

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

OFFICE OF FACILITIES AND OPERATIONS

March 1, 2023

TO: Mr. Scott Glenn
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, Hawaii Revised Statutes, Draft Environmental Assessment and Anticipated 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 has reviewed the Draft Environmental Assessment for the Palisades Elementary School Covered Play Court and has issued an Anticipated Finding of No Significant Impact (DEA-AFONSI) 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 Draft 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: Tuesday, March 14, 2023 12:11:02 PM

Action Name

Palisades Elementary School Covered Playcourt

Type of Document/Determination

Draft environmental assessment and anticipated finding of no significant impact (DEA-AFNSI)

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, Chapter 6E Review, Building Permit and Construction Plan Review, Grubbing Grading and Stockpiling, Building Permit, Waiver, Street Usage, Fire Department 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

Office of Facilities and Operation
3633 Waialae Avenue, Room
Honolulu, H 96816
United States
[Map It](#)

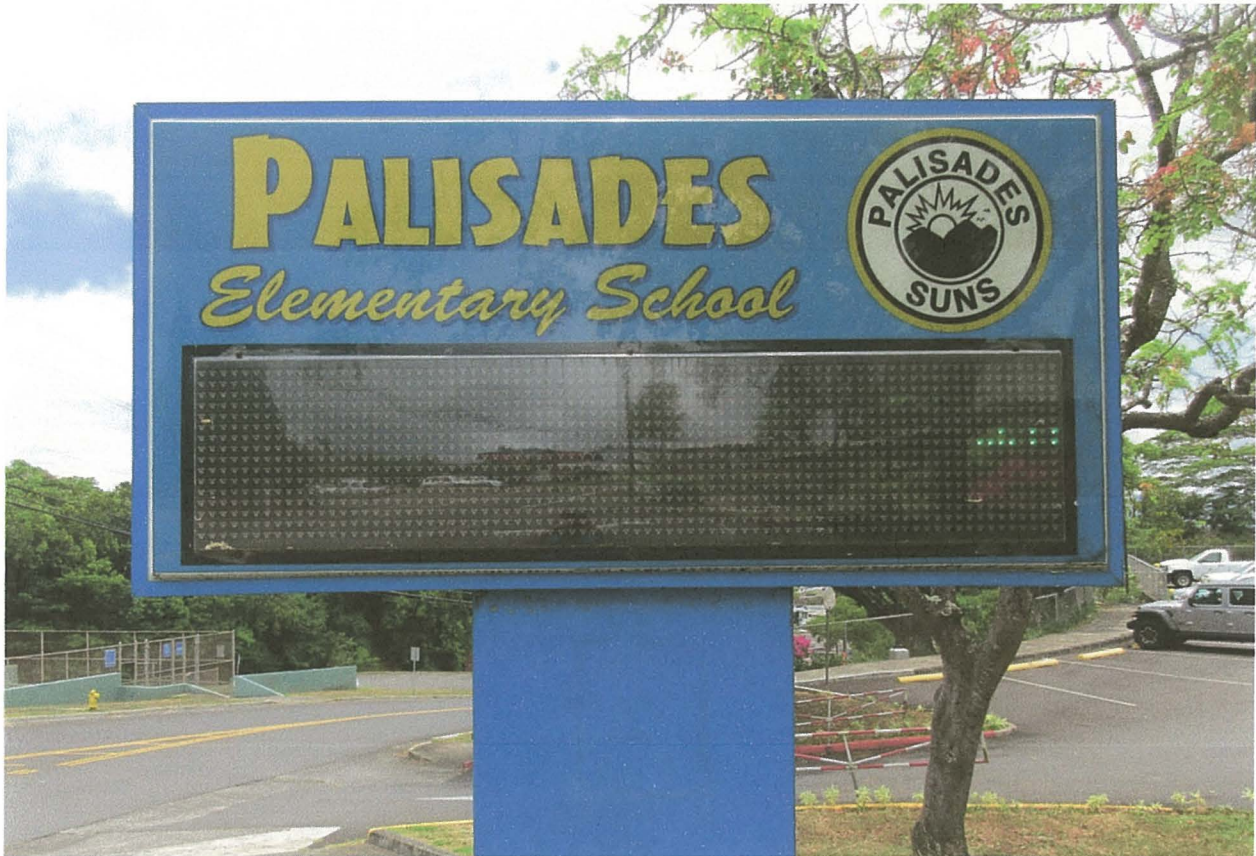
Was this submittal prepared by a consultant?

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 Draft EA, Section 7, Determination of Significance
Attached documents (signed agency letter & EA/EIS)
<ul style="list-style-type: none">• Palisades-Elem.-School.pdf• FONSI-Letter-Palisades-ES-Playcourt.pdf
Action location map
<ul style="list-style-type: none">• Palisades-Elementary-Figure-1-Standard.zip
Authorized individual
Gerald Park
Authorization
<ul style="list-style-type: none">• The above named authorized individual hereby certifies that he/she has the authority to make this submission.

DRAFT 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

December 2022

DRAFT 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 Waialae 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

December 2022

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

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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.

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.

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.

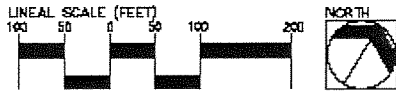
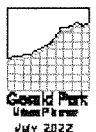
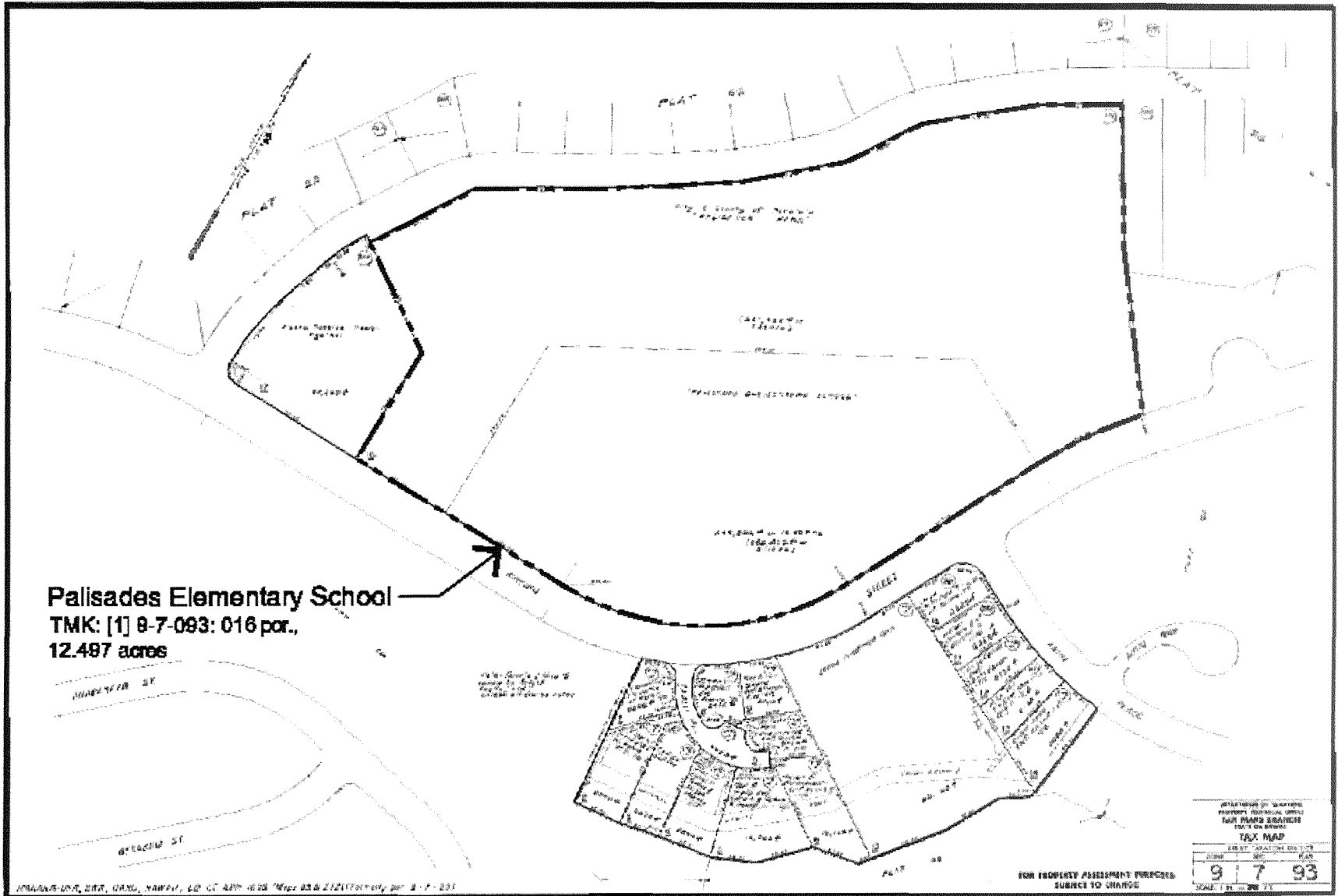
C. Economic Characteristics

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.



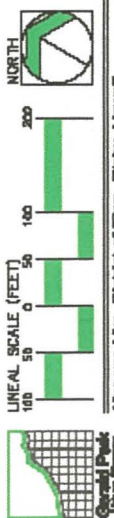
Manana-Uka, District of Ewa, O'ahu, Hawaii

Figure 2
 Tax Map
 Palisades Elementary School
 Covered Play Court



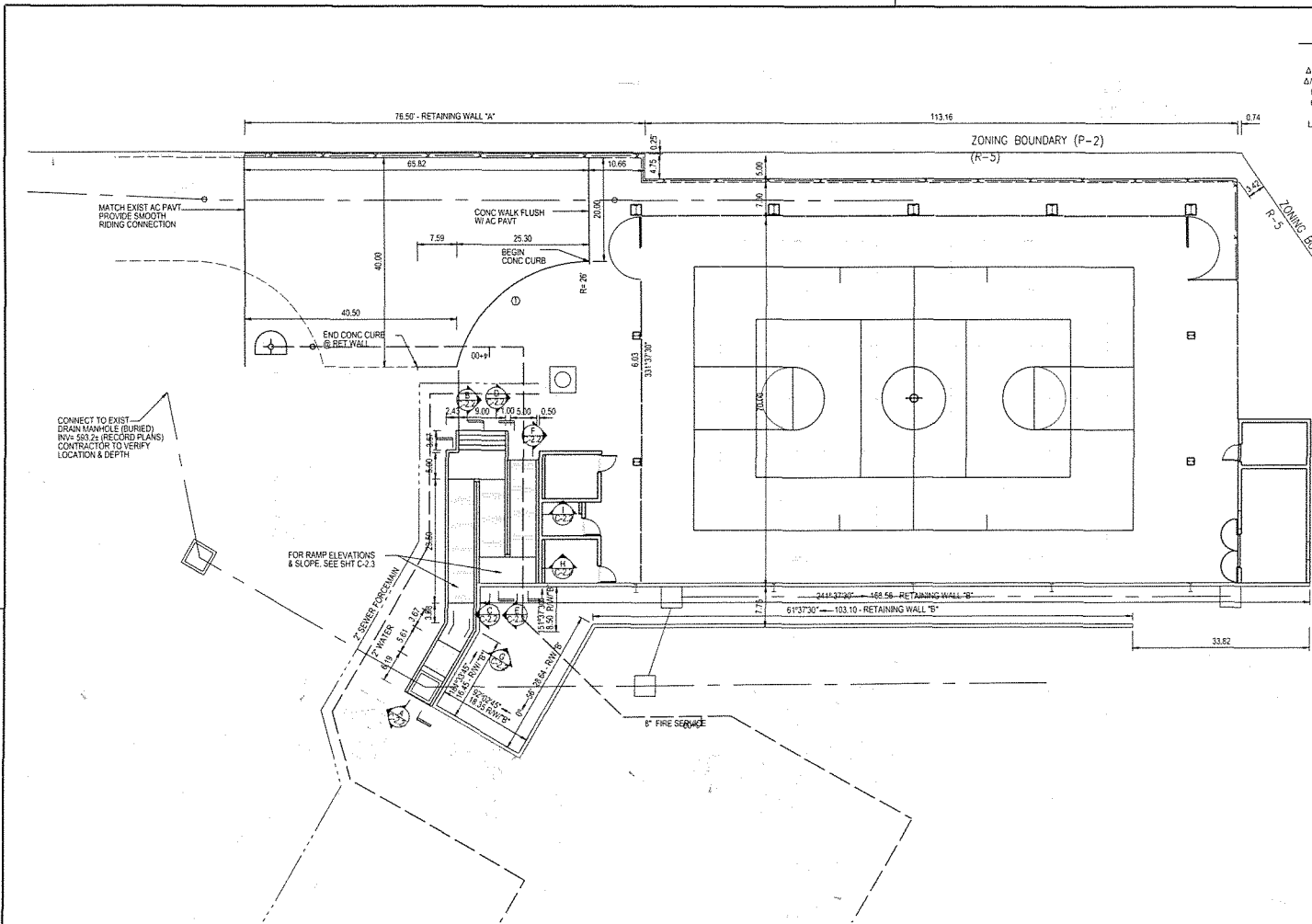
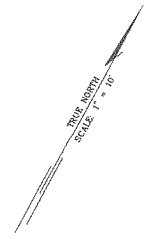
Source: Google Maps 2022 Imagery

Figure 3
Campus Map
Palisades Elementary School
Covered Play Court

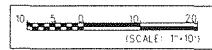


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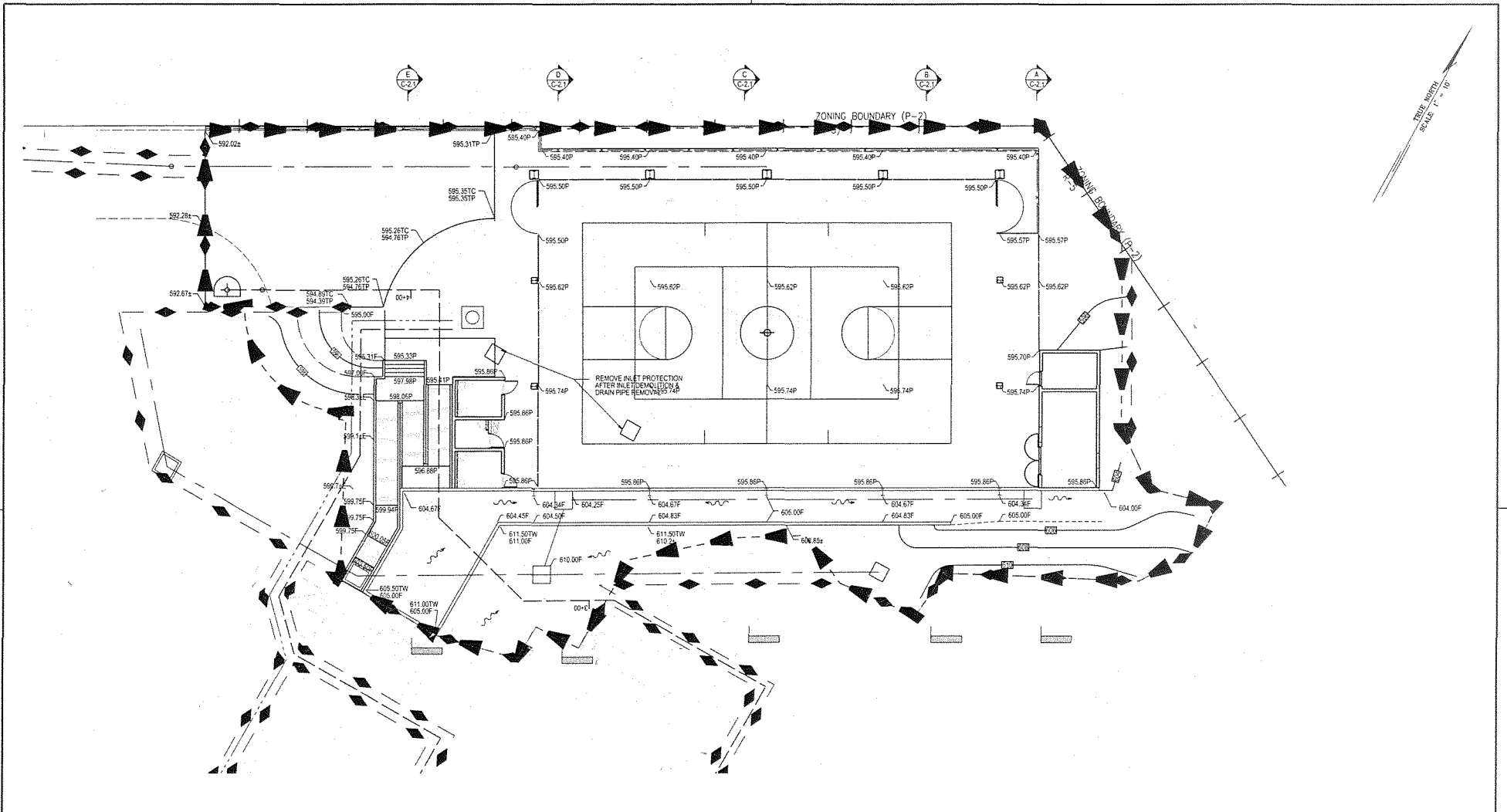
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 $C = 32.25$
 $T = 20.55$
 $L = 34.79$



REVISION NO.	DATE	APPROVED
STATE OF HAWAII		
PALISADES ELEMENTARY SCHOOL COVERED PLAYCOURT		
PEARL CITY	OAHU	HAWAII
SITE PLAN		
<small>THIS BOOK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE MADE BY ME OR MY ASSISTANT.</small>		
<small>ENGINEER EXPIRATION DATE: APRIL 30, 2024</small>		
DESIGNED BY:	CHECKED BY:	JOB NO.:
CS	CS	084215-19
DRAWN BY:	APPROVED BY:	DATE:
KSE	CS	
SCALE:	AS NOTED	APRIL 2022
FILE:	DRAWER:	FOLDER:



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



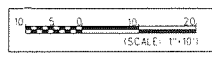
LEGEND

- 10 4. 10 4+E SPOT ELEVATION EXISTING
- 10 10 P SPOT ELEVATION FINISH TOP PAVEMENT
- 10 10TC 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

EXC = 450 C.Y.
 EMB = 50 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.



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

REVISION NO.	DATE	DESCRIPTION	BY	DATE	APPROVED

DONALD J. SULLIVAN
 LICENSED PROFESSIONAL ENGINEER
 No. 4224-C
 HAWAII, U.S.A.

STATE OF HAWAII

PALISADES ELEMENTARY SCHOOL COVERED PLAYCOURT

PEARL CITY OAHU HAWAII

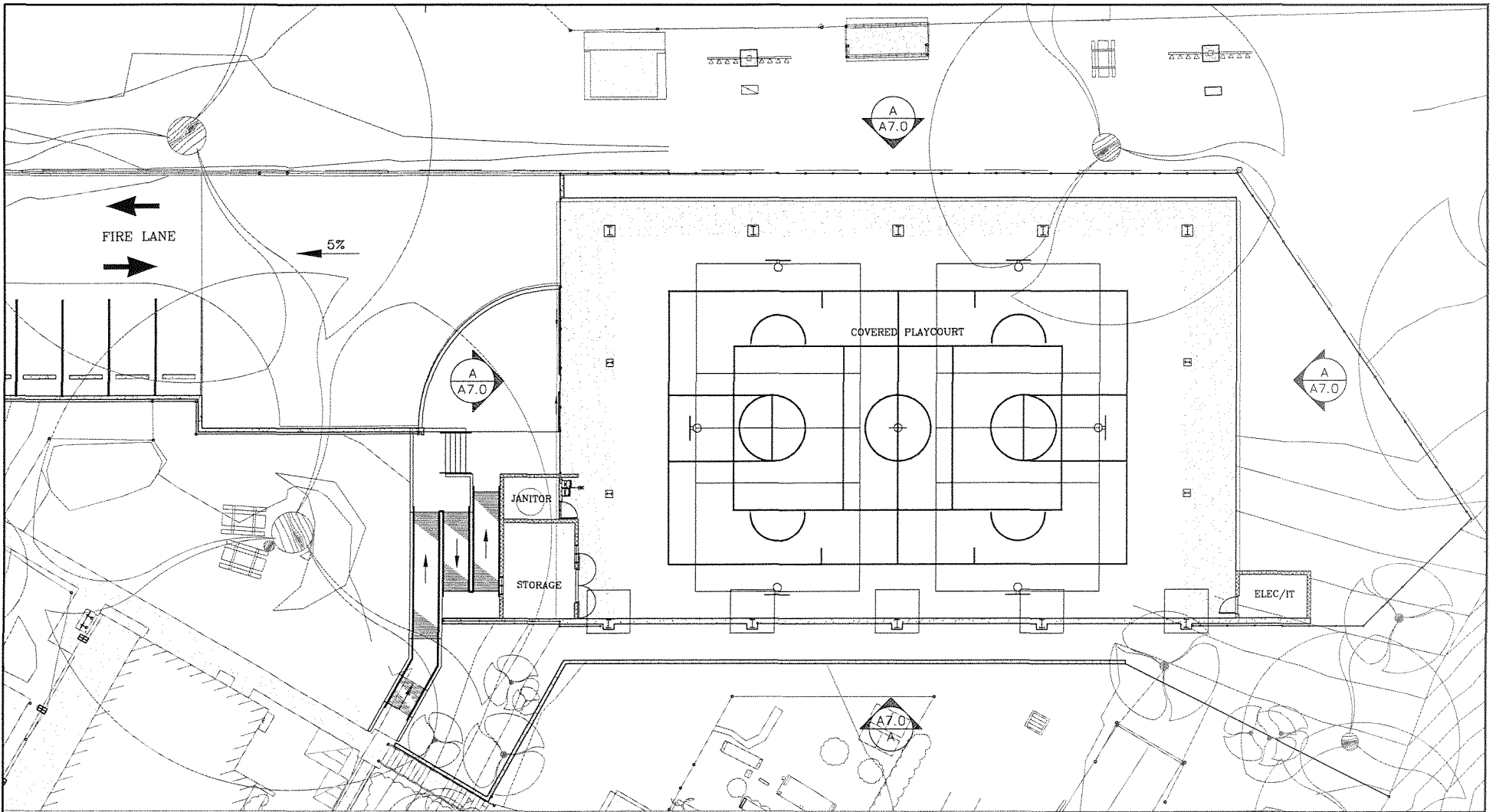
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JOB NO. 084215-19

SHEET C-1.4

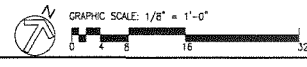
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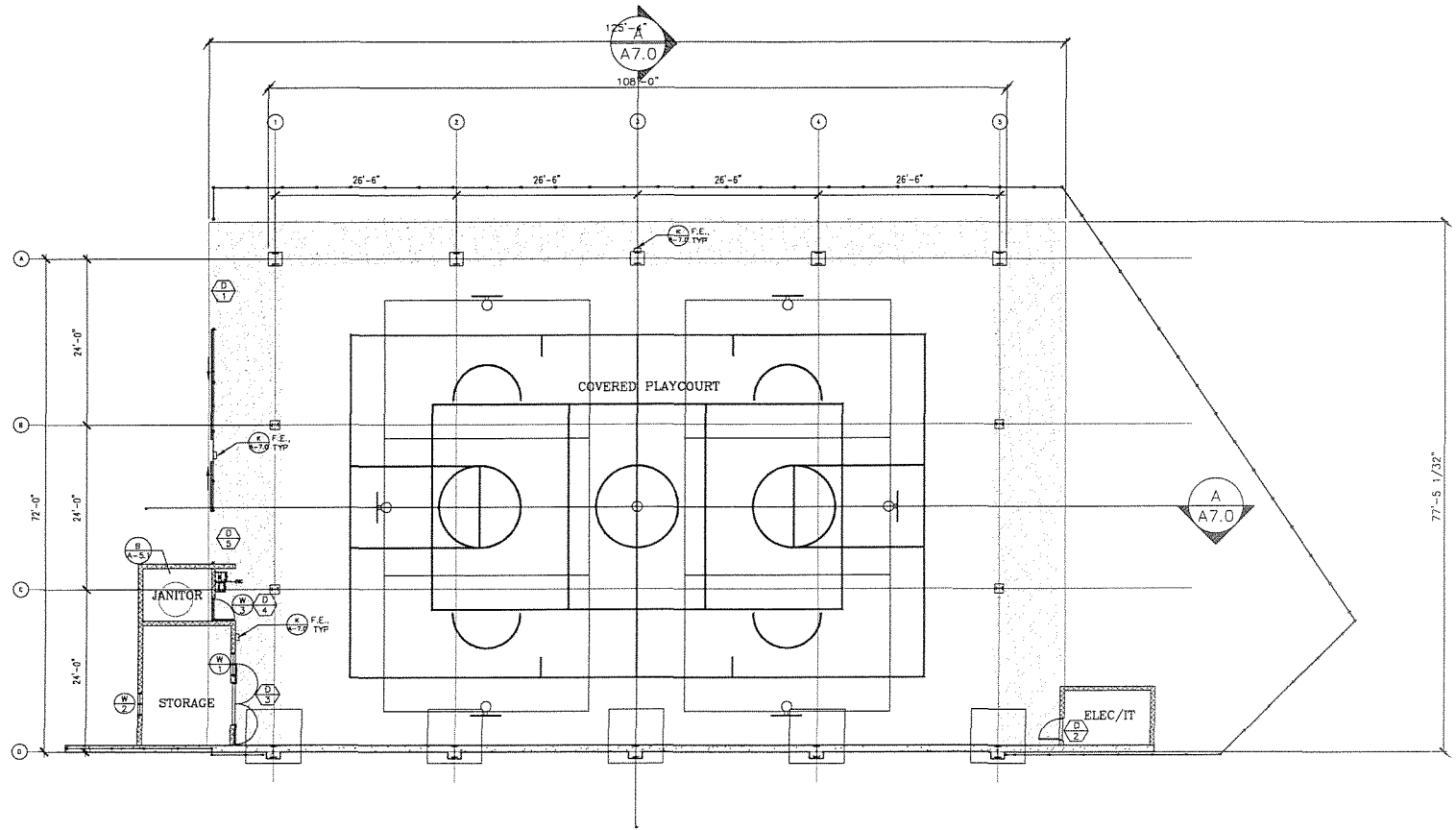
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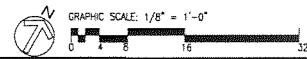
1 PARTIAL SITE PLAN
 A-1.0 SCALE: 1/8" = 1'-0"

		DEPARTMENT OF EDUCATION STATE OF HAWAII	
This work was prepared by me or under my supervision and construction of this project shall be under my observation.		Palisades Elementary School Covered Play Court	
SIGNATURE: _____ DATE: APRIL 2023		PEARL CITY: OAHU	HAWAII:
LICENSE EXPIRES: APRIL 30, 2024		PARTIAL SITE PLAN	
PROJECT NO.:	SHEET NO.:	DATE: APRIL 2023	DRAWING NO.: A-1.0
SIGNATURE: _____ TITLE: ARCHITECT		DATE: APRIL 2023	SHEET: 27 OF 76
AS NOTED			

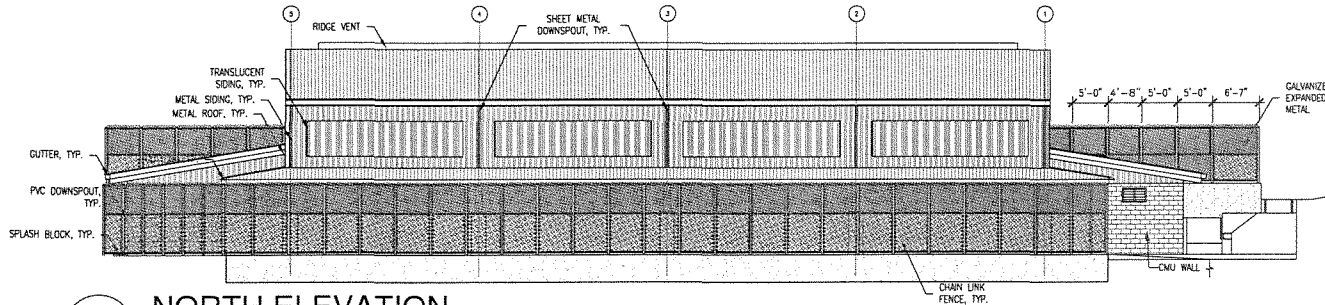




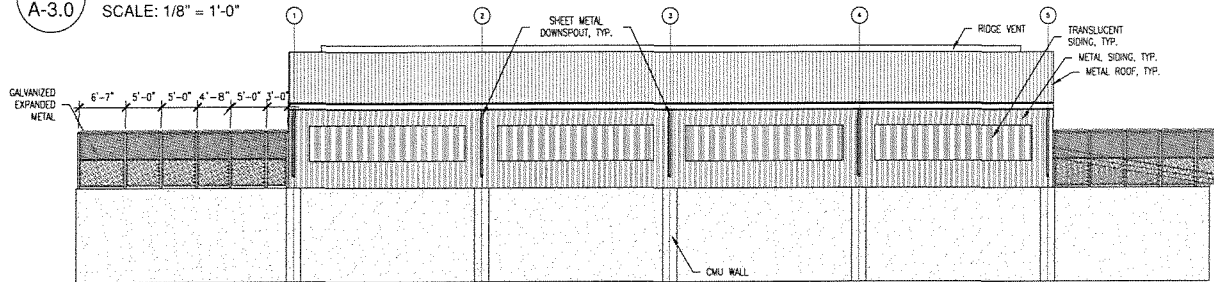
1 **PLAYCOURT PLAN**
 A-1.1 SCALE: 1/8" = 1'-0"



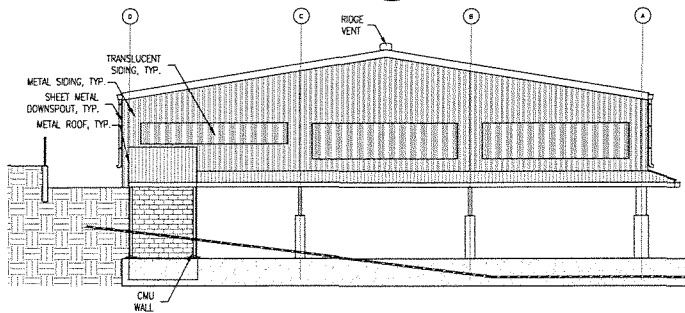
REVISION NO.	DATE	DESCRIPTION	BY	CHK	APP
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PLAY COURT PLAN					
DESIGNED BY	DRAWN BY	CHECKED BY	DATE	SCALE	PROJECT NO.
PACIFIC ARCHITECTS			08/21-16	A-1.1	
			APRIL 2022		
SIGNATURE			DATE	SCALE	PROJECT NO.
			APRIL 30, 2024	AS NOTED	28-78
LICENSE EXPIRES: APRIL 30, 2024					



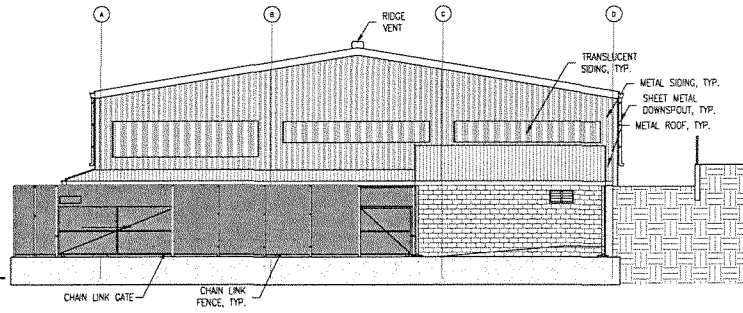
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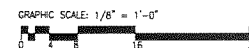
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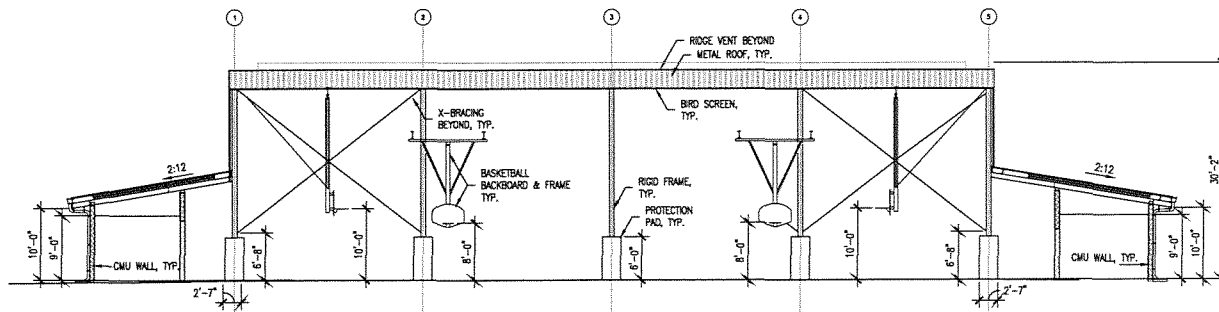
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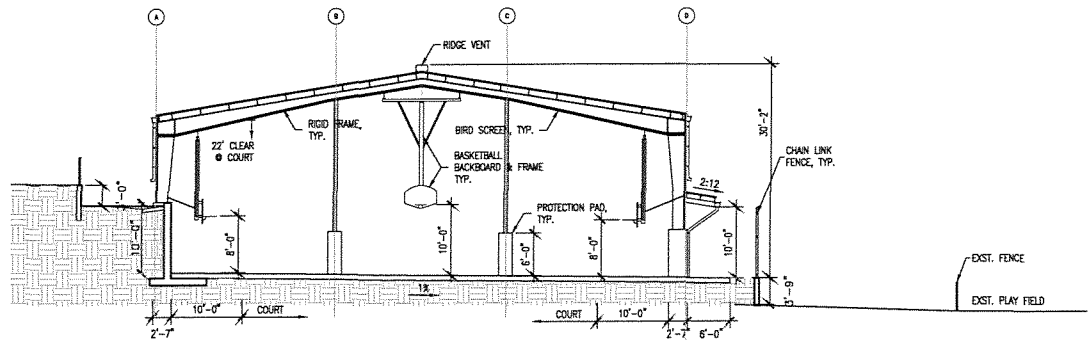
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A-3.0 SCALE: 1/8" = 1'-0"



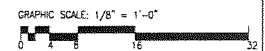
DESIGN NO.	DATE	APPROVED
PROJECT NO.	DATE	APPROVED
DEPARTMENT OF EDUCATION STATE OF HAWAII		
Palisades Elementary School Covered Play Court		
PEARL CITY	GAH(1)	HAWAII
ELEVATIONS		
PACIFIC ARCHITECTS		DATE: 08/21/19
DESIGNED BY: [Signature]	DRAWN BY: [Signature]	SCALE: A-3.0
CHECKED BY: [Signature]	DATE: APRIL 2022	PROJECT: [Signature]
TITLE: AS NOTED		30 of 78
LICENSE EXPIRES: APRIL 30, 2024		



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



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



REVISION NO.	DATE	DESCRIPTION	BY	CHK	APPROVED
DEPARTMENT OF EDUCATION STATE OF HAWAII Palisades Elementary School Covered Play Court PEARL CITY OAHU HAWAII					
		This work was prepared by me or under my supervision and construction of this project shall be under my observation. LICENSE EXPIRES: APRIL 30, 2024			
SECTIONS PACIFIC ARCHITECTS 68405-19 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 71.6° 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.

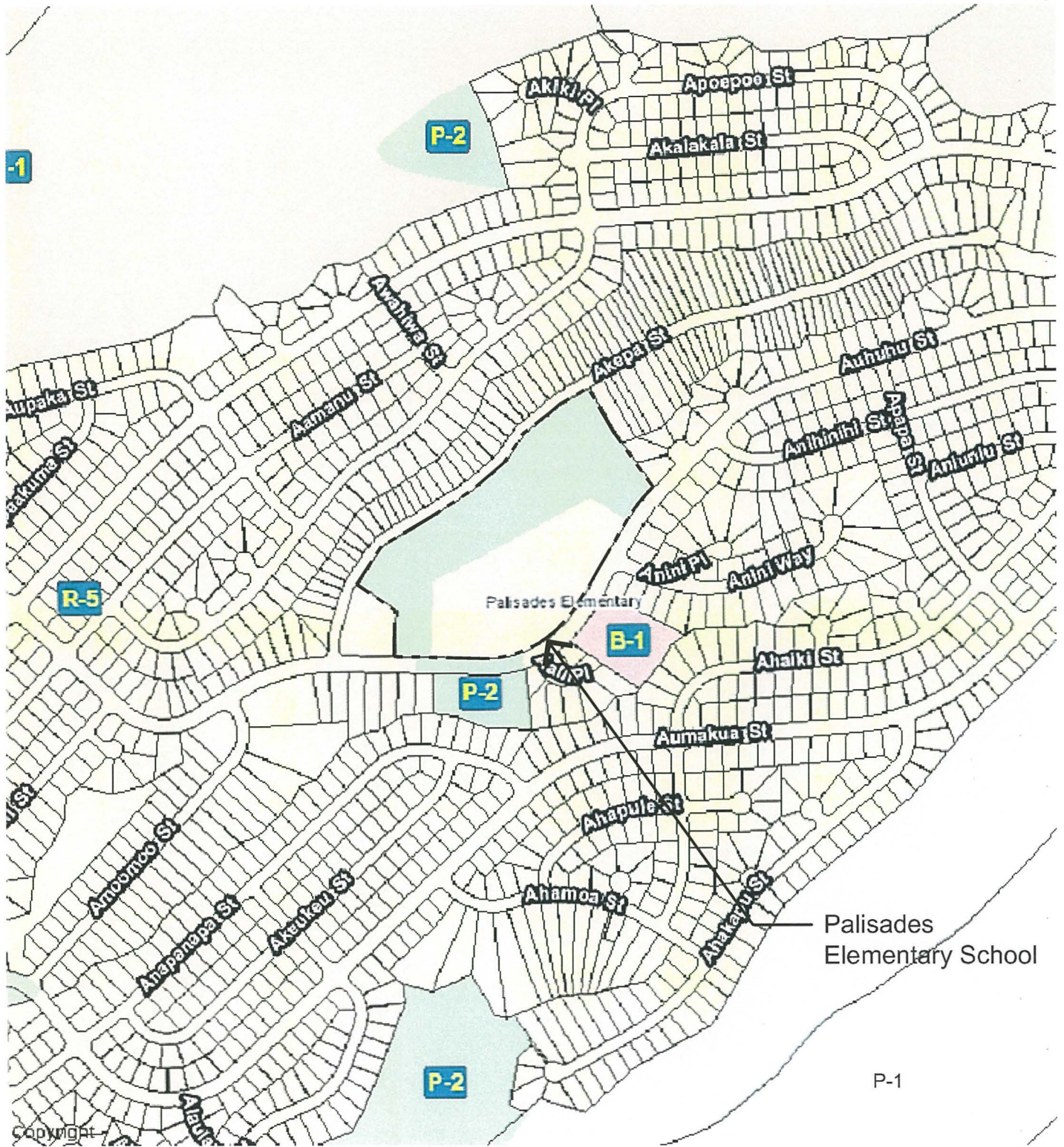
Potable water is supplied by the Board of Water Supply from a lateral in Auhuhu Street.

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.

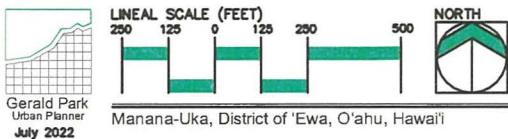


Source: City & County of Honolulu (DPP) Website

Legend

R-5	RESIDENTIAL (5,000 SF. LOT MINIMUM)	P-1	RESTRICTED PRESERVATION
B-1	NEIGHBORHOOD BUSINESS DISTRICT	P-2	GENERAL PRESERVATION
AG-1	RESTRICTED AGRICULTURAL DISTRICT		

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

State of Hawai'i

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

City and County of Honolulu

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 safeguarding 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

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