

## Conceptual Cost Estimate

### Boxborough Public Safety Facility

502 + 520 Massachusetts Avenue

Boxborough, Ma

Prepared by:



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Prepared for:

**HKT**

June 2, 2016

# Boxborough Public Safety Facility

502 + 520 Massachusetts Avenue



Conceptual Cost Estimate

June 2, 2016

MAIN COST SUMMARY AND QUALIFICATIONS	Building area	\$/sf	Projected Costs
SITWORK			\$2,312,595
BUILDING CONSTRUCTION	30,982	\$415.28	\$12,866,237
<b>TOTAL CONSTRUCTION COST</b>	<b>30,982</b>	<b>\$489.92</b>	<b>\$15,178,832</b>

This cost estimate was produced from May 20, 2016 concept documents provided by HKT. Design and engineering changes occurring subsequent to the issue of these documents have not been incorporated in this estimate.

This estimate includes all direct construction costs, general contractor's overhead and profit and design contingency. Cost escalation assumed to mid point of construction schedule. Construction start is assumed spring 2017.

Bidding conditions are expected to be public bidding utilizing chapter 149 filed sub bidding and DCAM qualified general contractors.

The estimate is based on prevailing wage rates for construction in this market and represents a reasonable opinion of cost. It is not a prediction of the successful bid from a contractor as bids will vary due to fluctuating market conditions, errors and omissions, proprietary specifications, lack or surplus of bidders, perception of risk, etc. Consequently the estimate is expected to fall within the range of bids from a number of competitive contractors or subcontractors, however we do not warrant that bids or negotiated prices will not vary from the final construction cost estimate.

### ITEMS NOT CONSIDERED IN THIS ESTIMATE

- Land acquisition, feasibility, and financing costs
- Items identified in the design as Not In Contract (NIC)
- Items identified in the design as by others
- Rock excavation; special foundations (unless indicated by design engineers)
- Utility company back charges, including work required off-site
- Work to City streets and sidewalks, (except as noted in this estimate)
- Construction or occupancy phasing or off hours' work, (except as noted in this estimate)
- Contaminated or unsuitable soils removal or replacement
- Dewatering
- Building Permit

### Recommendations For Cost Control

TCI recommends that the Owner and Architect carefully review this document, including line item descriptions, unit prices, clarifications, exclusions, inclusions and assumptions, contingencies, escalation and mark-ups. Request for modifications of any apparent errors or omissions to this document must be made to TCI with in ten (10) days of receipt of this estimate. Otherwise, it will be understood that the contents have been concurred with and accepted.

It is recommended that TCI using bid documents produce a final update estimate, to determine overall costs changes which have occurred since the preparation of the estimate. The final update estimate will address changes and additions to the document, as well as addenda issued during bidding process. TCI cannot reconcile bid results to an estimate not produced from bid documents.

### Statement Of Probable Cost

TCI has no control over the cost of labor and materials, the general contractor's or any subcontractor's method of determining prices, or competitive bidding and market conditions. The opinion of construction is made on the basis of the experience, qualifications, and best judgment of the professional estimator familiar with the industry. TCI does not guarantee that bids will not vary from this estimate.

TCI staff of professional cost estimators has prepared this estimate in accordance with generally accepted principles and practices.

### Acceptance of Report

With acceptance of this report, the holder shall indemnify and hold harmless Tortora Consulting from and against all claims, damages, losses and expenses, including but not limited to attorney fees and court costs arising out of or as a result of the performance of this work, including third party claims.

June 2, 2016

**Conceptual Cost Estimate**

<b>CONSTRUCTION COST SUMMARY</b>							
		<i>30,982 sf</i>		<i>30,982 sf</i>			
BUILDING SYSTEM	Sitework	New Construction		Total			
A10	FOUNDATIONS AND SLABS		\$753,091	\$24.31	<b>\$753,091</b>	\$24.31	
B10	SUPERSTRUCTURE		\$993,123	\$32.05	<b>\$993,123</b>	\$32.05	
B20	EXTERIOR CLOSURE		\$1,444,303	\$46.62	<b>\$1,444,303</b>	\$46.62	
B30	ROOFING		\$371,793	\$12.00	<b>\$371,793</b>	\$12.00	
C10	INTERIOR CONSTRUCTION		\$1,129,983	\$36.47	<b>\$1,129,983</b>	\$36.47	
C20	STAIRCASES		\$99,000	\$3.20	<b>\$99,000</b>	\$3.20	
C30	INTERIOR FINISHES		\$445,637	\$14.38	<b>\$445,637</b>	\$14.38	
D10	CONVEYING SYSTEMS		\$116,800	\$3.77	<b>\$116,800</b>	\$3.77	
D20	PLUMBING		\$388,010	\$12.52	<b>\$388,010</b>	\$12.52	
D30	HVAC		\$1,180,362	\$38.10	<b>\$1,180,362</b>	\$38.10	
D40	FIRE PROTECTION		\$169,526	\$5.47	<b>\$169,526</b>	\$5.47	
D50	ELECTRICAL		\$1,326,376	\$42.81	<b>\$1,326,376</b>	\$42.81	
E10	EQUIPMENT		\$19,300	\$0.62	<b>\$19,300</b>	\$0.62	
E20	FURNISHINGS		\$133,366	\$4.30	<b>\$133,366</b>	\$4.30	
E30	SPECIAL CONSTRUCTION		\$140,150	\$4.52	<b>\$140,150</b>	\$4.52	
F20	BUILDING DEMOLITION						
G10	SITework & DEMOLITION	\$1,464,964		\$47.28	<b>\$1,464,964</b>	\$47.28	
<b>TOTAL DIRECT COST (Trade Costs)</b>		<b>\$1,464,964</b>		<b>\$8,710,820</b>	\$281.16	<b>\$10,175,784</b>	\$328.44
GC general conditions and requirements (2 phases - 18 months)	\$280,000		\$980,000		\$1,260,000		
GC GL Insurance (1.1%)	\$16,115		\$95,819		\$111,934		
Bonds (2%)	\$29,299		\$174,216		\$203,515		
GC overhead and profit (4%)	\$71,615		\$398,434		\$470,049		
Design and Estimating contingency (15%)	\$279,299		\$1,553,893		\$1,833,192		
(8%) Escalation to midpoint of construction - spring 2017 start	\$171,303		\$953,055		\$1,124,358		
<b>TOTAL CONSTRUCTION COST</b>	<b>\$2,312,595</b>	\$74.64	<b>\$12,866,237</b>	\$415.28	<b>\$15,178,832</b>	\$489.92	

Conceptual Cost Estimate

GFA 30,982

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**GROSS FLOOR AREA CALCULATION**

1st floor	11,429
2nd floor	18,232
Mezzanine	1,321

<b>TOTAL GROSS FLOOR AREA (GFA)</b>	<b>30,982 sf</b>
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**A10 BUILDING FOUNDATIONS**

**A1010 STANDARD FOUNDATIONS**

Building Strip footings

03300	Formwork	1,344	sf	15.00	20,160
03300	Re-bar	1,411	lbs	3.00	4,233
03300	Concrete material	78	cy	155.00	12,090
03300	Placing concrete	78	cy	40.00	3,120

Building Foundation walls (frost)

03300	Formwork	4,884	sf	15.00	73,260
03300	Re-bar	4,477	lbs	3.00	13,431
03300	Concrete material	95	cy	155.00	14,725
03300	Placing concrete	95	cy	40.00	3,800
07130	Dampproofing	2,442	sf	5.00	12,210
07210	Insulation to foundation walls; 2" thick	2,442	sf	3.00	7,326
03300	Form shelf	407	lf	8.00	3,256

Building Foundation walls (16" Retaining)

03300	Formwork	5,300	sf	15.00	79,500
03300	Re-bar	2,915	lbs	3.00	8,745
03300	Concrete material	155	cy	155.00	24,025
03300	Placing concrete	155	cy	40.00	6,200
07130	Dampproofing	1,590	sf	5.00	7,950
07210	Insulation to foundation walls; 2" thick	1,590	sf	3.00	4,770
03300	Form shelf	265	lf	8.00	2,120

Building Interior column footings

03300	Formwork	480	sf	15.00	7,200
03300	Re-bar	321	lbs	3.00	963
03300	Concrete material	19	cy	155.00	2,945
03300	Placing concrete	19	cy	40.00	760
03300	Set anchor bolts grout plates	15	ea	135.00	2,025

Building Exterior wall column footings

03300	Formwork	720	sf	15.00	10,800
03300	Re-bar	1,126	lbs	3.00	3,378
03300	Concrete material	21	cy	155.00	3,255
03300	Placing concrete	21	cy	40.00	840
03300	Set anchor bolts grout plates	30	ea	135.00	4,050

Miscellaneous

03300	Form key in footing	524	lf	5.00	2,620
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Piers/Pilasters

03300	Formwork	1,440	sf	15.00	21,600
03300	Re-bar	5,400	lbs	3.00	16,200
03300	Concrete material	19	cy	155.00	2,945
03300	Placing concrete	19	cy	40.00	760

Holding Tank Foundation walls (5' height)

03300	Formwork	2,200	sf	15.00	33,000
03300	Re-bar	2,420	lbs	4.00	9,680
03300	Concrete material	64	cy	155.00	9,920
03300	Placing concrete	64	cy	45.00	2,880
07130	Sheet membrane waterproofing to wall and footing	1,320	sf	10.00	13,200
07210	Insulation to foundation walls; 2" thick	1,320	sf	3.00	3,960

SUBTOTAL

453,902

**Conceptual Cost Estimate**

GFA

30,982

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>A1030 LOWEST FLOOR CONSTRUCTION</b>							
<u>New Slab on grade, 5" thick</u>							
07210	Vapor barrier	9,830	sf	2.50	24,575		
03300	Mesh reinforcing 15% lap	11,305	sf	0.60	6,783		
03300	Concrete - 5" thick	191	cy	155.00	29,605		
03300	Placing concrete	191	cy	18.00	3,438		
03300	Finishing and curing concrete	9,830	sf	1.00	9,830		
03300	Control joints - saw cut	9,830	sf	0.10	983		
03300	Isolation joints at columns	176	lf	2.50	440		
<u>New Slab on grade, 8" thick (apparatus / Sallyport)</u>							
07210	Rigid insulation	9,012	sf	2.50	22,530		
07210	Vapor barrier	9,012	sf	0.60	5,407		
03300	Rebar	10,364	sf	1.00	10,364		
03300	Concrete - 8" thick	242	cy	155.00	37,510		
03300	Placing concrete	242	cy	18.00	4,356		
03300	Finishing and curing concrete	9,012	sf	1.00	9,012		
03300	Control joints - saw cut	9,012	sf	0.10	901		
03300	Isolation joints at columns	423	lf	2.50	1,058		
<u>Elevator Pits</u>							
Elevator pit walls							
03300	formwork	675	sf	15.00	10,125		
03300	reinforcement	1,013	lbs	3.00	3,039		
03300	concrete material	9	cy	155.00	1,395		
03300	placing concrete	9	cy	45.00	405		
Slab							
03300	formwork	185	sf	12.00	2,220		
03300	reinforcement	1,388	lbs	3.00	4,164		
03300	concrete material in slab	11	cy	155.00	1,705		
03300	placing concrete	11	cy	45.00	495		
07160	Bentonite waterstops	1	ls	1,500.00	1,500		
07160	Cementitious waterproofing to elevator pit	1	ls	4,000.00	4,000		
<u>Holding Tank Bottom slab 12" thick</u>							
03300	Rebar	1,500	sf	3.50	5,250		
03300	Concrete - 12" thick	40	cy	155.00	6,200		
03300	Placing concrete	40	cy	18.00	720		
03300	Finishing and curing concrete	1,500	sf	1.00	1,500		
07160	Cementitious waterproofing & stops	1,500	sf	10.00	15,000		
<u>Holding Tank top elevated slab 12" thick</u>							
03300	Rebar	1,500	sf	5.00	7,500		
03300	formwork	1,500	sf	18.00	27,000		
03300	Concrete - 12" thick	40	cy	155.00	6,200		
03300	Placing concrete	40	cy	18.00	720		
03300	Finishing and curing concrete	1,500	sf	1.00	1,500		
07160	Cementitious waterproofing & stops	1,500	sf	10.00	15,000		
<u>Miscellaneous</u>							
03300	Slope slabs	9,012	sf	0.75	6,759		
03300	Equipment pads and curbs	1	ls	10,000.00	10,000		
	SUBTOTAL					299,189	
<b>TOTAL - FOUNDATIONS</b>							<b>\$753,091</b>

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GFA 30,982

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**B10 SUPERSTRUCTURE**

**B1010 FLOOR CONSTRUCTION**

Admin 1st and 2nd Floor Structure - Steel:

05120	W beams, tube, columns, bracing and misc framing members	110	tns	4,500.00	495,000		
53100	Floor deck - 1 1/2" deck	19,949	sf	3.85	76,804		
03300	WWF reinforcement	22,941	sf	1.50	34,412		
03300	Concrete Fill to metal deck; 4-1/2" thick; Normal Weight	404	cy	155.00	62,620		
03300	Place and finish concrete	19,949	sf	1.10	21,944		
<u>Mezzanine Floor Structure - Steel:</u>							
05120	W beams, tube, columns, bracing and misc framing members	5	tns	4,500.00	22,500		
53100	Floor deck - 1 1/2" deck	1,321	sf	3.85	5,086		
03300	WWF reinforcement	1,519	sf	1.50	2,279		
03300	Concrete Fill to metal deck; 4-1/2" thick; Normal Weight	27	cy	155.00	4,185		
03300	Place and finish concrete	1,321	sf	1.10	1,453		
<u>Miscellaneous</u>							
07841	Fire stopping floors	1	ls	3,500.00	3,500		
	SUBTOTAL					729,783	

**B1020 ROOF CONSTRUCTION**

Detention Roof Structure - Steel:

05120	W beams, joist, columns, bracing and misc framing members bearing on perimeter CMU exterior walls	12	tns	4,500.00	54,000		
53100	Roof deck - 1 1/2" 20 ga deck	3,000	sf	3.50	10,500		
<u>Apparatus Roof Structure</u>							
05120	W beams, joist, columns, bracing and misc framing members bearing on perimeter CMU exterior walls	38	tns	4,500.00	171,000		
53100	Roof deck - 1 1/2" 20 ga deck	9,600	sf	2.90	27,840		
	SUBTOTAL					263,340	

<b>TOTAL - SUPERSTRUCTURE</b>						<b>\$993,123</b>
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**B20 EXTERIOR CLOSURE**

**B2010 EXTERIOR WALLS**

Interior skin at Admin

07210	5/4" x 4' FT vertical furring	6,489	sf	3.50	22,712		
07270	3" Rigid insulation & Z clips	6,489	sf	4.00	25,956		
07270	Air/Vapor barrier	6,489	sf	6.00	38,934		
09211	6" Lightgage metal framing	6,489	sf	12.00	77,868		
09211	5/8" ext gwb Sheathing	6,489	sf	2.25	14,600		
09211	5/8" int gwb	6,489	sf	2.20	14,276		
09900	Paint	5,840	sf	1.50	8,760		

Interior skin at Detention

04200	8" CMU	2,224	sf	30.00	66,720		
07210	5/4" x 4' FT vertical furring	2,224	sf	3.50	7,784		
07210	3" Rigid insulation & Z clips	2,224	sf	4.00	8,896		
07270	Air/Vapor barrier	2,224	sf	6.00	13,344		
09900	Paint interior CMU	2,002	sf	2.00	4,004		

Interior skin at Apparatus

09211	8" CMU	9,630	sf	30.00	288,900		
07210	5/4" x 4' FT vertical furring	9,630	sf	3.50	33,705		
07270	3" Rigid insulation & Z clips	9,630	sf	4.00	38,520		
09211	Air/Vapor barrier	9,630	sf	6.00	57,780		
09900	Paint interior CMU	9,630	sf	2.00	19,260		

**Conceptual Cost Estimate**

GFA 30,982

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<u>Exterior skin</u>							
04200	Brick veneer	1,944	sf	40.00	77,760		
04200	Fiber cement panel siding	440	sf	28.00	12,320		
07460	Fiber cement trim - roof edge	856	lf	15.00	12,840		
07460	Fiber cement trim - window, door and bands	1,834	lf	10.00	18,340		
07460	Fiber cement lap/shingle siding	13,269	sf	18.00	238,842		
<u>Miscellaneous</u>							
05500	Canopy ceiling supports, framing and blocking	312	sf	25.00	7,800		
05500	Canopy ceiling and fascia finish	312	sf	48.00	14,976		
05500	Lintels in masonry openings - labor and material	18,343	sf	1.00	18,343		
	SUBTOTAL					1,143,240	
<b>B2020 WINDOWS</b>							
<u>Window systems</u>							
84110	Alum clad windows	2,817	sf	70.00	197,190		
07920	Backer rod & double sealant	1,650	lf	5.00	8,250		
06100	Wood blocking at openings	1,650	lf	6.00	9,900		
	SUBTOTAL					215,340	
<b>B2030 EXTERIOR DOORS</b>							
08111	GHM door - type FG - full glazed	1	ea	650.00	650		
08111	GHM door - type F - flush	1	ea	450.00	450		
08111	GHM door - type G - half glazed	1	ea	550.00	550		
08111	Door frame A - GHM single	1	ea	375.00	375		
08111	Door frame B - GHM single	1	ea	400.00	400		
08111	Door frame D - GHM single	1	ea	950.00	950		
08111	Hardware	3	ea	500.00	1,500		
08111	Install	3	lvs	255.00	765		
84110	FG - Alum entry - double	2	pr	6,500.00	13,000		
08311	12'x10' OH1	2	ea	6,000.00	12,000		
08331	14'x14' OH2	5	ea	9,800.00	49,000		
08900	Louvers	1	ls	5,000.00	5,000		
07920	Backer rod & double sealant	80	lf	4.00	320		
06100	Wood blocking at openings	80	lf	5.00	400		
09900	Paint HM door and frame	3	ea	121.00	363		
	SUBTOTAL					85,723	
<b>TOTAL - EXTERIOR CLOSURE</b>							<b>\$1,444,303</b>
<b>B30 ROOFING</b>							
<b>B3010 ROOF COVERINGS</b>							
<u>Flat roofing (main roof and canopies)</u>							
07540	TPO Membrane roof	21,431	sf	7.00	150,017		
07540	6" Insulation	21,431	sf	5.00	107,155		
07540	Insulation tapered	4,286	sf	5.00	21,430		
07540	1/2" dens-deck protection board	21,431	sf	1.50	32,147		
07540	Reinforced vapor barrier	21,431	sf	0.45	9,644		
07540	Walking pads	1	ls	5,000.00	5,000		
<u>Flashing &amp; Trim</u>							
07620	Parapet cap and wall membrane/flashing	750	lf	42.00	31,500		
07620	Misc wall and roof to roof flashings	350	lf	22.00	7,700		
<u>Accessories</u>							
07720	Roof hatch	1	ea	5,000.00	5,000		
05500	Roof to roof ladder	2	ea	1,100.00	2,200		
	SUBTOTAL					371,793	
<b>TOTAL - ROOFING</b>							<b>\$371,793</b>

**Conceptual Cost Estimate**

GFA

30,982

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**C10 INTERIOR CONSTRUCTION**

**C1010 PARTITIONS**

04200	Interior 8" CMU walls	5,552	sf	25.00	138,800		
04200	Interior 8" CMU walls under mezzanine	2,532	sf	25.00	63,300		
09211	Interior walls - rated at stairs/mech	5,936	sf	15.00	89,040		
09211	8" CMU walls at elevator shaft	1,056	sf	25.00	26,400		
09211	Interior walls - plumbing walls	2,368	sf	20.00	47,360		
09211	Interior walls	26,385	sf	12.00	316,620		
11000	Chain link partition 16'	30	lf	75.00	2,250		
11000	Chainlink door	1	ea	800.00	800		
07920	Sealants & caulking at partitions	1	ls	7,500.00	7,500		
06100	Rough blocking	4,488	lf	6.00	26,928		
	<b>SUBTOTAL</b>					718,998	

**C1020 INTERIOR DOORS**

08111	Door frame A - HM single	67	ea	285.00	19,095		
08111	Door frame A - HM double	1	ea	325.00	325		
08111	Door frame B - HM single	17	ea	310.00	5,270		
08111	Door frame C	4	ea	475.00	1,900		
08111	HM door - type F	17	lvs	450.00	7,650		
08111	HM door - type G	1	lvs	545.00	545		
08111	HM door - type N	4	lvs	525.00	2,100		
08111	Wood door - type N	5	lvs	535.00	2,675		
08111	Wood door - type F	43	lvs	475.00	20,425		
08111	Wood door - type G	7	lvs	550.00	3,850		
08111	Wood door - type FG	12	lvs	650.00	7,800		
08111	90 min	2	lvs	400.00	800		
08111	60 min	8	lvs	300.00	2,400		
08111	45 min	1	lvs	200.00	200		
08111	Hardware	89	lvs	400.00	35,600		
08111	Install	89	lvs	255.00	22,695		
09900	Paint HM doors and frames	22	ea	121.00	2,662		
09900	Paint HM frames	67	ea	95.00	6,365		
08800	Glazing	33	ea	150.00	4,950		
07920	Sealants & caulking	89	ea	68.00	6,052		
08311	Allowance for access doors	16	ea	165.00	2,640		
	<b>SUBTOTAL</b>					155,999	

**C1030 SPECIALTIES / MILLWORK**

06402	Kitchen cabinets and counters at 138	13	lf	350.00	4,550		
06402	Kitchen cabinets and counters at 203	24	lf	350.00	8,400		
06402	Kitchen cabinets and counters at 119	13	lf	350.00	4,550		
06402	Closet pole and shelves	37	lf	45.00	1,665		
06402	Plam work surface and base cabinets and wall shelving	20	lf	575.00	11,500		
10000	Lobby built in bench	8	lf	375.00	3,000		
06402	AV Surv Plam work counters	12	lf	250.00	3,000		
06402	Mops hooks and shelving	14	lf	200.00	2,800		
06402	Wall shelving at storage, supply, amory, evidence rooms	184	lf	185.00	34,040		
06402	Plam work surface and base cabinets	43	lf	450.00	19,350		
10000	Lobby display cabs	3	ea	1,500.00	4,500		
10000	White board and projection at training	1	ea	800.00	800		
06402	Plam base cabinets w/ solid surface top at conf	12	lf	400.00	4,800		
10000	Plam base cabinets w/ solid surface top and wall shelving at bulk stor	8	lf	500.00	4,000		
06402	Plam base cabinets w/ solid surface top and wall shelving at SCBA	5	lf	500.00	2,500		
06402	Plam base cabinets w/ solid surface top and wall shelving at laundry	7	lf	500.00	3,500		
10000	White boards	2	ea	450.00	900		
06402	8' mirrors at fitness walls	488	sf	20.00	9,760		
08800	Surveillance one way glass and frame	1	ea	1,600.00	1,600		



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GFA 30,982

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<u>Restrooms and Lockers</u>							
10440	Toilet partitions - HC	2	ea	1,322.00	2,644		
10650	Toilet partitions - regular stall	3	ea	1,100.00	3,300		
10650	Toilet partitions screen	5	ea	450.00	2,250		
06402	Solid surface vanities	24	lf	325.00	7,800		
10280	Soap disp	11	ea	18.00	198		
10280	Mirror	11	ea	233.00	2,563		
10280	Robe hook	15	ea	23.00	345		
10280	Grab bar	16	ea	85.00	1,360		
10280	Towel dispenser/disposal	8	ea	56.00	448		
10280	Napkin dispenser/disposal	8	ea	56.00	448		
10280	TP holder	12	ea	45.00	540		
10280	Shower curtain rod	6	ea	268.00	1,608		
10850	20x24 gear lockers	30	ea	300.00	9,000		
10850	24x36 Lockers/integral bench	27	ea	400.00	10,800		
10850	18x24 Lockers/integral bench	23	ea	385.00	8,855		
10850	Wood benches at gear stor	4	ea	650.00	2,600		
10850	Wood benches at showers	6	ea	350.00	2,100		
<u>Misc</u>							
06100	Backer panels in electrical closets	1	ls	2,500.00	2,500		
06200	Window sill/aprons	375	lf	45.00	16,875		
10140	Interior and Exterior Signage	1	ls	15,000.00	15,000		
10440	Fire extinguisher cabinets	12	ea	275.00	3,300		
08800	Misc glass and glazing	1	ls	5,000.00	5,000		
05500	Int bollards	14	ea	500.00	7,000		
05500	Miscellaneous metals throughout building	30,982	sf	0.50	15,491		
07920	Miscellaneous sealants throughout building	30,982	sf	0.25	7,746		
	SUBTOTAL					254,986	

<b>TOTAL - INTERIOR CONSTRUCTION</b>	<b>\$1,129,983</b>
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**C20 STAIRCASES**

<b>C2010 STAIR CONSTRUCTION</b>							
05500	Stair 1	2	flt	12,500.00	25,000		
05500	Stair 2	2	flt	12,500.00	25,000		
05500	Half Stair at 212	1	flt	7,500.00	7,500		
05500	Mezzanine Stair	1	flt	8,500.00	8,500		
05500	Mezzanine rail	60	lf	125.00	7,500		
03300	Concrete material in pan infill	6	flt	500.00	3,000		
	SUBTOTAL					76,500	
<b>C2020 STAIR FINISHES</b>							
09651	Rubber treads/risers	6	flts	2,250.00	13,500		
09900	Paint to staircases	6	flt	1,500.00	9,000		
	SUBTOTAL					22,500	

<b>TOTAL - STAIRCASES</b>	<b>\$99,000</b>
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**C30 INTERIOR FINISHES**

<b>C3010 WALL FINISHES</b>							
09900	Paint to GWB	46,260	sf	1.50	69,390		
09300	Tile to walls	3,000	sf	18.00	54,000		
	SUBTOTAL					123,390	

**Conceptual Cost Estimate**

GFA 30,982

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>C3020 FLOOR FINISHES</b>							
09651	Linoleum	5,300	sf	9.00	47,700		
09651	Athletic flooring	550	sf	12.00	6,600		
11000	Walk-off mat/frame	60	sf	20.00	1,200		
09665	Carpet	5,525	sf	4.44	24,531		
09300	Porcelain and base	475	sf	20.00	9,500		
09300	Ceramic Tile and base	2,260	sf	18.00	40,680		
09900	Sealed concrete	12,685	sf	1.50	19,028		
09730	Resinous floor and base	820	sf	15.00	12,300		
09651	Rubber base	5,210	lf	2.95	15,370		
	SUBTOTAL					176,909	
<b>C3030 CEILING FINISHES</b>							
09510	ACT ceilings	16,575	sf	4.50	74,588		
09211	Rated gwb	2,925	sf	8.00	23,400		
09211	Interior gwb ceiling	2,500	sf	6.00	15,000		
09900	Exposed structure	8,982	sf	1.00	8,982		
09211	Soffits	400	lf	38.00	15,200		
09900	Paint to GWB ceilings and soffits	7,425	sf	1.10	8,168		
	SUBTOTAL					145,338	
<b>TOTAL - INTERIOR FINISHES</b>							<b>445,637</b>
<b>D10 CONVEYING SYSTEMS</b>							
<b>D1010 ELEVATOR</b>							
14210	Passenger elevator, 2 stop	1	ea	110,000.00	110,000		
05500	Pit ladders	1	ea	1,200.00	1,200		
05500	Rail supports and hoist beam	1	ls	5,000.00	5,000		
05500	Sill angles	24	lf	25.00	600		
	SUBTOTAL					116,800	
<b>TOTAL - CONVEYING SYSTEMS</b>							<b>\$116,800</b>
<b>D20 PLUMBING</b>							
<b>D20 PLUMBING, GENERALLY</b>							
<i>Equipment</i>							
220000	Gas, Oil, & Sand Interceptor	1	ea	\$12,000.00	\$12,000		
220000	Water Meter	1	ea	\$1,760.00	\$1,760		
220000	Domestic Water Heater	1	ea	\$8,500.00	\$8,500		
220000	Main Backflow Preventor	1	ea	\$3,200.00	\$3,200		
220000	Zone Backflow Preventor	1	ea	\$750.00	\$750		
220000	Thermostatic Mixing Valve	1	ea	\$1,800.00	\$1,800		
220000	Air Compressor	1	ea	\$5,000.00	\$5,000		
220000	Circulation Pump	1	ea	\$1,600.00	\$1,600		
220000	Fixture and Equipment Hook Ups	8	ea	\$500.00	\$4,000		
<i>Plumbing Fixtures including all supply, drain and venting</i>							
220000	Water Closets	11	ea	4,250.00	\$46,750		
220000	Cell Water Closets/sink combo	3	ea	8,500.00	\$25,500		
220000	Urinal	3	ea	4,000.00	\$12,000		
220000	Lavatories - drop in	6	ea	2,950.00	\$17,700		
220000	Lavatories - wall hung	5	ea	3,850.00	\$19,250		
220000	Janitors Sinks	4	ea	2,800.00	\$11,200		
220000	Kitchen Sinks	3	ea	2,500.00	\$7,500		
220000	SS Scullery sink, pedal and hose spray	1	ea	5,500.00	\$5,500		
220000	Shower	8	ea	5,000.00	\$40,000		
220000	Emergency Eye Wash/Shower	2	ea	4,500.00	\$9,000		
220000	Drinking Fountains	1	ea	5,000.00	\$5,000		
220000	Roof Drains	10	ea	\$2,850.00	\$28,500		
220000	Floor Drains	12	ea	\$2,000.00	\$24,000		
220000	Hose Bibbs	10	ea	\$800.00	\$8,000		

Conceptual Cost Estimate

GFA 30,982

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
	<u>Misc</u>						
220000	Laundry room connections	1	ls	3,500.00	3,500		
220000	Decon room connections	1	ls	3,500.00	3,500		
220000	SCBA room connections	1	ls	3,500.00	3,500		
220000	Compressed Air annd misc apparatus utilities	1	ls	30,000.00	30,000		
220000	Gas	500	lf	68.00	34,000		
220000	Coordination	1	ls	10,000.00	10,000		
220000	Permits	1	ls	5,000.00	5,000		
	SUBTOTAL					388,010	

<b>TOTAL - PLUMBING</b>	<b>\$388,010</b>
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<b>D30 HVAC</b>
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**D30 HVAC, GENERALLY**

Equipment and distribution

230000	Admin/Dentention building heating	21,382	sf	\$10.00	213,820		
230000	Apparatus in slab radiant and gas fired infared heaters	9,600	sf	\$7.00	67,200		
230000	Admin/Dentention building Cooling	21,382	sf	\$26.00	555,932		
230000	Ventilation and CO Exhaust	30,982	sf	\$3.00	92,946		

Controls

230000	ATC	30,982	sf	\$5.00	154,910		
230000	Alarming, Scheduling, Trending & Logging	30,982	sf	\$1.00	30,982		

Commissioning

230000	Start up	30,982	sf	\$0.50	15,491		
230000	Balancing	30,982	sf	\$0.75	23,237		
230000	3rd Party Assist	30,982	sf	\$0.35	10,844		

Miscellaneous

230000	Coordination	1	ls	\$5,000.00	5,000		
230000	Crane and Rigging	1	ls	\$10,000.00	10,000		

SUBTOTAL

1,180,362

<b>TOTAL - HVAC</b>	<b>\$1,180,362</b>
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<b>D40 FIRE PROTECTION</b>
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**D40 FIRE PROTECTION, GENERALLY**

210000	Sprinkler system piping and heads	30,982	sf	4.10	127,026		
210000	Service Equipment	1	ls	12,500.00	12,500		
210000	Fire pump	1	ls	30,000.00	30,000		
	SUBTOTAL					169,526	

<b>TOTAL - FIRE PROTECTION</b>	<b>\$169,526</b>
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<b>D50 ELECTRICAL</b>
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**D5010 SERVICE & DISTRIBUTION**

Power Circuitry & Equipment

260000	Service, main switthboard and panels	30,982	sf	8.00	247,856		
260000	200KVA Emergency generator	1	ls	225,000.00	225,000		
260000	Power circuitry	30,982	sf	6.00	185,892		
	SUBTOTAL					658,748	

**D5020 LIGHTING & POWER**

260000	LED lighting, power and branch circuitry	30,982	sf	10.00	309,820		
260000	SUBTOTAL					309,820	

**Conceptual Cost Estimate**

GFA 30,982

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>D5030 COMMUNICATION &amp; SECURITY SYSTEMS</b>							
<i>Telecommunications System</i>							
260000	Rough-in system	30,982	sf	1.25	38,728		
<i>Fire Alarm</i>							
260000	Fire Alarm system	30,982	sf	3.85	119,281		
<i>Special Systems</i>							
260000	Radio transponder system				softcosts		
260000	Security roughin	30,982	sf	1.25	38,728		
260000	PA system	1	ls	15,000.00	15,000		
	SUBTOTAL					211,737	
<b>D5040 OTHER ELECTRICAL SYSTEMS</b>							
<i>Lightning protection</i>							
260000	UL Master label lightning protection	30,982	sf	1.00	30,982		
<i>Site</i>							
260000	Site power and Lighting	1	ls	65,000.00	65,000		
<i>Miscellaneous</i>							
260000	Temp services	30,982	sf	0.60	18,589		
260000	Seismic restraints	1	ls	10,000.00	10,000		
260000	Coring & patching	1	ls	6,500.00	6,500		
260000	Fire stopping	1	ls	5,000.00	5,000		
260000	Fault current & coordination study	1	ls	5,000.00	5,000		
260000	Fees & Permits	1	ls	5,000.00	5,000		
	SUBTOTAL					146,071	
<b>TOTAL - ELECTRICAL</b>							<b>\$1,326,376</b>
<b>E10 EQUIPMENT</b>							
<b>E10 EQUIPMENT, GENERALLY</b>							
<i>Appliances</i>							
11310	Under-counter refrigerator	1	ea	500.00	500		
11310	Full-size residential refrigerator	2	ea	900.00	1,800		
11310	Microwave	2	ea	400.00	800		
11310	Cook top	2	ea	850.00	1,700		
11310	Toaster-oven	2	ea	200.00	400		
11310	Disposers	2	ea	250.00	500		
11310	Commercial Stove and hood	1	ea	7,500.00	7,500		
11310	Commercial refrigerator	1	ea	3,500.00	3,500		
11310	Commercial dishwasher	1	ea	1,600.00	1,600		
11310	Commercial microwave	1	ea	750.00	750		
11310	Commercial Toaster-oven	1	ea	250.00	250		
	SUBTOTAL					19,300	
<b>TOTAL - EQUIPMENT</b>							<b>\$19,300</b>

Conceptual Cost Estimate

GFA 30,982

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**E20 FURNISHINGS**

**E2010 FIXED FURNISHINGS**

Blinds

12211	Window treatments	2,817	sf	8.00	22,536		
12211	Training - room darkening shades	225	sf	6.00	1,350		
12211	Dorm - room darkening shades	80	sf	6.00	480		

Casework

12000	Metal base cabinets w/ solid surface top and wall shelving at Decon	10	lf	550.00	5,500		
12000	Metal storage cabinets at medical supply	5	ea	1,250.00	6,250		
12000	Metal wall shelving at medical supply	11	ls	200.00	2,200		
12000	Metal storage cabinets at bulk storage	3	ea	1,250.00	3,750		
12000	Metal storage cabinets at maintenance	2	ea	1,250.00	2,500		
12000	Booking island base cab / counter	21	lf	800.00	16,800		
12000	Storage shelving at Hazmat storage	24	lf	250.00	6,000		
12000	Tire and part shelving	14	lf	200.00	2,800		
12000	Wood bench at Decon	3	lf	400.00	1,200		
12000	Wood work bench, peg board and wall shelving at Maintenance	15	lf	400.00	6,000		
11000	Safe room metal cabinet, eppy counter and shelving	10	lf	600.00	6,000		
	<u>Shelving</u>						
12000	High density file storage	1	ls	50,000.00	50,000		
	SUBTOTAL					133,366	

**E2020 MOVABLE FURNISHINGS**

All movable furnishings to be provided and installed by owner  
 SUBTOTAL

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<b>TOTAL - FURNISHINGS</b>						<b>\$133,366</b>	
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**E30 SPECIAL CONSTRUCTION**

**E30 SPECIAL CONSTRUCTION**

Security and Detention allowance

13000	G2 sliding steel cell doors; 3' x 7' x 2" thick door, insulated and E frame	3	ea	12,000.00	36,000		
13000	Steel built-in bench/bunk	3	ea	5,500.00	16,500		
13000	Evidence and holding steel built-in bench w/ culk bars	2	ea	6,000.00	12,000		
13000	Steel plate ceiling system; 3/16" steel panels with interlock	3	rms	6,500.00	19,500		
13000	Suicide proof HVAC register/return	6	ea	500.00	3,000		
13000	Suicide proof light fixture	3	ea	850.00	2,550		
13000	Cell monitor/audio system	1	ls	5,000.00	5,000		
13000	Pistol locker, wall mounted	1	ea	1,600.00	1,600		
13000	Evidence drop off pass through lockers	4	ea	2,250.00	9,000		

Transaction window

13000	Transaction counter, tray & Bullet proof window unit	1	ls	25,000.00	25,000		
13000	Bullet proof sheilding at lobby walls	1	ls	10,000.00	10,000		
	SUBTOTAL					140,150	

<b>TOTAL - EQUIPMENT</b>						<b>\$140,150</b>	
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Conceptual Cost Estimate

GFA 30,982

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**F20 BUILDING DEMOLITION**

**F2010 BUILDING ELEMENTS DEMOLITION**

Phase 1 building take down

02050	Demo makesafe						w/ sitework budget below
02050	Fire station building demo including foundations						w/ sitework budget below
01000	Temp, structural and facade at police						see summary

Phase 2 building take down

02050	Demo makesafe						w/ sitework budget below
02050	Police station building demo including foundations						w/ sitework budget below
	SUBTOTAL						\$0

**F2020 HAZARDOUS COMPONENTS ABATEMENT**

	Haz-mat						w/ sitework budget below
	SUBTOTAL						\$0

**TOTAL - BUILDING DEMOLITION \$0**

**G10 SITEWORK**

**Sitework**

	Site Estimate provided by PARE Corp	1	ls	1,297,500.00	1,297,500		
	Site prep, erosion control and earthwork						
	Site improvements including pavement, curbing, retaining walls, guardrails, concrete paving, loading dock and equipment pads						
	Drainage systems						
	Utilities including water, sewer and gas line e&b						
	Demo and haz-mat						

**Additional site Improvements not included above**

02100	Building excvaton, backfill and slab prep	30,982	sf	2.00	61,964		
21000	Bollards at garage doors	14	ea	500.00	7,000		
21000	Bollards at generator and transformer	8	ea	500.00	4,000		
21000	Flagpole	1	ea	4,500.00	4,500		
21000	Encase electrical ductbanks in concrete, excavate and backfill	100	cy	250.00	25,000		
21000	Misc signage and improvements	1	ls	15,000.00	15,000		
21000	<b>Landscaping</b>						
21000	Planting and lawns allowance	1	ls	50,000.00	50,000	1,464,964	

**Site Electrical**

21000	Generator						w/ bldg estimate
21000	Primary and secondary conduit						w/ bldg estimate
21000	Secondary wiring						w/ bldg estimate
21000	Light poles, conduit and wiring						w/ bldg estimate
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**TOTAL - SITEWORK 1,464,964**