SUMMARY OF SCHOOL CAMPUS

Address: 2201 Encinal Ave, Alameda, CA 94501

• **Principal - Phone No. :** Kelly Lara **-** (510) 337-7026

• Year Built: Original Campus 1924, through new Gymnasium 1993

• Total Site Area: 12.90 acres

• Thompson Field: 2.50 acres (Located off site)

• **Building Area:** 116,784 sf (Ground Floor area)

FACILITY DESCRIPTION

Alameda High School consists of multiple buildings constructed from 1924 through 1975. The original campus (1924) is a registered Historic Landmark that consists of (5) distinct Classic Revival buildings all facing Central Avenue. The only original buildings that can be used by the school are the Auditorium, which includes 6 classrooms on the 2nd and 3rd floors, the Patton Gym, and the West Wing buildings, which have all been seismically upgraded to meet Field Act certification. For additional information of those portions of the original campus not in current use by the school, refer to "Historic Alameda High School Seismic Report", issued separately from this assessment report.

The West Wing at Central and Walnut Street, was built later in 1957 to mimic the Classic Revival theme, but lacks the cast stone detailing of the originals. It was seismically retrofitted and added accessibility ramps, elevator, and restroom and fire alarm improvements in 1994. West Wing has (3) floors (45,600 sf), with 13 classrooms, an exercise Gym, a small Theater (2,715 sf), Cafeteria with Kitchen area (4,100 sf), and ground floor vocational programs. In 1975, a major campus addition was completed to replace the original buildings that were not Field Act compliant. This addition consisted of the 1-story Technical Arts building (13,800 sf), a 2-story Academic building (62,800 sf), and a Boiler/Utility (1,100 sf) servicing these buildings. These facilities were constructed as concrete pad foundations with concrete masonry unit (CMU) exterior walls, steel and metal deck framing with parapet wall and membrane roofing. The Academic building serves as the current focal point of the high school, with 48 classrooms, Administrative offices, and Library/Media Center.

The newest addition to the Campus is the Gymnasium (constructed in 1993,) adjacent to the Emma Hood Aquatic Center (1955). The new Gym building (23, 600 sf) is built on a concrete pad foundation, with steel post and truss framing, and cast-in place concrete exterior walls. The Gym includes public Restrooms, a Boys & Girls Locker Rooms, and mechanical/electrical service area. It is unknown if this building has received any upgrade since its construction. All told, the A.H.S. campus currently serves 1,830 students in a total of 75 classrooms, and various ancillary spaces as noted in the building descriptions above. This flagship campus also serves the Island community as a focal point of the renovated historical Downtown District, as well as a public resource with its 600 seat Auditorium, Adult Education Center, and District Offices. The District has directed a separate seismic analysis and report for both wings of the Central Building currently not DSA certified. This Assessment Report does not address the buildings within that separate Report.

KEY ASSESSMENT ITEMS

- Auditorium (1924)
 - a) Exterior cement plaster cracking
 - b) Fire Escape steel stair deterioration
 - c) Replace heating, lighting, and fire sprinkler & Alarm systems
 - d) Accessible audience seating at Balcony
 - e) Stage and Dressing Room accessibility
 - f) Boiler system with radiators is obsolete
- Patton Gym (1924)
 - a) Roof leaks at north wall of main gym
 - b) Original windows and doors beyond restoration
 - c) Replace heating, lighting, and fire sprinkler & Alarm systems
 - d) Interior finishes deteriorated
- West Wing (1957)
 - a) Classroom, Exercise gym accessibility
 - b) Window sash and trim service life and deterioration (south side)
 - c) Kitchen non-accessible and Alameda Co. Health Code violations

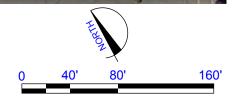
FACILITIES ASSESSMENT REPORT Alameda Unified School District

- d) Domestic hot water system is obsolete.
- e) 3rd Floor skylights have reached service life, and deferred maintenance.
- f) Non-accessible Corridor drinking fountains.
- Technical Arts (1975)
 - a) Membrane roof blistering (2002 replacement)
 - b) Excessive concrete floor moisture content
- Academic Building (1975)
 - a) HVAC discharges at Classroom # 42 Atrium windows.
 - b) Excessive Ground floor concrete moisture content.
 - c) Rain intrusion at ledge flashing between 1st and 2nd floor.
- New Gymnasium (1993)
 - a) Exterior concrete wall shear cracks
 - b) Roof leaks on south and west sides
 - c) Bleacher wood seating splintering
- Hood Aquatic Building
 - a) Building exterior has deteriorated
 - b) Pool deck, fencing, lighting, and bleachers have deteriorated



ALAMEDA HS 04/30/2012

Alameda USD Facilities Assessment





ADMINISTRATION

CLASSROOM BUILDING

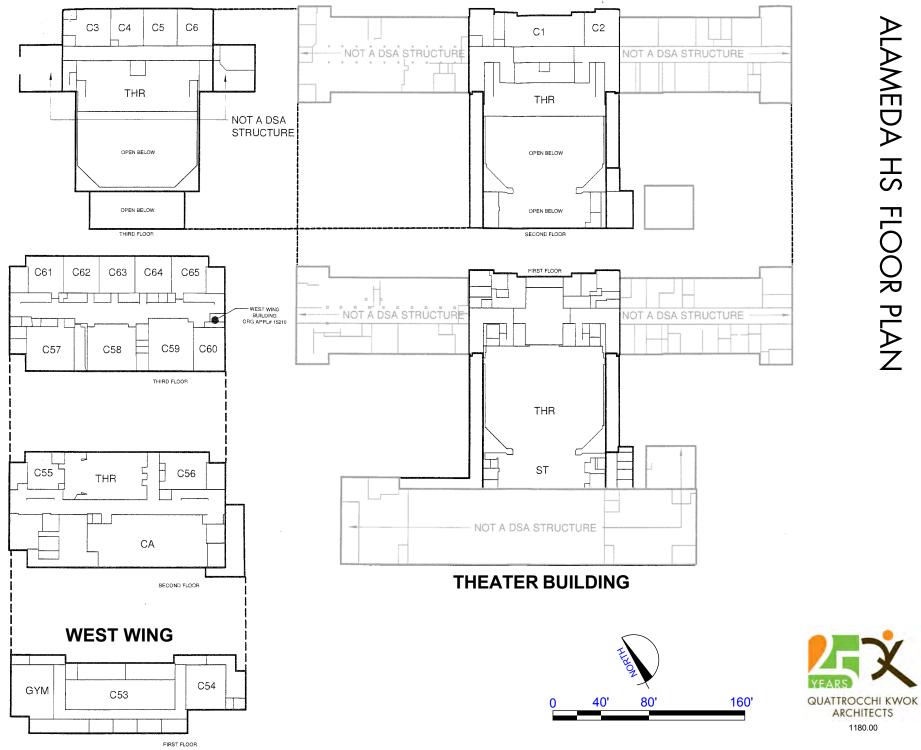
MULTI-PURPOSE / CAFETERIA BUILDING

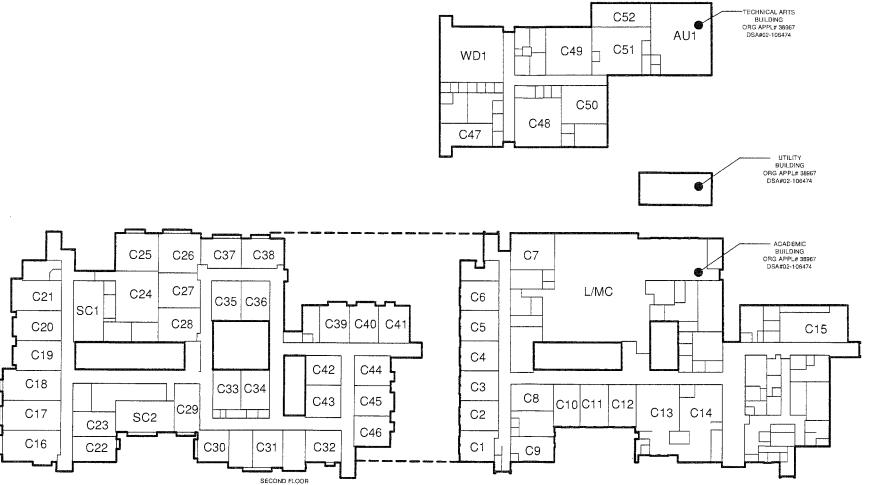
MODULAR BUILDING

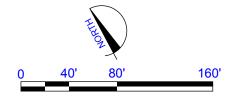
PORTABLE BUILDING

COVERED WALKWAYS

SEE ASSESSMENT SPREADSHEET FOR CIVIL KEYNOTES, TYP.









	CATEGORY	DESCRIPTION	PHOTO & SITE PLAN	ESTIMATED Quantity	TAKE OFF Unit	COST / UNIT	TOTAL COST
Civi	il		SITE PLAIN	Quantity	Unit	UNIT	\$1,748,656
	Existing Site Conditions						
i)	ACCESS						
	1 Existing Deficiency	Signage is not to current standards.	1C				
	Recommended Remedy	Update signage with the addition of \$250 fine signs. Restripe in		2	EA	\$600	\$1,200
	2 Existing Deficiency	conjunction with parking lot seal coat work. The ADA sign designating the path of travel has been twisted,					
	2 Existing Deficiency	indicating the wrong direction	2C				
	Recommended Remedy	Reset pole to restore proper orientation.		2	EA	\$600	\$1,200
	3 Existing Deficiency	The cross slope on the sidewalk across the bottom of the ramp area is 3%.	3C		LA	-	\$1,200
	Recommended Remedy	Remove and replace existing walk (approximately 30 ft) between joints, and replace with flatwork at 2% cross slope. Pending field survey verification, this may require removal and replacement of the walk leading to the nearby ADA stalls, at either 5% max or 8.33% max with railings.		240	SF	\$17	\$4,080
	4 Existing Deficiency	Metal threshold transitions at these locations are not ADA compliant, in that they do not provide a 5 ft level landing.	4C				
	Recommended Remedy	Remove threshold transitions and approximately 10ftx10ft section of concrete flatwork, and reconstruct with level landing at threshold and 5% max transition back to ex. flatwork on three sides		300	SF	\$20	\$6,000
	5 Existing Deficiency	No level landing at exterior door at media center.	5C				
	Recommended Remedy	Remove and replace flatwork as required to create level landing at door and 5% max transition back to existing flatwork on three sides.	Allow	200	SF	\$17	\$3,400
	6 Existing Deficiency	There are joints offset more than 1/4" vertically in the flatwork in this area.	6C				
	Recommended Remedy	Grind offset joints to eliminate offset.	Allow	105	SF	\$4	\$420

Facility Assessment Spreadsheet

CA	TEGORY	DESCRIPTION	РНОТО &	ESTIMATED	TAKE OFF	COST /	TOTAL COST
CA	TEGURY	DESCRIPTION	SITE PLAN	Quantity	Unit	UNIT	TOTAL COST
7	Existing Deficiency	Landing at main doors has 4.5% slope.	7C				
	Recommended Remedy	Flattening the slope at the door to create a level landing, and breaking to a 5% max slope will likely result in not matching the elevation at the top riser, with no level landing at the top of the stairs. In order to achieve full compliance, completely rebuild the upper landing and		360	SF	\$40	\$14,400
		stairs.					
8	Existing Deficiency	There are numerous joints in the concrete flatwork offset by more than 1/4" in this area.	8C				
	Recommended Remedy	Grind offset joints to eliminate the offsets.		200	SF	\$4	\$800
9	Existing Deficiency	Concrete flatwork in this area has cross slopes significantly exceeding ADA requirements.	9C			·	·
	Recommended Remedy	Remove all flatwork in this area. Reconstruct upper and lower walks with 2% max cross slope, and shorter connecting walkways at no more than 8.33%. Any flatwork in excess of 5% requires railings.		1,200	SF	\$30	\$36,000
10	Existing Deficiency	The slope of the upper ramp is 9.1%.	10C				
	Recommended Remedy	Since the slope of the lower ramp is less than 8.33%, it appears that a viable solution would be to remove and replace the flatwork, leaving railings in place, to reduce the slope of the upper ramp to not more than 8.33%, and to increase the slope of the lower ramp to not more than 8.33%.		960	SF	\$30	\$28,800
11	Existing Deficiency	Existing paving is deteriorating	11C				
	Recommended Remedy	Fill cracks, seal coat, and restripe.		49,794	SF	\$0.33	\$16,183
12	Existing Deficiency	Existing pavement is deteriorated.	12C	43,734	Ji	- γ0.55	\$10,163
				10 ==0		40	4.0.000
ii)	Recommended Remedy FIRE/LIFE SAFETY/HAZ MAT	Edge grind, fill cracks, pavement fabric, and 1.5" min. overlay.		19,556	SF	\$2.55	\$49,868
	Existing Deficiency	The interconnected nature of the buildings will likely result in a large fire area, and correspondingly high required fire flows, which the surrounding hydrants may not be able to meet.					
	Recommended Remedy	Consider adding fire sprinklers to existing buildings to reduce required fire flow.		180,892	SF	\$9	\$1,582,805

Alameda High School Page 2

Facility Assessment Spreadsheet

	CATEGORY		DESCRIPTION	РНОТО &	ESTIMATED	TAKE OFF	COST /	TOTAL COST
	CA	TEGURY	DESCRIPTION	SITE PLAN	Quantity	Unit	UNIT	TOTAL COST
iii)		UTILITIES						
	1	Existing Deficiency	Existing inlet in bike pen frequently clogs and ponds.	13C				
		Recommended Remedy	Clean small diameter pipes that discharge through curb. Cut 6" notch					
			out of concrete curb next to inlet to provide overland relief.		1	LS	\$1,000	\$1,000
	2	Existing Deficiency	This area drained by one small dia.inlet which is easily clogged,	14C				
			flooding lower level.					
		Recommended Remedy	Remove existing inlet and replace with a 24" square inlet with					
		necommended nemedy	1/2"max opening grate.		1	LS	\$2,500	\$2,500
Ar	chit	ectural	12/2 max opening graces					\$8,161,431
A) EX								. , ,
(i)		ACCESS						
	1	Existing Deficiency	West Wing Bridge: plaza area trip hazards	#1, #2				
				Pavement	300	SF	\$18	\$5,400
		Recommended Remedy	* See ZFA Report for structural bracing; At Plaza, remove pavement,	Steel Bracing	6	Tons	\$3,500	\$21,000
		5 · · · · · · · · · · · · · · · · · · ·	regrade, and replace with concrete pavement.				, , , , , , ,	1 /
	2	Existing Deficiency	Tech Arts Accessable Ramp: non compliant where landing exceeds 6"	#3				
			to adjacent pavement					
		Recommended Remedy	Add 6" high concrete curb from hand rail to bottom of landing.		40	LF	\$30	\$1,200
	3	Existing Deficiency	Tech Arts Exercise Gym: Exterior classroom door non accessible	#4				
		Recommended Remedy	Replace steel door frame and install threshold.		1	EA	\$3,500	\$3,500
	4	Existing Deficiency	West Wing 1st Floor: Small Gym is non accessible; East Corridor entry	#5, #9		Ε, τ	<i>φ3,300</i>	
		,	is non compliant to plaza level	ĺ				
		December de d'Occident	Deve flere and install grown into Cons. Budgeton aristics at in to					
		Recommended Remedy	Demo floor and install ramp into Gym; Redesign existing stairs to include accessible ramp/rail.	Allow	240	SF	\$155	\$37,200
	5	Existing Deficiency	Theater Bldg: non accessible at Street Entry					
		Recommended Remedy	Apply historical status for no ramp retrofit, but must provide		4	1.0	ĆE OO	ĆE OO
			directional signage at street to Accessible Entry at Eask Parking lot.		1	LS	\$500	\$500
	6	Existing Deficiency	Patton Gym: pavement subsidence at entry area to small gym create	#80				
		Land Beneficiery	large pools	1100				
		Recommended Remedy	Add site drain inlet and regrade, repave area at seatwall/entry area		300	SF	\$68	\$20,400

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СД	TEGORY	DESCRIPTION	РНОТО &	ESTIMATED	TAKE OFF	COST /	TOTAL COS	
			SITE PLAN	Quantity	Unit	UNIT	10172 003	
7	Existing Deficiency	Pool Bldg: locker room to pool deck non compliant and numerous	#81, #82, #83					
		slope and crack issues						
	Recommended Remedy	Remove and replace concrete deck		1,800	SF	\$23	\$41,400	
8	Campus Wide Deficiency	Student Lockers: most are in need of repairs at hinges and latches		1,000	31	723	541,400	
ŭ	campus while behiciency	Student Edekers. Most are in need of repairs at minges and latenes						
				2 000	5.	4650	44 200 00	
	Recommended Remedy DEFERRED MAINTENANCE	Replace w/ district Standard Pemco lockers		2,000	EA	\$650	\$1,300,00	
_		Poof DUD and in the stand of a suite life assess Tools Asta C Anadamia						
1	Campus Wide Deficiency	Roof : BUR roofing at end of service life, except Tech Arts & Academic						
		Bldgs						
	Recommended Remedy	Replace all roofing, scuppers, drains, caps and flashings except at Tech				4	4	
		Arts & Academic		73,000	SF	\$9	\$657,000	
2	Campus Wide Deficiency	All Bldg. Exteriors: painted finish is deteriorated						
	Recommended Remedy	Reseal and repaint all exterior walls, trims fascia, etc.		44,000	SF	\$5	\$220,00	
3	Campus Wide Deficiency	Exterior Windows: have reached end of service life		,,	<u> </u>	7.5	7==0/00	
	Recommended Remedy	Replace all remaining windows not listed in items #1,2, & 4 (Science,	ALLOW					
	Recommended Remedy	Gym/Lockers, Auto Shop, Wings 600 & 700)	ALLOW	3,500	SF	\$42	\$147,00	
4	Campus Wide Deficiency	Exterior doors: have reached end of service life						
	Recommended Remedy	Replace all ext. doors with metal frame and FRP door	ALLOW	28	Leaves	\$4,400	\$123,20	
5	Campus Wide Deficiency	No Trash Enclosure at this Site	ALLOW	20	Leaves	Ş 4 ,400	7123,20	
,	campus wide beneficiency	Trash Enclosure at this site						
	Recommended Remedy	Install (2) 3-Bin Trash Enclosure per Health Dept. standards	ALLOW	2	LS	\$20,000	\$40,000	
6	Existing Deficiency	Academic Bldg: Z-flash at 2nd Fl. Ribband leaks at roof scupper	#86, #87					
		downspouts						
	Recommended Remedy	Investigate reglet detail and replace flashing overall	ALLOW	140	LF	\$15	\$2,100	
7	Existing Deficiency	Tech Arts & Academic Bldgs: roofing membrane developing blisters.	#6, #7, #8	1-10		713	72,100	
	Landan & Delicitor	Treatment of the bridge treatment are developing bilaters.	,,					
						4	444	
	Recommended Remedy	Investigate w/ Garland for cause and remedy	ALLOW	33,000	SF	\$9	\$297,00	
8	Existing Deficiency	Academic Bldg: Street Entry plaza and flag pole base damage	#10, #11					
	Recommended Remedy	Repair / replace pole base cap; investigate soil stability for pavement						
		heave.	Allow	1	LS	\$1,500	\$1,500	
9	Existing Deficiency	West Wing Bridge: Corrosion and paint deterioration on all railings;	#12,16, 17 &					
		missing 2nd Fl. Handrail	18					
	Recommended Remedy	Replace all stair railing		100	LF	\$150	\$15,000	

CA	TEGORY	DESCRIPTION		ESTIMATED		COST /	TOTAL COST
			SITE PLAN	Quantity	Unit	UNIT	
10	Existing Deficiency	West Wing Bridge : Egress Stair not structurally compliant; rebar corrosion and concrete spalling;	#13, #14, #19				
	Recommended Remedy	Replace Stair with new compliant design; use specialty epoxy concrete repair		14	CY	\$850	\$11,900
11	Existing Deficiency	West Wing Bridge: terrazzo and concrete steps deteriorating	#15, #16				
	Recommended Remedy	Repair or replace treads		144	SF	\$14	\$2,016
12	Existing Deficiency	West Wing: Loading Dock function & stair damage					
	Recommended Remedy	Reconfigure dock with tailgate lift; repair concrete stair and install new guard/ handrails	Allow	1	LS	\$20,000	\$20,000
13	Existing Deficiency	West Wing East elevation; rails non compliant; North/South	#21,22,26,				
	·	elevations: All rails have excessive corrosion with deterioration.	&27				
	Recommended Remedy	East elev: Replace with 12" extension rails beyond 1st riser; North/South: prep, treat corrosion, and repaint all railings.		124	LF	\$75	\$9,300
14	Existing Deficiency	West Wing North elevation: 2nd Fl. Entry clearstory glass damaged; mismatched glazing replacement	#28, 29				
	Recommended Remedy	Replace with tempered glazing to match adjacent field		40	SF	\$24	\$960
15	Existing Deficiency	Theater Historic Front: cast stone, terrazzo and other surface	#23,24,25,30,				
		damage	31,32,&33				
	Recommended Remedy	Restore cast stone, bronze work, windows, doors and hardware	Allow	9,048	SF	\$145	\$1,311,960
16	Existing Deficiency	Theater Bldg 2nd Fl Exit Stairs; excessive corrosion and non compliant	#34, 35, 36,	3,040	- 31	Ş14J	71,311,30
	zg z c,	guardrails	&37				
	Recommended Remedy	Replace stairs, guardrail, & handrail in entirety		2	Stairs	\$65,000	\$130,000
17	Existing Deficiency	Theater 1st Floor West Egress: there is no accessible entry/egress on	#38				
		East elevation. *(Per ZFA Seismic Report, this exit to be blocked)					
	Recommended Remedy	Reconstruct stair to accessible ramp		400	SF	\$90	\$36,000
18	Existing Deficiency	Patton Gym: All (E) windows wood and steel frame windows have	#84, #85, #88				
		reached end of service life					
	Recommended Remedy	Replace all windows with FRP sash and IGU tempered glazing		800	SF	\$40	\$32,000
19	Existing Deficiency	Patton Gym: Roll-up door jamb and header damaged and deteriorating.	#80, #90				
	Recommended Remedy	Repair wall framing/ install new metal jamb & header, and new roll-up door		1	LS	\$18,000	\$18,000

CA	TEGORY	DESCRIPTION	РНОТО &	ESTIMATED	TAKE OFF	COST /	TOTAL COST
			SITE PLAN	Quantity	Unit	UNIT	TOTAL COS
20	Existing Deficiency -	Excessive moisture infiltration at brick wall plaster veneer.	#91, #92				
	Recommended Remedy	Strip all paint finish to base plaster and treat with Zypex sealer,					
	,	repaint		13,800	SF	\$11	\$151,800
21	Existing Deficiency	Gymnasium East & North Elev: shear cracking in cast in place walls	#39,40,				
			41,42,43				
	Recommended Remedy	Investigate for subsidence; repair using specialty concrete epoxy		6,600	SF	\$8	\$52,800
	necommended nemedy	contractor.		0,000	٥.	70	Ψ3 2 ,000
22	Existing Deficiency	Gymnasium Entry: faded paint and corrosion at piping, frame, roof	#44, #46				
		deck, fixtures and equipment	#44, #40				
	Recommended Remedy	Prep, and repaint metal work		1,600	SF	\$5	\$8,000
23	Existing Deficiency	New Gym Roof : roof leaks at metal roof joints, 20-ft from south and	#93			т-	7 5/5 5 5
		west walls	#93				
	Recommended Remedy	Re seal lap joints at standing seam metal roof		13,400	SF	\$4	\$53,600
23	Existing Deficiency	Pool Bldg: entire exterior needs replacement	#94,95,96,97	13,400	31	,34 -	\$33,000
		Tool bidg. entire exterior needs replacement					
	Recommended Remedy	Replace: all doors w/ galv feames & FRP; all windows w/ alum. dual					
		glazed; BUR roofing w/ cool roof coating; all fascia, trim, paneling with		1	LS	\$175,000	\$175,000
2.4	Fulation Definions	cement board materials; paint complete	U00 U404				
24	Existing Deficiency	Pool Bldg : entire pool fence. Lighting and bleachers are rusted and beyond service life	#98, #101, #102				
		beyond service life	#102				
	Recommended Remedy	Replace all chainlink use galv. with polycoat on all posts, mesh and		320	LF	\$75	\$24,000
		accessories		320	Li	Ψ, σ	φ 2 1,000
NTERI	<u>IOR</u> GENERAL & MAINTENANCE						
1	Existing Deficiency	Academic & Tech Arts Bldgs: 1st floor vinyl tile is delaminating from	#45				
	Existing Dentilency	excessive moisture release	13				
	Recommended Remedy	Strip tile, bead blast, seal concrete and apply new VCT		2,200	SF	\$10	\$22,000
2	Existing Deficiency	Tech Arts Bldg: Corridor drink fountain is non compliant	#47				
	Recommended Remedy	Add pipe barriers		1	Pair	\$225	\$225
3	Existing Deficiency	West Wing: 1st floor ceiling damage; concrete pedestal trip hazzard	#52, #53				
	Recommended Remedy	Confirm leak is repaired and repair area, or replace with entire new					
	·	corridor ceiling; Install new District standard lockers on pedestal or		11,210	SF	\$6.37	\$71,408
		demo and replace concrete floor.				1	

CATEGORY		DESCRIPTION	PHOTO & SITE PLAN		ESTIMATED TAKE OFF Quantity Unit		TOTAL COST
4	Existing Deficiency	Cafeteria Kitchen: flooring, base and wall covering is not Health Dept. compliant; abandoned gas lines and non functioning equipment waste space	#48, #49, #54			UNIT	
	Recommended Remedy	Reconfigure a compliant kitchen, with new finishes		4,200	SF	\$44	\$185,000
5	Existing Deficiency	Kitchen Staff Toilet: non accessible	#50, #55				
	Recommended Remedy	Reconfigure with Kitchen remodel		100	SF	\$44	\$4,400
6	Existing Deficiency	West Wing 2nd FI: some lockers and curb tiles damaged/ missing	#51				, ,
	Recommended Remedy	Replace curb tile. Repair lockers until replacement with new District standard lockers	Includes Demo	66	Lockers	\$375	\$24,750
7	Existing Deficiency	West Wing 3rd FI: some skylight glazing damage	#58				
	Recommended Remedy	Investigate skylight for service life before glass replacement		224	SF	\$42	\$9,408
8	Existing Deficiency	Theater Bldg 1st Fl Lobby: some plaster damage and paint scalling in Lobby	#56, #60		-	•	, , , , ,
	Recommended Remedy	Investigate cause and repair plaster; repaint		800	SF	\$5	\$4,000
9	Existing Deficiency	Theater Bldg: 2nd Fl Corridor : no accessible drink fountain; exposed wall pipe; broken lockers; and ceiling tile delamination;	#57, #59, #61, #62				
	Recommended Remedy	Replace D. fountain with accessible fountain; replace lockers with new district standard, and repair wall and ceiling tiles.		9,500	SF	\$11	\$104,500
10	Existing Deficiency	Theater Bldg: 3rd Fl Corridor ; no accessible drink fountain; dim lighting.	#69, #70				
	Recommended Remedy	Replace D. fountain with accessible fountain; add solatube skylighting (Includes all infrastructure needed)	Allow	1	LS	\$8,500	\$8,500
11	Existing Deficiency	Theater Balcony : no accessible seating from 2nd or 3rd level; stage lighting poles not seismic braced	#63, #71				
	Recommended Remedy	Reconfigure platform for more depth to allow wheelchair seating; Structurally design lighting	Allow	1	LS	\$45,000	\$45,000
12	Existing Deficiency	Theater Balcony 2nd FI: no handrail and needs minimum floor lighting during performance	#72				
	Recommended Remedy	Confirm ramp is less than 8.33%, add handrails and strip lighting		360	SF	\$24	\$8,640
13	Existing Deficiency	Patton Gym: 84-yr old interior finishes are beyond service life	#99, #105				
	Recommended Remedy	Remove all radiators, piping, misc. items from brick walls; install furring and GWB; repaint		13,800	SF	\$10	\$138,000

C A :	TEGORY	DESCRIPTION	РНОТО &	ESTIMATED	TAKE OFF	COST /	TOTAL COST
CA	TEGORY	DESCRIPTION	SITE PLAN	Quantity	Unit	UNIT	TOTAL COST
14	Existing Deficiency	Patton Gym: Ceiling insulation is delaminating	#104				
	Recommended Remedy	Remove, replace with insulated, acoustic ceiling		11,600	SF	\$7	\$81,200
15	Existing Deficiency	Patton Gym: Hardwood floor is moisture damaged at end of service life	#100, #103				
	Recommended Remedy	Remove all flooring and replace with new maple cushion floor system		9,000	SF	\$21.50	\$193,500
16	Existing Deficiency	Patton Gym: Wood bleachers are splintered and broken	#106, #107				
	Recommended Remedy	Replace all bleachers with polyvinyl seating		1	LS	\$60,000	\$60,000
17	Existing Deficiency	Patton Gym: all interior doors are wood and at end of service life	#108, #109, #110, #111				. ,
	Recommended Remedy	Replace all interior doors with galv. metal frames, and FRP doors throughout	ALLOW	15	EA	\$4,400	\$66,000
18	Existing Deficiency	Patton Gym: Sports Medicine in old locker room	#12, #13, #14				
	Recommended Remedy	Repurpose space into classroom; remove showers, total interior renovation		2,000	SF	\$125	\$250,000
19	Existing Deficiency	Patton Gym: Weight Room in old girls locker room	#115, #116, #117				
	Recommended Remedy	Repurpose space into Exercise Gym; remove all piping, radiators; replace ceiling with insulated, acoustic ceiling, replace walls with hiimpact GWB; install cushioned athletic flooring; repaint complete; install new light fixture		1,500	SF	\$150	\$225,000
20	Existing Deficiency	Patton Gym: Exercise Gym toilets are beyond service life	#118, #119, #120				
	Recommended Remedy	Reove (E) complete, replace w/ tile walls, epoxy flooring, new fixtures, partitions, accessories and lighting		200	SF	\$200	\$40,000
21	Existing Deficiency	Gymnasium Entry: faded and deteriorated wall paint	#64, #73				
	Recommended Remedy	prep and repaint		1,200	SF	\$4	\$4,800
	Existing Deficiency	Gym - Boys Toilets: Urinal 7 toilet leakage/ wall deterioration; floor deterioration	#65, #66	,		·	. ,
	Recommended Remedy	Replace fixtures, cleanout locations and rebuild plumbing wall, Install tile wainscot and epoxy floor covering		1,200	SF	\$30.40	\$36,480

Facility Assessment Spreadsheet

$C\Delta$	TEGORY	DESCRIPTION	РНОТО &	ESTIMATED	TAKE OFF	COST /	TOTAL COST
		DESCRIPTION	SITE PLAN	Quantity	Unit	UNIT	
23	Existing Deficiency	Gym - Boys Locker Rm: many broken lockers; dingy, faded walls, deteriorated concrete floor.	#67				
	Recommended Remedy	Replace lockers, add tile wainscot, solatube daylighting, and epoxy flooring.		3,066	SF	\$55.28	\$169,488
24	Existing Deficiency	Gym - Girls Locker Rm: dingy wall, and stained concrete flooring.	#74,75, &76				
	Recommended Remedy	Add solatube daylighting, epoxy flooring, and paint walls		1,200	SF	\$33	\$39,600
25	Existing Deficiency	Gym - West Exit Corridor : Deteriorated wall board, doors and exposed electrical box.	#77, #78, #79				
	Recommended Remedy	Remove electrical box, repair walls, prep and repaint, and install 8-ft corner guards.		1,488	SF	\$8	\$11,904
26	Existing Deficiency	Pool Bldg: concrete floor is degraded; piping/roof framing exposed; wall finshes not durable	#121, 122, 123,124,125				
	Recommended Remedy	Total renovate with tile walls, epoxy flooring, insulated drop ceiling, with integraded utilities and lighting; new lockers, and plumbing fixtures		1	LS	\$90,000	\$90,000
27	Campus Wide Deficiency	All slab on grade (SOG) concrete floors: excessive moisture impedes flooring bond					
	Recommended Remedy	Prior to new flooring, strip/etch concrete, and apply vapor barrier	Verify Qty	86,000	SF	\$6	\$516,000
28	Campus Wide Deficiency	Classrooms/ Corridors/Misc. flooring: at end of service life					
	Recommended Remedy	Replace all flooring with resilient flooring, and walk-off Entry carpet mat.	Allow	75,000	SF	\$5	\$375,000
29	Campus Wide Deficiency	All Corridors/ Hallways/ and Gym Walls: damaged and patched gyp. wall board (GWB)					
	Recommended Remedy	Replace with 'Hi-Impact' GWB and 8-ft corner guards	Allow	45,000	SF	\$5	\$225,000
30	Campus Wide Deficiency	Interior Walls: paint/ wall covering at end of service life					
	Recommended Remedy	Repaint all interiors campus wide		180,892	SF	\$1	\$180,892

Alameda High School Page 9

С	ATEGORY	DESCRIPTION	PHOTO & SITE PLAN	ESTIMATED Quantity	TAKE OFF Unit	COST / UNIT	TOTAL COST
3) Mech	nanical / Plumbing						\$3,113,036
A) <u>Ext</u> e	<u>erior</u>						
i)	SITE SYSTEMS						
	1 Existing Restrooms	campus has some Trane Tracer DDC controls, on the wings that have					
		been modernized within the past 8-10years. Older portions of the					
		campus have no DDC					
	Recommended Remedy	add campus wide ddc control and create district standard for energy		100 002	CE	Ċa	6261 704
		control systems (SF of Conditioned Space)		180,892	SF	\$2	\$361,784
	2 Existing Deficiency	overall condition of hvac and plumbing is very poor condition					
		throughout, with exception of the new boilers and the academic					
		building, which are in good condition.					
	Recommended Remedy	replace hvac/plumbing systems complete, see below		180,892	SF	\$8	\$1,447,136
	3 Existing Deficiency	storm drainage sump and pump lift station system is failing at west		100,032	31	Şο	\$1,447,130
	LAISTING Deliciency	wing					
		Willig					
	Recommended Remedy	replace sump pit and pump		1	LS	\$8,500	\$8,500
B) <u>Inte</u>							
ii)	EXISTING SYSTEMS		•	1			T
	Existing Boilers, pumps,	hydronic systems are old and inefficient with poor zone control.					
	piping; DISTRICT OFFICE	District has requested complete removal of all boiler systems, within					
	BUILDING	in the District office building.					
	Recommended Remedy	Remove all convectors, wall radiators, controls, piping completely.					
	·	Replace with ductless spilt heat pumps system with heat recovery, i.e.					
		Daikin VRV for independent zone control throughout first and second		180,892	SF	\$2	\$361,784
		floors. Third floor, use rooftop package AC units.					
		, 11 0					
	2 Existing Systems-	Plumbing systems are non ada, high volume fixtures that are vintage.					
	District offices building						
	Recommended Remedy	Replace all plumbing fixtures, complete, including, urinals (0.125 gpf),					
	Recommended Remedy	water closets (1.28gpf), and lavatories (0,5gpm) to bring into current				_	
		code compliance and reduce water consumption.		34,600	SF	\$5	\$173,000
		code compilance and reduce water consumption.					
	3 Existing Deficiency -	steam radiators within space are vintage, no ventilation					
	Pacammandad Pamada	replace with high efficienty gas fired unit heaters. Add CO2 sensors					
	Recommended Remedy	and exhaust fans for ventilation.		10,132	SF	\$5.00	\$50,660
		and Exhaust Ians for Venthation.]			

	TEGORY	DESCRIPTION	PHOTO & SITE PLAN	ESTIMATED Quantity	TAKE OFF Unit	COST / UNIT	TOTAL COST
4	Existing Deficiency - Patton Gym locker rooms	Heating and ventilation is accomplished with unit ventilators and steam heating coils. Showers have been abandoned and are no longer in use. Toilets and urinals are high volume fixtures and do not meet current code					
	Recommended Remedy	Replace uv's with new higher efficiency units, gas heating. Add CO2 sensors and exhaust fans for ventilation. Replace toilets, urinals and lav's as required to meet current code. Showers should either be replaced and upgraded to current standards, or demolished completely to repurpose space.		8,800	SF	\$5	\$44,000
5	Existing Deficiency Indust. Arts bldg.	HVAC and plumbing systems in this building are in good condition and working well. Trane rooftop units with gas heating and ducted air delivery. Units are about 8years old and still have useful life					
	Recommended Remedy	clean ductwork		19,800	SF	\$1.50	\$29,700
6	Existing Deficiency-Cafeteria	hot water unit ventilators, with minimal to no ventilation					
	Recommended Remedy	add CO2 control with exhaust		4,200	SF	\$1.50	\$6,300
7	Existing Deficiency - West Wing	domestic hot water heating system and storage tanks are vintage and are failing					
	Recommended Remedy	replace hot water boiler and storage tanks		1	LS	\$125,000	\$125,000
8	Existing Deficiency - West Wing 3rd floor	rooftop a/c units, (Carrier) and exhaust fans are nearing the end of their useful life					
	Recommended Remedy	replace and clean ductwork		19,400	SF	\$2	\$38,800
9	Existing Deficiency -	Air handlers in space appear to be in fair to good condition					
	Recommended Remedy	clean ductwork		20,300	SF	\$1.50	\$30,450
10	Existing Deficiency -	unit ventilators appear to be in fair to good condition, showing signs					
	New Gym-locker rooms	of rust due to location within space, but use hot water for heating.					
	Recommended Remedy	replace hot water units with roof mounted gas fired make up air units, (i.e. reznor or equal) Increase ventilation to space and add CO2 control		20,300	SF	\$1.50	\$30,450

	_	ATEGORY	DESCRIPTION	РНОТО &	ESTIMATED	TAKE OFF	COST /	TOTAL COST
L	C.	ATEGORY	DESCRIPTION	SITE PLAN	Quantity	Unit	UNIT	TOTAL COST
	1	1 Existing Deficiency -	heating and domestic boilers, pumps and related equipment are at					
		New Gym-boilers	the end of useful life					
		Recommended Remedy	replace central heating and domestic water heating plants in their					
		Recommended Remedy	entirety with new high efficiency gas fired packaged ac units.		20,300	SF	\$5	\$101,500
			lentifiety with fiew high efficiency gas filed packaged at drifts.		20,300	31	ÇÇ	\$101,500
	1	2 Existing Deficiency-Academic	overall mechanical / plumbing systems are in good condition. AH's are					
		, , , , , , , , , , , , , , , , , , ,	newer robust units by Haakon. Plumbing systems are current and					
			meet ada and low flow requirements. Some drinking ftns in hall ways					
			lare not hi-low type					
		Recommended Remedy	clean duct systems, rebalance and re-commission vav controls and ah		404 224	CE	ća	6202.072
			set points to optimize energy savings. Replace non compliant DF's,		101,324	SF	\$3	\$303,972
4)	Electr	sing!	<u>l(25%).</u>	L				¢2 FF2 142
								\$2,553,142
A) [<u>Gen</u> i)	EXISTING SYSTEMS	T					
Ļ	')	Existing Systems	School Modernizations in past have included upgrades to electrical serv	vice telecom	munication	hall/clack/sn	eaker and	
		Existing Systems	fire alarm systems.	vice , tele collii	numcation,	репустоску зр	eaker, and	
			Central Wing appears to have its own service, main switchboard is orgi	nal equinment	and at the e	nd of carvice	lifo	
			West Wing, Academic and Techanical Arts buildings appear to share the					
			basement. Main switchboard is original equipment and at end of service		ai sci vice , it	ocated iii vve	3t Willig	
			Gymnasium has a separate electrical service Swim Center has a separat		vice			
			T-Mobile cell phone site on roof of Academic building. No cable TV serv		VICC			
в)	Mand	latory	The Mobile Cell phone site on 1001 of Academic Ballamig. No casie 17 serv	ricc.				
	i)	EXTERIOR LIGHTING						
`		Existing Systems	Exterior building lighting provided by wallpacks and roof mounted floor	dlights, surface	square drop	ped lens at o	covered walk	ways, eave
			mounted HID cans at historic buildings Pole mounted dual head shoebd	ox luminaires a	t Oak St parl	king lot, pole	mounted sing	gle head
			shoebox luminaires at Walnut St parking lot.					
	1	Existing Deficiency	Inadequate exterior lighting provided, walkways dark for back to					
			school nights, as noted by staff					
		Decemberded Demody	Add oxtorior walkway fixtures		60	ГΛ	ĆOFO	ĆE1 000
		Recommended Remedy Existing Deficiency	Add exterior walkway fixtures Inadequate lighting provided at exterior stairs		60	EA	\$850	\$51,000
		Existing Deficiency	Imadequate lighting provided at exterior stairs					
		Recommended Remedy	Add exterior steplights at stairways		20	EA	\$500	\$10,000
	3	Existing Deficiency	No exterior emergency lighting provided for emergency egress.					
		December ded Decemb	Add substitute hottom, model find use for maining use and a service		50	F.4	6275	640.750
		Recommended Remedy	Add exterior battery pack fixtures for minimum code coverage		50	EA	\$375	\$18,750

CA	TEGORY	DESCRIPTION	PHOTO & SITE PLAN	ESTIMATED Quantity	TAKE OFF Unit	COST / UNIT	TOTAL COST
	INTERIOR LIGHTING						
	Existing Systems	Central & West Wings: Existing suspended fluorescent fixtures in	some classroo	om and office	e areas do no	t have seism	ic supports
1	Existing Deficiency	Suspended fixtures do not have seismic supports & cables to prevent					
		sideways shifting					
	Recommended Remedy	Add horizontal bracing and diagonal restraint wires per code		54,000	SF	\$2	\$108,000
Def	ferred Maintenance			0 1/000		, , , , , , , , , , , , , , , , , , ,	+====
	FIRE ALARM /DETECTION						
	Existing Systems	Existing control and expander panels, strobes, detectors are recent syst	tem upgrades.	Several sepa	arate control	panels obser	ved, Cerberus
		Pyrotronics in Central Wing, Notifier in Academic bldg, and Rauland in a	gym (Gym not	hooked into	rest of Camp	ous) .	
1	Existing Deficiency	In Central & West Wings, fire alarm cable is not in conduit					
	Danaman dad Damada	Dua i da gazarrar fag askla		750	LF	Ċ A	¢2,000
_	Recommended Remedy Existing Deficiency	Provide raceway for cable Broken devices were observed		750	LF	\$4	\$3,000
2	existing Deliciency	Broken devices were observed					
	Recommended Remedy	Replace broken devices		10	EA	\$300	\$3,000
3	Existing Deficiency	Fire alarm strobes inadquate in several areas, particularly in					
		classrooms, audtiorium and conference in historic building.					
	Recommended Remedy	Add fire alarm strobes		50	EA	\$300	\$15,000
4	Existing Deficiency	Fire alarm panels are not preferred manufacturer Problems with false				,	, -,
	,	alarms and trouble signals.					
	Recommended Remedy	Replace fire alarm panel with district preferred manufacturer					
		(Firelite). Provide (3) new extender panels, one each for Central		1	ΓΛ	¢E 400	¢F 400
		Wing, Academic Building, and gym. Consolidate all buildings on		1	EA	\$5,400	\$5,400
		campus into single fire alarm system, with new main panel in					
5	Existing Deficiency	Administration Consolidate all buildings on campus into single fire alarm system, with					
	Existing Deniciency	new main panel in Administration					
		new main paner in Administration					
	Recommended Remedy	Provide new fire alarm devices, conduit and cables as required to		180,892	LF	\$2	\$361,784
		consolidate existing system		100,032	LF	ب ک	3301,784
6	Existing Deficiency	Gym is not connected to rest of campus					
	Recommended Remedy	Provide conduit and fire alarm cable to connect gym to campus		750	LF	\$45	\$33,750

Facility Assessment Spreadsheet

CA	TEGORY	DESCRIPTION	PHOTO & SITE PLAN	ESTIMATED Quantity	TAKE OFF Unit	COST / UNIT	TOTAL COST	
i)	TELEPHONE/DATA SYSTEM							
	Existing Systems Rack mounted telephone & data systems are recent upgrades, seven (7) racks for District tele/data system							
1	Existing Deficiency	Existng telephone service is faulty and is not preferred manufacturer.						
	Recommended Remedy	Replace (E) system with District standard VOIP.		1	LS	\$250,000	\$250,000	
2	Existing Deficiency	In some classrooms, plastic floor thresholds used to cover data cables to tables and work stations.						
	Recommended Remedy	Add data outlets to eliminate use of thresholds Add vertical data poles		200 40	LF EA	\$15 \$150	\$3,000 \$6,000	
3	Existing Deficiency	In typical classrooms, inadequate number of data outlets					1 3/2 2 2	
	Recommended Remedy	Provide additonal data outlets		250	EA	\$350	\$87,500	
4	Existing Deficiency	Surface raceway in several locations has broken pieces, loose data cable.						
	Recommended Remedy	Replace broken raceway		500	LF	\$15	\$7,500	
5	Existing Deficiency	Add data distribution equipment, including fiber optic panels, patch panels, switches and wireless data transmitters, to accommodate new data outlets note above						
	Recommended Remedy	Add data distribution equipment to activate all data outlets		25	Units	\$950	\$23,750	
iii)	Existing Systems	M Existing bell/clock/speaker system is outdated, parts & service difficult to find. At Central wing, 2nd flr only is connected to High School bell/clock/speaker system.						
1	Existing Deficiency	In Central Wing auditorium, existing sound system is outdated and parts and service are difficult to find.						
	Recommended Remedy	Replace (E) system with District standard VOIP.		1	LS	\$125,000	\$125,000	
2	Existing Deficiency	Existing system appears to be consolidation of several buildings and bell/clock/speaker functions are not working properly. Existing system is not preferred manufacturer.						
	Recommended Remedy	Replace existing system with one preferred by District, as noted above in Tele/Data systems.		180,892	SF	\$2	\$361,784	

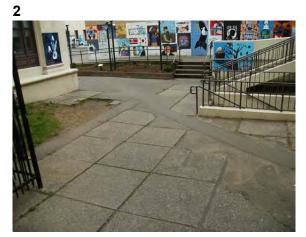
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CA	TEGORY	DESCRIPTION	PHOTO & SITE PLAN	ESTIMATED Quantity	COST / UNIT	TOTAL COST		
iv)	SECURITY SYSTEM		•		Unit			
	Existing Systems	Security system is provided by door contacts and motion sensors. Site has several separate systems, Central Wing, Gym, Academic Build & Swim Center.						
1	Existing Deficiency	Some parts of campus are not protected						
	Recommended Remedy	Add door contacts and motion sensors		180,892	SF	\$0.75	\$135,669	
2	Existing Deficiency	Consolidate all buildings on campus into single security system, with new panel in Administration						
	Recommended Remedy	Provide new security panel, devices and cables to replace existing system		180,892	SF	\$0.60	\$108,535	
/)	INTERIOR LIGHTING							
1	Existing Systems Existing Deficiency	Central & West Wings: surface 4x4 lensed fluorescents in typical offices, pendant 1x4 wraparound fluorescents in typical classrooms, surface 1x4 baffled fixtures in hallways, surface 1x4 wraparound fluorescents in stairways and cafeteria. In auditorium, pendant chan and wall sconces, with projection lights at stage, bowl incandescent and recessed square lensed downlights in balcony soffit In basem surface incandescent and fluorescent strip fixtures and high bay HID fixtures in gym. In Central Wing non DSA areas pendant 1x4 wraparound fluorescent fixtures. Academic and Techanical Arts buildings: recessed 2x4 lensed fluorescent fixtures in typical classrooms and hallways; wall mounted co lights, recessed 2x2 fluorescents, beam mounted fluorescent fixtures in office areas; wall mounted 6"square x 4" fluorescent fixtures in restrooms; surface 2x2 HID fixtures in Multi Purpose room. In gym: high bay HID fixtures in gymnasium, 1x4 wraparound fluorescents in lockers, 2x4 fluorescents in office. Fixtures appear to be older, with T8 or T12 lamps and magnetic						
	Recommended Remedy	ballasts. Replace new fluorescent fixtures with energy efficient T5 lamps and electronic ballasts		180,892	SF	\$1.55	\$280,383	
2	Existing Deficiency	Minimal lighting control in Central & West wings, circuit breakers at panels used for daily switching, original push button switches still in use.						
	Recommended Remedy	Provide or replace with new switches or occupancy sensors		35	EA	\$300	\$10,500	
3	Existing Deficiency	In Central Wing auditorium, existing dimmer panel is outdated and parts and service are difficult to find.						
	Recommended Remedy	Replace with new dimmer panel		1	LS	\$14,500	\$14,500	
4	Existing Deficiency	Fixtures observed with broken or missing lenses.						
	Recommended Remedy	Replace lenses		35	EA	\$50	\$1,750	

CATEGORY		DESCRIPTION	РНОТО &	ESTIMATED TAKE OFF		COST /	TOTAL COST
			SITE PLAN	Quantity	Unit	UNIT	
5	Existing Deficiency	Some occupancy sensors observed, local room switches are typical					
		classroom and office lighting controls					
	Recommended Remedy	Replace toggle switches with ultrasonic/infrared room occupancy		400.000	C.F.	40.05	662.242
	·	sensors		180,892	SF	\$0.35	\$63,312
	EXIT SIGNS						
	Existing Systems	Exit signs and dual head battery packs observed. Low level exits observ	ved in gym.				
1	Existing Deficiency	Fixtures observed with broken or missing lenses. Several exit signs are					
		outdated and not furnished with battery backup, paper exit signs					
		observed.					
	Recommended Remedy	Replace and add exit signs		60	EA	\$275	\$16,500
2	Existing Deficiency	Inadequate number of emergency egress fixtures were observed.				7=10	7 - 0/0 0 0
	,						
						4.0-	4000
)	Recommended Remedy POWER	Add dual head battery packs at egress paths		60	EA	\$425	\$25,500
		In some areas, ie, media center, classrooms, offices, plastic floor	I				
-	Laisting Deficiency	thresholds used to cover power cables to tables and work stations.					
		thresholds used to cover power cables to tables and work stations.					
	Recommended Remedy	Add power outlets to eliminate use of thresholds		75	EA	\$350	\$26,250
	Recommended Remedy	Add vertical power poles		30	EA	\$330 \$150	\$4,500
2	Existing Deficiency	In some areas, ie, media center, classrooms, offices, plastic surface		30	L/\	7150	Ţ-1,500
		raceway is broken and hanging loose from walls, with data and power					
		cables exposed.					
	Recommended Remedy	Ponlace broken racoways		500	LF	\$15	\$7,500
2	Existing Deficiency	Replace broken raceways In typical Central & West wing classrooms, inadequate number of		300	LF	\$13	\$7,500
	Laisting Denciency	receptacles, two per room were observed.					
		receptuales, two per room were observed.					
	Recommended Remedy	Provide additional receptacles		60	EA	\$350	\$21,000
4	Existing Deficiency	In gym, inadequate quantity of receptacles, branch circuits faulty.					
	Recommended Remedy	Provide additonal receptacles		150	EA	\$350	\$52,500
5	Existing Deficiency	Scoreboard is not working in Patton Gym					
	Recommended Remedy	Repair or replace scoreboard		1	EA	\$12,000	\$12,000

CATEGORY	DESCRIPTION	РНОТО &			COST /	TOTAL COST
 ATEGORY	DESCRIPTION	SITE PLAN	Quantity	Unit	UNIT	TOTAL COST
6 Existing Deficiency	In some areas, devices are missing coverplates with data or power cables exposed					
Recommended Remedy	Replace coverplates		35	EA	\$15	\$525
7 Existing Deficiency	In Central Wing basement boiler room, existing electrical equipment is					·
	outdated and rusted due to periodic flooding.					
Recommended Remedy	Replace distribuition board, panels and motor control center.		1	LS	\$150,000	\$150,000
8 Existing Deficiency	Academic Wing: all in or under slac metal conduit has rusted out		_		7 0,000	+====
·	causing shorts and wiring replacement hard					
Recommended Remedy	Replace ground floor UG service with PVC conduit and boxes.		1	LS	\$125,000	\$125,000
9 Existing Deficiency	At Academic & Tech Arts buildings, cast in place floor outlets fill with				, ,,,,,,	, -,
	water					
Recommended Remedy	Replace with new cast iron floorbox and coverplate in compliance	ALLOW				
Recommended Remedy	with UL scrub water requirements	ALLOW	10	EA	\$2,000	\$20,000
10 Existing Deficiency	Inadequate power distribution for receptacles for data system as					
	noted above					
Recommended Remedy	For added receptacles noted above, install new panelboards (42pole,					
ŕ	100amp, 120/208volt, 3phase, with Transient Voltage Surge		6	EA	\$500	\$3,000
	Suppression) and new feeder from switchboard					
 ctural						\$64,000
1 Existing Deficiency	Academic BLDG appears to have inadequate out-of-plane wall					
	anchorage - not critical					
Recommended Remedy	* Additional analysis required. Allowance is for analysis only		1	LS		\$4,000
2 Existing Deficiency	West Wing 1st floor south facing wall appears to be lacking shear wall					
Recommended Remedy	Add 12" concrete shear wall	Allow	160	LF	\$350	\$56,000
3 Existing Deficiency	Gym lacking low roof to wall anchorage at west wall N/S direction btw	-			,	, ,
	grids 13,14					
Recommended Remedy	* Additional analysis required. Allowance is for analysis only		1	LS		\$4,000
					Sub-Total	\$15,640,265
	* NEEDS FURTHER INQUIRY FOR ACCURATE ESTIMATE					
				SOFT CO	OSTS @ 25%	\$3,910,066
		TOTAL CO	STS (not in	cluding es	calation)	\$19,550,331

































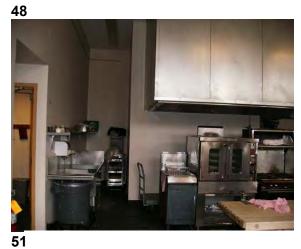














































































































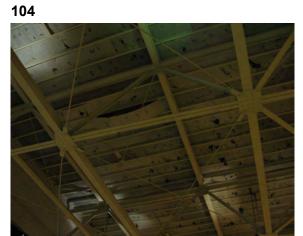






















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