

MOUNTAIN VIEW CIVIC CENTER
PRELIMINARY ESTIMATE

September 1986

CLIENT:

Center for Environmental Structure
2701 Shasta Road
Berkeley, CA 94708

CONSULTANT:

Hanscomb Associates Inc.
350 Pacific Avenue
San Francisco, CA 94111



Hanscomb

Hanscomb Associates Inc.
350 Pacific Avenue
San Francisco, California 94111
(415) 781-6677

September 9, 1986

Mr. Christopher Alexander
Center for Environmental Structure
2701 Shasta Road
Berkeley, CA. 94708

RE: MOUNTAIN VIEW CIVIC CENTER

Dear Mr. Alexander:

Enclosed is the preliminary estimate for your Mountain View Civic Center project.

In accordance with the competition conditions, we have followed the format requested by Lee Saylor Inc., and have therefore presented the figures in a computerized system adapted to that format.

Also in accordance with your instructions, we have made a very detailed take-off and estimate which reflects the specifications, details and drawings given us. Special attention was given to unusual design elements and nonstandard construction techniques.

We are hopeful that you will be successful in this competition, and that we shall have the opportunity of working with you on this project through to completion.

Yours very truly,
HANSCOMB ASSOCIATES INC.


Duane Sample
Manager

Enclosures as described.

MOUNTAIN VIEW CIVIC CENTER

COST ESTIMATE AND AREA TABULATION

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MOUNTAIN VIEW CIVIC CENTER

AREA TABULATION

The following summary of areas in the project, gives the detailed quantities which demonstrate compliance with the program requirements.

MOUNTAIN VIEW CIVIC CENTER

SUMMARY OF AREAS OF CONSTRUCTION

CITY HALL	63,903 sf.
THEATER	37,343 sf.
PARKING	69,025 sf.

Distributed as follows:

CITY HALL

First floor

Finance	5382
Personnel	2589
Information services	6448
Chamber, public meeting	800
Lunchroom + storage	783
Lobby	2697
Reception	476
Circulation, toilets, showers	3574
Porches, arcades etc	3412 (50% x 6824)

First floor subtotal 26,161

Second floor

City clerk & Mayor	2669
City Manager	3752
City attorney	2456
Finance	709
Housing and Planning	2882
Public works	7562
Council chamber	6468
Circulation & lobby	2689

Second floor subtotal 29,187

Third floor

Housing and planning	3156
Public works	2850
Lobby & circulation	2549

Third floor subtotal 8,555

CITY HALL TOTAL 63,903

Note. 5000 sf of expansion space is evenly distributed among the city departments.

THEATER

Basement

Storage and misc 2620
Exits and elevator pits 560

Basement subtotal 3,180

First floor

Lobby 3706
Cafe 1353
Offices 1934
Actors area 1919
Backstage 2220
Frontstage 769
Prop shop 600
Scene shop 2294
Rehearsal 1406
Second stage 3532
Auxiliary circulation,
toilets and mechanical 3156

First floor subtotal 22,889

Second floor

Auditorium 6252
Costume shop 1375
Second floor mezzanine,
control and viewing booths 320

Second floor subtotal 7,947

Third floor

Balcony and upper lobby 3327

Third floor subtotal 3,327

THEATER TOTAL 37,343

PARKING

Basement floor 79025

Basement subtotal 69,025

PARKING TOTAL 69,025

MOUNTAIN VIEW CIVIC CENTER

COST ESTIMATE SUMMARIES

Notes on estimating

Since the design of the project has an amount of detail which may appear unusual by current standards, we have taken unusual care to make a detailed estimate, and to show that what appears on the drawings, both in character and quality, can be built for the available money.

The fundamental principle at work, is that expensive details and materials used in certain critical areas, are offset by extreme simplicity and inexpensive construction on other areas.

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On the first page, we have given our overall breakdown for the project. We have followed Lee Saylor's categories, as specified in the competition conditions. The estimates for different numbered categories (functional categories) are accurate. On the second page, we give attributions to different buildings (City Hall, Theater, Parking, Plaza/Landscape) as requested. Since the project buildings are so tightly intervoven, attribution to one particular building is sometimes artificial.

The detailed estimate, which the summaries are based on, is given category by category, on the twenty pages which follow. This estimate, which gives detailed cost figures within the functional categories, is accurate and reliable.

MOUNTAIN VIEW CIVIC CENTER

ESTIMATE

1.1 Demolition	Not included in budget
1.2 Sitework	743,373
2.1 Substructure	1,963,501
3.0 Structure	4,411,690
4.1 Enclosure, vertical	1,202,940
4.2 Enclosure, horizontal	353,842
4.3 Support items	154,000
5.1 Internals, vertical	625,530
5.2 Internals, horizontal	567,576
5.3 Finishes, special	812,490
5.4 Interiors	608,000
6.0 Specialities, building	304,735
7.0 Equipment	212,110
8.0 Special construction	-
9.0 Conveying	412,050
10.1 Plumbing and fire	783,185
10.2 HVAC	885,997
11.0 Electrical	946,259
Direct cost	14,987,278
12.1 General conditions, 20 mo @ 38,000	760,000
12.2 Escalation and design contingency (escalation is figured at 2.7% x 3/4 yr to midpoint, and design contingency at 3%)	753,111
12.3 Contractors OH&P, fee, bond, & insur, 5.5%	824,300
Prorates	2,337,411
TOTAL COST	17,324,689

MOUNTAIN VIEW CIVIC CENTER

Distribution of estimate

All amounts on this page are shown in millions of dollars

	City hall	Theater	Parking	Plaza/Lpe	TOTAL
1.1 Demolition		Not included in budget			
1.2 Sitework	.036	.031	.362	.314	.743
2.1 Substructure	.291	.263	1.410	-	1.964
3.0 Structure	2.345	2.067	-	-	4.412
4.1 Enclosure, vertical	.625	.551	-	.027	1.203
4.2 Enclosure, horizontal	.188	.166	-	-	.354
4.3 Support items	.082	.072	-	-	.154
5.1 Internals, vertical	.333	.293	-	-	.626
5.2 Internals, horizontal	.302	.266	-	-	.568
5.3 Finishes, special	.333	.301	-	.178	.812
5.4 Interiors	.199	.409	-	-	.608
6.0 Specialities, building	.033	.030	-	.241	.304
7.0 Equipment	.070	.142	-	-	.212
8.0 Special construction	-	-	-	-	-
9.0 Conveying	.216	.190	.006	-	.412
10.1 Plumbing and fire	.415	.224	.144	-	.783
10.2 HVAC	.513	.276	.097	-	.886
11.1 Electrical	.533	.287	.126	-	.946
Direct cost	6.514	5.568	2.145	.760	14.987
12.1 General conditions	.330	.282	.109	.039	.760
12.2 Escalation & DC	.328	.280	.107	.038	.753
12.3 Contractors OH&P	.358	.306	.118	.042	.824
Prorates	1.016	.868	.334	.119	2.337
TOTAL COST (millions)	7.530	6.436	2.479	.879	17.324

MOUNTAIN VIEW CIVIC CENTER

COST ESTIMATE SHEETS

The following sheets give detailed notes on construction, quantities and unit prices.

MOUNTAIN VIEW CIVIC CENTER

ESTIMATE

1.1 Demolition

* Cost of demolition is not included in this budget.

MOUNTAIN VIEW CIVIC CENTER

ESTIMATE

1.2 Sitework.

Layout and survey	LS	-	-	5,000
Mass excavation	30,543	CY	5.00	152,715
Remove from site	26,000	CY	4.50	117,000
Backfill behind retaining wall	4,530	CY	17.00	77,010
Gravel backfill w/ sub drain	1,292	LF	12.00	15,504
Protect existing trees	allow			12,000
Move or reroute street services behind retaining walls	allow			15,000
Lawns, shrubs, trees and flowers	allow			80,000
Planters, small retaining walls	allow			30,000
Curbs, gutters and sidewalks	400	LF	36.00	14,400
Misc signs, plaques etc	allow	-	-	15,000
Main plaza fountain	allow			20,000
Theater court fountain	allow			10,000
Bermed amphitheater	allow	-	-	8,000
Trellised walk and trellis around amphitheater	1,300	SF	24.00	31,200
Castro plaza hardscape	15,000	SF	7.00	105,000
Misc hardscape	5,136	SF	4.00	20,544
Misc steps and benches	300	LF	50.00	15,000

TOTAL

743,373

NOTES

- * For other specialty exterior paving within the project, see 5.3
- * Park plaza between project and Pioneer park is planted with sprinkled lawns, flowering bushes and flower beds, with asphalt walks.
- * Back gardens of city hall are unpaved gardens, planted with small trees and bushes
- * Castro plaza, paving which crosses Castro street, and paving which crosses Mercy street, is finished as trowelled concrete w/ colored polished tile insets. Cost is calculated as \$5/sf for concrete, plus 2000 colored tile insets at \$15 each, making a total of \$7/sf.
- * Trellised walks are redwood.
- * Amphitheater is bermed, with lawn.
- * Misc hardscape includes surface of theater workshop courtyard, truck enclosure and back entrance of city hall. Plain asphalt over 4" rock.
- * Drainage for plaza under plumbing in parking garage, see 11.0.

MOUNTAIN VIEW CIVIC CENTER

ESTIMATE

2.1 Substructure and parking garage.

Spread footings, retaining wall	574	CY	140.00	80,360
Footings for shear walls/columns	434	CY	150.00	65,100
Retaining wall, parking	10,332	SF	19.00	196,308
Interior walls and shear walls	9,700	SF	17.00	164,900
Columns, parking, 18" diam x 8'	51	EA	500.00	25,500
Slab on grade	72,205	SF	2.75	198,564
Elevator pits	3	EA	4500.00	13,500
Suspended slab, 12" deep	72,205	SF	11.00	794,255
Girders, 1692 LF	188	CY	390.00	73,300
Membrane over top	72,205	SF	1.80	129,969
Ramp into garage	1,100	SF	3.25	3,575
Miscellaneous curbs	2,000	LF	8.50	17,000
Striping and painted arrows	allow	-	-	4,000
Footings at grade (for 20,220 sf buildings not over garage)	400	CY	140.00	56,000
Slabs on grade	20,220	SF	2.75	55,605
Topping over garage slab	45,034	SF	1.90	85,565

TOTAL

1,963,501

NOTES

*Topping and sub-slabs under ground floor exterior paving are included in paving prices (see 5.3)

*Drains and pumps for garage included in garage plumbing (10.1)

*Shear walls and columns include allowance for extra columns, piers and shear walls in parking garage to transfer loads from buildings above.

*Parking structure is calculated using parking standard spaces of 8.5 feet by 18.5 feet (averaging compact and full-size cars). This standard is expected to come into use in Mountain View in the near future.

MOUNTAIN VIEW CIVIC CENTER

ESTIMATE

3.0 Structure.

Sloped supported slabs	10,340	SF	12.00	124,080
2nd floor supported slabs	27,781	SF	11.00	305,591
3rd floor supported slabs	9,428	SF	11.00	103,708
Roof supported slabs, flat	23,615	SF	9.00	212,535
Sloped insulated metal deck roofs	11,204	SF	7.50	84,030
Cantilevered supported slabs	12,763	SF	10.00	127,630
Exterior poured concrete walls (price includes two sides of formwork, steel, scaffolding, concrete and stripping)	81,789	SF	16.50	1,349,519
Polystyrene formwork inserts to form detailed panels, pilasters, cornices etc.	50,000	SF	2.00	100,000
Job pre-cast concrete walls (includes precast theater dome wall)	27,263	SF	9.00	245,367
Interior poured concrete walls	30,000	SF	16.50	495,000
Interior job-precast walls	11,100	SF	9.00	99,900
Council interior conc. walls	3,632	SF	20.00	72,640
Theater interior conc. walls	7,904	SF	20.00	158,080
Main lobby interior walls	2,880	SF	20.00	57,600
Concrete columns, main lobby (60)	800	LF	50.00	40,000
Concrete columns, theater (20)	200	LF	65.00	13,000
Concrete columns, council entry (12)	132	LF	75.00	9,900
Concrete columns, council chamber(20)	180	LF	50.00	9,000
Concrete columns, courtyard (63)	756	LF	55.00	41,580
Concrete columns, rear council (18)	216	LF	55.00	11,880
Concrete columns, rear garden (13)	156	LF	45.00	7,020
Concrete columns, inter porch (2)	24	LF	45.00	1,080
Theater auditorium wooden stem walls and wooden subfloor	9,940	SF	5.00	49,700
Council chamber wooden stem walls and wooden subfloor	4,000	SF	5.00	20,000
Column capitals and bases (376)	376	EA	100.00	37,600
Courtyard raised fill	10,400	SF	1.50	15,600
City hall lobby -- exterior glass dome, complete	4,904	SF	40.00	196,160
Plaza steps	440	LF	50.00	22,000
Trusses to form theater dome (8)	8	EA	20,000.00	160,000
Girders, purlins and slab over steel decking for theater dome	6,912	SF	11.50	79,490
Cupola over council chamber roof	allow	-	-	12,000
Misc structural beams	allow			130,000
Misc interior conc slabs	2,000	SF	10.00	20,000

TOTAL

4,411,690

MOUNTAIN VIEW CIVIC CENTER

ESTIMATE

3.0 Structure (continued)

NOTES

- * For structural stairs see 9.0
- *Detail on exterior walls is obtained by polystyrene inserts in plywood forms
- *City hall dome price includes glazing, painting and caulking
- *For city hall, council chamber and theater, structure is cast in place concrete. Assume wall thickness of 12" (ground floor), and 8" on upper floors.
- *Second stage, scene shop, rehearsal space, and other spaces totalling 25% of all walls, are to be job pre-cast construction. Remainder are poured in place 8" and 12" concrete walls.
- *Floor systems. Waffle slabs or two way reinforced concrete slab and beam construction) throughout city hall and council chamber building, and in lobbies and offices of theater.
- *Interior dome of city hall lobby is listed under 5.2
- *Theater stage structure is calculated as part of cantilevered slabs
- *Theater dome is made of poured slabs over steel decking and purlins, supported on eight 40' lightweight steel trusses.
- *Exterior wall of theater dome is 3" job-cast panels over steel purlins fastened to trusses
- *Theater auditorium and council chamber floors. Sloping slab, with wooden substructure to support wood decking. 5.00/sf price includes vinyl surface.
- *Interior columns. Interior columns are very rare. Spans in office building are never more than 35' and can be spanned by single span of waffle slab or slab and beam.
- *Throughout the project, columns will be cast concrete columns, with green and white marble terrazo surface.
- *Column capitals and bases. Throughout the project, columns will have shaped capital and bases. Simple shapes will be used, formed in place or precast.

MOUNTAIN VIEW CIVIC CENTER

ESTIMATE

4.1 Enclosure, vertical.

Green marble terrazzo, on walls	39,400	SF	15.00	591,000
Council chamber, exterior surface modelling	6,292	SF	3.70	23,280
Column surfaces (green/white marble terrazzo)	1,848	SF	15.00	27,720
Steel windows, glazed and painted	12,640	SF	26.00	328,640
Glazed entrances	2,200	SF	23.00	50,600
Doors, HM, complete	25	EA	850.00	21,250
Friezes	allow	-	-	20,000
Misc metals (unforeseen)	allow	-	-	50,000
Seismic joints	allow	-	-	25,000
Plaster arcade wall surface over concrete	6,600	SF	3.25	21,450
Paint arcade walls and other exterior surfaces	40,000	SF	1.10	44,000
	TOTAL			1,202,940

NOTES

* Assume that the formwork on the exterior will show a continuous panelling and pilaster work, with panels to be filled with polished green terrazzo made with marble dust. Panels will be formed with polystyrene inserts in formwork. We assume 2.00/sf extra for this special formwork (shown under 3.0), and 3.70/sf extra on the council chamber surface.

* Approximately 50% of all exterior wall surfaces have the polished green terrazzo surface. Price will be 15/sf of surface. Work is like plaster work, followed by in-place grinding and polishing.

*Windows are steel sash, single glazed, painted. Good quality, with high percentage of lites and mullions. 26/sf reflects mullion density.

*The terrazzo on each column will be hand applied, using polystyrene insets to get two color effect.

MOUNTAIN VIEW CIVIC CENTER

ESTIMATE

4.2 Enclosure, horizontal.

Built-up roofing, incl. insulation	23,600	SF	3.80	89,680
Sheet metal and flashings	allow	-	-	24,000
Tile sloped roofs (incl. rigid insul)	11,200	SF	6.00	67,200
Tile on seams of theater dome	allow	-	-	9,000
Facias not yet detailed	2,400	LF	8.00	19,200
Gutters and leaders	allow	-	-	16,000
Skylights, small	1,000	SF	25.00	25,000
Roof hatches, ladders	allow	-	-	3,500
Sealants and caulking	allow	-	-	30,000
Plaster exterior soffits	8,000	SF	7.00	56,000
Xypex waterproofing on theater dome	4,754	SF	3.00	14,262

TOTAL

353,842

NOTES

* City hall lobby dome. This is a glazed double dome, on a steel space frame. All glass is plane glass, no curves. Steel frame is specially fabricated. Upper dome is at roof level of exterior dome over the structure. Lower dome is located in the plane above the galleries. Both domes use obscure glass. Price of exterior dome is included under 3.0, and interior under 5.2.

* Joints along seams of octagonal theater dome are finished with terracotta.

MOUNTAIN VIEW CIVIC CENTER

ESTIMATE

4.3 Support items.

Utilities into building	allow	-	-	100,000
Mech. louver vents	allow			8,000
Caulking	allow			6,000
Misc iron and gratings	allow			25,000
Handicapped requirements	allow			15,000
	TOTAL			154,000

MOUNTAIN VIEW CIVIC CENTER

ESTIMATE

5.1 Internals, vertical.

Inside exterior walls, insulating batts, mtl stds, sheetrock and paint	38,100	SF	3.50	133,350
Interior partitions, both sides, mtl stds, sheetrock and paint	25,400	SF	5.40	137,160
Interior partitions, both sides, mtl stds, L&P, and paint	6,000	SF	9.20	55,200
Interior doors, complete	230	EA	650.00	149,500
Interior glass lites	1,200	SF	16.00	19,200
Sound insulation	12,000	SF	.50	6,000
Special interior terrazzo wall surface (Council chamber and city hall lobby)	2,300	SF	12.00	27,600
Lobby balustrades (council chamber, and city hall)	288	LF	60.00	17,280
Lobby balustrades (theater)	200	LF	60.00	12,000
Stair balustrades (council chamber, city hall lobby and theater)	280	LF	65.00	18,200
Lunch room balustrade	64	LF	60.00	3,840
Painted wood panelled wainscot in theater lobbies and vestibules, city hall lobby, council chamber lobby	5,775	SF	8.00	46,200

TOTAL 625,530

NOTES

* Department entrances included in glazed entrances

* Painted wood panelling on lower portions of all theater public spaces.
Assume extra of \$8.00/sf of panelled area, and assume panelling goes up to 5'
wainscot height, for all panelling.

MOUNTAIN VIEW CIVIC CENTER

ESTIMATE

5.2 Internals, horizontal.

Floors carpeted w/base	45,000	SF	2.35	105,750
Special quality carpet in council chamber lobby, adder	2,504	SF	1.00	2,504
Special quality carpet in theater vestibules, adder	2,190	SF	1.00	2,190
VAT	6,980	SF	3.25	22,685
Quarry tile (kitchen, cafe, lunchroom)	2,268	SF	8.50	19,278
Ceramic tile (bathroom floors and walls)	5,400	SF	7.25	39,150
Raised computer flooring	1,170	SF	10.00	11,700
Ceilings - suspended acoustic tile	34,440	SF	2.00	68,880
Ceilings - suspended painted sheetrock	16,210	SF	2.75	44,578
Ceilings - metal kitchen	324	SF	7.00	2,268
Ceilings - cafe, special	1,224	SF	5.00	6,120
Ceiling - lunch room special	720	SF	3.00	2,160
Ceiling - theater lobby and bar	3,070	SF	6.50	19,955
Theater auditorium domed ceiling, plaster over lath, suspended from trusses on joists and purlins	8,924	SF	12.00	107,088
Paint other exposed ceilings	10,000	SF	1.00	10,000
Artistic ceiling work allow	-	-	-	20,000
Softwood panelled ceilings in 15% of all offices	6,750	SF	5.00	33,750
Wooden stage and forestage	2,940	SF	8.00	23,520
Domed ceiling city hall lobby (inner glass dome)	520	SF	50.00	26,000
TOTAL				567,576

NOTES

- * Finish floors for arcades, lobbies and courtyards are figured under 5.3
- * Vinyl floor surface in theater and council chamber is included in price of wooden structure (see 3.0).
- * Stair surfaces included in price for stairs (9.0)
- * Carpet in theater vestibules and council chamber will be high grade.
- * No ceilings in shops, second stage, scene shop, rehearsal.
- * No finish floors in shops, second stage, scene shop, rehearsal.
- * Stair and landing finishes under 9.0

MOUNTAIN VIEW CIVIC CENTER

ESTIMATE

5.3 Finishes, special.

Wood trim at window interiors	12,000	LF	7.00	84,000
Stone paving in city hall lobby	2,784	SF	25.00	69,600
Stone paving with ornamental terrazzo insets, in arcades	5,000	SF	25.00	125,000
Concrete paving in arcades	3,000	SF	5.00	15,000
Stone paving in theater lobby	2,626	SF	25.00	65,650
Grass and stone paving, main plaza	7,500	SF	12.00	90,000
Stone paving, theater courtyard	3,116	SF	15.00	46,740
Cafe terrace paving	1,700	SF	12.00	20,400
Cafe terrace awning	1,700	SF	10.00	17,000
Hand painted arcade ceilings	4,560	SF	2.50	11,400
Council chamber ceiling	allow			10,000
City hall lobby murals, plaster	3,200	SF	3.25	10,400
Ditto, artist's fee	allow			30,000
Special hardwood panels for council chamber	3,000	SF	7.50	22,500
Arches and colonnade on theater balcony, plasterwork	2,520	SF	15.00	37,800
Columns in council chamber, plasterwork	800	SF	10.00	8,000
Wood panelling or wallpaper or cloth surfaces in some offices (10% of all office areas)	11,250	SF	6.00	67,500
Interior plasterwork in lobbies	8,150	SF	10.00	81,500
			TOTAL	812.490

NOTES

- * On exterior paving, grouted subfloors are included in prices.
- * Main plaza paving. Surface of main plaza will be slate paths alternating with small lawns, with small black and white marble terrazzo inset next to main fountain (as shown on drawing).
- * Paving under arcades. Natural stone and marble terrazzo combination. Assume combined average price of \$25/sf.
- * In lobbies, stairs, and interior of theater walls arches and ceiling, we assume ornamentation and highlights done in a high grade smooth interior plaster, possibly done by our plasterers from Japan, who have recently completed a similar job for us. Price of this work will be approximately \$10.00/sf.

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5.4 Interiors.

Council chamber seats	125	EA	340	42,500
Benches in council chamber lobby	136	LF	75	10,200
Theater seats	600	EA	450	270,000
Benches in city hall lobby, and in front of department entrances	120	LF	75	9,000
Benches in waiting areas	allow			15,000
Council chamber dais & millwork	allow	-	-	120,000
Cabinets and tops	allow	-	-	85,000
Misc finish carpentry items	allow			34,000
Toilet accessories	allow	-	-	16,000
Curtains in theater balcony	180	LF	35.00	6,300
			TOTAL	608,000

NOTES

- * See other interior items under 6.0
- * Theater seats high grade red plush.

MOUNTAIN VIEW CIVIC CENTER

ESTIMATE

6.0 Specialities, building.

Reception room windows, special muntin design and fabrication	allow			3,000
Council chamber doors	allow			2,000
Column fountains w/ basins and pumps (one per column of plaza)	24	EA	1,500.00	36,000
Concrete seats on column fountains	32	EA	120.00	3,840
Ceramic horses	32	EA	6,000.00	192,000
Terracotta surface (plaza)	2,860	SF	4.50	12,870
Mercy street fresco (plasterwork)	7,700	SF	3.25	25,025
Mercy street fresco (artists fee)	allow			30,000
TOTAL				304,735

NOTES

- * Small column fountains contain outlet in column, about 6' off the ground, on each of 24 columns, with two splash basins, and recirculating pump.
- * Blue horses around plaza are glazed ceramic bas relief, made in pieces, and assembled on site. Price will be 6,000 per horse.
- * Horses are set on background of exterior terracotta around the plaza. Terracotta band is 440'x6.5' high.
- * Lobbies, theater etc will have custom made chandeliers hanging from ceilings. For various specialty chandeliers, see 11.0
- * Fresco on back wall of theater (Mercy Street side) will be hand painted on plaster.

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ESTIMATE

7.0 Equipment.

Stage scene handling equipment	allow			15,000
Catwalks	270	LF	75.00	20,250
Orchestra pit hydraulic mechanism	allow			24,000
Council projection booth	allow			3,500
Council chamber projection screen	allow			2,700
Theater control booth	allow			6,000
Theater viewing booth	allow			8,500
Loading dock	allow			6,400
Toilet partitions	12	EA	480.00	5,760
Kitchen equipment	allow			120,000
	TOTAL			212,110

NOTES

* Theater sound system is included under 11.0

MOUNTAIN VIEW CIVIC CENTER

ESTIMATE

8.0 Special construction.

NOTES

* The project contains a large number of special items of construction. In this estimate they have all been assigned to other categories.

MOUNTAIN VIEW CIVIC CENTER

ESTIMATE

9.0 Conveying.

Pan filled stairs (garage)	3	EA	2,000.00	6,000
Poured concrete stairs (22)	4,114	SF	25.00	102,850
Stair balustrades, special (for lobby, theater and council chamber main stairs)	280	LF	65.00	18,200
Railings, surfaces and finishes	12	FLTS	3,500.00	42,000
Ditto, high quality for city hall lobby, theater lobby, and council chamber main stair.	5	FLTS	6,600.00	33,000
Elevators, hydraulic	3	EA	70,000.00	210,000
TOTAL				412,050

NOTES

* Main public stairs in lobbies of council chamber, city hall and theater will have high level of floor finish, with expensive balusters, and some ornamentation.

MOUNTAIN VIEW CIVIC CENTER

ESTIMATE

10.1 Plumbing and fire protection.

Plumbing (general)	100,000	SF	3.50	350,000
Plumbing (kitchens)	allow			60,000
Fire protection	100,000	SF	2.20	220,000
Halon in computer room	1,170	SF	7.50	8,775
Sprinkler system in parking garage	72,205	SF	1.40	101,087
Plumbing in parking garage	72,205	SF	.60	43,323

TOTAL 783,185

MOUNTAIN VIEW CIVIC CENTER

ESTIMATE

10.2 HVAC.

HVAC, office areas	51,000	SF	8.00	408,000
HVAC, theater	10,300	SF	14.00	144,200
HVAC, council chamber	5,520	SF	12.00	66,240
HVAC, city hall lobby	2,784	SF	20.00	55,680
HVAC, shop areas	9,600	SF	6.50	62,400
Ventilation, parking garage	72,205	SF	1.35	97,477
Heating and venting, other areas	13,000	SF	4.00	52,000

TOTAL 885,997

NOTES

- * Basic system uses an outside cooling tower; booster units as required.
- * Concrete structure and construction together with small windows will substantially lower heating and cooling loads.
- * Both city hall lobby and theater dome are designed to be vented between the double domes, further reducing cooling loads.

MOUNTAIN VIEW CIVIC CENTER

ESTIMATE

11.0 Electrical.

Electrical, office areas	51,000	SF	6.00 -	306,000
Electrical, theater	10,300	SF	3.50	36,050
Electrical, theater equipment	allow	-	-	75,000
Electrical, theater rooms	6,476	SF	2.50	16,190
Electrical, council building	5,520	SF	8.50	46,920
Electrical, city hall lobby (72' high)	2,784	SF	10.00	27,840
Electrical, shop areas	9,600	SF	3.00	28,800
Electrical, courtyards	26,000	SF	1.50	39,000
Electrical, parking garage	72,205	SF	1.75	126,359
Electrical, other areas	13,000	SF	3.50	45,500
Electrical, TV, interc, speakers	100,000	SF	.30	30,000
Arcade chandeliers	12	EA	800.00	9,600
Theater lobby chandeliers	4	EA	3,000.00	12,000
City hall lobby chandeliers	12	EA	1,000.00	12,000
Theater auditorium chandeliers	5	EA	3,000.00	15,000
Theater vestibule lights	10	EA	2,000.00	20,000
Electrical, emergency system	allow	-	-	100,000

TOTAL

946,259

NOTES

* Chandeliers are speciality items for important public areas.