

1990-05-08-0A-FEA

**FILE COPY**

NEGATIVE DECLARATION

\* IMPROVEMENTS TO CRASH/FIRE RESCUE STATION NO. 2  
HONOLULU INTERNATIONAL AIRPORT \*  
STATE PROJECT NO. AO-1144-13

1. Proposing Agency

The proposing agency is the Airports Division, Department of Transportation, State of Hawaii.

2. General Description of the Project

The project consists of:

- a. Fire Station expansion and interior renovations.
- b. Truck reservicing facility.
- c. Parking area modification.

3. Environmental Impact Factors

An Environmental Impact Assessment has been written to assess the significance of the proposed project. It is felt that because of the minor impact caused by the project within the stated limits, a negative declaration should be filed.

A copy of the assessment is attached.

4. Conclusion

The proposed project is not considered to be detrimental to the surrounding environment as the negative effects from the proposed actions are insignificant and can be mitigated.

Attachment

PROPOSED IMPROVEMENTS

FOR

AIRCRAFT RESCUE AND FIRE FIGHTING  
STATION #2 - PHASE II

PROJECT NO. A01144-13

ENVIRONMENTAL IMPACT ASSESSMENT

Proposing Agency: Airports Division  
Department of Transportation  
State of Hawaii

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October 1990

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## SECTION I

### SUMMARY

#### A. DESCRIPTION OF PROPOSED ACTION

The Airports Division of the Department of Transportation, State of Hawaii, proposes to improve the fire station facilities at Honolulu International Airport. Improvements proposed will be at the existing Aircraft Rescue and Fire Fighting Station No. 2 (ARFF No. 2) and consist of:

1. Expansion and interior remodeling of the existing station.
2. A new truck reservicing facility for rapid replacement of water and aqueous foam used for fire fighting by the rescue station vehicles.
3. Expansion of the existing employee parking area.

#### B. FINDINGS

1. There is no significant impact on air traffic operations since the area involved for all improvements is away from any active runway or taxiway.
2. There is no significant impact on air and noise quality.
3. There is no significant impact on fauna and flora. There are no endangered species in the project area.
4. There is no significant impact on water quality.
5. There is no significant impact on the scenic views of the area.
6. There is no significant impact on historic sites.

#### C. CONCLUSION

1. The proposed improvements are needed at Honolulu International Airport for the following reasons:
  - a. To improve living facilities at ARFF Station No. 2.

- b. To provide proper storage facilities for fire fighting equipment.
  - c. To provide a more efficient system to reservice emergency vehicles.
2. Implementation of the proposed action will not have a significant impact on the quality of human environment and a finding of No Significant Impact should be adopted.

SECTION II  
PROJECT DESCRIPTION

A. DESCRIPTION OF EXISTING FACILITIES

Aircraft Rescue and Fire Fighting Station No. 2 (ARFF #2) is located at the end of Lagoon Drive near Runway 8R-26L (the reef runway). Constructed in the 1970's, this station provides crash, fire and rescue support along the south and southeast portion of Honolulu International Airport (Figure 1).

There are improvements under construction around the existing ARFF #2, (Figure 2). They include:

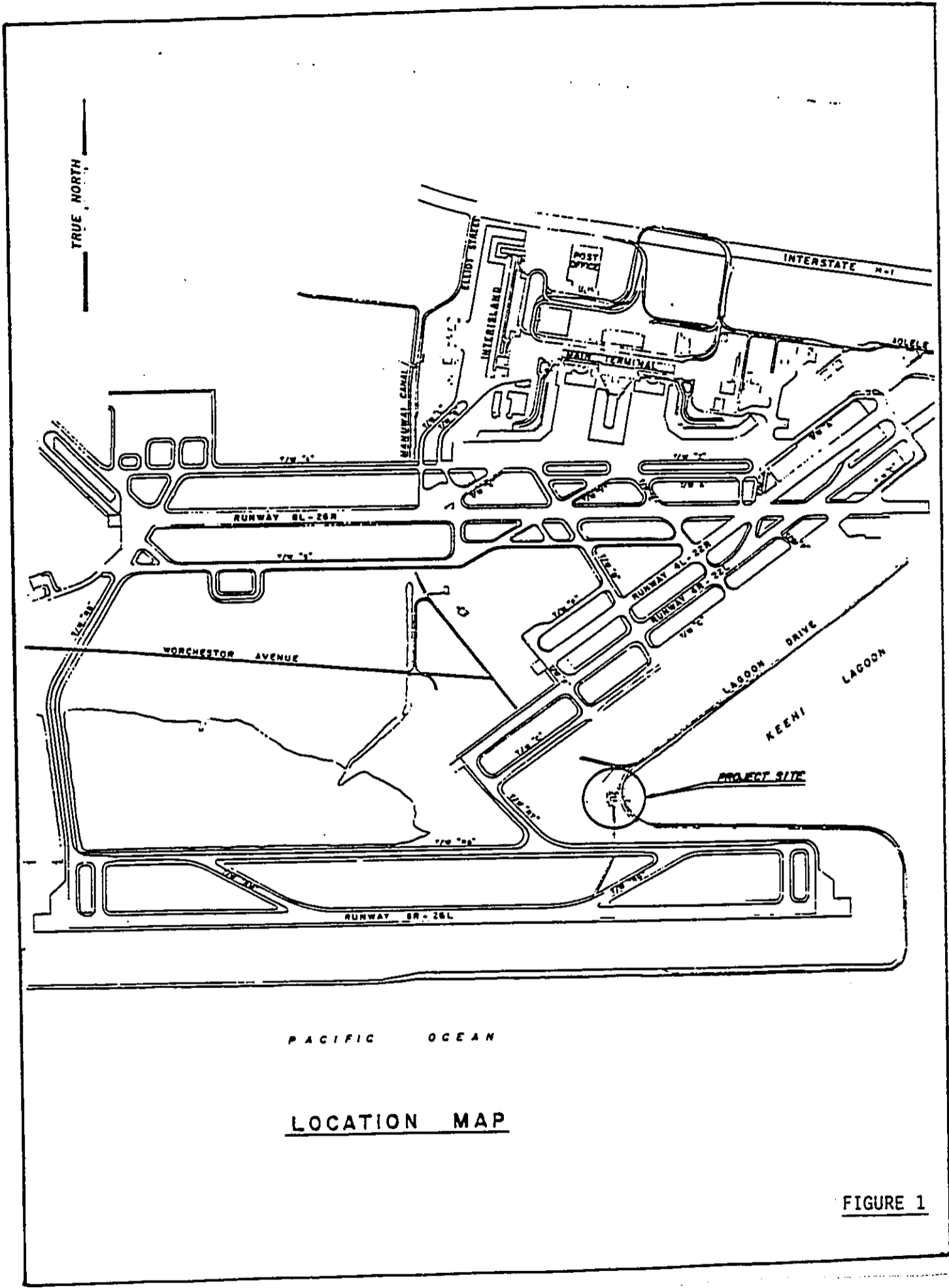
1. New fire training facility. (State Project No. A01144-11)
2. New Pier and boathouse in Ke'ehi Lagoon. (State Project No. A01144-11)
3. New Storage facility and observation tower. (State Project No. A01144-11)
4. Lagoon Drive Extension - Phase III (State Project No. A01132-13)

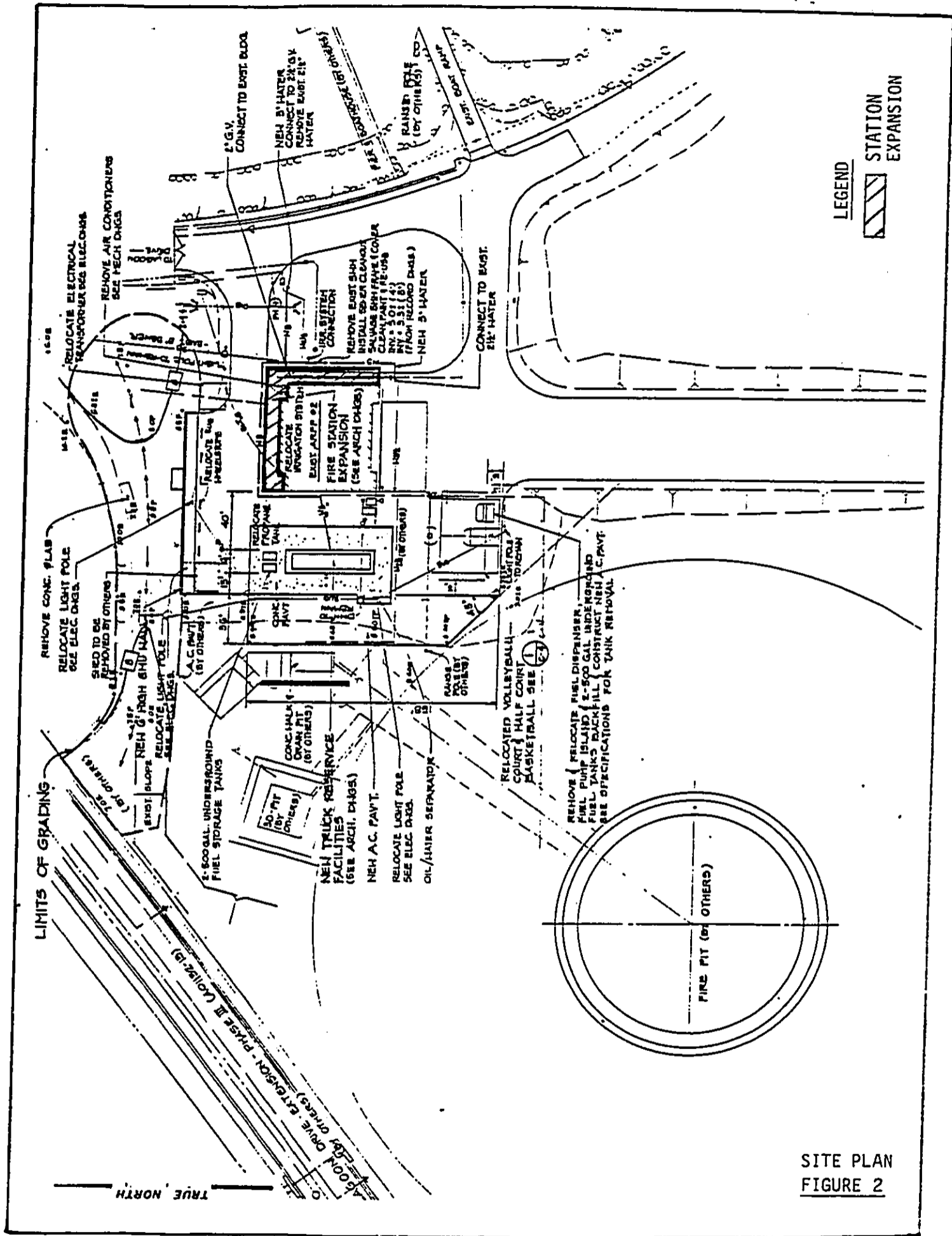
B. OBJECTIVE

The objectives of the proposed action are:

1. Create better living and learning conditions and improve employee moral with improved facilities and living conditions.
2. Provide a truck re-service area for fueling the emergency vehicles and rapid refilling of water and aqueous foam.







LEGEND  
 STATION  
 EXPANSION

SITE PLAN  
 FIGURE 2

LIMITS OF GRADING

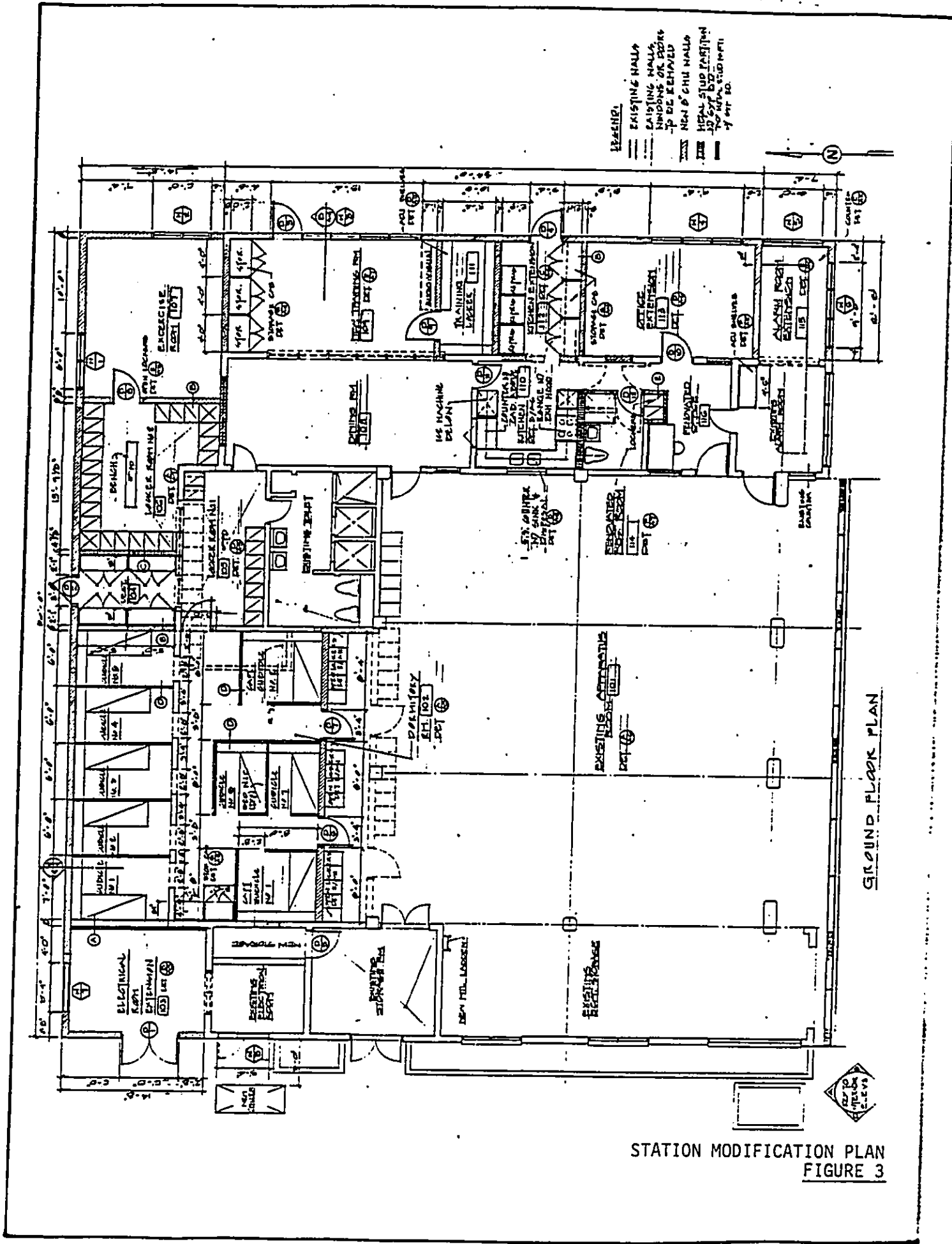
TRUE NORTH

ALCON DRIVE EXTENSION - PHASE II (CONC.)  
 (BY OTHERS)

C. TECHNICAL CHARACTERISTICS

A general description of the project scope is given below:

1. Station expansion and renovation (Figure 3, and 4): Station expansion and renovation will occur along the northern and eastern sides of the station.
  - a. By extending the walls toward the east, the station will increase the size of the alarm room, enlarge the captains office area, create separate shower and restroom facilities for female employees, expand the kitchen facilities, and separate the dining room/dayroom area by creating a new dayroom/classroom area.
  - b. By expanding the station in the northerly direction, the station can provide the proper storage facilities for the new and larger rescue vehicles which are presently at ARFF Station No.1. The expansion toward the north will also create a larger dormitory area for the fire/rescue personnel, enlarge the present locker facilities, and create a new exercise/training room.
  - c. The air conditioning system will be removed and a new heating, ventilation and air conditioning system installed.
  - d. The electrical system will be upgraded to three phase power. The standby generator will be upgraded for the new station equipment.



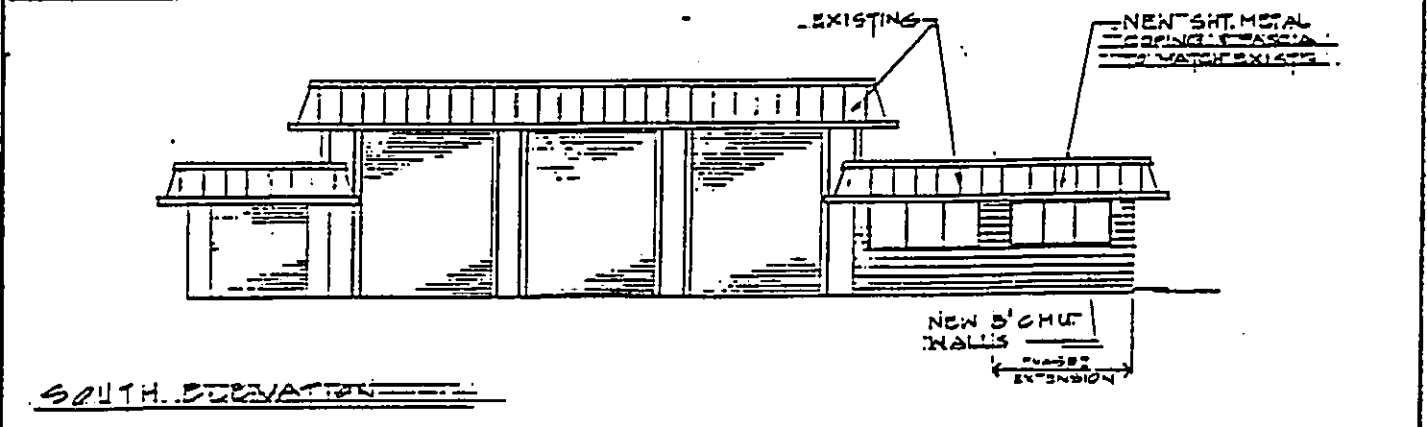
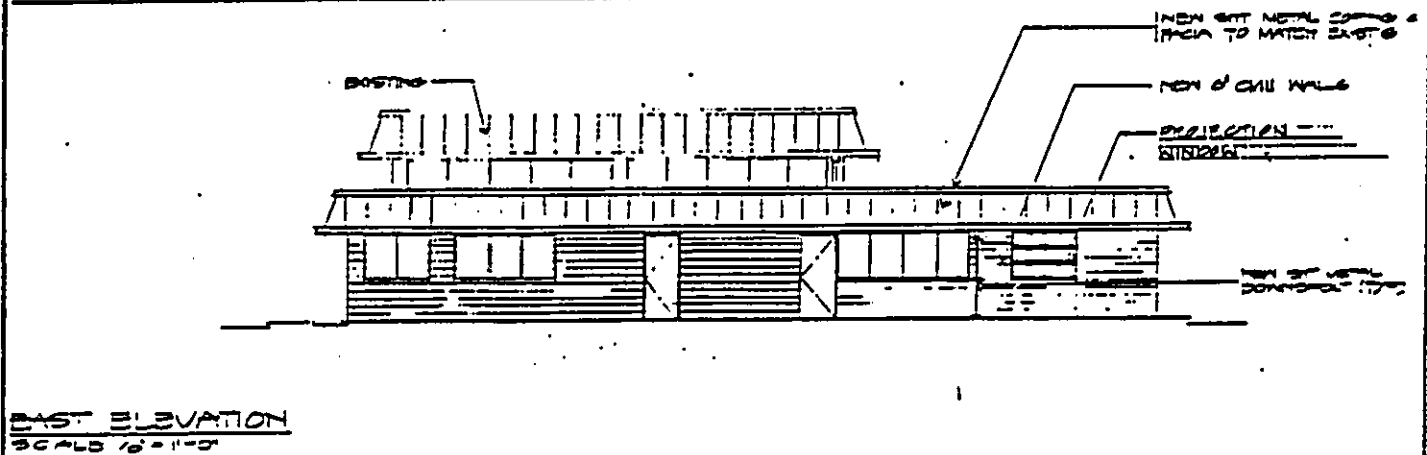
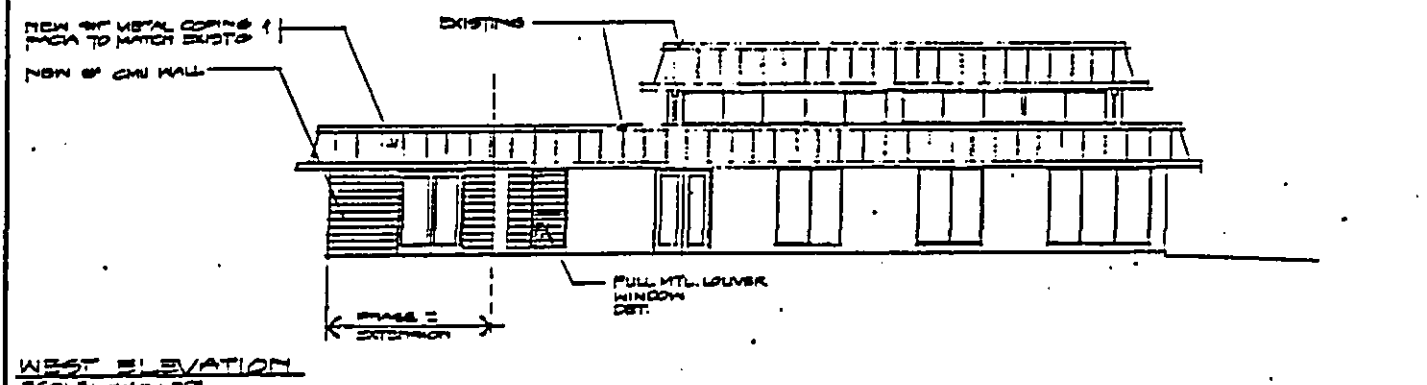
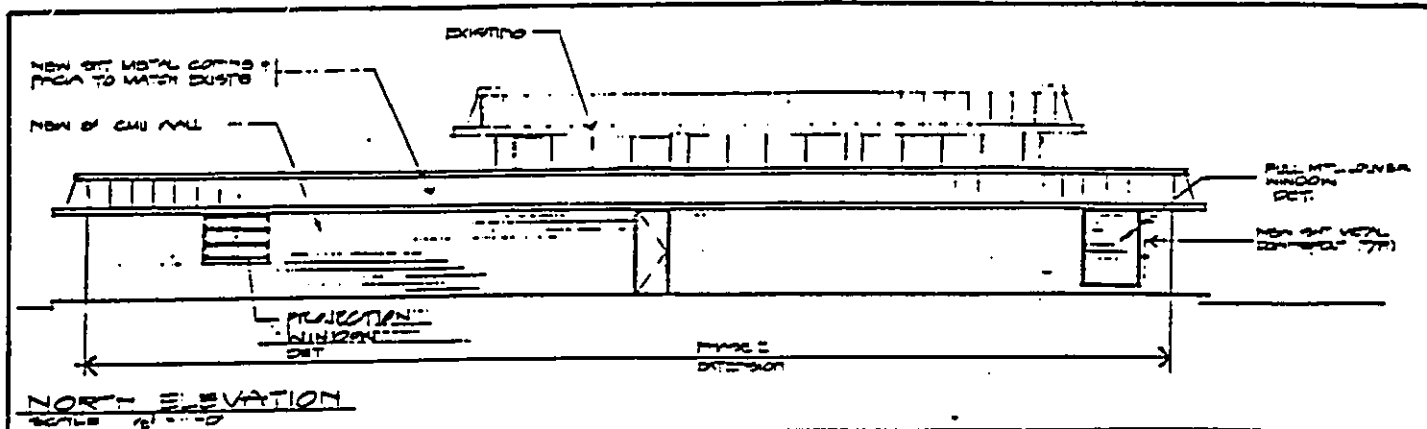
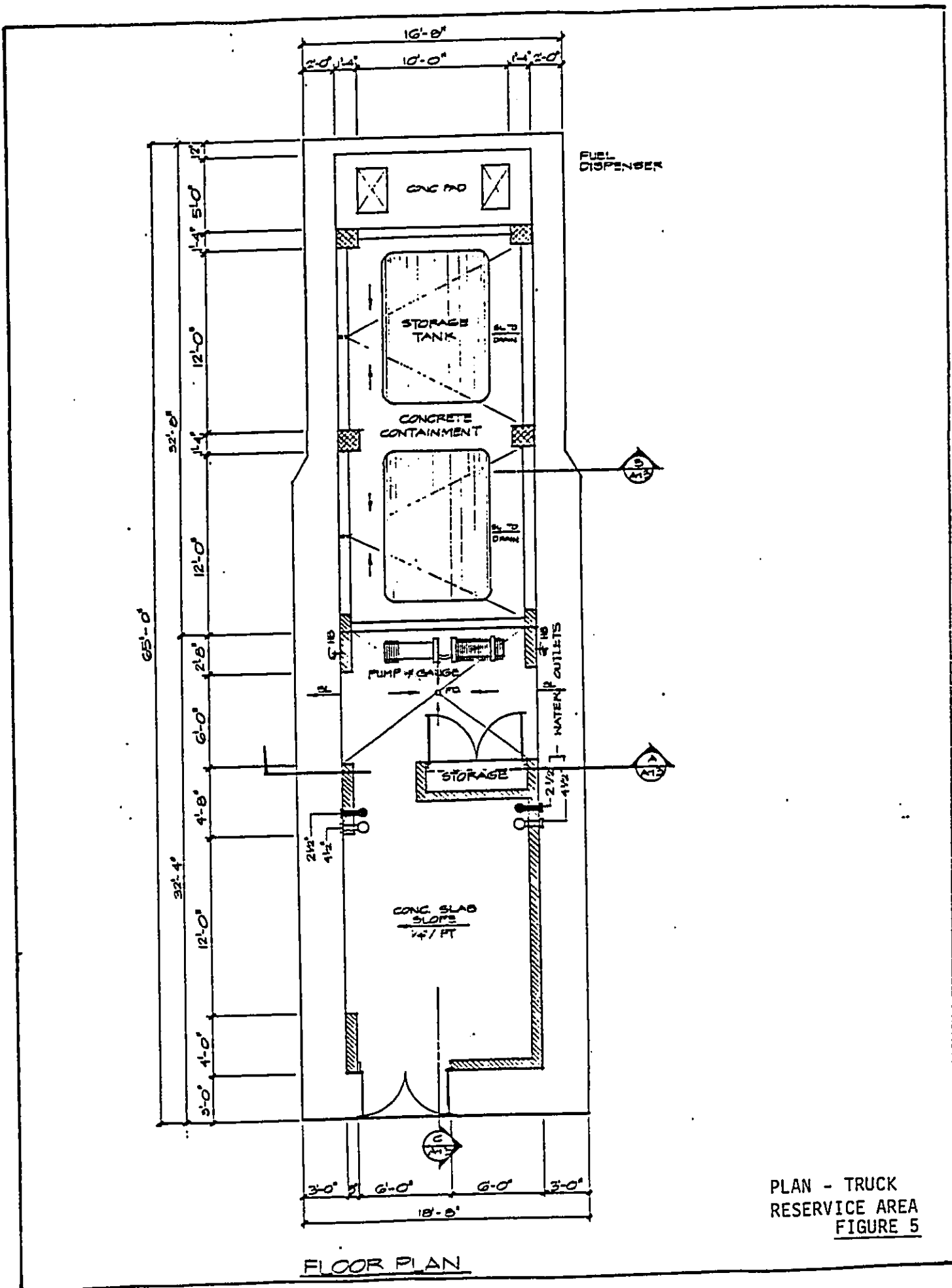


FIGURE 4

e. The station will be reroofed. The original roof is about 17 years old. The original station specifications indicates the presence of asbestos. Disposal of the roofing material will be in accordance with County, State and Federal regulations for the disposal of asbestos products.

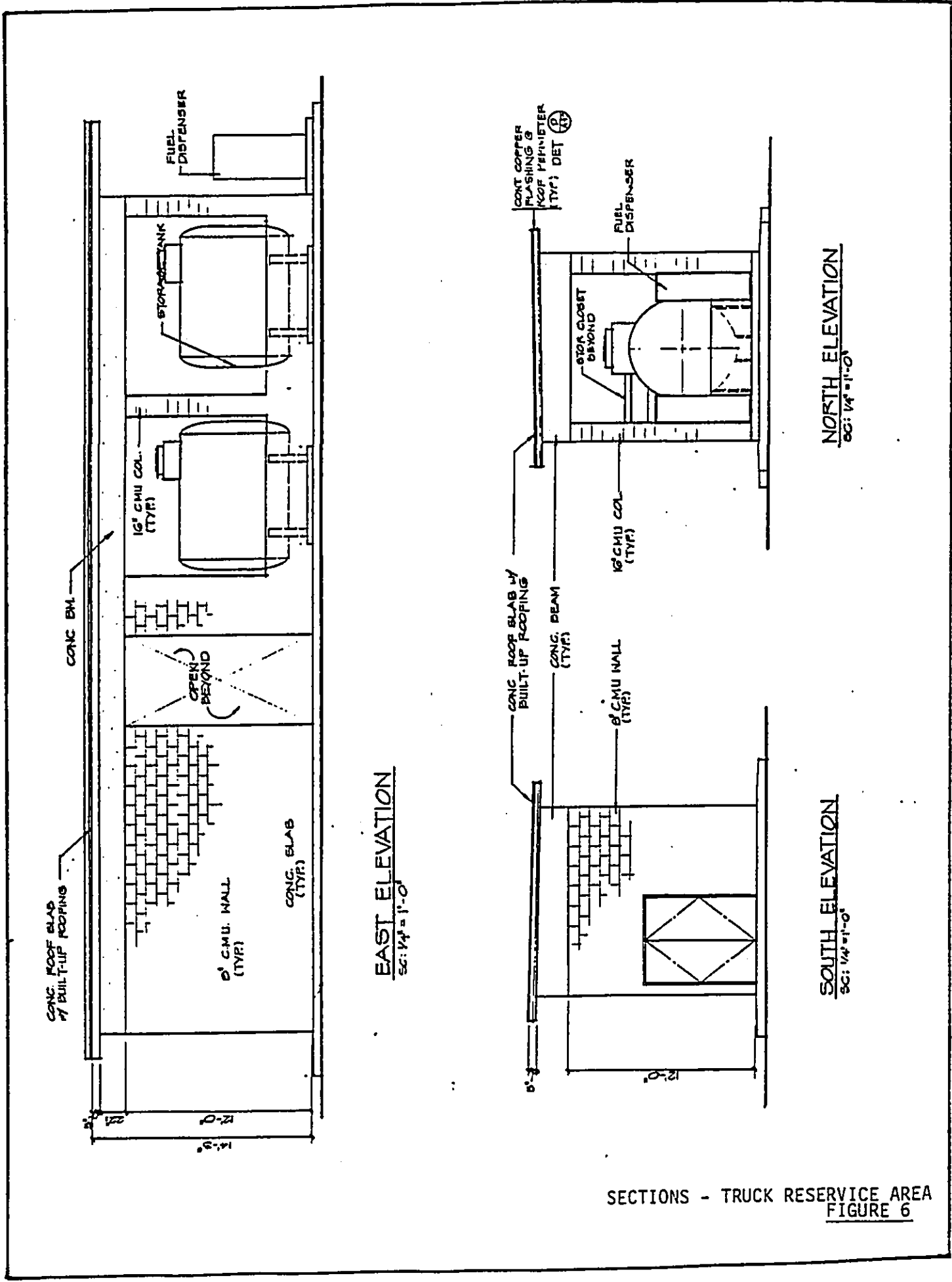
2. Truck Reservice Facility (Figure 5 and 6):

- a. The truck reservice facility will consist of two service bays for truck refueling and refilling the tanks of the trucks with water and aqueous foam.
- b. Existing steel diesel and gasoline tanks will be removed. New storage tanks and piping which meet DOH and EPA regulations for underground storage tanks will be installed near the reservice facility.
- c. The two reservice bays will be designed to collect any fuel spills or engine oil leaks from the truck and pipe the liquid through an oil/water separator tank before discharging into an existing injection well.
- d. The aqueous foam used to fight aircraft fires will be stored in two 2,500 gallon stainless steel tanks above ground. The chemicals will be pumped from the tank into the trucks.



PLAN - TRUCK  
RESERVE AREA  
FIGURE 5

FLOOR PLAN



EAST ELEVATION  
SC: 1/4" = 1'-0"

SOUTH ELEVATION  
SC: 1/4" = 1'-0"

NORTH ELEVATION  
SC: 1/4" = 1'-0"

SECTIONS - TRUCK RESERVE AREA  
FIGURE 6



Secondary containment for the stainless steel tanks will consist of a concrete berm with sufficient volume to contain all the foam chemicals should the stainless steel tanks leak or rupture.

- e. A new 8-inch waterline will extend from the existing watermain at the driveway to ARFF Station No.2 and connect to the reservice facility. The FAA advisory circular recommends that rescue trucks be refilled in three minutes. With the installation of the waterline and 4-inch hose connections to the truck, it is anticipated that the time limit during emergency refilling should be met.

3. Parking Area Modifications (Figure 2):

- a. The area to the north of Station No. 2 will be graded and additional parking area added for the personnel working at the station. The parking area will be located outside the AOA. There will be access from the parking area to Lagoon Drive through a new gate.

D. SOCIAL-ECONOMICAL CHARACTERISTICS

There will be no changes on social and economic characteristics. The project area is within the Airport Operations Area for Honolulu International Airport and will continue to be used for this purpose after improvements are completed.

E. ENVIRONMENTAL CHARACTERISTICS

The improvements proposed will be around ARFF Station No. 2 and should not alter the environment considerably. The station expansion will retain the original roof line and style.

F. FUNDING AND PROJECT SCHEDULE

Monies have been appropriated by the State of Hawaii Department of Transportation, Airports Division for the design plans, specifications, and estimates for the improvements. The estimated cost is \$1,500,000 with a construction time of 12 months.

G. RELATIONSHIP TO LAND USE POLICIES AND CONTROLS

1. Special Management Area Use Permit

All activities which lie within the Special Management area, as amended by Chapter 205A Hawaii Revised Statutes, requires a Special Management Area (SMA) Use Permit. The SMA permit is administered by the City and County of Honolulu, Department of Land Utilization (DLU) under Ordinance 84-4 ROH, as amended. The station expansion and truck reservice building are within a special management area, therefore, a SMA Permit is required.

SECTION III  
DESCRIPTION OF ENVIRONMENTAL SETTING

A. LOCATION

The island of Oahu is part of the Hawaiian island chain. The island is the third largest in size with an area of about 608 square miles. The County and the State seats are both situated in the city of Honolulu.

The proposed improvements are within the Airport Operations Area of the Honolulu International Airport and access is limited to personnel with security clearances.

B. PHYSICAL CHARACTERISTICS

The climate of the Hawaiian Islands is influenced by its location beyond any great continental land mass. Prevailing winds occur about 65 percent of the time averaging 12 mph with gusts up to 35 mph. The temperature at Honolulu International Airport averages 77 degrees Fahrenheit with humidity ranging from 56 to 73 percent. The average annual rainfall for the project area is 22.68 inches.<sup>1</sup>

The project site is a fill area makai of the Lagoon Drive and includes dredged fill, coral fragments and miscellaneous deposits. Elevations in this area range from approximately 5.0 feet to 10.0 feet above mean sea level. The predominant soil type at the site consists of grayish brown silty sand with gravel and coral fragments. Underlying the surface soil is a stratum of tan silty sand with coral fragments.

C. ARCHEOLOGICAL AND HISTORIC SITES

No historical or archeological study was conducted for this area as this area was built up with dredged material during the construction of the reef runway. Since all improvements will be constructed within the existing built up area, there is no impact on archaeological and historical sites.

D. FAUNA

No endangered animal species were seen in the project area during site visits. Bird species which may be found in the area include: Spotted Dove, House Finch or the common Sparrow and Golden Plover. Several water bird habitats are located about 4,000 feet northeast of the project site. Other animals which may be found in the area include the mongoose, rat and house mouse.

E. AQUATIC LIFE

The Oceanic Institutes ecological survey of Ke'ehi Lagoon classifies the lagoon as biologically very poor.<sup>5</sup> Mollusks, crab and fish (mullet, hammerhead shark and butterfly fish) have been observed in the area and are not considered endangered.

F. FLORA

Flora in the areas of the project site are predominantly of sparse lowlying grasses, weeds and scrub brush, some Haole Koa and Keawe Trees are present throughout the site.

G. RECREATION

Ke'ehi Lagoon is considered a valuable recreation source and is adjacent to the project site. Recreational activities include boating, canoeing, water skiing, fishing and sailing. The public has access to Ke'ehi Lagoon outside of the Airport Operations Area.

H. WATER QUALITY

The water quality in Ke'ehi Lagoon is considered generally poor although it has improved since the construction of the reef runway.6 Ke'ehi Lagoon receives runoff from industrial areas, urban areas, as well as a major portion of the airport area. Ke'ehi Lagoon is also the receiving body for Moanalua Stream, Kalihi Stream and Kapalama Stream.

The waters of Ke'ehi Lagoon are designated as class A by the State Department of Health.2 The objective of Class A is to protect their use for recreational and aesthetic enjoyment. Any other use is permitted provided it is compatible with the protection and propagation of fish, shellfish, wildlife and recreation in and on these waters. Class A waters shall not act as receiving waters for any discharge which has not received the best degree of treatment or control compatible with the criteria established for this class. No new industrial or sewage discharge will be permitted within embayments.

I. AIR QUALITY

The air quality at the site is generally representative of airport areas. The primary air pollutants found in this area are aviation related. Pollutants include carbon monoxide, oxides of nitrogen, hydrocarbons, and particulates. During periods of heavy air traffic at Honolulu International Airport, emissions of pollutants can be significant, however, the northeast winds help to disperse the pollutants out to the ocean.

J. NOISE

The main source of noise at the project site is from aircraft operations at the Honolulu International Airport. There should be no additional noise generated by the improvements.

K. COASTAL HAZARDS

According to the Flood Insurance Maps prepared by the Federal Insurance Administration this area is designated as Zone D, which is an area of undetermined but possible flood hazard.<sup>4</sup>

SECTION IV  
ENVIRONMENTAL IMPACT OF THE PROPOSED ACTION  
AND PROPOSED MITIGATIVE MEASURES

A. SHORT TERM IMPACT

Construction impacts are considered short term impacts. Site preparation and grading will involve clearing, grubbing, filling and excavation. The grading operations shall conform to chapter 23 - Grading, Soil Erosion and Sediment Control, of the revised Ordinances of Honolulu, 1978, as amended (Ord. 81-13). Any silt and debris deposited in the drainage facilities and building area by the Contractor's work will be removed by the contractor. In addition, the contractor will be required to comply with the Public Health Regulations of the State's Department of Health. The regulations include Chapter 54 - "Water Quality Standards," Chapter 60 - "Air Pollution Control," Chapter 42 - "Vehicular Noise Control for Oahu," and Chapter 43 - "Community Noise Control for Oahu".

Dust is normally generated by this type of construction and could affect interior areas and areas downwind from the construction site. The contractor will be required to implement dust measures which include watering, applying a dust palliative, dust barriers or other methods required by the City and County of Honolulu and the State of Hawaii.

There will be minimal amounts of grading to construct the improvements as the graded land is flat.

The operation of construction machinery will generate increased noise levels but should not be noticed in the noise airport environment.

The contractor will adhere to all safety requirements dictated by law and is expected to take additional precautions as may be required to minimize possible hazards on the construction site.

B. LONG TERM IMPACTS

The completed project will have no long term impact on noise, air quality or water quality. Other long term impacts are not anticipated to be adverse.

1. Social Economic

The proposed improvements will benefit the personnel at ARFF Station No. 2 as follows:

- a. The larger apparatus room will be able to store the new and larger rescue trucks. The emergency response time for the larger vehicles will be greatly improved if there is a call from the reef runway area.
- b. A separate training room for the dining/living area will promote a better learning environment.



c. The enlargement of the dormitory area and the addition of partitions for privacy will promote a feeling of security and privacy normally associated with living conditions in a home environment.

d. The rapid refilling of water and foam at the new truck reservice facility will reduce time spent away from an emergency should the rescue vehicles run out of water or aqueous foam and require the tanks in the trucks to be refilled.

## 2. Water Quality

The proposed project will not affect the existing water quality in Ke'ehi Lagoon. There will be no dredging or blasting permitted for this project. The improvements will not use material organic in nature or contain pollutants at toxic concentrations that may harm aquatic life. The proposed activities will not increase surface runoff or sediment discharge into Ke'ehi Lagoon.

SECTION V  
DETERMINATION

A. DETERMINATION AND FINDINGS

A Negative Declaration of environmental impact is recommended for the proposed improvements at Aircraft Rescue and Fire Fighting Station No. 2.

The assessment indicates that the improvements proposed will have no long term impact on air, water or noise quality. There will be no adverse economical or social impact since the lands involved will continue to be used for airport purposes.

There will be short term impacts caused during construction of the improvements. These impacts are: dust during grading and interior renovation operations, noise during construction related to interior demolition, possible temporary shelter during roof tie ins, asbestos removal and reroofing. Such inconveniences will be minimized with proper implementation of dust and noise control measures by the contractor, and by proper coordination and inspection by the state during construction.

#### REFERENCES

1. The State of Hawaii Data Book, Department of Planning and Economic Development, December 1986.
2. State of Hawaii Department of Health, Chapter 54, or Title 11, "Water Quality Standards," Effective October 6, 1984.
3. State of Hawaii Department of Health, Chapter 60, of Title 11 "Air Pollution Control".
4. Flood Insurance Rate Map, U.S. Department of Housing and Urban Development Federal Insurance Administration.
5. Survey of the Water Quality, Benthic Habitat and infaunal populations for Ke'ehi Lagoon, Hickam Harbor and Marine Pond, Honolulu International Airport, Oi Consultant, Inc., September 1986.
6. Reef Runway Post-Construction Environmental Impact Report, Vol I & II, Parson Hawaii, July 1979.