

Amelia Earhart Elementary School

SUMMARY OF SCHOOL CAMPUS

- **Address:** 400 Packet Landing, Alameda, CA 94502
- **Principal - Phone No. :** Joy Dean - (510) 748 4003
- **Year Built:** 1979
- **Total Site Area:** 8.0 acres
- **Building Area:** 36,270 sf
- **10 Portables:** 10,015 sf

FACILITY DESCRIPTION

Earhart Elementary School is constructed on concrete pad foundations with 1-story wood framed, cement plastered, walls, and composite shingle roofing. The original campus includes a Multi-Use/ Cafeteria, Administration building, and (3) Classroom Clusters with (6) classrooms, and a central resource center. In 1988, Classroom Cluster "F" was added along with an addition to Cluster "E", and a campus wide lighting upgrade.

This site currently serves 582 (K-5) students with 32 classrooms, including 10 relocatable buildings added since 1992, which serve as classrooms and daycare. A large asphalt playground extends into area between Multi-Use and the classrooms, which serves as the campus focal point. Measure "C" funds (2005) provided modernization improvements including, restroom barrier removal, utility upgrades, and repainting.

STRUCTURAL OBSERVATIONS

Upon reviewing the original structural drawings dated in 1978, the wood framed buildings appear to generally conform to modern standards of practice. A structural review of the original framing and foundation plans reveals that no hold downs were originally specified for use at the wood framed shear walls. However structural modernization drawings dated 2005 show a voluntary seismic upgrade including the addition of hold downs and collector straps. It is suggested to confirm this seismic upgrade was performed. Based on this upgrade, we believe that any added structural strengthening should be a low priority.

Further investigation of the roof framing system should be performed to determine if the sloped roof insulation is properly vented, to prevent condensation forming at the dew point of the composite assembly during the winter heating cycle. If not vented, the condensation build up over time may have caused dry rot infestation in the structural framing members.

KEY ASSESSMENT ITEMS

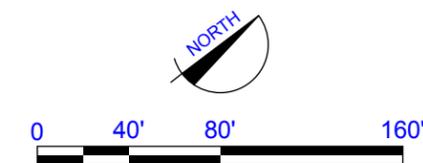
- Composite shingle roofing at end of service life
- Investigate roof framing for vented insulation space and potential dry rot
- Deteriorated playground asphalt and accessible cross slope issues
- Classroom 15 & 16 not directly accessible from playground
- Day-lighting skylights shuttered and non-functional
- Inadequate parking lot lighting level
- No emergency egress lighting at covered walkways
- Some areas don't have required F.A. strobes
- Telephone system requires frequent re-programming and no voice mail function
- Classroom furnace units near end of service life
- Interior floor and wall finishes at end of service life



- CLASSROOM BUILDING
- ADMINISTRATION
- MULTI-PURPOSE / CAFETERIA BUILDING
- MODULAR BUILDING
- PORTABLE BUILDING
- COVERED WALKWAYS
- ACCESSIBLE RAMPS
- PROVIDE ACCESS TO PLAYGROUND
- #C SEE ASSESSMENT SPREADSHEET FOR CIVIL KEYNOTES, TYP.

EARHART ES
4/30/2012

Alameda USD Facilities Assessment



**Earhart Elementary School
Facility Assessment Spreadsheet**

CATEGORY	DESCRIPTION	PHOTO & SITE PLAN	ESTIMATED TAKE OFF		COST / UNIT	TOTAL COST
			Quantity	Unit		
1) Civil						\$1,047,222
A) Existing Site Conditions						
i) ACCESS						
1 Existing Deficiency	The pavement designations for the ADA student drop off zone is non-compliant, and suggestive of parking stalls	1C				
Recommended Remedy	Paint out all three ADA stall designations on the pavement. Replace ADA loading zone sign with compliant sign.		3	EA	\$600.00	\$1,800
2 Existing Deficiency	Pavement cross slope in ADA student drop off is 2.7%	2C				
Recommended Remedy	Edge grind at perimeter of stall; overlay pavement to reduce cross slope, taper 5 ft into drive aisle. Restripe to ADA standards.		308	SF	\$9.00	\$2,772
3 Existing Deficiency	Pavement cross slope in accessible stall area is 2.5%. Missing and out of date signage.	3C				
Recommended Remedy	Edge grinding at perimeter of stall; overlay pavement to reduce cross slope; taper 5ft into drive aisle. Restripe per ADA standards. Add signage to right stall; add minimum fine sign to left stall.		450	SF	\$9.00	\$4,050
4 Existing Deficiency	Pavement cross slope in stall and unloading zone exceeds 3%. Signage is out of date. Lacks truncated domes at crossing.	4C				
Recommended Remedy	Edge grind at perimeter of stall; overlay pavement to reduce cross slope, taper 5 ft into adjoining stalls on three sides. Update signage to current standards. Restripe to current standards. Add band of truncated domes on both sides of circulation aisle.		450	SF	\$15.00	\$6,750
5 Existing Deficiency	Cross slope on walk leading to Admin building entrance is 3.3%. There is a tripping hazard along the north side where the concrete adjoins asphalt.	5C				
Recommended Remedy	Remove concrete and asphalt, and reinstall as all concrete with 2% max cross slope towards fenced area.		1,800	SF	\$15.00	\$27,000

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			Quantity	Unit		
6 Existing Deficiency	The transition slab from the door landing to the adjoining walk has a slope of 7%.	6C				
Recommended Remedy	Remove steep section of walk and adjoining flatter section. Regrade and repour walk for 5% max slope. Alternatively, add railing to one side of ramp.		320	SF	\$20.00	\$6,400
7 Existing Deficiency	Walk on path from public way/ADA drop off has cross slope of 2.6%.	7C				
Recommended Remedy	Remove walk, flatten cross slope starting at back of curb, and repour walk at 2% max cross slope.		640	SF	\$20.00	\$12,800
8 Existing Deficiency	Cross slope of existing paved play court varies from 2.2% to 3.8%	8C				
Recommended Remedy	This would require a significant reconstruction of the pavement and drainage infrastructure to correct. An alternative could be removal of existing pavement, add a linear planter with seat wall(s) as a way of taking up grade, and repave at 2% max slope. This will reduce the available play area and flexibility of the space.		1,200	SF	\$9.00	\$10,800
9 Existing Deficiency	The rim of the sewer lift station projects approximately 3/4" above pavement grade and is a tripping hazard.	9C				
Recommended Remedy	Saw cut and remove ring of pavement around lid, and repave for smooth pavement transition to flush with lid.		100	SF	\$7.00	\$700
10 Existing Deficiency	Pavement surface in parking area is deteriorated.	10C				
Recommended Remedy	Grind, regrade and repave entire parking area.		20,000	SF	\$6.00	\$120,000
11 Existing Deficiency	2.9% Cross slope on paved play court, and deteriorated pavement	11C				
Recommended Remedy	Edge grind adjoining building; install pavement fabric and 1.5" pavement overlay to flatten cross slope. Restripe courts.		8,400	SF	\$6.00	\$50,400
12 Existing Deficiency	3.6% pavement cross slope in direction of travel.	12C				
Recommended Remedy	Edge grind adjoining building; install pavement fabric and variable depth pavement overlay to flatten cross slope.		5,300	SF	\$6.00	\$31,800

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CATEGORY		DESCRIPTION	PHOTO & SITE PLAN	ESTIMATED TAKE OFF		COST / UNIT	TOTAL COST
				Quantity	Unit		
13	Existing Deficiency	4% pavement cross slope across entire playcourt.	13C				
	Recommended Remedy	Edge grind adjoining building; install pavement fabric and variable depth pavement overlay to flatten cross slope.		32,000	SF	\$6.00	\$192,000
14	Existing Deficiency	Classrooms 15 & 16 (Cluster B) have no direct accessible path of travel to Playground	16C				
	Recommended Remedy	Add accessible ramp		240	SF	\$22.00	\$5,280
ii) FIRE/LIFE SAFETY/HAZ MAT							
1	Existing Deficiency	No fire truck access to this portion of the campus	14C				
	Recommended Remedy	Consider adding fire access gate in fence at northeast corner of school site, or at least a man gate at this location to improve fire fighter access.		192	SF	\$30.00	\$5,760
2	Existing Deficiency	Poor fire hydrant coverage of site. Only hydrants are at parking lot exit and nearby intersection.	15C				
	Recommended Remedy	Consider addition of private fire service to campus, with hydrant between PC3 and PC8.		1	EA	\$75,000	\$75,000
3	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.		36,270	SF	\$13.00	\$471,510
iii) UTILITIES							
1	Existing Deficiency	Many of the existing onsite inlets in pedestrian traffic areas do not have ADA compliant grates.					
	Recommended Remedy	Replace grates with 1/2" max. opening grates. Approximately 8 locations.		8	EA	\$300.00	\$2,400
2	Existing Deficiency	Existing Irrigation system has many shorts and manual zones					
	Recommended Remedy	Replace (E) system w/ remote monitoring Controller system		1	LS	\$20,000	\$20,000

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CATEGORY	DESCRIPTION	PHOTO & SITE PLAN	ESTIMATED TAKE OFF		COST / UNIT	TOTAL COST
			Quantity	Unit		
2) Architectural						\$2,032,291
A) EXTERIOR						
i) ACCESS						
1 Existing Condition:	Campus lot: hills and mounds of dirt left over from construction					
Recommended Remedy	Remove 500 yds of dirt, regrade, and replant grass		500	CY	\$35.00	\$17,500
2 Existing Deficiency	Students walk in grassy area north of Pods A, B & F.	#26				
Recommended Remedy	Add concrete walkway in grass area, connecting plazas on north side of Pods.		400	SF	\$17.00	\$6,800
3 Existing Deficiency	Classroom Pod A: Drinking Fountain on north side of classroom 3 is non-accessible	#1				
Recommended Remedy	Replace w/ single Accessible D.F.		1	EA	\$3,000	\$3,000
4 Existing Deficiency	Classroom Pod C: Playground is not accessible from plaza at Room 16	#2				
Recommended Remedy	Add accessible ramp for direct access		120	SF	\$30.00	\$3,600
5 Existing Deficiency	Playground Surface: asphalt is cracking with many trip hazards. Also see Civil item #8	#3, #4				
Recommended Remedy	Grind (E) asphalt, regrade, and repave entire play yard		10,200	SF	\$6.00	\$61,200
6 Existing Deficiency	Daycare Modular: Drink fountain is non-compliant	#7				
Recommended Remedy	Replace with compliant model		1	Pair	\$5,000.00	\$5,000
ii) DEFERRED MAINTENANCE						
1 Existing Deficiency	Classroom Pods & Admin: Asphalt shingle roofing is 33 yrs old. Bldg. F roofing is 24-yrs old and has only 6 more years of service life	1B				
Recommended Remedy	Upgrade to 50-yr SS metal roofing, and BUR on covered walkways.		36,270	SF	\$12.00	\$435,240
2 Existing Deficiency	Exterior doors have reached end of service life					
Recommended Remedy	Replace all ext. doors with metal frame and FRP door		54	EA	\$4,400.00	\$237,600
3 Existing Deficiency	Exterior windows w/ Plexiglas beyond Service life					
Recommended Remedy	Replace all windows with Alum. frame & dual pane glass		5,500	SF	\$44.00	\$242,000

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			Quantity	Unit		
4	Existing Deficiency No Trash Enclosure at this Site					
	Recommended Remedy Install a 2-Bin Trash Enclosure per Health Dept. standards		1	LS	15,000	\$15,000
5	Existing Deficiency Classrooms: Acoustic ceiling tile water stained/delaminating	#8				
	Recommended Remedy See item # B-7 below. replace ceiling tiles.		32,900	SF	\$5.00	\$164,500
6	Existing Deficiency Stucco & Wood Trim: paint is at end of service life					
	Recommended Remedy Repaint entire campus		45,400	SF	\$2.00	\$90,800
7	Existing Deficiency Corridor Columns: Damaged cement plaster corners	#9				
	Recommended Remedy Repair stucco where damage not likely to occur again; otherwise, add corner guards.	Allow	1,152	SF	\$14.00	\$16,128
8	Existing Deficiency Daycare Modular: wood siding and paint is deteriorated.	#6, #11				
	Recommended Remedy Replace wood siding with cement board paneling/ trim and repaint		2,688	SF	\$6.00	\$16,128
6	Existing Deficiency Music Room Portables: Roof downspouts discharge on wood foundation, cause dry rot.	#10, #12, #13, #14, #17				
	Recommended Remedy Add site drainage inlets for direct discharge, and replace with concrete foundation/ramps		45	CY	\$850.00	\$38,250
7	Existing Deficiency Bike Yard Fence: wood fence burned by vandals	#15				
	Recommended Remedy Remove burned fence and replace with new chainlink bike cage		160	LF	\$60.00	\$9,600
8	Existing Deficiency 6 Room Portable Pod: roof downspouts saturate wood foundation, causing dry rot	#16, #18, #21, #22				
	Recommended Remedy Add site drainage inlet for downspouts; design a metal flashing detail for concrete to wood connection	Allow	1	LS	\$8,000.00	\$8,000
9	Existing Deficiency Multi-Use Bldg: exterior drink fountain is non accessible compliant	#19, #23				
	Recommended Remedy Reset at correct height and place padded boot on drain line, or replace		1	EA	\$5,000.00	\$5,000

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			Quantity	Unit		
B) INTERIOR						
i) GENERAL & MAINTENANCE						
1	Existing Deficiency Shuttered skylights: Classroom & Multi-Use shutters not used, due to problematic cable operator	#5, #24				
	Recommended Remedy Install "solatube" daylighting, and convert (E) skylights to 'passive' ventilators		20	EA	\$3,200.00	\$64,000
2	Existing Deficiency Multi-Use Bldg: moveable panels at ridge beam, bind when moved.	#24				
	Recommended Remedy Replace heavy panels with manual lightweight panels		75	LF	\$75.00	\$5,625
3	Existing Deficiency Campus flooring has reached end of service life					
	Recommended Remedy Replace all flooring with resilient flooring, and walk-off Entry carpet mat.		54,400	SF	\$5.00	\$272,000
4	Existing Deficiency Interior painting and wall covering at end of service life					
	Recommended Remedy Repaint all interiors		54,400	SF	\$1.55	\$84,320
5	Existing Deficiency Multi-Use Toilets: sinks are non accessible compliant	#25				
	Recommended Remedy Add padded drain line cover		6	EA	\$1,000.00	\$6,000
6	Existing Deficiency Classroom pods: Staff toilets require sanitary cove base per Health Code	#5				
	Recommended Remedy Remove probable VAT flooring at toilets and Commons space. Replace with ceramic tile at toilets, and resilient or carpet elsewhere.		6,500	SF	\$5.00	\$32,500
7	Existing Deficiency Admin. & Pod Bldgs: precipitation collects at high point of ceiling	#5, #20, #27				
	Recommended Remedy * Investigate insulation of joist space. If unvented, dew point may occur in winter, resulting in condensation and probable framing dry rot.	Allowance for venting & 20% dry rot	34,900	SF	\$5.00	\$174,500
8	Existing Deficiency Cafeteria Kitchen: service sink is non accessible and wall/floor finish is not Health Code compliant	#28				
	Recommended Remedy Refinish wall w/ FRP and floor/cove with applied Epoxy. Replace sink		1	LS	\$18,000.00	\$18,000

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CATEGORY	DESCRIPTION	PHOTO & SITE PLAN	ESTIMATED TAKE OFF		COST / UNIT	TOTAL COST
			Quantity	Unit		
3) Mechanical / Plumbing						\$179,273
A) Exterior						
i) SITE SYSTEMS						
1 Existing Systems	campus energy management system does not exist					
Recommended Remedy	add campus wide ddc control and create district standard for energy control systems		36,270	SF	\$2.25	\$81,608
B) Interior						
i) ACCESS						
1 Existing Deficiency	plumbing fixtures are ADA compliant throughout, although the P-trap protective coverings are missing					
Recommended Remedy	Replace p-trap protective covers		1	LS	\$4,000.00	\$4,000
ii) EXISTING SYSTEMS						
1 Existing Systems	mechanical/plumbing systems in good condition and working order. Plumbing fixtures are ADA compliant with waterless urinals, sensor faucets.					
Recommended Remedy	Replace waterless urinals with ultra low flow 0.125 gpf; replace a/c filters and clean existing duct system.		1	LS	\$2,500.00	\$2,500
2 Existing Deficiency Pods-A, B, C	mech/plumb in good condition and ADA compliant with, sensor flush toilets, newer classroom sinks w/ bubblers, standard efficiency gas fired furnaces, Trane XR-80 w/ 7 day programmable t-stats					
Recommended Remedy	ADD DX cooling coils and condensing units, on grade for cooling. , i.e. clean duct systems, replace filters		34,900	SF	\$1.25	\$43,625
3 Existing Deficiency-Pod F	plumbing systems are in good condition and are ADA compliant. Furnaces are older, RUUD units and are nearing the end of useful life					
Recommended Remedy	replace furnaces with high efficiency type, clean duct systems; At Media Center, replace and Add DX cooling and condensing units for		9,680	SF	\$3.00	\$29,040
4 Existing Deficiency-Multipurpose	mech/plmb systems in good condition and are ADA compliant with, sensor flush toilets, newer classroom sinks w/ bubblers, standard efficiency gas fired furnaces, Trane XR-80 w/ 7 day programmable t-stats					
Recommended Remedy	replace furnaces with high efficiency type with DX cooling coils and condensing units on grade, clean duct systems		7,400	SF	\$2.50	\$18,500

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			Quantity	Unit		
4) Electrical						\$346,100
A) General						
i) EXISTING SYSTEMS						
Existing Systems	School Modernization in 2005 included upgrades tp electrical services, tele communication, clock, security, and fire alarm systems. Light systems were upgraded in 1991. No cable TV service.					
B) Mandatory						
i) EXTERIOR LIGHTING						
1 Existing Deficiency	Parking lot lighting provided by (2) pole mounted shoebox luminaires. As noted by staff, light levels are low for back to school nights.	1E				
Recommended Remedy	Add (2) pole mounted luminaires to match existing at Parking; Add (3) from Parking to Day Care Bldg. Add low level bollard type fixtures.		5	EA	\$16,000.00	\$80,000
			10	EA	\$4,500.00	\$45,000
2 Existing Deficiency	Inadequate exterior lighting provided, walkways dark for back to school nights, as noted by staff					
Recommended Remedy	Add (25) and replace (E) exterior walkway fixtures, with LED fixtures		45	EA	\$550.00	\$24,750
3 Existing Deficiency	Exterior building lighting provided by wallpaks and surface square downlights at covered walk ways. No exterior emergency lighting provided for emergency egress.	2E				
Recommended Remedy	Replace exterior wallpack fixtures and down lights at covered walkways.		20	EA	\$650.00	\$13,000
	Add exterior battery pack fixtures for minimum code coverage		30	EA	\$375.00	\$11,250
C) Deferred Maintenance						
i) FIRE ALARM /DETECTION						
1 Existing Deficiency	Notifier NFS640 control and expander panels, Some areas, ie, kindergarten toilets, do not have required strobes					
Recommended Remedy	Add fire alarm strobe devices		4	EA	\$475.00	\$1,900
ii) TELEPHONE SYSTEM						
Existing System	Rauland telephone system is recent upgrade.					
1 Existing Deficiency	Panel problems require frequent reprogramming. No voicemail available with telephone system.					
Recommended Remedy	Replace Rauland system with district standard VOIP.		1	LS	\$75,000.00	\$75,000

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			Quantity	Unit		
2 Existing Deficiency	In some areas, ie, media center, classrooms, offices, plastic floor thresholds used to cover data cables to tables and work stations					
Recommended Remedy	Add data outlets to eliminate use of thresholds		30	EA	\$450.00	\$13,500
3 Existing Deficiency	Surface raceway in media center has broken pieces and missing plates					
Recommended Remedy	Add plates and replace broken items		8	EA	\$25.00	\$200
4 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		54,500	EA	\$1.00	\$54,500
iii) BELL/CLOCK/SPEAKER SYSTEM						
Existing System	Rauland bell/clock/speaker system is recent upgrade					
1 Existing Deficiency	Panel problems require frequent reprogramming. All call function not working properly. Exterior speakers not working or unclear transmission.		10	EA	\$700.00	\$7,000
Recommended Remedy	Replace Rauland system with district standard VOIP.		1	LS	\$20,000.00	\$20,000
iv) SECURITY SYSTEM						
1 Existing System	Security system is recent upgrade					
1	No deficiencies observed or reported.					
v) INTERIOR LIGHTING						
1 Existing Deficiency	Existing fluorescent fixtures appear to have T8 lamps and magnetic ballasts					
Recommended Remedy	Replace with energy efficient T5 lamps and electronic ballasts fixtures throughout		36,200	SF	\$1.75	\$63,350
2 Existing Deficiency	Fixtures observed with broken or missing lenses.					
Recommended Remedy	See item above					
3 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 sensors		54,500	SF	\$0.35	\$19,075

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				Quantity	Unit		
vi) EXIT SIGNS							
1	Existing Deficiency	Exit signs observed with broken lenses Exit signs not clearly provided or located					
	Recommended Remedy	Replace broken lenses		3	EA	\$75.00	\$225
		Install additional exit signs		6	EA	\$475.00	\$2,850
vii) POWER							
1	Existing Deficiency	In some areas, ie, media center, classrooms, offices, plastic floor thresholds used to cover power cables to tables and work stations.					
	Recommended Remedy	Add power outlets to eliminate use of thresholds		30	EA	\$450.00	\$13,500
2	Existing Deficiency	In some areas, ie, media center, classrooms, offices, plastic surface raceway is broken and hanging loose from walls, with data and power cables exposed					
	Recommended Remedy	Replace broken raceways		100	LF	\$20.00	\$2,000
3	Existing Deficiency	In kindergarten classrooms, tamper proof receptacles have not been provided					
	Recommended Remedy	Replace with tamperproof receptacles.		30	EA	\$475.00	\$14,250
4	Existing Deficiency	Inadequate power distribution for receptacles for data system as noted above					
	Recommended Remedy	For added receptacles noted above, install new panelboard (42pole, 100amp, 120/208volt, 3phase, with Transient Voltage Surge Suppression) and new feeder from switchboard		2	EA	\$4,500.00	\$9,000
5) Structural							\$30,000
1	Existing Deficiency	Visible signs of moisture at admin (See Arch Item # B-7 above)					
	Recommended Remedy	Repair/ reframe Dry Rot roof or wall framing	ALLOW	1	LS	\$30,000.00	\$30,000
						Sub-Total	\$3,634,886
* NEEDS FURTHER INQUIRY FOR ACCURATE ESTIMATE							
						SOFT COSTS @ 25%	\$908,721
						TOTAL COSTS (not including escalation)	\$4,543,607

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