



KALAELOA HOME LANDS SOLAR

A COMMUNITY-BASED RENEWABLE ENERGY PROJECT

BUILT ON HAWAIIAN HOME LANDS

HAR § 15-215-81

REQUIREMENTS

- 1) UNIQUENESS. THAT THERE ARE UNIQUE PHYSICAL CONDITIONS, INCLUDING IRREGULARITY, NARROWNESS OR SHALLOWNESS OF LOT SIZE OR SHAPE, OR EXCEPTIONAL TOPOGRAPHICAL OR OTHER PHYSICAL CONDITIONS PECULIAR TO AND INHERENT IN THE PARTICULAR LOT; AND THAT, AS A RESULT OF SUCH UNIQUE PHYSICAL CONDITIONS, PRACTICAL DIFFICULTIES OR UNUSUAL HARDSHIP ARISE IN COMPLYING STRICTLY WITH THE STANDARDS OF THE RULES;
- 2) SELF-CREATED HARDSHIP. THAT THE PRACTICAL DIFFICULTIES OR UNUSUAL HARDSHIP CLAIMED AS THE BASIS FOR A VARIANCE HAS NOT BEEN CREATED BY THE OWNER OR BY A PREDECESSOR IN TITLE;
- 3) MINIMAL DEVIATION. THAT THE VARIANCE, IF GRANTED, IS THE MINIMUM DEVIATION NECESSARY TO AFFORD RELIEF; AND TO THIS END, THE DECISION-MAKER MAY PERMIT A LESSER VARIANCE THAN THAT APPLIED FOR;

HAR § 15-215-81 REQUIREMENTS

- 4) CHARACTER OF THE TRANSECT. THAT THE VARIANCE, IF GRANTED, WILL NOT ALTER THE EXISTING OR PLANNED CHARACTER OF THE TRANSECT IN WHICH THE LOT IS LOCATED; WILL NOT SUBSTANTIALLY IMPAIR THE APPROPRIATE USE OR DEVELOPMENT OF ADJACENT PROPERTY; AND WILL NOT BE DETRIMENTAL TO THE PUBLIC WELFARE; AND
- 5) NO ADVERSE IMPACT. THE VARIANCE WOULD RESULT IN DEVELOPMENT THAT IS NOT DETRIMENTAL TO OR THAT WOULD ADVERSELY IMPACT ADJACENT PROPERTIES.

VARIANCE #1 FROM HAR § 15-215 REQUIREMENTS

REQUIREMENT

HAR §15-215-43 (c) ARCHITECTURAL STANDARDS — STANDARDS — FENCES, WALLS, AND HEDGES — DEVIATE FROM THE MAXIMUM FENCE HEIGHT ALLOWED AND INCREASE THE HEIGHT OF THE PROPOSED PROJECT PERIMETER FENCE TO BE CONSTRUCTED/INSTALLED, FROM THREE FEET TO SIX FEET.

REQUEST

6-FOOT CHAIN-LINK FENCE

VARIANCE #1

- Three-foot fence height is insufficient
 - Unmanned facilities
 - Safety concerns for entrants
 - Inadequate barrier to protect intruders
 - Protection of costly equipment
- Fence height will not detract from positive visual aspects
 - Surrounded by airports and industrial lots – no cause of visual blight
 - Western Perimeter Road is primarily used for industrial purposes
- Minimal deviation as there is no clear "front yard"



VARIANCE #2 FROM HAR § 15-215 REQUIREMENTS

REQUIREMENT

*HAR § 15-215-44 (1) AND (4) LANDSCAPE
— DEVIATE FROM ALL LANDSCAPING
REQUIREMENTS FOR REQUIRED YARDS;
DEVIATE FROM REQUIRED AUTOMATIC
IRRIGATION SYSTEM REQUIREMENTS RELATING
TO RAIN OR MOISTURE SENSORS AND A
WATER WASTE ELIMINATION SYSTEM.*

REQUEST

LANDSCAPE PLANTINGS WITH APPROVED
PLANTS ONLY AROUND PERIMETER
FENCE AT SARATOGA STREET.
TEMPORARY IRRIGATION SYSTEM
PROVIDED

VARIANCE #2

- Functionality of PV requires limited visual detractions or barrier sand minimal vegetation or landscaping
- Proposed xeriscape plants would limit the need for irrigation
- Will maintain landscape along the accessible perimeter
- No adverse impact to the adjacent airport property - consistent with the adjacent airport property requiring limited vegetation





VARIANCE #2



VARIANCE #3 FROM HAR § 15-215 REQUIREMENTS

REQUIREMENT

HAR §15-215-46 (C) OPEN SPACE
– DEVIATE FROM THE MINIMUM OF
20 PERCENT OPEN SPACE
REQUIREMENT TO PROVIDE 10
PERCENT (129,808 SQUARE FEET)
OF OPEN SPACE.

REQUEST

OPEN SPACE: AT FULL
DEVELOPMENT LOT MAY HAVE
MORE THAN 80% COVERAGE

VARIANCE #3

- Final density up to 90% at full development - exceeding the design standard by 10%. Actual calculation is 45% of the parcel due to the nature of solar PV installation.
- Limited open space helps control growth of invasive species
- Opens space is not needed because personnel and other potential uses are limited due to FAA restrictions



VARIANCE #3

- Maximizes solar PV panel use for renewable energy output - highest and best use and benefit to state.
- This area not consistent with other types of T-3 zone uses – e.g. residential not consistent with other
- Increased density has no adverse affect on surrounding properties - Kalaeloa Airport, industrial and existing solar generating equipment on three sides.



Figure 2-3: An example of Solar Trackers



SUMMARY

- THIS REQUESTED VARIANCE MEETS ALL THE REQUIRED FINDINGS OF FACT UNDER HAR § 15-215-81(D).
- PROVIDES SAFETY PROTECTION WITHOUT CAUSING VISUAL BLIGHT
- VARIANCES LEAD TO HIGHEST AND BEST USE AND GREATEST FUNCTIONALITY
- PROVIDES FOR HIGHEST PRODUCTION OF RENEWABLE ENERGY



THANK YOU

HAR § 15-219-89(e)

REQUIREMENTS

HCDA allows a waiver if "any of the provisions of the administrative rules of HCDA's community development districts" upon a finding that:

(1) Granting the waiver will not endanger the health, safety or welfare of the subject community

(2) There is either an alternate means for which the spirit and intent of the provision of which petitioner seeks a waiver can be accomplished or the waiver of the strict application of the provision is in the best interest of the subject community development district.