Bay Farm Elementary School

SUMMARY OF SCHOOL CAMPUS

- **Address:** 200 Aughinbaugh Way, Alameda, CA 94502
- **Principal - Phone No. :** Babs Freitas **-** (510) 748-4010
- **Year Built:** 1991
- **Total Site Size:** 8.0 acres
- **Building Area:** 30,800 sf
- **10 Portables:** 9,600 sf

FACILITY DESCRIPTION

Bay Farm Elementary School is constructed on concrete pad foundations with 1-story wood frame, cement plastered, walls, and composite shingle roofing. This campus includes a Multi-Use/ Cafeteria, Administration building, Media Center/ Library, (3) Classroom Clusters with (16) classrooms, and (10) portable classrooms.

Bay Farm currently serves 466 (K-5) students in one of the District's newer facilities, which was constructed in 1991 as part of the Bay Farm Development. The campus was modernized in 2004 using Measure "C" funds, but only included exterior painting, and repaving of the parking lot and access road. Since 2004, there have been a total of 10 Portable classrooms placed at this facility.

ISSUE OF CONCERN

Bay Farm school occupies a site that was created from bay-fill sediments in a former marsh area. The structural stability of these soils is of a questionable nature and requires extensive further geotechnical study before any reasonable analysis can be performed. Visual evidence, however, makes it very clear that while the building pads appear to be stable, the earthen grades under the covered walkways concrete slabs, asphalt playgrounds, and landscaped areas has subsided up to 3" since 1991. This issue is the greatest single concern for addressing this facilities long-term durability and maintenance.

KEY ASSESSMENT ITEMS

- Bay fill ground subsidence except at building pads.

- Non accessibility at most building entrances
- Severe dry rot at a some portable buildings
- ADA parking signage
- Playground asphalt surface deterioration.
- Exterior doors, windows and paint near end of service life

CLASSROOM BUILDING

ADMINISTRATION

MULTI-PURPOSE / CAFETERIA BUILDING

MODULAR BUILDING

PORTABLE BUILDING

COVERED WALKWAYS

#C — SEE ASSESSMENT SPREADSHEET FOR CIVIL KEYNOTES, TYP.

BAY FARM ES

4/30/2012

Alameda USD Facilities Assessment

NORTH

0 40' 80' 160'

25 YEARS

QUATTROCCHI KWOK ARCHITECTS

1180.00

Bay Farm Elementary School

Facility Assessment Spreadsheet

	CATEGORY	DESCRIPTION	PHOTO & SITE PLAN	ESTIMATED TAKE OFF Quantity	Unit	COST / UNIT	TOTAL COST
1)	**Civil**						**$613,595**
A)	**Existing Site Conditions**						
i)	**ACCESS**						
1	**Existing Deficiency**	Stall not 18 ft deep, lacks proper path from unloading zone to sidewalk, lacking $250 fine sign, and has 4% longitudinal slope.	1C				
	Recommended Remedy	Convert to standard parking stall. Remove blue markings; remove sign. Add additional stall at location 2		1	Stall	$2,500	$2,500
2	**Existing Deficiency**	3.4% longitudinal slope; no designated van space; signage out of date; improper POT from ADA stall to sidewalk. Total of three stalls, including one van needed.	2C				
	Recommended Remedy	Redesignate three stalls for ADA parking, including one van. Edge grind at perimeter of this area, and install variable depth overlay of stalls and unloading zones at 2% max slope. Extend overlay into aisle at 5% max slope to conform. Restripe stalls for ADA use; install current signage at all stalls. Remove curb at head end of stalls, and install sidewalk to connect unloading zones to existing sidewalk leading to school entrance. Provide truncated domes at head end of both unloading zones.		600	SF	$3	$1,800
3	**Existing Deficiency**	No truncated domes at bottom of ADA ramp to parking lot.	3C				
	Recommended Remedy	Add truncated dome mat to bottom 3 ft of ramp.		18	SF	$20	$360
4	**Existing Deficiency**	Pedestrian ramps on both sides of drop off loop have slopes exceeding 1:12, and no bands of truncated domes.	4C				
	Recommended Remedy	Demo and rebuild ramps and adjoining length of other flatwork to reduce ramp slope to 1:12 max, with 2% max level landing at top of ramp. Install 3 ft band of truncated domes at bottom of each ramp.		128	SF	$20	$2,560

Bay Farm Elementary School

Facility Assessment Spreadsheet

	CATEGORY	DESCRIPTION	PHOTO & SITE PLAN	ESTIMATED TAKE OFF Quantity	Unit	COST / UNIT	TOTAL COST
5	**Existing Deficiency**	ADA unloading zone at front of school has no curb ramp, and is signed to resemble accessible parking stalls.	5C				
	Recommended Remedy	Paint out ADA stall symbols; remove incorrect signage. Install proper signage for ADA student unloading zone. Remove 32 lf of curb, gutter and sidewalk and replace with 20 ft of depressed curb/walk, with 6 ft 1:12 ramps on both ends, and 3 ft band of truncated domes at bottom of both ramps. Paint vertical curb at back of depressed walk area yellow. See also next item.		256	SF	$25	$6,400
6	**Existing Deficiency**	Sidewalk along multipurpose building, along drop off loop, has a 5 ft wide area adjoining the curb that is at 2% cross slope, but obstructed with tree wells. The adjoining 5 ft width of walk, extending up to the building, has slopes substantially in excess of 2% due to settlement of the site. This condition results in a non-compliant POT along this side of the school.	6C				
	Recommended Remedy	Remove trees and tree wells adjoining curb, and fill in with concrete to create accessible path along curb.		8	EA	$450	$3,600
7	**Existing Deficiency**	The main covered walkway leading from the drop off loop into the campus adjoining the multipurpose building has settled resulting in a 16% slope on the portion of the walkway leading from the covered walk to the main doors of the building, with no ADA level landing outside the doors.	7C				
	Recommended Remedy	One possible solution could be to remove the existing concrete walk under the covered walkway, add 8" of lightweight aggregate to raise the grade and construct new concrete walkway to building floor level. This will require that the drop off loop end of the walkway be reconstructed as a ramp, with handrails, to gain the additonal elevation. It must also be determined if there is sufficient vertical clearance to the structural members of the covered walkway to accomodate the 8" rise in walkway surface grades.	Allow	1,808	SF	$35	$63,280
8	**Existing Deficiency**	Ground Subsidence affects throughout Site					
	Recommended Remedy	* Geotechnical Report with extensive soil boring and testing by a Consultant well versed in Bay Fill projects, is a required prerequisite to any work to remedy the subsidence issue.	Allow	1	LS	$75,000	$75,000

Bay Farm Elementary School

Facility Assessment Spreadsheet

	CATEGORY	DESCRIPTION	PHOTO & SITE PLAN	ESTIMATED TAKE OFF Quantity	Unit	COST / UNIT	TOTAL COST
9	**Existing Deficiency**	Existing paving stones leading from the covered walkway to the eating area have settled significantly along the north and east sides, precluding compliant access to this area.	8C				
	Recommended Remedy	Remove pavers along east side. Replace with lightweight concrete walk sloping up at 5% max from covered walkway to concrete slab level. Leave pavers in place along north face.		700	SF	$12	$8,400
10	**Existing Deficiency**	Combination of tightly and widely spaced pavers leading to a required accessible entrance to multipurpose room. Where there are widely spaced pavers, they do not create an accessible surface. Where they are tightly spaced closer to the building, they have settled, eliminating the required 2% level landing at the door.	9C				
	Recommended Remedy	Remove wide expanse/length of pavers, and replace with 5 ft wide sidewalk from circulation path to building entrances.		2,200	SF	$17	$37,400
11	**Existing Deficiency**	As a result of settlement over time, there is no level landing at the south doors from this building to the paved playcourts.	10C				
	Recommended Remedy	Remove existing concrete in north/south and east/west directions. Provide new concrete walks with flat landing at doors for 5 ft, then 5% max slope towards paved playcourts. Replace concrete at drinking fountains at 2% max slope. Provide curb at transition to paved playcourts, with concrete sloping down both east and west along the building to match play court grades.		1,956	SF	$25	$48,900
12	**Existing Deficiency**	The pavement slope of the bottom of the ramps from these portable classrooms is approximately 9%	11C				
	Recommended Remedy	Remove asphalt between ramps and out to concrete band. Extend ramps/railings 2-3 ft to a new shared lower landing; repave out to concrete band.		720	SF	$25	$18,000
13	**Existing Deficiency**	Pavers have settled so that there is no level landing at exit door.	12C				
	Recommended Remedy	Remove band of pavers between building and asphalt; replace with level concrete landing at door, and 5% max slope concrete walkway along building down to asphalt grade.		5,100	SF	$17	$86,700

Bay Farm Elementary School

Facility Assessment Spreadsheet

CATEGORY		DESCRIPTION	PHOTO & SITE PLAN	ESTIMATED TAKE OFF Quantity	Unit	COST / UNIT	TOTAL COST
14	**Existing Deficiency**	No ADA ramp into (2) play equipment yards with "chip" cushion	13C				
	Recommended Remedy	Add ADA ramps and rubberized cushion on new asphalt base		4,000	SF	$10	$40,000
15	**Existing Deficiency**	2" drop from finished floor to finished grade at threshold.	14C				
	Recommended Remedy	Remove sufficient quantity of pavers to allow for installation of level concrete landing at doors, and 5% max slope on walk down to adjoining pavement.		1,020	SF	$17	$17,340
16	**Existing Deficiency**	Vertically offset joint where exterior flatwork joins building slab	15C				
	Recommended Remedy	Grind offset joint to be flush.		30	SF	$4	$120
17	**Existing Deficiency**	Play Court pavement deteriorated.	16C				
	Recommended Remedy	Crack seal cracks 1/4 inch and larger, seal coat, restripe.		20,580	SF	$0.75	$15,435
18	**Existing Deficiency**	Pavement deteriorated	17C				
	Recommended Remedy	Crack seal, paving fabric, and 1.5" minimum overlay		18,000	SF	$5	$90,000
19	**Existing Deficiency**	Settlement of pavers between floor slab and covered walkway concrete along front of mods.	18C				
	Recommended Remedy	Remove pavers at entrance to Pods. Replace with concrete walks at 1:12 max and railings		2,900	SF	$17	$49,300
ii)	**FIRE/LIFE SAFETY/HAZ MAT**						
1	**Existing Deficiency**	Sparse onsite fire hydrant coverage, particularly at north end of site.	19C				
	Recommended Remedy	Consider adding fire hydrant either along Aughinbaugh Way at north end of site, or onsite hydrant in north paved playcourt.		1	EA	$10,000	$10,000
2	**Existing Deficiency**	No evidence of backflow device for private onsite hydrants.					
	Recommended Remedy	Add single check valve in vault per Water Co. Standards		1	LS	$15,000	$15,000
iii)	**UTILITIES**						
1	**Existing Deficiency**	All drop inlet grates in pedestrian areas have larger openings than allowed by ADA					
	Recommended Remedy	Replace non-compliant grates with 1/2" max opening bolt down grates. Estimated 10 ea.		7	EA	$500	$3,500

Bay Farm Elementary School

Facility Assessment Spreadsheet

	CATEGORY	DESCRIPTION	PHOTO & SITE PLAN	ESTIMATED TAKE OFF Quantity	Unit	COST / UNIT	TOTAL COST
2	**Existing Deficiency**	No evidence of separate irrigation service for site.					
	Recommended Remedy	Recommend installation of separate irrigation service and backflow device.		1	Srv	$18,000	$18,000
2)	**Architectural**						**$1,005,080**
A)	**Exterior**						
i)	**ACCESS**						
1	**Existing Deficiency**	**Main Entry**: pavement heave projection near Admin.	#1				
	Recommended Remedy	* Further investigation required (see Civil Item #8). Allowance for replace concrete.	Allow	1	LS	$1,800	$1,800
2	**Existing Deficiency**	**Site Pavers**: Numerous trip hazards	#2, #3, #7, #8				
	Recommended Remedy	Replace pavers with conc. walkway		3,600	SF	$16	$57,600
3	**Existing Deficiency**	**Media Center:** Occupant load for main room requires 2nd Exit	#26				
	Recommended Remedy	Add 36" Exit door at east wall, with conc. walkway		1	Exit	$5,000	$5,000
4	**Existing Deficiency**	No secured Bike Storage					
	Recommended Remedy	Add 20'x40' secured chainlink Bike Enclosure		1,200	SF	$8	$9,600
ii)	**DEFERRED MAINTENANCE**						
1	**Existing Deficiency**	**Admin. Bldg**: Wallboard cracking from settlement	#9				
	Recommended Remedy	Remove drywall/ replace & repaint		200	SF	$7	$1,400
2	**Existing Deficiency**	**Media Center:** red paint degraded	#4				
	Recommended Remedy	Reseal /repaint entire campus		40,000	SF	$3	$120,000
3	**Existing Deficiency**	**Classroom Windows**: south facing leaks through frames at wall					
	Recommended Remedy	Replace all windows with Alum. frame & dual pane glass		3,200	SF	$30	$96,000
4	**Existing Deficiency**	**Comp. Shingle roofing**: nearing end of service life					
	Recommended Remedy	Replace all shingle roofs with S.S. metal roofing. Also new fascia, gutter, and RWL.		9,600	SF	$12	$115,200
5	**Existing Deficiency**	Exterior doors have reached end of service life					
	Recommended Remedy	Replace all ext. doors with metal frame and FRP door		48	EA	$4,400	$211,200

Bay Farm Elementary School

Facility Assessment Spreadsheet

	CATEGORY	DESCRIPTION	PHOTO & SITE PLAN	ESTIMATED TAKE OFF Quantity	Unit	COST / UNIT	TOTAL COST
6	**Existing Deficiency**	**(4) Portable classrooms**: paint peeling off at metal panels; faded at paneling	#5, #10				
	Recommended Remedy	Repair roof leaks, replace with cement board panel/ trim, prep and repaint		4,000	SF	$12	$48,000
7	**Existing Deficiency**	**(4) Portable classrooms**: downspouts discharge on wood foundation; dry rot	#17, #18				
	Recommended Remedy	Replace with concrete foundation and ramps; Add site drainage, and new RWLs		32	CY	$650	$20,800
8	**Existing Deficiency**	**(1) Portable classroom**: missing handrail at ramp wall; gutter downspout drops on wood foundation w/ dry rot	#11, #19				
	Recommended Remedy	Replace with concrete foundation and ramps; Add site drainage, and new RWLs		8	CY	$650	$5,200
9	**Existing Deficiency**	**(2) westside Portable classrooms**: wood foundation deteriorated	#6, #12, #13				
	Recommended Remedy	Replace with concrete foundation and ramps; Add site drainage, and new RWLs	CONC	16	CY	$650	$10,400
10	**Existing Deficiency**	**(2) westside Portable classrooms**: wood siding deteriorated	#14, #15				
	Recommended Remedy	Replace siding with cement board panel/trim		1,000	SF	$6	$6,000
11	**Existing Deficiency**	**(2) Butterfly Garden Portables**: wood foundation has dry rot					
	Recommended Remedy	Replace with concrete foundation and ramps; Add site drainage, and new RWLs		32	CY	$650	$20,800
12	**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
13	**Existing Deficiency**	**(2) Butterfly Garden Portables**: wood siding & trim has deteriorated	#16, #21, #22, #23, #24				
	Recommended Remedy	Replace siding with cement board panel/trim		2,480	SF	$6	$14,880
B)	**Interior**						
i)	**GENERAL & MAINTENANCE**						
1	**Existing Deficiency**	Campus flooring has reached end of service life					
	Recommended Remedy	Replace all flooring with resilient flooring, and walk-off Entry carpet mat.		40,000	SF	$5	$200,000

Bay Farm Elementary School

Facility Assessment Spreadsheet

	CATEGORY	DESCRIPTION	PHOTO & SITE PLAN	ESTIMATED TAKE OFF Quantity	Unit	COST / UNIT	TOTAL COST
2	**Existing Deficiency**	Interior painting and wall covering at end of service life					
	Recommended Remedy	Repaint all interiors		40,000	SF	$1	$40,000
3	**Existing Deficiency**	**Staff Lounge**: Kitchen sink is non-accessible	*#25*				
	Recommended Remedy	Replace cabinets & sink		1	LS	$6,200	$6,200
3)	**Mechanical / Plumbing**						**$202,400**
A)	**Exterior**						
i)	**SITE SYSTEMS**						
1	**Existing System**	campus energy management system does not exist					
	Recommended Remedy	add campus wide ddc control and create district standard for energy control systems		40,000	SF	$2	$80,000
2	**Existing Restrooms**	newer, with ada fixtures, floor mounted toilets, with flush valves, typical throughout					
	Recommended Remedy	replace waterless urinals and 10% of other fixtures on an as needed basis. New urinals will be 0.125 gpf, ultra low flow.		10	EA	$600	$6,000
3	**Existing Restrooms**	exterior df's - non ada compliant					
	Recommended Remedy	replace		4	Pair	$3,500	$14,000
B)	**Interior**						
ii)	**EXISTING SYSTEMS**						
1	**Existing Systems**	I.T. data closets have no exhaust, or cooling					
	Recommended Remedy	add cooling as needed		8	EA	$800	$6,400
2	**Existing Deficiency**	original heating furnaces, standard efficiency throughout					
	Recommended Remedy	replace, with high efficiency condensing furnaces with DX coils and condensing units and clean ductwork throughout		40,000	SF	$2.00	$80,000
3	**Existing Deficiency**	exterior drain lines, Gas & Water lines along building perimeters are failing due to soil settlement					
	Recommended Remedy	need flexible type connections		8	EA	$2,000	$16,000
4)	**Electrical**						**$234,375**
A)	**General**						
i)	**EXISTING SYSTEMS**						
	Existing Systems	School electrical systems appear to be original equipment installed at time of construction in 1991. Modernization project in 2004 did not include any electrical systems. No cable TV service.					

Bay Farm Elementary School

Facility Assessment Spreadsheet

		CATEGORY	DESCRIPTION	PHOTO & SITE PLAN	ESTIMATED TAKE OFF Quantity	Unit	COST / UNIT	TOTAL COST
B)		**Mandatory**						
i)		**EXTERIOR LIGHTING**						
	1	**Existing Deficiency**	Exterior building lighting provided by wallpaks and surface rectangular dropped lens fixtures at covered walkways. No exterior emergency lighting provided for emergency egress. As noted by staff, light levels are low for back to school nights.					
		Recommended Remedy	Replace exterior wallpack fixtures and down lights at covered walkways.		35	EA	$525	$18,375
			Add exterior battery pack fixtures for minimum code coverage.		30	EA	$375	$11,250
ii)		**INTERIOR LIGHTING**						
	1	**Existing Deficiency**	Existing suspended fluorescent fixtures in typical classroom and office appear to be original equipment. Suspended fixtures do not have seismic supports to prevent sideways shifting					
		Recommended Remedy	Add horizontal bracing and diagonal restraint wires per code		40,000	SF	$1.55	$62,000
C)		**Deferred Maintenance**						
i)		**FIRE ALARM /DETECTION**						
		Existing Systems	Fire Alarm system panels (Gamewell), devices, strobes, detectors appear to be original equipment.					
	1	**Existing Deficiency**	In Multi-Purpose Room, plastic surface raceway and cable is hanging loose from wall.					
		Recommended Remedy	Replace broken raceways		50	LF	$15	$750
ii)		**TELEPHONE SYSTEM**						
		Existing Systems	Rauland telephone system, rack mounted					
	1	**Existing Deficiency**	Panel problems require frequent reprogramming; Subsidence at U.G. data/phone/speaker systems has compromised conduit and wiring					
		Recommended Remedy	Replace Rauland system with District standard VOIP.		1	EA	$75,000	$75,000
			Replace existing underground data conduit with new conduit and fiber optic cable.					
			Replace existing underground phone & speaker conduit with new conduit and fiber optic cable.	Allow	800	LF	$65	$52,000
	2	**Existing Deficiency**	In Media Center, rack intrudes into code required clearance (3' min) for adjacent panel					
		Recommended Remedy	Relocate rack to provide required clearance		1	LS	$15,000	$15,000

Bay Farm Elementary School

Facility Assessment Spreadsheet

CATEGORY			DESCRIPTION	PHOTO & SITE PLAN	ESTIMATED TAKE OFF Quantity	Unit	COST / UNIT	TOTAL COST
iii)		BELL/CLOCK/SPEAKER SYSTEM						
		Existing Systems	Rauland bell/clock/speaker system is rack mounted with telephone system					
	1	Existing Deficiency	Panel problems require frequent reprogramming.					
		Recommended Remedy	Replace Rauland system with District standard VOIP.		1	EA	$45,000	$45,000
iv)		SECURITY SYSTEM						
		Existing Systems	Security system is provided by door contacts and motion sensors.					
	1	Existing Deficiency	No deficiencies observed or reported.					
v)		INTERIOR LIGHTING						
		Existing Systems	Existing suspended fluorescent fixtures in typical classroom and office appear to be original equipment.					
	1	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		40,000	SF	$0.35	$14,000
vi)		POWER						
	1	Existing Deficiency	400A main Breaker constantly trips					
		Recommended Remedy	Conduct Megger testing to check for grounding potential, and Replace breaker if OK		1	LS	$8,000	$8,000
5)		Structural						$20,000
	1	Existing Deficiency	significant site settlement of 3" at Covered walkway locations					
		Recommended Remedy	* Structural design required based on Geotech analysis (design fee)	Allow	1	LS		$20,000
							Sub-Total	$2,075,450
			* NEEDS FURTHER INQUIRY FOR ACCURATE ESTIMATE					
							SOFT COSTS @ 25%	$518,863
							TOTAL COSTS (not including escalation)	$2,594,313

BAY FARM ES

1

2

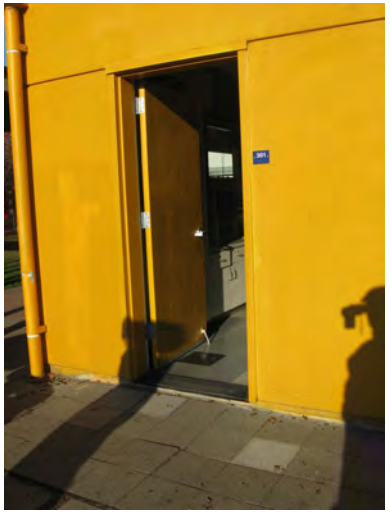
3

4

5

6

7



8

9

10

25 YEARS
QUATTROCCHI KWOK ARCHITECTS

1180.00

BAY FARM ES

11

12

13

14

15

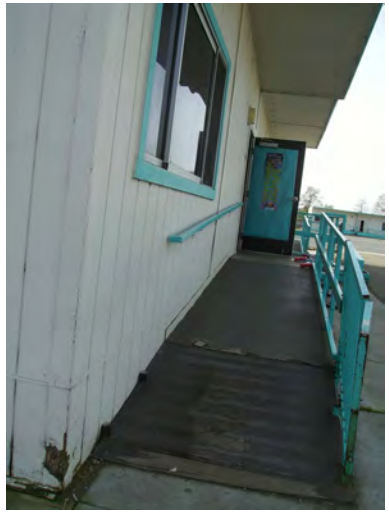
16

17

18

19

20



25 YEARS
QUATTROCCHI KWOK ARCHITECTS

1180.00

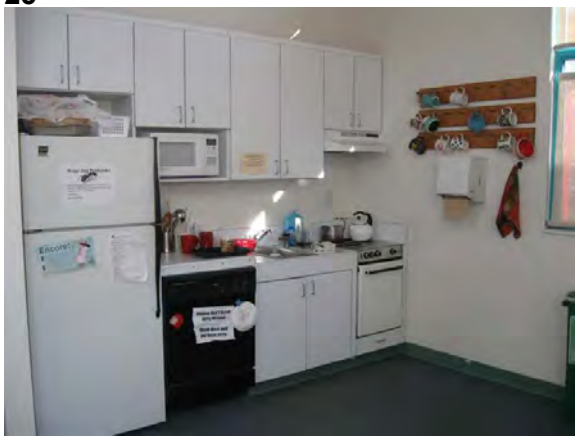
21

22

23

24

25



26

BAY FARM ES

25 YEARS
QUATTROCCHI KWOK ARCHITECTS

1180.00