DEPARTMENT OF WATER

COUNTY OF KAUAI
P.O. BOX 1706
LIHUE, HAWAII 96766-5706
PHONE NO: (808) 245-6986 FAX NO. 245-5813

September 1, 1993

Mr. Brian J. J. Choy, Director
OFFICE OF ENVIRONMENTAL QUALITY CONTROL
State of Hawaii
220 South King Street, Suite 400
Honolulu, HI 96813

Re: Negative Declaration for Microbiological Laboratory Building - Department of Water, County of Kauai, TMK: 3-8-05:Por. 13, Lihue, Kauai, Hawaii

The Department of Water, County of Kauai, has reviewed the comments received during the 30-day public comment period which began on July 23, 1993. The agency has determined that this project will not have significant environmental effect and has issued a negative declaration. Please publish this notice in the September 23, 1993 OEQC Bulletin.

We have enclosed a completed OEQC Bulletin Publication Form and four(4) copies of the final Environmental Assessment.

Please contact Wayne Hinazumi at 245-6986 if you have any questions.

Jeremiah M. Kaluna
Acting Manager and Chief Engineer

rm
Enclosure

1993-09-23-KA-FEA- Microbiological Laboratory Bldg

SEP 23 1993

NEGATIVE DECLARATION

MICROBIOLOGICAL LABORATORY BUILDING

Lihue, Kauai, Hawaii

Prepared in Fulfillment of the Requirements
of Chapter 343, Hawaii Revised Statutes and
Chapter 200, Title 11, Administrative Rules
Department of Health, State of Hawaii

Prepared For

Department of Water
County of Kauai
4398 Pua Loke Street
Lihue, Kauai, Hawaii

By

Kimura/Ybl & Associates AIA
1014 Akala Lane
Honolulu, Hawaii

and

Gerald Park Urban Planner

August, 1993

SUMMARY INFORMATION

PROJECT:	Microbiological Laboratory Building
PROPOSING AGENCY:	Department of Water County of Kauai
DETERMINING AGENCY:	Department of Water County of Kauai
LOCATION:	4398 Pua Loke Street Lihue, Kauai
TAX MAP KEY:	3-8-05: por. 13
LAND AREA:	2.43 acres
LANDOWNER:	County of Kauai
STATE LAND USE DESIGNATION:	Urban
GENERAL PLAN:	Urban Mixed Use (UMU)
EXISTING ZONING:	Special Treatment-Public (ST-P) Residential-1 acre (R-1)
EXISTING USE:	Material Storage
CONTACT PERSON:	Wayne Hinazumi Department of Water County of Kauai P.O. Box 1706 Lihue, Kauai 96766-5706 Phone: 245-6986

TABLE OF CONTENTS

LIST OF FIGURES

SECTION 1

DESCRIPTION OF THE PROPOSED PROJECT

The Department of Water, County of Kauai, proposes to construct a microbiological laboratory at its office/operations complex located at Nawiliwili, Lihue, Kauai. The property bears tax map key 3-8-05: 13 and encompasses an area of 2.43 acres. The laboratory building will be located on an approximately 2,600 square foot section of the parcel. At this time there are no plans to subdivide the building site from the larger parcel. The property is owned by the County of Kauai. A Location Map is shown in Figure 1.

A. Need for the Project

The Department of Water does not have a laboratory for testing water samples collected from the 26 community systems under its jursidiction. Water samples collected from the systems are now sent weekly to the Board of Water Supply, City and County of Honolulu, for testing and analysis.

The laboratory will allow the Department of Water, County of Kauai, to comply with the extensive drinking water testing requirements of the Safe Drinking Water Act (PL 93-523) and Hawaii Administrative Rules, Title 11, Chapter 20, Rules Relating to Potable Water Systems. The laboratory will be testing collected water samples for microbiological contaminants.

B. Technical Characteristics

The proposed microbiological laboratory will be constructed in an open, undeveloped area located generally to the west of an existing Department of Water vehicle and employee parking lot. The conceptual plan for the building orients the longitudinal axis of a rectangular building mass north-south or parallel to the aforementioned parking lot. The broader face of the building will face an existing grassy area which will be retained as open space. The proposed two-story building measures approximately 72' X 36' with a building footprint of 2,592 square feet and a gross floor area of 5,184 square feet. A preliminary site plan is shown in Figure 2. The building stands 29'10" high measured from finish grade to top of the roof ridge. Sections and elevations are shown in Figures 3 and 3A.

As shown in Figure 4 ground floor space is allocated for a laboratory, men's and women's restrooms, employee lounge, office, and storage. The second floor will be used as storage space (See Figure 4A) and, in the future may be converted to house Supervised Control and Data Acquisition (SCADA) equipment. Stair towers for fire exiting are placed at opposite ends of the building's length. The building will be enclosed and completely air conditioned. The building is to be of Type V-N, Fire Resistive construction per Uniform Building Code requirements.

The structure will be erected on poured in place concrete foundation and footings, framed with cmu exterior walls and metal interior partitions, and topped with a pitched metal roof over prefabricated wood trusses. The structure will be designed to be hurricaine resistive.

Eighteen parking stalls will be provided as required by the parking requirements of the County zoning code. A new parking lot will be constructed on the north side of the laboratory building. Access to the new parking area will be taken from an existing driveway.

Two existing employee parking stalls will be replaced by two wider parking stalls for the handicapped. A sidewalk will be constructed to connect the laboratory, parking lot, and Department of Water office builidng. The laboratory building will be constructed for handicap access per Uniform Federal Accessibility Standards (UFAS).

Wastewater will be discharged into a to be constructed treatment system. The system, consisting of a septic tank and leach field for treated effluent, will be constructed under a separate Department of Water contract. Wasteline stubouts from the laboratory will be provided for future connection.

Water, power, and communication lines will be extended to the site from existing systems on the premises.

C. Economic Characteristics

The cost of the project is estimated at $ 720,000.00 and will be funded by the County of Kauai. Construction will commence after all necessary approvals are received. The project will be built in one phase and construction time is projected at nine (9) months.

The project is proposed on County owned land which is used as the Department of Water office/operations complex.

D. Social Characteristics

The project will not displace any residences or business establishments.

The laboratory will employ 2 microbiologists and 2 laboratory technicians. One of the microbiolgists will be the supervisor. At this time, no clerical or administrative staffing is planned.

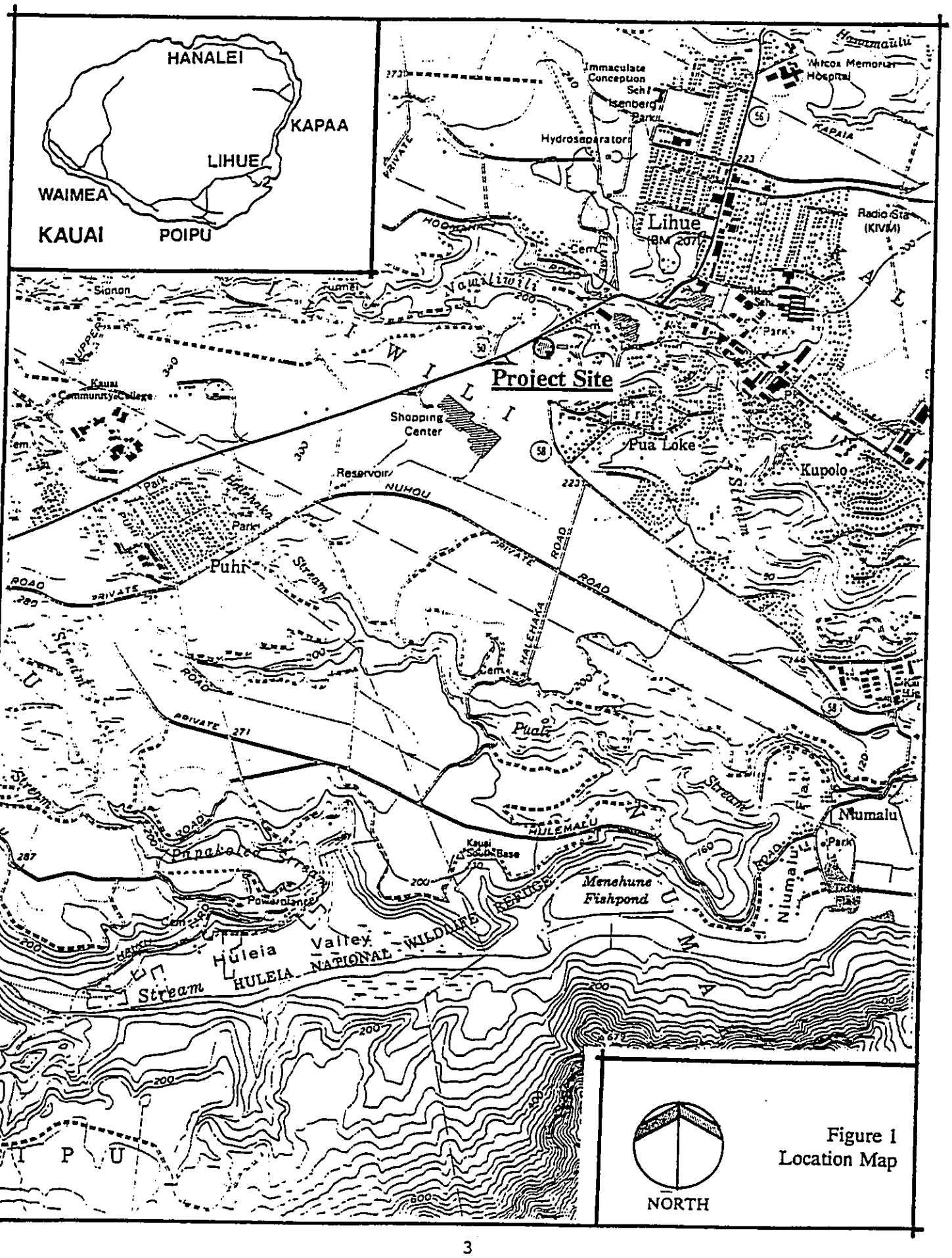
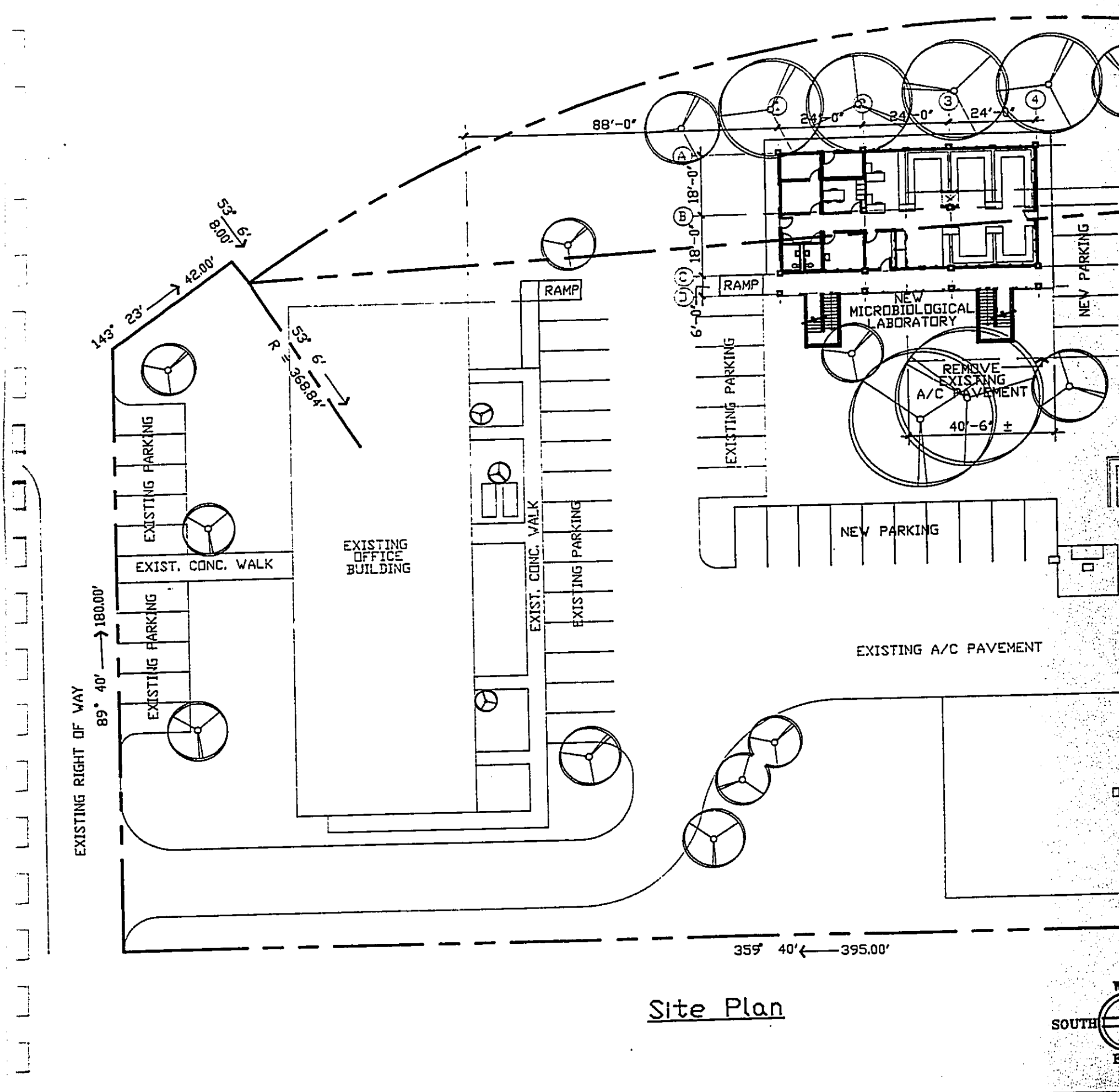


Figure 1
Location Map


88'-0"
24'-0"
24'-0"
24'-0"
1
2
3
4
A
B
C
18'-0"
18'-0"
6'-0"
RAMP
NEW MICROBIOLOGICAL LABORATORY
NEW PARKING
REMOVE EXISTING A/C PAVEMENT
40'-6" ±
EXISTING PARKING
NEW PARKING
EXISTING A/C PAVEMENT
53° 6'
8.00'
42.00'
143° 23'
53° 6'
R = 368.84'
RAMP
EXISTING PARKING
EXIST. CONC. WALK
EXISTING OFFICE BUILDING
EXIST. CONC. WALK
EXISTING PARKING
EXISTING PARKING
89° 40'
180.00'
EXISTING RIGHT OF WAY
359° 40'
395.00'

Site Plan

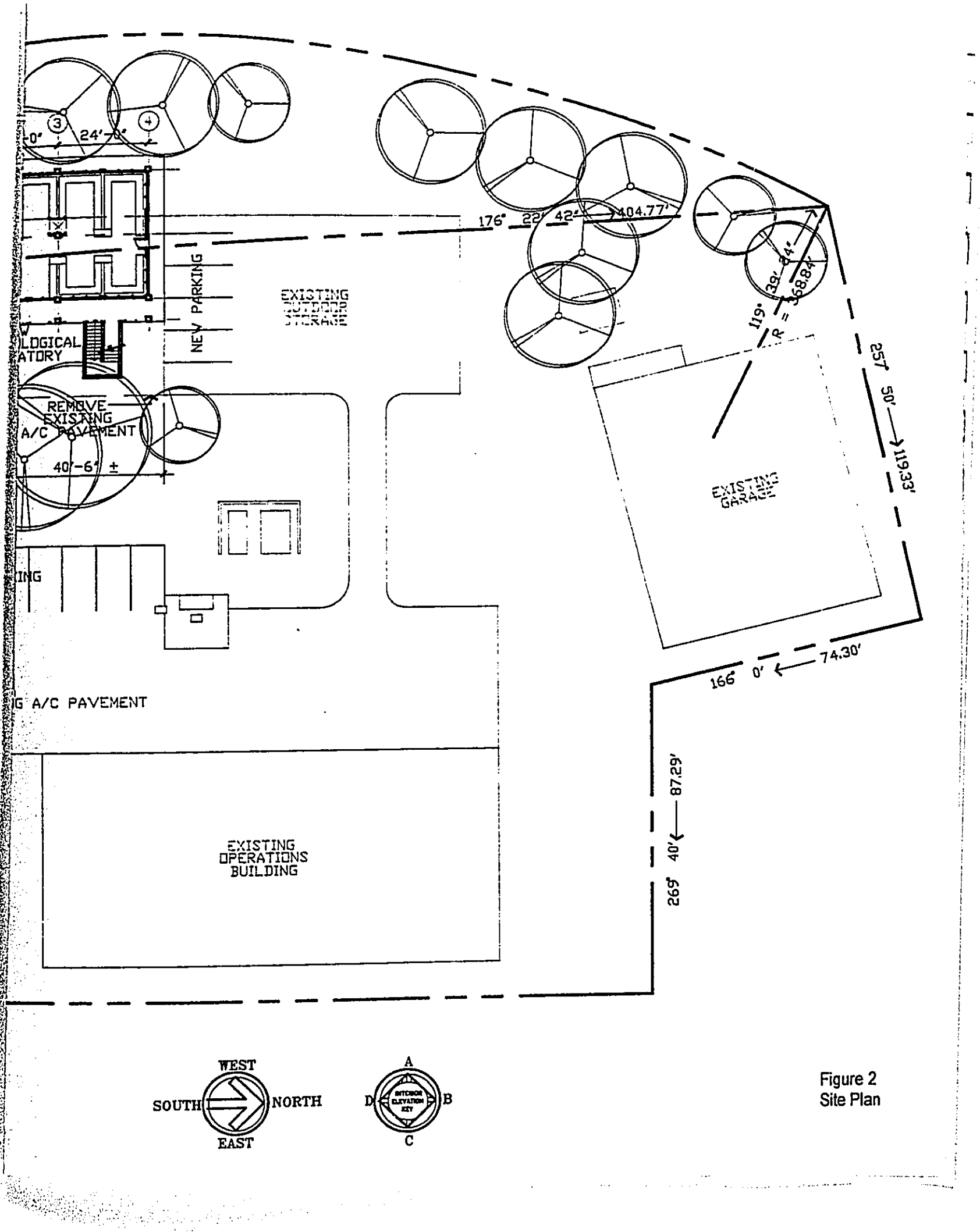
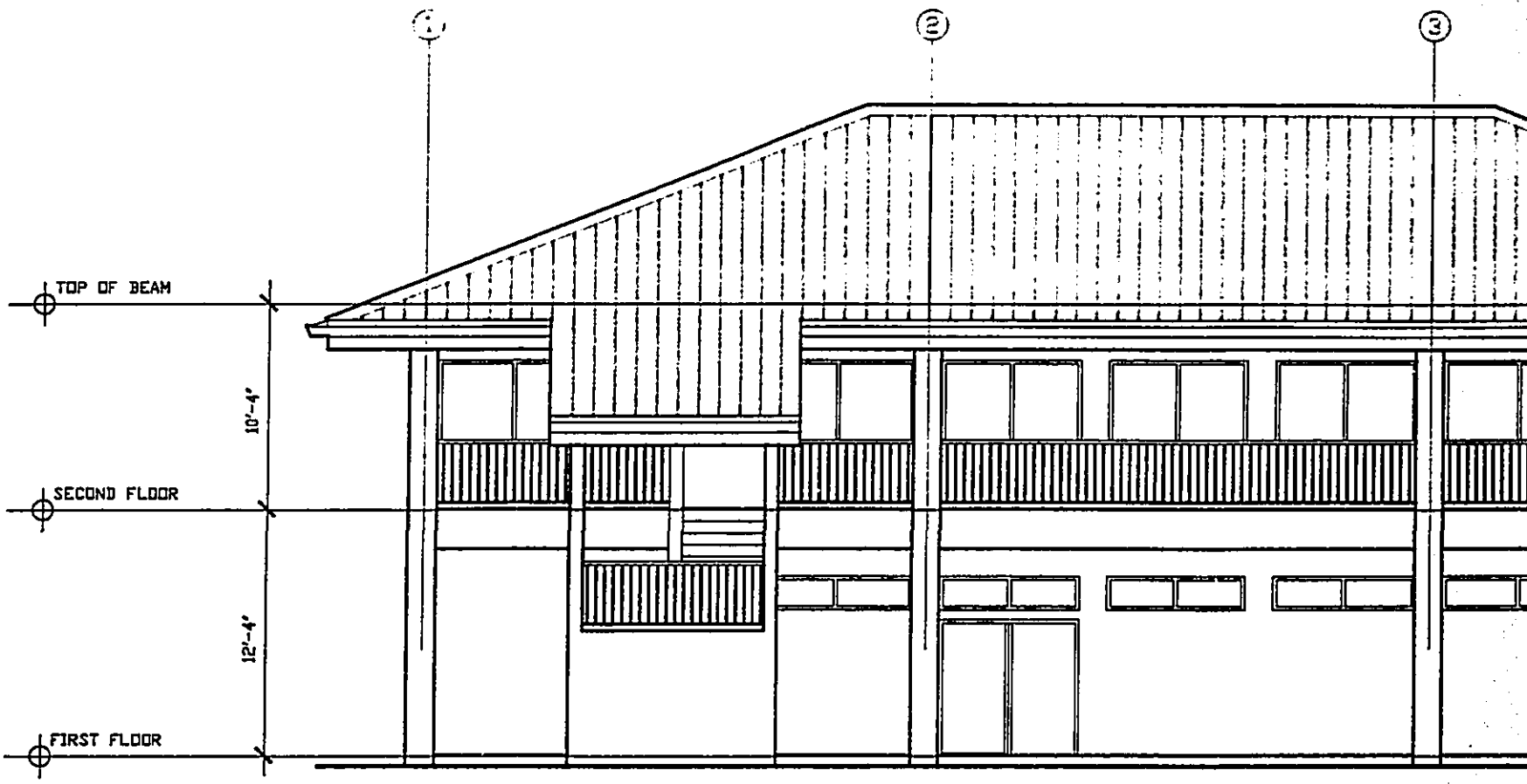
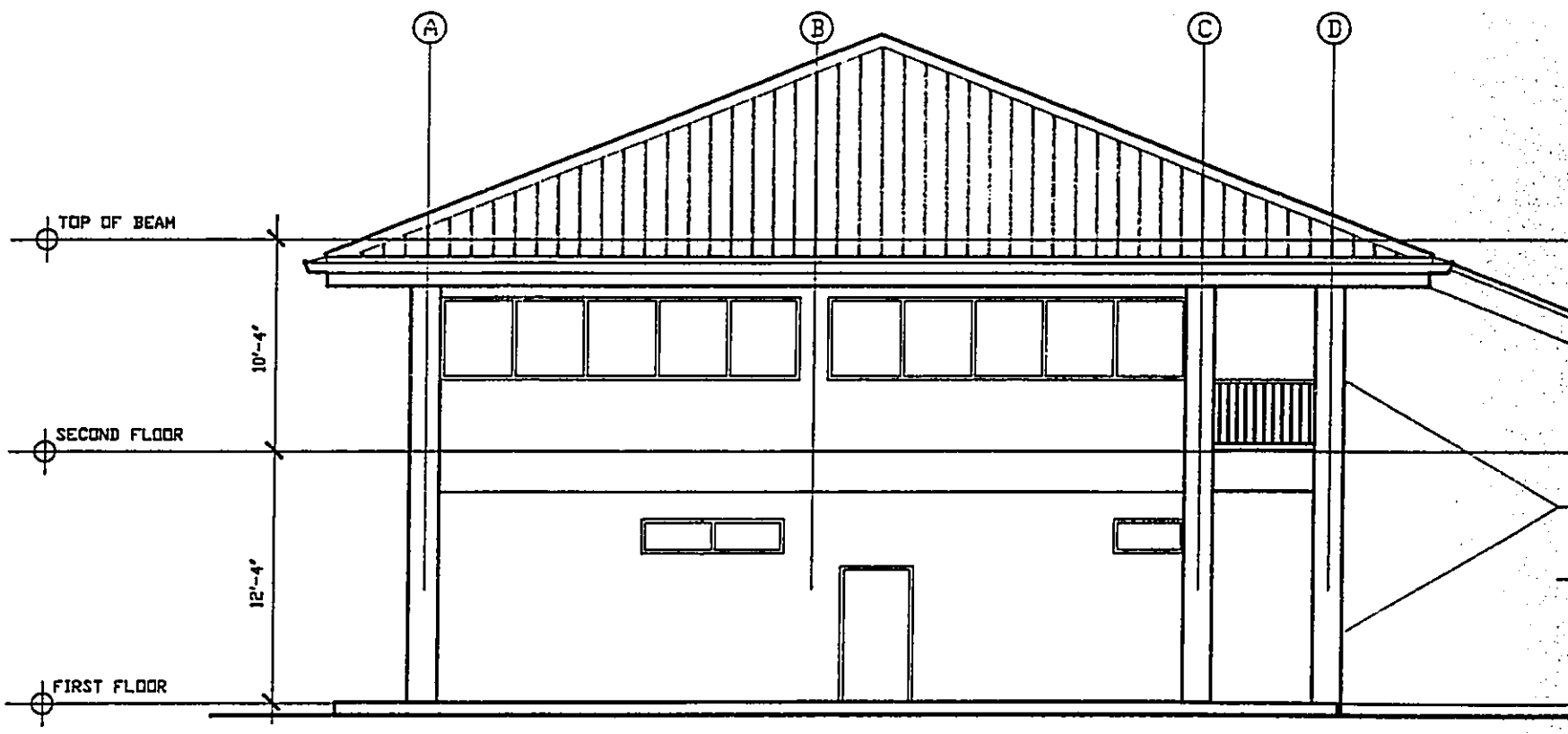


Figure 2
Site Plan



EAST ELEVATION



SOUTH ELEVATION

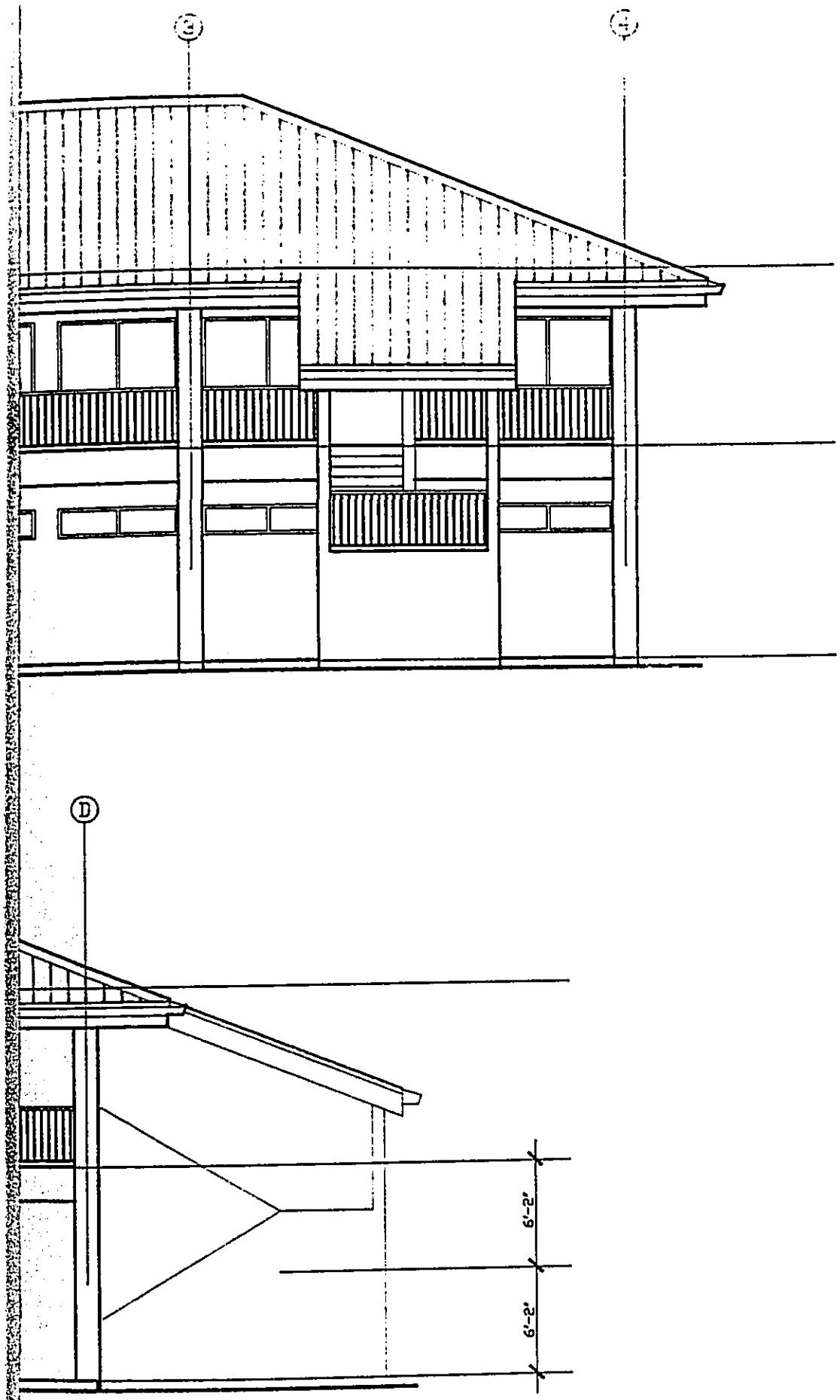
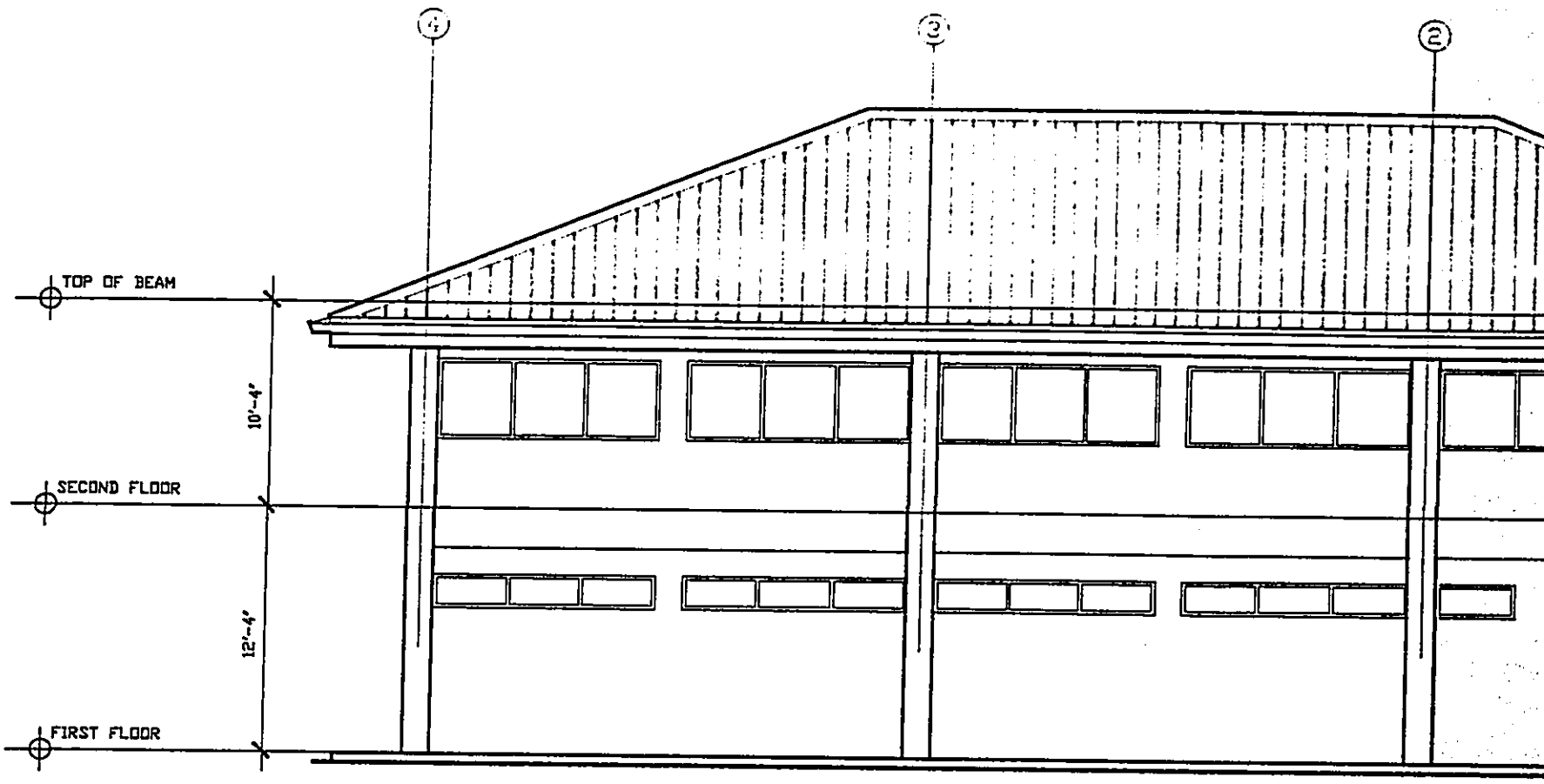
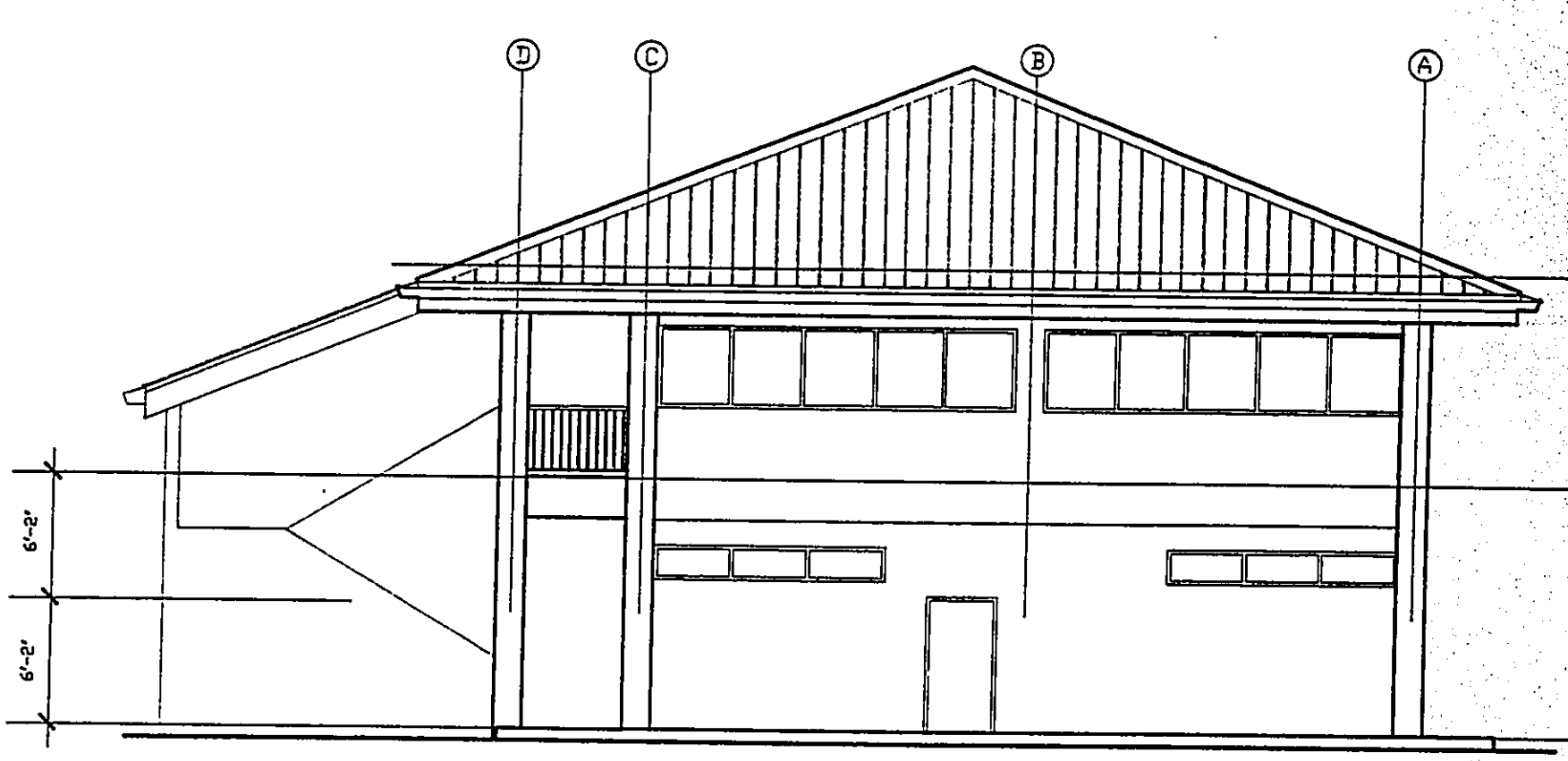


Figure 3
East/South Elevations



WEST ELEVATION



NORTH ELEVATION

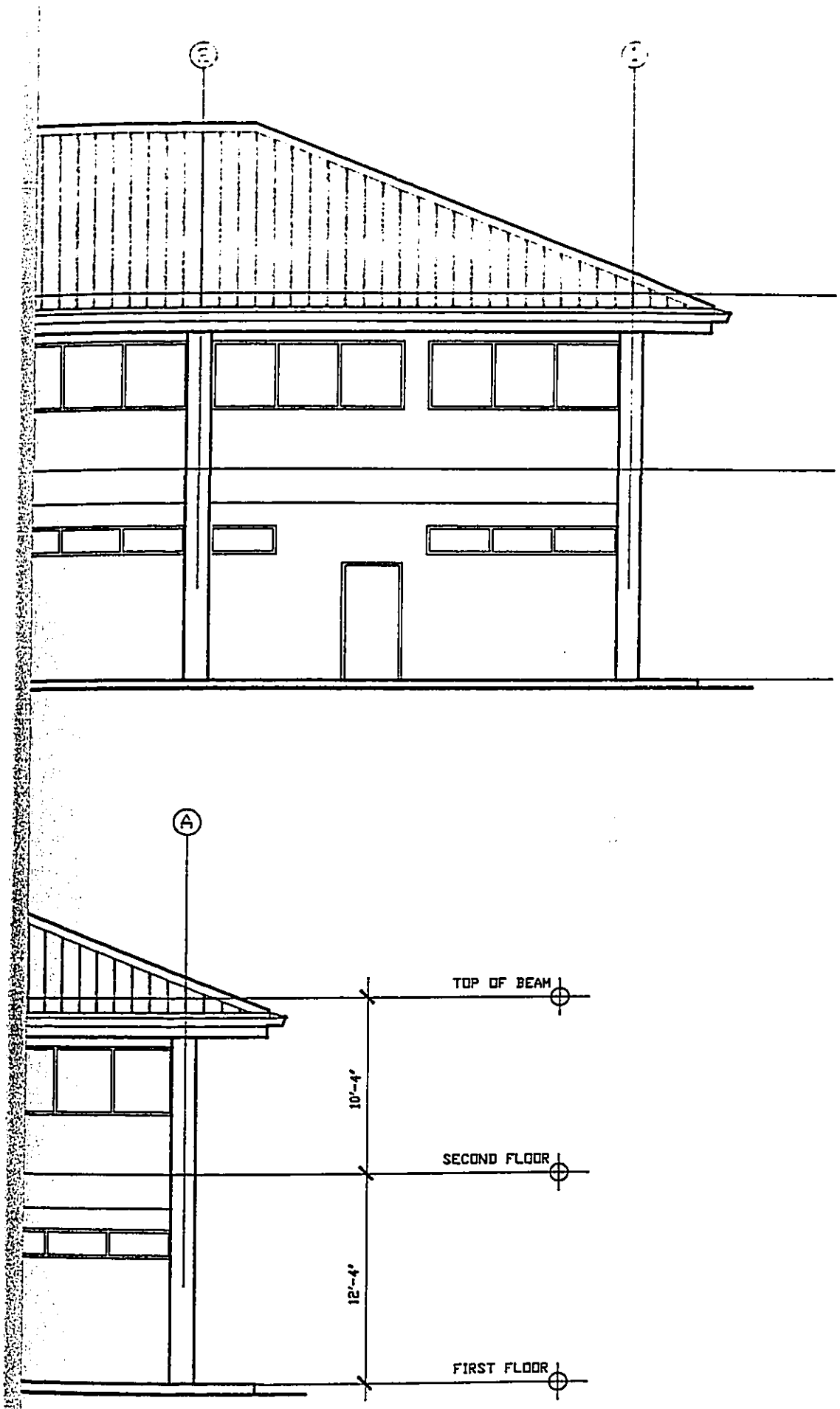
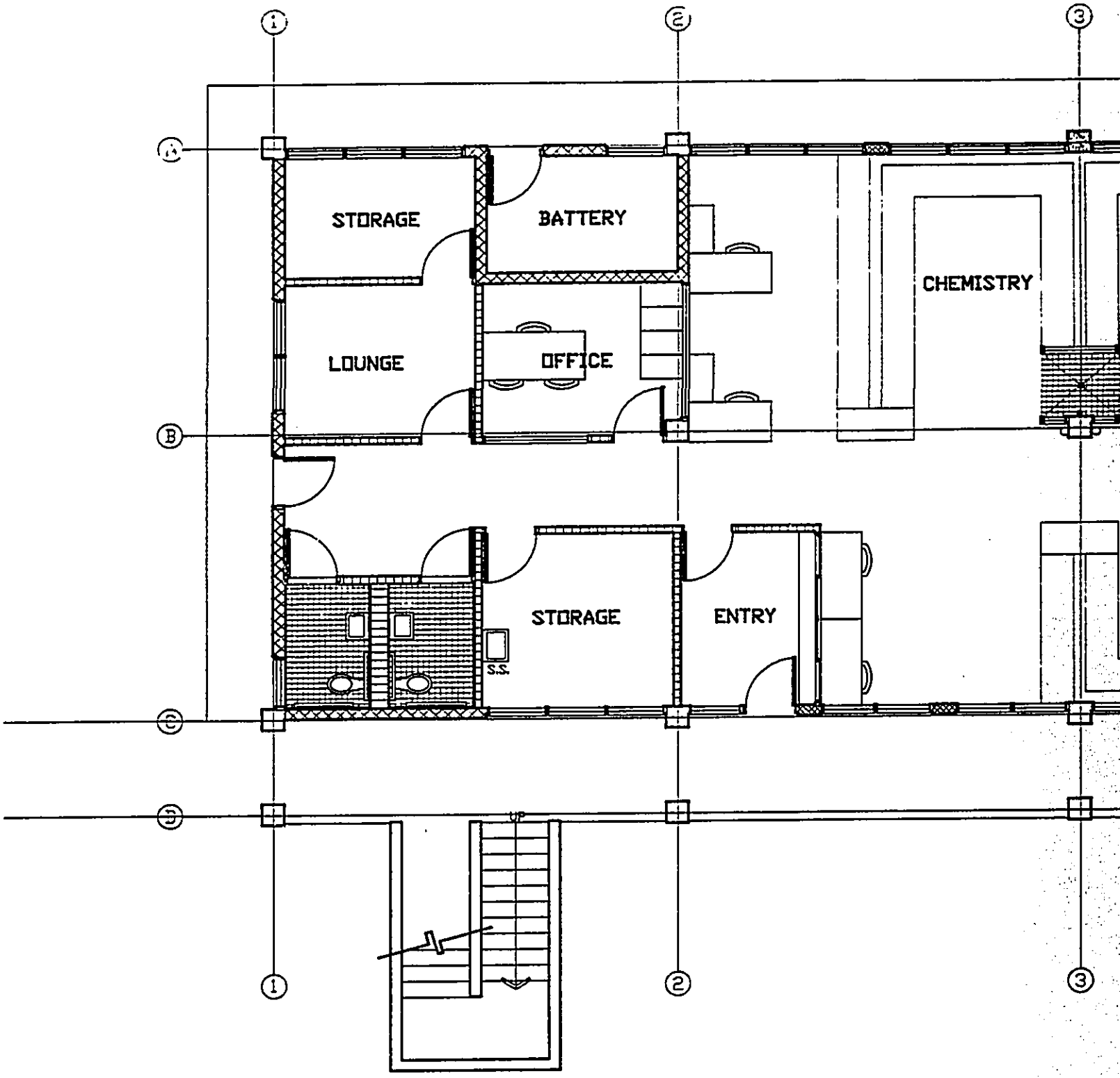
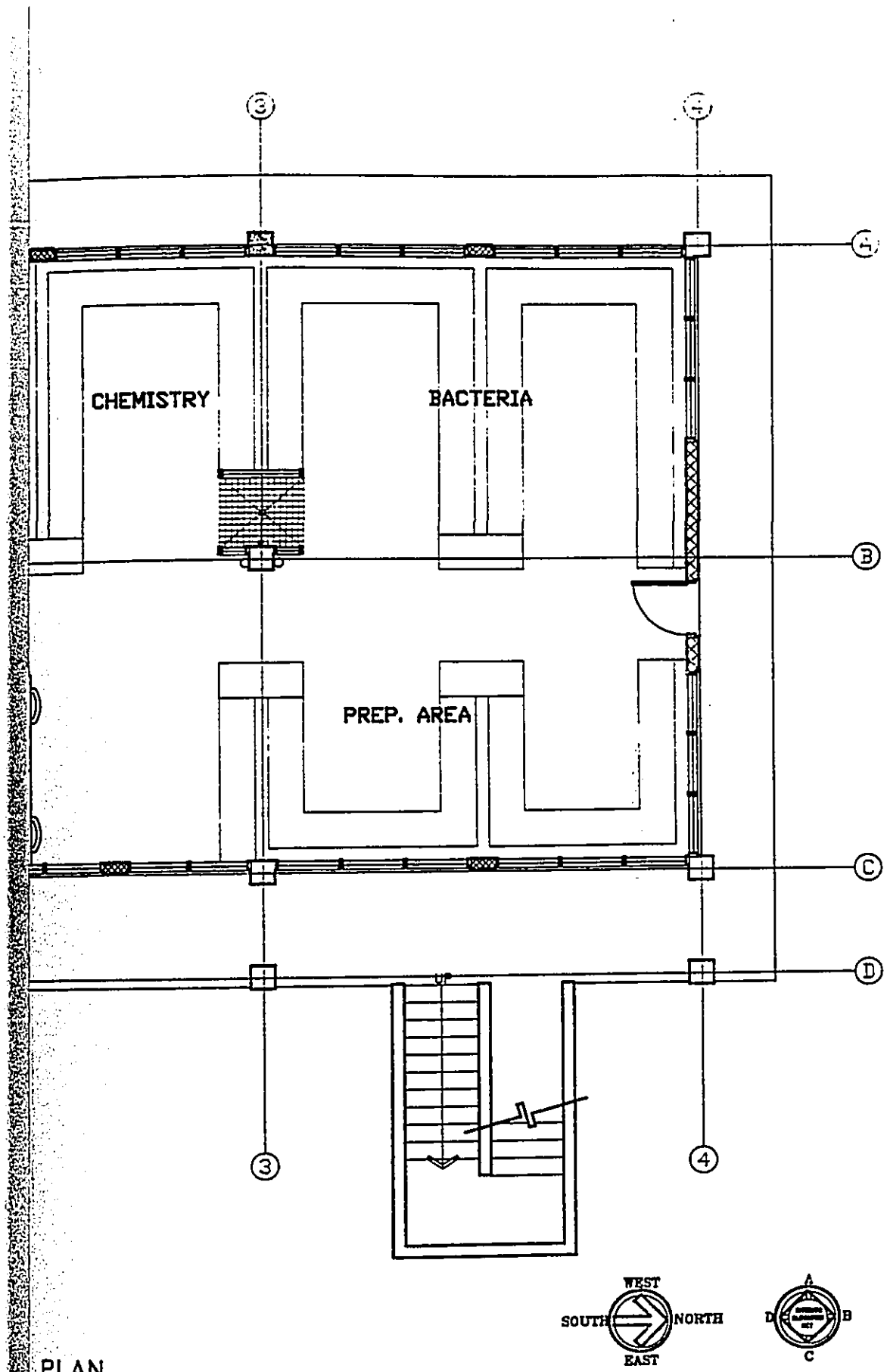


Figure 3A
West/North Elevations

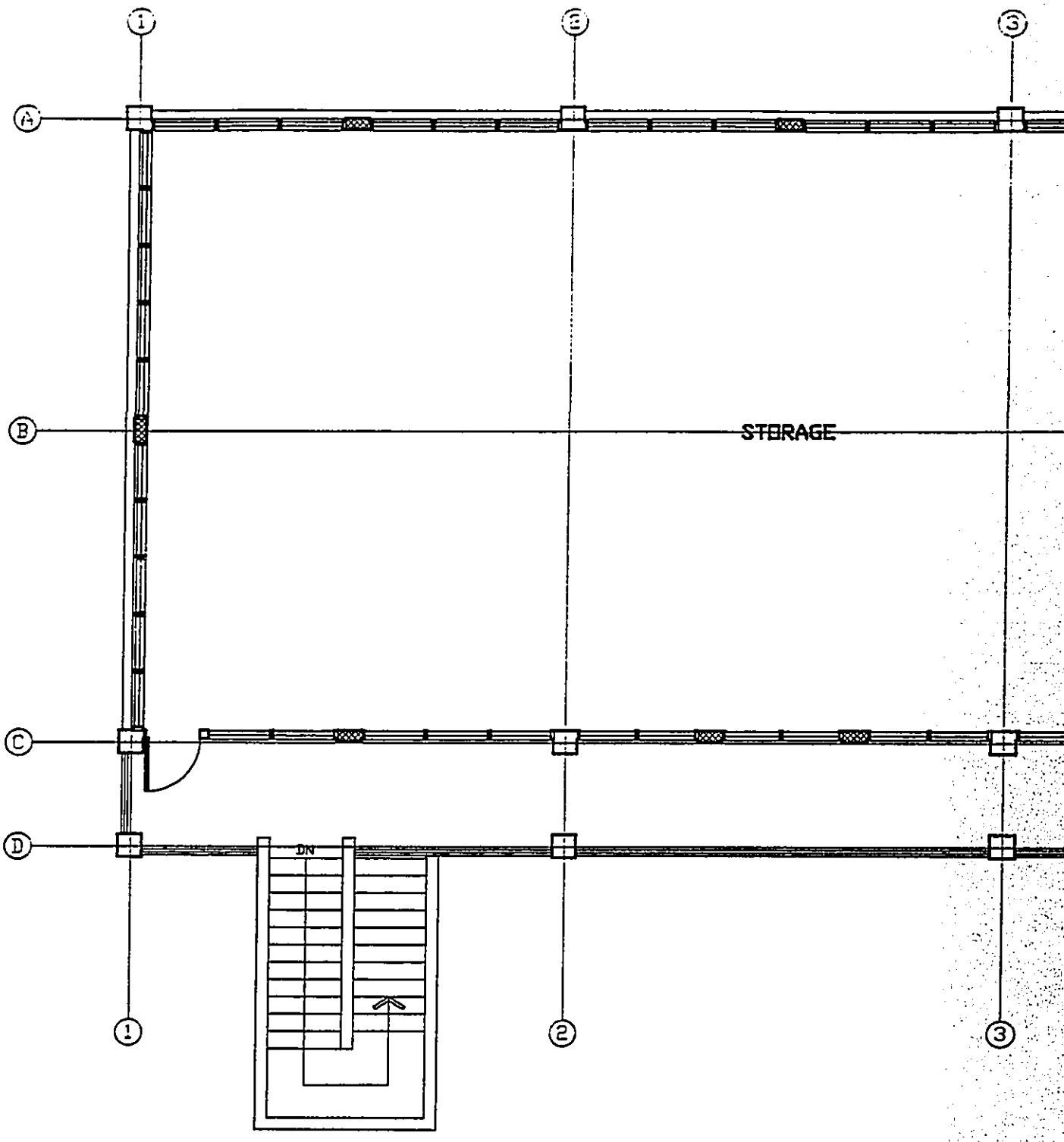


FIRST FLOOR PLAN

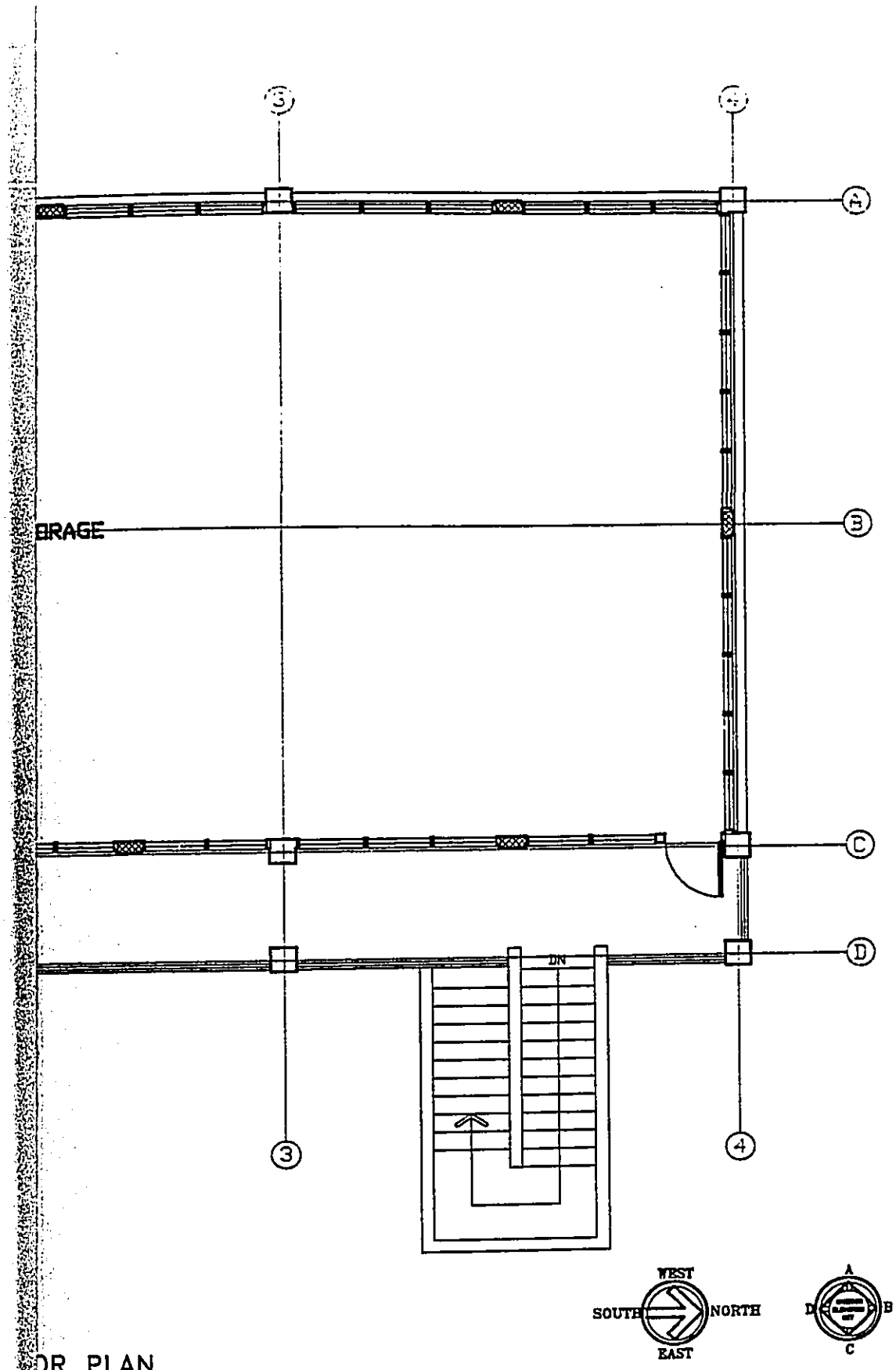


PLAN

Figure 4
First Floor Plan



SECOND FLOOR PLAN



OR PLAN

Figure 4A
Second Floor Plan

SECTION 2

DESCRIPTION OF THE AFFECTED ENVIRONMENT

A. Existing Use

Approximately one-third of the building site is planted in grass and two-thirds covered by asphaltic concrete. The site is used by Department of Water for open storage of equipment and materials including a backhoe, tractor, water trailer, cast iron fittings, various lengths of water pipe, water meter boxes, and stacked 55-gallon drums.

The Department's Office, Operations, and Garage buildings border the site to the south, east, and north respectively. These buildings are physically separated from the building site by parking areas and driveways. The west boundary is marked by a 4 1/2 foot high chain link fence and a bougainvillea hedge.

B. Topography

The site is relatively flat with a slight west to east gradient. Elevation ranges from a high of +230 feet along the west boundary to +229 feet at the east boundary. There are no unusual topographic features on the 2,600 + square foot building site.

C. Geology and Soils

Site soils are identified as Lihue silty clay (LhB) by the Soil Conservation Service (1972). The soil is moderately to rapidly permeable and the erosion hazard is slight. Considering that the site is partially grassed and partially covered with asphaltic concrete, we suspect the area has been filled (or backfilled) with soil types other than that identified by the Soil Conservation Service.

D. Drainage and Flooding

The site does not appear to be prone to flooding. On-site runoff flows in a northerly direction to a grated inlet in the driveway fronting the garage building.

The Flood Insurance Rate Map for the area designates the property Zone X which is defined as "areas determined to be outside the 500 year flood plain" (FEMA, 1987).

E. Cultural Features

Cultural features or deposits were not observed during our field survey. Historic site maps on file at the Division of Historic Sites, Department of Land and Natural Resources, State of Hawaii, also do not indicate the presence of historic features on the premises.

F. Flora and Fauna

Except for a Bermuda grass (Cynodon dactylon) lawn and assorted weeds, the building site is devoid of flora. Several pruned mango (Mangifera indica) trees border the site to the west.

Two tall eucalyptus (Eucalyptus sp.) and a skunk tree (Sterculia foetida) stand to the east of the site.

The barred dove (Geopelia striata) was the only animal life observed frequenting the premises.

G. Land Use Controls

The site is classified Urban by the State Land Use Commission, general planned urban mixed use (UMU) on the Lihue Community Development Plan, and zoned ST-P and R-1. The proposed use is an allowable under these land use controls. Per the requirements of both zoning districts, applicant has been notified that a Use Permit is required prior to construction.

H. Air and Acoustical Quality

Ambient air quality is considered good. There are no significant point sources of pollution on the premises. During our field survey, no emissions were observed from the nearby Lihue Plantation Mill.

Background noises are predominantly sounds of passing traffic, air conditioning units, and nature.

I. Public Facilities

1. Circulation

The employee parking lot which is located to the rear of the Department of Water Office Building is accessed by a 20-foot wide driveway. In turn the driveway connects to a second driveway which intersects Pua Loke Street (aka Hala Road). This latter driveway is shared with State of Hawaii, Department of Agriculture facilities located to the east of the Water Department.

Vehicle traffic is considered to be light on both driveways during normal working hours. Traffic is heaviest during the start and end of the work day when Department vehicles depart and return to the complex.

2. Water

Water service is available on the premises.

3. Wastewater

There is no municipal sewer serving the Department of Water complex. Wastewater is collected and discharged into cesspools.

4. Power and Communication

Electrical and telephone service are provided from overhead lines along Pua Loke Street.

SECTION 3

SUMMARY OF POTENTIAL ENVIRONMENTAL IMPACTS AND MEASURES TO MITIGATE ADVERSE EFFECTS

A. Assessment Process

The scope of the project was discussed with staff of the Department of Water, the consulting architect, and others comprising the design team. State and County agencies were consulted for information relative to their areas of expertise. Time was spent in the field noting site conditions and conditions in the vicinity of the project site. The discussions and field investigations allowed us to identify existing conditions which could affect or be affected by the project. These conditions are:

- The microbiological building will be constructed on a portion of an existing Department of Water office/operations complex;
- Land on which the improvements are proposed has been modified extensively by fill, landscape plantings, and asphalt concrete paving;
- There are no threatened or endangered flora or fauna on the premises;
- The site is devoid of cultural features on the ground surface;
- The site is not within an identified flood hazard area;
- Utility services are available and adequate to service the proposed laboratory;

B. Short-term Impacts

Prior to construction, stored equipment and material will be transferred to an alternative storage area. The site will then be grubbed and the asphaltic concrete surface removed. All construction debris will be hauled to an approved disposal site.

Since the building site is generally flat and area to be graded is generally small, erosion from construction is not expected to be significant. Control measures will be designed and specified on a grading plan to mitigate erosion and sedimentation impacts. The grading plan will be submitted for review and approval by the Department of Public Works.

Fugitive dust will be raised during sitework. Dust cannot be eliminated entirely but can be suppressed by thorough and frequent water sprinkling or other control measures stipulated in Hawaii Administrative Rules, Title 11, Chapter 60 Air Pollution Control. The Contractor also will be responsible for general housekeeping of the site and keeping adjacent areas free of mud and sediment.

Construction equpment will emit minor quantities of pollutants in the form of engine exhausts and aldehyde odors. Most large construction equipment is diesel powered and carbon monoxide emissions are generally low but nitrogen dioxide emissions can be quite high.

Construction noise will persist for the projected 9 month construction period. Noise will be most pronounced during the early stages of development (sitework) and the erection of the structure. Construction noise will diminish as interior work commences as most sounds will be confined to inside the building.

There are no noise sensitive areas such as schools or hospitals near the project site to be affected by noise. Noise also should neither affect professional offices in the Kukui Grove Village opposite the Department of Water Office Building nor users of nearby Pua Loke Park. Sound should be attenuated by the distance (+300 feet) separating the project site from the Village and noise from passing traffic. The park too is quite distant from the project site for construction noise to adversely affect park users.

There are no historic features on the property that will be affected by the proposed development. The area has been previously improved and any historic features have been removed. Should subsurface sites or artifacts be uncovered, work in the immediate area will cease and historic authorities notified for proper disposition of the finds.

C. Long-term Impacts

The principal benefit of the project will be to provide the Department of Water with its own facility for testing and analyzing water samples from water systems under its jurisdiction. Because the Department (and the County) does not have a microbiological laboratory, weekly collected water samples are flown to Honolulu for analysis at the Honolulu Board of Water Supply microbiological laboratory. The average turnaround time for collection, testing, and obtaining results varies between two to four (2-4) days depending on findings.

Unlike a chemical laboratory, a microbiological laboratory neither uses nor generates significant quantities of chemical or hazardous wastes. The primary chemicals to be used in the laboratory are ethyl alcohol, methyl alcohol, and disinfectants. These chemicals are commonly used in most laboratories and diluted with water prior to disposal or disposed directly into the laboratory's plumbing system.

Small amounts of xylene are used in the laboratory for cleaning rather than analytical testing purposes. The chemical is applied using paper towels or disposable materials; spent towels are discarded into appropriate waste receptacles and not the laboratory plumbing system.

The laboratory will be examining biological contaminants and all equipment (primarily glassware) will be steam sterilized prior to disposal. **If there is a need to acid wash glassware, non-hazardous sulfuric acid will be used. The laboratory will be provided with acid resistant plumbing and an acid dilution tank.** More than likely, disposal glassware will be used thus negating the need for acid washing.

The proposed structure will temporarily affect the general appearance of the property. The completed structure should not significantly affect views towards the west from within the office/operations complex. The structure replaces an open storage area but views beyond is (or was) screened by tall mango trees and a dense bougainvillea hedge along the property line. The mango trees were recently trimmed because of hurricaine damages. From Pua Loke Street and Kaumualii Highway, the structure will stand above adjoining Water Department buildings.

The ground level floor will be screened by the aforementioned bougainvillea hedge thus only the second level and roof should be visible. Over time, the trimmed mango trees should flush out and significantly screen the upper floor from public view.

Wastewater flow from the laboratory building is estimated at less than 100 gallons per day. The disposal system shall be sited and constructed per Hawaii Administrative Rules, Title 11, Chapter 62 Wastewater Systems. If operated properly and maintained regularly, the septic tank and leaching field should not adversely affect the surrounding environment.

SECTION 4

ALTERNATIVES TO THE PROPOSED ACTION

A. No Action

A No Action alternative precludes the occurence of all environmental impacts, short and long-term, beneficial and adverse, described in this Assessment. A No Action alternative maintains the status quo of the building site and the logistics associated with current water analysis and reporting practices of the Department of Water. For reasons presented earlier, the No Action alternative is not a desirable course of action.

B. Alternative Site

The Department of Water has no other site on which to locate the proposed microbiological laboratory. The project site centralizes the Department's office, operations, maintenance facilities, and laboratory in one government complex.

SECTION 5

AGENCIES AND ORGANIZATIONS CONSULTED IN THE PREPARATION OF THE ENVIRONMENTAL ASSESSMENT

Federal

Corps of Engineers*

State

Department of Health
Department of Land and Natural Resources*
Department of Transportation*
Office of Environmental Quality Control*

County

Department of Planning
Department of Public Works*
Fire Department*
Police Department**

Other

Lihue Plantation Co. Ltd.

* Denotes consulted parties who responded in writing.
** Telephone response: No comment (6/1/93).

SECTION 6

DETERMINATION OF SIGNIFICANCE

Chapter 200 (Environmental Impact Statement Rules) of Title 11, Administrative Rules of the State Department of Health, presents criteria for determining whether an action may have significant effects on the environment (Section 11-200-112). The relationship of the proposed project to these criteria is discussed below.

(1) Involves an irrevocable commitment to loss or destruction of any natural or cultural resource;

No natural or cultural resources were found on the building site.

(2) Curtails the range of beneficial uses of the environment;

The building site is open, partially improved, and used for storing equipment and materials. No other use has been contemplated for this location. The Department of Water has no other adequately sized building site under its jurisdiction for locating the laboratory. The project commits an undeveloped site in an improved area to a needed facility and further consolidates Department of Water fuctions in one location.

(3) Conflicts with the state's long-term environmental policies or goals and guidelines as expressed in Chapter 344, Hawaii Revised Statutes, and any revisions thereof and amendments thereto, court decisions or executive orders;

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

(4) Substantially affects the economic or social welfare of the community or state;

The project does not substantially affect the economic or social welfare of the County of Kauai. Capital expenditures in the form of construction monies will provide short-term job opportunities for the local construction industry.

(5) Substantially affects public health;

Substantial adverse impacts on public health are not anticipated. In the long-term, the laboratory will enable the Department of Water to comply with the testing requirements for water systems promulgated by the Safe Drinking Water Act (PL 93-523) and Hawaii Administrative Rules, Chapter 20, Rules Pertaining to Potable Water Systems.

(6) Involves substantial secondary impacts, such as population changes or effects on public facilities;

Substantial secondary impacts are not anticipated.

(7) Involves a substantial degradation of environmental quality;

Environmental quality will not be degraded. The laboratory building will be located on a portion of the Department of Water complex that already accommodates an administrative building, warehouse, operations center, fueling facilities, and parking.

With the exception of xylene, non-hazardous chemicals primarily methyl and ethyl alcohol will be used in the laboratory. Spent alcohols will be diluted with water prior to disposal into the laboratory's plumbing system. Xylene is generally used for cleaning rather than testing purposes. The chemical, which is non-soluble in water, is generally applied using paper towels or other disposable materials. Expended towels will be *discarded into appropriate waste receptacles and not the laboratory plumbing system.*

(8) Is individually limited but cumulatively has considerable effect upon the environment or involves a commitment for larger actions;

The project does not entail a commitment for a larger action.

(9) Substantially affects a rare, threatened or endangered species, or its habitat;

There are no rare, threatened or endangered species or its habitat on the premises.

(10) Detrimentally affects air or water quality or amient noise levels; or

Ambient air quality will be affected temporarily by dust and combustion emissions but can be controlled by measures described in this Assessment. Construction noise will be pronounced during site preparation but should diminish during building construction. In addition, there are no noise-sensitive activities (for example residences, schools, or hospitals) in the vicinity of the building site that could be adversely affected by construction noise.

(11) Affects an environmentally sensitive area such as a flood plain, tsunami zone, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal waters.

The project is not proposed in an environmentally sensitive area.

Based on the above criteria, the scope of the project, consideration of short and long-term consequences of the proposed action, and all comments received during the consultation process, it is recommended that a Negative Declaration be filed for the proposed Microbiological Laboratory Building project.

BIBLIOGRAPHY

Federal Emergency Management Agency. 1987. Flood Insurance Rate Map, County of Kauai. Community Panel 150002 0201C and 150002 202C.

Park, Gerald Urban Planner. 1993. Field Observation.

Planning Department County of Kauai. Zoning Map ZM-LI 400. Lihue-Kapaia.

U.S. Department of Agriculture, Soil Conservation Service. 1972. Soil Survey of Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii. In Cooperation with the University of Hawaii Agricultural ?Experiment Station. U.S. Government Printing Office, Washington D.C.

APPENDIX A

COMMENTS AND RESPONSES

DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, HONOLULU
FORT SHAFTER, HAWAII 96858-5440

REPLY TO ATTENTION OF

June 3, 1993

RECEIVED 6/3/93

Planning Division

Mr. Gerald Park, Urban Planner
1245 Young Street, Suite 201
Honolulu, Hawaii 96814

Dear Mr. Park:

Thank you for the opportunity to review and comment on the Preliminary Draft Environmental Assessment for the Microbiology Laboratory Building, Lihue, Kauai (TMK 3-8-5: por. 13). The following comments are provided pursuant to Corps of Engineers authorities to disseminate flood hazard information under the Flood Control Act of 1960 and to issue Department of the Army (DA) permits under the Clean Water Act; the Rivers and Harbors Act of 1899; and the Marine Protection, Research and Sanctuaries Act.

a. Based on the information provided in the report relative to soils, flora, and fauna, a DA permit will not be required.

b. The flood hazard information provided on page 9 is correct.

Sincerely,

Kisuk Cheung, P.E.
Director of Engineering

JOANN A. YUKIMURA
MAYOR

COUNTY ENGINEER
TELEPHONE 245-3318

EDMOND P.K. RENAUD
DEP COUNTY ENGINEER
TELEPHONE 245-3602

AN EQUAL OPPORTUNITY EMPLOYER
COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
3021 UMI STREET
LIHUE, KAUAI, HAWAII 96766

RECEIVED 6/17/93

June 11, 1993

Gerald Park Urban Planner
1245 Young Street, Suite 201
Honolulu, Hawaii 96814

Dear Mr. Park:

Re: Microbiology Laboratory
Lihue, Kauai, Hawaii

Thank you for giving our office the opportunity to provide comments for the above project.

We will recognize this building as a B-2 occupancy, Type VN construction. We are also in the process of updating our current building, electrical and plumbing codes. Upon review and approval of your plans, it shall comply to all requirements of the codes in effect at that time of permit issuance.

If you need further assistance or have any questions, please call Don Lutao at our Building Division Office at 241-6655.

Very truly yours,

ED RENAUD
Deputy County Engineer

DL/ml
cc: Department of Water

RECEIVED
6/8/93

JOHN WAIHEE
GOVERNOR

BRIAN J. J. CHOY
Director

STATE OF HAWAII
OFFICE OF ENVIRONMENTAL QUALITY CONTROL
220 SOUTH KING STREET
FOURTH FLOOR
HONOLULU, HAWAII 96813
TELEPHONE (808) 586-4185

June 7, 1993

Mr. Gerald Park
Gerald Park Urban Planner
1245 Young Street, Suite 201
Honolulu, Hawaii 96814

Dear Mr. Park:

This is written in response to your May 24, 1993, letter requesting comment on a preliminary draft environmental assessment for the County of Kauai, Department of Water, Microbiology Laboratory in Lihue.

Having reviewed the above document, the Office of Environmental Quality Control offers the following comments for your consideration. These comments are premised on a statement on page 10 that states that "[w]astewater is collected and discharged into cesspools."

1. Under Section C, Long Term Impacts (page 12), paragraph 2 states that "[t]he primary chemicals to be used in the laboratory are ethyl alcohol, methyl alcohol, xylene and disinfectants. These chemicals are common in most laboratories and are diluted with water prior to disposal or disposed of directly into the laboratory's plumbing system."

   While paragraph's initial sentence notes that a microbiology laboratory "neither uses nor generates significant quantities of chemical or hazardous wastes," the Office understands that xylenes (various isomers of dimethylbenzene and commonly used in microscopy), unlike methyl alcohol and ethyl alcohol, are relatively insoluble in water. [1] Hence, the practice of disposing "... directly into the laboratory's plumbing system" would result in the unsolvated compound travelling directly to a septic tank and leach field.

2. Under Section C, Long Term Impacts, paragraph 3, the assessment states that "in the event acid is used for washing glassware, acid resistant plumbing and an acid dilution tank will be provided." Certain acid cleaning agents, especially chromic acid, are hazardous wastes, because they are corrosive and contain certain heavy metals (such as chromium).

[1] *The Merck Index, An Encyclopedia of Chemicals, Drugs and Biologicals*, Tenth Edition, Merck & Co., Inc., 1983, p. 1447.

The Office notes that xylenes and chromic acid contain Appendix VIII hazardous constituents (see Part 261, Title 40, Code of Federal Regulations). The draft environmental assessment should contain a brief discussion on the effectiveness of the septic tank system in biologically degrading unsolvated xylene isomers and the subsurface transport and fate (biodegradation or chemical oxidation or reduction) of the septic tank effluent including any hazardous constituents (such as chromium) found in the laboratory wastewater.

While the conclusion that "the septic tank and leaching field should not adversely affect the surrounding environment" is premised on the proper operation and maintenance of the wastewater systems pursuant to Chapter 62, Title 11, Hawaii Administrative Rules, the Office encourages you consult with the Department of Health, Solid and Hazardous Waste Branch for regulatory requirements for hazardous waste management at the site, specifically on how the wastewater administrative rules interface with the federal hazardous waste regulations.

If you have any questions regarding the above comments, please call Mr. Leslie Segundo, Environmental Health Specialist at 586-4185. Thank you for the opportunity to review and comment.

Very truly yours,

Brian J. J. Choy

BRIAN J. J. CHOY
Director

c: Wastewater Branch, Department of Health
Solid and Hazardous Waste Branch, Department of Health

July 12, 1993

Brian J.J. Choy, Director
Office of Environmental Quality Control
220 South King Stret
Fourth Floor
Honolulu, Hawaii 96813

Dear Mr. Choy:

Subject: Microbiology Laboratory Building
Lihue, Kauai, Hawaii

Thank you for your reviewing the draft Environmental Assessment for the subject project. In response to your comments, we offer the following:

1. Small amounts of xylene are used in laboratories for cleaning rather than analytical testing purposes. We understand that the chemical is used primarily for removing gummy label residue from glass bottles and is applied using paper towels or other disposable materials. Spent towels are discarded into appropriate waste receptacles and not the laboratory plumbing system. We also have been informed that other non-hazardous chemicals can be substituted for xylene in the laboratory.

The referenced paragraph will be revised to eliminate the suggestion that xylene will be discharged into the laboratory's plumbing system.

2. Your comment that "certain acid cleaning agents, especially chromic acid, are hazardous wastes . . . " is correct. Because of its hazardous constituents, chromic acid is not used as a cleansing solution and has not been used in laboratories for several years. Rather, a sulfuric acid base solution is commonly used for cleaning glassware. Sulfuric acid is soluble in water and is not considered a hazardous substance.

We will revise the paragraph to indicate that non-hazardous sulfuric acid may be used for acid washing glassware.

In summary, hazardous substances will not be discharged into the laboratory's wastewater system.

Sincerely,

GERALD PARK URBAN PLANNER

Gerald Park

xc: Department of Water
Kimura/Ybl Architects

GERALD PARK urban planner
policy analysis / environmental studies
1245
young street
suite 201
honolulu, hi 96814
tel. (808)
533-0018
urban planning

JOANN A. YUKIMURA
MAYOR

ALEJANDRO LOMOSAD
FIRE CHIEF

COUNTY OF KAUAI
FIRE DEPARTMENT
4223 RICE STREET
LIHUE, KAUAI, HAWAII 96766

June 5, 1993

Mr. Gerald Park,
Urban Planner
1245 Young Street - Suite 201
Honolulu. Hawaii 96814

RE: Fire Department Comments
Microbiology Laboratory
Department of Water - County of Kauai
Lihue, Kauai, Hawaii

We concur with the proposal to build this facility. There has been an need for this type of facility for many years. As stated in your draft, the turnaround time for samples testing is unacceptable in providing this invaluable service for our Department of Water.

Aside from the daily routine sampling of water, there has been an essential need for this on-island service during the time of disasters such as in Iniki when our Island's normal transportation lines were severed and routine sample testing were interrupted. The D.O.W. utilized our department's fire apparatus to dispense "potable" water in the communities. Our tanks were flushed and disinfected before providing this service. Even with these measures, residents were advised to boil or treat the water before consumption. Questions also arose when levels within the County storage facilities dropped drastically low and the water became turbid. Precautions were again given to boil or treat it before use.

The structure does not require additional fire protection measures such as fire sprinklers, wet standpipe cabinets, or fire alarms. The Battery Room may be required to have mechanical ventilation - provide additional data for our consideration. The storage of chemicals and flammables shall be in an approved chemical/flammable liquid storage cabinet - provide data of types and expected quantities.

Portable fire extinguishers shall be provided. Our recommendation is to provide two (2) 4A:60B:C-rated units on the second floor; housed in cabinets and located at each of the entry doors to the storage facility. Provide two (2) units on the ground floor with a minimum classification rating of 2A:40B:C; locate at the north and south interior entry doorways. Recommend that cabinets be furnished for these units as well. The cabinets may be of plastic.

Exit lighting is recommended to be provided in the ground floor interior space and at the stairwell locations on the second floor level. Installation of emergency lighting fixtures for both floors are recommended as well. Consult with our Department for acceptable fixtures and locations.

Direct any further inquiry to the Fire Prevention Bureau at 241-6511.

Sincerely,

Mike Kano, Captain
Fire Prevention Bureau

JOHN WAIHEE
GOVERNOR

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
869 PUNCHBOWL STREET
HONOLULU, HAWAII 96813-5097

REX D. JOHNSON
DIRECTOR

DEPUTY DIRECTORS
JOYCE T. OMINE
AL PANG
JEANNE K. SCHULTZ
CALVIN M. TSUDA

IN REPLY REFER TO
STP 8.5269

June 18, 1993

Mr. Raymond H. Sato
Manager and Chief Engineer
Department of Water Supply
County of Kauai
P. O. Box 1706
Lihue, Hawaii 96766-5706

Dear Mr. Sato:

Subject: Draft Environmental Assessment
Department of Water Microbiology Laboratory
Lihue, Kauai

We do not anticipate that the proposed Water Microbiology Laboratory in Lihue will adversely affect our State transportation facilities.

Thank you for the opportunity to provide comments.

Sincerely,

Rex D. Johnson
Director of Transportation

c: Gerald Park, Urban Planner

JOHN WAIHEE
GOVERNOR OF HAWAII

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
P.O. BOX 621
HONOLULU, HAWAII 96809

Keith W. Ahue, Chairperson
BOARD OF LAND AND NATURAL RESOURCES

DEPUTIES
JOHN P. KEPPELER II
DONA L. HANAIKE

AQUACULTURE DEVELOPMENT PROGRAM
AQUATIC RESOURCES
CONSERVATION AND ENVIRONMENTAL AFFAIRS
CONSERVATION AND RESOURCES ENFORCEMENT
CONVEYANCES
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION PROGRAM
LAND MANAGEMENT
STATE PARKS
WATER AND LAND DEVELOPMENT

REF:OCEA:SKK

JUN 28 1993

FILE NO.: 93-628
DOC. NO.: 3025

RECEIVED 7/6/93

Mr. Gerald Park, Urban Planner
1245 Young Street, Suite 201
Honolulu, Hawaii 96814

Dear Mr. Park:

SUBJECT: Draft Environmental Assessment (DEA): Microbiology Laboratory Building, Lihue, Kauai, TMK: 3-8-05: por. 13

We have reviewed the DEA information for the subject laboratory project transmitted by your letter dated May 24, 1993, and have no comments to offer at this time.

We will forward our Historic Preservation Division comments as they become available.

Thank you for the opportunity to comment on this matter.

Please feel free to call Steve Tagawa at our Office of Conservation and Environmental Affairs, at 587-0377, should you have any questions.

Very truly yours,

KEITH W. AHUE