FINAL

ENVIRONMENTAL IMPACT STATEMENT

for

EWALANI VILLAGE

by

Hawaii Housing Authority

April 14, 1972

INTRODUCTION:

The project area is all of that certain parcel of land situate at Puuloa,
District of Ewa, City and County of Honolulu, State of Hawaii, described
as Lot 1554, with an area of 222,919 square feet as shown on map 191,
Land Court Application #242 amended. The project will provide 81 townhouse condominium units with a project mix as follows: 43 three bedroom,
22 two bedroom, and 16 four bedroom units. There is also parking for 116
vehicles (102 are required), 4 loading zone areas, 6 designated rubbish
collection areas, and a secondary sewage treatment plant with a capacity
for 50,000 gallons of domestic sewage per day. The townhouse units will be
sold fee simple in a price range of \$28,500 to \$35,950 under the FHA 234
convertibles to 235 program. The market that Ewalani Village is directed
at is considered "Low and Moderate" income.

Improvements consist of a playground area, curbs and gutters, sidewalks, storm drains and underground utilities.

The site for the project is already improved due to the fact that all site work, both increments, was accomplished when Unit I was developed. The initial project provided 133 single family units, with Unit II providing a higher density mix using the townhouse concept of cluster style housing. The terrain is essentially coral which was improved according to traditional construction practices and rigid FHA specifications. All natural voids were opened using bulldozers to rip the coral material and the voids were backfilled with

graded coral and other select fill material to achieve compaction of 90%. The water table was not considered a problem since it was below the limits of the excavation. In addition, the voids below the excavation levels were tested by the bulldozers and vibrators to determine their strength of the coral material. In accordance with FHA specifications, fill material was placed to final grade. All site work took into consideration the negative aspects of noise and dust. A sprinkler truck was used by the contractor to control the dust and the overall effect during site improvement construction was considered excellent. The noise was limited to the normal construction associated with building construction, with no loud or excessive noise from specialized heavy construction equipment like piledriving machines. All site improvements including storm drains and underground utilities were placed for Units I and II at the same time.

The environmental impact of the proposed project has been for the most part absorbed by the advanced planning of the total project which provided for the site work for both units to be accomplished at one time. This advanced planning format eliminated the need to physically alter the landscape at the expense of the immediate residential sectors. The need to cause the already established residents of Unit I and the other adjacent residential areas the problems that occur when extensive grading and excavation work has been eliminated. The significant change from Unit I is that at Unit II, the 50,000 gallon capacity secondary sewage treatment plant will adequately provide sewage treatment for the 81 townhouses.

The sewage treatment system presently in operation for Unit I consists of cesspools that are operationally effective and are accomplishing their intended purpose. The proposed secondary treatment package ptant for this project will provide the required treatment for the 81 townshouse units only. Mr. Peter Sakai, Chief of the Sanitary Engineering Branch, State Department of Health has stated that he favors an above the ground treatment plant for this site. The developer has proposed an above the ground treatment plant. Before approval of this system for this development additional perculation tests need be made. These tests are now being conducted.

The impact of the proposed project will be limited to the normal construction noise emanating from the building contractors who will be erecting the townhouse units. This anticipated noise is not expected to cause undue problems since the work is limited to normal construction working hours, with work stopped during the hours when the established community has returned home for the day. The other aspects of environmental impact that could be considered detrimental are considered minor, since the basic sitework improvements have already been accomplished. Ground water pollution is improved with the installation of the sewage treatment plant.

Disposal of the treated effluent will be accomplished through two deep wells, not less than 4' in diameter and not less than 50' deep. The treated affluent from the package sewage treatment plant is pumped through the wells which are lined to prevent cave-in problems. The wells are designed to absorb not less than 100 gallons per minute each and will be tested by the well drilling

contractor. As the Honouliuli Sewage Treatment Plant at Honolulu is developed and implemented, housing projects as this, will be connected to a formal regional sewage treatment plant. There will be little if any air pollution from the normal building construction activity at the project. The contractor will be advised that disposal of construction rubble or waste will be accomplished by trucking away the waste, not burning it at the site. At the present time, the site is in an unused but improved state awaiting the commencement of building construction. The social and economic benefits to be derived from the implementation of this project outweigh the minor environmental impact that will take place.

Any adverse enrironmental effects which cannot be avoided should the project be implemented: There is the previously mentioned factor of construction noise from the structural building contractors, but there will be no loud or excessive noise since the need for heavy specialized construction equipment like pile driving equipment is not required. During the installation of the sewage plant there will be additional noise when the fabrication of the plant and the limited installation of the rectangular aeration tank is done. Fully described, "the tank also provides an aeration capacity of 50,000 gallons and will be furnished with an inlet screening basket, sludge return and air distribution systems. There will also be a clarifier equipped with airlift sludge return and airlift surface skimmer systems, scum baffle, and adjustable V-notch effluent weir; a comminutor with electrode control; and a hypochlorinator with housing and 1200 gallon

chlorine contact tank." Specifications for the plant can be provided on request. The depletion of resources attributable to the project are considered normal for a project of this size and scope. The utilization of water and also the land area are justified in view of the benefits to be derived. In an improved state, the project area will be greater socioeconomic benefit to Man, particularly with the need for housing in this badly needed price range. There will be as previously mentioned, minimal air pollution since the basic activity is limited to the carpentry, electrical, and plumbing contractors. The effect will be extremely minor in nature to the environment as well as the established residents of the area. There will be no loss of significant flora or fauna since the area is not considered a wilderness or conservation type sector.

A serious matter for consideration is the potential traffic flow that will develop from the implementation of this project. To minimize the traffic impact of this project on the existing transportation system, the developer will provide the necessary internal roadways and coordinate the construction work with the City Traffic Department and the State Department of Transportation. The County's role is of course in the providing of basic services like police, fire, and solid waste collection; the state's role is in the planning and providing for adequate roads and highways to alleviate the traffic density that results from projects of this type. Solid waste will be picked up by the City and County Refuse Department.

Alternatives to the proposed action: The benefits to the project area outweigh the obvious alternative of not implementing the project.

The providing of low to moderate cost housing units predicates the need for this project as opposed to other alternative uses such as open space or recreational use.

The overall project plan calls for the development of single unit family dwellings in the first increment, and the decision to provide townhouse units in the second phase was based on utilizing to the maximum, the allowable density provided by existing regulations. This is in keeping with the provisions of the Housing requirements to provide "low to moderate cost" housing for as many people as possible. To expand the previously developed single unit housing portion would not have provided the increased number of living units for sale.

The relationship between local short-term use of man's environment and the maintenance and enhancement of long-term productivity: Man's short-term use is considered more critical in view of the housing needs in this price range (\$28,500 to \$35,950). The amenities provided are also to be considered as valid examples to the project's willingness to provide more than shelter at economical prices. Acknowledgment and acceptance of the concern over Man's depradation of the land is demonstrated by the inclusion of the extensive improvements such as curbs and gutters, storm drains, underground utilities, and a recreational playground area for the children

of the project. There is also clearly designated areas for solid waste collection and more than adequate space for automobiles. The long-term productivity of the area with the basic coral terrain is not considered to be prime agricultural land. The County will be expected to provide the customary utilities such as solid waste collection and disposal, fire, police, street lights, road maintenance, and the State is to provide schools and roads. In its present state, the project area is not considered as being fully utilized for tax benefits to the State and County Governments. The long-term versus short-term economic considerations are considered in favor of the project.

- Mould be involved in the proposed action should it be implemented: The single most important commitment of resources would be the land area in question. The materials that will be utilized in the implementation include the wood for the structural buildings; the water to be used during the actual construction and also after the project has been completed and the permanent residents move in, and the fuels required for power generation.
- 6. The analysis of the economic and social benefits derived from implementation of environmental quality control with respect to the housing project: The ability to provide either State lands or State funds to accomplish the housing considered essential in view of the growing population has the most significant impact in a socio-economic sense. This is especially

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true from the standpoint of providing housing in the price range that is within the reach of the average citizen and not limited to the middle or upper levels of our local economy. The ability of a low to moderate income family to purchase a home at a price they can realistically afford without both members of the family working is a goal that must be made available to as many of our society as possible. The sociological impact of sub-standard housing at the current price scale is creating problems within our society; this project is considered one means to effectively meet this challenge.

A brief discussion as the capability of the Department of Education to provide adequate school facilities in the area is provided here. The Department of Education has pointed out that at the present time, the three schools in the area, Campbell High School, Ilima Intermediate School and Pohakea Elementary School, are reflecting enrollment levels considerably higher than the levels of a year ago. Campbell High School's enrollment has gone from 1582 in 1970, to 1731 in 1971. Ilima Intermediate School's enrollment has jumped to 1142 in 1971 from 991 in 1970. Finally, Pohakea Elementary School's enrollment has nearly doubled to 1360 in 1971 from 736 in 1970. This is also an indication that the school age children are heavily vested in the elementary school level. Mr. James Edington of the Advanced Planning Section of the Department of Education advises that for the school year 1972-73 (which commences in September, 1972) there will be additional capacity provided by Momilani Elementary School and Puuloa

Elementary School. Some of the children attending Pohakea Elementary and Ewa Beach Elementary Schools will be re-assigned according to the school districts in which they presently reside. This will allow children living nearest the schools to attend these schools without traveling long distances.

The Department of Education has indicated that the existing and planned facilities will be able to handle the amount of children generated by this project.

It is on this basis that favorable consideration be given to this project and also in view of the relatively insignificant impact on the environment that will take place if implemented.

