

STATE OF HAWAII
DEPARTMENT OF EDUCATION
KA 'OIHANA HO'ONA'AUAO
P.O. BOX 2360
HONOLULU, HAWAII 96804

OFFICE OF FACILITIES AND OPERATIONS

June 8, 2023

TO: Ms. Mary Alice Evans
Acting Director, Office of Planning and Sustainable Development
Environmental Review Program

FROM: Edward S. Ige *Edward S. Ige*
Facilities Director, Facilities Development Branch

SUBJECT: **Chapter 343, Finding of No Significant Impact**
Palisades Elementary School – Covered Play Court
Pearl City, Oahu, Hawaii
Job No.: Q84215-19
Tax Map Key: (1) 9-7-093: 016 por.

The Hawaii State Department of Education (Department) has reviewed all comments received during the 30-day public comment period for the Draft Environmental Assessment for the Palisades Elementary School Covered Play Court. The Department has determined that the project will not result in significant adverse effects and has issued a Finding of No Significant Impact (FONSI) determination. Please publish this determination in the next edition of *The Environmental Notice*.

The project will provide the school and its students with a covered structure for recreational use and protection during inclement weather and “hot” days.

The Final Environmental Assessment in Portable Document Format and supporting information will be uploaded to the Environmental Review Program website. A printed copy of the Draft Environmental Assessment will be mailed to the Hawaii Documents Center.

Should you have any questions, please contact Aaron Geonzon, Project Coordinator of the Facilities Development Branch, Project Management Section, at (808) 784-5053 or via email at aaron.geonzon@k12.hi.us.

ESI:ag

c: Facilities Development Branch

From: webmaster@hawaii.gov
To: [DBEDT OPSD Environmental Review Program](#)
Subject: New online submission for The Environmental Notice
Date: Wednesday, June 14, 2023 8:14:44 AM

Action Name

Palisades Elementary School Covered Playcourt

Type of Document/Determination

Final environmental assessment and finding of no significant impact (FEA-FONSI)

HRS §343-5(a) Trigger(s)

- (1) Propose the use of state or county lands or the use of state or county funds

Judicial district

‘Ewa, O‘ahu

Tax Map Key(s) (TMK(s))

[1] 9-7-093: 016 por.

Action type

Agency

Other required permits and approvals

Variance from Pollution Control, Disability and Communications Access Board, HRS Chapter 6E Review, BWS Construction Plan Review, Grubbing and Grading, Building Permit, Building Height Waiver, Street Usage Permit, HFD Plan Check

Proposing/determining agency

Department of Education, State of Hawai‘i

Agency contact name

Aaron Geonzon

Agency contact email (for info about the action)

aaron.geonzon@k12.hi.us

Email address or URL for receiving comments

aaron.geonzon@k12.hi.us

Agency contact phone

(808) 784-5053

Agency address

3633 Waialae Avenue
Honolulu, HI 96816
United States
[Map It](#)

Was this submittal prepared by a consultant?

Yes

Consultant

Gerald Park Urban Planner

Consultant contact name

Gerald Park

Consultant contact email

gpark@gpup.biz

Consultant contact phone

(808) 625-9626

Consultant address

95-595 Kanamee Street #324
Mililani, HI 96789
United States
[Map It](#)

Action summary

The project will provide the School and its students a covered structure for recreational use and protection during inclement weather and "hot" days.

Reasons supporting determination

See Final Environmental Assessment, Section 7 Determination of Significance

Attached documents (signed agency letter & EA/EIS)

- [AG-Evans-FONSI-letter-Palisades-ES-Covered-Playcourt-Q84215-19-signed.pdf](#)
- [Palisades-Elem-School.pdf](#)

Shapefile

- The location map for this Final EA is the same as the location map for the associated Draft EA.

Action location map

- [Palisades-Elementary-Figure-1-Standard.zip](#)

Authorized individual

Gerald Park

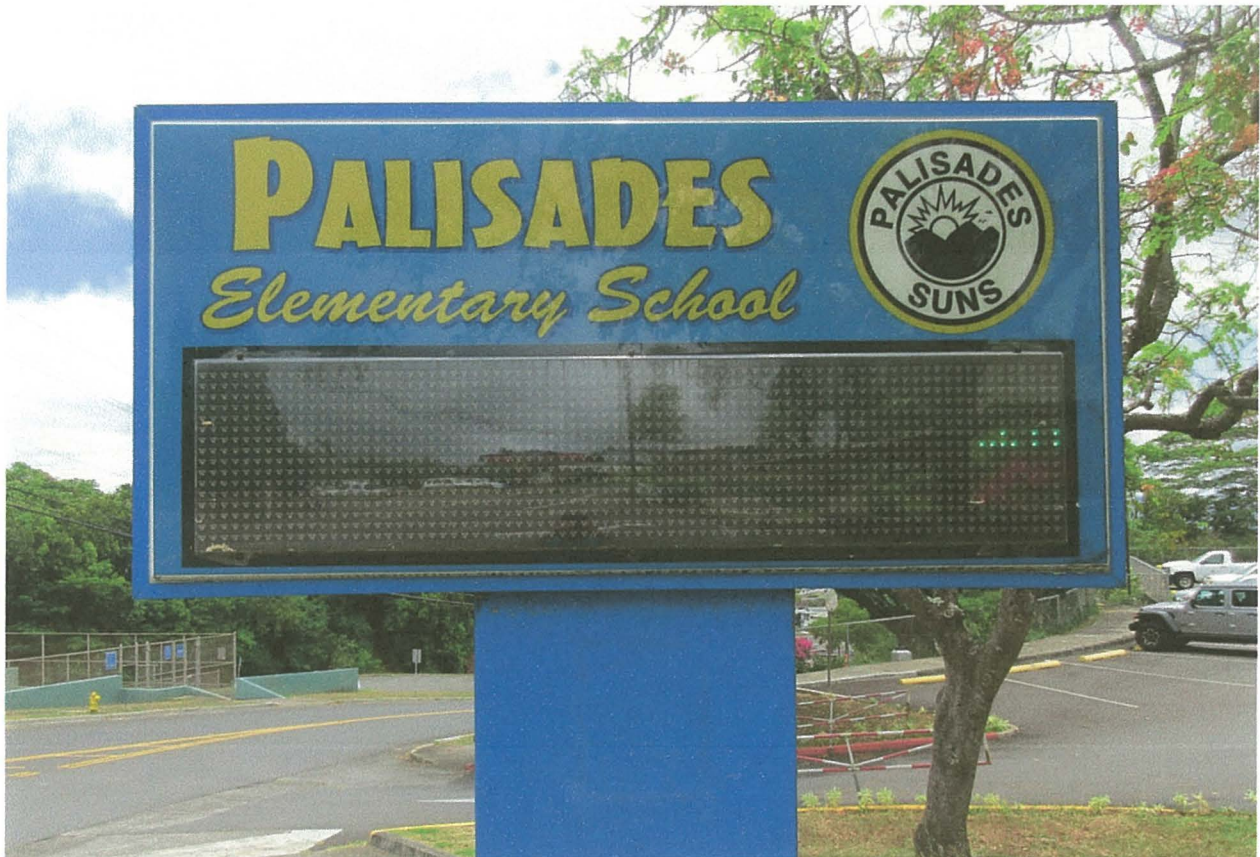
Authorization

- The above named authorized individual hereby certifies that he/she has the authority to make this submission.

FINAL ENVIRONMENTAL ASSESSMENT

PALISADES ELEMENTARY SCHOOL COVERED PLAY COURT

Mānana Ahupua‘a, District of ‘Ewa, O‘ahu, Hawai‘i



Prepared for

Department of Education, State of Hawai‘i
Office of School Facilities and Support Services
3633 Waiālae Avenue
Honolulu, Hawai‘i 96816

Mei 2023

FINAL ENVIRONMENTAL ASSESSMENT

PALISADES ELEMENTARY SCHOOL COVERED PLAY COURT Mānana Ahupua‘a, District of ‘Ewa, O‘ahu, Hawai‘i

Prepared Pursuant to Chapter 343, Hawai‘i Revised Statutes and
Hawai‘i Administrative Rules Chapter 200.1 Environmental Impact Statement Rules

Prepared For
Department of Education
Office of School Facilities and Support Services
3633 Waiālae Avenue
Honolulu, Hawai‘i 96816

Prepared By

Gerald Park Urban Planner
95-595 Kaname‘e Street #324
Mililani, Hawai‘i 96789

and

Pacific Architects
2020 South King Street
Honolulu, Hawai‘i 96826

Mei 2023

PROJECT PROFILE

Project: Palisades Elementary School
Covered Play Court
DOE Job No. Q-8215-19

Street Address: Palisades Elementary School
2306 'Auhuhu Street
Pearl City, O'ahu, Hawai'i

Proposing/Determining Agency: Department of Education
Facilities Development Branch
State of Hawai'i
3633 Waialae Avenue
Honolulu, Hawai'i 96816

Tax Map Key: [1] 9-7-093: 016 por.
Land Area: 6.0 acres
Land Owner: City and County of Honolulu

State Land Use Designation: Urban
General Plan: Urbanized Area (PUC)
Development Plan (DP): Primary Urban Center - West
DP Land Use Map: Lower Density Residential
Zoning: Residential R-5 (School)
General Preservation P-2 (Park)

Special Management Area Outside Special Management Area

Existing Use: Public Elementary School

Need for Environmental Assessment: Chapter 343, Hawai'i Revised Statutes
§343-5(a)(1) Propose the use of state or
county lands or state or county funds

[Anticipated] Determination: Finding of No Significant Impact

Project Contact: Aaron Geonzon, Project Manager
Department of Education
Facilities Development Branch
3633 Waialae Avenue
Honolulu, Hawai'i 96816

Telephone: (808) 784-5053
Email: aaron.geonzon@k12.hi.us

Note: *Substantive revisions to the text of the Draft Environmental Assessment are in **bold italic** type. Deleted text is bracketed with a [strikethrough].*

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SECTION 1

DESCRIPTION OF THE PROPOSED ACTION

The Department of Education, State of Hawai'i, proposes to construct improvements at Palisades Elementary School, District of 'Ewa, O'ahu, Hawai'i. Palisades Elementary School ("School") is located in the Mānana Uka subdivision (more commonly known as Pacific Palisades) of Pearl City a community on the western edge of Honolulu. The School is bounded by Palisades Community Park on the north, east, and west, and 'Auhuhu Street on the south.

The project area is identified as Tax Map Key [1] 9-7-093: 016 with an area of 12.497 acres. Tax parcel 016 is an un-subdivided lot owned by the City and County of Honolulu. Palisades Elementary School occupies a 5.117 acre portion on the south end of the lot and the 7.38 acre Pacific Palisades Community Park surrounds the School on the other three sides. A Vicinity Map and Tax Map are shown as Figures 1 and 2, respectively.

A. Purpose of the Proposed Action

The project will provide the School and its students a covered structure for recreational use and protection during inclement weather and "hot" days.

B. Technical Characteristics

1. Location

The play court will be constructed on the north side of the campus entirely on School property. The building site is partially flat land and partially a hillside. The flat area is at the same level as an adjoining softball field at Palisades Community Park and the end of a driveway behind Buildings B and C. The hillside portion slopes south to north from the top of slope at Building C (elevation 608 feet) down to the flat land (elevation 594 feet) a difference in grade of approximately 14 feet (See Photographs 1 and 2).

2. Demolition

There are no permanent structures to be demolished but two large shipping containers placed on the site by the School will be moved. A batting / golf cage erected near the east end of Building C is outside the building site but may be removed.

The flat area will be grubbed of grass and selected hillside trees and vegetation demolished. An existing shower tree on the Park property overhanging the proposed play court will be pruned or removed.

Between Building B and the end of driveway an existing concrete walkway, concrete swale, and drain inlet will be demolished. CMU walls and chain link fencing along the driveway, at upslope and downslope locations on the hillside, and sections of a concrete retaining wall at the proposed fire land turnaround will be removed.



Photograph 1. West View of Building Site. Flat Area on Right, Hillside on Left.



Photograph 2. East View of Building Site. Flat Area in Background and Hillside on the Right. Chain Link Fence at Left Generally Demarcates the Zoning District Boundary Between the Park (Left) and School (Right).

3. Site Work

Palisades Elementary School is built on a hillside and its four main buildings are situated on four separate plateaus. The play court will be sited below Building C on flat ground and excavated hillside. The building site will be graded, raised approximately +3 feet and flattened. The raised building site will not be wide enough to accommodate the width of the structure. The plan is to cut about 13+ feet into the hillside---10 feet for the court structure and 3 feet for a smooth connection at the Building C level. The area to be graded is estimated at 0.47 acres and earthwork quantities are estimated at 490 CY of excavation and 60 CY of embankment. A Civil Site Plan and Grading Plan are shown as Sheets C-1-3 and C-1-4.

Trees will be removed from the sloping site to accommodate the new play court. A specimen monkey pod tree adjacent to Building C will be removed as the root system would need to be severely cut back for the new play court construction. Common Formosan koa, paperbark, and satin leaf trees which are considered invasive species will be demolished. Replacement trees are proposed but the majority of the trees will be planted off the project site on a slope on the southern edge of the school's property. A planting plan will be developed in coordination with the Department of Education Arborist to satisfy the DOE's Tree Loss mitigation requirements.

The north side of the play court shares an adjacency with Palisades Community Park. A shower tree in the park overhangs onto the school's property and has minor branches and roots within the footprint of the play court. The Department of Parks and Recreation, Division of Urban Forestry has approved removal of the tree.

A 10-foot high, 120 foot long poured in place concrete retaining wall will be constructed on the south section to retain the hillside. Partial CMU walls on the east and west sections will enclose accessory spaces extending out from the building footprint.

A second retaining wall will be built on the south side of the court structure. The wall will retain ground and provide a 3-foot space for a smooth connection to Building C level.

Roof runoff will be conveyed to existing and proposed drain inlets at strategic locations around the building.

The structure will be erected on poured in place concrete foundations and concrete slab on-grade floor. An athletic court surface over an asphalt concrete base will cover the concrete floor. Pre-engineered steel columns on concrete pedestals will support a pre-engineered steel roof structure. The pitched roof structure is a pre-finished metal standing seam roofing over structural corrugated metal siding. The upper section of the play court will feature metal siding with translucent panels to allow for natural lighting of the interior. Exterior Elevations and Sections are shown on Sheets A-3.0 and A-4.0, respectively.

The court will open to a secured yard to the future property line on the north. The yard will be secured by a ten foot high fence. The lower portion will be standard chain link fencing and the top four feet will have a non-climbable mesh to prevent vandals from climbing over the fence.

An existing 4-foot high chain link fence along the driveway demarcates the zoning district boundary for the School and Park. It is not a lot demarcation. A section of the fence will be

demolished and replaced by an approximately 190 foot long new chain link fence of the same height as existing. The fence will be setback 5-feet where the play court fronts the zoning district boundary.

3. Covered Play Court

A covered structure for basketball and volleyball will be constructed. The approximately 9,625 square foot structure (125' X 77') will be used primarily for P.E. and recess. A Site Plan is shown on Sheet A-1.0.

A regulation basketball court (84' X 50') with operable backboards will be provided. One regulation volleyball court will be striped over the basketball court. Four stationary basketball backboards will be striped between the regulation court sidelines (two per sideline). The finish floor elevation is 594.00 feet.

Ancillary space will be provided for:

- Janitor's Closet
- Storage Room
- Electrical / IT Room

Restrooms will not be provided.

A Floor Plan is shown on Sheet A-1.1.

The height of the structure is approximately 33 feet measured from the lowest grade to the top of the structure. Exterior Elevations and Sections are shown on Sheets A-3.0 and A-4.0, respectively. The height exceeds the allowable height for the Residential zoning district and the Department of Education will request a zoning waiver from the Department of Planning and Permitting.

The Department of Planning and Permitted commented that a waiver also might be required for exceeding the allowable building area of the lot. Because the lot is split zoned Preservation (Palisades Community Park) and Residential (Palisades Elementary School) the allowable building area was calculated using a formula in the Land Use Ordinance. The calculation indicates that the maximum building area of the lot is 55,147.55 square feet. The combined building area for the school including the proposed play court and the park is 42,117.79 square feet. The combined coverage is less than the maximum and a building area Waiver should not be required. Building area calculations are attached to the response letter to the DPP found in Exhibit A.

4. Drainage

Roof and surface runoff will be collected and discharged into a drain manhole in the driveway. An 8" drain line will be installed on the north side of the structure and runoff from the south side will be conveyed by new and existing drain inlets / lines to the manhole.

5. Walkway

A new accessible walkway and ramp will be constructed from near Building B to the west side of the play court structure. The walkway / ramp will be constructed on sloping ground and negotiate grade changes.

The existing stairway connecting Buildings B and C will be retained.

6. Water and Wastewater

Water service is not available at the building site but will be provided from the on-site system located between Buildings B and C. Trenching and backfilling will be required for installing the service line.

The existing water system can accommodate the proposed development. The final decision on the availability of water will be confirmed when the Building Permit application is submitted for approval (BWS Comment).

The landscape contractor will provide temporary irrigation and maintenance for several months to assure the plants are established. After the maintenance period the contractor will remove the temporary irrigation system. A permanent irrigation system will not be installed (Response to BWS Comment)

7. Circulation and Parking

Changes in overall vehicle circulation and parking are not proposed.

An existing driveway along the north property line will serve as a fire lane. Parking stalls are aligned along and at the end of the driveway. A turnaround for the fire apparatus will require removing four end parking stalls and a section of retaining wall.

8. Fire Protection

The building will not be equipped with a fire sprinkler system. A fire alarm system will connect to the School's fire alarm system. Fire extinguishers will be provided.

A fire hydrant will be installed at the turnaround. Fire flow to the hydrant will be provided via a new 8" service line from a fire hydrant at 'Auihuhu Street and crossing the campus *mauka* of Building C. The line is sized to deliver 750 gallons per minute.

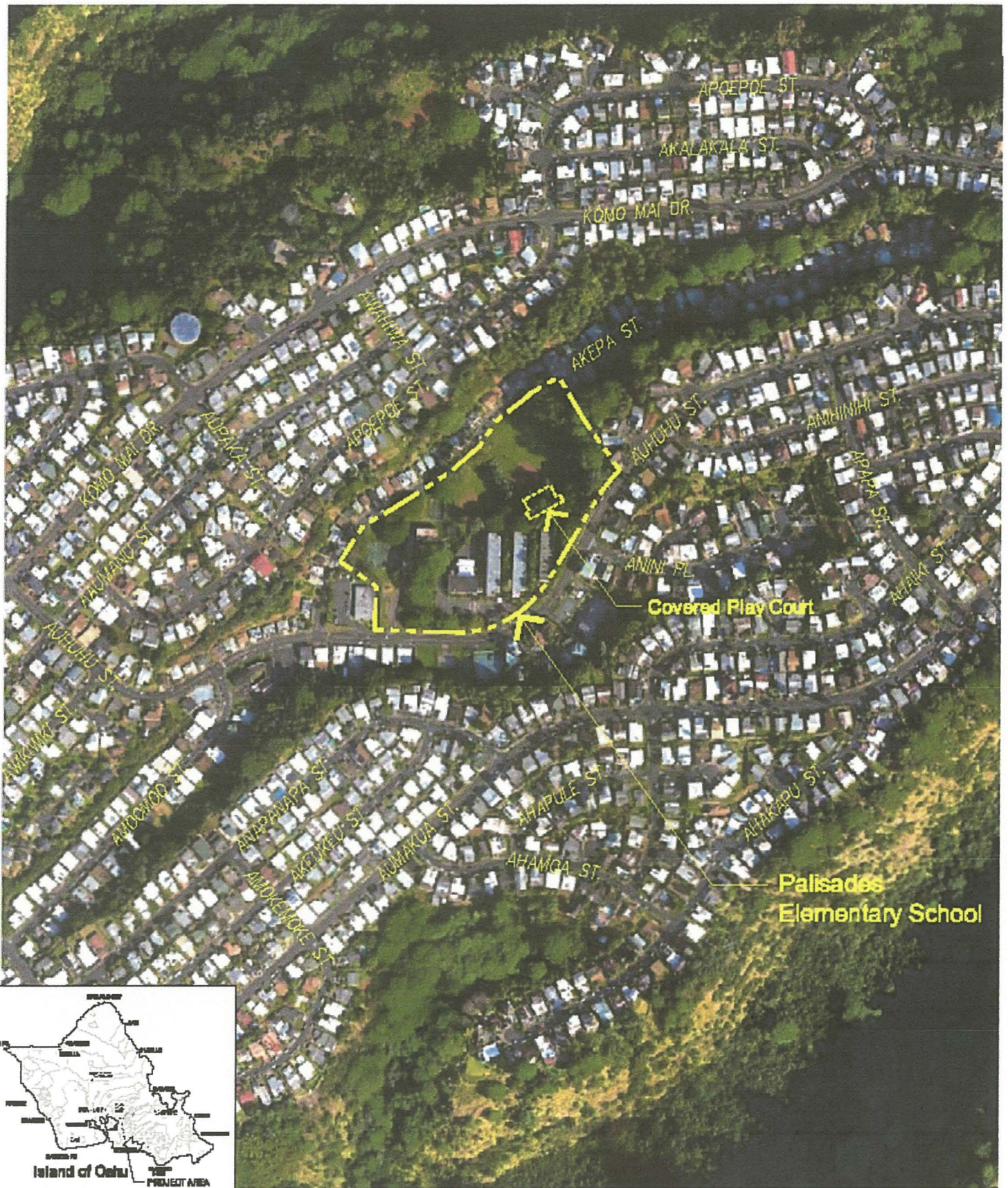
C. Economic Characteristics

The cost of the project is estimated at \$4.1 million and will be funded by the State of Hawai'i. The improvements will be constructed in one phase with construction start-up projected for Summer 2023 and completion by Summer 2024.

D. Social Characteristics

The proposed project will not permanently displace educational activities at the School and recreational uses at Palisades Community Park.

An existing concrete walkway between Building B and the end of the driveway will be demolished. Improvements at the end of the driveway and general construction activities will temporarily preclude pedestrian access to the School buildings at this location. A new walkway will be constructed to replace the existing.



Source: Google Maps 2022 Imagery

Figure 1
Vicinity Map
Palisades Elementary School
Covered Play Court



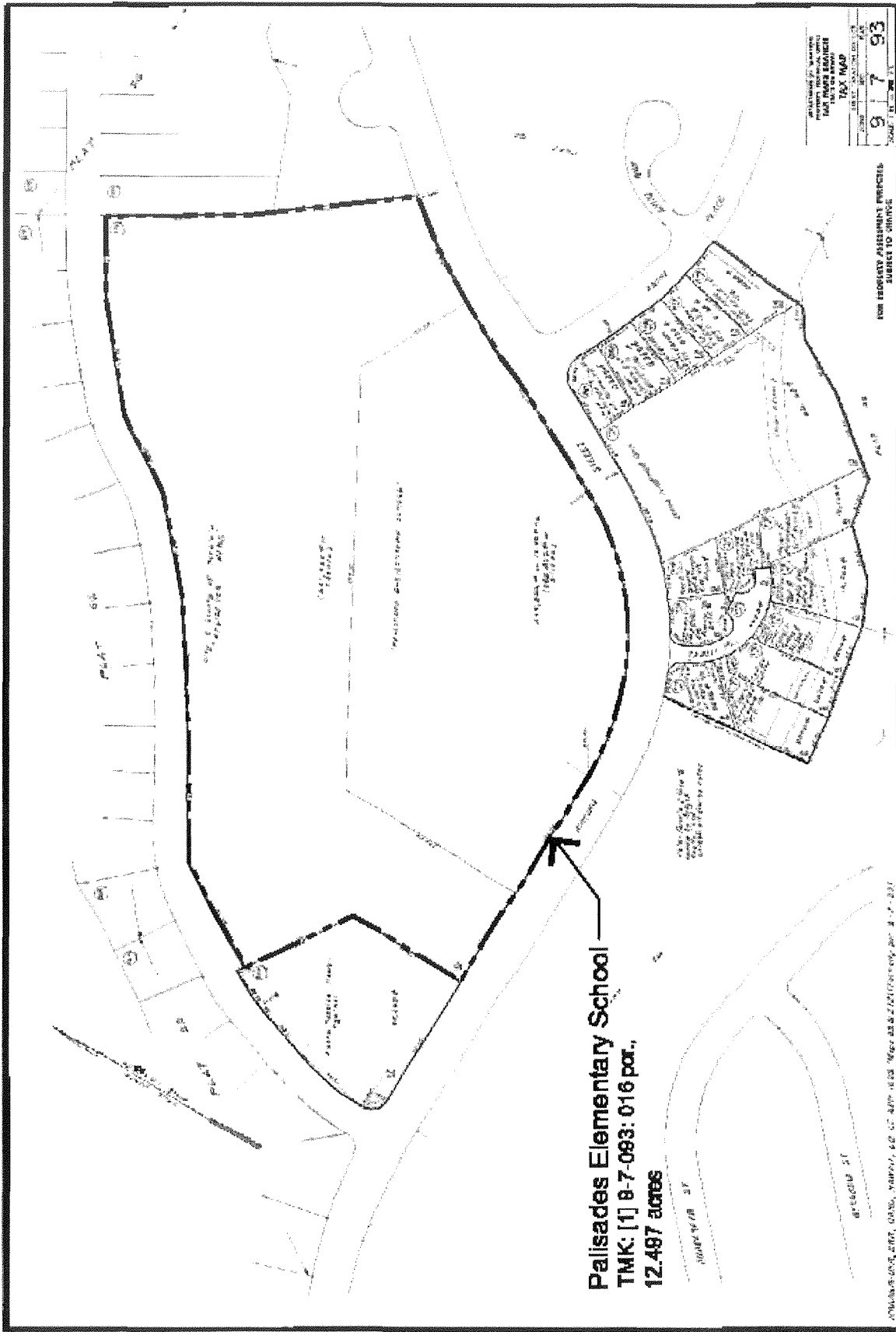
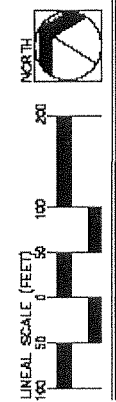


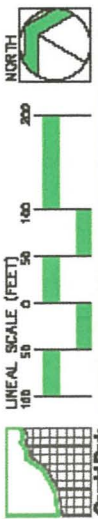
Figure 2
Tax Map
Palisades Elementary School
Covered Play Court





Source: Google Maps 2022 Imagery

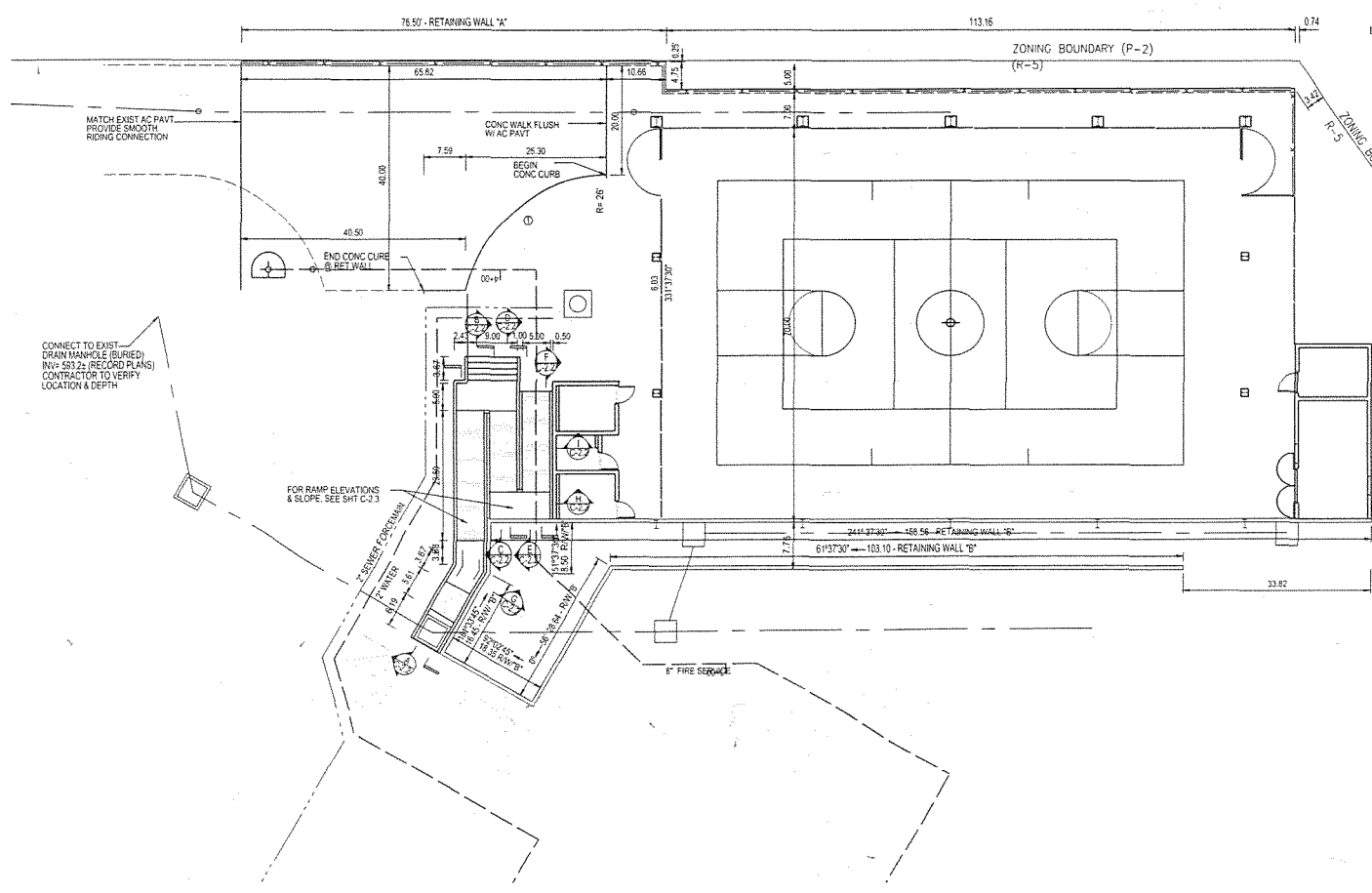
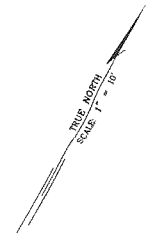
Figure 3
Campus Map
Palisades Elementary School
Covered Play Court



Google Maps
 Palisades Elementary School
 District of Palisades, Palisades, New York
 July 2022

CURB RETURN DATA

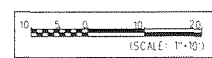
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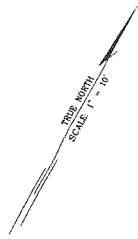
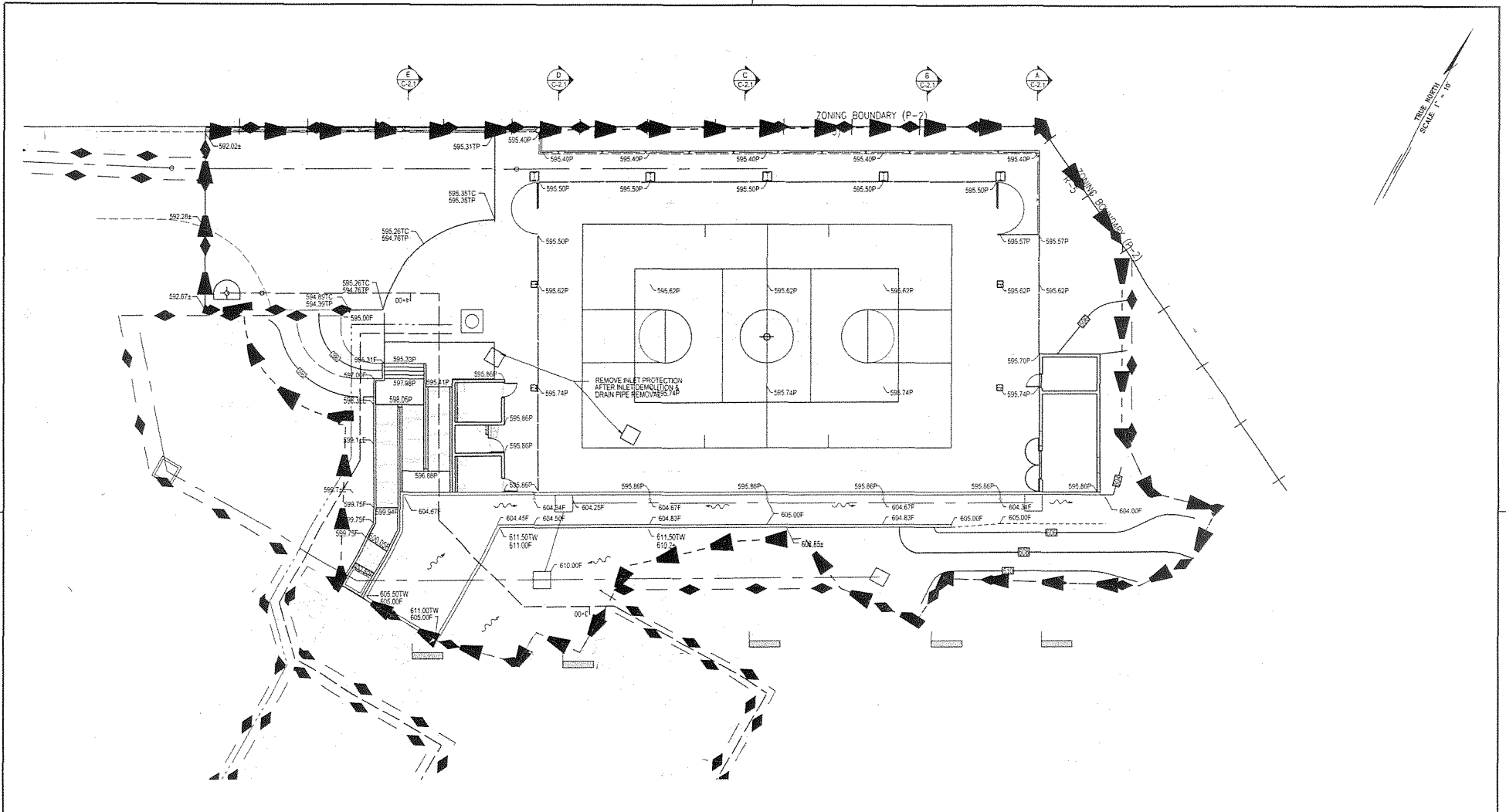
REVISION NO.	DATE	DESCRIPTION	BY	DATE	APPROVED

STATE OF HAWAII	
PALISADES ELEMENTARY SCHOOL COVERED PLAYCOURT	
PEARL CITY	OAHU HAWAII
SITE PLAN	
DESIGNED BY: CS	CHECKED BY: CS
DRAWN BY: ESE	APPROVED BY: CS
SIGNATURE <i>Cheryl</i>	
EXPIRATION DATE: APRIL 30, 2024	DATE: APRIL 2022

JOB NO. 084215-19	DRAWING NO. C-1.3
SCALE: AS NOTED	SHEET



APPROVED: _____
 CHIEF, CIVIL ENGINEERING BRANCH, D.P.P. DATE



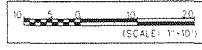
LEGEND

- 10 4 10 4±E SPOT ELEVATION EXISTING
- 10 10 P SPOT ELEVATION FINISH TOP PAVEMENT
- 10 10 TC BC SPOT ELEVATION TOP CURB BOTTOM CURB
- 11 0 F SPOT ELEVATION FINISH GROUND
- EXISTING CONTOUR ELEVATION
- FINISH CONTOUR ELEVATION
- LIMITS OF GRADING
- LIMITS OF DISTURBED AREA

EARTHWORK SUMMARY

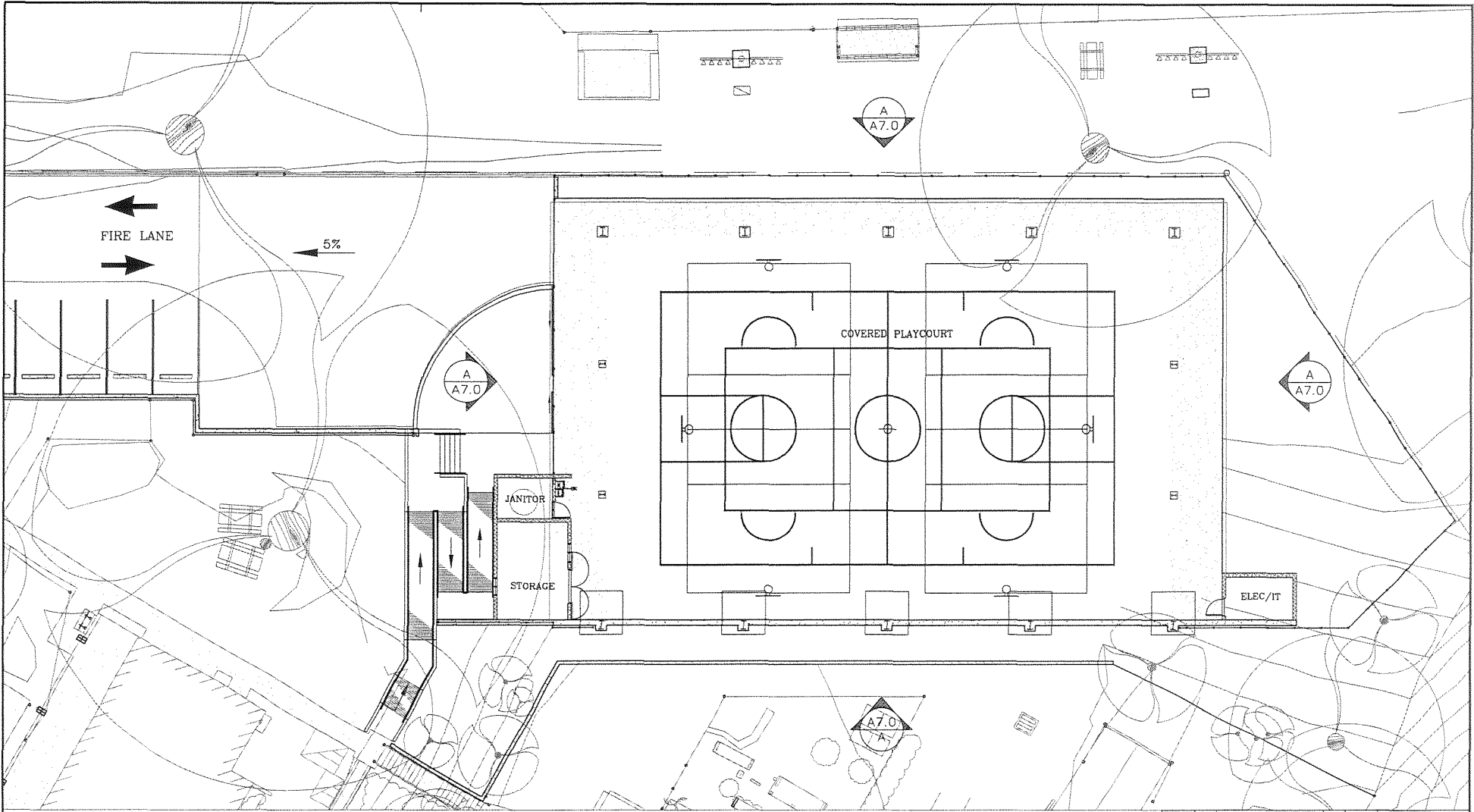
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EMB =	60	C Y
AREA TO BE GRADED =	0.47	AC
AREA DISTURBED =	0.60	AC

NOTE:
 QUANTITIES SHOWN ARE FOR GRADING PERMIT PURPOSES ONLY AND DO NOT INCLUDE TRENCH OR STRUCTURAL EXCAVATION AND BACKFILL. THE CONTRACTOR SHALL VERIFY ALL EARTHWORK QUANTITIES.



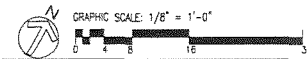
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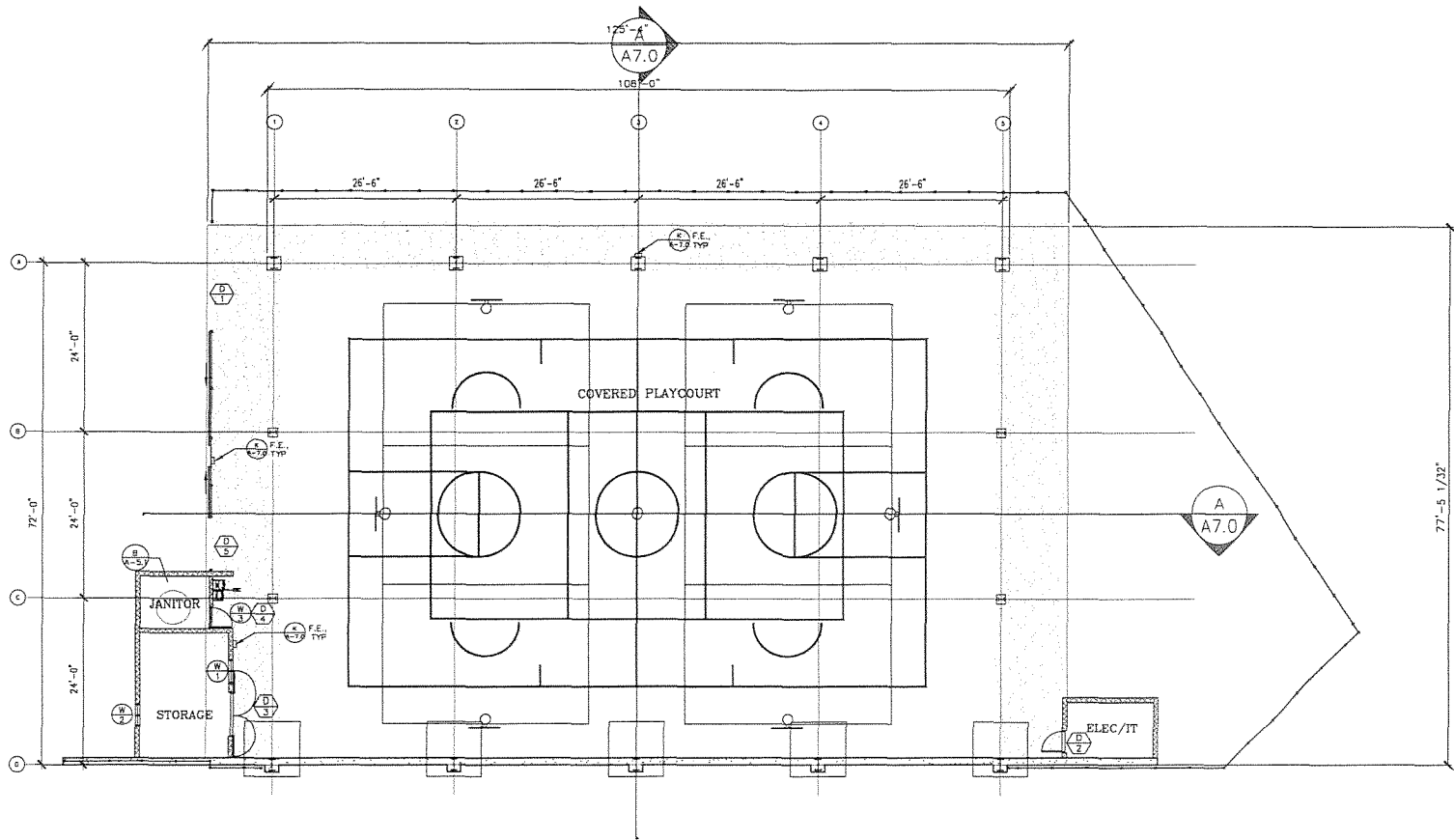
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STATE OF HAWAII					
PALISADES ELEMENTARY SCHOOL COVERED PLAYCOURT					
PEARL CITY		OAHU	HAWAII		
GRADING PLAN					
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION. <i>Conrad T. Sivarajah</i> SIGNATURE EXPIRATION DATE: APRIL 30, 2024					
KIM & SHIGONA ENGINEERS, INC. DESIGNED BY: CS CHECKED BY: CS APPROVED BY: CS SCALE: AS NOTED					
JOB NO. 084215-19		DATE: APRIL 2022		SHEET C-1.4	
FILED _____ DRAWN _____ PLOTTED _____					



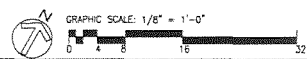
1 PARTIAL SITE PLAN
A-1.0 SCALE: 1/8" = 1'-0"

REVISION	DATE	BY	DATE	APPROVED
DEPARTMENT OF EDUCATION STATE OF HAWAII Palisades Elementary School Covered Play Court				
PEARLE CITY		QAHLU	HAWAII	
PARTIAL SITE PLAN				
FACIFIC ARCHITECTS		2140	PROFESSIONAL	
SHEET NO.	TOTAL SHEETS	024215-19	A-1.0	
DATE	APPROVED BY	DATE	SHEET	
APRIL 2022			27 ... 78	
LICENSURE EXPIRES: APRIL 30, 2024		AS NOTED		






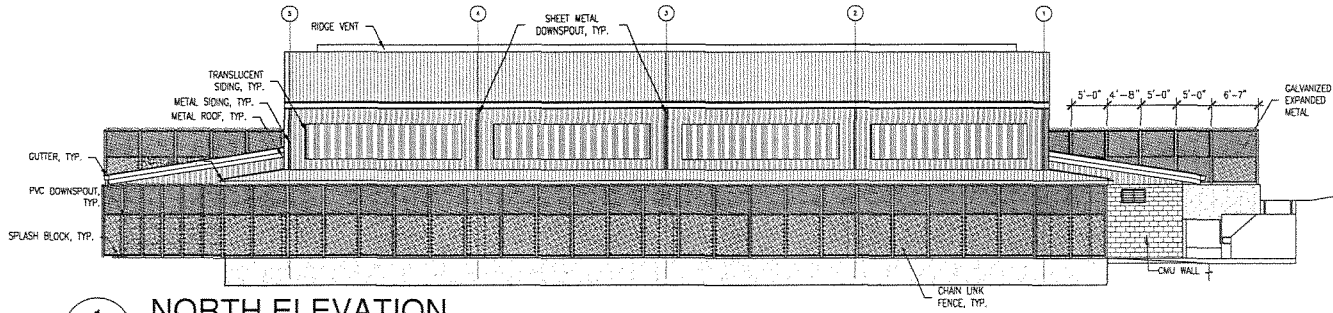
1 PLAYCOURT PLAN
A-1.1 SCALE: 1/8" = 1'-0"



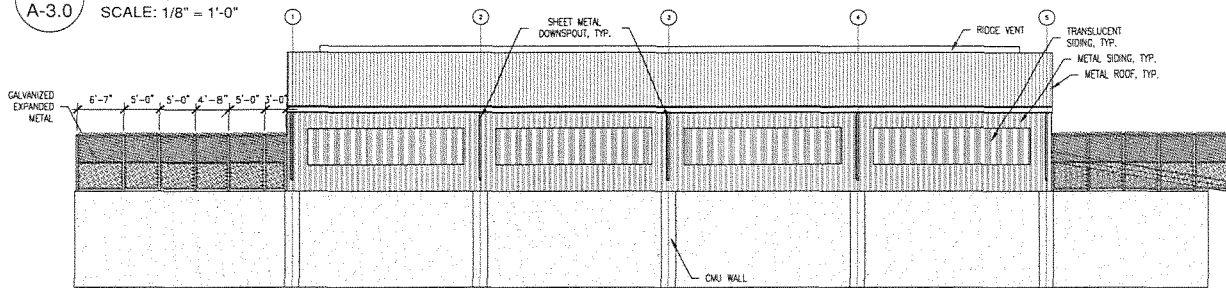
NO.	DATE	BY	CHK'D	APP'D


DEPARTMENT OF EDUCATION
 STATE OF HAWAII
 Palisades Elementary School
 Covered Play Court
 PEARL CITY OAHU HAWAII

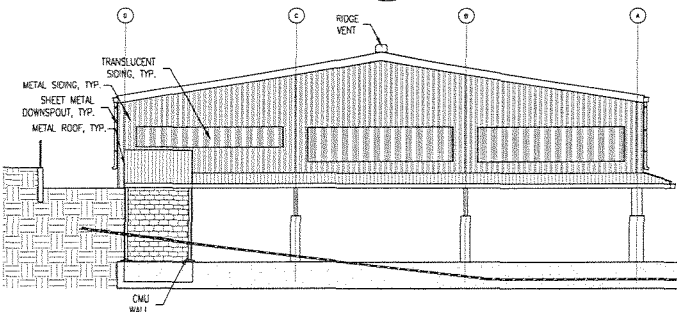
PLAY COURT PLAN
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 CHECKED: [Signature] DATE: APR. 2022
 THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONTRIBUTION OF THIS PROJECT. I AM A LICENSED PROFESSIONAL ARCHITECT.
 SIGNATURE: [Signature] DATE: APR. 2022
 LICENSE EXPIRES: APRIL 30, 2024
 TYPED: AS NOTED



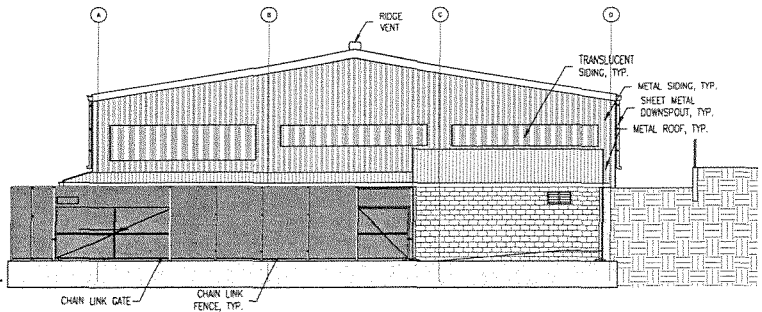
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A-3.0 SCALE: 1/8" = 1'-0"



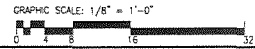
2 SOUTH ELEVATION
A-3.0 SCALE: 1/8" = 1'-0"




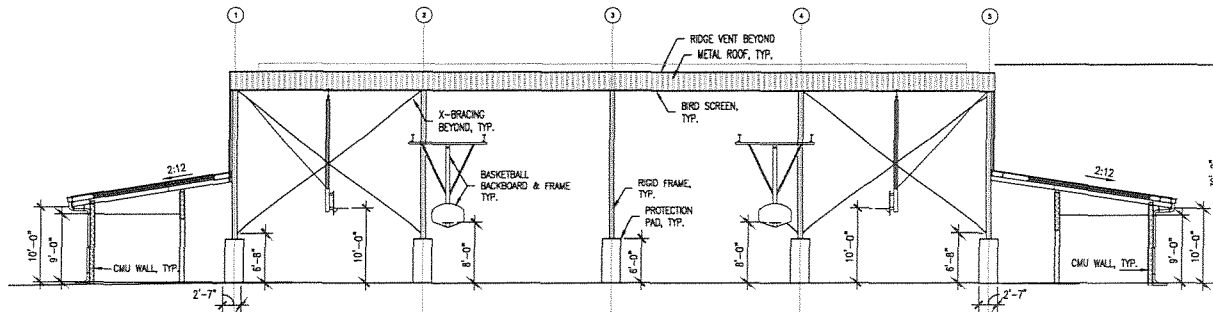
3 EAST ELEVATION
A-3.0 SCALE: 1/8" = 1'-0"



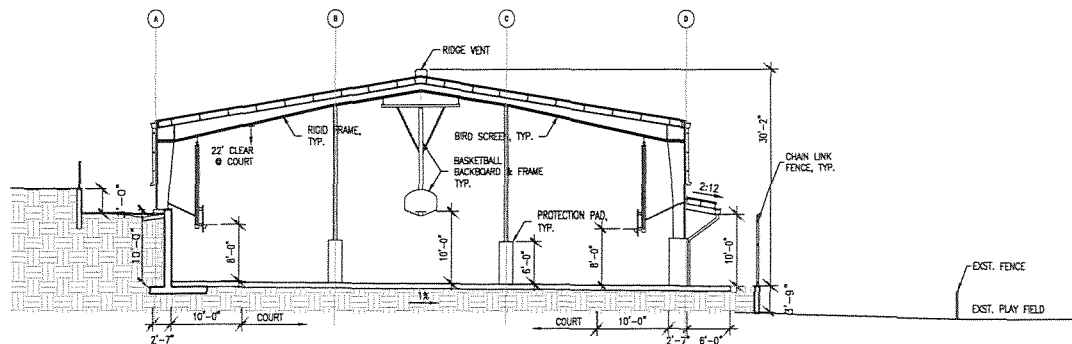
4 WEST ELEVATION
A-3.0 SCALE: 1/8" = 1'-0"



DATE	BY	APPROVED	DATE	BY	APPROVED
					
DEPARTMENT OF EDUCATION STATE OF HAWAII Paliades Elementary School Covered Play Court					
PEARL CITY		OAHU		HAWAII	
ELEVATIONS					
PACIFIC ARCHITECTS			PROJECT NO.	DATE	SCALE
			084215-18	APR 2022	A-3.0
			APRIL 2022	30	78
LICENSE EXPIRES: APRIL 30, 2024					



1 NORTH SECTION
A-4.0 SCALE: 1/8" = 1'-0"



2 EAST SECTION
A-4.0 SCALE: 1/8" = 1'-0"

GRAPHIC SCALE: 1/8" = 1'-0"



NO. 1000	NO. 1000	DATE	DATE
DEPARTMENT OF EDUCATION STATE OF HAWAII			
Pellissades Elementary School Covered Play Court			
PEARL CITY	DAHL	HAWAII	
SECTIONS			
PACIFIC ARCHITECTS		NO. 084215-19	A-4.0
DATE	DATE	DATE	DATE
APRIL 2022			
APRIL 2022			
AS NOTED			

SECTION 2 DESCRIPTION OF THE AFFECTED ENVIRONMENT

A. Background

Palisades Elementary School opened in 1955 at its current location with three permanent buildings. A fourth classroom building was added in 1967 and a Multi-Purpose Building around 1968. All buildings are two-floors in height (Department of Education, 2006).

Table 1. Campus Buildings

Building	Use	Year Built	# Floors
A	Classroom	1955	2
B	Classroom	1955	2
C	Classroom	1967	2
D	Conventional Kitchen	1955	2
No Letter	Multi-Purpose	1968	2

Source: Department of Education, 2006, As-built Plans.

Grade levels range from Kindergarten to Grade 6 and the School also has a Pre-K program. In school year 2020-2021 Kindergarten to Grade 6 and Special Education enrollment totaled 393 students (DOE Official Enrollment Count SY20-21). The design capacity is 500 students. Full-time staff numbers 61 to include administrators, faculty, clerical staff, aides, counselors, specialty positions, and support personnel.

The School is part of the Department of Education's Leeward Oahu School District, Pearl City-Waipahu Complex Area. Complex areas consist of elementary, middle, and high schools within geographic areas on Oahu. Palisades Elementary School is in the Pearl City Complex that includes Lehua, Manana, Momilani, Pearl City, Pearl City Highlands, and Waiiau Elementary Schools; Highlands Intermediate School, and Pearl City High School. Elementary schools "feed" students to the intermediate school which in turn "feed" students into high school.

B. Climate

The climate of the Pearl City area can be characterized as warm and tropical. Annual rainfall averages 50 inches with most falling between October and March. The average temperature in the project area is 71.6⁰ F (Cultural Surveys Hawai'i, 2022).

C. Topography

Ground elevation rises from 594 feet on the flat portion of the Community Park to 609 feet at the top of slope and 610 feet at Building C. The hillside slope is approximately 18%.

D. Soils

Based on Soil Conservation Soil Maps (1972) it appears that the major soil type in the project area is Helemano silty clay, 30 to 90% slopes (Symbol HLMG). For this soil runoff is medium to very rapid, permeability is moderately rapid, and the erosion hazard is severe to very severe. The covered play court will be built on Helemano soils.

A smaller area on the east side of the project area is identified as Wahiawa silty clay, 3 to 8% slopes (Symbol WaB). For this soil runoff is slow, the erosion hazard moderate, and permeability is moderately rapid.

More than likely mass grading for the school altered the surface of the soil type and imported engineered fill and topsoil altered its composition.

E. Flood Hazard and Drainage

The Flood Hazard Assessment Map for the Palisades subdivision places the lot in Other Flood Areas Zone D which is defined as “unstudied areas where flood hazards are undetermined but flooding is possible (See Figure 3)”.

F. Water Resources

1. Groundwater

Groundwater maps prepared by Mink and Lau (1990) show the Palisades area overlies the Waiawa aquifer of the Pearl Harbor aquifer sector (See Table 2). The Waiawa aquifer is characterized as an unconfined basal aquifer occurring in flank lavas. It provides fresh drinking water, is considered irreplaceable, and highly vulnerable to contamination.

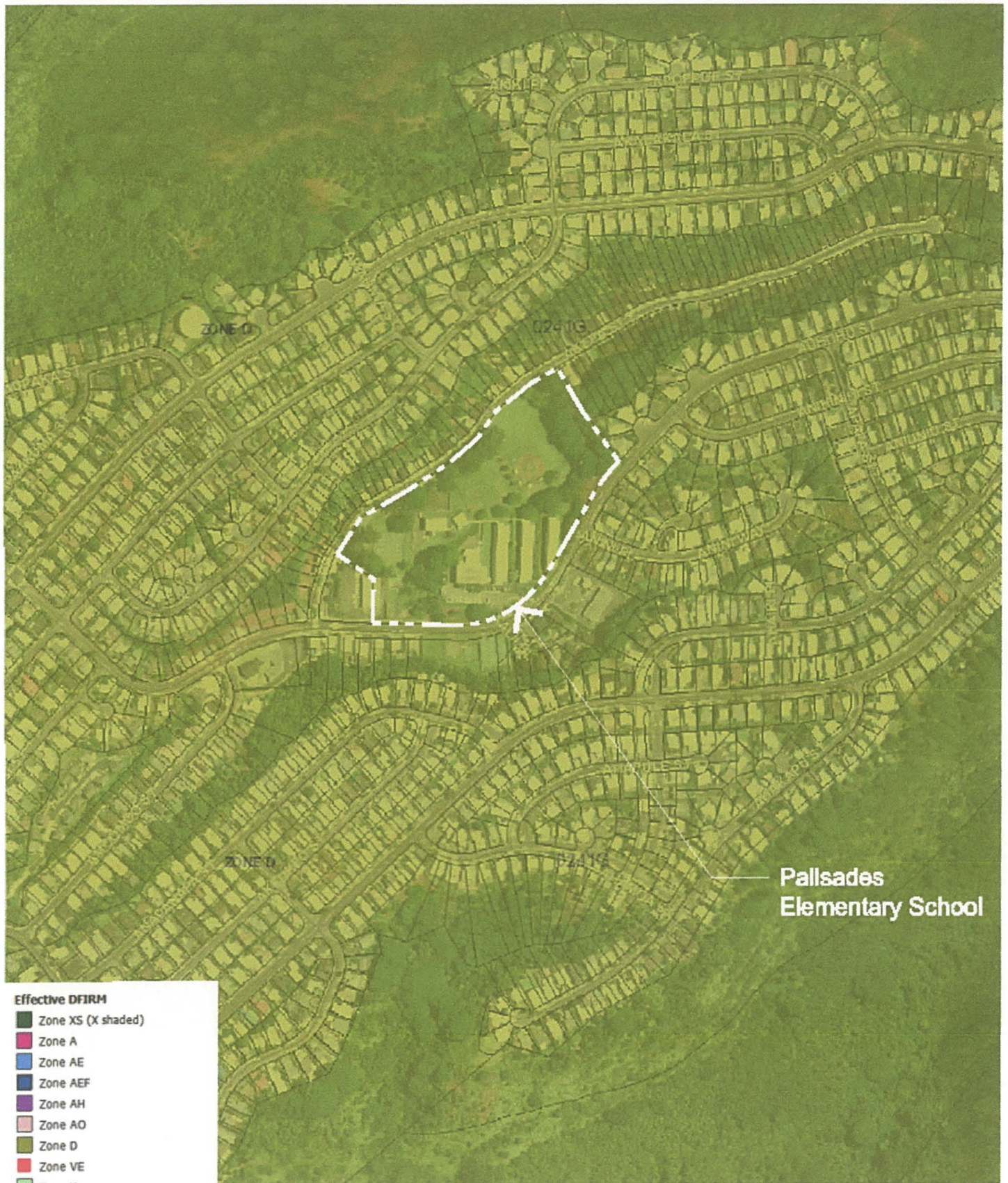
Table 2. Aquifer Classification System

Aquifer Code	30202111
Island Code	3 - Oahu
Aquifer Sector	02 - Pearl Harbor
Aquifer System	02 - Waiawa
Aquifer Type, Hydrogeology	1 - Basal
Aquifer Condition	1 - Unconfined
Aquifer Type, Geology	1 - Flank
Status Code	11111
Developmental Stage	1 - Currently Used
Utility	1 - Drinking
Salinity (mg/l Cl)	1 - Fresh (<250)
Uniqueness	1 - Irreplaceable
Vulnerability to Contamination	1 - High

Source: Mink and Lau, 1990

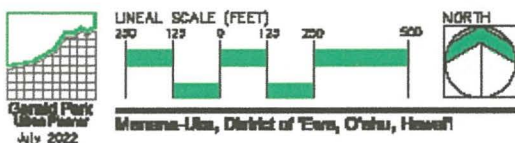
2. Surface Water

There are no freshwater streams, rivers, ponds, or wetlands on the school grounds.



Source: Flood Hazard Assessment Tool Website

Figure 4
Flood Hazard Assessment Report Map
Palisades Elementary School
Covered Play Court



G. Biological Resources

The building site and adjoining slopes support a dense vegetative canopy made up of few species. Formosan koa and satin leaf, and paperbark trees populate the slope between the School and Palisades Community Park. Single avocado and guava trees were also observed. Bougainvillea, ti, sansivera, and ginger fill spaces between the trees and wedelia covers the ground.

Monkeypod and shower tree grow on the Park grounds. A specimen monkeypod tree grows near Building C.

Domesticated or feral animals were not observed on the school campus and the adjoining public park. Cattle egret was seen browsing the school and park grounds and Brazilian cardinal and barred dove were seen perched on tree branches.

The dense vegetation probably harbors rodents and mongoose because of the proximity to food and water.

H. Historical Resources

Cultural Surveys Hawai'i (2022) conducted a Literature Review and Field Inspection report for this project. Their findings of existing conditions is excerpted from their report and recited below.

“One previous archaeological field study (Farley et al. 2018) has been conducted at the Palisades Elementary School campus but no historic properties have been identified within or within 700 m of the project area. There were no native tenant Land Commission Awards within or near the project area. Since early twentieth century map place the project area at the *mauka* (northeast) boundary of the Honolulu Plantation company (a.k.a. Honolulu Sugar Company) lands (see Figure 9 and Figure 10), it is likely that evidence of prior land use was destroyed during the plantation era.

Although historical maps indicated railroad lines and unimproved roads in the vicinity, none appear to be within the current project area, and no evidence of former plantation infrastructure was identified during the field inspection. Neither surface historic properties nor indication of subsurface historic properties were identified during the field inspection, and both the school grounds and community park surround the project area appear to have graded substantially. The prospect for potential subsurface archaeological historic properties in the project area was evaluated as very low.”

The archaeological report also included a statement about historic architecture::

“Palisades Elementary School, the site of the current project area, opened in 1965 and hence may be a historic property. A comparison of the 1968 Waipahu USGS map (see Figure 19) with the contemporary campus (see Figure 3) indicates the campus in 1968 was very much as it is today, dominated by three parallel north/south-oriented classroom buildings in the central portion of the campus with two smaller structures on the west side. Hence these five main buildings appear to be more than 50 years old and may need to be assessed as a potentially significant architectural historic property.

The evaluation in the field was that the project is unlikely to adversely affect any significant architectural historic properties in the project area and its vicinity.....”

I. Land Use and Controls

State and County land use controls are cited below:

State Land Use Designation: Urban
General Plan Development Pattern: Urbanized Area (PUC)
Development Plan (DP): Primary Urban Center - West
DP Land Use Map: Lower Density Residential
Zoning: R-5 Residential
P-2 General Preservation (See Figure 4)

Public uses and structures are permitted in the P-2 General Preservation zoning district (Land Use Ordinance, Table 21-3). Public uses and structures “mean uses conducted by or structures owned or managed by the federal government, the State of Hawaii or the city to fulfill a governmental function, activity or service for public benefit and in accordance with public policy” (Land Use Ordinance, Definitions, 1968). A public school is a typical example of public uses and structures.

J. Public Facilities

Auhuhu Street, a two-lane, two-way, all-weather surfaced roadway passing the School on the south. The street is fully improved with curbs, gutters, sidewalks, and planting strips in the right-of-way. The speed limit is 25 mph fronting the School.

Two 28-foot curb cuts separated by a raised asphalt curb island provide one-way ingress and egress from street to School. Grass and a shower tree grow within the island. From Ahuhu Street, a paved driveway accesses the School’s Cafeteria near the rear of the campus. Off-street parking is provided generally on both sides of the driveway to its terminus near Building B.

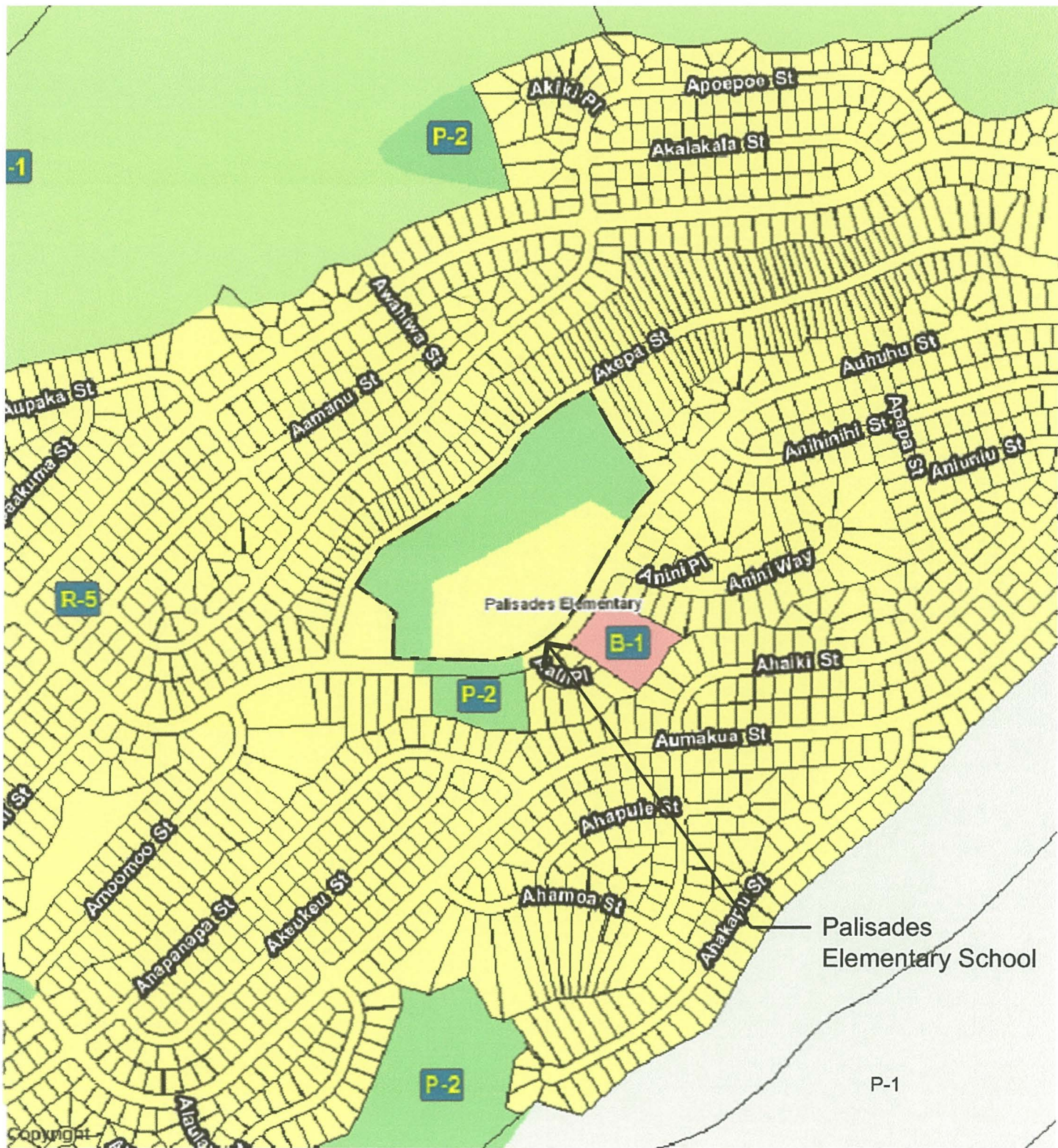
Potable water is supplied by the Board of Water Supply from a lateral in Auhuhu Street.

Fire flow to the Scholl is delivered by an 8” fire service line from Auhuhu Street.

The on-site wastewater system consists of 8” and 10” laterals. Wastewater is collected and discharged into a main in Auhuhu Street.

The Pearl City Police Station (District 3) provides police protection for communities between Red Hill on the east, Waipahu / Village Park on the west, and Gentry Waipio on the north. Located on lower Waimano Home Road near Kamehameha Highway, the station is approximately 3.1 miles south of the School.

Fire protection originates from the Pearl City Fire Station (Station 20) on Lehua Street approximately 3.5 miles south of the School.

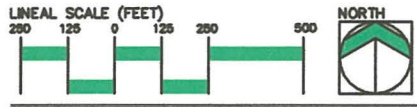


Legend

- R-5 RESIDENTIAL (5,000 SF. LOT MINIMUM)
- B-1 NEIGHBORHOOD BUSINESS DISTRICT
- AG-1 RESTRICTED AGRICULTURAL DISTRICT

- P-1 RESTRICTED PRESERVATION
- P-2 GENERAL PRESERVATION

Source: City & County of Honolulu (DPP) Website



Manana-Uka, District of Ewa, O'ahu, Hawai'i

Figure 5
Zoning
**Palisades Elementary School
Covered Play Court**

Palisades Community Park bounds the School on the north. Owned by the City, park facilities include:

- Comfort station
- Recreation Building (arts and crafts room, kiln/drying room, kitchen, meeting rooms, office)
- Two softball fields (one lighted)
- Two basketball courts (lighted)
- Two volleyball courts (lighted)
- Two tennis courts
- One tennis practice court
- Children's Play Apparatus
- 16 Parking stalls, (Department of Parks and Recreation, 1997).

The School uses the Park for P.E. and recess.

K. Views

Palisades Elementary School is not identified as viewing object to be seen in panoramic or stationary views in the Pearl City community (PUC, Map A.1, 2004).

SECTION 3

SUMMARY OF POTENTIAL ENVIRONMENTAL IMPACTS AND MEASURES TO MITIGATE ADVERSE EFFECTS

A. Assessment Process

The scope of the project was discussed with the Project Manager for the Department of Education and the consulting architect. State and County agencies were contacted for information relative to their jurisdiction, expertise, and areas of concern. Time was spent in the field surveying site conditions and conditions in the vicinity of the School. From the discussions and field investigations, existing conditions and features that could be affected by or affect the project were identified. These influencing conditions are:

- Palisades Elementary School opened in 1965;
- There are no archaeological features on the building site;
- The School has permanent structures over 50 years old that may be historic property;
- There are no rare, threatened, or endangered flora and fauna on the building site;
- There are no surface water bodies on the premises;
- Existing on-site water and sewer service is adequate;

B. Short-term Impacts

1. Air Quality

Construction will temporarily affect air quality. Demolition, grubbing, grading, stockpiling, backfilling and other soil (or earth) moving activities will raise fugitive dust that can settle in adjoining areas. Windy conditions coupled with exposed soil can create severe dust problems. The general contractor will employ dust control measures to prevent the building site and construction equipment and activities from causing significant dust generation. Continuous plywood fencing and or dust screens will be erected around the construction site.

Control measures shall comply with Chapter 60.1, Air Pollution Control, Title 11, Department of Health, State of Hawaii (and revisions thereto). The site work contractor may implement alternative methods adaptable to the scope of the improvements and features of the site.

Most construction equipment and vehicles are diesel powered and emit exhaust emissions typically high in nitrogen dioxide and low in carbon monoxide. The Federal and State nitrogen dioxide standard ---100mg/m³ per annum---which is an annual standard, is not likely to be exceeded during construction. Carbon dioxide emissions should be less than that generated by automobile traffic on adjoining streets. Aldehyde odors from diesel equipment may be detected but should be dispersed by the prevailing winds.

2. Noise

Construction noise, like fugitive dust, cannot be avoided. Exposure to noise will vary by construction phase, the duration of each phase, and the type of equipment used during the

different phases. Maximum sound levels in the range of 82-96 db(A) measured at 50 feet from the source will be generated by heavy machinery during site work. After site work is completed, reductions in sound levels, frequency, and duration can be expected as the building foundation is formed, concrete footings and flooring, and CMU walls and rigid metal framing erected to support the metal decking and roof.

Community Noise Control regulations establish maximum permissible sound levels for construction activities occurring within "acoustical" zoning districts. Based on the residential zoning for the School, it is considered to be located in the Class A zoning district for noise control purposes. The maximum permissible daytime sound level in the district attributable to stationary noise sources and equipment related to construction activities is 55 dBA during daytime (7:00 AM to 10:00 PM) and 45 dBA during nighttime (10:00 PM to 7:00 AM) (Chapter 46, Community Noise Control, 1996). As disclosed above, construction noise occasionally will exceed the 55 dBA threshold.

In general, construction activities cannot exceed the permissible noise levels for more than ten percent of the time within any twenty-minute period except by permit or variance. Any noise source that emits noise levels in excess of the maximum permissible sound levels cannot be operated without first obtaining a noise permit from the State Department of Health. Although the permit does not attenuate noise per se it regulates the hours during which excessive noise is allowed.

The general contractor will obtain and comply with conditions attached to the permit. Work will be scheduled between the hours of 7:00 AM to 3:30 PM Mondays through Fridays. The contractor will also ensure that construction equipment with motors is equipped with mufflers in proper operating condition.

Noise will be audible over the projected 12 month construction period but should not adversely interfere with classroom instruction considering the building site is located on one end of campus, the modest scale of construction, and faces the ends of Buildings B and C.

3. Erosion

Site work will create opportunities for erosion (fugitive dust and suspended sediment in runoff). Grubbing, grading, and stockpiling of excavated and imported material will be performed in accordance with the erosion control ordinance of the City and County of Honolulu, approved grading plans, and Rules for Water Quality of the Department of Planning and Permitting, City and County of Honolulu.

Best Management Practices (BMPS) for erosion and drainage control during construction will be incorporated into a detailed Erosion Control Plan. BMPs such as silt curtains erected around work sites and gravel blankets placed at vehicle access points are typical for construction sites. Additional BMPS will be considered based on-site conditions.

The overall project area is less than one acre thus a NPDES General Permit Authorizing Discharges of Storm Water Associated with Construction Activity will not be required from the State Department of Health.

4. Flora

Rare, threatened, or endangered flora or candidates for that status are not found on the building site. Recorded vegetation is primarily trees that are common to the Island of O'ahu and the State of Hawai'i.

Replacement trees will be planted but the majority of the trees will be planted off the project site on a slope on the southern edge of the school's property. A planting plan will be developed in coordination with the Department of Education Arborist to satisfy the DOE's Tree Loss mitigation requirements.

5. Historical Resources

No surface archaeological features were observed during the field investigation. In the absence of such features, environmental impacts are not anticipated.

In the event that subsurface features are unearthed, work in the immediate area will cease and the proper authorities (both historical and police) notified of the finds. Treatment and disposition of the finds will adhere to established protocols of the State Historic Preservation Division and/or the Honolulu Police Department.

6. Traffic

Vehicles carrying workers and material will contribute to traffic on Komo Mai Drive and Auhuhu Street. Material deliveries will be scheduled during non-peak traffic hours to minimize impact on school and local neighborhood traffic. As much as practical building materials will be off-loaded at a construction base yard or at the building site.

Connecting the fire service line to a fire hydrant in Auhuhu Street will require closing the *makai* bound travel lane until the connection is completed. .

Providing a turnaround for a fire apparatus will remove several parking stalls at the end of the driveway.

To minimize traffic impacts during construction, the contractor will:

- Post notices alerting drivers of scheduled work at access ways to the building site;
- Post flagmen for traffic control on Auhuhu Street;
- Schedule work to avoid student drop-off and pick-up times;
- Post warning lights during non-working hours;
- Cover open trenches with steel plates;
- Restore disturbed areas to pre-construction condition or better; and
- Coordinate construction work and traffic movement/mitigation with School administrators.
- Prepare and submit a Traffic Control Plan for review and approval if required.

7. Safety

As with any building project worker safety and the safety of persons interfacing with the job site are of paramount importance. The general contractor will coordinate with School administrators for identifying safe routes for students, workers, and vehicle movement to / from and around / adjoining the building site.

Plywood fencing or dust curtains will be erected around the building for dust containment, noise attenuation, and overall safety for school children, staff, and construction workers. Walkways near the building site may be relocated during construction for safety reasons. The contractor and School administrators will collaborate on a safety plan for the duration of construction.

C. Long-term Impacts

Anticipated long-term impacts include but are not limited to:

- Providing a covered, all-weather, multi-use structure for P.E. and recess.
- Providing a play court for basketball and volleyball which the School does not have.
- Secondary uses would include a covered space for school events.
- Shielding students from inclement weather, the sun, and heat on “hot” days thus providing for their health and safety.
- Adding a 9,625 square foot permanent structure to the existing building inventory.
- Converting currently unusable open space to a beneficial use.
- Noise may be audible when the court(s) is in use. Features that will aid in mitigating acoustical impacts include a) concrete and CMU exterior walls on three sides except the side facing Palisades Community Park; b) the ends of Buildings B and C facing the structure are built of solid concrete; c) building the structure at a lower elevation than the classroom buildings; and d) landscaping areas between the structure and classroom buildings.
- Post-development storm water runoff quantity is expected to increase due to the increase in impervious roof surface. The increase cannot be avoided and the storm water system will be designed for a “net zero increase” in runoff quantity.
- Energy costs cost will increase but can be mitigated by natural lighting and using energy efficient light fixtures/luminaries.
- Using restrooms in adjoining buildings prior to or during play.
- The structure will present a new object to be seen from the campus and Palisades Community Park. At a height of 30'-2” feet it would be at a height equivalent to the existing two-story classroom buildings.
- Over time, the structure will become part of the building “fabric” of the campus.
- The structure will not be clearly visible from ‘Auhuhu Street because of its location and the dense tree canopy at its location. The structure, however, will be visible from field locations at Palisades Community Park and from some residences along Akepa Street to the north of the Park..
- The proposed use will not affect land use controls for the property. County zoning regulations allow public uses and structures as permitted uses in the residential zoning district. Elementary schools are defined as a “public use”. Palisades Elementary School is the principal land use for the property and the covered play court an accessory to the principal use.
- The project is not anticipated to increase student enrollment.
- The building and building systems will deteriorate gradually over time.
- Regular maintenance and periodic repairs will maintain the useful life of the structure. Repair, renovation, and replacement costs will be funded by the Department of Education.

SECTION 4 ALTERNATIVES TO THE PROPOSED ACTION

A. No Action / Delay the Action

A No Action / Delay the Action alternative will maintain the status quo of the physical environment and preclude the occurrence of all impacts, short and long term, beneficial and adverse disclosed in this Assessment. A No Action alternative will not achieve the stated objectives of the project. Delaying the Action only suspends the project until such time that it can be constructed.

B. Alternative Location

There is no alternative location for the play court on the school campus.

SECTION 5
AGENCIES AND ORGANIZATIONS ~~[TO BE]~~ CONSULTED
IN THE ENVIRONMENTAL ASSESSMENT PROCESS

*The Draft Environmental Assessment for the Palisades Elementary School Covered Play Court was published in the Environmental Review Program Environmental Notice of March 23, 2023. Publication initiated a 30-day public review period ending on April 24, 2023. The Draft Environmental Assessment was distributed to the agencies and organizations listed below requesting their comments. An asterisk * identifies agencies that submitted written comments during the review period. All comment letters and responses are found in Exhibit A.*

State of Hawai'i

Department of Land and Natural Resources
Historic Preservation Division
Department of Health Clean Air Branch

City and County of Honolulu

***Board of Water Supply**

*Department of Planning and Permitting
Department of Parks and Recreation
Department of Transportation Services
*Honolulu Fire Department

Other

Pacific Palisades Community Association
*Hawaiian Electric Company
Pearl City Neighborhood Board No. 22
Pearl City Public Library (Placement)

SECTION 6 PERMITS AND APPROVALS

Permits and approvals required for the project and approving authorities are listed below. Additional permits and approvals may be required pending final construction plans.

State of Hawai'i

Department of Health

Variance from Pollution Control (Noise Permit)
Disability and Communications Access Board

Department of Land and Natural Resources

State Historic Preservation Division – Chapter 6E Review

City and County of Honolulu

Board of Water Supply

Building Permit and Construction Plan Review

Department of Planning and Permitting

Grubbing, Grading, and Stockpiling Permit
Building Permit for Building, Electrical, Plumbing, Sidewalk/Driveway and Demolition Work
Waiver (Height and Lot Area)

Department of Transportation Services

Street Usage Permit

Honolulu Fire Department

Plan Check

SECTION 7 DETERMINATION OF SIGNIFICANCE

Hawai'i Administrative Rules, Title 11, Department of Health, Chapter 200.1 (Environmental Impact Statement Rules) establishes criteria for determining whether an action may have significant effects on the environment (§11-200.1-13). The relationship of the proposed project to these criteria is discussed below.

- 1) Irrevocably commit a natural, cultural, or historic resource;

Natural, cultural, and historic resources were not observed on the premises. Should site work encounter subsurface deposits work in the immediate area will cease and authorities notified of the finds.

- 2) Curtail the range of beneficial uses of the environment;

The proposed improvements are considered a beneficial use of the sloping terrain as there are no flat areas or other areas on campus for locating the covered play court.

- 3) Conflict with the State's environmental policies or long-term environmental goals established by law;

The project does not conflict with long-term environmental policies, goals, and guidelines of the State of Hawaii.

- 4) Have a substantial adverse effect on the economic welfare, social welfare, or cultural practices of the community and State;

The project will not substantially affect the economic or social welfare of the State.

- 5) Have a substantial adverse effect on public health;

Public health will not be affected. Short-term environmental impacts in the form of fugitive dust, construction noise, and erosion can be expected during construction. These impacts can and will be mitigated by measures described in this Assessment.

- 6) Involve adverse secondary impacts, such as population changes or effects on public facilities;

Substantial secondary impacts on public facilities are not anticipated.

- 7) Involve a substantial degradation of environmental quality;

A substantial degradation of environmental quality is not anticipated in the short and long terms.

- 8) Be individually limited but cumulatively have substantial adverse effect upon the environment or involves a commitment for larger actions;

The project does not involve a commitment for larger actions.

- 9) Have a substantial adverse effect on a rare, threatened or endangered species, or its habitat;

*Rare, threatened, or endangered flora and fauna are not present on the building site
Trees to be removed are considered invasive species .*

- 10) Have a substantial adverse effect on air or water quality or ambient noise levels;

Site work is the first major activity and grubbing, grading, and excavation generally result in impacts on air quality, ambient noise levels, and water quality. Construction will generate noise that will be audible in nearby classrooms and dust can settle outside the project limits. Site work and building contractors are aware of dust and noise impacts and will comply with air quality and noise regulations of the State Department of Health.

The general contractor will implement measures for controlling erosion and safe guarding water quality during construction and post-construction. Mitigating measures are prescribed in the Rules for Water Quality, Department of Planning and Permitting, City and County of Honolulu.

The general contractor can also implement measures based on experience with similar job sites, site conditions, and recommendations from School administrators.

- 11) Have a substantial adverse effect on or be likely to suffer damage by being located in an environmentally sensitive area such as a flood plain, tsunami zone, sea level rise exposure area, beach, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal waters;

Palisades Elementary School is not located in an environmentally sensitive area and this criterion does not apply.

- 12) Have a substantial adverse effect on scenic vistas and view planes, day or night, identified in county or state plans or studies, or,

Scenic vistas and view planes of Palisades Elementary School are not identified in state and county plans. This criterion should not apply.

- 13) Require substantial energy consumption or emit substantial greenhouse gases.

Substantial energy consumption is not anticipated.

REFERENCES

- Cultural Surveys Hawai'i. June 2022. *Archaeological Literature Review and Field Inspection Report for the Palisades Elementary School Covered Play Court Project, Mānana Ahupua'a, 'Ewa District O'ahu. TMKs: [1] 9-7-093: 016 (por.) and [1] 9-7-093L 999 (por.) Auhuhu Street ROW. DOE Project No. Q84215-19.*
- Department of Education, State of Hawai'i. December 2006. *Facilities Inventory System Comprehensive Report – Palisades Elementary School.*
- Department of Land and Natural Resources, Engineering Division. *Flood Hazard Assessment Report.* November 2014. Community Panel No. 15003C0241G. Effective Date January 19, 2011.
- Department of Parks and Recreation, City and County of Honolulu. April 1997. *Index of O'ahu Parks and Facilities.*
- Department of Planning and Permitting, City and County of Honolulu. June 2004. *Primary Urban Center Development Plan.* Ordinance 04-14.
- Department of Planning and Permitting, City and County of Honolulu. December 2008. *Land Use Ordinance.* Ordinance No. 86-96 as Amended.
- Department of Planning and Permitting, City and County of Honolulu. January 2022. *O'ahu General Plan, Resolution 21-023, CD 1.*
- Mink, John F. and L. Stephen Lau. February 1990 Revised. *Aquifer Identification and Classification for O'ahu: Groundwater Protection Strategy for Hawai'i.* Water Resources Research Center, University of Hawaii at Manoa.
- Pacific Architects. 2022. Project Plans. Prepared for Department of Education, State of Hawai'i.
- Park, Gerald Urban Planner. June 2022. *Site Inspection.*
- Tree Solutions and Environmental Consulting Services, Inc. November 2021, April 2022. *Palisades Elementary School Playcourts. [Arborist Reports]*
- U.S. Department of Agriculture, Soil Conservation Service. 1972. *Soil Survey Report for Islands of Kauai, O'ahu, Maui, Molokai, and Lanai, State of Hawai'i.* In Cooperation with the University of Hawai'i Agricultural Experiment Station.

EXHIBIT A COMMENT LETTERS AND RESPONSES

BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU
630 SOUTH BERETANIA STREET
HONOLULU, HI 96843
www.boardofwatersupply.com



March 31, 2023

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ERNEST Y. W. LAU, P.E.
Manager and Chief Engineer

ERWIN M. KAWATA
Deputy Manager

Mr. Gerald Park
Gerald Park Urban Planner
95-595 Kaname'e Street, #324
Mililani, Hawaii 96789



Dear Mr. Park:

Subject: Your Letter Dated March 16, 2023 Requesting Comments on the Draft Environmental Assessment for Palisades Elementary School Covered Play Court off Auhuhu Street, Tax Map Key: 9-7-093: 016

Thank you for the opportunity to comment on the proposed elementary school covered play court project.

The existing water system is adequate to accommodate the proposed development. However, please be advised that this information is based upon current data, and therefore, the Board of Water Supply reserves the right to change any position or information stated herein up until the final approval of the building permit application. The final decision on the availability of water will be confirmed when the building permit application is submitted for approval.

When water is made available, the applicant will be required to pay our Water System Facilities Charges for resource development, transmission, and daily storage.

Water conservation measures are required for all proposed developments. These measures include utilization of nonpotable water for irrigation using rain catchment, drought tolerant plants, xeriscape landscaping, efficient irrigation systems, such as a drip system and moisture sensors, and the use of Water Sense labeled ultra-low flow water fixtures and toilets.

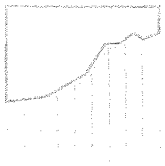
The on-site fire protection requirements should be coordinated with the Fire Prevention Bureau of the Honolulu Fire Department.

If you have any questions, please contact Robert Chun, Project Review Branch of our Water Resources Division at (808) 748-5443.

Very truly yours,


ERNEST Y. W. LAU, P.E.
Manager and Chief Engineer

KA



GERALD PARK
Urban Planner



Urban Planner

Urban Planner

Urban Planner

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Urban Planner

Urban Planner

Urban Planner

May 17, 2023

Ernest W. Lau, P.E., Manager
Board of Water Supply
630 South Beretania Street
Honolulu, HI 96813

Dear Manager Lau:

Subject: Palisades Elementary School Covered Play Court
2306 Auhuhu Street
Pearl City, Hawai'i
Tax Map Key: [1] 9-7-093: 016

Thank you for reviewing and commenting on the Draft Environmental Assessment prepared for the Palisades Elementary School Covered Play Court. We offer the responses below to the agency's comments in the order they were presented.

Water Availability

A statement that the existing water system is adequate to accommodate the proposed development will be included in the Final Environmental Assessment.

Water Conservation

Plants chosen for the landscaping can tolerate the moisture level of the area and have minimum irrigation requirements. The landscape contractor will provide temporary irrigation and maintenance for several months to assure the plants are established. After the maintenance period the contractor will remove the temporary irrigation system. A permanent irrigation system will not be provided.

Restrooms will not be provided at the play court.

Fire Requirements

Fire protection requirements will be coordinated with the Fire Prevention Bureau of the Honolulu Fire Department.

Board of Water Supply participation of the in the environmental assessment review process is appreciated.

Sincerely,

GERALD PARK URBAN PLANNER

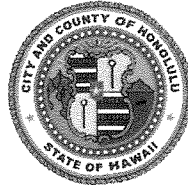
Gerald Park, Principal

c: A. Geonzon, DOE
C. Murakami, Pacific Architects

HONOLULU FIRE DEPARTMENT
CITY AND COUNTY OF HONOLULU

636 South Street
Honolulu, Hawaii 96813-5007
Phone: 808-723-7139 Fax: 808-723-7111 Internet: www.honolulu.gov/hfd

RICK BLANGIARDI
MAYOR



SHELDON K. HAO
FIRE CHIEF

JASON SAMALA
DEPUTY FIRE CHIEF

March 31, 2023



Mr. Gerald Park, Principal
Gerald Park Urban Planner
95-595 Kanamee Street, Unit 324
Mililani, Hawaii 96789

Dear Mr. Park:

Subject: Draft Environmental Assessment
Palisades Elementary School Covered Playcourt
2306 Auhuhu Street
Pearl City, Hawaii 96782
Tax Map Key: 9-7-093: 016 Portion.

In response to your letter received on March 20, 2023, regarding the abovementioned subject, the Honolulu Fire Department (HFD) reviewed the submitted information and requires that the following be complied with:

1. Fire department access roads shall be provided such that any portion of the facility or any portion of an exterior wall of the first story of the building is located not more than 150 feet (46 meters) from fire department access roads as measured by an approved route around the exterior of the building or facility. (National Fire Protection Association [NFPA] 1; 2018 Edition, Sections 18.2.3.2.2 and 18.2.3.2.2.1, as amended.)

A fire department access road shall extend to within 50 feet (15 meters) of at least one exterior door that can be opened from the outside and that provides access to the interior of the building. (NFPA 1; 2018 Edition, Section 18.2.3.2.1.)

2. The fire department access roads shall be in accordance with NFPA 1; 2018 Edition, Section 18.2.3.

Mr. Gerald Park, Principal
Page 2
March 31, 2023

3. An approved water supply capable of supplying the required fire flow for fire protection shall be provided to all premises upon which facilities, buildings, or portions of buildings are hereafter constructed or moved into the jurisdiction. The approved water supply shall be in accordance with NFPA 1; 2018 Edition, Sections 18.3 and 18.4.
4. Submit civil drawings to the City and County of Honolulu's Department of Planning and Permitting and route them to the HFD for review and approval.

The abovementioned provisions are required by the HFD. This project may necessitate that additional requirements be met as determined by other agencies.

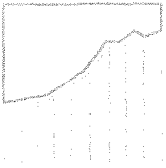
Should you have questions, please contact Acting Battalion Chief Kendall Ching of our Fire Prevention Bureau at 808-723-7154 or kching3@honolulu.gov.

Sincerely,



CRAIG UCHIMURA
Acting Assistant Chief

CU/MD:bh



GERALD PARK
Urban Planner

■
Planning
Civil Blue
Residential
Environmental
Traffic
■
751 North Kamehameha St
#104
Honolulu, Hawaii
96813
■
Telephone:
(808) 933-3020
E-mail:
gerald@geraldpark.com

May 17, 2023

Sheldon K. Hao, Fire Chief
Honolulu Fire Department
City and County of Honolulu
636 South Street
Honolulu, HI 96813-5007

Dear Fire Chief Hao:

Subject: Palisade Elementary School Covered Play Court
2306 Auhuhu Street
Pearl City, Hawai'i
Tax Map Key: [1] 9-7-093: 016

Thank you for reviewing and commenting on the Draft Environmental Assessment prepared for the Subject project. We offer the responses below in the order your comments were presented.

1. An existing two-way driveway along the west / north property line from Auhuhu Street dead ends near Buildings B and C. The driveway will serve as a fire lane. A turnaround for the fire apparatus will require removing four existing parking stalls and a section of retaining wall at the dead end.
2. For most of its length the driveway is 20 feet wide. A 22-foot wide turnaround at the end of the driveway will be modified for a fire apparatus turnaround.
3. The project includes connecting a new 8" fire line to an existing 8" line in Auhuhu Street to a new fire hydrant to be constructed at the end of the driveway. The line is sized to deliver 750 gallons per minute.
4. Civil drawings will be submitted to the Department of Planning and Permitting and routed to the Honolulu Fire Department for review and approval.

Honolulu Fire Department participation in the environmental assessment review process is appreciated.

Sincerely,

GERALD PARK URBAN PLANNER

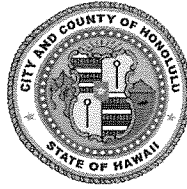
Gerald Park, Principal

c: A. Geonzon, DOE
C. Murakami, Pacific Architects

DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 7TH FLOOR • HONOLULU, HAWAII 96813
PHONE: (808) 768-8000 • FAX: (808) 768-6041
DEPT. WEB SITE: www.honolulu.gov/dpp

RICK BLANGIARDI
MAYOR



DAWN TAKEUCHI APUNA
DIRECTOR

JIRO A. SUMADA
DEPUTY DIRECTOR

March 31, 2023

2023/ELOG-569 (EK)

Mr. Gerald Park
GERALD PARK Urban Planner
95-595 Kanamee Street Unit 324
Mililani, Hawaii 96789



Dear Mr. Park:

SUBJECT: Draft Environmental Assessment
Palisades Elementary School Covered Playcourt Project
2282 Auhuhu Street – Pearl City
Tax Map Key 9-7-039: 016

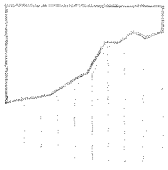
This responds to your request, received March 20, 2023, for comments on the Draft Environmental Assessment (EA) for the subject project. The Draft EA indicates the site is comprised of one zoning lot in two zoning districts, the R-5 Residential and P-2 General Preservation Districts, and is developed with both a public elementary school and a public park. Both the school and park are considered public uses and structures for purposes of the Land Use Ordinance (LUO), Chapter 21, Revised Ordinances of Honolulu. A public use and structure is a use common to both zoning districts. As such, the standards of LUO Section 21-4.50. The Draft EA also indicates that a Zoning Waiver will be necessary for the height and lot area (building area) of the project. Before submitting the Zoning Waiver application, the Applicant should determine the building area maximum for the overall site based on the formula in LUO Section 21-4.50. If the lot coverage is approaching the maximum allowance, calculations for the building area of the existing and proposed structures of both the school and park will need to be provided.

Thank you for the opportunity to comment. Should you have any questions, please contact Elizabeth Krueger, of our staff, at (808) 768-8011 or ekrueger@honolulu.gov.

Very truly yours,

A handwritten signature in black ink, appearing to read "Dawn Takeuchi Apuna".

FIR: Dawn Takeuchi Apuna
Director



GERALD PARK
Urban Planner



Planning

Permitting

Research

Environmental

Studies



2160 Palisades Ave

10104

Honolulu, Hawaii

70819



Website

www.geraldpark.com

Phone

808.943.9999

May 17, 2023

Dawn Takeuchi Apuna, Director
Department of Planning and Permitting
City and County of Honolulu
650 S. King Street, 7th Floor
Honolulu, HI 96813

Dear Director Apuna:

Subject: Palisades Elementary School Covered Play Court
2306 Auhuhu Street
Pearl City, Hawai'i
Tax Map Key: [1] 9-7-093: 016
2023/ELOG-569 (EK)

Thank you for reviewing and commenting on the Draft Environmental Assessment prepared for the Palisades Elementary School Covered Play Court. We offer the response below to the agency's comment about building area for the overall site.

Parcel 016 is owned by the City and County of Honolulu and shared by the Department of Parks and Recreation (Palisades Community Park) and the Department of Education (Palisades Elementary School). The portion of the lot occupied by the park is zoned P-2 and the portion occupied by school is zoned R-5. Because the lot is split zoned it was advised that the allowable building area be calculated using a formula in LUO Section 21-4.50. Our calculations are attached.

The calculation indicates that the maximum building area is 55,147.55 square feet. Building area coverage for the four school buildings and the proposed play court is 37,178.9 square feet. The park has a building area coverage of 4,938.8 square feet for a community center and comfort station. The combined building area for the school and park is 42,117.79 square feet. The combined coverage is below the maximum and a Waiver for exceeding the building area should not be required.

A Waiver to exceed the allowable building height will be applied for.

Participation of the Department of Planning and Permitting in the environmental assessment review process is appreciated.

Sincerely,

GERALD PARK URBAN PLANNER

Gerald Park, Principal

Attachment

c: A. Geonzon, DOE
C. Murakami, Pacific Architects

April 11, 2023

Palisades Elementary School Covered Play Court
DOE Project Number: Q84215-19

ZONING LOT COVERAGE CALCULATIONS

City & County of Honolulu "Pacific Palisades Park":

Zoning: P-2 Preservation (portion of TMK: 97093016)
Use: Public Uses and Structure – Public Community Park
Total Lot Area: 7.380 Ac. or 321,457 Square Feet (P2 zone)
Maximum Lot Coverage: 5% (16,072.85 Square Feet.)
 Community Building: 3029.34 Square Feet
 Rest Rooms: 1909.86 Square Feet
Total Building Lot Area: 4,938.8 Square Feet
Building Lot Coverage: 1.5%

Palisades Elementary School:

Zoning: R5 Residential (portion of TMK: 97093016)
Use: Public Uses and Structure – Elementary School
Total Lot Area: 5.117 Ac. or 222,896 Square Feet (R5 zone)
Maximum Lot Coverage: 50% (111,448 Square Feet.)
Building Lot Coverage Area:
 Building A: 6,836 Square Feet
 Building B: 7,671.5 Square Feet
 Building C: 5,430 Square Feet
 Building D: 7,332 Square Feet
 New Covered Playcourt: 9,909.43 Square Feet
Total Building Lot Coverage Area: 37,178.93 Square Feet
Building Lot Coverage: 17%

Total Combined Building Lot Coverage: 42,117.79 Square Feet

A(School R-5 Maximum Allowable Lot Coverage)= 111,448 Square Feet

B(Park P-2 Maximum Allowable Lot Coverage)= 16,072 Square Feet

C=222,896 Square Feet

Total Area= 544,064 Square Feet

$$\text{FAR} = \frac{(111,448 - 16,072) \times 222,896}{544,064} + 16,072$$

$$= 95,376 \times 0.4097 + 16,072$$

$$= 55,147.55 \text{ Square Feet Maximum Allowable Lot Coverage}$$

Gerald Park

From: Liu, Rouen <rouen.liu@hawaiianelectric.com>
Sent: Thursday, April 20, 2023 1:38 PM
To: gpark@gpup.biz
Cc: Kuwaye, Kristen; aaron.geonzon@k12.hi.us
Subject: DEA - Palisades Elementary School Covered Playcourt



Dear Mr. Park,

Thank you for the opportunity to comment on the subject project exemption declaration. Hawaiian Electric Company has no objection. Should Hawaiian Electric have existing easements and facilities on the subject property, we will need continued access for maintenance of our facilities. We appreciate your efforts to keep us apprised of the subject project in the planning process. As the proposed Palisades Elementary School Covered Playcourt project comes to fruition, please continue to keep us informed.

Should there be any questions, please contact me at 808-543-7245.

Thank you,
Rouen Liu
Permit Engineer
Hawaiian Electric Company

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