\$38.00	\$5,320
3/4" EMT	5,000	LF	\$10.00	\$50,000
Cabling	7,000	LF	\$1.75	\$12,250
Detention room lock system (Rough-in only)	1	LS	\$7,500.00	\$7,500
E-911 (Server)				
UPS unit disconnect switch feed and connection	1	LS	\$25,000.00	\$25,000
(Not in narrative, assumes required)				
E-911 rough-in)	1	LS	\$5,000.00	\$5,000
Dispatch Room				
Dispatch room rough-in (allow)	1	LS	\$7,500.00	\$7,500

ELECTRICAL	Quantity	Unit	Rate	Total (\$)
Antenna System				
Exterior antenna power and grounding only	1	LS	\$5,000.00	\$5,000
Radio system, power only	1	LS	\$5,000.00	\$5,000
Conference Training/Operations Room				
Sound system	2	LS	\$5,000.00	\$10,000
Rough-in	2	LS	\$1,500.00	\$3,000
Projector screen feed and connection	2	LS	\$1,200.00	\$2,400
Emergency Call System				
Call system	1	LS	\$2,500.00	\$2,500
Council Chamber Room				
Sound system	1	LS	\$9,500.00	\$9,500
Rough-in	1	LS	\$2,500.00	\$2,500
Projector screen feed and connection	1	LS	\$1,200.00	\$1,200
Other Electrical Systems				
Temp power & lighting	1	LS	\$20,000.00	\$20,000
Seismic restraints	1	LS	\$15,000.00	\$15,000
Fees & Permits	1	LS	\$35,000.00	\$35,000
Subtotal For Electrical:				\$1,519,333

EQUIPMENT	Quantity	Unit	Rate	Total (\$)
Commercial Equipment				
Residential equipment at staff breakroom and kitchen				
Refrigerator	2	EA	\$2,000.00	\$4,000
Under counter refrigerator	2	EA	\$1,000.00	\$2,000
Dishwasher	2	EA	\$1,000.00	\$2,000
Microwave				NIC
Vending machine				NIC
At Fitness room - allowance	1	LS	\$25,000.00	\$25,000
Subtotal For Equipment:				\$33,000

FURNISHINGS	Quantity	Unit	Rate	Total (\$)
Fixed Furnishings				
Light Control and Vision Equipment				
Window shades and blinds, manual operation	2,204	SF	\$8.00	\$17,632
Projection screens at conference rooms				
8' x 6'	3	EA	\$4,500.00	\$13,500
8' x 8'	1	EA	\$5,000.00	\$5,000
Pull down screen, 96" x 96"	1	EA	\$5,000.00	\$5,000
TV monitors				NIC
Amenities and Convenience Items				
Entrance mats and frames	1	LS	\$5,000.00	\$5,000
Fire Extinguisher cabinets	1	LS	\$5,000.00	\$5,000
Bike storage	1	LS	\$3,000.00	\$3,000
Stainless steel bench, wall mounted	12	LF	\$400.00	\$4,800
Benches at locker room	15	LF	\$300.00	\$4,500
Metal lockers				
Small, 1' x 2' x full height	16	EA	\$750.00	\$12,000
Large, 2' x 2' x full height	33	EA	\$1,000.00	\$33,000
Council Chambers Millwork & Furnishing				
Dais seating & desk	7	EA		NIC
Council Chambers seating	80	EA		NIC
Lectern	1	LS		NIC
TV screens	2	EA		NIC
Display monitor	1	EA		NIC
				-
Subtotal For Furnishings:				\$108,432



Library Cedar Terrace View

Library

Atherton Civic Center

Control Quantities
Library Summary
Detailed Cost Breakdown

October 3, 2016

Enclosed Areas
Ground floor, library 9,950

Subtotal of Enclosed Area 9,950

Covered Area
Roof Overhang 638

Subtotal of Covered Area at half value 319

Total of Gross Floor Area 10,269

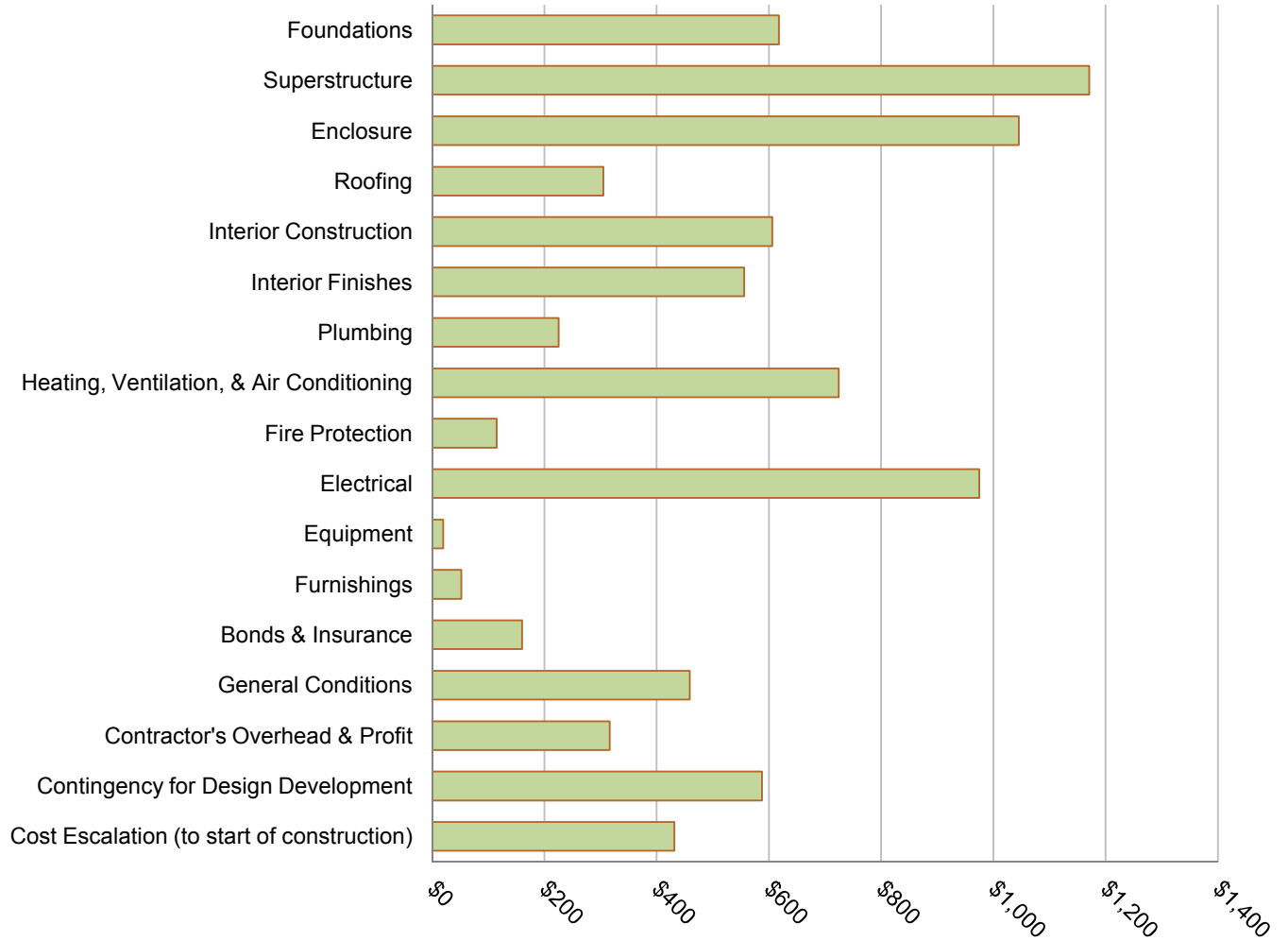
CONTROL QUANTITIES

			Ratio to Gross Area
Number of stories (x1,000)	1	EA	0.097
Gross Area	10,269	SF	1.000
Enclosed Area	9,950	SF	0.969
Covered Area	638	SF	0.062
Footprint Area	9,950	SF	0.969
Volume	153,578	CF	14.956
Gross Wall Area	11,310	SF	1.101
Finished Wall Area	8,058	SF	0.785
Windows or Glazing Area	29% 3,252	SF	0.317
Roof Area - Flat	10,588	SF	1.031
Roof Area - Sloping	0	SF	0.000
Roof Area - Total	10,588	SF	1.031
Roof Glazing Area	378	SF	0.037
Interior Partition Length	582	LF	0.057
Elevators (x10,000)	0	EA	0.000
Plumbing Fixtures (x1,000)	12	EA	1.169

CSI UniFormat Summary	10,269 SF	%	\$/SF	,\$,000
Foundations		7%	\$60.18	\$618
Superstructure		14%	\$113.99	\$1,171
Enclosure		12%	\$101.81	\$1,045
Roofing		4%	\$29.73	\$305
Interior Construction		7%	\$59.01	\$606
Interior Finishes		7%	\$54.17	\$556
Plumbing		3%	\$21.96	\$226
Heating, Ventilation, & Air Conditioning		9%	\$70.56	\$725
Fire Protection		1%	\$11.24	\$115
Electrical		12%	\$94.93	\$975
Equipment		0%	\$1.95	\$20
Furnishings		1%	\$5.07	\$52
Subtotal - Building Construction		77%	\$624.59	\$6,414
Bonds & Insurance	2.50%	2%	\$15.61	\$160
General Conditions		5%	\$44.71	\$459
Contractor's Overhead & Profit	4.50%	4%	\$30.82	\$316
Subtotal		88%	\$715.73	\$7,350
Contingency for Design Development	8.00%	7%	\$57.26	\$588
Cost Escalation (to start of construction)	5.44%	5%	\$42.06	\$432
TOTAL CONSTRUCTION BUDGET	August 2017	100%	\$815.04	\$8,370

NOTE: Inclusions and Exclusions listed in the Commentary Section.

CSI UniFormat Summary



FOUNDATIONS	Quantity	Unit	Rate	Total (\$)
Reinforced concrete grade beams, 36"w x 30"deep				
Excavation and disposal offsite	220	CY	\$35.00	\$7,707
Concrete, 4000psi	220	CY	\$250.00	\$55,049
Gravel bedding and subgrade	2,378	SF	\$1.50	\$3,567
Formwork	3,964	SF	\$8.00	\$31,708
Rebar, 150pcy	33,029	LB	\$1.25	\$41,286
Reinforced concrete grade beams, 42"w x 36"deep				
Excavation and disposal offsite	24	CY	\$35.00	\$836
Concrete, 4000psi	24	CY	\$250.00	\$5,969
Gravel bedding and subgrade	215	SF	\$1.50	\$322
Formwork	368	SF	\$8.00	\$2,947
Rebar, 200pcy	4,776	LB	\$1.25	\$5,969
Reinforced concrete grade beams, 60"w x 36"deep				
Excavation and disposal offsite	32	CY	\$35.00	\$1,116
Concrete, 4000psi	32	CY	\$250.00	\$7,972
Gravel bedding and subgrade	287	SF	\$1.50	\$431
Formwork	344	SF	\$8.00	\$2,755
Rebar, 200pcy	6,378	LB	\$1.25	\$7,972
Special Foundations				
Drilled concrete pier				
18" diameter x 18'deep (35EA)	630	LF	\$100.00	\$63,000
24" diameter x 20' deep (7EA)	140	LF	\$150.00	\$21,000
Mobilization/demobilization and testing	1	LS	\$15,000.00	\$15,000
Slab On Grade				
6" thick topping slab	9,950	SF	\$6.00	\$59,700
Rigid insulation	9,950	SF	\$3.00	\$29,850
6" thick reinforced concrete slab on grade, reinforced with #5 @ 18" o.c., e.w.	9,950	SF	\$8.00	\$79,600
"Stegowrap" water vapor membrane, 15mil	9,950	SF	\$0.75	\$7,463
Thickened slab at perimeter	1,740	SF	\$14.00	\$24,360
Excavation and removal	3,113	CY	\$25.00	\$77,813
4" thick crushed rock	123	CY	\$75.00	\$9,213
12" thick class 2 aggregate	369	CY	\$75.00	\$27,639
30" thick reworked/compacted engineered fill, extend pad 5' beyond edge of building on all sides				<i>see Site Preparation</i>
6~12" thick scarified/moisture conditioned/compacted native soil				<i>see Site Preparation</i>

FOUNDATIONS	Quantity	Unit	Rate	Total (\$)
Miscellaneous				
Perimeter perforated drain pipe	580	LF	\$25.00	\$14,500
Perimeter concrete stemwall/curb, min. 8"high			<i>measured with Enclosure</i>	
Structural concrete curb, 8"high	164	LF	\$50.00	\$8,200
Concrete curbs and mechanical pads	1	LS	\$5,000.00	\$5,000
Subtotal For Foundations:				\$617,944

SUPERSTRUCTURE	Quantity	Unit	Rate	Total (\$)
Vertical Structure				
18" thick Rammed earth wall reinforced with #5 @ 12" o.c., e.w., complete with rigid insulation core	8,093	SF	\$70.00	\$566,475
Structural tube columns, including connections				
HSS 4-1/2 x 4-1/2 x 1/2	8	T	\$5,200.00	\$41,587
Braced Frame - Allowance	8	EA	\$5,000.00	\$40,000
Base plates	18	EA	\$350.00	\$6,300
Roof Construction				
Structural steel roof framing, allow 14psf	72	T	\$5,200.00	\$374,400
3/4" thick fire treated plywood	10,588	SF	\$4.00	\$42,352
Steel deck, N18 ga G60	10,588	SF	\$6.00	\$63,528
Sprayed-fireproofing				NIC, Not required
Miscellaneous				
Miscellaneous metal	10,269	GSF	\$2.00	\$20,538
Miscellaneous rough carpentry	10,269	GSF	\$1.50	\$15,404
Subtotal For Superstructure:				\$1,170,583

ENCLOSURE	Quantity	Unit	Rate	Total (\$)
Exterior Walls				
Vertical wood rainscreen wall	3,104	SF	\$75.00	\$232,778
Rammed earth wall, premium for to sealed finish	3,132	SF	\$5.00	\$15,660
Zinc wall panel	577	SF	\$85.00	\$49,045
Concrete stem wall, 30" high	1,450	SF	\$50.00	\$72,500
Premium for exposed board form finish	920	SF	\$15.00	\$13,800

ENCLOSURE	Quantity	Unit	Rate	Total (\$)
Exterior Windows				
Wood window/storefront system	3,252	SF	\$125.00	\$406,500
Interior finish of exterior wall				
Painted gypwall	6,813	SF	\$5.00	\$34,064
Exterior Doors				
Sliding glass door, 8'-0 wide x 10'high Double leaf door at mechanical room	1	PR	\$7,500.00	\$7,500
6'-0"wide x 10'-0"high	2	PR	\$5,000.00	\$10,000
Main Entry Door				
Single leaf	1	EA	\$3,500.00	\$3,500
Double leaf, 6'-0"wide x 10'-0" high	3	PR	\$7,500.00	\$22,500
Double leaf, 11'-0"wide x 12'-0"high	4	PR	\$10,000.00	\$40,000
Premium for special door hardwares	1	LS	\$18,000.00	\$18,000
Fascias, bands, screens, trim				
Zinc coping	540	LF	\$45.00	\$24,300
Miscellaneous bands and trim etc.	11,310	GWA	\$1.50	\$16,965
Soffits				
Exterior soffit/eave	638	SF	\$75.00	\$47,850
Balustrades, parapets and roof screens				
Backside of parapet wall	1,152	SF	\$20.00	\$23,040
Miscellaneous Work				
Rough carpentry	9,950	GSF	\$0.75	\$7,463
Subtotal For Enclosure:				\$1,045,464

ROOFING	Quantity	Unit	Rate	Total (\$)
Roof Coverings				
Modified bituminous roofing system over tapered rigid insulation, flat roof area	10,588	SF	\$16.00	\$169,408
Roofing upstands and sheetmetal				
Roof flashing, gutters and downspouts	10,588	SF	\$1.50	\$15,882
Roof Lights				
Operable skylight	378	SF	\$250.00	\$94,500

ROOFING	Quantity	Unit	Rate	Total (\$)
Roof or deck traffic surfaces				
Allowance for mechanical roof pad, 10% of roof area	1,059	SF	\$15.00	\$15,882
Miscellaneous work				
Roof access hatches with ladder	1	EA	\$4,500.00	\$4,500
Caulking and sealants	10,269	GSF	\$0.50	\$5,135
Subtotal For Roofing:				\$305,307

INTERIOR CONSTRUCTION	Quantity	Unit	Rate	Total (\$)
Interior Partitions				
Non-rated Partitions				
4" metal studs	9,991	SF	\$7.00	\$69,939
Batt insulation	9,991	SF	\$1.25	\$12,489
5/8" gypsum wallboard underlayment	13,416	SF	\$3.50	\$46,957
5/8" gypsum wallboard, finished	19,983	SF	\$4.00	\$79,931
STC 50+ header wall	50	SF	\$25.00	\$1,250
Backing and blacking	10,269	GSF	\$1.25	\$12,836
Moveable Partitions				
Operable partition, 10' x 19'	1	EA	\$20,000.00	\$20,000
Window Walls				
Interior storefront glazing	400	SF	\$75.00	\$30,000
Window	32	SF	\$75.00	\$2,400
Interior Doors				
Single leaf	15	EA	\$1,800.00	\$27,000
Single leaf at restroom stalls	6	EA	\$1,800.00	\$10,800
Single leaf, glass	1	EA	\$3,200.00	\$3,200
Double leaf, glass	2	PR	\$5,000.00	\$10,000
Premium for special door hardware	1	LS	\$25,000.00	\$25,000
Fittings				
Protective guards, barriers and bumpers				
Allowance	10,269	GSF	\$0.25	\$2,567

INTERIOR CONSTRUCTION	Quantity	Unit	Rate	Total (\$)
Prefabricated compartments and accessories				
Toilet seat cover dispenser	7	EA	\$150.00	\$1,050
Toilet paper dispenser	7	EA	\$100.00	\$700
Soap dispenser	3	EA	\$100.00	\$300
ADA grab bar	3	SET	\$500.00	\$1,500
Recessed paper towel dispenser/waste receptacle combo	3	EA	\$450.00	\$1,350
Recessed baby changing station	2	EA	\$500.00	\$1,000
Shelving and Millwork				
Vanity countertop	8	LF	\$200.00	\$1,600
Storage shelves	1	LS	\$5,000.00	\$5,000
Library shelving; includes book shelving and tools library shelving	9,950	GSF	\$15.00	\$149,250
General casework - Allowance	9,950	GSF	\$3.00	\$29,850
Cabinets and Countertops				
Lower cabinets and countertop	32	LF	\$500.00	\$16,000
Chalkboards and Graphics				
Directional/wayfinding signs	10,269	GSF	\$1.50	\$15,404
Door signage	24	EA	\$150.00	\$3,600
Building signage - exterior	1	LS	\$20,000.00	\$20,000
Chalkboards and tackboards	1	LS	\$5,000.00	\$5,000
Subtotal For Interior Construction:				\$605,973

STAIRS	Quantity	Unit	Rate	Total (\$)
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No work anticipated in this section

Subtotal For Stairs:

INTERIOR FINISHES	Quantity	Unit	Rate	Total (\$)
Flooring				
Sealed concrete	1,253	SF	\$1.50	\$1,879
Porcelain tile	380	SF	\$20.00	\$7,596
Carpet tile	6,984	SF	\$5.50	\$38,412
Wood	334	SF	\$15.00	\$5,009
Water vapor emission control system, under the resinous and carpet finishes	7,318	SF	\$3.50	\$25,613
Bases				
Rubber base and cove base	1,617	LF	\$3.00	\$4,851
Wood base	127	LF	\$15.00	\$1,907
Walls				
Porcelain tile	199	SF	\$20.00	\$3,978
Ceramic tile	3,038	SF	\$20.00	\$60,768
Metal panel	126	SF	\$35.00	\$4,393
Sealed rammed earth	2,579	SF	\$3.00	\$7,736
Acoustic wood wall panel	1,002	SF	\$25.00	\$25,038
Fabric wrapped acoustic panels	426	SF	\$25.00	\$10,645
Paint	11,023	SF	\$1.25	\$13,779
Ceiling				
Gypsum board	2,476	SF	\$18.00	\$44,561
Wood deck	458	SF	\$35.00	\$16,027
Acoustic stretched fabric	6,308	SF	\$45.00	\$283,838
Assume paint exposed ceiling	141	SF	\$1.75	\$247
Subtotal For Interior Finishes:				\$556,273

CONVEYING	Quantity	Unit	Rate	Total (\$)
<i>No work anticipated in this section</i>				
Subtotal For Conveying:				

PLUMBING	Quantity	Unit	Rate	Total (\$)
Plumbing Equipment				
Plumbing equipment	10,269	GSF	\$5.00	\$51,345
Plumbing Fixtures				
Water closet	7	EA	\$2,500.00	\$17,500
Lavatory	3	EA	\$1,800.00	\$5,400
Lavatory (in casework)	1	EA	\$975.00	\$975
Mop sink	1	EA	\$1,300.00	\$1,300
4" Roof drain	8	EA	\$850.00	\$6,800
Domestic Water Distribution				
2" Domestic water piping	350	LF	\$42.00	\$14,700
1" Domestic water piping	250	LF	\$34.00	\$8,500
3/4" Domestic water piping	250	LF	\$30.00	\$7,500
Domestic water pipe insulation	850	LF	\$12.00	\$10,200
Non-Potable Water Distribution				
Copper pipe type L with fittings & hangers	9,950	SF	\$1.25	\$12,438
Non-potable water pipe insulation	9,950	SF	\$1.00	\$9,950
Sanitary Waste & Vent Piping				
4" Sanitary underslab	500	LF	\$48.00	\$24,000
Grease Waste & Vent Piping				
6" Grease waste	150	LF	\$50.00	\$7,500
Storm Water Piping				
6" Storm drain piping	200	LF	\$50.00	\$10,000
Natural Gas Piping				
Black steel pipe with fittings & hangers (Allowance)	9,950	SF	\$1.00	\$9,950
Miscellaneous				
Disinfecting & flushing	1	LS	\$8,000.00	\$8,000
Coring, sealing and firestopping	1	LS	\$7,500.00	\$7,500
Coordination & management	1	LS	\$10,000.00	\$10,000
Fees & permits	1	LS	\$2,000.00	\$2,000
Subtotal For Plumbing:				\$225,558

**HEATING, VENTILATION, & AIR-
CONDITIONING**

	Quantity	Unit	Rate	Total (\$)
Equipment				
EF-1 1200cfm	1	EA	\$6,660.00	\$6,660
EF-2 ?	1	EA	\$5,000.00	\$5,000
EF-3 500cfm	1	EA	\$2,775.00	\$2,775
AHU-4 12800cfm	1	EA	\$179,200.00	\$179,200
Electric water heater	1	EA	\$10,000.00	\$10,000
CHWP-1 5HP 175gpm	1	EA	\$8,750.00	\$8,750
CHWP-2 5HP 175gpm	1	EA	\$8,750.00	\$8,750
CHWP-3 1HP 55gpm	1	EA	\$2,750.00	\$2,750
CHWP-4 1HP 55gpm	1	EA	\$2,750.00	\$2,750
HWP-1 5HP 175gpm	1	EA	\$8,750.00	\$8,750
HWP-2 5HP 175gpm	1	EA	\$8,750.00	\$8,750
HWP-3 1HP 55gpm	1	EA	\$2,750.00	\$2,750
HWP-4 1HP 55gpm	1	EA	\$2,750.00	\$2,750
AS-1 ?	1	EA	\$5,000.00	\$5,000
AS-2 ?	1	EA	\$5,000.00	\$5,000
AS-3 ?	1	EA	\$5,000.00	\$5,000
AS-4 ?	1	EA	\$5,000.00	\$5,000
VFD ?	8	EA	\$3,500.00	\$28,000
NFA 10SF Motorized windows	17	EA	\$750.00	\$12,750
Radiant slab	1,683	SF	\$15.00	\$25,245
Piping				
3" HW	110	LF	\$60.00	\$6,600
2" HW	414	LF	\$50.00	\$20,700
1 1/2" HW	46	LF	\$40.00	\$1,840
4" CHW	113	LF	\$70.00	\$7,910
2 1/2" CHW	438	LF	\$55.00	\$24,090
Refrigeration piping with fittings & hangers	9,950	SF	\$0.65	\$6,468
Condensate drain piping with fittings & hangers	9,950	SF	\$0.50	\$4,975
Valves & accessories	9,950	SF	\$2.00	\$19,900
Pipe insulation	9,950	SF	\$2.50	\$24,875
Ductwork				
Branch ductwork underfloor fabric CC	195	LF	\$10.00	\$1,950
Galvanized ductwork with fittings & hangers	9,400	LB	\$11.00	\$103,400
Duct insulation	5,600	SF	\$4.00	\$22,400
Registers, grilles & diffusers	9,950	SF	\$1.50	\$14,925
Miscellaneous sheet metal accessories	9,950	SF	\$0.75	\$7,463

**HEATING, VENTILATION, & AIR-
CONDITIONING**

	Quantity	Unit	Rate	Total (\$)
Miscellaneous				
Automatic temperature control DDC	9,950	SF	\$8.50	\$84,575
Test and balance	9,950	SF	\$0.75	\$7,463
Coring and firestopping	1	LS	\$4,000.00	\$4,000
Rigging & equipment rental	1	LS	\$10,000.00	\$10,000
Coordination & management	1	LS	\$10,000.00	\$10,000
Fees & permits	1	LS	\$5,400.00	\$5,400
Subtotal For Heating, Ventilation, & Air-Conditioning:				\$724,563

FIRE PROTECTION

	Quantity	Unit	Rate	Total (\$)
Wet Pipe Sprinkler Distribution				
Double check valve	1	EA	\$10,000.00	\$10,000
Wet alarm valve	1	EA	\$4,500.00	\$4,500
Fire department connection	1	EA	\$1,200.00	\$1,200
Sprinkler head	75	EA	\$200.00	\$15,000
Miscellaneous valves	1	LS	\$5,000.00	\$5,000
Main sprinkler pipe with fittings & hangers	400	LF	\$30.00	\$12,000
Branch sprinkler pipe with fittings & hangers	1,000	LF	\$26.00	\$26,000
Special systems (Allowance)	1	LS	\$25,000.00	\$25,000
Miscellaneous				
Demolition	1	LS	\$3,000.00	\$3,000
Hydraulic calculations	1	LS	\$4,000.00	\$4,000
Coring and firestopping	1	LS	\$3,000.00	\$3,000
Coordination & management	1	LS	\$3,500.00	\$3,500
Drawings	1	LS	\$2,000.00	\$2,000
Fees & permits	1	LS	\$1,200.00	\$1,200
Subtotal For Fire Protection:				\$115,400

ELECTRICAL	Quantity	Unit	Rate	Total (\$)
Electrical Service and Distribution				
Normal power				
Energy monitoring	1	LS	\$10,000.00	\$10,000
1000A distribution panelboard	1	EA	\$40,000.00	\$40,000
500A distribution panelboard	1	EA	\$20,000.00	\$20,000
125A panelboard	1	EA	\$2,250.00	\$2,250
100A panelboard	1	EA	\$2,000.00	\$2,000
500A feed	40	LF	\$144.00	\$5,760
125A feed	15	LF	\$38.00	\$570
100A feed	30	LF	\$30.00	\$900
Grounding and bonding	1	LS	\$3,500.00	\$3,500
Emergency power				
Centralized Lighting battery inverter	1	LS	\$25,000.00	\$25,000
Equipment wiring				
Mechanical equipment feed and connections	10,269	GSF	\$0.50	\$5,135
AHU feed and connection	1	EA	\$4,500.00	\$4,500
EF feed and connection	3	EA	\$1,500.00	\$4,500
FCU feed and connection	3	EA	\$1,000.00	\$3,000
Fan feed and connection	2	EA	\$1,000.00	\$2,000
WH feed and connection	1	EA	\$750.00	\$750
Pump feed and connection	8	EA	\$1,500.00	\$12,000
Split feed and connection	2	EA	\$3,000.00	\$6,000
VFD feed and connection only	8	EA	\$950.00	\$7,600
Motorized windows feed and connection	1	LS	\$5,000.00	\$5,000
Photovoltaic system				
RA3 - 83KW system with array of panels, inverters, panelboards, feeders and	83	KW	\$4,300.00	\$356,900
200A panelboard	1	EA	\$2,500.00	\$2,500
200A disconnect switch	1	EA	\$1,850.00	\$1,850
200A feed (Ductbank)	650	LF	\$130.00	\$84,500
Lighting and Branch Wiring				
Lighting fixtures				
Downlight (small)	69	EA	\$350.00	\$24,150
Downlight (medium)	21	EA	\$450.00	\$9,450
Downlight (large)	15	EA	\$650.00	\$9,750
Linear lighting	80	LF	\$120.00	\$9,600
Strip lights	9	EA	\$150.00	\$1,350
Vestibule light	2	EA	\$850.00	\$1,700

ELECTRICAL	Quantity	Unit	Rate	Total (\$)
Lighting and Branch Wiring				
Lighting fixtures				
Exit and emergency lighting	10,403	SF	\$1.00	\$10,403
Exterior building lighting	1	LS	\$7,500.00	\$7,500
Lighting controls				
Lighting control panel	1	EA	\$2,500.00	\$2,500
Single pole switch	4	EA	\$40.00	\$160
Dimmer switch	21	EA	\$75.00	\$1,575
Sensor	17	EA	\$200.00	\$3,400
Branch devices				
Double Duplex receptacle	2	EA	\$30.00	\$60
Double Duplex receptacle in floor box	8	EA	\$30.00	\$240
Duplex receptacle	28	EA	\$36.00	\$1,008
Duplex receptacle (controlled)	22	EA	\$52.00	\$1,144
Duplex receptacle in floor box	6	EA	\$36.00	\$216
GFCI duplex receptacle	5	EA	\$40.00	\$200
2 gang floor box	14	EA	\$350.00	\$4,900
Device box	300	EA	\$38.00	\$11,400
3/4" EMT	2,000	LF	\$10.00	\$20,000
3/4" PVC	700	LF	\$10.00	\$7,000
#12 THHN	13,500	LF	\$1.10	\$14,850
12-2 MC cable	5,000	LF	\$5.30	\$26,500
12-2 MC cable	1,000	LF	\$6.20	\$6,200
Communications and Security				
Fire Alarm				
Fire alarm control panel	1	EA	\$7,500.00	\$7,500
Graphic annunciator	1	EA	\$3,500.00	\$3,500
LCD annunciator	1	EA	\$1,500.00	\$1,500
Initiating device	16	EA	\$150.00	\$2,400
Audio visual device	20	EA	\$125.00	\$2,500
Visual device	5	EA	\$115.00	\$575
Modules	10	EA	\$150.00	\$1,500
Device box	50	EA	\$30.00	\$1,500
3/4" EMT	1,500	LF	\$8.00	\$12,000
FA cable	2,500	LF	\$1.50	\$3,750
Testing and programming	1	LS	\$3,500.00	\$3,500
Bi-Directional amplification				
Bi-Directional amplification	1	EA	\$15,000.00	\$15,000

ELECTRICAL	Quantity	Unit	Rate	Total (\$)
Telecommunications				
IDF fit out	1	EA	\$6,500.00	\$6,500
Device box with conduit stub to ceiling	33	EA	\$130.00	\$4,290
2 gang floor box	14	EA	\$350.00	\$4,900
1-port device	27	EA	\$25.00	\$675
1-port device in floor box	14	EA	\$25.00	\$350
2-port device	6	EA	\$50.00	\$300
WAP	11	EA	\$350.00	\$3,850
Cat.6 cable	13,000	LF	\$1.75	\$22,750
Backbone cabling from PS/CH				Site work
Grounding	1	LS	\$1,500.00	\$1,500
PA/Clock system				
				NIC
AV system				
AV system rough-in & power	10,403	SF	\$1.00	\$10,403
Security system				
Head end	1	LS	\$10,000.00	\$10,000
Camera WP	8	EA	\$1,750.00	\$14,000
Camera	2	EA	\$1,200.00	\$2,400
Card reader	6	EA	\$350.00	\$2,100
Door contact	19	EA	\$250.00	\$4,750
Motion detector	4	EA	\$250.00	\$1,000
Device box	19	EA	\$38.00	\$722
3/4" EMT	1,000	LF	\$10.00	\$10,000
Cabling	1,200	LF	\$1.75	\$2,100
SatelliteTV				
Rough-in, provisions only	1	LS	\$5,000.00	\$5,000
Other Electrical Systems				
Temp power & lighting	1	LS	\$5,500.00	\$5,500
Seismic restraints	1	LS	\$10,000.00	\$10,000
Fees & Permits	1	LS	\$15,000.00	\$15,000
Subtotal For Electrical:				\$974,786

EQUIPMENT	Quantity	Unit	Rate	Total (\$)
Commercial Equipment				
Residential equipment at breakroom; including refrigerator, microwave, and dishwasher	1	RM	\$10,000.00	\$10,000
Library equipment; including book depository slots and security gate	1	LS	\$10,000.00	\$10,000
Subtotal For Equipment:				\$20,000

FURNISHINGS	Quantity	Unit	Rate	Total (\$)
Fixed Furnishings				
Light Control and Vision Equipment				
Window shades and blinds, manual operation	3,252	SF	\$8.00	\$26,016
Projection screens at meeting rooms and digital lab	4	EA	\$5,000.00	\$20,000
Amenities and Convenience Items				
Entrance mats and frames	1	LS	\$5,000.00	\$5,000
Fire Extinguisher cabinets	1	LS	\$1,000.00	\$1,000
Subtotal For Furnishings:				\$52,016

50% Design Development Cost Estimate

Renovate existing Heritage Town Hall
Atherton Civic Center

Control Quantities
Renovate existing Heritage Town Hall Summary
Detailed Cost Breakdown

October 3, 2016

Enclosed Areas
Ground floor 1,645

Subtotal of Enclosed Area 1,645

Covered Area
Roof Overhang 460

Subtotal of Covered Area at half value 230

Total of Gross Floor Area 1,875

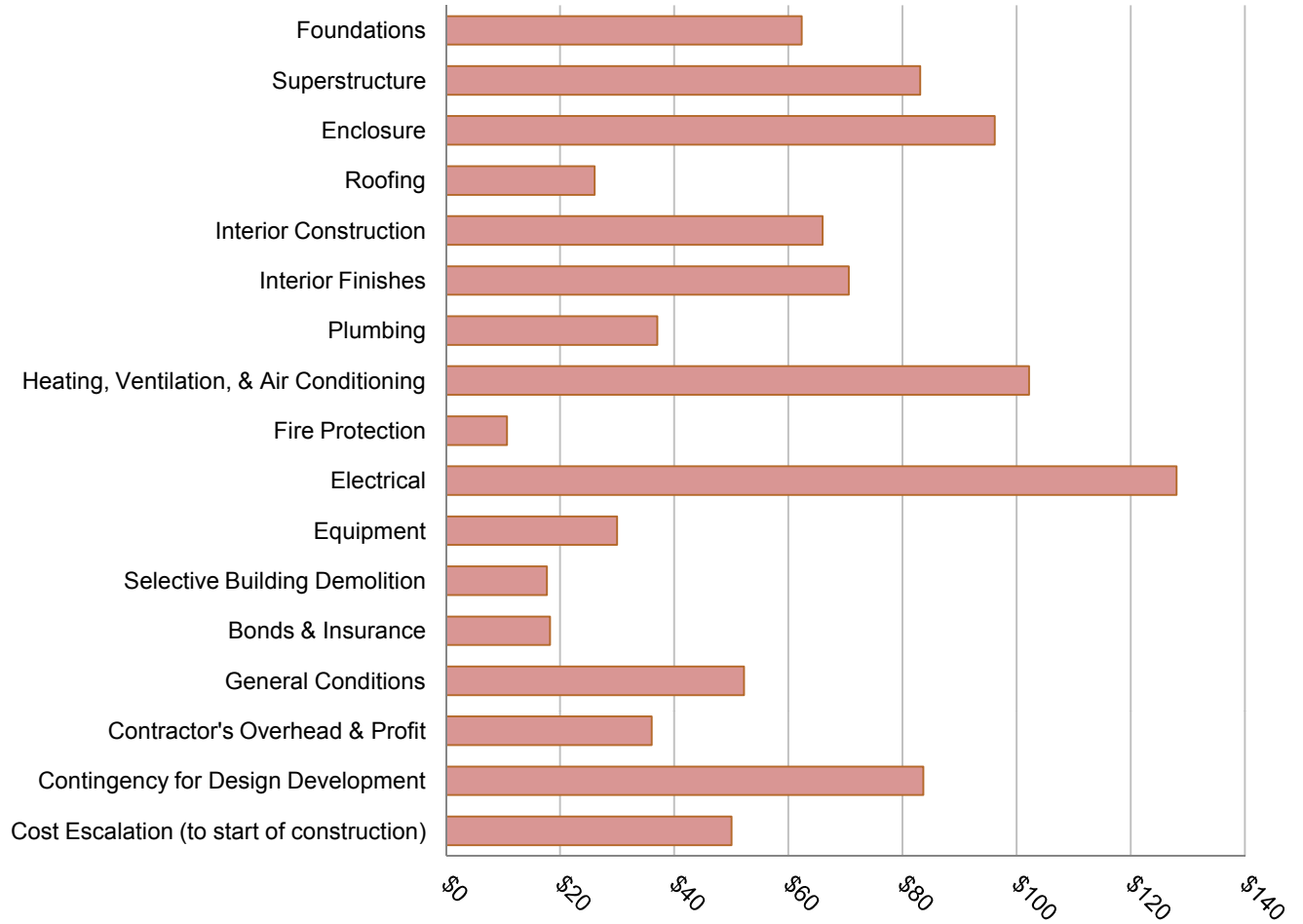
CONTROL QUANTITIES

			Ratio to Gross Area
Number of stories (x1,000)	1	EA	0.533
Gross Area	1,875	SF	1.000
Enclosed Area	1,645	SF	0.877
Covered Area	524	SF	0.280
Footprint Area	1,645	SF	0.877
Volume	23,030	CF	12.283
Gross Wall Area	3,209	SF	1.712
Finished Wall Area	3,083	SF	1.645
Windows or Glazing Area	4% 126	SF	0.067
Roof Area - Flat	0	SF	0.000
Roof Area - Sloping	2,169	SF	1.157
Roof Area - Total	2,169	SF	1.157
Roof Glazing Area	0	SF	0.000
Interior Partition Length	65	LF	0.035
Elevators (x10,000)	0	EA	0.000
Plumbing Fixtures (x1,000)	5	EA	2.667

CSI UniFormat Summary	1,875 SF	%	\$/SF	\$,000
Foundations		6%	\$33.25	\$62
Superstructure		9%	\$44.33	\$83
Enclosure		10%	\$51.28	\$96
Roofing		3%	\$13.88	\$26
Interior Construction		7%	\$35.21	\$66
Interior Finishes		7%	\$37.66	\$71
Plumbing		4%	\$19.76	\$37
Heating, Ventilation, & Air Conditioning		11%	\$54.51	\$102
Fire Protection		1%	\$5.70	\$11
Electrical		13%	\$68.28	\$128
Equipment		3%	\$16.00	\$30
Selective Building Demolition		2%	\$9.42	\$18
Subtotal - Building Construction		75%	\$389.27	\$730
Bonds & Insurance	2.50%	2%	\$9.73	\$18
General Conditions		5%	\$27.86	\$52
Contractor's Overhead & Profit	4.50%	4%	\$19.21	\$36
Subtotal		86%	\$446.08	\$836
Contingency for Design Development	10.00%	9%	\$44.61	\$84
Cost Escalation (to start of construction)	5.44%	5%	\$26.70	\$50
TOTAL CONSTRUCTION BUDGET	August 2017	100%	\$517.38	\$970

NOTE: Inclusions and Exclusions listed in the Commentary Section.

CSI UniFormat Summary



FOUNDATIONS	Quantity	Unit	Rate	Total (\$)
Foundation				
HDU 11 x 1" diameter anchor bolts into concrete drilled pier	10	EA	\$100.00	\$1,000
Concrete pier 12" diameter x 12" deep	120	LF	\$100.00	\$12,000
Shoring, underpinning and safety measure	1,645	SF	\$25.00	\$41,125
Slab On Grade				
Cut and patch (E) slab on grade - allowance	1,645	SF	\$5.00	\$8,225
Subtotal For Foundations:				\$62,350

SUPERSTRUCTURE	Quantity	Unit	Rate	Total (\$)
Seismic Upgrade				
Strip existing inside finishes to studs	3,209	GWA	\$2.00	\$6,419
New 1/2" thick plywood sheathing	3,209	SF	\$5.00	\$16,047
New 2x4 framing at all vertical & horizontal plywood joints	1,587	LF	\$10.00	\$15,870
Anchor bolts (A.B) 5/8" diameter epoxy grouted into existing foundation	132	EA	\$75.00	\$9,900
Miscellaneous sheet-metal hardware to tie together various sections of the building	1,875	GSF	\$2.00	\$3,750
Roof Construction				
15/32" thick fire treated plywood over (E) straight sheathing and new blocking	2,169	SF	\$6.00	\$13,015
Miscellaneous				
Rough carpentry	1,875	GSF	\$2.00	\$3,750
Dryrot repair - Allowance	1,875	GSF	\$5.00	\$9,375
Temporary scaffolding, shoring and safety measure	1	LS	\$5,000.00	\$5,000
Subtotal For Superstructure:				\$83,126

ENCLOSURE	Quantity	Unit	Rate	Total (\$)
Exterior Walls				
Refinish and repaint existing cement plaster/stucco wall	3,209	SF	\$10.00	\$32,095
Exterior Windows				
Aluminum framed windows, with insulated low-E vision glazing	126	SF	\$95.00	\$11,970
Interior finish of exterior wall				
Painted gypwall	3,209	SF	\$5.50	\$17,652
Exterior Doors, finished oak door with bronze finished custom hardware				
Wood french doors and frames, double leaf, 6'-0"wide x 8'-0" high	2	PR	\$7,500.00	\$15,000
Hollow metal door, single leaf	1	EA	\$2,000.00	\$2,000
Premium for special door hardwares	1	LS	\$5,000.00	\$5,000
Soffits				
Exterior soffit, patch/repair and repaint existing	460	SF	\$10.00	\$4,600
Miscellaneous Work				
Fascias, bands, screens, trim, wood articulation at doors, etc.	3,209	GWA	\$2.00	\$6,419
Rough carpentry	1,875	GSF	\$0.75	\$1,406
Subtotal For Enclosure:				\$96,142

ROOFING	Quantity	Unit	Rate	Total (\$)
Roof Coverings				
Reinstall roof tile over new wood deck, salvage tile from (E) library to replace damaged tile	2,169	SF	\$10.00	\$21,692
Waterproofing membrane	2,169	SF	\$2.00	\$4,338
Subtotal For Roofing:				\$26,030

INTERIOR CONSTRUCTION	Quantity	Unit	Rate	Total (\$)
Interior Partitions				
Non-rated Partitions				
4" metal studs	876	SF	\$7.00	\$6,133
Batt insulation	876	SF	\$1.25	\$1,095
5/8" gypsum wallboard, finished	1,752	SF	\$4.00	\$7,009
Backing and blacking	1,875	GSF	\$1.25	\$2,344
Interior Doors				
Single leaf	3	EA	\$1,800.00	\$5,400
Fittings				
Protective guards, barriers and bumpers	1,875	GSF	\$0.50	\$938
Toilet Partitions and accessories				
Single stall, family restroom	2	RM	\$1,500.00	\$3,000
Cabinets and Countertops				
Upper cabinets	4	LF	\$300.00	\$1,260
Lower cabinets	11	LF	\$350.00	\$3,920
Full height cabinets	18	LF	\$750.00	\$13,200
Countertops	13	LF	\$150.00	\$1,965
Café island, 2'-6"wide	8	LF	\$750.00	\$6,000
Residential equipment at breakroom; including refrigerator, microwave, and dishwasher	1	RM	\$10,000.00	\$10,000
64" TV				<i>NIC, Owner furnished Owner Installed</i>
Allowance for chalkboards, insignia and graphics; including door signages, directional/wayfinding signs and chalkboards/tackboards	1,875	GSF	\$2.00	\$3,750
Subtotal For Interior Construction:				\$66,014

STAIRS	Quantity	Unit	Rate	Total (\$)
<i>No work anticipated in this section</i>				
Subtotal For Stairs:				

INTERIOR FINISHES	Quantity	Unit	Rate	Total (\$)
Flooring				
Porcelain tile	134	SF	\$20.00	\$2,680
Wood	1,295	SF	\$15.00	\$19,425
Bases				
Rubber base and cove base	298	LF	\$3.00	\$894
Ceramic tile base	70	LF	\$20.00	\$1,400
Walls				
Ceramic tile	676	SF	\$20.00	\$13,520
Paint	200	SF	\$1.25	\$250
Ceiling				
Gypsum board	134	SF	\$18.00	\$2,412
Wood deck	835	SF	\$35.00	\$29,225
Assume paint exposed ceiling	459	SF	\$1.75	\$803
Subtotal For Interior Finishes:				\$70,609

CONVEYING	Quantity	Unit	Rate	Total (\$)
<i>No work anticipated in this section</i>				
Subtotal For Conveying:				

PLUMBING	Quantity	Unit	Rate	Total (\$)
Plumbing Fixtures				
Water closet	2	EA	\$2,500.00	\$5,000
Lavatory	2	EA	\$1,800.00	\$3,600
Kitchen sink	1	EA	\$1,200.00	\$1,200
Domestic Water Distribution				
2" Domestic water piping	150	LF	\$42.00	\$6,300
1" Domestic water piping	250	LF	\$34.00	\$8,500
Domestic water pipe insulation	400	LF	\$12.00	\$4,800
Sanitary Waste & Vent Piping				
6" Sanitary	50	LF	\$50.00	\$2,500
4" Sanitary underslab	100	LF	\$48.00	\$4,800

PLUMBING	Quantity	Unit	Rate	Total (\$)
Storm Water Piping				
4" Storm drain piping	7	LF	\$49.00	\$343
Subtotal For Plumbing:				\$37,043

HEATING, VENTILATION, & AIR-CONDITIONING	Quantity	Unit	Rate	Total (\$)
Equipment				
CHWP-5 1HP 55gpm	1	EA	\$2,750.00	\$2,750
CHWP-6 1HP 55gpm	1	EA	\$2,750.00	\$2,750
HWP-5 1HP 55gpm	1	EA	\$2,750.00	\$2,750
HWP-6 1HP 55gpm	1	EA	\$2,750.00	\$2,750
AS-5 ?	1	EA	\$5,000.00	\$5,000
AS-6 ?	1	EA	\$5,000.00	\$5,000
Piping				
Heating hot water pipe with fittings & hangers	1,645	SF	\$3.50	\$5,758
Refrigeration piping with fittings & hangers	1,645	SF	\$0.65	\$1,069
Condensate drain piping with fittings & hangers	1,645	SF	\$0.50	\$823
Valves & accessories	1,645	SF	\$2.00	\$3,290
Pipe insulation	1,645	SF	\$2.50	\$4,113
Galvanized ductwork with fittings & hangers	1,645	LB	\$10.00	\$16,450
Duct insulation	1,645	SF	\$4.00	\$6,580
Registers, grilles & diffusers	1,645	SF	\$1.50	\$2,468
Miscellaneous sheet metal accessories	1,645	SF	\$0.75	\$1,234
Miscellaneous				
Automatic temperature control DDC	1,645	SF	\$8.50	\$13,983
Test and balance	1,645	SF	\$0.75	\$1,234
Coring and firestopping	1	LS	\$5,000.00	\$5,000
Rigging & equipment rental	1	LS	\$10,000.00	\$10,000
Coordination & management	1	LS	\$8,000.00	\$8,000
Fees & permits	1	LS	\$1,200.00	\$1,200
Subtotal For Heating, Ventilation, & Air-Conditioning:				\$102,199

FIRE PROTECTION	Quantity	Unit	Rate	Total (\$)
Allowance to modify existing fire sprinkler system	1,645	GSF	\$6.50	\$10,693
Subtotal For Fire Protection:				\$10,693

ELECTRICAL	Quantity	Unit	Rate	Total (\$)
Electrical Service and Distribution				
Gear and Distribution				
Panelboard and feeders	1	LS	\$7,500.00	\$7,500
Mechanical equipment wiring	1,875	GSF	\$1.00	\$1,875
Pump feed and connection	4	EA	\$1,500.00	\$6,000
Split feed and connection	1	EA	\$3,000.00	\$3,000
Lighting and Branch Wiring				
Lighting fixtures				
Recessed downlight	8	EA	\$350.00	\$2,800
Linear lighting	80	LF	\$120.00	\$9,600
Exit and emergency lighting	1,875	GSF	\$1.00	\$1,875
Exterior lighting	1	LS	\$5,000.00	\$5,000
Lighting Controls				
Sensor	4	EA	\$200.00	\$800
Dimmer switch	7	EA	\$75.00	\$525
Branch devices				
Double Duplex receptacle in floor box	4	EA	\$72.00	\$288
Duplex receptacle	4	EA	\$36.00	\$144
GFCI duplex receptacle	30	EA	\$53.00	\$1,590
2 gang floor box	4	EA	\$350.00	\$1,400
Device box	70	EA	\$38.00	\$2,660
3/4" EMT	500	LF	\$10.00	\$5,000
3/4" PVC	200	LF	\$10.00	\$2,000
#12 THHN	3,500	LF	\$1.10	\$3,850
12-2 MC cable	750	LF	\$5.30	\$3,975
12-2 MC cable	250	LF	\$6.20	\$1,550

ELECTRICAL	Quantity	Unit	Rate	Total (\$)
Communications and Security				
Security system				
Make connection to existing head end	1	LS	\$3,500.00	\$3,500
Camera WP	7	EA	\$1,750.00	\$12,250
Camera	3	EA	\$1,200.00	\$3,600
Card reader	2	EA	\$350.00	\$700
Door contact	7	EA	\$250.00	\$1,750
Device box	19	EA	\$38.00	\$722
3/4" EMT	1,000	LF	\$10.00	\$10,000
Cabling	1,200	LF	\$1.75	\$2,100
Telecommunications				
IDF closet fit-out	1	LS	\$3,500.00	\$3,500
Device box with conduit stub to ceiling	5	EA	\$130.00	\$650
Floor box	4	EA	\$350.00	\$1,400
1-port device	5	EA	\$25.00	\$125
1-port device in floor box	4	EA	\$25.00	\$100
Cat.6 cable	1,600	LF	\$1.75	\$2,800
AV System				
Community room sound system	1	LS	\$5,000.00	\$5,000
AV system rough-in & power	1,946	SF	\$1.00	\$1,946
Projector screen feed and connection	1	EA	\$450.00	\$450
Other Electrical Systems				
Demo & make safe	1	LS	\$5,000.00	\$5,000
Temp power & lighting	1	LS	\$4,000.00	\$4,000
Seismic restraints	1	LS	\$4,500.00	\$4,500
Fees & Permits	1	LS	\$2,500.00	\$2,500

Subtotal For Electrical: \$128,025

EQUIPMENT	Quantity	Unit	Rate	Total (\$)
Commercial Equipment				
Food Service allowance	200	SF	\$150.00	\$30,000

Subtotal For Equipment: \$30,000

FURNISHINGS	Quantity	Unit	Rate	Total (\$)
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No work anticipated in this section

Subtotal For Furnishings:

SELECTIVE BUILDING DEMOLITION	Quantity	Unit	Rate	Total (\$)
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Selective Demolition				
Remove (E) tile roof	2,169	SF	\$3.00	\$6,508
Demolition and removal of existing partitions/doors and interior finishes	1,645	SF	\$6.00	\$9,870
Demolition and removal of (E) exterior wall - for new french door	128	SF	\$10.00	\$1,280

Hazardous Materials Abatement *NIC, Excluded*

Subtotal For Selective Building Demolition: \$17,658

50% Design Development Cost Estimate

Site Improvement (Police Station Scope)

Atherton Civic Center

Control Quantities
Site Improvement (Police Station Scope) Summary
Detailed Cost Breakdown

October 3, 2016

Site Areas

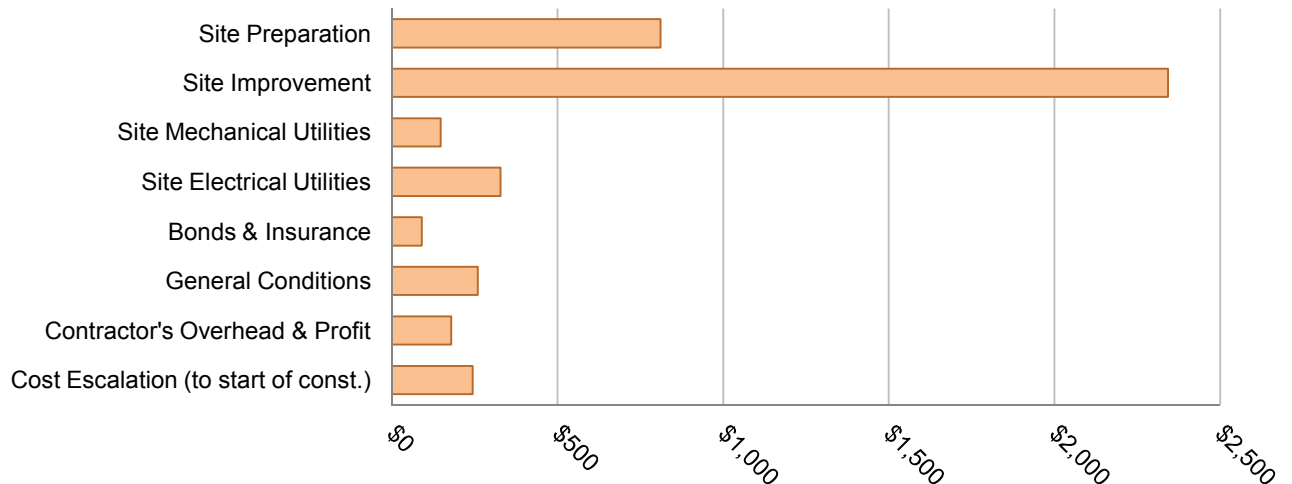
Vehicular paving	46,355
Pedestrian paving and hardscape	30,464
Landscaping and Softscape	23,732
Biofiltration basin	3,987
Ancillary building	1,812
Building footprint - City Hall	15,770

Subtotal of Enclosed Area	122,120
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CSI UniFormat Summary	122,120 SF	%	\$/SF	,\$000
Site Preparation		17%	\$6.64	\$811
Site Improvement		49%	\$19.18	\$2,342
Site Mechanical Utilities		3%	\$1.20	\$147
Site Electrical Utilities		7%	\$2.68	\$328
Subtotal - Sitework		77%	\$29.71	\$3,628
Bonds & Insurance	2.50%	2%	\$0.74	\$91
General Conditions		5%	\$2.13	\$260
Contractor's Overhead & Profit	4.50%	4%	\$1.47	\$179
Subtotal		88%	\$34.04	\$4,158
Contingency for Design Development	8.00%	7%	\$2.72	\$333
Cost Escalation (to start of const.)	5.44%	5%	\$2.00	\$244
TOTAL CONSTRUCTION BUDGET		100%	\$38.77	\$4,734

NOTE: Inclusions and Exclusions listed in the Commentary Section.

CSI UniFormat Summary



SITE PREPARATION	Quantity	Unit	Rate	Total (\$)
Demolition Of Building and Structures				
Demo and removal of existing building within the limit of work; including city offices, police station, building department, permit center, library and one maintenance building	12,925	SF	\$10.00	\$129,250
Demo and removal of all hardscape and minimum softscape, including paving, curbs, wall features and aggregate base	122,120	SF	\$1.50	\$183,180
Remove existing heritage trees	18	EA	\$800.00	\$14,400
Site Protective Construction				
Transplant existing trees	2	EA	\$1,500.00	\$3,000
Tree Protection				
Temporary tree protection chainlink fence, 6' high	866	LF	\$30.00	\$25,980
Temporary layer of mulch to be maintained till tree protection fence is removed, 2" thick	5,250	SF	\$0.50	\$2,625
Plastic laminated sign spaced at 50' o.c., 24" x 36" "KEEP OUT TREE PROTECTION AREA"	15	EA	\$100.00	\$1,500
Erosion control/SWPPP	122,120	SF	\$0.50	\$61,060
Earthwork				
Site clearing and rough grading	122,120	SF	\$0.50	\$61,060
Excavate and offhaul unsuitable materials				
Under building, 30" thick	1,840	CY	\$35.00	\$64,394
Under vehicular/pedestrian paving, varying thickness	3,843	CY	\$35.00	\$134,492
6~12" thick scarified/moisture conditioned/compacted native soil				
Under building	19,870	SF	\$0.75	\$14,903
Under vehicular/pedestrian paving	67,802	SF	\$0.75	\$50,852
30" thick compacted engineered fill, extend pad 5' beyond edge of building on all sides	1,840	CY	\$35.00	\$64,394
Hazardous Materials Abatement				NIC
Subtotal For Site Preparation:				\$811,089

SITE IMPROVEMENT	Quantity	Unit	Rate	Total (\$)
Vehicular Paving				
Vehicular concrete; consist of 6" thick portland cement concrete reinforced with #4 rebar at 16" o.c. both ways at midpoint of slab, over 8" thick aggregate base, over wooven geotextile fabric, over compacted subgrade	46,354	SF	\$10.00	\$463,542
Pavement marking and striping	46,354	SF	\$0.35	\$16,224
Concrete curb and gutter	2,664	LF	\$35.00	\$93,240
Curb cuts and ramps	4	EA	\$1,500.00	\$6,000
Wheelstop	11	EA	\$100.00	\$1,100
Pedestrian Paving				
PV-1 Asphalt paving; consists of 4" thick asphalt concrete pavement, over 10" thick class 2 aggregate base, over woven textile fabric and compacted 12"thick subgrade	3,046	SF	\$6.50	\$19,799
PV-2 Porous asphalt paving; consist of 4" thick open-graded porous asphalt, over 6" thick choker course crushed aggregate, over 24" thick washed drain rock, over geogrid and non-woven geotextile fabric, over uncompacted subgrade	9,016	SF	\$11.50	\$103,684
PV-3 Exposed aggregate pervious concrete (unreinforced); consist of 4" thick exposed aggregate pervious concrete, over 8" thick graded crushed aggregate base, over filter fabric and compacted native subgrade	13,146	SF	\$8.00	\$105,168
PV-6 Concrete paving; consist of 4" thick concrete reinforced with #4 rebar at 16" o.c., both ways, over 6" thick class II aggregate base, over filter fabric and 12" thick compacted native subgrade	5,256	SF	\$8.00	\$42,048

SITE IMPROVEMENT	Quantity	Unit	Rate	Total (\$)
Landscaping				
Planting area, 1 gallon pots @ 18" o.c.	23,732	SF	\$10.00	\$237,320
Ground hardwood mulch, 2" thick	23,732	SF	\$0.30	\$7,120
Biofiltration basin; consists of 1 gallon plants @ 18" o.c., over 2" thick gravel mulch, over 18" thick of bioretention soil mix, over 12" thick of sand, over geotextile filter fabric	3,987	SF	\$25.00	\$99,675
Landscape edging header - allowance	4,000	LF	\$10.00	\$40,000
Trees, 48" box	9	EA	\$1,500.00	\$13,500
Irrigation				
Planting area (PA)	27,719	SF	\$2.50	\$69,298
Trees	9	EA	\$350.00	\$3,150
Soil Preparation (under PV-3 and PA)				
S-1 New topsoil (excavated and amended or imported, 3' deep)	758	CY	\$25.00	\$18,939
S-2 Amend in place existing soil; 12" in hand excavation zone of existing trees, 36" thick otherwise	1,588	CY	\$25.00	\$39,694
S-3 Porous paving #2 gap-graded aggregate; 8" thick deep below bottom of paving	3,895	CY	measured with PV-3	
S-4 CU-Structural soil; 24" thick deep below bottom of paving	307	CY	\$35.00	\$10,746
S-5 Biofiltration soil profile			measured with Bioretention basin	
Site Structures				
B-1 Radial bench	108	LF	\$200.00	\$21,600
W-2 Concrete retaining wall @ biofiltration basin, 6" thick x 5'-0" high	600	LF	\$200.00	\$120,000
W-3 Dasso wood fence in galvanized steel frame, complete with reinforced concrete footing, 6'-0" high	76	LF	\$250.00	\$19,000
Reinforced concrete wall footing				
For W-2, 3'-6" wide x 12" thick	600	LF	\$60.00	\$36,000
For W-3, 9" wide x 3'-4" thick	76	LF	\$75.00	\$5,700
F-1 Parc centre chair	20	EA	\$265.00	\$5,300
F-4 Parc centre table	5	EA	\$800.00	\$4,000
Custom monument wall	46	LF	\$250.00	\$11,500

SITE IMPROVEMENT	Quantity	Unit	Rate	Total (\$)
Ancillary Building				
Structural				
Reinforced concrete foundation	1,900	GSF	\$20.00	\$38,000
Reinforced concrete slab on grade	1,900	GSF	\$15.00	\$28,500
Vertical Structure/Post	1,900	GSF	\$10.00	\$19,000
Roof framing and plywood sheathing	1,900	GSF	\$25.00	\$47,500
Exterior Enclosure				
Perimeter CMU wall	3,159	SF	\$30.00	\$94,770
Interior finish to exterior wall, painted gypwall	3,159	SF	\$7.50	\$23,693
Exterior Doors				
Single leaf	4	EA	\$2,000.00	\$8,000
Double leaf	4	PR	\$3,200.00	\$12,800
Garage door				
At stolen vehicle garage, 10'-0" wide x 9'-9" high	1	EA	\$18,000.00	\$18,000
At motorcycle garage, 16'-0" wide x 8'-0" high	1	EA	\$6,400.00	\$6,400
Roofing				
Built-up roof including rigid insulation, flat roof area	1,900	SF	\$20.00	\$38,000
Roof flashing, gutters and downspouts	1,900	SF	\$2.00	\$3,800
Interior Construction				
Interior cmu wall	1,860	SF	\$30.00	\$55,800
Interior doors	2	EA	\$1,800.00	\$3,600
General casework	72	LF	\$250.00	\$17,975
Chalkboards and graphics; including directional/wayfinding signs, door signage, chalkboard and tackboards, flagpole, and building signs	1,900	GSF	\$5.00	\$9,500
Floor, Wall and Ceiling Finishes	1,900	GSF	\$10.00	\$19,000
Miscellaneous, rough carpentry	1,900	GSF	\$2.00	\$3,800
Plumbing, roof drainage - Allowance	1,900	GSF	\$2.00	\$3,800
HVAC - Allowance	1,900	GSF	\$10.00	\$19,000

SITE IMPROVEMENT	Quantity	Unit	Rate	Total (\$)
Ancillary Building				
Electrical				
Electrical Service and Distribution				
100A panelboard	1	EA	\$2,000.00	\$2,000
100A feed in ductbank	80	LF	\$40.00	\$3,200
Grounding and bonding	1	LS	\$500.00	\$500
Equipment wiring				
Mechanical equipment feed and connections	1,900	SF	\$2.00	\$3,800
Lighting and Branch Wiring				
Lighting fixtures	1,900	SF	\$4.00	\$7,600
Exterior building lighting	1	LS	\$1,000.00	\$1,000
Lighting controls	1,900	SF	\$0.20	\$380
Branch devices				
Duplex GFI receptacle	1,900	SF	\$0.20	\$380
Circuitry	1,900	SF	\$3.00	\$5,700
Communications and Security				
Fire Alarm				
Fire alarm control panel	1	EA	\$2,000.00	\$2,000
Reporting devices and circuitry	1,900	EA	\$1.00	\$1,900
Telecommunications				
Fit out closet	1	LS	\$1,000.00	\$1,000
Cabling and devices	1,900	SF	\$0.50	\$950
Rough-in	1,900	SF	\$0.50	\$950
Security system				
Control panel	1	LS	\$2,000.00	\$2,000
Cameras, devices and cabling	1	LS	\$4,000.00	\$4,000
Other Electrical Systems				
Temp power & lighting	1	LS	\$1,000.00	\$1,000
Seismic restraints	1	LS	\$1,000.00	\$1,000
Fees & Permits	1	LS	\$400.00	\$400
Fire Protection - Allowance	1,900	GSF	\$8.00	\$15,200
Equipment and Furnishings - Allowance	1,900	GSF	\$2.00	\$3,800

SITE IMPROVEMENT	Quantity	Unit	Rate	Total (\$)
Police Secure Parking and Trash Area				
Wall footing	255	LF	\$75.00	\$19,125
CMU fence with cement plaster finish at exterior, 8'-0" high	2,040	SF	\$45.00	\$91,800
Exterior Doors				
Single leaf	3	EA	\$2,000.00	\$6,000
Secure sliding gate, 16'-0" wide	2	EA	\$9,000.00	\$18,000
Swinging gate at trash enclosure	1	PR	\$3,000.00	\$3,000
Emergency generator pad	250	SF	\$20.00	\$5,000
Concrete pad for fuel storage tank, emergency generator and transformer and trash area	720	SF	\$20.00	\$14,400
Trash area pad	230	SF	\$20.00	\$4,600
Chain link fence and gate	12	LF	\$200.00	\$2,400
Secure PD parking, asphalt paving				measured under pedestrian paving
Striping and pavement marking				measured under pedestrian paving
Wheelstop	19	EA	\$100.00	\$1,900
Removable bollard	9	EA	\$350.00	\$3,150
Fencing and miscellaneous site furnishing				
Allowance for miscellaneous site furnishing; such as trash receptacles, bicycle rack, bollards, etc.	1	LS	\$30,000.00	\$30,000
Subtotal For Site Improvement:			\$2,342,419	

SITE MECHANICAL UTILITIES	Quantity	Unit	Rate	Total (\$)
Domestic & Fire Water Systems:				
Domestic water supply (allowance)	1	EA	\$4,000.00	\$4,000
Fire water supply (allowance)	1	EA	\$10,000.00	\$10,000
Fire hydrant assembly	1	EA	\$4,500.00	\$4,500
Fire water supply lines - PVC, to 6"	60	LF	\$100.00	\$6,000
Demo (E) water lines, hydrants, etc.	45	LF	\$25.00	\$1,125
Demo (E) IRR mains	180	LF	\$6.00	\$1,080
Sanitary Sewer Systems:				
Manhole	1	EA	\$5,500.00	\$5,500
Washdown area drain				<i>included with Library Scope</i>
Sanitary sewer lines - PVC, to 6"	330	LF	\$52.00	\$17,160
Connect SS to (E) SS lines	1	EA	\$650.00	\$650

SITE MECHANICAL UTILITIES	Quantity	Unit	Rate	Total (\$)
Storm Drainage Systems:				
Roof drain collection (allowance)	1	LS	\$3,000.00	\$3,000
Manhole	2	EA	\$5,500.00	\$11,000
Adjust (E) SDMH to new grade	1	EA	\$800.00	\$800
Overflow structure	3	EA	\$2,500.00	\$7,500
Catchbasin	1	EA	\$2,450.00	\$2,450
Junction box			<i>included with Library Scope</i>	
Outfall structure			<i>included with Library Scope</i>	
Trench drain	20	LF	\$125.00	\$2,500
Storm drain lines - PVC, 12"	356	LF	\$95.00	\$33,820
Storm drain lines - PVC, 6"	200	LF	\$55.00	\$11,000
Connect SD to (E) SD structures	2	EA	\$750.00	\$1,500
Underdrain lines - PVC (perforated)	800	LF	\$25.00	\$20,000
Demo (E) SD structures & lines	170	LF	\$20.00	\$3,400
Natural Gas Systems:				
Decommission (E) gas service			<i>included with Library Scope</i>	
Miscellaneous				
Rain harvesting filtration system			NIC, see ADD Alternate	
Rain harvesting disinfection system			NIC, see ADD Alternate	
Rain harvesting pressurization system			NIC, see ADD Alternate	
10,000 Gallon rain harvesting cistern			NIC, see ADD Alternate	
Drain inlet			NIC, see ADD Alternate	
Rainwater pump			NIC, see ADD Alternate	
Well			NIC, see ADD Alternate	
SFPUC Waterline			NIC, Existing to remain	
Subtotal For Site Mechanical Utilities:				\$146,985

SITE ELECTRICAL UTILITIES	Quantity	Unit	Rate	Total (\$)
Electrical Service and Distribution				
Connection to Vault				By PG&E
Primary ductbank includes 1-4" PVC conduits, concrete encased				
Primary ductbank to padmount transformer	200	LF	\$113.00	\$22,600
Handhole	3	EA	\$1,500.00	\$4,500
Padmount transformer				By PG&E
Connection to existing transformers				By PG&E
Padmount transformer pad	1	EA	\$2,500.00	\$2,500
Secondary Ductbank				
3000A feed to MSB-M	20	LF	\$595.00	\$11,900
1000A feed from switchboard	130	LF	\$328.00	\$42,640
600A feed from switchboard	130	LF	\$245.00	\$31,850
225A feed from switchboard	140	LF	\$130.00	\$18,200
Site Communications				
Communications ductbank 3-4 conduits with inner duct and backbone cabling	160	LF	\$190.00	\$30,400
Lighting and Branch Wiring				
Time clock	1	EA	\$450.00	\$450
Lighting contactor	1	EA	\$1,000.00	\$1,000
Type L-1	17	EA	\$1,200.00	\$20,400
Type L-2	19	EA	\$1,200.00	\$22,800
Type L-3	23	EA	\$950.00	\$21,850
Type L-4	12	EA	\$950.00	\$11,400
Type L-5	3	EA	\$2,500.00	\$7,500
Base	39	EA	\$350.00	\$13,650
Circuitry	1,600	LF	\$15.00	\$24,000
Site Security				
Site security, allow	1	LS	\$15,000.00	\$15,000
Other Site Work				
Site demolition and relocation	1	LS	\$25,000.00	\$25,000

SITE ELECTRICAL UTILITIES	Quantity	Unit	Rate	Total (\$)
Photovoltaic system				
At Auxiliary building (RA1=4,984st)				
102KW system with array of panels, inverters, panelboards, feeders and installation			NIC, see ADD Alternate	
600A distribution panelboard			NIC, see ADD Alternate	
600A disconnect switch			NIC, see ADD Alternate	
600A feed (Ductbank)			NIC, see ADD Alternate	
At Carport #1 (RA2=3,047sf)				
62KW system with array of panels, inverters, panelboards, feeders and installation			NIC, see ADD Alternate	
At Carport #2 (RA 4=2,684sf)				
55KW system with array of panels, inverters, panelboards, feeders and installation			NIC, see ADD Alternate	
Subtotal For Site Electrical Utilities:				\$327,640

50% Design Development Cost Estimate

Site Improvement (Library Scope)

Atherton Civic Center

Control Quantities
Site Improvement (Library Scope) Summary
Detailed Cost Breakdown

October 3, 2016

Site Areas

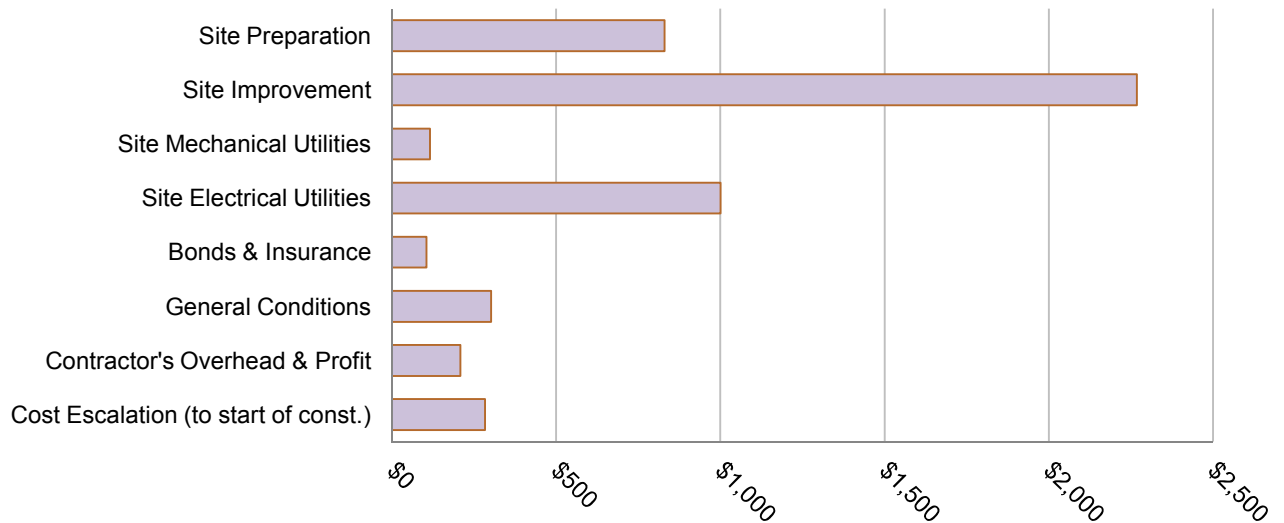
Vehicular paving	46,013
Pedestrian paving and hardscape	30,720
Landscaping and Softscape	43,726
Biofiltration basin	2,478
New Building footprint	9,950
Existing MPR to remain	1,645

Subtotal of Enclosed Area	134,532
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CSI UniFormat Summary	134,532 SF	%	\$/SF	,\$000
Site Preparation		15%	\$6.17	\$830
Site Improvement		41%	\$16.86	\$2,268
Site Mechanical Utilities		2%	\$0.86	\$116
Site Electrical Utilities		18%	\$7.44	\$1,001
Subtotal - Sitework		77%	\$31.33	\$4,214
Bonds & Insurance	2.50%	2%	\$0.78	\$105
General Conditions		5%	\$2.24	\$302
Contractor's Overhead & Profit	4.50%	4%	\$1.55	\$208
Subtotal		88%	\$35.90	\$4,829
Contingency for Design Development	8.00%	7%	\$2.87	\$386
Cost Escalation (to start of const.)	5.44%	5%	\$2.11	\$284
TOTAL CONSTRUCTION BUDGET		100%	\$40.88	\$5,499

NOTE: Inclusions and Exclusions listed in the Commentary Section.

CSI UniFormat Summary



SITE PREPARATION	Quantity	Unit	Rate	Total (\$)
Demolition Of Building and Structures				
Demo and removal of existing building within the limit of work; including city offices, police station, building department, permit center, library and one maintenance building	11,765	SF	\$10.00	\$117,650
Demo and removal of all hardscape and minimum softscape, including paving, curbs, wall features and aggregate base	134,532	SF	\$1.50	\$201,798
Remove existing heritage trees	61	EA	\$800.00	\$48,800
Site Protective Construction				
Transplant existing trees	2	EA	\$1,500.00	\$3,000
Tree Protection				
Temporary tree protection chainlink fence, 6' high	1,996	LF	\$30.00	\$59,880
Temporary layer of mulch to be maintained till tree protection fence is removed, 2" thick	12,146	SF	\$0.50	\$6,073
Plastic laminated sign spaced at 50' o.c., 24" x 36" "KEEP OUT TREE PROTECTION AREA"	35	EA	\$100.00	\$3,500
Erosion control/SWPPP	134,532	SF	\$0.50	\$67,266
Earthwork				
Site clearing and rough grading	134,532	SF	\$0.50	\$67,266
Excavate and offhaul unsuitable materials				
Under building, 30" thick	1,190	CY	\$35.00	\$41,644
Under vehicular/pedestrian paving, varying thickness	3,342	CY	\$35.00	\$116,965
6~12" thick scarified/moisture conditioned/compacted native soil				
Under building	12,850	SF	\$0.75	\$9,638
Under vehicular/pedestrian paving	59,298	SF	\$0.75	\$44,474
30" thick compacted engineered fill, extend pad 5' beyond edge of building on all sides	1,190	CY	\$35.00	\$41,644
Hazardous Materials Abatement				NIC
Subtotal For Site Preparation:				\$829,596

SITE IMPROVEMENT	Quantity	Unit	Rate	Total (\$)
Vehicular Paving				
Vehicular concrete; consist of 6" thick portland cement concrete reinforced with #4 rebar at 16" o.c. both ways at midpoint of slab, over 8" thick aggregate base, over wooven geotextile fabric, over compacted subgrade	46,013	SF	\$10.00	\$460,132
Pavement marking and striping	46,013	SF	\$0.35	\$16,105
Concrete curb and gutter	2,400	LF	\$35.00	\$84,000
Curb cuts and ramps	2	EA	\$1,500.00	\$3,000
Wheelstop	35	EA	\$100.00	\$3,500
Pedestrian Paving				
PV-2 Porous asphalt paving; consist of 4" thick open-graded porous asphalt, over 6" thick choker course crushed aggregate, over 24" thick washed drain rock, over geogrid and non-woven geotextile fabric, over uncompacted subgrade	4,200	SF	\$11.50	\$48,300
PV-3 Exposed aggregate pervious concrete (unreinforced); consist of 4" thick exposed aggregate pervious concrete, over 8" thick graded crushed aggregate base, over filter fabric and compacted native subgrade	17,435	SF	\$8.00	\$139,480
Decking (PV-4), consist of 1x6 Dasso decking, over redwood ledger and 2" x 6" redwood joist at 16"o.c., complete with 4" thick graded crushed no.2 grey stone mulch and filter fabric under full extents of deck	5,410	SF	\$35.00	\$189,350
PV-5 Safety surface; consists of poured-in-place safety surface, over 4" thick aggregate base, over filter fabric and compacted native subgrade	3,675	SF	\$12.00	\$44,100
Stepping stones, 4 1/2" thick	830	SF	\$20.00	\$16,600

SITE IMPROVEMENT	Quantity	Unit	Rate	Total (\$)
Landscaping				
Planting area, 1 gallon pots @ 18" o.c.	43,726	SF	\$10.00	\$437,255
Ground hardwood mulch, 2" thick	43,726	SF	\$0.30	\$13,118
Biofiltration basin; consists of 1 gallon plants @ 18" o.c., over 18" thick of bioretention soil mix, over 10" thick of sand, over geotextile filter fabric	2,478	SF	\$25.00	\$61,950
Landscape edging header - allowance	5,400	LF	\$10.00	\$54,000
Trees, 48" box	65	EA	\$1,500.00	\$97,500
Irrigation				
Planting area (PA)	46,204	SF	\$2.50	\$115,509
Trees	65	EA	\$350.00	\$22,750
Soil Preparation (under PV-3 and PA)				
S-1 New topsoil (excavated and amended or imported, 3' deep)	2,206	CY	\$25.00	\$55,139
S-2 Amend in place existing soil; 12" in hand excavation zone of existing trees, 36" thick otherwise	2,823	CY	\$25.00	\$70,575
S-3 Porous paving #2 gap-graded aggregate; 8" thick deep below bottom of paving	3,939		measured with PV-3	
S-4 CU-Structural soil; 24" thick deep below bottom of paving	497	CY	\$35.00	\$17,412
S-5 Biofiltration soil profile			measured with Bioretention basin	
Fencing and miscellaneous site furnishing				
B-1 Radial bench	256	LF	\$200.00	\$51,200
W-1 Free standing concrete wall, complete with skateboard deterrent notches, 2'-0" wide x 2'-6" high	98	LF	\$200.00	\$19,600
W-2 Concrete retaining wall @ biofiltration basin, 6" thick x 5'-0" high	478	LF	\$200.00	\$95,600
W-3 Dasso wood fence in galvanized steel frame	61	LF	\$250.00	\$15,250
Gates	2	PR	\$5,000.00	\$10,000
Reinforced concrete wall footing				
For W-1, 4'-0" wide x 14" thick	98	LF	\$80.00	\$7,840
For W-2, 3'-6" wide x 12" thick	478	LF	\$60.00	\$28,680
For W-3, 9" wide x 3'-4" thick	61	LF	\$75.00	\$4,575

SITE IMPROVEMENT	Quantity	Unit	Rate	Total (\$)
Fencing and miscellaneous site furnishing				
S-1 Concrete stair	274	LF	\$50.00	\$13,700
H-1 Handrail with lighting (lights included w/ site lighting L-6)	128	LF	\$150.00	\$19,200
F-1 Parc centre chair	32	EA	\$265.00	\$8,480
F-2 Parc centre lounge	8	EA	\$475.00	\$3,800
F-3 Parc centre ottoman	4	EA	\$350.00	\$1,400
F-4 Parc centre table	8	EA	\$800.00	\$6,400
F-5 Go outdoor couch rocker	3	EA	\$875.00	\$2,625
Allowance for miscellaneous site furnishing; such as trash receptacles, bicycle rack, bollards, etc.	1	LS	\$30,000.00	\$30,000
Subtotal For Site Improvement:				\$2,268,124

SITE MECHANICAL UTILITIES	Quantity	Unit	Rate	Total (\$)
Domestic & Fire Water Systems:				
Domestic water supply (allowance)	2	EA	\$4,000.00	\$8,000
Fire water supply (allowance)	2	EA	\$10,000.00	\$20,000
Fire hydrant assembly	2	EA	\$4,500.00	\$9,000
Fire water supply lines - PVC, to 6"	60	LF	\$100.00	\$6,000
Demo (E) water lines, hydrants, etc.	45	LF	\$25.00	\$1,125
Demo (E) IRR mains	180	LF	\$6.00	\$1,080
Sanitary Sewer Systems:				
Manhole				<i>included with Police Scope</i>
Washdown area drain	1	EA	\$1,500.00	\$1,500
Sanitary sewer lines - PVC, to 6"	190	LF	\$52.00	\$9,880
Connect SS to (E) SS lines	1	EA	\$650.00	\$650
Storm Drainage Systems:				
Roof drain collection (allowance)	1	LS	\$2,000.00	\$2,000
Manhole				<i>included with Police Scope</i>
Adjust (E) SDMH to new grade				<i>included with Police Scope</i>
Overflow structure	3	EA	\$2,500.00	\$7,500
Catchbasin	1	EA	\$2,450.00	\$2,450
Junction box	1	EA	\$2,600.00	\$2,600
Outfall structure	1	EA	\$1,500.00	\$1,500
Trench drain				<i>included with Police Scope</i>
Storm drain lines - PVC, 12"	214	LF	\$95.00	\$20,330
Storm drain lines - PVC, 6"	50	LF	\$55.00	\$2,750

SITE MECHANICAL UTILITIES	Quantity	Unit	Rate	Total (\$)
Storm Drainage Systems:				
Connect SD to (E) SD structures	4	EA	\$750.00	\$3,000
Underdrain lines - PVC (perforated)	450	LF	\$25.00	\$11,250
Demo (E) SD structures & lines	200	LF	\$20.00	\$4,000
Natural Gas Systems:				
Decommission (E) gas service at MPR	1	LS	\$1,200.00	\$1,200
Miscellaneous				
Rain harvesting filtration system	1	LS	NIC, See ADD Alternate	
Rain harvesting disinfection system	1	LS	NIC, See ADD Alternate	
Rain harvesting pressurization system	1	LS	NIC, See ADD Alternate	
10,000 Gallon rain harvesting cistern	1	EA	NIC, See ADD Alternate	
Drain inlet	15	EA	NIC, See ADD Alternate	
Rainwater pump	1	EA	NIC, See ADD Alternate	
Well	1	EA	NIC, See ADD Alternate	
SFPUC Waterline			NIC, Existing to remain	
Subtotal For Site Mechanical Utilities:				\$115,815

SITE ELECTRICAL UTILITIES	Quantity	Unit	Rate	Total (\$)
Secondary Ductbank				
1000A feed from switchboard to Library	650	LF	\$328.00	\$213,200
Handhole	11	EA	\$1,500.00	\$16,500
Communications ductbank 3-4 conduits with inner duct and backbone cabling - Allowance to library	650	LF	\$190.00	\$123,500
Lighting and Branch Wiring				
Time clock	1	EA	\$450.00	\$450
Lighting contactor	1	EA	\$1,000.00	\$1,000
Type L-1	14	EA	\$1,200.00	\$16,800
Type L-2	14	EA	\$1,200.00	\$16,800
Type L-3	56	EA	\$950.00	\$53,200
Type L-4	3	EA	\$950.00	\$2,850
Type L-6	108	EA	\$120.00	\$12,960
Base	28	EA	\$350.00	\$9,800
Circuitry	1,500	LF	\$15.00	\$22,500
Site Security				
Site security, allow	1	LS	\$15,000.00	\$15,000

SITE ELECTRICAL UTILITIES	Quantity	Unit	Rate	Total (\$)
Corp Yard				
Communication ductbank 3-4" conduits with Fiber & 50pr cable to Corp Yard Building	820	LF	\$190.00	\$155,800
150A panelboard	1	EA	\$2,250.00	\$2,250
125A panelboard	6	EA	\$2,150.00	\$12,900
100A panelboard	1	EA	\$2,000.00	\$2,000
100A disconnect switch	1	EA	\$150.00	\$150
400A feed from switchboard to Corp Yard Building	610	LF	\$216.00	\$131,760
150A feed	100	LF	\$40.00	\$4,000
125A feed	100	LF	\$38.00	\$3,800
100A feed	100	LF	\$30.00	\$3,000
IDF closet	1	LS	\$5,000.00	\$5,000
PV System over Corp yard (1,707sf) RA5 - 35KW system with array of panels, inverters, panelboards, feeders and installation	35	KW	\$4,300.00	\$150,500
Other Site Work				
Site demolition and relocation	1	LS	\$25,000.00	\$25,000
Subtotal For Site Electrical Utilities:				\$1,000,720

**New Police Department, City Hall, Council Chamber & Ancillary Building
New Library
Renovate existing Heritage Town Hall
Site Development**

	DELTA	CURRENT 50% Design Development dated Oct. 3, 2016			PREVIOUS Schematic Estimate dated 5/11/2016			
GROSS FLOOR AREA	(4,940 SF)			40,708 SF			45,648 SF	
CSI UniFormat Summary		%	\$/SF	\$,000	%	\$/SF	\$,000	
Foundations	\$573	5%	\$48.50	\$1,974	4%	\$30.69	\$1,401	
Superstructure	\$546	10%	\$93.02	\$3,787	9%	\$71.00	\$3,241	
Enclosure	(\$988)	7%	\$64.67	\$2,633	10%	\$79.32	\$3,621	
Roofing	(\$118)	2%	\$21.56	\$878	3%	\$21.82	\$996	
Interior Construction	\$215	7%	\$59.19	\$2,409	6%	\$48.06	\$2,194	
Stairs	(\$5)	0%	\$1.84	\$75	0%	\$1.75	\$80	
Interior Finishes	\$477	5%	\$42.74	\$1,740	4%	\$27.67	\$1,263	
Conveying	\$25	0%	\$2.95	\$120	0%	\$2.08	\$95	
Plumbing	(\$112)	2%	\$21.00	\$855	3%	\$21.18	\$967	
Heating, Ventilation, & Air Conditioning	(\$31)	6%	\$58.20	\$2,369	7%	\$52.58	\$2,400	
Fire Protection	(\$19)	1%	\$8.80	\$358	1%	\$8.26	\$377	
Electrical	(\$737)	7%	\$64.41	\$2,622	9%	\$73.58	\$3,359	
Equipment	(\$40)	0%	\$2.04	\$83	0%	\$2.69	\$123	
Furnishings	\$0	0%	\$3.94	\$160	0%	\$3.51	\$160	
Selective Building Demolition	\$7	0%	\$0.43	\$18	0%	\$0.24	\$11	
Subtotal - Building Construction	-1%	(\$207)	55%	\$493.29	\$20,081	57%	\$444.44	\$20,288
Site Preparation	\$538	5%	\$40.30	\$1,641	3%	\$24.16	\$1,103	
Site Improvement	\$717	13%	\$113.26	\$4,611	11%	\$85.30	\$3,894	
Site Mechanical Utilities	(\$587)	1%	\$6.46	\$263	2%	\$18.62	\$850	
Site Electrical Utilities	\$1,091	4%	\$32.63	\$1,328	1%	\$5.19	\$237	
Subtotal - Sitework	29%	\$1,758	22%	\$192.65	\$7,842	17%	\$133.28	\$6,084
Total - Building and Sitework Constr	6%	\$1,551	77%	\$685.94	\$27,923	74%	\$577.73	\$26,372
Bonds & Insurance	\$171	2%	\$17.15	\$698	1%	\$11.54	\$527	
General Conditions	\$383	5%	\$49.10	\$1,999	5%	\$35.40	\$1,616	
Contractor's Overhead & Profit	\$95	4%	\$33.85	\$1,378	4%	\$28.11	\$1,283	
Contingency for Design Development	(\$403)	7%	\$63.29	\$2,577	8%	\$65.28	\$2,980	
Cost Escalation (to start of construction)	(\$751)	5%	\$46.21	\$1,881	7%	\$57.66	\$2,632	
TOTAL CONSTRUCTION BUDGET	3%	\$1,046	100%	\$895.55	\$36,456	100%	\$775.72	\$35,410