Site and Facility Assessment
For
Ulu Ke Kukui Transitonal Housing

Wai‘anae, O‘ahu, Hawai‘i
87-576 Kula‘aupuni Street
TMK: (1) 8-7-010:030

Prepared For:
Department of Hawaiian Home Lands
Hale Kalaniana‘ole
91-5420 Kapolei Parkway
Kapolei, Hawai‘i 96707

Prepared by:
Group 70 International, Inc.
925 Bethel Street, 5th Floor
Honolulu, Hawai‘i 96813

October 31, 2017 (FINAL)

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LIST OF APPENDICIES

I. EXECUTIVE SUMMARY

Property Name: Ulu Ke Kukui Transitional Housing

Property Location: 87-576 Kula'aupuni Street, Waianae, Hawaii 96792

Tax Map Keys (TMK): (1) 8-7-010:030 por.
See Figures 1 and 2

General Physical Description

General Condition: Acceptable

Level of Maintenance: Fair

All buildings appeared structurally stable and designed and constructed appropriately. The interior of units that were observed are in generally good condition with no indication of wall, ceiling or flooring failures, or damages. The exterior of the facility requires cleaning of bird droppings on the roof solar panels, gutters and downspout pipes. There are areas in the site parking lot and access road that will need to be rebuilt as deterioration is significant. The observed building MEP (Mechanical, Electrical, and Plumbing) systems appear functional and do not require repairing at this time. Overall, the existing facility will need minor restoration for the buildings and repaving in the asphalt areas that have failed.

Opinion of Probable Cost

Based on the observations from the walkthrough of the existing facilities, interviews conducted, and supplementary information provided, G70's opinion of the probable cost to address the areas of physical deficiency is outlined in the table below. These costs are on a rough order of magnitude (ROM) budget. Cost will vary, depending on origin of materials, current market pricing, and labor. Each cost entry will be detailed and explained in Budgetary Cost Estimate section of this report.

	Total
Architectural Costs	
a. Architectural Total	$0
Site Costs (Civil Engineering)	
a. Site Total	$33,392
Structural Costs	
a. Structural Total	$2,161
MEP Costs	
b. MEP Total	$19,655
Subtotal, Direct Cost	**$ 55,208**
Design Contingency (5%)	**$ 2,760**

Subtotal, Estimated Direct Cost to Prime	**$ 57,968**
Prime Contractor Markups	**$ 34,674**
GRAND TOTAL ESTIMATE	**$ 92,642**

II. INTRODUCTION

Group 70 International, Inc. ("G70") was contracted by the Department of Hawaiian Home Lands ("DHHL") to perform a visual observation of the Ulu Ke Kukui Housing site an facility located in Waianae, Oahu. The facility consists of five transitional multi-family buildings and an administration building which includes offices, storage, classrooms, a daycare and cafeteria. The six structures are located on DHHL-owned property located at 87-576 Kula'aupuni Street. **See Figures 1 and 2.** The structures are used for transitional housing for homeless families with dependent children and to provide an array of services and resources for residents. The facility is owned by Department of Human Services and is operated by Alternative Structure International dba Kahumana. They currently maintain 78 family housing units.

G70 was tasked with preparing this report that would detail the findings of the site visit, summarize any issues found, any recommended improvements, and maintenance items for the structures and surrounding site. This assessment will help DHHL decide if it is feasible to adaptively reuse the facility, renew its lease with Kahumana, or demolish the facility to redevelop as single-family lots.

G70 and its consultants visited the site on October 3, 2017 at approximately 8:00 am. Conditions were fair, partly sunny and partly overcast, with low gusts of winds out of the northeast. The team visually inspected the building structures, interiors, exteriors, roofing, as well as the surrounding site. Field measurements, photographs, and notes were taken. Kahumana/DHS staff opened rooms, attics, storages, and other portions of the facility as needed and requested by G70 and its consultants. Following the visit, summaries of the visual inspection were provided by each discipline and compiled into this report for DHHL.

Figure 1. Site TMK

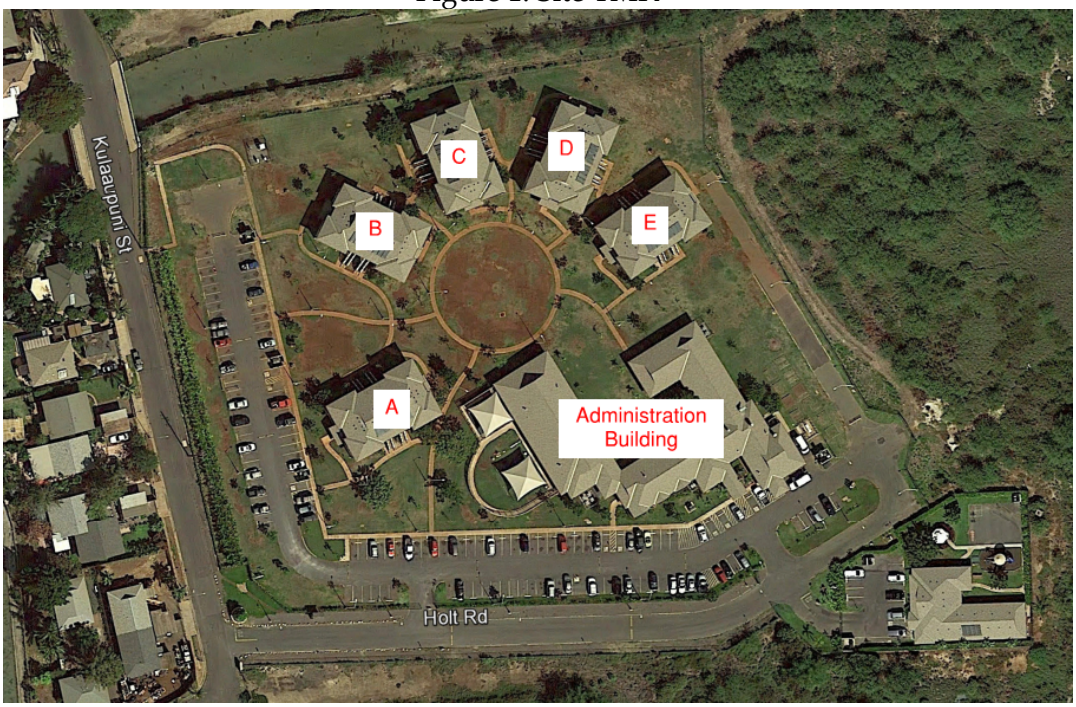

Figure 2. Site Location

III. GENERAL FACILITY DESCRIPTION

BUILDING A, B, C, D, E: There are five residential buildings built in 2007. Each building has 16 units that include 8 two-bedroom units and 8 studio units. There are 4 ADA units at the Ulu Ke Kukui facility, 2 in Building A and 2 in Building B, both are two-bedroom units. There are communal washing machines and a laundry area outside of each building. There are also solar water heater panels on each building.

ADMINISTRATION BUILDING: The existing administration building is a one-story timber framed structure with a sloped roof. There are offices, classrooms, a cafeteria, commercial kitchen and two early child care centers. One is operated by Kahumana and the other is operated by Honolulu Community Action Program (HCAP). Outside of the child care services is an enclosed playground area with a covered playset.

PARKING LOT: There are marked parking stalls and ADA stalls in the parking lots. There are fire lanes with fire hydrants on three sides of the facility. There are also dumpsters along each side of the parking lot.

IV. FACILITY CONDITION ASSESSMENTS

A. ARCHITECTURAL ASSESSMENT

General

- The Building Permit issued for the building was based on Construction Type V Occupancy Groups as follows:
  - R Residential
  - B Business
  - E Educational

Land Use/Zoning

- The facility is located on a City and County of Honolulu zoned Agricultural lot.
- Fundamental Zoning Elements:
  - A residential use along with supporting administrative uses is likely allowed by the City and County of Honolulu under a Conditional Use permit or DHHL may have used its exemption of zoning requirements to achieve the proposed development.
  - Parking: Current zoning code Land Use Ordinance (LUO) for the project requires provision for parking which has been provided on site. Project is likely compliant for the proposed use as an abundance of surface parking was observed.
  - Loading: Multiple loading stalls were observed at the main administrative building as well as adjacent to the dumpsters.
  - Setbacks: The facility is within the required setbacks for the site.
  - Height limit: the project is within the allowable height limit of 25 feet.

Building Code

- The applicable Building Code in effect at the time of initial design and construction was likely the 1997 Edition of the Uniform Building Code (UBC). Copies of the actual approved Building Permit Plans were unavailable.

- The building is in a satisfactory condition with signs of wear and ongoing maintenance. It should be noted that the transient nature of the tenants historically creates an accelerated building wear due to the number of residents and the constant turnover. There were observed deficiencies noted, most significantly:
  - Floor assemblies are likely performing at or below allowable acoustical ranges of housing standards as the flooring is placed directly on the plywood floor sheathing and a single layer of gypsum board below. Anticipation of significant below to upper floor underperformance of impact insulation class (IIC) is likely.

Architectural Systems

- General Quality of Construction and Condition:
  - The buildings were designed and constructed to an adequate level of quality. The building are wood framed structures which has a predictable history of performance in the tropical marine environment. Many areas of exterior finish degradation were observed. **(See Photo 1.2)**
  - In general, the interior of units observed were generally in good condition with no indication of wall, ceiling or flooring failures, or damages. **(See Photo 1.3)**
  - The following are exterior architectural conditions are as follows:
    - Roof condition: Asphalt shingle is in moderate condition; significant bird droppings are present and present a health and material wear issue. Roof top appurtenances such as solar water heating appears to be significantly coated with deposits. **(See Photo 1.1)** This should be maintained to ensure further damage is limited. Upon visual inspection there appeared to be no insulation in roof cavities, foil faced sheathing was observed but does not provide insulation properties.
    - Eaves: underside of eaves provided with simulated siding were in good condition, exposed raters and vents to attic space show sign of wear and all have exposure to nesting bird and associated bird dropping deposits.
    - Gutters and downspouts have an oxidized finishes and significant bird dropping deposits.
    - Walls: Board and batten walls with concrete sheathing and wood trim are in good condition, a small percentage of dry rot was observed on trim and edge conditions. Not required to be replaced but may want to in the future.
    - Windows: Vinyl jalousie windows (breezeway) are in good condition, missing screen panels were observed.
    - Doors: metal clad residential door seals and hardware are in good condition.
    - Entry Lanai Floors (second floors): open treks running boards are in moderate condition indicating standard foot wear.
    - Stairways: precast treads and wood frames stringers along with wood framed guard rails are in moderate condition, a few balustrades were missing or damaged, dry rot and other exposure wear was observed.
    - Ground floor walkways: concrete walkways were in moderate condition with minimal cracking, standard red dirt staining and other staining was observed. No significant differential settlement was observed.
    - Attached fencing at laundry rooms: chain link fencing appeared in good condition with some oxidation and plant growth.

- Interior Architectural Conditions:
  - Wall partitions: moderate condition with anticipated wear, patching and deferred maintenance due to heavy residential utilization from short term renters. It does appear that ongoing maintenance has been provided by current operator, the degree of damage has accumulated in the observable repairs/refinishing.
  - Interior floor finishes:
    - Vinyl flooring: had significant red dirt staining and in upstairs unit's joints in floor sheathing were telegraphing through. Not required to be replaced but may want to in the future.
    - Ceramic Tile in ADA restrooms was in moderate condition but had significant staining of grout joints. Heavy chemical stain removal and re-grouting recommended for maintenance.
  - Interior doors: moderate condition with signs of damage. Not required to be replaced but may want to in the future.
  - Appliances: in a the few units visited the stove was missing burners and appeared to not be operable, studios were not outfitted with a cooking appliance. Refrigerators appear to be operable.
  - Cabinetry with cultured marble counters were in moderate condition with some damage and overserved staining. Not required to be replaced but may want to in the future.
  - Vinyl shower stall observed were in various conditions, most had staining but were operable.
- Americans with Disability Act (ADA) Review: In general, the facility has units designated/designed to achieve ADA compliance. The following are observations:
  - The facility has four ADA units, which is compliant with the amount needed per ADA guidelines.
  - Doors appear to be compliant to applicable ADA standards.
  - Accessible kitchen elements were observed; however, appliances may not be compliant to reach and control requirements.
  - Public restrooms have been provided with clearances heights and location of fixtures

B. CIVIL ENGINEERING ASSESSMENT

The civil engineering assessment is focused on the existing infrastructure and site improvements. Additional information was received from Marin Witt, Ulu Ke Kukui Housing Director and Mike Lave, Housing Resident Manager.

- Access to the site is provided through Holt Road from the City and County of Honolulu owned Kula'aupuni Street. Holt Road consists of a two-lane asphalt paved driveway. The driveway appears to be DHHL-owned per property tax maps. Holt Road also provided access to Ho'omalu O Na Kamali'i operated by Family Programs Hawaii. Asphalt cracking and potholes were observed at several locations along the driveway to the facility indicating the pavement is failing. Towards the entrance of Holt Road, two deep depressions on the asphalt road on one side of the lane about 6-in deep. **(See Photo 2.1).** There is a low point on the south-eastern side

of the site along Holt Road causing rutting and asphalt cracking, it is approximately 10 feet in length causing significant failure. **(See Photo 2.6).** There is ponding along the parking entrance and fire lane entrance about 8 feet in length as well as weeds growing out of the asphalt area. **(See Photo 2.7).** Potholes and asphalt cracking were spotted in the parking lot due to ponding water and puddles close to 5 feet in diameter. **(See Photo 2.8).** Asphalt deterioration appears near the fire lane on the west side of the parking lot. A detached sign post pole protrudes 1.5 inch from the ADA access stalls which will need to be removed. **(See Photo 2.9).**

- There are 131 open parking stalls and 10 ADA designated parking stalls, which meet parking requirements. There are two large asphalt paved parking areas with two-way traffic located at the south and west sides of the facility. There is also a asphalt driveway to the east of the facility. **(See Photo 2.2).**

- The site is flat and appears to have ADA accessible paths connecting all buildings. There was an uneven sidewalk section which appeared to be caused by a nearby tree root about 10 feet in length. **(See Photo 2.3).** Due to the condition of the pavement, ADA accessibility should be verified, and pavements should be repaired.

- Fire access to the site is available through Holt Road to the facility. The parking aisles and driveway to the east of the facility are fire lanes and provide the required fire hydrants.

- The facility is serviced by a 8″x2″ FM water meter located at the southwestern corner of the facility. It connects to a Board of Water Supply 8″ water line in Kula'aupuni Street. Potable water and fire hydrant water is combined in the same system with backflow preventers at each building's potable water connection lateral.

- It appears the onsite sewer is collected in ductile iron pipes and conveyed towards a City and County of Honolulu owned 10″ PVC pipe located at the north side of the property. It was noted that there are occasional sewer overflows, but it appears that it is due to grease blockage rather than deterioration of the sewer system. We recommend working with the residents to dispose of grease appropriately.

- The onsite cafeteria has a grease interceptor. It was not inspected. Per Mike Lave, Housing Resident Manager, it is emptied regularly.

- There are two drainage inlets onsite. The first is located between the parking lot and Kula'aupuni Street and the second is located at the center of the facility in a large circular landscape area. **(See Photo 2.4)** The first inlet connects to the second with an 18″storm drain line, and the second connects to a storm drain manhole then to the City and County of Honolulu Maili Channel with a 24″ storm drain line. The project site is relatively flat. Adjacent to each building, grades appear to slope away from the building with no evidence of ponding or flooding issues. Parking lots and driveways appear to slope towards the two drainage inlets. Slopes are minimal and

ponding occurs at various locations within the parking lot and driveways. All structures contain gutters, downspouts and splash blocks which discharge to grade.

- There is a propane gas tank that is used for the kitchen that is regularly filled. No issues noted.

C. STRUCTURAL ASSESSMENT

Description of buildings A through E:

The existing structures are two-story timber framed with a sloped roof with roof eaves. In the attic space, the roof is framed primarily with 2x wood trusses spaced at 24" on center. The 2x wood rafters at the ends of the building extend over the top chord of the step-down trusses (**See Photo 3.1**). The interior roof sheathing uses LP techshield which has a foil coating on the interior surface. The exterior roof sheathing at the eaves appear to be T1-11 plywood which have the grooves facing downward. The exterior wall sheathing is a combination of what appears to be horizontal siding at some areas and board and batten at other areas.

The buildings most likely have 2x4 framed stud walls that serve as both bearing and shear walls. The floor joist was not observed but the floor system is most likely framed with 2x floor joists. The second-floor common entry area is framed with 1x spaced TREX decking over 2x joists spaced at 16″ on center (**See Photo 3.2**). There are second floor joists at the entry area and the exterior slab edges. The rest of the structural framing was not visible. Each building has an outdoor laundry area on each side which is framed with 2x wood roof rafters spaced at 24″ on center and supported by a wood beam and steel pipe columns.

The exterior stairway up to the second floor is framed with precast concrete steps supported by Glulam beam stringers on each side. Wood railing posts are bolted to the outside faces of the stringers. (**See Photo 3.3**.)

Description of Administration Building:

The existing administration building is a one-story timber framed structure with a sloped roof and roof eaves. The attic space roof framing is most likely wood trusses spaced at 24″ on center. The exterior roof sheathing at the eaves appear to be T1-11 plywood which have the grooves facing downward.

The building is composed of three wings and has a concrete slab on grade foundation. The exterior covered walkways have a 4x wood beam supported by 16″ square concrete masonry columns. The walls are most likely wood framed stud walls that act as bearing and shear walls.

Conversion of the 2 bedroom and adjacent studios into a three-bedroom unit:

The typical two-bedroom units are located at the ends of the building and the adjacent studio units are located at the middle. There is an internal locking door that connects the two-bedroom unit and the adjacent studio unit.

If it is desired to combine the two-bedroom and studio units to form a three-bedroom unit, the internal door could be replaced with a standard bedroom door and the studio which is one large room can be converted into a large bedroom with a bathroom.

Building A:
The stair framing post at the bottom landing fronting unit A102 and A107 was found with signs of rot with an approximate area of 6"x6" (**See Photo 3.4 and 3.5**). Need to notch out rot area and fill with structural epoxy and replace end piece to match existing. Paint over epoxy afterwards.

Building B:
The exterior deck framing joist from B205 was found to be splitting approximately six linear feet (**See Photo 3.6**). The 4th joist away from B207 was found to be splitting approximately six linear feet (**See Photo 3.7**) and the 9th joist was found to be splitting approximately 3 linear feet (**See Photo 3.8**). Inject cracks in joist with structural epoxy.

Building C:
On the stair landing, there are minor spall at bottom landing corner. It does not affect the structural integrity. Recommend leaving as is (**See Photo 3.9**).

Building D:
Appears to be in good condition and no visible problems.

Building E:
Minor spall at bottom stair landing corner. It does not affect the structural integrity. Recommend leaving as is. (**See Photo 3.10**).

Admin Building:
On the northeast side of the building, the bottom of the concrete slab appears to be exposed. (**See Photo 3.11**). It's recommended to add approximately 6 inches of compacted soil over a 6 feet x 8 feet area next to the building to cover the bottom of slab. The roof framing on the northeast side of building at walkway, there is a 3/4" gap between roof eave blocking and the supporting roof beam. (**See Photo 3.12**) This occurs over a distance of six feet. We recommend sealing this gap or replacing the eave blocking to prevent vermin from entering the attic space.

D. ELECTRICAL SYSTEMS ASSESSMENT

Building A through E and Site:
The exterior fixtures are high quality and have weathered well. No issues have been reported. The indoor fixtures are fluorescent and are also well maintained. The kitchen units appear functional with no action needed. The site pole lights on the site are in excellent condition.

The power is distributed throughout the site by HECo. There are transformers that feed the individual buildings with HECo metering on every building. This system is maintained by HECo up to the connection to the meter. The metering equipment is in good shape and can be maintained by painting the boxes as needed.

The distribution equipment is in closets on the second floor and appears is pristine condition. The panels in each unit all are in good condition. Branch circuiting is done with non-metallic sheathed cable. No issues have been reported other than the potential for rats chewing through the insulation in limited areas. We were not able to observe this condition.

Interior circuiting is adequate and well maintained. The only small issue is that the covers on the exterior convenience receptacles have been vandalized. These can be easily replaced.

There are cable TV and telephone entrances on each building. Currently there are no cable TV subscribers, but there is at least one wired phone service per unit.

Admin building:
The exterior fixtures are high quality and have weathered well. No issues have been reported. The indoor fixtures are fluorescent and are also well maintained.

No actions needed for electrical box, HECo meters and fire alarm panel.

There is currently only a fire alarm system in the child care area. There are single station smoke detectors inside and outside every sleeping room in accordance with the code.

E. MECHANICAL SYSTEMS ASSESSMENT

Admin Building:
The air conditioning in the admin building office and school is a variable refrigerant flow type system. This is very efficient. The coils in the outdoor condensing units look quite good for a 10-year-old system. The air conditioning in the classroom area is a less efficient split system with fan coil units above the ceilings. The coils on the condensing units also look quite good for the age. The IT closet has a dedicated split system. All systems are from the original construction. Kitchen hood, fan and Ansul System were well maintained. There was no dielectric coupling where the iron transitions to copper. Need to install dielectric fitting.

Building A through E:
Water heating in the residential buildings is done with solar electric water heaters. The equipment is from the original construction, but there were no visible issues other than excessive bird droppings on some of the panels. Need to clean the bird droppings from panels (**See Photo 4.1**).

F. PLUMBING SYSTEMS ASSESSMENT

Admin Building:
Drain and waste piping management has dealt effectively with problems. Need to continue with maintenance. There were no issues for faucets, valves and toilets. Gas water heaters has never been replaced since first installation, therefore monitoring for leaks is essential.

The water supply piping that could be seen was copper. There have been no issues reported. The only issue observed was one instance inside the maintenance shop of a copper pipe connected to an iron pipe without a dielectric fitting. There is visible corrosion on these pipes that should be addressed.

Building A through E:
Drain and waste piping management has dealt effectively with problems. Need to continue with maintenance. The valves that could be seen were in good working order. The handles had been taken off several, including the main building shut offs, to reduce tampering by the local children. The faucets and angle stops appeared to be from the original construction. We did not observe any leaks or drips. These can be maintained for as long as parts are available. The toilets are low flow tank type, 1.6 gallons per flush.
The water supply piping that could be seen was copper. There have been no issues reported. The pressure reducing valves were replaced recently and moved so as to be above grade. The management reported that they had authorization to install cages around them to prevent tampering, but had not had the time to do it. They need a cage around them, at least one per building

V. BUDGETARY COST ESTIMATES

Note: These costs are on a "rough order of magnitude" (ROM) budgets. Cost will vary depending on origin and current market pricing. Costs indicated in parenthesis and with a preceding asterisk are phase related.

A. Architectural Costs

N/A

B. Site Costs (Civil Engineering)

a.	Remove and repave asphalt areas	$24,406
b.	Remove and repave concrete sidewalk	$2,261
c.	Remove sign post and patch AC pavement:	$515
d.	Mobilization/Demobilization:	$1,360
	Subtotal	**$ 26,283**
	CIVIL –TOTAL	**$ 33,392**

C. Structural Costs

Building A:

a.	Repair 6"x6" Stair framing post:	$560

Building B:

b.	Inject joist cracks w/ structural epoxy:	$538

Admin Building:

c.	Add 6" compacted soil at exposed slab:	$335
d.	Replace eave blocking at roof beam gap	$268
	Subtotal	**$ 1,701**
	STRUCTURAL –TOTAL	**$ 2,161**

D. MEP Costs

Admin Building:

a.	Install dielectric fitting:	$220
b.	Metal cages for PRV, UTC-4	$7,950

Building A-E:

c.	Clean bird dropping from solar panels	$7,300
	Subtotal	**$ 15,470**
	MEP –TOTAL	**$ 19,655**

E. Grand Total Costs

		Total
	Architectural Costs	
b.	Architectural Total	$0
	Site Costs (Civil Engineering)	
c.	Site Total	$33,392
	Structural Costs	
a.	Structural Total	$2,161
	MEP Costs	
d.	MEP Total	$19,655
	Subtotal, Direct Cost	**$ 55,208**
	Design Contingency (5%)	**$ 2,760**
	Subtotal, Estimated Direct Cost to Prime	**$ 57,968**
	Prime Contractor Markups	**$ 34,674**

GRAND TOTAL ESTIMATE	**$ 92,642**

VI. CONCLUSION

All buildings observed were generally in good condition. Exterior site improvements should include cleaning of bird droppings on the roof solar panels, gutters and downspout pipes. The parking lots and driveways will need repaving as many signs of deterioration and failure were observed. Most of the electrical, mechanical, and plumbing systems are functional and require minor repairs. A summary of findings is listed below:

- The overall condition of Buildings A through E and Administration building appears in to be in fair condition. There are some recommendations that are not currently required, but DHHL may want to revisit in the future.

- The site parking lot will need to be repaved. Depending on the severity of the deterioration, the asphalt may have to be removed and replaced.

- Structurally, the facility appears to be in acceptable condition. There was deterioration such as rotting areas and splitting joist. These conditions do not present an immediate safety hazard, but if the buildings are to be reused it is recommended that repairs be made to prevent continued deterioration.

- The electrical, mechanical, and plumbing systems appear functional. The exceptions to this are the electrical service entrance and the AC air handler and ductwork; however, all plumbing, electrical and AC systems will likely need to be maintained.

APPENDIX A: PHOTOGRAPHS

Photo 1.1. Exterior Building

Photo 1.2. Exterior Finish

Photo 1.3. Interior of Building

Photo 2.1. Holt Road, Asphalt Concrete Depression

Photo 2.2. Fire Lane

Photo 2.3. Uneven Pavement

Photo 2.4. Drain Inlet in the Center of the Field

Photo 2.5. Debris in Gutters

Photo 2.6. Rutting and Cracking

Photo 2.7. Ponding on Driveway

Photo 2.8. Potholes and Cracking on Parking Lot

Photo 2.9. Sign Post

Photo 3.1. Attic

Photo 3.2. Second Floor Joist

Photo 3.3. Wood Railings Bolted Outside

Photo 3.4. Stair Framing

Photo 3.5. Stair Framing

Photo 3.6. Exterior Deck Framing Joist from B205

Photo 3.7. Exterior Deck Framing Joist from B207

Photo 3.8. Exterior Deck Framing Joist from B207

Photo 3.9. Stair Landing Corner

Photo 3.10. Stair Landing Corner

Photo 3.11. Exposed Slab

Photo 3.12. Roof Beam Gap

Photo 4.1. Bird Droppings on Panels

APPENDIX B: COST ESTIMATES

J. UNO & ASSOCIATES

CONSTRUCTION COST CONSULTANT



Cost Estimate for:

PROJECT NAME:	**DEPT. OF HAWAIIAN HOMELANDS**
	ULU KE KUKUI TRANSITIONAL HOUSING SITE ASSESSMENT REPORT
LOCATION:	**WAIANAE, OAHU, HAWAII**
DATE:	**10/16/2017**
PROJECT NO.:	**216012-15**
JUA NO.:	**17-265**
PREPARED FOR:	**GROUP 70 INTERNATIONAL, INC.**
SUBMITTAL:	**SITE ASSESSMENT REPORT**

1210 Ward Avenue, Suite 204 | Honolulu, Hawaii 96814 | Telephone: 808.947.6855 | www.j-uno-associates.com

P R O J E C T C O S T S U M M A R Y

PROJECT:	**ULU KE KUKUI TRANSITIONAL HOUSING SITE ASSESSMENT REPORT**			ESTIMATE NO.:	17-265
LOCATION:	WAIANAE, OAHU, HAWAII	PROJECT NO.:	216012-15	DATE:	10/16/2017
ARCHITECT:	GROUP 70 INTERNATIONAL, INC.	SUBMITTAL:	SITE ASSESSMENT REPORT	CHECKED BY:	B. KATAYAMA
QTY BY:	V. HIRAOKA	PRICES BY:	V. HIRAOKA	DATE CHECKED:	10/16/2017

DESCRIPTION	QTY	UNIT	TOTAL UNIT COST	TOTAL
PROJECT COST SUMMARY				
CODE DESCRIPTION				
(AR) ARCHITECTURAL ASSESSMENT (BUILDINGS)	1	LS		NO WORK
(CI) CIVIL ENGINEERING ASSESSMENT (SITE)	1	LS		$33,392
(ST) STRUCTURAL ASSESSMENT	1	LS		$2,161
(EL) ELECTRICAL SYSTEMS ASSESSMENT	1	LS		NO WORK
(ME) MECHANICAL SYSTEMS ASSESSMENT	1	LS		$19,655
(PL) PLUMBING SYSTEMS ASSESSMENT	1	LS		NO WORK
SUBTOTAL, DIRECT COST,				$55,208
LOCATION FACTOR,				
DESIGN CONTINGENCY,	5.00%			$2,760
SUBTOTAL, ESTIMATED DIRECT COST TO PRIME,				**$57,968**
PRIME CONTRACTOR MARKUPS				
PRIME CONTRACTOR'S JOOH,	30.00%			$17,390
PRIME CONTRACTOR'S HOOH,	5.00%			$3,768
PRIME CONTRACTOR'S PROFIT,	8.00%			$6,330
BONDS & INSURANCE,	1.50%			$1,282
G.E. TAX,	4.71%			$4,087
ESCALATION TO MOC (NOVEMBER 2018),	2.00%			$1,817
TOTAL ESTIMATED CONTRACT COST,				**$92,642**
ROUNDED,	**1**	**LS**		**$93,000**

C O S T A N A L Y S I S

PROJECT:	**ULU KE KUKUI TRANSITIONAL HOUSING SITE ASSESSMENT REPORT**			ESTIMATE NO.:	17-265
LOCATION:	WAIANAE, OAHU, HAWAII	PROJECT NO.:	216012-15	DATE:	10/16/2017
ARCHITECT:	GROUP 70 INTERNATIONAL, INC.	SUBMITTAL:	SITE ASSESSMENT REPORT	CHECKED BY:	B. KATAYAMA
QTY BY:	V. HIRAOKA	PRICES BY:	V. HIRAOKA	DATE CHECKED:	10/16/2017

DESCRIPTION	QTY	UNIT	MATERIAL / SUB		LABOR / EQPT		TOTAL	
			UNIT COST	TOTAL	UNIT COST	TOTAL	UNIT COST	TOTAL
CIVIL ENGINEERING ASSESSMENT (SITE)								
PHOTO 2.1								
Area 1								
Remove Portion of AC Pavement	64	sf			$8.10	$518	$8.10	$518
Hauling & Disposal	1.2	cy			$85.00	$101	$85.00	$101
Provide New AC Pavement, 8'X8'	1.2	ton	$123.00	$145	$760.00	$897	$883.00	$1,042
Compacted Fill	1.2	cy	$37.00	$44	$170.00	$201	$207.00	$245
Area 2								
Remove Portion of AC Pavement	100	sf			$8.10	$810	$8.10	$810
Hauling & Disposal	1.9	cy			$85.00	$157	$85.00	$157
Provide New AC Pavement, 10'X10'	1.8	ton	$123.00	$226	$760.00	$1,398	$883.00	$1,625
Compacted Fill	2	cy	$37.00	$69	$170.00	$315	$207.00	$383
PHOTO 2.3								
Remove Portion of Concrete Sidewalk	30	sf			$17.00	$510	$17.00	$510
Hauling & Disposal	0.4	cy			$85.00	$31	$85.00	$31
Provide Replacement Concrete Sidewalk	30	sf	$12.00	$360	$45.33	$1,360	$57.33	$1,720
PHOTO 2.6								
Area 1								
Remove Portion of AC Pavement	16	sf			$8.10	$130	$8.10	$130
Hauling & Disposal	0.3	cy			$85.00	$25	$85.00	$25
Provide New AC Pavement, 4'x4'	0.3	ton	$123.00	$37	$760.00	$228	$883.00	$265
Compacted Fill	0.3	cy	$37.00	$11	$170.00	$50	$207.00	$61
Area 2								
Remove Portion of AC Pavement	84	sf			$8.10	$680	$8.10	$680
Hauling & Disposal	1.6	cy			$85.00	$132	$85.00	$132
Provide New AC Pavement, 14'x6'	1.5	ton	$123.00	$189	$760.00	$1,170	$883.00	$1,360
Compacted Fill	2	cy	$37.00	$58	$170.00	$264	$207.00	$322
PHOTO 2.7								
Area 1								
Remove Portion of AC Pavement	144	sf			$8.10	$1,166	$8.10	$1,166
Hauling & Disposal	2.7	cy			$85.00	$227	$85.00	$227
Provide New AC Pavement, 12'x12'	2.6	ton	$123.00	$325	$760.00	$2,006	$883.00	$2,331
Compacted Fill	3	cy	$37.00	$99	$170.00	$453	$207.00	$552
Areas 2, 3, and 4								
Remove Portion of AC Pavement	112	sf			$8.10	$907	$8.10	$907
Hauling & Disposal	2.1	cy			$85.00	$176	$85.00	$176
Provide New AC Pavement, 8'x14'	2.1	ton	$123.00	$253	$760.00	$1,566	$883.00	$1,819
Compacted Fill	2	cy	$37.00	$77	$170.00	$353	$207.00	$429
PHOTO 2.8								
Remove Portion of AC Pavement	225	sf			$8.10	$1,823	$8.10	$1,823
Hauling & Disposal	4.2	cy			$85.00	$354	$85.00	$354

C O S T A N A L Y S I S

PROJECT:	**ULU KE KUKUI TRANSITIONAL HOUSING SITE ASSESSMENT REPORT**			ESTIMATE NO.:	17-265
LOCATION:	WAIANAE, OAHU, HAWAII	PROJECT NO.:	216012-15	DATE:	10/16/2017
ARCHITECT:	GROUP 70 INTERNATIONAL, INC.	SUBMITTAL:	SITE ASSESSMENT REPORT	CHECKED BY:	B. KATAYAMA
QTY BY:	V. HIRAOKA	PRICES BY:	V. HIRAOKA	DATE CHECKED:	10/16/2017

DESCRIPTION	QTY	UNIT	MATERIAL / SUB		LABOR / EQPT		TOTAL	
			UNIT COST	TOTAL	UNIT COST	TOTAL	UNIT COST	TOTAL
CIVIL ENGINEERING ASSESSMENT (SITE)								
Provide New AC Pavement, 15'x15'	4.1	ton	$123.00	$507	$760.00	$3,135	$883.00	$3,642
Compacted Fill	4	cy	$37.00	$154	$170.00	$708	$207.00	$863
PHOTO 2.9								
Remove sign post	1	ea			$170.00	$170	$170.00	$170
Patch AC Pavement, Hand Place	2	sf	$2.25	$5	$170.00	$340	$172.25	$345
MISCELLANEOUS								
Mobilization/Demobilization	1	ls			$1,360.00	$1,360	$1,360.00	$1,360
SUBTOTAL,								$26,283
SUBCONTRACTOR JOOH,							10%	$2,628
SUBCONTRACTOR HOOH,							5%	$1,446
SUBCONTRACTOR PROFIT,							10%	$3,036
SUBTOTAL,	**1**	**LS**					**$33,392.37**	**$33,392**

C O S T A N A L Y S I S

PROJECT:	**ULU KE KUKUI TRANSITIONAL HOUSING SITE ASSESSMENT REPORT**			ESTIMATE NO.:	17-265
LOCATION:	WAIANAE, OAHU, HAWAII	PROJECT NO.:	216012-15	DATE:	10/16/2017
ARCHITECT:	GROUP 70 INTERNATIONAL, INC.	SUBMITTAL:	SITE ASSESSMENT REPORT	CHECKED BY:	B. KATAYAMA
QTY BY:	V. HIRAOKA	PRICES BY:	V. HIRAOKA	DATE CHECKED:	10/16/2017

DESCRIPTION	QTY	UNIT	MATERIAL / SUB		LABOR / EQPT		TOTAL	
			UNIT COST	TOTAL	UNIT COST	TOTAL	UNIT COST	TOTAL
STRUCTURAL ASSESSMENT								
BUILDING A								
Repair 6"x6" Stair Framing Post, Unit 102	1	ls	$25.00	$25	$255.00	$255	$280.00	$280
Repair 6"x6" Stair Framing Post, Unit 107	1	ls	$25.00	$25	$255.00	$255	$280.00	$280
BUILDING B								
Inject Joist Cracks w/ Structural Epoxy, B20	6	lf	$7.50	$45	$28.33	$170	$35.83	$215
Inject Joist Cracks w/ Structural Epoxy, B20	6	lf	$7.50	$45	$28.33	$170	$35.83	$215
Inject Joist Cracks w/ Structural Epoxy, B20	3	lf	$7.50	$23	$28.33	$85	$35.83	$108
ADMIN BUILDING								
Add 6" Compacted Soil at Exposed Slab	0.9	cy	$37.00	$33	$340.00	$302	$377.00	$335
Replace Eave Blocking at Roof Beam Gap	6	lf	$2.16	$13	$42.50	$255	$44.66	$268
SUBTOTAL,								$1,701
SUBCONTRACTOR JOOH,							10%	$170
SUBCONTRACTOR HOOH,							5%	$94
SUBCONTRACTOR PROFIT,							10%	$196
SUBTOTAL,	**1**	**LS**					**$2,160.56**	**$2,161**

C O S T A N A L Y S I S

PROJECT:	**ULU KE KUKUI TRANSITIONAL HOUSING SITE ASSESSMENT REPORT**			ESTIMATE NO.:	17-265
LOCATION:	WAIANAE, OAHU, HAWAII	PROJECT NO.:	216012-15	DATE:	10/16/2017
ARCHITECT:	GROUP 70 INTERNATIONAL, INC.	SUBMITTAL:	SITE ASSESSMENT REPORT	CHECKED BY:	B. KATAYAMA
QTY BY:	V. HIRAOKA	PRICES BY:	V. HIRAOKA	DATE CHECKED:	10/16/2017

DESCRIPTION	QTY	UNIT	MATERIAL / SUB		LABOR / EQPT		TOTAL	
			UNIT COST	TOTAL	UNIT COST	TOTAL	UNIT COST	TOTAL
MECHANICAL SYSTEMS ASSESSMENT								
ADMIN BUILDING								
Install Dielectric Fitting	1	ea	$50.00	$50	$170.00	$170	$220.00	$220
Metal Cages for PRV, UTC-4	6	ea	$985.00	$5,910	$340.00	$2,040	$1,325.00	$7,950
BUILDINGS A-F								
Clean Bird Dropping From Solar Roof Panels	1,280	sf	$0.39	$500	$5.31	$6,800	$5.70	$7,300
SUBTOTAL,								$15,470
SUBCONTRACTOR JOOH,							10%	$1,547
SUBCONTRACTOR HOOH,							5%	$851
SUBCONTRACTOR PROFIT,							10%	$1,787
SUBTOTAL,	**1**	**LS**					**$19,654.64**	**$19,655**