# U.S. NAVY PACIFIC MISSILE RANGE FACILITY AND NASA KŌKE'E PARK GEOPHYSICAL OBSERVATORY REAL ESTATE

## FINAL ENVIRONMENTAL IMPACT STATEMENT

August 2026

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# Appendix A

# Glossary

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# Glossary

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| Accepting authority | In the case of applicant actions, the agency that initially received and agreed to process the request for approval, that makes the determination that the Environmental Impact Statement fulfills the requirements for acceptance (Hawaii Administrative Rules 11-200.1-2). |
| Acquisition | The procurement of an interest in land by one entity from another. |
| Appraisal | The process by which a qualified appraiser determines the market value of real estate. |
| Basaltic lava | A type of lava that erupted from a volcano or fissure in Earth's surface, cooled, and solidified. |
| Boresight | A type of telemetry equipment that works in conjunction with antenna(e) and assists with aim. |
| Command/control | A set of organizational and technical attributes and processes established to solve problems and accomplish a specified mission. |
| Doppler Orbitography by Radiopositioning Integrated on Satellite (DORIS) | A satellite system that uses radio signals and doppler effect to determine a satellite's orbit and location. |
| Easement | A recordable interest in land, not revocable at will, to use or restrict the use of real property of the owner for a specific purpose for a specific period of time. |
| Electromagnetic Radiation | A form of energy that includes radio waves, microwaves, x-rays and gamma rays, as well as visible light. |
| Encroachment buffer | A designed area of land surrounded by a sensitive environmental feature, where development is restricted and/or prohibited to prevent intrusion into the protected area. |
| *Enterococcus* spp. | A type of bacteria found in environments with human or animal activity. |
| Explosive Safety Quantity Distance (ESQD) | Explosive Safety Quantity Distance is the safe distance required between a storage and or handling site of explosive materials and populated areas. |
| Fair Market Value | The value of property as determined by the marketplace. |
| Fee simple | Title (ownership) of real property in perpetuity, including the land and all improvements thereon. Also referred to as "fee simple absolute" or "owned in fee." |
| Flight Termination System (FTS) | Provides a mechanism to protect public with very high reliability and is designated to activate a destruct command in the unlikely case of a missile malfunction. |
| Force Protection | A set of processes and procedures designed to deter, detect, delay, deny, and defend military installations. |
| Frequency shift reflectors | A system that aids radar and tracking operations. |
| Geodetic | A study of science referring to the measurement and representation of geometry, gravity and spatial orientation of the earth in 3D. |

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| Ground Hazard Area (GHA) | Area of land that is used as method of protecting individuals from hazards that may be encountered from military activities. |
| In perpetuity | Continuing indefinitely. |
| International Terrestrial Reference Frame | A standard frame for referencing positions at different times and locations around the world. |
| Ionizing/Non-ionizing radiation | Types of radiation that have the ability to break molecular bonds (ionizing) and that cannot (non-ionizing). |
| Lease | An agreement or contract by which the owner of real property grants an interest in real property to another providing for the exclusive rights to possess, use, and enjoy that property for a specified period of time in exchange for consideration (i.e., legal value that is offered in exchange by one party for something of value from another party). |
| Leasehold | The property held in lease. |
| Local land motion | The study of spatial variations in the movement of land relative to the ocean, a key element to understanding sea level change along the coasts. In coastal areas, sinking land, known as subsidence, leads to higher sea-level and increased flood risk. In contrast, uplifting land reduces sea level and promotes the seaward migration of coastlines. Together, subsidence and uplift are referred to as land motion. |
| Ordnance | Military supplies including weapons, ammunition, and explosive materials. |
| Ordnance storage magazines | An item or place within which ammunition and/or other explosive materials are stored. |
| Passive buffer | Type of easement used to ensure public is not within the ground hazard area during launch operations. |
| Per- and polyfluoroalkyl substances (PFAS) | Synthetic chemicals used in various products that resist grease, oil, water, and heat. |
| Perchlorate | An impurity found in drinking water and commonly used to produce nitrate fertilizers, explosives, and other products. |
| Potable water | Water that is safe for human consumption. |
| Propellants | A type of fuel or powder that can either be a single chemical or a mix of two chemicals. |
| Restrictive use easement | An agreement that includes specific limitations (restrictions) on a third party's use. |
| Retain | The ability to keep a property interest that would allow the continued existing use of that property. |
| Satellite Laser Ranging | A technique that uses laser pulses to measure the distance between a satellite and a ground station. |
| Sector blanking | A process that stops the radar from transmitting unwanted reflections or in unwanted areas. |
| Succeeding Real Estate Agreement(s) | New real estate agreement(s) to replace the existing agreements and address new terms and conditions. |
| Telemetry | The process of collecting information about distant objects and sending the information to a secondary location electronically. |

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| Use Permit | A document issued by a land management authority identifying a specific land use for a set period of time. |
| Unencumbered state lands | State lands that are free from any obligations such as deed restrictions, restrictive easements, and public liens. |
| Very Long Baseline Interferometry (VLBI) | A technique that uses radio telescopes to make high resolution observation of space. |

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# Appendix B

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# Appendix C

## Current Real Estate Agreements (Leases, Easements, and Use Permit)

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**Navy Lease S-3852**

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INSTALLATION : CNI PMRF HAWAII AREA
SITE : KAMOKALA RIDGE
AGREEMENT TYPE : ILEAS
CONTRACT NUMBER: DLR 10-5-105A
PARTY INVOLVED : STATE OF HAWAII ET AL
DATE : 01-Jul-1947

| TITLE | DATE | PAGES |
|---|---|---|
| STATUS OF REAL ESTATE TRANSACTION PACDOCKS 11011/1 | 01-Jan-1964 | 1 |
| MAP BARKING SANDS, KAUAI, T.H MANA ADDITIONS TO U.S. MILITARY RESERVATION BY X, VARIOUS | 01-Jul-1947 | 1 |
| LOT 1 BEING A PORTION OF THE GOVERNMENT (CROWN) LAND OF WAIMEA, BEGINNING AT THE SOUTHWEST CORNER OF THIS PARCEL OF LAND, BEING ALSO THE NORTHWEST, VARIOUS BY WILFRED Y.K. CHIN, VARIOUS | 13-Jun-2005 | 66 |
| LETTER FROM RUSSELL Y. TSUJI TO NIRU SANTOS | 21-Feb-2007 | 1 |
| FIFTH AMENDMENT OF GENERAL LEASE NO. S-3852, BETWEEN THE STATE OF HAWAII AND UNITED STATES OF AMERICA, VARIOUS BY DENNIS PACHT, VARIOUS | 21-Feb-2007 | 37 |
| AMENDMENT TO STATE GENERAL LEASE NO. S-3852 (NAVY CONTRACT NO. NOy(R)-68046), BETWEEN THE STATE OF HAWAII AND UNITED STATES OF AMERICA, VARIOUS BY X, VARIOUS | 31-May-1973 | 14 |
| MAP ADDITIONAL LAND TO TRACT E-2 IN GENERAL LEASE NO. S-3852 PARCEL MAP 1013, LIBER 9221 PAGE 421 BY H.G. JR. | 15-Jan-1964 | 1 |
| MAP EASEMENT "E" FOR ROADWAY STATE OF HAWAII GENERAL LEASE NO. S-3852 PARCEL MAP RE-1037, LIBER 922 PAGE 422 BY J.E. WALLACE | 31-Jul-1972 | 1 |
| MAP EASEMENT "F" FOR COMMUNICATION CABLES STATE OF HAWAII GENERAL LEASE NO. S-3852 PARCEL MAP, LIBER 9221 PAGE 423 BY J.E. WALLACE | 01-Aug-1972 | 1 |
| MAP EASEMENT "G" FOR WATER PIPE LINE (PARTS I & II) EASEMENT "H" FOR ROADWAY RE-1039, LIBER 9221 PAGE 424 BY J.E. WALLACE | 11-Oct-1972 | 1 |
| MAP EASEMENT "G" FOR WATER PIPE LINE (PART III) STATE OF HAWAII GENERAL LEASE NO. S-3852 PARCEL MAP RE-1040, LIBER 9221 PAGE 425 BY J.E. WALLACE | 13-Oct-1972 | 1 |
| MAP EASEMENT "G" FOR WATER PIPE LINE - PARTS IV, V & VI STATE OF HAWAII GENERAL LEASE NO. S-3852 RE-1041, LIBER 9221 PAGE 426 BY J.E. WALLACE | 16-Oct-1972 | 1 |
| STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES, AMENDMENT OF STATE GENERAL LEASE NO. S-3852 (NAVY CONTRACT NOy(R)-68046), LIBER 5302 PAGE 330 BY X, VARIOUS | 26-Apr-1965 | 3 |
| STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES, STATE GENERAL LEASE NO. S-3852, BETWEEN STATE OF HAWAII AND UNITED STATES OFA MERICA BY BERT T. KOBAYASHI, VARIOUS | 20-Aug-1964 | 40 |
| NOTES, EASEMENTS B-3 AND B-4 FOR CULVERT AND SLOPES, VARIOUS | | 10 |
| | TOTAL | 179 |

STATUS OF REAL ESTATE TRANSACTION
PACDOCKS 11011/1

General Lease No. S-3852
of Aug. 20, 1964 (NOy (R)- 68046)

| ITEM | ACTION | DATE | BY |
|---|---|---|---|
| Legal Description | | | |
| Recording AMD. LIBER 5302, pg. 330 AMD. LIBER 9221, PG. 407 2nd amd fwd. 11/4/74 | DOC. # 64-26926 LIBER 4821, PG. 245 | 20 AUG. 1964 | STATE BUR. OF CONVEYANCES |
| Microfilm | AMD. FWDED, FWDED. TO NAVFAC | 21 JUL 1966 12 OCT. 1964 | H.G. MARSHALL H.G. MARSHALL |
| Summary Map | AMD. ENTERED -1069338 ENTERED - 1069337 & 338 | 8/23/72 1964 | J.W. H.N. |
| Inventory | | | |
| Grantor-Grantee Index | 10-5-105A | | |
| District Land Register | ~~10-4-001~~ 10-5-105A | | |
| Amendment | | | |
| Termination 19 Aug. 2029 TERM-65 YRS | | | |
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COMMENTS Expiration date: Aug. 19, 2029. See also DLR 10-5-127A for easement for Bridge 96 and DLR 10-5-132 for Bridge 97 easements (additions to Easement "B" of this doc.)

1. Amd. of 4/26/65
2. Amd. of 5/31/73
3. Amd of. 8/28/2000

U. S. MILITARY RESERVATION
Governor's Executive Order (E.S.F.)
TRACT E-2
TRACT E-1
887
9265
Old Reservation Boundary
New Reservation Boundary
Government Lease 3458
Kekaha Sugar Co., Ltd
Land (1580)
Hawaiian Home Land (S.F.)
TRACT E-3
U.S. Military Reservation
Bomb Storage Area
74.463± Acres
PARCEL 2
48.777 Acs.
PARCEL 1
25.686 Acs.
TRACT E-4
EASEMENT "D" FOR POWER LINE
Power Line 15' Easement
Area = 1.363 ± Acres
EASEMENT "A" FOR ROADWAY PART I
22' Paved Road 25' Easement
Area = 2.141 ± Acres
EASEMENT "A" FOR ROADWAY PART II — PORTION B
EASEMENT "A" FOR ROADWAY PART II — PORTION A
EASEMENT "A" FOR ROADWAY PART II — PORTION D
12' Paved Road 15' Easement
Area = 1.411 ± Acres
EASEMENT "A" FOR ROADWAY PART III
10' Dirt Road 10' Easement
Area = 0.476 ± Acre
EASEMENT "C" FOR WATER PIPE LINE PORTION A
6" Water Line Area of 5' easement from Meter to end of 15' easement = 0.135 ± Acre.
6" Water Line Area of 5' easement from Pumphouse to Meter (exclusive of Water Storage Area) = 0.600 ± Acre.
EASEMENT "C" FOR WATER PIPE LINE PORTION B
6" Water Line — 5' Easement
EASEMENT "C" FOR WATER PIPE LINE PORTION C
6" Water Line — 5' Easement
EASEMENT "A" FOR ROADWAY PART III
0.455 Ac
(U.S. Military Reservation Water Storage Area 0.644± Acre)
Trig Sta "WATER TANK" NAD 1927 E 794,402.97 "B" P.in conc.
Trig Sta "TUNNEL" NAD 1927 E 792,145.58 "T" P. in conc.
Pavilion Pumphouse
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Lot 1

Being a portion of the Government (Crown) Land of Waimea.

Situated at Kekaha, Waimea, Kauai, Hawaii.

Beginning at the Southwest corner of this parcel of land, being also the Northwest corner of Lot B of the Government (Crown) Land of Waimea and on the East side of Addition to Bonham Air Base, Tract E-2, the coordinates of said point of beginning referred to Government Survey Triangulation Station "TRANSIT OF VENUS" being 28,405.79 feet North and 38,335.44 feet West, thence running by azimuths measured clockwise from true South:

| | | | | | |
|---|---|---|---|---|---|
| 1. | 140° | 35' | | 136.86 feet | along the Addition to Bonham Air Base, Tract E-2; |
| 2. | 174° | 14' | 30" | 153.27 feet | along the Addition to Bonham Air Base, Tract E-2; |
| 3. | 196° | 07' | 30" | 411.61 feet | along the Addition to Bonham Air Base, Tract E-2; |
| 4. | 185° | 24' | | 302.35 feet | along the Addition to Bonham Air Base, Tract E-2; |
| 5. | 180° | 23' | | 351.61 feet | along the Addition to Bonham Air Base, Tract E-2; |
| 6. | 193° | 32' | | 173.20 feet | along the Addition to Bonham Air Base, Tract E-2; |
| 7. | 203° | 01' | | 540.31 feet | along the Addition to Bonham Air Base, Tract E-2; |
| 8. | 208° | 23' | | 252.04 feet | along the Addition to Bonham Air Base, Tract E-2; |
| 9. | 194° | 10' | 30" | 140.75 feet | along the Addition to Bonham Air Base, Tract E-2; |
| 10. | 183° | 02' | | 299.35 feet | along the Addition to Bonham Air Base, Tract E-2; |
| 11. | 191° | 26' | | 156.12 feet | along the Addition to Bonham Air Base, Tract E-2; |



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| 12. | 198° | 03' | | 244.98 feet | along the Addition to Bonham Air Base, Tract E-2; |
| 13. | 186° | 44' | 30" | 661.62 feet | along the Addition to Bonham Air Base, Tract E-2; |
| 14. | 183° | 02' | | 270.92 feet | along the Addition to Bonham Air Base, Tract E-2; |
| 15. | 191° | 28' | | 460.00 feet | along the Addition to Bonham Air Base, Tract E-2; |
| 16. | 201° | 43' | | 276.90 feet | along the Addition to Bonham Air Base, Tract E-2; |
| 17. | 209° | 05' | | 326.22 feet | along the Addition to Bonham Air Base, Tract E-2; |
| 18. | 205° | 48' | | 180.60 feet | along the Addition to Bonham Air Base, Tract E-2; |
| 19. | 191° | 49' | | 267.80 feet | along the Addition to Bonham Air Base, Tract E-2; |
| 20. | 195° | 19' | | 274.30 feet | along the Addition to Bonham Air Base, Tract E-2; |
| 21. | 189° | 05' | | 255.65 feet | along the Addition to Bonham Air Base, Tract E-2; |
| 22. | 177° | 49' | | 317.01 feet | along the Addition to Bonham Air Base, Tract E-2; |
| 23. | 182° | 46' | | 304.55 feet | along the Addition to Bonham Air Base, Tract E-2; |
| 24. | 191° | 06' | | 176.75 feet | along the Addition to Bonham Air Base, Tract E-2; |
| 25. | 92° | 40' | | 67.00 feet | along the Addition to Bonham Air Base, Tract E-2; |



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26. Thence along Bonham Air Base, Tract E-2-A, on a curve to the right with a radius of 110.00 feet, the chord azimuth and distance being: 197° 53' 45.30 feet;

27. 209° 06' 14.00 feet along the Addition to Bonham Air Base, Tract E-2-A;

28. Thence along Bonham Air Base, Tract E-2-A, on a curve to the left with a radius of 380.00 feet, the chord azimuth and distance being: 193° 14' 216.28 feet;

29. 176° 42' 224.06 feet along Bonham Air Base, Tract E-2-A;

30. 196° 40' 2,612.76 feet along Bonham Air Base (Formerly Mana Airport Military Reservation), Remainder of Part 2, Governors Executive Order 945;

31. 191° 05' 181.49 feet along Bonham Air Base (Formerly Mana Airport Military Reservation), Remainder of Part 2, Governors Executive Order 945;

32. 224° 03' 1,458.00 feet along Bonham Air Base, Tract E-1;

33. 191° 05' 742.14 feet along Bonham Air Base, Tract E-1;

34. 224° 03' 1,506.89 feet along Bonham Air Base, Tract E-1;

35. 314° 03' 201.43 feet along the remainder of the Government (Crown) Land of Waimea;

36. 58° 18' 160.91 feet along the remainder of the Government (Crown) Land of Waimea;

37. Thence along the remainder of the Government (Crown) Land of Waimea, on a curve to the left with a radius of 310.00 feet, the chord azimuth and distance being: 47° 10' 119.72 feet;

38. 44° 03' 1,195.22 feet along the remainder of the Government (Crown) Land of Waimea;



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| 39. | 11° | 05' | 732.36 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 40. | 44° | 03' | 1,458.00 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 41. | 11° | 05' | 144.42 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 42. | 16° | 40' | 2,593.67 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 43. | 356° | 42' | 411.20 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 44. | 11° | 06' | 260.84 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 45. | 2° | 46' | 287.14 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 46. | 357° | 49' | 325.32 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 47. | 9° | 05' | 278.61 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 48. | 15° | 19' | 277.88 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 49. | 11° | 49' | 281.61 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 50. | 25° | 48' | 203.30 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 51. | 29° | 05' | 320.86 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 52. | 21° | 43' | 253.79 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 53. | 11° | 28' | 435.49 feet | along the remainder of the Government (Crown) Land of Waimea; |



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| 54. | 3° | 02' | | 264.72 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 55. | 6° | 44' | 30" | 681.33 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 56. | 18° | 03' | | 251.16 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 57. | 11° | 26' | | 136.43 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 58. | 3° | 02' | | 302.97 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 59. | 14° | 10' | 30" | 174.08 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 60. | 28° | 23' | | 263.70 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 61. | 23° | 01' | | 520.84 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 62. | 13° | 32' | | 143.47 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 63. | 0° | 23' | | 340.89 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 64. | 5° | 24' | | 122.46 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 65. | 99° | 58' | 30" | 97.22 feet | along the North side of Kaumualii Highway (Hawaii Project No. DA-WR-1); |
| 66. | 9° | 58' | 30" | 100.00 feet | along the West side of Kaumualii Highway (Hawaii Project No. DA-WR-1); |
| 67. | 279° | 58' | 30" | 105.23 feet | along the South side of Kaumualii Highway (Hawaii Project No. DA-WR-1); |



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| | | | | | |
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| 68. | 5° | 24' | | 100.22 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 69. | 16° | 07' | 30" | 396.69 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 70. | 354° | 14' | 30" | 78.90 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 71. | 320° | 35' | | 118.57 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 72. | 329° | 50' | | 50.89 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 73. | 79° | 10' | 50" | 161.52 feet | along Lot B of the Government (Crown) Land of Waimea to the point the point of beginning and containing an area of 47.937 Acres. |

Wilfred Y. K. Chin

Wilfred Y. K. Chin
Licensed Professional Land Surveyor
Certificate Number 3499
License Expires 4/06

June 13, 2005
Honolulu, Hawaii



ControlPoint Surveying, Inc.
1150 South King Street, Suite 102
Honolulu, Hawaii 96814

Lot 2

Being a portion of the Government (Crown) Land of Waimea.

Situated at Kekaha, Waimea, Kauai, Hawaii.

Beginning at the Northwest corner of this parcel of land and on the South side of Kaumualii Highway (Hawaii Project No. DA-WR-1), the coordinates of said point of beginning referred to Government Survey Triangulation Station "TRANSIT OF VENUS" being 29,131.07 feet North and 38,165.97 feet West, thence running by azimuths measured clockwise from true South:

| | | | | | |
|---|---|---|---|---|---|
| 1. | 279° | 58' | 30" | 21.97 feet | along the South Side of Kaumualii Highway (Hawaii Project No. DA-WR-1); |
| 2. | Thence along the South Side of Kaumualii Highway (Hawaii Project No. DA-WR-1), on a curve to the right with a radius of 1,049.89 feet, the chord azimuth and distance being: 306° 01' 39" 922.21 feet; | | | | |
| 3. | 79° | 10' | 50" | 792.37 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 4. | 149° | 50' | | 50.89 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 5. | 140° | 35' | | 118.58 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 6. | 174° | 14' | 30" | 78.90 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 7. | 196° | 07' | 30" | 396.69 feet | along the remainder of the Government (Crown) Land of Waimea; |



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| | | | | |
|---|---|---|---|---|
| 8. | 185° | 24' | 100.22 feet | along the remainder of the Government (Crown) Land of Waimea to the point of beginning and containing an area of 8.691 Acres. |

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Lot 3

Being a portion of Kaumualii Highway (Hawaii Project No. DA-WR-1).

Situated at Kekaha, Waimea, Kauai, Hawaii.

Beginning at the Southeast corner of this parcel of land, the coordinates of said point of beginning referred to Government Survey Triangulation Station "TRANSIT OF VENUS" being 29,131.07 feet North and 38,165.97 feet West, thence running by azimuths measured clockwise from true South:

| | | | | | |
|---|---|---|---|---|---|
| 1. | 99° | 58' | 30" | 105.23 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 2. | 189° | 58' | 30" | 100.00 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 3. | 279° | 58' | 30" | 97.21 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 4. | 5° | 24' | | 100.32 feet | along the remainder of Kaumualii Highway (Hawaii Project No. DA-WR-1) to the point of beginning and containing an area of 0.232 Acre. |

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Lot 4

Being a portion of the Government (Crown) Land of Waimea.

Situated at Kekaha, Waimea, Kauai, Hawaii.

Beginning at the South corner of this parcel of land and on Kaumualii Highway (Hawaii Project No. DA-WR-1), the coordinates of said point of beginning referred to Government Survey Triangulation Station "TRANSIT OF VENUS" being 28,075.32 feet North and 37,176.45 feet West, thence running by azimuths measured clockwise from true South:

1. Along Kaumualii Highway (Hawaii Project No. DA-WR-1), on a curve to the left with a radius of 1,149.89 feet, the chord azimuth and distance being: 152° 28' 11" 1,094.64 feet;

2. 279° 58' 30" 1,285.64 feet along Kaumualii Highway (Hawaii Project No. DA-WR-1);

3. Thence along Kaumualii Highway (Hawaii Project No. DA-WR-1), on a curve to the left with a radius of 1,044.32 feet, the chord azimuth and distance being: 278° 15' 31" 62.56 feet;

4. Thence along Kaumualii Highway (Hawaii Project No. DA-WR-1), on a curve to the left with a radius of 1,850.44 feet, the chord azimuth and distance being: 48° 02' 56" 1,105.48 feet to the point of beginning and containing a GROSS AREA of 9.637 ACRES and NET AREA of 9.489 ACRES after deducting therefrom Mana Substation Site A (0.148 Acres). (C.S.F. 20,658)

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Lot 5

Being a portion of Kaumualii Highway (Hawaii Project No. DA-WR-1).

Situated at Kekaha, Waimea, Kauai, Hawaii.

Beginning at the Southwest corner of this parcel of land and on the East boundary of Lot B of the Government (Crown) Land of Waimea, the coordinates of said point of beginning referred to Government Survey Triangulation Station "TRANSIT OF VENUS" being 27,642.04 feet North and 37,363.43 feet West, thence running by azimuths measured clockwise from true South:

1. 196° 01' 168.05 feet along Lot B of the Government (Crown) Land of Waimea;

2. Thence along Lot B of the Government (Crown) Land of Waimea and the remainder of the Government (Crown) Land of Waimea, on a curve to the left with a radius of 1,049.89 feet, the chord azimuth and distance being:
147° 59' 45" 1,560.95 feet;

3. 99° 58' 30" 21.97 feet along the remainder of the Government (Crown) Land of Waimea;

4. 185° 24' 100.32 feet along the remainder of Kaumualii Highway (Hawaii Project No. DA-WR-1);

5. 279° 58' 30" 1,784.65 feet along the remainder of the Government (Crown) Land of Waimea;

6. Thence along the remainder of the Government (Crown) Land of Waimea, on a curve to the left with a radius of 944.32 feet, the chord azimuth and distance being:
269° 25' 45" 345.66 feet;

7. 258° 53' 798.13 feet along the remainder of the Government (Crown) Land of Waimea;

8. 348° 53' 100.00 feet along the remainder of the Government (Crown) Land of Waimea;



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| | | | | |
|---|---|---|---|---|
| 9. | 78° | 53' | 684.38 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 10. | Thence along the remainder of the Government (Crown) Land of Waimea, on a curve to the left with a radius of 1,750.44 feet, the chord azimuth and distance being: 47° 27' 1,825.73 feet; | | | |
| 11. | 106° | 01' | 100.00 feet | across Kaumualii Highway (Hawaii Project No. DA-WR-1) to the point of beginning and containing a GROSS AREA of 23.353 ACRES and a NET AREA of 13.716 ACRES after deducting therefrom Lot 4 (9.489 acres and Mana Substation Site (0.148 acre). |

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Lot 6

Being a portion of Kaumualii Highway (Hawaii Project No. DA-WR-1).

Situated at Kekaha, Waimea, Kauai, Hawaii.

Beginning at the Northwest corner of this parcel of land, and on the East boundary of Lot B of the Government (Crown) Land of Waimea, the coordinates of said point of beginning referred to Government Survey Triangulation Station "TRANSIT OF VENUS" being 27,642.04 feet North and 37,363.43 feet West, thence running by azimuths measured clockwise from true South:

| | | | | |
|---|---|---|---|---|
| 1. | 286° | 01' | 100.00 feet | along the remainder of Kaumualii Highway (Hawaii Project No. DA-WR-1); |
| 2. | 16° | 01' | 2,536.22 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 3. | Thence along the remainder of the Government (Crown) Land of Waimea, on a curve to the left with a radius of 1,950.51 feet, the chord azimuth and distance being: 347° 22' 30" 1,869.88 feet; | | | |
| 4. | 318° | 44' | 15,620.53 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 5. | 43° | 20' | 100.45 feet | across Kaumualii Highway (Hawaii Project No. DA-WR-1); |
| 6. | 138° | 44' | 15,629.98 feet | along the Road to Lae-O-Kokole Lighthouse (Presidential Proclamation 827 dated December 4, 1908), Substation Site B (revised November 1976), Kekaha Agricultural Park Subdivision, File Plan 2136, remainder of the Government (Crown) Land of Waimea, Wild Bird Sanctuary, Governor's Executive Orders 3437 and 3685 and along Lot A of the Government (Crown) Land of Waimea; |



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7. Thence along Lot A of the Government (Crown) Land of Waimea, on a curve to the right with a radius of 2,050.51 feet, the chord azimuth and distance being: 167° 22' 30" 1,965.74 feet;

8. 196° 01' 2,536.22 feet along Lot A of the Government (Crown) Land of Waimea, along the remainder of Kaumualii Highway (Hawaii Project No. DA-WR-1) and Lot B of the Government (Crown) Land of Waimea to the point of beginning and containing an area of 46.285 Acres.

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Lot 7

Being a portion of Kaumualii Highway (Hawaii Project No. DA-WR-1).

Situated at Kekaha, Waimea, Kauai, Hawaii.

Beginning at the Southeast corner of this parcel of land, being also the Northeast boundary of Lot A of the Government (Crown) Land of Waimea, the coordinates of said point of beginning referred to Government Survey Triangulation Station "TRANSIT OF VENUS" being 26,466.52 feet North and 37,700.87 feet West, thence running by azimuths measured clockwise from true South:

1. Along Lot A of the Government (Crown) Land of Waimea, on a curve to the left with a radius of 100.00 feet, the chord azimuth and distance being: 151° 01' 141.42 feet;

2. 106° 01' 561.88 feet along Lot A of the Government (Crown) Land of Waimea;

3. 195° 50' 30" 100.00 feet along Addition to Bonham Air Base, Tract E-2;

4. 286° 01' 562.19 feet along Lot B of the Government (Crown) Land of Waimea;

5. Thence along Lot B of the Government (Crown) Land of Waimea, on a curve to the left with a radius of 100.00 feet, the chord azimuth and distance being: 241° 01' 141.42 feet;

6. 16° 01' 300.00 feet along the remainder of Kaumualii Highway (Hawaii Project No. DA-WR-1) to the point of beginning and containing an area of 1.618 Acres.

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Lot 8

Being a portion of the Government (Crown) Land of Waimea.

Situated at Kekaha, Waimea, Kauai, Hawaii.

Beginning at the Northwest corner of this parcel of land, on the Southwest side of Kaumualii Highway (Hawaii Project No. DA-WR-1), the coordinates of said point of beginning referred to Government Survey Triangulation Station "TRANSIT OF VENUS" being 18,694.21 feet North and 33,604.25 feet West, thence running by azimuths measured clockwise from true South:

| | | | | | |
|---|---|---|---|---|---|
| 1. | 318° | 44' | | 3,012.76 feet | along the Southwest side of Kaumualii Highway (Hawaii Project No. DA-WR-1); |
| 2. | 43° | 30' | 26" | 368.90 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 3. | 138° | 48' | | 347.07 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 4. | 143° | 55' | 55" | 2,682.32 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 5. | 216° | 00' | | 127.05 feet | along the Wild Bird Sanctuary, Governor's Executive Order 3437 to the point of beginning and containing an area of 17.875 acres. |

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Lot 9

Being a portion of the Government (Crown) Land of Waimea.

Situated at Kekaha, Waimea, Kauai, Hawaii.

Beginning at the East corner of this parcel of land and on the Southwest side of Kaumualii Highway (Hawaii Project No. DA-WR-1), the coordinates of said point of beginning referred to Government Survey Triangulation Station "TRANSIT OF VENUS" being 16,324.34 feet North and 31,524.72 feet West, thence running by azimuths measured clockwise from true South:

| | | | | | |
|---|---|---|---|---|---|
| 1. | 48° | 44' | | 647.44 feet | along Lot 11 of Kekaha Agricultural Park Subdivision (File Plan 2136); |
| 2. | 146° | 56' | 40" | 3,140.13 feet | along Bonham Air Base (formerly Mana Airport Military Reservation), Part 1, Governor's Executive Order 945; |
| 3. | 216° | 00' | | 76.93 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 4. | 323° | 55' | 55" | 2,682.32 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 5. | 318° | 48' | | 347.07 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 6. | 223° | 30' | 26" | 368.90 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 7. | 318° | 44' | | 140.14 feet | along the Southwest side of Kaumualii Highway (Hawaii Project No. DA-WR-1) to the point of beginning and containing an area of 12.422 acres. |

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Lot 10

Being a portion of the Government (Crown) Land of Waimea.

Situated at Kekaha, Waimea, Kauai, Hawaii.

Beginning at the Southeast corner of this parcel of land, on the Northeast side of Bonham Air Base (Formerly Mana Airport Military Reservation), Part 1 Governor's Executive Order 945, the coordinates of said point of beginning referred to Government Survey Triangulation Station "TRANSIT OF VENUS" being 18,529.15 feet North and 33,724.13 feet West, thence running by azimuths measured clockwise from true South:

| | | | | | |
|---|---|---|---|---|---|
| 1. | 146° | 56' | 40" | 20.60 feet | along Bonham Air Base (Formerly Mana Airport Military Reservation), Part 1 Governor's Executive Order 945; |
| 2. | 105° | 55' | 08" | 3,810.13 feet | along Bonham Air Base (formerly Mana Airport Military Reservation), Part 1, Governor's Executive Order 945; |
| 3. | 137° | 30' | 20" | 233.74 feet | along Bonham Air Base (formerly Mana Airport Military Reservation), Part 1, Governor's Executive Order 945; |
| 4. | 243° | 44' | 20" | 20.67 feet | along Lot A of the Government (Crown) Land of Waimea; |
| 5. | 153° | 44' | 20" | 73.89 feet | along Lot A of the Government (Crown) Land of Waimea; |
| 6. | 243° | 44' | 20" | 12.50 feet | along Lot A of the Government (Crown) Land of Waimea; |
| 7. | Thence along the remainder of the Government (Crown) Land of Waimea, on a curve to the left with a radius of 542.50 feet, the chord azimuth and distance being: 295° 07' 14" 677.18 feet; | | | | |
| 8. | 303° | 58' | 40" | 108.23 feet | along the Wild Bird Sanctuary, Governor's Executive Order 3685; |
| 9. | 285° | 54' | | 3,304.90 feet | along the Wild Bird Sanctuary, Governor's Executive Order 3437; |



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10. 36° 00' 76.93 feet along the remainder of the Government (Crown) Land of Waimea, to the point of beginning and containing an area of 5.171 acres.

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Lot 11

Being a portion of the Government (Crown) Land of Waimea.

Situated at Kekaha, Waimea, Kauai, Hawaii.

Beginning at the South corner of this parcel of land, on the West boundary of Lot A-1-A as shown on Map 26 of Land Court Application 1076 and on the North side of Kekaha Road, the coordinates of said point of beginning referred to Government Survey Triangulation Station "TRANSIT OF VENUS" being 1,993.35 feet North and 10,247.36 feet West, thence running by azimuths measured clockwise from true South:

| | | | | |
|---|---|---|---|---|
| 1. | 95° | 53' | 520.00 feet | along the North side of Kekaha Road; |
| 2. | 92° | 56' | 52.79 feet | along the North side of Kekaha Road; |
| 3. | 182° | 45' | 79.21 feet | along Lot 285 of Kekaha House Lots; |
| 4. | 91° | 55' | 400.00 feet | along Lots 285 and 284 of Kekaha House Lots; |
| 5. | 104° | 30' | 186.75 feet | along Lots 7, as shown on Map 12, T-1 and T-2, as shown on Map 9 of Land Court Application 1233; |
| 6. | 190° | 31' | 9.85 feet | along Lot 231 of Kekaha House Lots; |
| 7. | 93° | 19' | 418.90 feet | along Grant 9525 to Charles Aldolph Puck, Lot 230 of Kekaha House Lots and along Government Land; |
| 8. | 200° | 50' | 407.70 feet | along Grant 9142 to Maria Kaialau, Grant 9691 to Hatsuichi Hashiba, Grant 13382 to Joseph Ku Malama and Lucille Ahana Malama; |
| 9. | 143° | 35' | 210.00 feet | along Grant 13382 to Joseph Ku Malama and Lucille Ahana Malama; |
| 10. | 114° | 49' | 124.00 feet | along Grant 13382 to Joseph Ku Malama and Lucille Ahana Malama, the North end of Kolea Road and Grant 11572 to Louis Parraga; |



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| | | | | | |
|---|---|---|---|---|---|
| 11. | 128° | 30' | | 363.10 feet | along Grant 11572 to Louis Parraga, Grant 13765 to Choshi Nakaya and Mitsuyo Yokoyama Nakaya and along the North end of Aukuu Road; |
| 12. | 133° | 10' | | 250.00 feet | along the Northerly end of Aukuu Road and Grant 11880 to (Mrs.) Shizue K. Nitta; |
| 13. | 35° | 24' | | 112.38 feet | along Grant 11880 to (Mrs.) Shizue K. Nitta; |
| 14. | 125° | 24' | | 547.10 feet | along Grant 10266 to Ernest F. Shackleton and Grant 10267 to Lindsay A. Faye; |
| 15. | 35° | 24' | | 477.72 feet | along Grant 10267 to Lindsay A. Faye; |
| 16. | 125° | 24' | | 50.00 feet | along the Northerly side of Kekaha Road; |
| 17. | 125° | 08' | | 244.23 feet | along the Northerly side of Kekaha Road; |
| 18. | 128° | 14' | | 1,241.13 feet | along Grant S-15444 to County of Kauai; |
| 19. | 123° | 36' | 30" | 468.19 feet | along Grant S-15444 to County of Kauai; |
| 20. | 216° | 38' | | 100.64 feet | along Grant 10329 to Kekaha Sugar Company, Limited; |
| 21. | 161° | 50' | | 160.22 feet | along Grant 10329 to Kekaha Sugar Company, Limited; |
| 22. | 130° | 36' | | 347.74 feet | along Grant 10329 to Kekaha Sugar Company, Limited; |
| 23. | 100° | 29' | | 242.29 feet | along Grants 10329 and 10333 to Kekaha Sugar Company, Limited; |



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| | | | | | |
|---|---|---|---|---|---|
| 24. | 136° | 28' | | 87.52 feet | along Grant 10333 to Kekaha Sugar Company, Limited; |
| 25. | 140° | 23' | | 121.13 feet | along Grant 10333 to Kekaha Sugar Company, Limited; |
| 26. | 155° | 34' | | 79.77 feet | along Grant 10333 to Kekaha Sugar Company, Limited; |
| 27. | 143° | 52' | | 76.39 feet | along Grant 10333 to Kekaha Sugar Company, Limited; |
| 28. | 169° | 05' | | 53.00 feet | along Grant 10333 to Kekaha Sugar Company, Limited; |
| 29. | 157° | 47' | | 53.95 feet | along Lot 3 of Kekaha Beach Homes, Block 5, File Plan 1759; |
| 30. | 126° | 50' | | 528.10 feet | along Lots 3, 6, 9 and 12 of Kekaha Beach Homes, Block 5, File Plan 1759; |
| 31. | 137° | 22' | | 395.66 feet | along Lots 14 and 15 of Kekaha Beach Homes, Block 5, File Plan 1759 to the Easterly side of Mana Road; |
| 32. | 76° | 56' | 30" | 50.55 feet | across Mana Road; |
| 33. | 126° | 18' | | 274.58 feet | along Hawaii National Guard Site, Governor's Executive Order 1668; |
| 34. | 124° | 09' | | 368.90 feet | along Grant 8191 to Helen Hookano and Grant 8201 to Hikiauola Hilo; |
| 35. | 114° | 12' | | 282.90 feet | along Grant 8150 to Neely Hilo and Grant 8169 to Kuleana Hemolele; |
| 36. | 111° | 42' | | 1,105.90 feet | along Grant 8170 to Paleka Ono and Grant 8220 to Joe K Kanihalau and along Government Remnant; |
| 37. | 117° | 07' | | 21.21 feet | along the Northerly side of Kekaha Road; |



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38. 35° 08' 30.81 feet along the Westerly side of Kekaha Road;

39. 133° 00' 114.32 feet along the remainder of the Government (Crown) Land of Waimea;

40. Thence along the remainder of the Government (Crown) Land of Waimea, on a curve to the left with a radius of 426.00 feet, the chord azimuth and distance being:
125° 25' 112.44 feet;

41. 117° 50' 244.83 feet along the remainder of the Government (Crown) Land of Waimea;

42. Thence along the remainder of the Government (Crown) Land of Waimea, on a curve to the left with a radius of 535.00 feet, the chord azimuth and distance being:
107° 42' 30" 188.10 feet;

43. 97° 35' 341.37 feet along the remainder of the Government (Crown) Land of Waimea;

44. Thence along the remainder of the Government (Crown) Land of Waimea, on a curve to the left with a radius of 5,472.00 feet, the chord azimuth and distance being:
95° 05' 477.37 feet;

45. 92° 35' 194.00 feet along the remainder of the Government (Crown) Land of Waimea;

46. Thence along the remainder of the Government (Crown) Land of Waimea, on a curve to the left with a radius of 5,286.00 feet, the chord azimuth and distance being:
90° 45' 338.22 feet;

47. 88° 55' 300.47 feet along the remainder of the Government (Crown) Land of Waimea;



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48. Thence along the remainder of the Government (Crown) Land of Waimea, on a curve to the right with a radius of 985.00 feet, the chord azimuth and distance being:
101° 15' 30" 421.07 feet;

49. 113° 36' 646.66 feet along the remainder of the Government (Crown) Land of Waimea;

50. Thence along the remainder of the Government (Crown) Land of Waimea, on a curve to the left with a radius of 950.00 feet, the chord azimuth and distance being:
92° 34' 681.93 feet;

51. 71° 32' 410.23 feet along the remainder of the Government (Crown) Land of Waimea;

52. Thence along the remainder of the Government (Crown) Land of Waimea, on a curve to the right with a radius of 860.00 feet, the chord azimuth and distance being:
77° 41' 184.27 feet;

53. 83° 50' 267.27 feet along the remainder of the Government (Crown) Land of Waimea;

54. Thence along the remainder of the Government (Crown) Land of Waimea, on a curve to the left with a radius of 770.00 feet, the chord azimuth and distance being:
69° 02' 30" 393.17 feet;

55. 54° 15' 25.71 feet along the remainder of the Government (Crown) Land of Waimea;

56. Thence along the remainder of the Government (Crown) Land of Waimea, on a curve to the left with a radius of 30.00 feet, the chord azimuth and distance being:
6° 29' 30" 44.42 feet;

57. 318° 44' 133.75 feet along the Northerly side of Kaumualii Highway (Hawaii Project No. DA-WR-1);



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|---|---|---|---|---|---|
| 58. | Thence along the Northerly side of Kaumualii Highway (Project No. DA-WR-1), on a curve to the left with a radius of 5,962.17 feet, the chord azimuth and distance being: 310° 48' 1,645.81 feet; | | | | |
| 59. | 32° | 52' | | 100.00 feet | across Kaumualii Highway (Hawaii Project No. DA-WR-1); |
| 60. | 15° | 54' | | 474.66 feet | along Kekaha Beach Park, Governor's Executive Order 1425; |
| 61. | Thence along highwater mark at seashore, the direct azimuth and distance being: 105° 33' 20" 2,029.65 feet; | | | | |
| 62. | 203° | 19' | | 730.00 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 63. | 110° | 05' | 20" | 1,000.00 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 64. | 140° | 07' | 35" | 1,238.92 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 65. | 228° | 44' | | 420.89 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 66. | 118° | 04' | 40" | 657.25 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 67. | 228° | 44' | | 881.84 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 68. | 138° | 44' | | 3,415.52 feet | along the remainder of the Government (Crown) Land of Waimea and Access Road, Governor's Executive Order 1558, along New Kekaha Dumping Ground, Governor's Executive Order 3695 and Road to Lae-O-Kokole Lighthouse (Presidential Proclamation 827 dated December 4, 1908); |
| 69. | 223° | 20' | | 100.45 feet | across Kaumualii Highway (Hawaii Project No. DA-WR-1); |



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70. 138° 44' 15,620.53 feet along the Northeast side of Kaumualii Highway (Hawaii Project No. DA-WR-1);

71. Thence along the Northeast side of Kaumualii Highway (Project No. DA-WR-1), on a curve to the right with a radius of 1,950.51 feet, the chord azimuth and distance being:
167° 22' 30" 1,869.88 feet;

72. 196° 01' 2,536.22 feet along the Northeast side of Kaumualii Highway (Project No. DA-WR-1);

73. Thence along the Northeast side of Kaumualii Highway (Project No. DA-WR-1), on a curve to the right with a radius of 1,750.44 feet, the chord azimuth and distance being:
227° 27' 1,825.73 feet;

74. 258° 53' 684.38 feet along the Northeast side of Kaumualii Highway (Hawaii Project No. DA-WR-1);

75. 168° 53' 100.00 feet along the East side of Kaumualii Highway (Hawaii Project No. DA-WR-1);

76. 78° 53' 798.13 feet along the North side of Kaumualii Highway (Hawaii Project No. DA-WR-1);

77. Thence along the North side of Kaumualii Highway (Hawaii Project No. DA-WR-1), on a curve to the right with a radius of 944.32 feet, the chord azimuth and distance being:
89° 25' 45" 345.66 feet;

78. 99° 58' 30" 1,784.65 feet along the Government (Crown) Land of Waimea;

79. 185° 24' 122.46 feet along the remainder of the Government (Crown) Land of Waimea;

80. 180° 23' 340.89 feet along the remainder of the Government (Crown) Land of Waimea;

81. 193° 32' 143.47 feet along the remainder of the Government (Crown) Land of Waimea;



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|---|---|---|---|---|---|
| 82. | 203° | 01' | | 520.84 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 83. | 208° | 23' | | 263.70 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 84. | 194° | 10' | 30" | 174.08 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 85. | 183° | 02' | | 302.97 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 86. | 191° | 26' | | 136.43 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 87. | 198° | 03' | | 251.16 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 88. | 186° | 44' | 30" | 681.33 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 89. | 183° | 02' | | 264.72 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 90. | 191° | 28' | | 435.49 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 91. | 201° | 43' | | 253.79 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 92. | 209° | 05' | | 320.86 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 93. | 205° | 48' | | 203.30 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 94. | 191° | 49' | | 281.61 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 95. | 195° | 19' | | 277.88 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 96. | 189° | 05' | | 278.61 feet | along the remainder of the Government (Crown) Land of Waimea; |



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|---|---|---|---|---|
| 97. | 177° | 49' | 325.32 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 98. | 182° | 46' | 287.14 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 99. | 191° | 06' | 260.84 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 100. | 176° | 42' | 411.20 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 101. | 196° | 40' | 2,593.67 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 102. | 191° | 05' | 144.42 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 103. | 224° | 03' | 1,458.00 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 104. | 191° | 05' | 732.36 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 105. | 224° | 03' | 1,195.22 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 106. | Thence along the remainder of the Government (Crown) Land of Waimea, on a curve to the right with a radius of 310.00 feet, the chord azimuth and distance being: 227° 10' 119.72 feet; | | | |
| 107. | 238° | 18' | 160.91 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 108. | 134° | 03' | 1,395.67 feet | along the remainder of the Government (Crown) Land of Waimea and Bonham Air Base, Tract E-1; |
| 109. | 224° | 03' | 4,385.90 feet | along Polihale State Park, Governor's Executive Order 2901; |



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|---|---|---|---|---|---|
| 110. | 224° | 31' | 40" | 3,106.10 feet | along Polihale State Park, Governor's Executive Order 2901; |
| 111. | 223° | 37' | | 2,915.30 feet | along Polihale State Park, Governor's Executive Order 2901; |
| 112. | 300° | 50' | | 1,509.59 feet | along Puu Ka Pele Forest Reserve, Governor's Proclamation dated May 2, 1938; |
| 113. | 19° | 00' | | 863.83 feet | along Puu Ka Pele Forest Reserve, Governor's Proclamation dated May 2, 1938; |
| 114. | 22° | 00' | | 7,000.00 feet | along Hawaiian Home Land; |
| 115. | 4° | 30' | | 7,700.00 feet | along Hawaiian Home Land; |
| 116. | 349° | 00' | | 9,100.00 feet | along Hawaiian Home Land; |
| 117. | 329° | 00' | | 8,500.00 feet | along Hawaiian Home Land; |
| 118. | 323° | 56' | 15" | 5,793.80 feet | along Hawaiian Home Land; |
| 119. | 321° | 11' | | 348.70 feet | along Hawaiian Home Land; |
| 120. | 325° | 13' | | 804.60 feet | along Hawaiian Home Land; |
| 121. | 212° | 33' | | 400.50 feet | along Hawaiian Home Land; |

122. Thence along the West edge of Puehu Ridge being also the Hawaiian Home Land, the direct azimuth and distance being:
239° 02' 3,896.60 feet;

123. Thence along the West edge of Puehu Ridge being also the Hawaiian Home Land, the direct azimuth and distance being:
218° 16' 3,319.60 feet;

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|---|---|---|---|---|---|
| 124. | 323° | 25' | | 1,222.70 feet | along Hawaiian Home Land; |
| 125. | 270° | 04' | | 520.00 feet | along Hawaiian Home Land; |



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126. Thence along the middle of Waipao Gulch being also the Hawaiian Home Land, the direct azimuth and distance being: 227° 00' 8,500.00 feet;

127. Thence crossing the middle of the West branch of Waipao Gulch and Kokee Road, being also the Hawaiian Home Land, the direct azimuth and distance being: 190° 38' 45" 2,285.20 feet;

128. Thence along the Northwesterly side of Kokee Road running parallel to and twenty-five (25) feet from the centerline of said Kokee Road, being also the Hawaiian Home Land, the direct azimuth and distance being: 233° 12' 30" 4,618.50 feet;

129. 239° 21' 31.70 feet along Waimea Canyon Park, Governor's Executive Order 1510;

130. 306° 11' 30" 602.10 feet along Waimea Canyon Park, Governor's Executive Order 1510;

131. 283° 43' 30" 784.80 feet along Waimea Canyon Park, Governor's Executive Order 1510 to the top edge of Waimea Canyon;

Thence along the top edge of Waimea Canyon for the next six (6) courses, the direct azimuths and distances between points near the top edge of Waimea Canyon being:

132. 41° 04' 2,846.90 feet to a POKII 7 (2-inch pipe);

133. 00° 34' 4,075.90 feet to CANYON C (2-inch pipe);

134. 355° 35' 6,817.50 feet to Government Survey Triangulation Station CANYON B (Type A monument);

135. 335° 25' 4,690.80 feet to CANYON A (2-inch pipe);

136. 305° 18' 30" 1,620.90 feet to CANYON (2-inch pipe);

137. 354° 21' 2,632.10 feet;



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| | | | | | |
|---|---|---|---|---|---|
| 138. | 347° | 34' | 30" | 1,492.84 feet | along the Ili of Kikiaola and crossing Kekaha Ditch; |
| 139. | 21° | 30' | | 96.53 feet | along Area reserved for Waimea Heights House Lots; |
| 140. | 358° | 00' | | 174.00 feet | along Area reserved for Waimea Heights House Lots; |
| 141. | 78° | 20' | | 296.00 feet | along Area Government (Crown) Land reserved for Waimea Heights House Lots; |
| 142. | 125° | 00' | | 218.00 feet | along Area reserved for Waimea Heights House Lots; |
| 143. | 110° | 30' | | 240.00 feet | along Area reserved for Waimea Heights House Lots; |
| 144. | 153° | 40' | | 278.00 feet | along Area reserved for Waimea Heights House Lots; |
| 145. | 189° | 00' | | 120.00 feet | along Area reserved for Waimea Heights House Lots; |

146. Thence along Area reserved for Waimea Heights House Lots, on a curve to the left with a radius of 50.00 feet, the chord azimuth and distance being:
127° 35' 87.81 feet;

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|---|---|---|---|---|---|
| 147. | 66° | 10' | | 75.00 feet | along Area reserved for Waimea Heights House Lots; |

148. Thence along Area reserved for Waimea Heights House Lots, on a curve to the right with a radius of 150.00 feet, the chord azimuth and distance being:
117° 10' 233.14 feet;

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|---|---|---|---|---|---|
| 149. | 168° | 10' | | 325.00 feet | along Area reserved for Waimea Heights House Lots; |



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150. Thence along Area reserved for Waimea Heights House Lots, on a curve to the left with a radius of 50.00 feet, the chord azimuth and distance being:
94° 50' 95.80 feet;

151. 21° 30' 113.00 feet along Area reserved for Waimea Heights House Lots;

152. 40° 30' 716.00 feet along Area reserved for Waimea Heights House Lots;

153. Thence along Area reserved for Waimea Heights House Lots, on a curve to the left with a radius of 300.00 feet, the chord azimuth and distance being:
30° 40' 102.47 feet;

154. Thence along Area reserved for Waimea Heights House Lots, on a curve to the right with a radius of 150.00 feet, the chord azimuth and distance being:
73° 04' 30" 237.18 feet;

155. 35° 19' 383.00 feet along Area reserved for Waimea Heights House Lots to the foot of a rocky precipice of cliff on the side of pali;

Thence along Lot A-1-A of Land Court Application 1076 (Map 26), the boundary following the foot of a rocky precipice of cliff, on the side of pali, for the next four (4) courses, the direct azimuths and distances being:

156. 125° 19' 222.00 feet;

157. 123° 00' 450.00 feet;

158. 126° 00' 450.00 feet;

159. 141° 30' 300.00 feet;

160. 115° 20' 600.00 feet along Lot A-1-A of Land Court Application 1076 (Map 26), crossing gulch to a foot of a rocky precipice or cliff;



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Thence along Lot A-1-A of Land Court Application 1076 (Map 26), the boundary following the foot of a rocky precipice of cliff, on the side of pali, for the next four (4) courses, the direct azimuths and distances being:

| | | | | | |
|---|---|---|---|---|---|
| 161. | 90° | 30' | | 300.00 feet; | |
| 162. | 102° | 30' | | 420.00 feet; | |
| 163. | 108° | 30' | | 510.00 feet; | |
| 164. | 123° | 00' | | 360.00 feet to a pipe; | |
| 165. | 102° | 20' | | 1,080.00 feet | along Lot A-1-A of Land Court Application 1076 (Map 26), crossing gulch at the foot of a rocky precipice or cliff on the side of pali; |

Thence along Lot A-1-A of Land Court Application 1076 (Map 26), the boundary following the foot of a rocky precipice or cliff, on the side of pali, for the next five (5) courses, the direct azimuths and distances being:

| | | | | | |
|---|---|---|---|---|---|
| 166. | 100° | 30' | | 540.00 feet; | |
| 167. | 80° | 30' | | 360.00 feet; | |
| 168. | 76° | 30' | | 360.00 feet; | |
| 169. | 105° | 30' | | 330.00 feet; | |
| 170. | 133° | 42' | 30" | 364.60 feet; | |
| 171. | 107° | 50' | | 1,590.00 feet | along Lot A-1-A of Land Court Application 1076 (Map 26), crossing two (2) gulches; |

Thence along Lot A-1-A of Land Court Application 1076 (Map 26), the boundary following the foot of a rocky precipice or cliff, on the side of pali, for the next two (2) courses, the direct azimuths and distances being:

| | | | | | |
|---|---|---|---|---|---|
| 172. | 46° | 00' | | 270.00 feet; | |
| 173. | 85° | 00' | | 270.00 feet; | |



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| | | | | | |
|---|---|---|---|---|---|
| 174. | 17° | 14' | 30" | 3,932.80 feet | along Lot A-1-A of Land Court Application 1076 (Map 26), to the point of beginning and containing a GROSS AREA of 12,701.458 ACRES and a NET AREA of 12,495.823 ACRES after deducting therefrom Exclusions 1 to 23, inclusive (205.000 Acres) and Lot 12 (0.026 Acre). |

Subject , however, to the following:

(1) Easement A for roadway and utility purposes for water pipeline purposes, C for water pipeline purposes and D for power line purposes covered by General Lease S-3852 issued to the United States of America dated August 20, 1964 and recorded in Liber 4821, Page 245 and amendment dated May 31, 1973 and recorded in Liber 9221, Page 407 (C.S.F. 14,517).

(2) Perpetual Non-Exclusive Easements 1, 2 and 3 for Electric Transmission Line Purposes covered by Grant of Easement: State of Hawaii to Kauai Electric, Division of Citizens Utilities Company dated December 6, 1979 and recorded in Liber 14420, Page 354 (Land Office Deed S-27,071) (C.S.F. 18,582).

Easements for roadway and utility purposes for all exclusions entitled thereto.

(3) Easements 1 and 2 (30.00 feet wide) for Electric Transmission Line and Access Purposes (C.S.F. 20,658).

(4) Perpetual Non-Exclusive Easement C for Access and Waterline Purposes, Perpetual Non-Exclusive Easement E for Pump Station and Reservoir Purposes, Perpetual Non-Exclusive Easement J for Drainage Purposes and Perpetual Non-Exclusive Easement F for Pipeline Purposes covered by Governor's Executive Order 3633 to Department of Agriculture dated October 17, 1994 (C.S.F. 22,171).

(5) Easement for Waterline Booster Pump covered by Grant of Easement: State of Hawaii to United States of America (Department of Navy) dated April 14, 1978 and recorded in Liber 12844, Page 450 (Land Office Deed S-26,908) (C.S.F. 17,978).



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(6) Perpetual Non-Exclusive Easement for Transmission Line Purposes covered by Grant of Easement: State of Hawaii to Kauai Electric, Division of Citizens Utilities Company and Hawaiian Telephone Company dated December 18, 1979 and recorded in Liber 14651, Page 597 (Land Office Deed S-27,101) (C.S.F. 18,666).

(7) Non-Exclusive Easement for Electric Transmission Line Purposes (C.S.F. 16,191).

(8) Perpetual Non-Exclusive Easements 1 to 8, inclusive for Transmission Line Purposes covered by Grant of Easement: State of Hawaii to Kauai Electric, Division of Citizens Utilities Company and Hawaiian Telephone Company dated December 18, 1979 and recorded in Liber 14661, Page 651 (Land Office Deed S-27,102) (C.S.F. 18,667).

(9) Non-Exclusive Easement for Pipeline and Roadway Purposes in favor of County of Kauai.

(10) Non-Exclusive Easements E-1 and E-2 for Electrical Purposes covered by Grant of Easement: State of Hawaii to Citizens Utilities Company dated September 4, 1987 and recorded in Liber 21251, Page 335 (Land Office Deed S-27,645) (C.S.F. 20,203).

(11) Non-Exclusive Easement for Waterline Purposes covered by Governor's Executive Order 3377 to County of Kauai dated January 21, 1988 (C.S.F. 20,596).

(12) Perpetual Non-Exclusive Easement D-1 for Drainage Purposes covered by Grant of Easement: State of Hawaii to County of Kauai dated December 3, 1987 and recorded in Liber 21722, Page 687 (Land Office Deed S-27,663) (C.S.F. 20,501).

(13) Perpetual Non-Exclusive Easements D, G and H for Electrical and Telecommunication Purposes covered by Grant of Easement: State of Hawaii to Citizens Utilities Company and GTE Hawaiian Telephone Company, Incorporated dated April 6, 1995 and recorded in Document No. 96-084595 (Land Office Deed S-28,157) (C.S.F. 22,184).

(14) Non-Exclusive Easement 1 for Restrictive Ground Hazard Area Purposes (C.S.F. 22,196).

(15) Non-Exclusive Restriction Use Easement (C.S.F. 22,998).



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## EXCUSIONS

| | | |
|---|---|---|
| 1. | Kaumualii Highway (portion) | 18.136 Acres |
| 2. | Kokee Road | 25.30 Acres |
| 3. | Kokee Road Widening Project No. SRS-0700(6) (C.S.F. 17,824) | 0.521 Acre |
| 4. | Lower Saki Mana Road | 10.97 Acres |
| 5. | Polihale Road | 19.28 Acres |
| 6. | Waimea Canyon Drive | 30.000 Acres |
| 7 | Presidential Proclamation No. 827 | 7.871 Acres |
| 8. | Lot A, Land Court Application 1233 | 3.405 Acres |
| 9. | Lot B, Land Court Application 1233 | 0.712 Acre |
| 10. | Lot C, Land Court Application 1233 | 1.153 Acres |
| 11. | Grant 8143 to Jack P. Kaapuwai | 0.266 Acre |
| 12. | Grant 8202 to Augustus F. Knuden | 12.340 Acres |
| 13. | Grant 8144 to Peter Pah On Leong | 3.850 Acres |
| 14. | Grant 8153 to Baba Kaiwa | 1.330 Acres |
| 15. | Bonham Air Base Storage Area Tract E-3 (Parcel 2) | 48.777 Acres |
| 16. | Bonham Air Base Water Storage Area, Tract E-4 (C.S.F. 14,517) | 0.264 Acre |
| 17. | Addition to Kamokala Ridge Storage Area (C.S.F. 22,997) | 14.372 Acres |
| 18. | Aquaculture Site (C.S.F. 22,208) | 5.195 Acres |
| 19. | Water Tank Site (Governor's Executive Order 2884) | 0.431 Acre |



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|---|---|---|
| 20. | Tank and Pump Site and Right-of-Way (Governor's Executive Order 1380) | 0.31 Acre |
| 21. | Kekaha (Waipao) Well Site "B" and Access Road (Governor's Executive Order 3377) (C.S.F. 20,040) | 0.354 Acre |
| 22. | Well and Water Tank Site and Non-Exclusive Pipeline and Roadway Easement (Governor's Executive Order 3004) (C.S.F. 18,553) | 0.664 Acre |
| 23. | Well Site (Governor's Executive Order 4035) (C.S.F. 23,662) | 0.108 Acre |
| | TOTAL AREA OF EXCLUSIONS - | 205.609 Acres |

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License Expires 4/06

June 13, 2005
Honolulu, Hawaii



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Lot 12

Being a portion of the Government (Crown) Land of Waimea.

Situated at Kekaha, Waimea, Kauai, Hawaii.

Beginning at the Southwest corner of this parcel of land, the coordinates of said point of beginning referred to Government Survey Triangulation Station "TRANSIT OF VENUS" being 27,564.78 feet North and 29,522.66 feet West, thence running by azimuths measured clockwise from true South:

| | | | | |
|---|---|---|---|---|
| 1. | 173° | 17' | 28.98 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 2. | 261° | 36' | 38.48 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 3. | 345° | 34' | 26.80 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 4. | 78° | 27' | 42.21 feet | along the remainder of the Government (Crown) Land of Waimea to the point of beginning and containing an area of 0.026 acre. |

Wilfred Y. K. Chin

June 13, 2005
Honolulu, Hawaii

Wilfred Y. K. Chin
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License Expires 4/06



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Lot 13

Being a portion of the Government (Crown) Land of Waimea.

Situated at Kekaha, Waimea, Kauai, Hawaii.

Beginning at the Northeast corner of this parcel of land, on the Southwest side of Lot A of the Government (Crown) Land of Waimea, the coordinates of said point of beginning referred to Government Survey Triangulation Station "TRANSIT OF VENUS" being 19,592.52 feet North and 36,914.18 feet West, thence running by azimuths measured clockwise from true South:

1. 342° 02' 30" 25.00 feet along the remainder of the Government (Crown) Land of Waimea;

2. Thence along the remainder of the Government (Crown) Land of Waimea, on a curve to the right with a radius of 542.50 feet, the chord azimuth and distance being:
   112° 53' 25" 709.66 feet;

3. 243° 44' 20" 25.00 feet along Lot A-1, along the remainder of the Government (Crown) Land of Waimea;

4. Thence along Lot A of the Government (Crown) Land of Waimea, on a curve to the left with a radius of 517.50 feet, the chord azimuth and distance being:
   292° 53' 25" 676.95 feet
   to the point of beginning and containing an area of 0.434 acres.

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Lot 14

Being a portion of the Government (Crown) Land of Waimea.

Situated at Kekaha, Waimea, Kauai, Hawaii.

Beginning at the Northwest corner of this parcel of land, on the Southwest side of Lot A of the Government (Crown) Land of Waimea, the coordinates of said point of beginning referred to Government Survey Triangulation Station "TRANSIT OF VENUS" being 19,592.52 feet North and 36,914.18 feet West, thence running by azimuths measured clockwise from true South:

1. 252° 02' 30" 305.67 feet along Lot A of the Government (Crown) Land of Waimea;

2. Thence along Lot A of the Government (Crown) Land of Waimea, on a curve to the right with a radius of 1,172.50 feet, the chord azimuth and distance being: 268° 09' 650.63 feet;

3. 284° 15' 30" 53.60 feet along Lot A of the Government (Crown) Land of Waimea;

4. Thence along Lot A of the Government (Crown) Land of Waimea, on a curve to the left with a radius of 617.50 feet, the chord azimuth and distance being: 277° 49' 45" 138.29 feet;

5. 271° 24' 316.92 feet along Lot A of the Government (Crown) Land of Waimea;

6. Thence along Lot A of the Government (Crown) Land of Waimea, on a curve to the left with a radius of 1,157.50 feet, the chord azimuth and distance being: 266° 40' 05" 190.97 feet;

7. 261° 56' 10" 110.35 feet along Lot A of the Government (Crown) Land of Waimea;

8. Thence along Lot A of the Government (Crown) Land of Waimea, on a curve to the right with a radius of 1,502.50 feet, the chord azimuth and distance being: 269° 45' 55" 409.34 feet;



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| | | | | | |
|---|---|---|---|---|---|
| 9. | 277° | 35' | 40" | 313.69 feet | along Lot A of the Government (Crown) Land of Waimea; |
| 10. | 318° | 44' | | 38.00 feet | along the West side of Kaumualii Highway (Hawaii Project DA-WR-1); |
| 11. | 97° | 35' | 40" | 342.31 feet | along the Wild Bird Sanctuary, Governor's Executive Order 3685; |
| 12. | Thence along the Wild Bird Sanctuary, Governor's Executive Order 3685, on a curve to the left with a radius of 1,477.50 feet, the chord azimuth and distance being: 89° 45' 55" 402.53 feet; | | | | |
| 13. | 81° | 56' | 10" | 110.35 feet | along the Wild Bird Sanctuary, Governor's Executive Order 3685; |
| 14. | Thence along the Wild Bird Sanctuary, Governor's Executive Order 3685, on a curve to the right with a radius of 1,182.50 feet, the chord azimuth and distance being: 86° 40' 05" 195.10 feet; | | | | |
| 15. | 91° | 24' | | 316.92 feet | along the Wild Bird Sanctuary, Governor's Executive Order 3685; |
| 16. | Thence along the Wild Bird Sanctuary, Governor's Executive Order 3685, on a curve to the right with a radius of 642.50 feet, the chord azimuth and distance being: 97° 49' 45" 143.89 feet; | | | | |
| 17. | 104° | 15' | 30" | 53.60 feet | along the Wild Bird Sanctuary, Governor's Executive Order 3685; |
| 18. | Thence along the Wild Bird Sanctuary, Governor's Executive Order 3685, on a curve to the left with a radius of 1,147.50 feet, the chord azimuth and distance being: 88° 09' 636.76 feet; | | | | |
| 19. | 72° | 02' | 30" | 305.67 feet | along the Wild Bird Sanctuary, Governor's Executive Order 3685; |



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| | | | | | |
|---|---|---|---|---|---|
| 20. | 162° | 02' | 30" | 25.00 feet | along the remainder of the Government (Crown) Land of Waimea to the point of beginning and containing an area of 1.440 acres. |

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Lot A-1

Being a portion of Lot A of the Government (Crown) Land of Waimea.

Situated at Kekaha, Waimea, Kauai, Hawaii.

Beginning at the Southeast corner of this parcel of land, the coordinates of said point of beginning referred to Government Survey Triangulation Station "TRANSIT OF VENUS" being 19,592.52 feet North and 36,914.18 feet West, thence running by azimuths measured clockwise from true South:

| | | | | | |
|---|---|---|---|---|---|
| 1. | Along the remainder of the Government (Crown) Land of Waimea, on a curve to the right with a radius of 517.50 feet, the chord azimuth and distance being: 112° 53' 25" 676.95 feet; | | | | |
| 2. | 63° | 44' | 20" | 37.50 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 3. | 333° | 44' | 20" | 73.89 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 4. | 243° | 44' | 20" | 20.67 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 5. | 137° | 30' | 20" | 2,123.85 feet | along Bonham Air Base (Formerly Mana Airport Mililary Reservation), Part 1, Governor's Executive Order 945; |
| 6. | 205° | 10' | | 30.64 feet | along Addition to Bonham Air Base, Tract E-2; |
| 7. | 226° | 20' | | 587.33 feet | along Addition to Bonham Air Base, Tract E-2; |
| 8. | 149° | 11' | | 1,451.33 feet | along Addition to Bonham Air Base, Tract E-2; |
| 9. | 164° | 12' | | 143.83 feet | along Addition to Bonham Air Base, Tract E-2; |
| 10. | 182° | 29' | | 158.62 feet | along Addition to Bonham Air Base, Tract E-2; |



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| | | | | | |
|---|---|---|---|---|---|
| 11. | 201° | 11' | 30" | 426.37 feet | along Addition to Bonham Air Base, Tract E-2; |
| 12. | 197° | 59' | | 193.71 feet | along Addition to Bonham Air Base, Tract E-2; |
| 13. | 192° | 36' | | 232.73 feet | along Addition to Bonham Air Base, Tract E-2; |
| 14. | 188° | 48' | 30" | 203.04 feet | along Addition to Bonham Air Base, Tract E-2; |
| 15. | 187° | 25' | 30" | 423.32 feet | along Addition to Bonham Air Base, Tract E-2; |
| 16. | 192° | 21' | | 676.47 feet | along Addition to Bonham Air Base, Tract E-2; |
| 17. | 203° | 04' | | 1,090.37 feet | along Addition to Bonham Air Base, Tract E-2; |
| 18. | 195° | 50' | 30" | 359.19 feet | along Addition to Bonham Air Base, Tract E-2; |
| 19. | 286° | 01' | | 561.88 feet | along the Southwest side of Kaumualii Highway (Hawaii Project No. DA-WR-1); |
| 20. | Thence along the Southwest side of Kaumualii Highway (Hawaii Project No. DA-WR-1), on a curve to the right with a radius of 100.00 feet, the chord azimuth and distance being: 331° 01' 141.42 feet; | | | | |
| 21. | 16° | 01' | | 1,313.23 feet | along the Southwest side of Kaumualii Highway (Hawaii Project No. DA-WR-1); |
| 22. | Thence along the Southwest side of Kaumualii Highway (Hawaii Project No. DA-WR-1), on a curve to the left with a radius of 2,050.51 feet, the chord azimuth and distance being: 347° 22' 30" 1,965.74 feet; | | | | |
| 23. | 349° | 51' | | 3,122.61 feet | along the remainder of Lot A of the Government (Crown) Land of Waimea; |



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| | | | | | |
|---|---|---|---|---|---|
| 24. | 34° | 58' | | 150.21 feet | along the remainder of Lot A of the Government (Crown) Land of Waimea; |
| 25. | 304° | 58' | | 75.00 feet | along the remainder of Lot A of the Government (Crown) Land of Waimea; |
| 26. | 34° | 58' | | 60.20 feet | along the remainder of Lot A of the Government (Crown) Land of Waimea; |
| 27. | 124° | 58' | | 196.71 feet | along Grant 8891 to Rokuichiro Gotanda; |
| 28. | 63° | 22' | | 288.60 feet | along Grant 8891 to Rokuichiro Gotanda; |
| 29. | 333° | 22' | | 161.50 feet | along Grant 8891 to Rokuichiro Gotanda; |
| 30. | 301° | 38' | | 402.20 feet | along Grant 8891 to Rokuichiro Gotanda; |
| 31. | 277° | 55' | 15" | 234.87 feet | along the remainder of Lot A of the Government (Crown) Land of Waimea to the point of beginning and containing an area of 176.160 acres. |

WILFRED Y.K. CHIN
LICENSED PROFESSIONAL LAND SURVEYOR
No. 3499
HAWAII, U.S.A.

Wilfred Y. K. Chin

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Certificate Number 3499
License Expires 4/06

June 13, 2005
Honolulu, Hawaii



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Lot A-2

Being a portion of Lot A of the Government (Crown) Land of Waimea.

Situated at Kekaha, Waimea, Kauai, Hawaii.

Beginning at the Southwest corner of this parcel of land, the coordinates of said point of beginning referred to Government Survey Triangulation Station "TRANSIT OF VENUS" being 19,592.52 feet North and 36,914.18 feet West, thence running by azimuths measured clockwise from true South:

| | | | | | |
|---|---|---|---|---|---|
| 1. | 97° | 55' | 15" | 234.87 feet | along the remainder of Lot A of the Government (Crown) Land of Waimea; |
| 2. | 211° | 38' | | 154.90 feet | along Grant 8891 to Rokuichiro Gotanda; |
| 3. | 121° | 38' | | 120.00 feet | along Grant 8891 to Rokuichiro Gotanda; |
| 4. | 211° | 38' | | 160.00 feet | along Grant 8891 to Rokuichiro Gotanda; |
| 5. | 124° | 58' | | 71.49 feet | along Grant 8891 to Rokuichiro Gotanda; |
| 6. | 214° | 58' | | 60.20 feet | along the remainder of Lot A of the Government (Crown) Land of Waimea; |
| 7. | 124° | 58' | | 75.00 feet | along the remainder of Lot A of the Government (Crown) Land of Waimea; |
| 8. | 214° | 58' | | 150.21 feet | along the remainder of Lot A of the Government (Crown) Land of Waimea; |
| 9. | 169° | 51' | | 3,122.61 feet | along the remainder of Lot A of the Government (Crown) Land of Waimea; |
| 10. | 318° | 44' | | 4,831.08 feet | along the Southwest side of Kaumualii Highway (Hawaii Project No. DA-WR-1); |
| 11. | 97° | 35' | 40" | 313.69 feet | along the remainder of the Government (Crown) Land of Waimea; |



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12. Thence along the remainder of the Government (Crown) Land of Waimea, on a curve to the left with a radius of 1,502.50 feet, the chord azimuth and distance being:
89° 45' 55" 409.34 feet;

13. 81° 56' 10" 110.35 feet along the remainder of the Government (Crown) Land of Waimea;

14. Thence along the remainder of the Government (Crown) Land of Waimea, on a curve to the right with a radius of 1,157.50 feet, the chord azimuth and distance being:
86° 40' 05" 190.97 feet;

15. 91° 24' 316.92 feet along the remainder of the Government (Crown) Land of Waimea;

16. Thence along the remainder of the Government (Crown) Land of Waimea, on a curve to the right with a radius of 617.50 feet, the chord azimuth and distance being:
97° 49' 45" 138.29 feet;

17. 104° 15' 30" 53.60 feet along the remainder of the Government (Crown) Land of Waimea;

18. Thence along the remainder of the Government (Crown) Land of Waimea, on a curve to the right with a radius of 1,172.50 feet, the chord azimuth and distance being:
88° 09' 650.63 feet;

19. 72° 02' 30" 305.67 feet along the remainder of the Government (Crown) Land of Waimea to the point of beginning and containing an area of 105.032 acres.

Wilfred Y. K. Chin

June 13, 2005
Honolulu, Hawaii

Wilfred Y. K. Chin
Licensed Professional Land Surveyor
Certificate Number 3499
License Expires 4/06



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Easement 100
(For Agricultural Conservation Purposes)

Being a portion of Lot 11, being also a portion of the Government (Crown) Land of Waimea.

Situated at Kekaha, Waimea, Kauai, Hawaii.

Beginning at the Southwest corner of this easement, the coordinates of said point of beginning referred to Government Survey Triangulation Station "TRANSIT OF VENUS" being 29,187.50 feet North and 37,909.52 feet West, thence running by azimuths measured clockwise from true South:

| | | | | |
|---|---|---|---|---|
| 1. | 185° | 24' | | 122.46 feet along Lot 1; |
| 2. | 180° | 23' | | 340.89 feet along Lot 1; |
| 3. | 193° | 32' | | 143.47 feet along Lot 1; |
| 4. | 203° | 01' | | 520.84 feet along Lot 1; |
| 5. | 208° | 23' | | 263.70 feet along Lot 1; |
| 6. | 194° | 10' | 30" | 174.08 feet along Lot 1; |
| 7. | 183° | 02' | | 302.97 feet along Lot 1; |
| 8. | 191° | 26' | | 136.43 feet along Lot 1; |
| 9. | 198° | 03' | | 251.16 feet along Lot 1; |
| 10. | 186° | 44' | 30" | 681.33 feet along Lot 1; |
| 11. | 183° | 02' | | 264.72 feet along Lot 1; |
| 12. | 191° | 28' | | 435.49 feet along Lot 1; |
| 13. | 201° | 43' | | 253.79 feet along Lot 1; |
| 14. | 209° | 05' | | 320.86 feet along Lot 1; |
| 15. | 205° | 48' | | 203.30 feet along Lot 1; |
| 16. | 191° | 49' | | 281.61 feet along Lot 1; |



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| | | | | |
|---|---|---|---|---|
| 17. | 195° | 19' | 277.88 feet | along Lot 1; |
| 18. | 189° | 05' | 278.61 feet | along Lot 1; |
| 19. | 177° | 49' | 325.32 feet | along Lot 1; |
| 20. | 182° | 46' | 287.14 feet | along Lot 1; |
| 21. | 191° | 06' | 260.84 feet | along Lot 1; |
| 22. | 176° | 42' | 411.20 feet | along Lot 1; |
| 23. | 196° | 40' | 2,593.67 feet | along Lot 1; |
| 24. | 191° | 05' | 144.42 feet | along Lot 1; |
| 25. | 224° | 03' | 1,458.00 feet | along Lot 1; |
| 26. | 191° | 05' | 732.36 feet | along Lot 1; |
| 27. | 224° | 03' | 1,195.22 feet | along Lot 1; |
| 28. | Thence along the remainder of Lot 11, on a curve to the left with a radius of 310.00 feet, the chord azimuth and distance being: 4° 33' 323.79 feet; | | | |
| 29. | 333° | 04' | 145.13 feet | along the remainder of Lot 11; |
| 30. | 336° | 27' | 936.57 feet | along the remainder of Lot 11; |
| 31. | 44° | 03' | 3,604.33 feet | along the remainder of Lot 11; |
| 32. | 16° | 40' | 1,440.89 feet | along the remainder of Lot 11; |
| 33. | 356° | 42' | 398.77 feet | along the remainder of Lot 11; |
| 34. | 11° | 06' | 274.21 feet | along the remainder of Lot 11; |
| 35. | 2° | 46' | 258.12 feet | along the remainder of Lot 11; |
| 36. | 357° | 49' | 339.18 feet | along the remainder of Lot 11; |
| 37. | 9° | 05' | 316.89 feet | along the remainder of Lot 11; |
| 38. | 15° | 19' | 283.86 feet | along the remainder of Lot 11; |



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| | | | | | |
|---|---|---|---|---|---|
| 39. | 11° | 49' | | 304.63 feet | along the remainder of Lot 11; |
| 40. | 25° | 48' | | 241.12 feet | along the remainder of Lot 11; |
| 41. | 29° | 05' | | 311.93 feet | along the remainder of Lot 11; |
| 42. | 21° | 43' | | 215.28 feet | along the remainder of Lot 11; |
| 43. | 11° | 28' | | 394.63 feet | along the remainder of Lot 11; |
| 44. | 3° | 02' | | 254.38 feet | along the remainder of Lot 11; |
| 45. | 6° | 44' | 30" | 714.17 feet | along the remainder of Lot 11; |
| 46. | 18° | 03' | | 261.46 feet | along the remainder of Lot 11; |
| 47. | 11° | 26' | | 103.62 feet | along the remainder of Lot 11; |
| 48. | 3° | 02' | | 308.99 feet | along the remainder of Lot 11; |
| 49. | 14° | 10' | 30" | 229.62 feet | along the remainder of Lot 11; |
| 50. | 28° | 23' | | 283.14 feet | along the remainder of Lot 11; |
| 51. | 23° | 01' | | 488.38 feet | along the remainder of Lot 11; |
| 52. | 13° | 32' | | 93.92 feet | along the remainder of Lot 11; |
| 53. | 0° | 23' | | 323.03 feet | along the remainder of Lot 11; |
| 54. | 5° | 24' | | 153.42 feet | along the remainder of Lot 11; |
| 55. | 99° | 58' | 30" | 250.81 feet | along Lot 5 to the point of beginning and containing an area of 122.011 acres. |

Wilfred Y. K. Chin

June 13, 2005
Honolulu, Hawaii

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Licensed Professional Land Surveyor
Certificate Number 3499
License Expires 4/06



ControlPoint Surveying, Inc.
1150 South King Street, Suite 102
Honolulu, Hawaii 96814

Easement 101
(For Agricultural Conservation Purposes)

Being a portion of Lot 11, being also a portion of the Government (Crown) Land of Waimea.

Situated at Kekaha, Waimea, Kauai, Hawaii.

Beginning at the Northeast corner of this easement on the West side of Hawaiian Home Land (C.S.F. 13,610), the coordinates of said point of beginning referred to Government Survey Triangulation Station "TRANSIT OF VENUS" being 41,337.48 feet North and 29,284.46 feet West, thence running by azimuths measured clockwise from true South:

1. 4° 30' 7,700.00 feet along Hawaiian Home Land;

2. 39° 59' 32" 5,364.66 feet along the remainder of Lot 11;

3. Thence along the remainder of Lot 11, on a curve to the right with a radius of 5,077.50 feet, the chord azimuth and distance being:
   76° 13' 25" 348.99 feet;

4. 78° 11' 35" 18.66 feet along the remainder of Lot 11;

5. Thence along the remainder of Lot 11, on a curve to the left with a radius of 5,142.50 feet, the chord azimuth and distance being:
   76° 35' 30" 287.42 feet;

6. 74° 59' 25" 484.69 feet along the remainder of Lot 11;

7. Thence along the remainder of Lot 11, on a curve to the left with a radius of 10,272.50 feet, the chord azimuth and distance being:
   74° 11' 15" 287.85 feet;

8. 73° 23' 05" 380.10 feet along the remainder of Lot 11;



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9. Thence along the remainder of Lot 11, on a curve to the right with a radius of 1,717.50 feet, the chord azimuth and distance being:
76° 07' 45" 164.47 feet;

10 78° 52' 25" 20.86 feet along the remainder of Lot 11;

11. 168° 53' 38.37 feet along Lot 5;

12. 78° 53' 798.13 feet along Lot 5;

13. Thence along Lot 5, on a curve to the right with a radius of 944.32 feet, the chord azimuth and distance being:
89° 25' 45" 345.66 feet;

14. 99° 58' 30" 1,533.83 feet along Lot 5;

15. 185° 24' 153.42 feet along the remainder of Lot 11;

16. 180° 23' 323.03 feet along the remainder of Lot 11;

17. 193° 32' 93.92 feet along the remainder of Lot 11;

18. 203° 01' 488.38 feet along the remainder of Lot 11;

19. 208° 23' 283.14 feet along the remainder of Lot 11;

20. 194° 10' 30" 229.62 feet along the remainder of Lot 11;

21. 183° 02' 308.99 feet along the remainder of Lot 11;

22. 191° 26' 103.62 feet along the remainder of Lot 11;

23. 198° 03' 261.46 feet along the remainder of Lot 11;

24. 186° 44' 30" 714.17 feet along the remainder of Lot 11;

25. 183° 02' 254.38 feet along the remainder of Lot 11;

26. 191° 28' 394.63 feet along the remainder of Lot 11;

27. 201° 43' 215.28 feet along the remainder of Lot 11;



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| | | | | |
|---|---|---|---|---|
| 28. | 209° | 05' | 311.93 feet | along the remainder of Lot 11; |
| 29. | 205° | 48' | 241.12 feet | along the remainder of Lot 11; |
| 30. | 191° | 49' | 304.63 feet | along the remainder of Lot 11; |
| 31. | 195° | 19' | 283.86 feet | along the remainder of Lot 11; |
| 32. | 189° | 05' | 316.89 feet | along the remainder of Lot 11; |
| 33. | 177° | 49' | 339.18 feet | along the remainder of Lot 11; |
| 34. | 182° | 46' | 258.12 feet | along the remainder of Lot 11; |
| 35. | 191° | 06' | 274.21 feet | along the remainder of Lot 11; |
| 36. | 176° | 42' | 398.77 feet | along the remainder of Lot 11; |
| 37. | 196° | 40' | 1,440.89 feet | along the remainder of Lot 11; |
| 38. | 224° | 03' | 3,604.33 feet | along the remainder of Lot 11; |
| 39. | 156° | 27' | 936.57 feet | along the remainder of Lot 11; |
| 40. | 153° | 04' | 145.13 feet | along the remainder of Lot 11; |

41. Thence along the remainder of Lot 11 and along Lot 1, on a curve to the right with a radius of 310.00 feet, the chord azimuth and distance being:
195° 41' 419.80 feet;

| | | | | |
|---|---|---|---|---|
| 42. | 238° | 18' | 160.91 feet | along Lot 1; |
| 43. | 134° | 03' | 1,395.67 feet | along Lot 1 and along Tract E-1 (C.S.F. 14,517); |
| 44. | 224° | 03' | 4,385.90 feet | along Polihale State Park, Governor's Executive Order 2901; |



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| | | | | | |
|---|---|---|---|---|---|
| 45. | 325° | 29' | 35" | 4,557.72 feet | along the remainder of Lot 11 to the point of beginning and containing a GROSS AREA of 1,873.110 acres and a NET AREA of 1,871.780 acres after deducting therefrom Grant 8153 to Baba Kaiwa and Lower Saki Mana Road (10.970 Acres). |

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June 13, 2005
Honolulu, Hawaii



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Easement 102
(For Agricultural Conservation Purposes)

Being a portion of Lot 11, being also a portion of the Government (Crown) Land of Waimea.

Situated at Kekaha, Waimea, Kauai, Hawaii.

Beginning at the Northeast corner of this easement on the West side of Hawaiian Home Land (C.S.F. 13,610), the coordinates of said point of beginning referred to Government Survey Triangulation Station "TRANSIT OF VENUS" being 33,661.22 feet North and 29,888.59 feet West, thence running by azimuths measured clockwise from true South:

1. 349° 00' 1,572.77 feet along Hawaiian Home Land;

2. Thence along the remainder of the Government (Crown) Land of Waimea, on a curve to the left with a radius of 1,800.00 feet, the chord azimuth and distance being:
   78° 50' 32" 205.28 feet;

3. 84° 09' 27" 107.55 feet along the remainder of the Government (Crown) Land of Waimea;

4. Thence along the remainder of the Government (Crown) Land of Waimea, on a curve to the left with a radius of 1,800.00 feet, the chord azimuth and distance being:
   67° 51' 27" 625.13 feet;

5. 50° 19' 42" 725.06 feet along the remainder of the Government (Crown) Land of Waimea;

6. Thence along the remainder of the Government (Crown) Land of Waimea, on a curve to the left with a radius of 1,800.00 feet, the chord azimuth and distance being:
   28° 58' 41" 787.14 feet;



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7. Thence along the remainder of the Government (Crown) Land of Waimea, on a curve to the left with a radius of 1,650.00 feet, the chord azimuth and distance being:
   18° 05' 55" 1,782.70 feet;

8. Thence along the remainder of the Government (Crown) Land of Waimea, on a curve to the left with a radius of 1,650.00 feet, the chord azimuth and distance being:
   281° 25' 56" 3,174.80 feet;

9. 349° 00' 3,695.31 feet along Hawaiian Home Land;

10. 329° 00' 8,500.00 feet along Hawaiian Home Land;

11. 323° 56' 15" 1,495.26 feet along Hawaiian Home Land;

12. 43° 20' 6,355.57 feet along the remainder of the Government (Crown) Land of Waimea;

13. 138° 44' 15,620.53 feet along the Northeast side of Kaumualii Highway (Hawaii Project No. DA-WR-1);

14. Thence along the Northeast side of Kaumualii Highway (Hawaii Project No. DA-WR-1), on a curve to the right with a radius of 1,950.51 feet, the chord azimuth and distance being:
   167° 22' 30" 1,869.88 feet;

15. 196° 01' 2,536.22 feet along the East side of Kaumualii Highway (Hawaii Project No. DA-WR-1);

16. Thence along the Lot 5, on a curve to the right with a radius of 1,750.44 feet, the chord azimuth and distance being:
   227° 27' 1,825.73 feet;

17. 258° 53' 684.38 feet along Lot 5;

18. 168° 53' 61.63 feet along Lot 5;

19. 258° 52' 25" 20.86 feet along the remainder of Lot 11;



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20. Thence along the remainder of Lot 11, on a curve to the left with a radius of 1,717.50 feet, the chord azimuth and distance being: 256° 07' 45" 164.47 feet;

21. 253° 23' 05" 380.10 feet along the remainder of Lot 11;

22. Thence along the remainder of Lot 11, on a curve to the right with a radius of 10,272.50 feet, the chord azimuth and distance being: 254° 11' 15" 287.85 feet;

23. 254° 59' 25" 484.69 feet along the remainder of Lot 11;

24. Thence along the remainder of Lot 11, on a curve to the right with a radius of 5,142.50 feet, the chord azimuth and distance being: 256° 35' 30" 287.42 feet;

25. 258° 11' 35" 18.66 feet along the remainder of Lot 11;

26. Thence along the remainder of Lot 11, on a curve to the left with a radius of 5,077.50 feet, the chord azimuth and distance being: 256° 13' 25" 348.99 feet;

27. 219° 59' 32" 5,364.66 feet along the remainder of Lot 11 to the point of beginning and containing a GROSS AREA of 3,172.542 acre and a NET AREA of 3,168.692 ACRES after deducting therefrom Grant 8144 to Peter Pah On Leong (3.850 acres).

Wilfred Y. K. Chin

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June 13, 2005
Honolulu, Hawaii



ControlPoint Surveying, Inc.
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Honolulu, Hawaii 96814

Easement 103
(For Agricultural Conservation Purposes)

Being all of Lot 2, being also a portion of the Government (Crown) Land of Waimea.

Situated at Kekaha, Waimea, Kauai, Hawaii.

Beginning at the Northwest corner of this parcel of land, the coordinates of said point of beginning referred to Government Survey Triangulation Station "TRANSIT OF VENUS" being 29,131.07 feet North and 38,165.97 feet West, thence running by azimuths measured clockwise from true South:

| | | | | | |
|---|---|---|---|---|---|
| 1. | 279° | 58' | 30" | 21.97 feet | along the South Side of Kaumualii Highway (Hawaii Project No. DA-WR(1)); |
| 2. | Thence along the South Side of Kaumualii Highway (Hawaii Project No. DA-WR(1)), on a curve to the right with a radius of 1,049.89 feet, the chord azimuth and distance being: 306° 01' 39" 922.21 feet; | | | | |
| 3. | 79° | 10' | 50" | 792.37 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 4. | 149° | 50' | | 50.89 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 5. | 140° | 35' | | 118.58 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 6. | 174° | 14' | 30" | 78.90 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 7. | 196° | 07' | 30" | 396.69 feet | along the remainder of the Government (Crown) Land of Waimea; |



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| | | | | |
|---|---|---|---|---|
| 8. | 185° | 24' | 100.22 feet | along the remainder of the Government (Crown) Land of Waimea to the point of beginning and containing an area of 8.691 Acres. |

Wilfred Y. K. Chin

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Honolulu, Hawaii



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Easement 104
(For Agricultural Conservation Purposes)

Being all of Lot 4, being also a portion of the Government (Crown) Land of Waimea.

Situated at Kekaha, Waimea, Kauai, Hawaii.

Beginning at the South corner of this parcel of land, the coordinates of said point of beginning referred to Government Survey Triangulation Station "TRANSIT OF VENUS" being 28,075.32 feet North and 37,176.45 feet West, thence running by azimuths measured clockwise from true South:

1. Along Kaumualii Highway (Hawaii Project No. DA-WR (1)), on a curve to the left with a radius of 1,149.89 feet, the chord azimuth and distance being: 152° 28' 11" 1,094.64 feet;

2. 279° 58' 30" 1,285.64 feet along Kaumualii Highway (Hawaii Project No. DA-WR (1));

3. Thence along Kaumualii Highway (Hawaii Project No. DA-WR (1)), on a curve to the left with a radius of 1,044.32 feet, the chord azimuth and distance being: 278° 15' 31" 62.56 feet;

4. Thence along Kaumualii Highway (Hawaii Project No. DA-WR (1)), on a curve to the left with a radius of 1,850.44 feet, the chord azimuth and distance being: 48° 02' 56" 1,105.48 feet to the point of beginning and containing a GROSS AREA of 9.637 ACRES and NET AREA of 9.489 ACRES after deducting therefrom Mana Substation Site A (0.148 Acres) (C.S.F. 20,658).

Wilfred Y. K. Chin

Wilfred Y. K. Chin
Licensed Professional Land Surveyor
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June 13, 2005
Honolulu, Hawaii



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Easement 105
(For Agricultural Conservation Purposes)

Being all of Lot 8, being also a portion of the Government (Crown) Land of Waimea.

Situated at Kekaha, Waimea, Kauai, Hawaii.

Beginning at the Northwest corner of this parcel of land, on the Southwest side of Kaumualii Highway (Hawaii Project No. DA-WR-1), the coordinates of said point of beginning referred to Government Survey Triangulation Station "TRANSIT OF VENUS" being 18,694.21 feet North and 33,604.25 feet West, thence running by azimuths measured clockwise from true South:

| | | | | | |
|---|---|---|---|---|---|
| 1. | 318° | 44' | | 3,012.76 feet | along the West side of Kaumualii Highway (Hawaii Project No. DA-WR-1); |
| 2. | 43° | 30' | 26" | 368.90 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 3. | 138° | 48' | | 347.07 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 4. | 143° | 55' | 55" | 2,682.32 feet | along the remainder of the Government (Crown) Land of Waimea; |
| 5. | 216° | 00' | | 127.05 feet | along the Wild Bird Sanctuary (Governor's Executive Order 3437) to the point of beginning and containing an area of 17.875 Acres. |

Wilfred Y. K. Chin

Wilfred Y. K. Chin
Licensed Professional Land Surveyor
Certificate Number 3499
License Expires 4/06

June 13, 2005
Honolulu, Hawaii



ControlPoint Surveying, Inc.
1150 South King Street, Suite 102
Honolulu, Hawaii 96814

Easement 106
(For Agricultural Conservation Purposes)

Being a portion of Lot 11, being also a portion of the Government (Crown) Land of Waimea.

Situated at Kekaha, Waimea, Kauai, Hawaii.

Beginning at the Northeast corner of this easement on the West side of Hawaiian Home Land (C.S.F. 13,610), the coordinates of said point of beginning referred to Government Survey Triangulation Station "TRANSIT OF VENUS" being 32,117.34 feet North and 29,588.49 feet West, thence running by azimuths measured clockwise from true South:

| | | | | | |
|---|---|---|---|---|---|
| 1. | 349° | 00' | | 1,282.80 feet | along Hawaiian Home Land; |
| 2. | 85° | 32' | 40" | 778.77 feet | along Bonham Air Base Storage Area, Tract E-3 (C.S.F. 14,517); |
| 3. | 355° | 31' | 40" | 319.61 feet | along Bonham Air Base Storage Area, Tract E-3 (C.S.F. 14,517); |
| 4. | 26° | 32' | 10" | 508.45 feet | along Bonham Air Base Storage Area,Tract E-3 (C.S.F. 14,517); |
| 5. | 349° | 42' | | 131.59 feet | along Bonham Air Base Storage Area,Tract E-3 (C.S.F. 14,517); |
| 6. | 69° | 18' | 30" | 980.90 feet | along the addition to Kamokala Ridge Storage Area (C.S.F. 22,997); |
| 7. | Thence along the addition to Kamokala Ridge Storage Area (C.S.F. 22,997), on a curve to the left with a radius of 182.50 feet, the chord azimuth and distance being: 309° 23' 80.21 feet; | | | | |
| 8. | 296° | 41' | 20" | 196.91 feet | along the addition to Kamokala Ridge Storage Area (C.S.F. 22,997); |



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9. Thence along the addition to Kamokala Ridge Storage Area (C.S.F. 22,997), on a curve to the right with a radius of 257.50 feet, the chord azimuth and distance being:
309° 17' 15" 112.33 feet;

10. 321° 53' 10" 161.32 feet along the addition to Kamokala Ridge Storage Area (C.S.F. 22,997);

11. Thence along the addition to Kamokala Ridge Storage Area (C.S.F. 22,997), on a curve to the right with a radius of 307.50 feet, the chord azimuth and distance being:
327° 10' 50" 56.75 feet;

12. 332° 28' 30" 142.35 feet along the addition to Kamokala Ridge Storage Area (C.S.F. 22,997);

13. Thence along the addition to Kamokala Ridge Storage Area (C.S.F. 22,997), on a curve to the right with a radius of 157.50 feet, the chord azimuth and distance being:
344° 11' 40" 63.98 feet;

14. 355° 54' 50" 63.21 feet along the addition to Kamokala Ridge Storage Area (C.S.F. 22,997);

15. Thence along the addition to Kamokala Ridge Storage Area (C.S.F. 22,997), on a curve to the left with a radius of 292.50 feet, the chord azimuth and distance being:
344° 04' 35" 120.00 feet;

16. 332° 14' 20" 53.33 feet along the addition to Kamokala Ridge Storage Area (C.S.F. 22,997);

17. Thence along the addition to Kamokala Ridge Storage Area (C.S.F. 22,997), on a curve to the left with a radius of 72.50 feet, the chord azimuth and distance being:
281° 05' 30" 112.92 feet;

18. 229° 56' 40" 126.19 feet along the addition to Kamokala Ridge Storage Area (C.S.F. 22,997);



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Honolulu, Hawaii 96814

19. Thence along the addition to Kamokala Ridge Storage Area (C.S.F. 22,997), on a curve to the left with a radius of 612.50 feet, the chord azimuth and distance being:
221° 21' 183.06 feet;

20. 212° 45' 20" 79.18 feet along the addition to Kamokala Ridge Storage Area (C.S.F. 22,997);

21. Thence along the addition to Kamokala Ridge Storage Area (C.S.F. 22,997), on a curve to the right with a radius of 107.50 feet, the chord azimuth and distance being:
239° 37' 55" 97.19 feet;

22. 266° 30' 30" 13.07 feet along the addition to Kamokala Ridge Storage Area (C.S.F. 22,997);

23. 349° 42' 271.35 feet along Bonham Air Base Storage Area,Tract E-3 (C.S.F. 14,517);

24. 269° 11' 20" 1,078.56 feet along Bonham Air Base Storage Area,Tract E-3 (C.S.F. 14,517);

25. 203° 47' 20" 128.83 feet along Bonham Air Base Storage Area,Tract E-3 (C.S.F. 14,517);

26. 349° 00' 584.03 feet along Hawaiian Home Land (C.S.F. 13,610);

27. Thence along the remainder of the Government (Crown) Land of Waimea, on a curve to the right with a radius of 1,650.00 feet, the chord azimuth and distance being:
101° 25' 56" 3,174.80 feet;

28. Thence along the remainder of the Government (Crown) Land of Waimea, on a curve to the right with a radius of 1,650.00 feet, the chord azimuth and distance being:
198° 05' 55" 1,782.70 feet;



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29. Thence along the remainder of the Government (Crown) Land of Waimea, on a curve to the right with a radius of 1,800.00 feet, the chord azimuth and distance being:
208° 58' 41" 787.14 feet;

30. 230° 19' 42" 725.06 feet along the remainder of the Government (Crown) Land of Waimea;

31. Thence along the remainder of the Government (Crown) Land of Waimea, on a curve to the right with a radius of 1,800.00 feet, the chord azimuth and distance being:
247° 51' 27" 625.13 feet;

32. 264° 09' 27" 107.55 feet along the remainder of the Government (Crown) Land of Waimea;

33. Thence along the remainder of the Government (Crown) Land of Waimea, on a curve to the right with a radius of 1,800.00 feet, the chord azimuth and distance being:
258° 50' 32" 205.28 feet to the point of beginning and containing an area of 176.372 acres.

Wilfred Y. K. Chin

June 13, 2005
Honolulu, Hawaii

Wilfred Y. K. Chin
Licensed Professional Land Surveyor
Certificate Number 3499
License Expires 4/06



ControlPoint Surveying, Inc.
1150 South King Street, Suite 102
Honolulu, Hawaii 96814

Easement 107
(For Roadway Purposes)

Being a portion of Lot 11, being also a portion of the Government (Crown) Land of Waimea.

Situated at Kekaha, Waimea, Kauai, Hawaii.

Being a strip of land twenty (20.00) feet wide and extending for ten (10.00) feet on each side of the following described centerline.

Beginning at the West end of this centerline and on the centerline of Easement "A" for Roadway Part III (C.S.F. 14,517), the coordinates of said point of beginning referred to Government Survey Triangulation Station "TRANSIT OF VENUS" being 27,540.36 feet North and 29,875.62 feet West, thence running by azimuths measured clockwise from true South:

1. 296° 14' 59.58 feet;

2. Thence on a curve to the left with a radius of 125.00 feet, the arc length being 95.12 feet and the chord azimuth and distance being:
   274° 26' 92.84 feet;

3. 252° 38' 216.03 feet to the West side of Lot 12 and containing an area of 0.170 acre.

Wilfred Y. K. Chin

Wilfred Y. K. Chin
Licensed Professional Land Surveyor
Certificate Number 3499
License Expires 4/06

June 13, 2005
Honolulu, Hawaii



ControlPoint Surveying, Inc.
1150 South King Street, Suite 102
Honolulu, Hawaii 96814

received 3/1

RES 100
RESINS

LINDA LINGLE
GOVERNOR OF HAWAII

PETER T. YOUNG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

ROBERT K. MASUDA
DEPUTY DIRECTOR

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

# STATE OF HAWAII
## DEPARTMENT OF LAND AND NATURAL RESOURCES
### LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

February 21, 2007

GL No. S-3852
LD-GM

Ms. Niru Santos
USA, Department of the Navy
Pacific Division
Naval Facilities Engineering Command
258 Makalapa Drive, Suite 100
Pearl Harbor, Hawaii 96860-7300

Subject: Fifth Amendment of GL No. 3852, Mana, Waimea, Kauai, TMK: (4) 1-2-02: Por. 1

Dear Ms. Santos:

Enclosed, for your records, is one fully executed copy of the above referenced document.

If there is anything we can help you with or if you have any questions, please do not hesitate to contact Gary Martin at 587-0421. Thank you.

Sincerely,

RUSSELL Y. TSUJI
Administrator

Enclosure

c: Central Files
District Files

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Tax Map Key No. (4)1-2-02:Por. 1

SIXTH AMENDMENT OF GENERAL LEASE NO. S-3852

THIS AGREEMENT, made and entered into this 10th day of September, 2007, by and between the State of Hawaii, by its Board of Land and Natural Resources, hereinafter referred to as the "Lessor," and the UNITED STATES OF AMERICA, whose address is c/o Department of the Navy, Pacific Division, Naval Facilities Engineering Command, 258 Makalapa Drive, Suite 100, Pearl Harbor, Hawaii 96860-7300, hereinafter referred to as the "Government,"

WITNESSETH:

WHEREAS, the United States of America is the present lessee of General Lease No. S-3852 dated August 20, 1964, recorded in the Bureau of Conveyances of the State of Hawaii in liber 4821, page 245, covering lands situate at Mana, Waimea (Kona), Kauai, Hawaii; and

WHEREAS, the lease was amended, increasing the total area under the lease to 1.859 acres, more or less, by Amendment of State General Lease No. S-3852 dated April 26, 1965, recorded in the Bureau of Conveyances of the State of Hawaii in liber 5302, page 330; and



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

WHEREAS, the lease was further amended to provide for one additional parcel of land and two roadways, and utility, communication cable, and water pipeline right-of-way, by Amendment to State General Lease No. S-3852 dated May 31, 1973, recorded in the Bureau of Conveyances of the State of Hawaii in liber 9221, page 407; and

WHEREAS, the lease was further amended to include an area of 14.372 acres by unrecorded Amendment of General Lease No. S-3852 dated August 28, 2000; and

WHEREAS, the lease was further amended to allow subletting by unrecorded Amendment of General Lease No. S-3852 dated March 5, 2003; and

WHEREAS, the lease was further amended by that certain unrecorded Fifth Amendment of General Lease No. S-3852 dated February 21, 2007; and

WHEREAS, about 60 acres were withdrawn from unrecorded Governor's Executive Order No. 4007 by unrecorded Governor's Executive Order No. 4165 dated July 20, 2006; and

WHEREAS, Governor's Executive Order No. 4165 was subject to legislative disapproval; and

WHEREAS, the 2007 Hawaii legislative session adjourned in May 2007 without disapproving Governor's Executive Order No. 4165; and

WHEREAS, the Government desires that the general lease be further amended to add the additional 60 acres; and

WHEREAS, the Board of Land and Natural Resources, at its meetings held on May 24, 2004 and December 8, 2006, has approved the amendment to General Lease No. S-3852, adding an additional area of 60 acres to its operation for purposes of:

1. compliance with Federal Anti-Terrorism/Force Protection ("ATFP") guidelines regarding setback distance around military bases, and

2. securing an existing potable water source.

NOW, THEREFORE, the Lessor and the Government covenant and agree that:

A. Paragraph 2 of page 1, of General Lease No. S-



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

APPROVED
Department of the
Attorney General

3852, is hereby amended to add:

"2c. The Lessor hereby leases to the Government an additional area of 60 acres, situate at Kekaha, Waimea, Kauai, Hawaii, being identified as follows:

"Portion of the Government (Crown) Land of Waimea, Lot 1," containing an area of 47.937 acres, subject, however, to Portions of Perpetual Non-Exclusive Transmission Line Easement 1, Perpetual Non-Exclusive Transmission Line Easement 2, Perpetual Non-Exclusive Transmission Line Easement 3, Perpetual Non-Exclusive Transmission Line Easement 4, SUBJECT, ALSO, to Portion of Non-Exclusive Easement D, more particularly described in Exhibit "A" and delineated on Exhibit "B," both of which are attached hereto and made parts hereof, said exhibits being respectively, a survey description and survey map prepared by the Survey Division, Department of Accounting and General Services, State of Hawaii, designated C.S.F. No. 24,331 and dated September 27, 2006;

"Portion of the Government (Crown) Land of Waimea, Lot 9," containing an area of 12.422 acres, SUBJECT, however, to Perpetual Non-Exclusive Transmission Line Easement, and RESERVING to the State of Hawaii, its successors and assigns, Easement E for Roadway Purposes and Non-Exclusive Access and Drainage Easement, Easement 1, more particularly described in Exhibit "C" and delineated on Exhibit "D," both of which are attached hereto and made parts hereof, said exhibits being respectively, a survey description and survey map prepared by the Survey Division, Department of Accounting and General Services, State of Hawaii, designated C.S.F. No. 24,334 and dated September 27, 2006; and

"Portion of the Government (Crown) Land of Waimea, Lot 12," containing an area of 0.026 acre, TOGETHER WITH Non-Exclusive Roadway Easement 107, Portion of Non-Exclusive Easement "A" for Roadway and Utilities, Part III, Non-Exclusive Easement "A" for Roadway and Utilities, Part II, and Non-Exclusive Easement "A" for Roadway and Utilities, Part I, SUBJECT, however, to Portion of Non-Exclusive Easement "G" for Water Pipeline-Part IV, more particularly described in Exhibit "E" and delineated on Exhibit "F," both of which are attached hereto and made parts hereof, said exhibits being respectively, a survey description and survey map prepared by the Survey Division, Department of Accounting and General Services, State of Hawaii, designated C.S.F. No. 24,336 and dated September 27, 2006;

for purposes of:



Department of the Attorney General

1. compliance with Federal ATFP guidelines regarding setback distance around military bases, and

2. securing an existing potable water source.

IN CONSIDERATION THEREOF, the Lessor and the Government further agree that this Sixth Amendment of Lease Agreement is subject to all the covenants and conditions in the General Lease No. S-3852, and the amendments as above-referenced, except as herein provided.

This Sixth Amendment, read in conjunction with the General Lease No. S-3852 and the amendments as above-referenced, sets forth the entire agreement between the Lessor and Government; and the general lease as amended and modified hereby shall not be altered or modified in any particular except by a memorandum in writing signed by the Lessor and Government.

IN WITNESS WHEREOF, the STATE OF HAWAII, by its Board of Land and Natural Resources, has caused the seal of the Department of Land and Natural Resources to be hereunto affixed and the parties hereto have caused these presents to be executed the day, month, and year first above written.

STATE OF HAWAII

Approved by the Board of Land and Natural Resources at its meetings held on May 24, 2004 and December 8, 2006.

By _____
for Chairperson
Board of Land and
Natural Resources

APPROVED AS TO FORM:

LESSOR

_____
Deputy Attorney General

UNITED STATES OF AMERICA

Dated: 8/6/07

By _____

Its DENNIS PACHT
Realty Operations Officer
Naval Facilities Engineering Command, Pacific
Real Estate Contracting Officer

243166_1.DOC

STATE OF HAWAII
SURVEY DIVISION
DEPT. OF ACCOUNTING AND GENERAL SERVICES
HONOLULU

C.S.F. No. 24,331

September 27, 2006

PORTION OF
THE GOVERNMENT (CROWN) LAND OF WAIMEA

LOT 1

Kekaha, Waimea, Kauai, Hawaii

Beginning at the southwest corner of this parcel of land, at the northwest corner of Lot B of the Government (Crown) Land of Waimea and on the east boundary of Bonham Air Base, Tract E-2, the coordinates of said point of beginning referred to Government Survey Triangulation Station "TRANSIT OF VENUS" being 28,405.79 feet North and 38,335.44 feet West, thence running by azimuths measured clockwise from True South:-

| | | | | | |
|---|---|---|---|---|---|
| 1. | 140° | 35' | | 136.86 | feet along Bonham Air Base, Tract E-2; |
| 2. | 174° | 14' | 30" | 153.27 | feet along Bonham Air Base, Tract E-2; |
| 3. | 196° | 07' | 30" | 411.61 | feet along Bonham Air Base, Tract E-2; |
| 4. | 185° | 24' | | 302.35 | feet along Bonham Air Base, Tract E-2; |
| 5. | 180° | 23' | | 351.61 | feet along Bonham Air Base, Tract E-2; |

EXHIBIT A

| | | | | | |
|---|---|---|---|---|---|
| 6. | 193° | 32' | | 173.20 | feet along Bonham Air Base, Tract E-2; |
| 7. | 203° | 01' | | 540.31 | feet along Bonham Air Base, Tract E-2; |
| 8. | 208° | 23' | | 252.04 | feet along Bonham Air Base, Tract E-2; |
| 9. | 194° | 10' | 30" | 140.75 | feet along Bonham Air Base, Tract E-2; |
| 10. | 183° | 02' | | 299.35 | feet along Bonham Air Base, Tract E-2; |
| 11. | 191° | 26' | | 156.12 | feet along Bonham Air Base, Tract E-2; |
| 12. | 198° | 03' | | 244.98 | feet along Bonham Air Base, Tract E-2; |
| 13. | 186° | 44' | 30" | 661.62 | feet along Bonham Air Base, Tract E-2; |
| 14. | 183° | 02' | | 270.92 | feet along Bonham Air Base, Tract E-2; |
| 15. | 191° | 28' | | 460.00 | feet along Bonham Air Base, Tract E-2; |
| 16. | 201° | 43' | | 276.90 | feet along Bonham Air Base, Tract E-2; |
| 17. | 209° | 05' | | 326.22 | feet along Bonham Air Base, Tract E-2; |
| 18. | 205° | 48' | | 180.60 | feet along Bonham Air Base, Tract E-2; |
| 19. | 191° | 49' | | 267.80 | feet along Bonham Air Base, Tract E-2; |
| 20. | 195° | 19' | | 274.30 | feet along Bonham Air Base, Tract E-2; |
| 21. | 189° | 05' | | 255.65 | feet along Bonham Air Base, Tract E-2; |
| 22. | 177° | 49' | | 317.01 | feet along Bonham Air Base, Tract E-2; |
| 23. | 182° | 46' | | 304.55 | feet along Bonham Air Base, Tract E-2; |
| 24. | 191° | 06' | | 176.75 | feet along Bonham Air Base, Tract E-2; |
| 25. | 92° | 40' | | 67.00 | feet along Bonham Air Base, Tract E-2; |

TEXAS ALCOHOLIC Department of the Secretary of State

26. Thence along Roadway Tract E-2-A on a curve to the right with a radius of 110.00 feet, the chord azimuth and distance being: 197° 53' 45.30 feet;

27. 209° 46' 14.00 feet along Roadway Tract E-2-A;

28. Thence along Roadway Tract E-2-A on a curve to the left with a radius of 380.00 feet, the chord azimuth and distance being: 193° 14' 216.28 feet;

29. 176° 42' 224.06 feet along Roadway Tract E-2-A;

30. 196° 40' 2612.76 feet along Bonham Air Base (Formerly Mana Airport Military Reservation), Part 2, Governor's Executive Order 945;

31. 191° 05' 181.49 feet along Bonham Air Base (Formerly Mana Airport Military Reservation), Part 2, Governor's Executive Order 945;

32. 224° 03' 1458.00 feet along Bonham Air Base, Tract E-1;

33. 191° 05' 742.14 feet along Bonham Air Base, Tract E-1;

34. 224° 03' 1506.89 feet along Bonham Air Base, Tract E-1;

35. 314° 03' 201.43 feet along Agricultural and Related Purposes Site, Governor's Executive Order 4007;

36. 58° 18' 160.91 feet along Agricultural and Related Purposes Site, Governor's Executive Order 4007;

37. Thence along Agricultural and Related Purposes Site, Governor's Executive Order 4007 on a curve to the left with a radius of 310.00 feet, the chord azimuth and distance being: 47° 10' 119.72 feet;

38. 44° 03' 1195.22 feet along Agricultural and Related Purposes Site, Governor's Executive Order 4007;

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Department of the Interior
Solicitor's Office

| | | | |
|---|---|---|---|
| 39. | 11° | 05' | 732.36 feet along Agricultural and Related Purposes Site, Governor's Executive Order 4007; |
| 40. | 44° | 03' | 1458.00 feet along Agricultural and Related Purposes Site, Governor's Executive Order 4007; |
| 41. | 11° | 05' | 144.42 feet along Agricultural and Related Purposes Site, Governor's Executive Order 4007; |
| 42. | 16° | 40' | 2593.67 feet along Agricultural and Related Purposes Site, Governor's Executive Order 4007; |
| 43. | 356° | 42' | 411.20 feet along Agricultural and Related Purposes Site, Governor's Executive Order 4007; |
| 44. | 11° | 06' | 260.84 feet along Agricultural and Related Purposes Site, Governor's Executive Order 4007; |
| 45. | 2° | 46' | 287.14 feet along Agricultural and Related Purposes Site, Governor's Executive Order 4007; |
| 46. | 357° | 49' | 325.32 feet along Agricultural and Related Purposes Site, Governor's Executive Order 4007; |
| 47. | 9° | 05' | 278.61 feet along Agricultural and Related Purposes Site, Governor's Executive Order 4007; |
| 48. | 15° | 19' | 277.88 feet along Agricultural and Related Purposes Site, Governor's Executive Order 4007; |
| 49. | 11° | 49' | 281.61 feet along Agricultural and Related Purposes Site, Governor's Executive Order 4007; |
| 50. | 25° | 48' | 203.30 feet along Agricultural and Related Purposes Site, Governor's Executive Order 4007; |
| 51. | 29° | 05' | 320.86 feet along Agricultural and Related Purposes Site, Governor's Executive Order 4007; |
| 52. | 21° | 43' | 253.79 feet along Agricultural and Related Purposes Site, Governor's Executive Order 4007; |

| | | | | | |
|---|---|---|---|---|---|
| 53. | 11° | 28' | | 435.49 | feet along Agricultural and Related Purposes Site, Governor's Executive Order 4007; |
| 54. | 3° | 02' | | 264.72 | feet along Agricultural and Related Purposes Site, Governor's Executive Order 4007; |
| 55. | 6° | 44' | 30" | 681.33 | feet along Agricultural and Related Purposes Site, Governor's Executive Order 4007; |
| 56. | 18° | 03' | | 251.16 | feet along Agricultural and Related Purposes Site, Governor's Executive Order 4007; |
| 57. | 11° | 26' | | 136.43 | feet along Agricultural and Related Purposes Site, Governor's Executive Order 4007; |
| 58. | 3° | 02' | | 302.97 | feet along Agricultural and Related Purposes Site, Governor's Executive Order 4007; |
| 59. | 14° | 10' | 30" | 174.08 | feet along Agricultural and Related Purposes Site, Governor's Executive Order 4007; |
| 60. | 28° | 23' | | 263.70 | feet along Agricultural and Related Purposes Site, Governor's Executive Order 4007; |
| 61. | 23° | 01' | | 520.84 | feet along Agricultural and Related Purposes Site, Governor's Executive Order 4007; |
| 62. | 13° | 32' | | 143.47 | feet along Agricultural and Related Purposes Site, Governor's Executive Order 4007; |
| 63. | 0° | 23' | | 340.89 | feet along Agricultural and Related Purposes Site, Governor's Executive Order 4007; |
| 64. | 5° | 24' | | 122.46 | feet along Agricultural and Related Purposes Site, Governor's Executive Order 4007; |
| 65. | 99° | 58' | 30" | 97.22 | feet along the north side of Kaumualii Highway (Kao Road); |
| 66. | 9° | 58' | 30" | 100.00 | feet along the west end of Kaumualii Highway (Kao Road); |

FORMS APPR'D
Department of the
Attorney General

| | | | | | |
|---|---|---|---|---|---|
| 67. | 279° | 58' | 30" | 105.23 | feet along the south side of Kaumualii Highway (Kao Road); |
| 68. | 5° | 24' | | 100.22 | feet along Agricultural and Related Purposes Site, Governor's Executive Order 4007; |
| 69. | 16° | 07' | 30" | 396.69 | feet along Agricultural and Related Purposes Site, Governor's Executive Order 4007; |
| 70. | 354° | 14' | 30" | 78.90 | feet along Agricultural and Related Purposes Site, Governor's Executive Order 4007; |
| 71. | 320° | 35' | | 118.58 | feet along Agricultural and Related Purposes Site, Governor's Executive Order 4007; |
| 72. | 329° | 50' | | 50.89 | feet along Agricultural and Related Purposes Site, Governor's Executive Order 4007; |
| 73. | 79° | 10' | 50" | 161.52 | feet along Lot B of the Government (Crown) Land of Waimea to the point of beginning and containing an AREA OF 47.937 ACRES. |

SUBJECT, however, to the following easements covered by Grant of Easement: State of Hawaii to Kauai Electric, a Division of Citizens Utilities Co. and Hawaiian Telephone Co. dated December 18, 1979 and recorded in Liber 14661, Page 651 (Land Office Deed S-27,102):

A. Portions of Perpetual Non-Exclusive Transmission Line Easement 1.

B. Perpetual Non-Exclusive Transmission Line Easement 2.

C. Perpetual Non-Exclusive Transmission Line Easement 3.

D. Perpetual Non-Exclusive Transmission Line Easement 4.

C.S.F. No. 24,331

September 27, 2006

SUBJECT, ALSO, to Portion of Non-Exclusive Easement D (15.00 ft. wide) for Powerline Purposes covered by General Lease S-3852 to the United States of America dated August 20, 1964 and recorded in Liber 4821, Page 245 and amendment dated May 31, 1973 and recorded in Liber 9221, Page 407.

SURVEY DIVISION
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
STATE OF HAWAII

By: Glenn J. Kodani
Glenn J. Kodani
Land Surveyor

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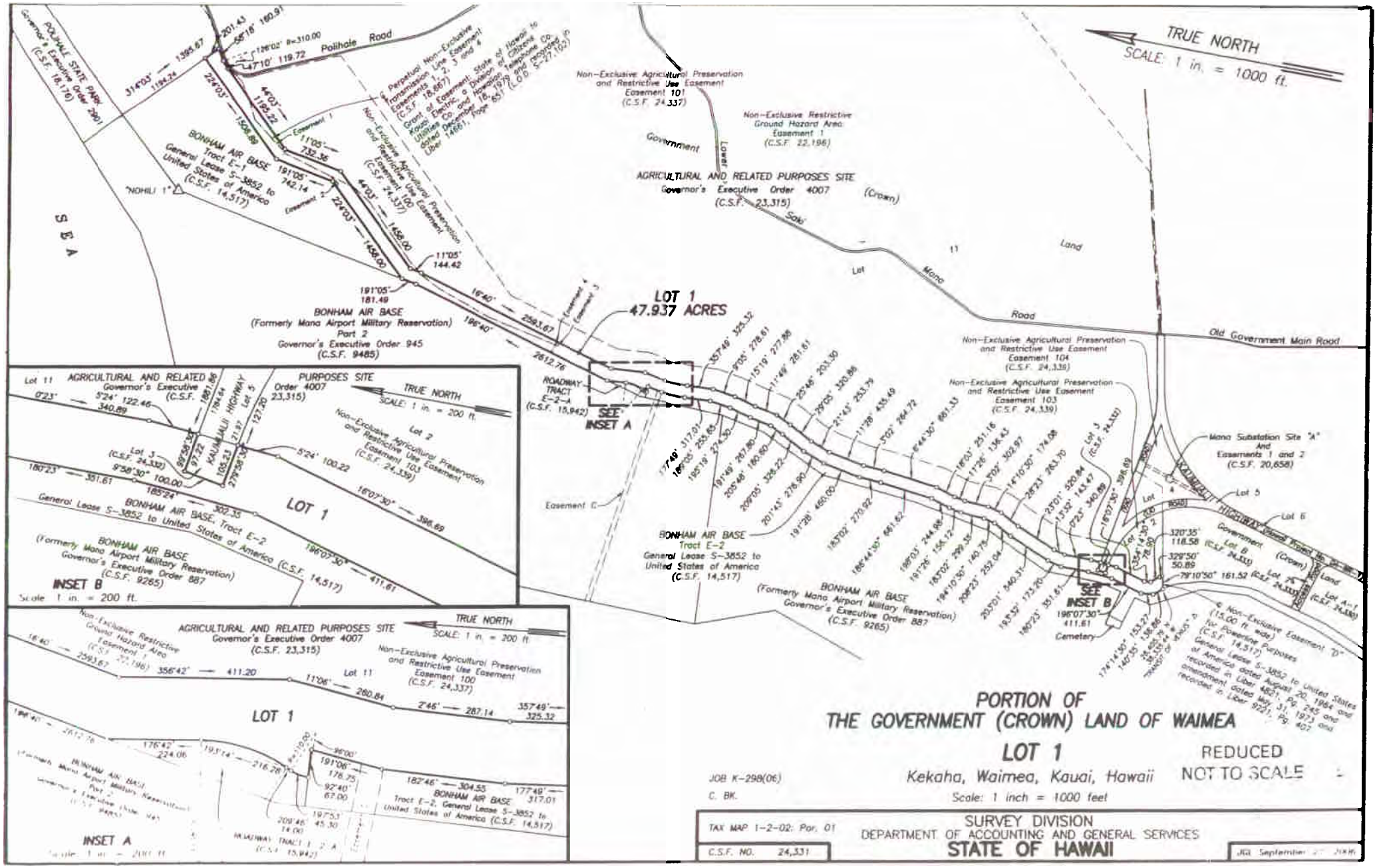
Compiled from map and desc. furn. by ControlPoint Surveying, Inc. Said map and desc. have been examined and checked as to form and mathematical correctness but not on the ground by the Survey Division.




APP'D
Department of the
Attorney General

**EXHIBIT B**

STATE OF HAWAII
SURVEY DIVISION
DEPT. OF ACCOUNTING AND GENERAL SERVICES
HONOLULU

C.S.F. No. 24,334

September 27, 2006

PORTION OF
THE GOVERNMENT (CROWN) LAND OF WAIMEA

LOT 9

Kekaha, Waimea, Kauai, Hawaii

Beginning at the southeast corner of this parcel of land, on the southwest side Kaumualii Highway (Hawaii Project No. DA-WR-1), and at the north corner of Lot 11 of Kekaha Agricultural Park Subdivision, File Plan 2136, the coordinates of said point of beginning referred to Government Survey Triangulation Station "TRANSIT OF VENUS" being 16,324.30 feet North and 31,524.69 feet West, thence running by azimuths measured clockwise from True South:-

| | | |
|---|---|---|
| 1. | 48° 44' | 647.44 feet along Lot 11 of Kekaha Agricultural Park Subdivision, File Plan 2136; |
| 2. | 146° 56' 40" | 3140.13 feet along Bonham Air Base (Formerly Mana Airport Military Reservation), Part 1, Governor's Executive Order 945; |
| 3. | 216° 00' | 76.93 feet along Lot 10 of the Government (Crown) Land of Waimea; |

APPROVED
Department of the Attorney General

EXHIBIT C

| | | |
|---|---|---|
| 4. 323° 55' 55" | 2682.32 | feet along Agricultural and Related Purposes Site, Governor's Executive Order 4007; |
| 5. 318° 48' | 347.07 | feet along Agricultural and Related Purposes Site, Governor's Executive Order 4007; |
| 6. 223° 30' 26" | 368.90 | feet along Agricultural and Related Purposes Site, Governor's Executive Order 4007; |
| 7. 318° 44' | 140.14 | feet along the southwest side of Kaumualii Highway (Hawaii Project No. DA-WR-1), to the point of beginning and containing an AREA OF 12.422 ACRES. |

SUBJECT, however, to Perpetual Non-Exclusive Transmission Line Easement covered by Grant of Easement: State of Hawaii to Kauai Electric, a Division of Citizens Utilities Company, and Hawaiian Telephone Company dated December 18, 1979 and recorded in Liber 14651, Page 597 (Land Office Deed S-27101) as shown on plan attached hereto and made a part hereof.

C.S.F. No. 24,334

September 27, 2006

RESERVING to the State of Hawaii, its successors and assigns, the following easements as shown on plan attached hereto and made a part hereof:

1. Easement E for Roadway Purposes (30.00 feet wide).

2. Non-Exclusive Access and Drainage Easement, Easement 1.

SURVEY DIVISION
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
STATE OF HAWAII

By: Glenn Kodani
Glenn J. Kodani
Land Surveyor

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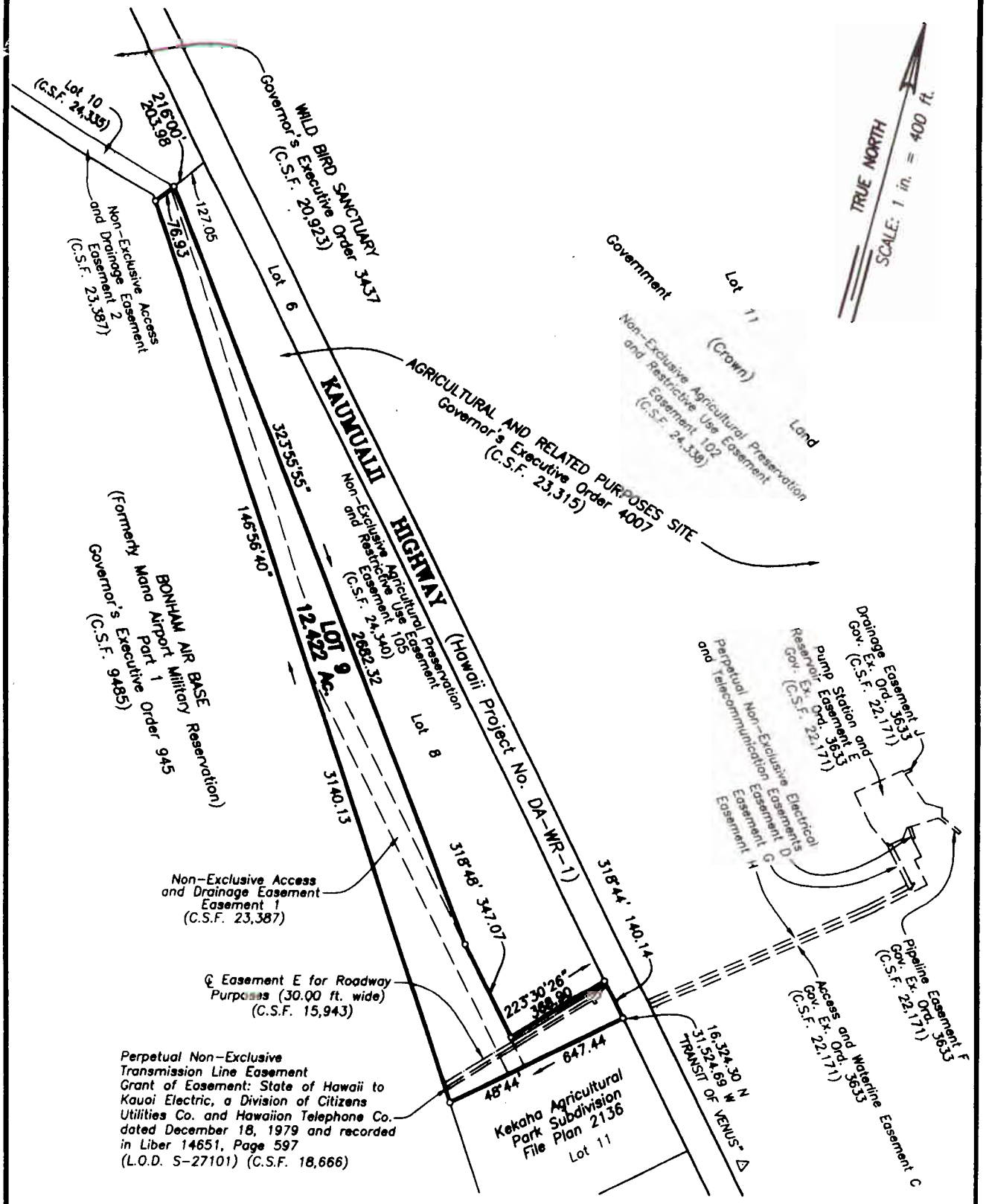
Inc. Said map and desc. have
been examined and checked as
to form and mathematical
correctness but not on the ground
by the Survey Division.




PORTION OF

# THE GOVERNMENT (CROWN) LAND OF WAIMEA

## LOT 9

**EXHIBIT D**

Kekaha, Waimea, Kauai, Hawaii

Job K-298(06)

C. BK.

Scale: 1 inch = 400 feet

REDUCED
NOT TO SCALE

TAX MAP 1-2-02: Por. 01

C.S.F. NO. 24,334

SURVEY DIVISION
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
STATE OF HAWAII

JGL September 27, 2006

PREPARED
Department of the
Attorney General

STATE OF HAWAII
SURVEY DIVISION
DEPT. OF ACCOUNTING AND GENERAL SERVICES
HONOLULU

C.S.F. No. 24,336

September 27, 2006

PORTION OF
THE GOVERNMENT (CROWN) LAND OF WAIMEA

LOT 12

Kekaha, Waimea, Kauai, Hawaii

Beginning at the southwest corner of this parcel of land, the coordinates of said point of beginning referred to Government Survey Triangulation Station "TRANSIT OF VENUS" being 27,564.78 feet North and 29,522.66 feet West, thence running by azimuths measured clockwise from True South:-

| | | |
|---|---|---|
| 1. | 173° 17' | 28.98 feet along Agricultural and Related Purposes Site, Governor's Executive Order 4007; |
| 2. | 261° 36' | 38.48 feet along Agricultural and Related Purposes Site, Governor's Executive Order 4007; |
| 3. | 345° 34' | 26.80 feet along Agricultural and Related Purposes Site, Governor's Executive Order 4007; |

EXHIBIT E

4. 78° 27' 42.21 feet along Agricultural and Related Purposes Site, Governor's Executive Order 4007 to the point of beginning and containing an AREA OF 0.026 ACRE.

TOGETHER WITH the following roadway easements for ingress and egress to Kaumualii Highway as shown on plan attached hereto and made a part hereof:

A. Non-Exclusive Roadway Easement 107 (20.00 ft. wide).

B. Portion of Non-Exclusive Easement "A" for Roadway and Utilities, Part III (12.00 ft. wide) covered by Amendment to General Lease S-3852 to United States of America (U.S. Navy) dated May 31, 1973 and recorded in Liber 9221, Page 407.

C. Non-Exclusive Easement "A" for Roadway and Utilities, Part II, Portion A (15.00 ft. wide) covered by Amendment to General Lease S-3852 to United States of America (U.S. Navy) dated May 31, 1973 and recorded in Liber 9221, Page 407.

D. Non-Exclusive Easement "A" for Roadway and Utilities, Part I (25.00 ft. wide) covered by Amendment to General Lease S-3852 to United States of America (U.S. Navy) dated May 31, 1973 and recorded in Liber 9221, Page 407.

APPROVED
Department of the
Attorney General

C.S.F. No. 24,336

September 27, 2006

SUBJECT, however, to Portion of Non-Exclusive Easement "G" for Water Pipeline-Part IV (5.00 ft. wide) covered by Amendment to General Lease S-3852 to United States of America (U. S. Navy) dated May 31, 1973 and recorded in Liber 9221, Page 407 as shown on plan attached hereto and made a part hereof.

SURVEY DIVISION
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
STATE OF HAWAII

By: Glenn J. Kodani
Glenn J. Kodani
Land Surveyor

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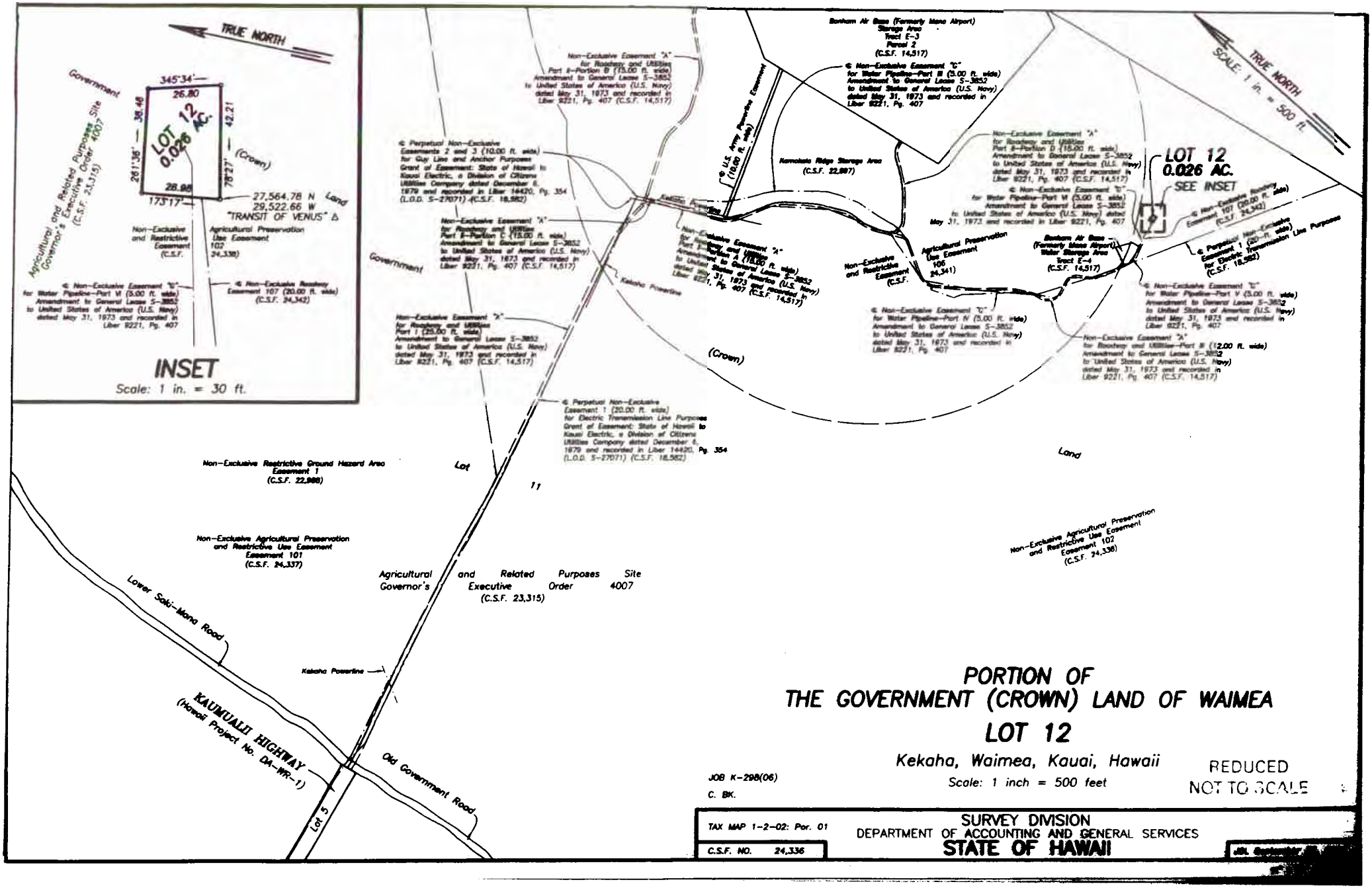
Compiled from map and desc. furn. by ControlPoint Surveying, Inc. Said map and desc. have been examined and checked as to form and mathematical correctness but not on the ground by the Survey Division.




# PORTION OF
# THE GOVERNMENT (CROWN) LAND OF WAIMEA
# LOT 12

*Kekaha, Waimea, Kauai, Hawaii*

*Scale: 1 inch = 500 feet*

REDUCED
NOT TO SCALE

JOB K-298(06)
C. BK.

TAX MAP 1-2-02: Por. 01

C.S.F. NO. 24,336

SURVEY DIVISION
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
**STATE OF HAWAII**

EXHIBIT F

LAND COURT SYSTEM ) REGULAR SYSTEM

Return by Mail ( ) Pickup ( ) To:

Total Number of Pages:

Tax Map Key No. (4)1-2-02:Por. 1

FIFTH AMENDMENT OF GENERAL LEASE NO. S-3852

THIS AGREEMENT, made and entered into this 21st day of February, 2007, by and between the State of Hawaii, by its Board of Land and Natural Resources, hereinafter referred to as the "Lessor," and the UNITED STATES OF AMERICA, whose address is c/o Department of the Navy, Pacific Division, Naval Facilities Engineering Command, 258 Makalapa Drive, Suite 100, Pearl Harbor, Hawaii 96860-7300, hereinafter referred to as the "Government,"

WITNESSETH:

WHEREAS, the United States of America is the present lessee of General Lease No. S-3852 dated August 20, 1964, recorded in the Bureau of Conveyances of the State of Hawaii in liber 4821, page 245, covering lands situate at Mana, Waimea (Kona), Kauai, Hawaii; and

WHEREAS, the lease was amended, increasing the total area under the lease to 1.859 acres, more or less, by Amendment of State General Lease No. S-3852 dated April 26, 1965, recorded in the Bureau of Conveyances of the State of Hawaii in liber 5302, page 330; and



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

PRELIM. APPR'D.
Department of the
Attorney General

WHEREAS, the lease was further amended to provide for one additional parcel of land and two roadways, and utility, communication cable, and water pipeline right-of-way, by Amendment to State General Lease No. S-3852 dated May 31, 1973, recorded in the Bureau of Conveyances of the State of Hawaii in liber 9221, page 407; and

WHEREAS, the lease was further amended to include an area of 14.372 acres by unrecorded Amendment of General Lease No. S-3852 dated August 28, 2000; and

WHEREAS, the lease was further amended to allow subletting by unrecorded Amendment of General Lease No. S-3852 dated March 5, 2003; and

WHEREAS, the Government desires that the general lease be further amended; and

WHEREAS, the Board of Land and Natural Resources, at its meetings held on May 24, 2004 and December 8, 2006, has approved the amendment to General Lease No. S-3852, adding an additional area of 215.685 acres to its operation for purposes of:

1. compliance with Federal Anti-Terrorism/Force Protection ("ATFP") guidelines regarding setback distance around military bases,

2. relocating the existing guard shack and Pass and ID Office to comply with ATFP guidelines,

3. facilitating the operation and maintenance of the ditches and drainage pumps to protect the Pacific Missile Range Facility ("PMRF") from flooding.

NOW, THEREFORE, the Lessor and the Government covenant and agree that:

A. Paragraph 2 of page 1, of General Lease No. S-3852, is hereby amended to add:

"2b. The Lessor hereby leases to the Government an additional area of 215.685 acres, situate at Kekaha, Waimea, Kauai, Hawaii, being identified as follows:

"Portion of the Government (Crown) Land of Waimea, Lot A-1," containing an area of 176.160 acres, subject, however, to



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Department of the
Attorney General

Portion of Non-Exclusive Easement "B", Non-Exclusive Easement F, and Perpetual Non-Exclusive Roadway Easement B-6, and Reserving to the State of Hawaii, its successor and assigns, Non-Exclusive Roadway Easement, Easements B-1 and B-2, Non-Exclusive Easements B-3 and B-4 for Drainage Purposes, and Non-Exclusive Access and Drainage Easement, Easement 3, more particularly described in Exhibit "A" and delineated on Exhibit "B," both of which are attached hereto and made parts hereof, said exhibits being respectively, a survey description and survey map prepared by the Survey Division, Department of Accounting and General Services, State of Hawaii, designated C.S.F. No. 24,330 and dated September 27, 2006;

"Portion of the Government (Crown) Land of Waimea, Lot 3," containing an area of 0.232 acre, more particularly described in Exhibit "C" and delineated on Exhibit "D," both of which are attached hereto and made parts hereof, said exhibits being respectively, a survey description and survey map prepared by the Survey Division, Department of Accounting and General Services, State of Hawaii, designated C.S.F. No. 24,332 and dated September 27, 2006;

"Portions of the Government (Crown) Land of Waimea, Lots 7 and B," Lot 7, being also all of Access Road, containing an area of 1.618 acres, and Lot B containing an area of 32.070 acres, more particularly described in Exhibit "E" and delineated on Exhibit "F," both of which are attached hereto and made parts hereof, said exhibits being respectively, a survey description and survey map prepared by the Survey Division, Department of Accounting and General Services, State of Hawaii, designated C.S.F. No. 24,333 and dated September 27, 2006; and

"Portions of the Government (Crown) Land of Waimea, Lots 10 and 13," Lot 10, containing an area of 5.171 acres, Subject, however, to Perpetual Non-Exclusive Roadway Easement B-5, and Reserving to the State of Hawaii, its successors and assigns, Portion of Non-Exclusive Access and Drainage Easement, Easement 2, and Lot 13 containing an area of 0.434 acres, Subject, however, to Portion of Non-Exclusive Easement "B" and Reserving to the State of Hawaii, its successors and assigns, Portion of Non-Exclusive Access and Drainage Easement, Easement 2, more particularly described in Exhibit "G" and delineated on Exhibit "H," both of which are attached hereto and made parts hereof, said exhibits being respectively, a survey description and survey map prepared by the Survey Division, Department of Accounting and General Services, State of Hawaii, designated C.S.F. No. 24,335 and dated September 27, 2006;



PRELIM. APPR'D.
Department of the
Attorney General

for purposes of:

1. compliance with Federal ATFP guidelines regarding setback distance around military bases,

2. relocating the existing guard shack and Pass and ID Office to comply with ATFP guidelines, and

3. facilitating the operation and maintenance of the ditches and drainage pumps to protect PMRF from flooding."

B. New paragraph 31 shall be added into General Lease No. S-3852 as follows:

"31. Operation and Maintenance Fees for Drainage Pumps, Ditches and Related Infrastructure Within the Leased Premises. The Government has a safety and security interest in maintaining the water levels in the canals (drainage ditches) located within the leased premises to a level of -2.0 feet Mean Sea Level (MSL), as determined by the Government, but not to a level below that. Therefore, the Government agrees to be responsible for the operation and maintenance of said canals, including the pumps and infrastructure associated therewith, needed to maintain the water level at -2.0 feet MSL, as determined by the Government, but not to a level below -2.0 feet MSL."

C. New paragraph 32 shall be added into General Lease No. S-3852 as follows:

"32. Compliance with laws. The Government shall comply with all of the requirements of all municipal, state, and federal authorities and observe all municipal, state and federal laws applicable to the premises, now in force or which may be in force."

IN CONSIDERATION THEREOF, the Lessor and the Government further agree that this Fifth Amendment of Lease Agreement is subject to all the covenants and conditions in the General Lease No. S-3852, and the amendments as above-referenced, except as herein provided.

This Fifth Amendment, read in conjunction with the General Lease No. S-3852 and the amendments as above-referenced, sets forth the entire agreement between the Lessor and Government; and the general lease as amended and modified hereby shall not be altered or modified in any particular except by a memorandum in writing signed by the Lessor and Government.



PRELIM. APPR'D.
Department of the
Attorney General

IN WITNESS WHEREOF, the STATE OF HAWAII, by its Board of Land and Natural Resources, has caused the seal of the Department of Land and Natural Resources to be hereunto affixed and the parties hereto have caused these presents to be executed the day, month, and year first above written.

Approved by the Board of Land and Natural Resources at its meetings held on May 24, 2004 and December 8, 2006.

STATE OF HAWAII

By _____
Chairperson
Board of Land and
Natural Resources

LESSOR

UNITED STATES OF AMERICA

By _____
Its DENNIS PACHT
Realty Operations Officer
Naval Facilities Engineering Command, Pacific
Real Estate Contracting Officer

GOVERNMENT

APPROVED AS TO FORM:

_____
Deputy Attorney General

Dated: 12/20/06

PRELIM. APPR'D.
Department of the
Attorney General

144370_2.DOC

STATE OF HAWAII
SURVEY DIVISION
DEPT. OF ACCOUNTING AND GENERAL SERVICES
HONOLULU

C.S.F. No. 24,330

September 27, 2006

PORTION OF
THE GOVERNMENT (CROWN) LAND OF WAIMEA

LOT A-1

Kekaha, Waimea, Kauai, Hawaii

Beginning at the northeasterly corner of this parcel of land, at the southeast corner of Lot 7 of the Government (Crown) Land of Waimea and on the westerly side of Kaumualii Highway (Hawaii Project No. DA-WR-1), the coordinates of said point of beginning referred to Government Survey Triangulation Station "TRANSIT OF VENUS" being 26,466.52 feet North and 37,700.87 feet West, thence running by azimuths measured clockwise from True South:-

1. 16° 01' 1313.23 feet along the westerly side of Kaumualii Highway (Hawaii Project No. DA-WR-1);

2. Thence along the westerly side of Kaumualii Highway (Hawaii Project No. DA-WR-1) on a curve to the left with a radius of 2050.51 feet, the chord azimuth and distance being:
347° 22' 30" 1965.74 feet;

PRELIM. APPR'D.
Department of the
Attorney General

EXHIBIT A

| | | | |
|---|---|---|---|
| 3. | 349° 51' | 3122.61 | feet along Lot A-2 of the Government (Crown) Land of Waimea; |
| 4. | 34° 58' | 150.21 | feet along Lot A-2 of the Government (Crown) Land of Waimea; |
| 5. | 304° 58' | 75.00 | feet along Lot A-2 of the Government (Crown) Land of Waimea; |
| 6. | 34° 58' | 60.20 | feet along Lot A-2 of the Government (Crown) Land of Waimea;; |
| 7. | 124° 58' | 196.71 | feet along Grant 8891 to Rokuichiro Gotanda; |
| 8. | 63° 22' | 288.60 | feet along Grant 8891 to Rokuichiro Gotanda; |
| 9. | 333° 22' | 161.50 | feet along Grant 8891 to Rokuichiro Gotanda; |
| 10. | 301° 38' | 402.20 | feet along Grant 8891 to Rokuichiro Gotanda; |
| 11. | 277° 55' 15" | 234.87 | feet along Lot A-2 of the Government (Crown) Land of Waimea; |
| 12. | Thence along Lot 14 of the Government (Crown) Land of Waimea on a curve to the right with a radius of 517.50 feet, the chord azimuth and distance being: 112° 53' 25" | 676.95 | feet; |
| 13. | 63° 44' 20" | 37.50 | feet along Lots 13 and 10 of the Government (Crown) Land of Waimea; |
| 14. | 333° 44' 20" | 73.89 | feet along Lot 10 of the Government (Crown) Land of Waimea; |
| 15. | 63° 44' 20" | 20.67 | feet along Lot 10 of the Government (Crown) Land of Waimea; |
| 16. | 137° 30' 20" | 2123.85 | feet along Bonham Air Base (Formerly Mana Airport Military Reservation), Part 1, Governor's Executive Order 945; |
| 17. | 205° 10' | 30.64 | feet along Bonham Air Base, Tract E-2; |

PRELIM. APPR'D.
Department of the
Attorney General

| | | | | | |
|---|---|---|---|---|---|
| 18. | 226° | 20' | | 587.33 | feet along Bonham Air Base, Tract E-2; |
| 19. | 149° | 11' | | 1451.33 | feet along Bonham Air Base, Tract E-2; |
| 20. | 164° | 12' | | 143.83 | feet along Bonham Air Base, Tract E-2; |
| 21. | 182° | 29' | | 158.62 | feet along Bonham Air Base, Tract E-2; |
| 22. | 201° | 11' | 30" | 426.37 | feet along Bonham Air Base, Tract E-2; |
| 23. | 197° | 59' | | 193.71 | feet along Bonham Air Base, Tract E-2; |
| 24. | 192° | 36' | | 232.73 | feet along Bonham Air Base, Tract E-2; |
| 25. | 188° | 48' | 30" | 203.04 | feet along Bonham Air Base, Tract E-2; |
| 26. | 187° | 25' | 30" | 423.32 | feet along Bonham Air Base, Tract E-2; |
| 27. | 192° | 21' | | 676.47 | feet along Bonham Air Base, Tract E-2; |
| 28. | 203° | 04' | | 1090.37 | feet along Bonham Air Base, Tract E-2; |
| 29. | 195° | 50' | 30" | 359.19 | feet along Bonham Air Base, Tract E-2; |
| 30. | 286° | 01' | | 561.88 | feet along Lot 7 of the Government (Crown) Land of Waimea; |

31. Thence along Lot 7 of the Government (Crown) Land of Waimea on a curve to the right with a radius of 100.00 feet, the chord azimuth and distance being: 331° 01' 141.42 feet to the point of beginning and containing an AREA OF 176.160 ACRES.

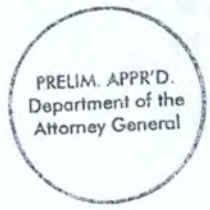
PRELIM. APPR'D.
Department of the
Attorney General

SUBJECT, however, to the following easements as shown on plan attached hereto and made a part hereof:

1. Portion of Non-Exclusive Easement "B" (25.00 ft. wide) for Roadway and Utilities Purposes covered by General Lease S-3882 issued to the United States of America dated August 20, 1964 and recorded in Liber 4821, Page 245 and amendment dated May 31, 1973 and recorded in Liber 9221, Page 407.

2. Non-Exclusive Easement F (10.00 ft. wide) for Communication Cable Line Purposes covered by Amendment to General Lease S-3852 issued to the United States of America dated May 31, 1973 and recorded in Liber 9221, Page 407.

3. Perpetual Non-Exclusive Roadway Easement B-6 covered by Grant of Easement: State of Hawaii to United States of America (Dept. of Navy) dated October 29, 1979 and recorded in Liber 14504, Page 63 (Land Office Deed S-27079).



C.S.F. No. 24,330

September 27, 2006

Reserving to the State of Hawaii, its successors and assigns, the following easements as shown on plan attached hereto and made a part hereof:

1. Non-Exclusive Roadway Easement, Easements B-1 and B-2.

2. Non-Exclusive Easements B-3 and B-4 for Drainage Purposes.

3. Non-Exclusive Access and Drainage Easement, Easement 3.

SURVEY DIVISION
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
STATE OF HAWAII

By: Glenn J. Kodani
Glenn J. Kodani
Land Surveyor

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Said map and desc. have been
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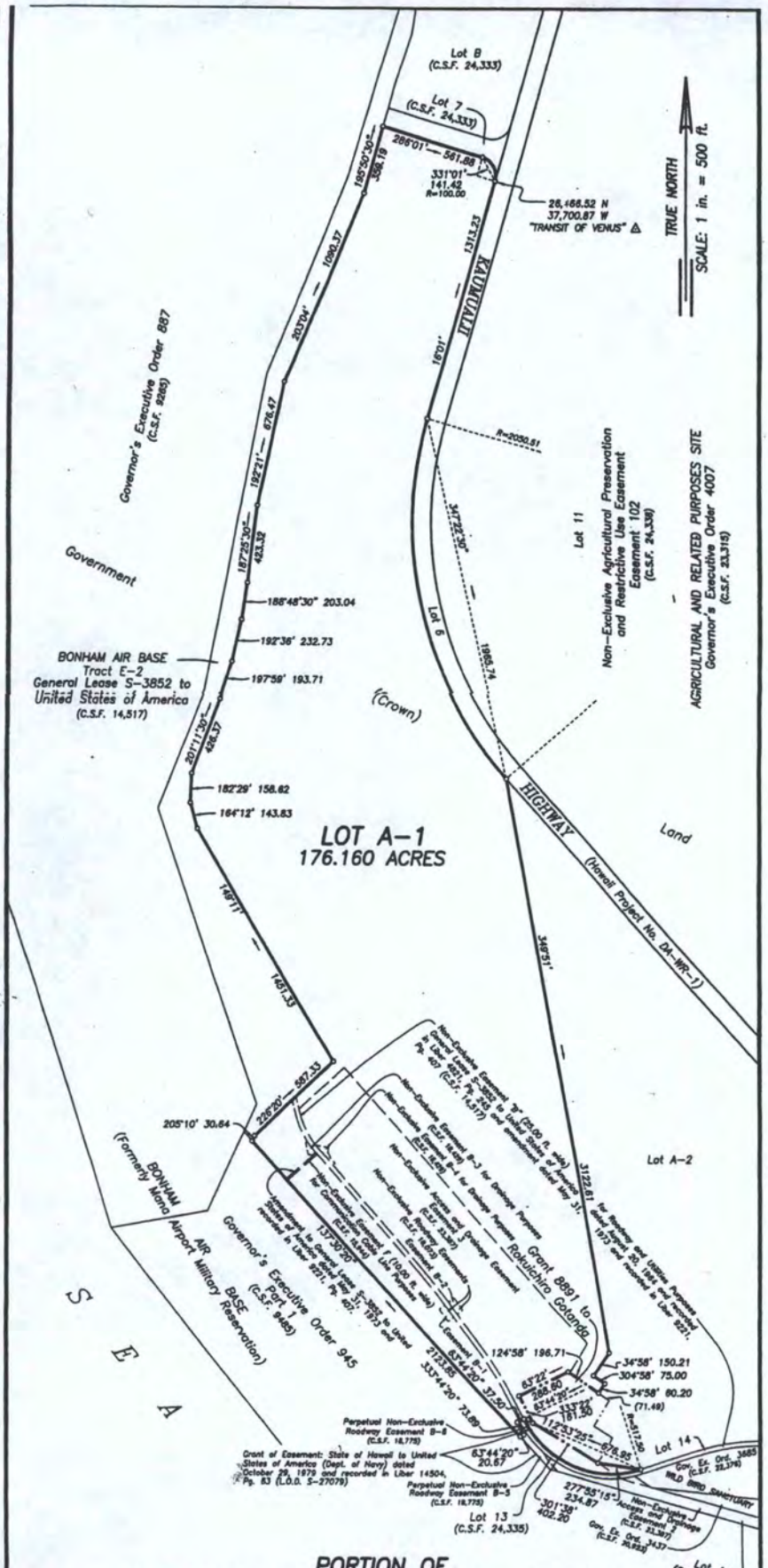
PRELIM. APPR'D.
Department of the
Attorney General




PORTION OF
THE GOVERNMENT (CROWN) LAND OF WAIMEA

LOT A-1

Kekaha, Waimea, Kauai, Hawaii

Scale: 1 inch = 500 feet

REDUCED
NOT TO SCALE

Job K-298(06)
C. BK.

TAX MAP 1-2-02: Par. 01

SURVEY DIVISION
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
STATE OF HAWAII

PRELIM. APPR'D.
Department of the
Attorney General

**EXHIBIT B**

STATE OF HAWAII
SURVEY DIVISION
DEPT. OF ACCOUNTING AND GENERAL SERVICES
HONOLULU

C.S.F. No. 24,332

September 27, 2006

PORTION OF
THE GOVERNMENT (CROWN) LAND OF WAIMEA

LOT 3

Kekaha, Waimea, Kauai, Hawaii

Being also a portion of Kaumualii Highway (Kao Road).

Beginning at the southeast corner of this parcel of land and at the northwest corner of Lot 2 of the Government (Crown) Land of Waimea, the coordinates of said point of beginning referred to Government Survey Triangulation Station "TRANSIT OF VENUS" being 29,131.07 feet North and 38,165.96 feet West, thence running by azimuths measured clockwise from True South:-

| | | |
|---|---|---|
| 1. | 99° 58' 30" | 105.23 feet along Lot 1 of the Government (Crown) Land of Waimea; |
| 2. | 189° 58' 30" | 100.00 feet along Lot 1 of the Government (Crown) Land of Waimea; |
| 3. | 279° 58' 30" | 97.22 feet along Lot 1 of the Government (Crown) Land of Waimea; |

PRELIM. APPR'D.
Department of the
Attorney General

EXHIBIT C

C.S.F. No. 24,332

September 27, 2006

4. 5° 24' 100.32 feet across Kaumualii Highway (Kao Road) to the point of beginning and containing an AREA OF 0.232 ACRE.

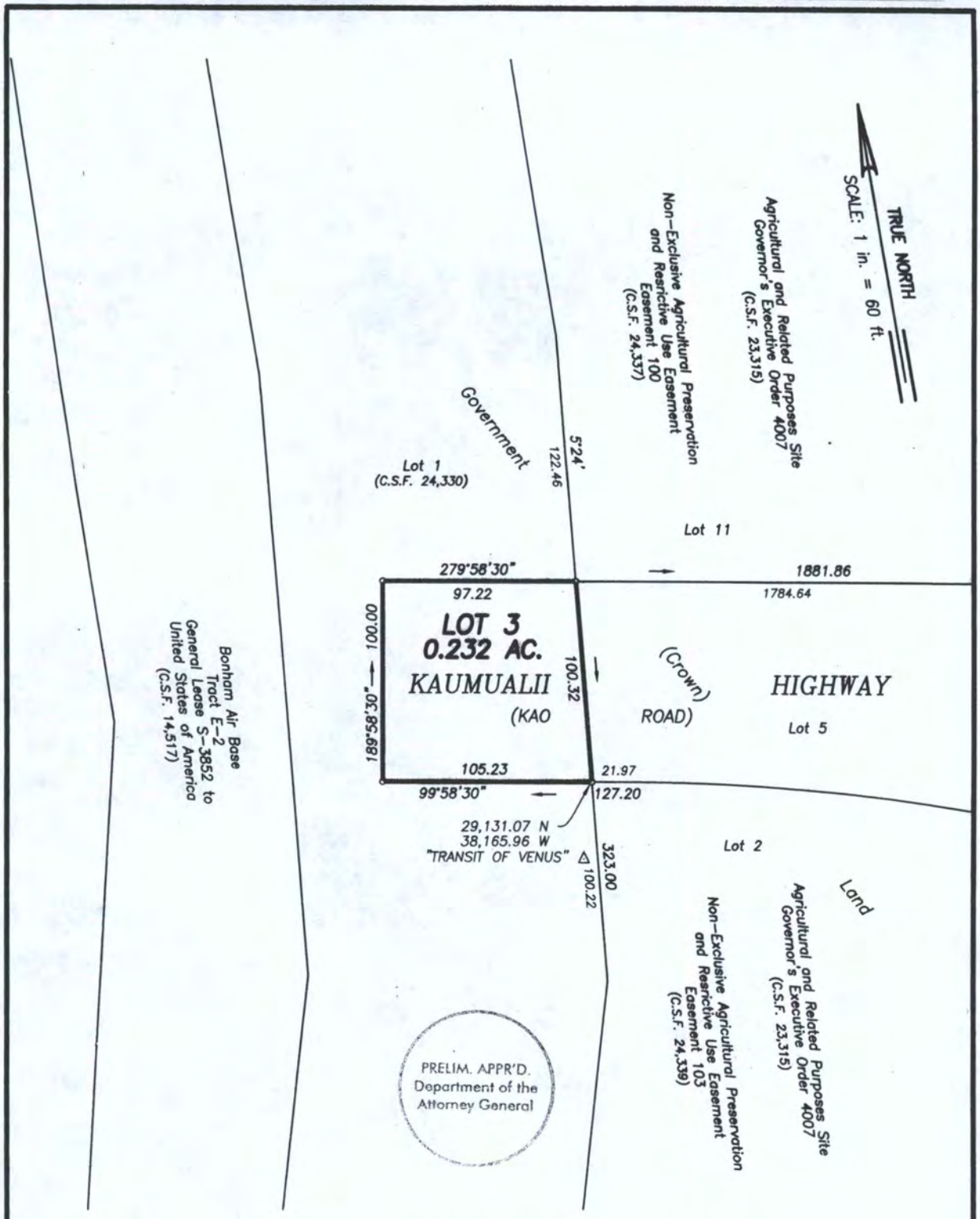
SURVEY DIVISION
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
STATE OF HAWAII

By: Glenn Kodani
Glenn J. Kodani
Land Surveyor

ml

Compiled from map and desc.
furn. by ControlPoint Surveying, Inc.
Said map and desc. have been examined and checked as to form and mathematical correctness but not on the ground by the Survey Division.

PRELIM. APPR'D.
Department of the
Attorney General




# PORTION OF THE GOVERNMENT (CROWN) LAND OF WAIMEA

## LOT 3

Kekaha, Waimea, Kauai, Hawaii

Scale: 1 inch = 60 feet

REDUCED
NOT TO SCALE

Job K-298(06)
C. BK.

TAX MAP 1-2-02: Por. 01

C.S.F. NO. 24,332

SURVEY DIVISION
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
STATE OF HAWAII

EXHIBIT D

JGL September 27, 2006

STATE OF HAWAII
SURVEY DIVISION
DEPT. OF ACCOUNTING AND GENERAL SERVICES
HONOLULU

C.S.F. No. 24,333

September 27, 2006

PORTIONS OF
THE GOVERNMENT (CROWN) LAND OF WAIMEA

LOTS 7 AND B

Kekaha, Waimea, Kauai, Hawaii

LOT 7

Being also all of Access Road.

Beginning at the northeast corner of this parcel of land, at the southeast corner of Lot B of the Government (Crown) Land of Waimea and on the westerly side of Kaumualii Highway (Hawaii Project No. DA-WR-1), the coordinates of said point of beginning referred to Government Survey Triangulation Station "TRANSIT OF VENUS" being 26,754.88 feet North and 37,618.10 feet West, thence running by azimuths measured clockwise from True South:-

1. 16° 01' 300.00 feet along the westerly side of Kaumualii Highway (Hawaii Project No. DA-WR-1);

PRELIM. APPR'D.
Department of the
Attorney General

EXHIBIT E

2. Thence along Lot A-1 of the Government (Crown) Land of Waimea on a curve to the left with a radius of 100.00 feet, the chord azimuth and distance being: 151° 01' 141.42 feet;

3. 106° 01' 561.88 feet along Lot A-1 of the Government (Crown) Land of Waimea;

4. 195° 50' 30" 100.00 feet along Bonham Air Base, Tract E-2;

5. 286° 01' 562.18 feet along Lot B of the Government (Crown) Land of Waimea;

6. Thence along Lot B of the Government (Crown) Land of Waimea on a curve to the left with a radius of 100.00 feet; the chord azimuth and distance being: 241° 01' 141.42 feet to the point of beginning and containing an AREA OF 1.618 ACRES.

LOT B

Beginning at the southeast corner of this parcel of land, at the northeast corner of Lot 7 of the Government (Crown) Land of Waimea, and on the westerly side of Kaumualii Highway (Hawaii Project No. DA-WR-1), the coordinates of said point of beginning referred to Government Survey Triangulation Station "TRANSIT OF VENUS" being 26,754.88 feet North and 37,618.10 feet West, thence running by azimuths measured clockwise from True South:-

PRELIM. APPR'D.
Department of the
Attorney General

1. Along Lot 7 of the Government (Crown) Land of Waimea on a curve to the right with a radius of 100.00 feet, the chord azimuth and distance being:
   61° 01' 141.42 feet;

2. 106° 01' 562.18 feet along the Lot 7 of the Government (Crown) Land of Waimea;

3. 195° 50' 30" 145.29 feet along Bonham Air Base, Tract E-2;

4. 199° 00' 30" 265.05 feet along Bonham Air Base, Tract E-2;

5. 188° 37' 184.64 feet along Bonham Air Base, Tract E-2;

6. 177° 09' 30" 518.90 feet along Bonham Air Base, Tract E-2;

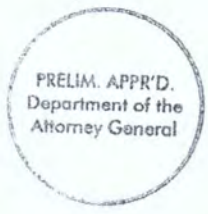
7. 164° 15' 335.36 feet along Bonham Air Base, Tract E-2;

8. 149° 50' 160.58 feet along Bonham Air Base, Tract E-2;

9. 140° 35' 14.94 feet along Bonham Air Base, Tract E-2;

10. 259° 10' 50" 953.89 feet along Lot 1 of the Government (Crown) Land of Waimea and Agricultural and Related Purposes Site, Governor's Executive Order 4007;

11. Thence along the westerly side of Kaumualii Highway (Lio Road) on a curve to the right with a radius of 1049.89 feet, the chord azimuth and distance being;
    354° 02' 54" 785.52 feet;



C.S.F. No. 24,333

September 27, 2006

12. 16° 01' 1091.04 feet along the westerly side of Kaumualii Highway (Hawaii Project No. DA-WR-1) to the point of beginning and containing an AREA OF 32.070 ACRES.

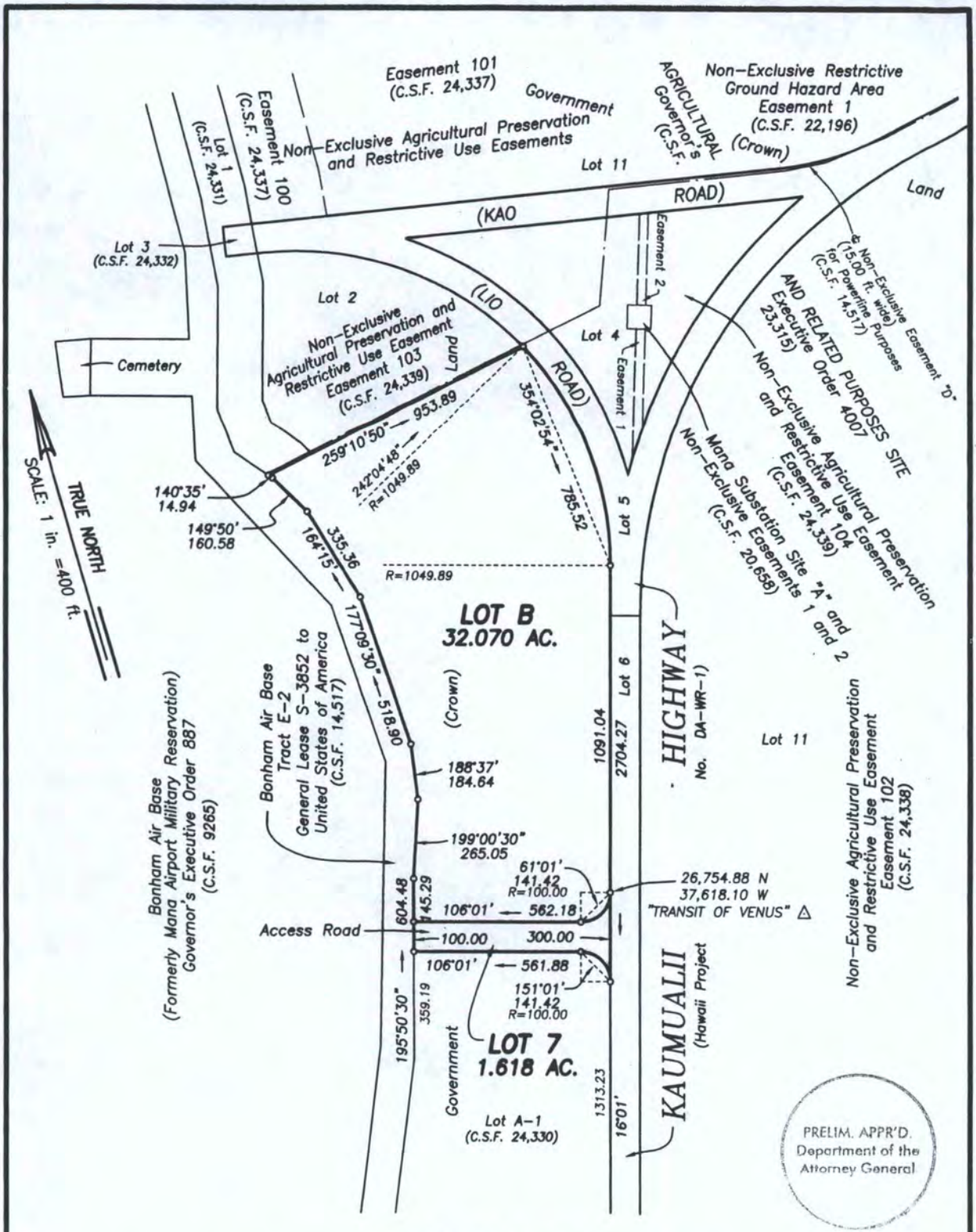
SURVEY DIVISION
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
STATE OF HAWAII

By: Glenn J. Kodani
Glenn J. Kodani
Land Surveyor

ml

Compiled from map and desc. furn. by ControlPoint Surveying, Inc. Said map and desc. have been examined and checked as to form and mathematical correctness but not on the ground by the Survey Division.

PRELIM. APPR'D.
Department of the
Attorney General




# PORTIONS OF
# THE GOVERNMENT (CROWN) LAND OF WAIMEA
# LOTS 7 AND B

*Kekaha, Waimea, Kauai, Hawaii*

*Scale: 1 inch = 400 feet*

REDUCED
NOT TO SCALE

*Job K-298(06)*
*C. BK.*

*TAX MAP 1-2-02: Pors. 01*

SURVEY DIVISION
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
STATE OF HAWAII

**EXHIBIT F**

*C.S.F. NO. 24,333*

*JGL September 27, 2006*

STATE OF HAWAII
SURVEY DIVISION
DEPT. OF ACCOUNTING AND GENERAL SERVICES
HONOLULU

C.S.F. No. 24,335

September 27, 2006

PORTIONS OF
THE GOVERNMENT (CROWN) LAND OF WAIMEA

LOTS 10 AND 13

Kekaha, Waimea, Kauai, Hawaii

LOT 10

Beginning at the northeast corner of this parcel of land, at the northwest corner of Lot 9 of the Government (Crown) Land of Waimea and at the southeast corner of Wild Bird Sanctuary, Governor's Executive Order 3437, the coordinates of said point of beginning referred to Government Survey Triangulation Station "TRANSIT OF VENUS" being 18,591.39 feet North and 33,678.91 feet West, thence running by azimuths measured clockwise from True South:-

1. 36° 00' 76.93 feet along Lot 9 of the Government (Crown) Land of Waimea;

2. 146° 56' 40" 20.60 feet along Bonham Air Base (Formerly Mana Airport Military Reservation), Part 1, Governor's Executive Order 945;

PRELIM. APPR'D.
Department of the
Attorney General

EXHIBIT G

| | | | | |
|---|---|---|---|---|
| 3. | 105° | 55' 08" | 3810.13' | feet along Bonham Air Base (Formerly Mana Airport Military Reservation), Part 1, Governor's Executive Order 945; |
| 4. | 137° | 30' 20" | 233.74 | feet along Bonham Air Base (Formerly Mana Airport Military Reservation), Part 1, Governor's Executive Order 945; |
| 5. | 243° | 44' 20" | 20.67 | feet along Lot A-1 of the Government (Crown) Land of Waimea; |
| 6. | 153° | 44' 20" | 73.89 | feet along Lot A-1 of the Government (Crown) Land of Waimea; |
| 7. | 243° | 44' 20" | 12.50 | feet along Lot A-1 of the Government (Crown) Land of Waimea; |
| 8. | Thence along the Lot 13 of the Government (Crown) Land of Waimea on a curve to the left with a radius of 542.50 feet, the chord azimuth and distance being: 295° 07' 14" 677.18 feet; | | | |
| 9. | 303° | 58' 40" | 108.23 | feet along Wild Bird Sanctuary, Governor's Executive Order 3685; |
| 10. | 285° | 54' | 3304.90 | feet along Wild Bird Sanctuary, Governor's Executive Order 3437 to the point of beginning and containing an AREA OF 5.171 ACRES. |

SUBJECT, however, to Perpetual Non-Exclusive Roadway Easement B-5 covered by Grant of Easement: State of Hawaii to United States of America (Dept. of Navy) dated October 29, 1979 and recorded in Liber 14504, Page 63 (Land Office Deed S-27079) as shown on plan attached hereto and made a part hereof.

RESERVING to the State of Hawaii, its successor and assigns, Portion of Non-Exclusive Access and Drainage Easement, Easement 2 as shown on plan attached hereto and made a part hereof.

PRELIM. APPR'D.
Department of the
Attorney General

C.S.F. No. 24,335

September 27, 2006

LOT 13

Beginning at the southeasterly corner of this parcel of land, at the southwesterly corner of Lot 14 of the Government (Crown) Land of Waimea and on the northerly boundary of Wild Bird Sanctuary, Governor's Executive Order 3685, the coordinates of said point of beginning referred to Government Survey Triangulation Station "TRANSIT OF VENUS" being 19,568.73 feet North and 36,906.48 feet West, thence running by azimuths measured clockwise from True South:-

1. Along Wild Bird Sanctuary, Governor's Executive Order 3685 on a curve to the right with a radius of 542.50 feet, the chord azimuth and distance being: 74° 16' 19" 42.22 feet;

2. Thence along Lot 10 of the Government (Crown) Land of Waimea on a curve to the right with a radius of 542.50 feet, the chord azimuth and distance being: 115° 07' 14" 677.18 feet;

3. 243° 44' 20" 25.00 feet along Lot A-1 of the Government (Crown) Land of Waimea;

4. Thence along Lot A-1 of the Government (Crown) Land of Waimea on a curve to the left with a radius of 517.50 feet, the chord azimuth and distance being: 292° 53' 25" 676.95 feet;

5. 342° 02' 30" 25.00 feet along Lot 14 of the Government (Crown) Land of Waimea to the point of beginning and containing an AREA OF 0.434 ACRE.

PRELIM. APPR'D.
Department of the
Attorney General

C.S.F. No. 24,335

September 27, 2006

SUBJECT, however, to Portion of Non-Exclusive Easement "B" (25.00 ft. wide) for Roadway and Utilities Purposes covered by General Lease S-3852 to the United States of America dated August 20, 1964 and recorded in Liber 4821, Page 245 and amendment dated May 31, 1973 and recorded in Liber 9221, Page 407 as shown on plan attached hereto and made a part of hereof.

RESERVING to the State of Hawaii, its successors and assigns, Portion of Non-Exclusive Access and Drainage Easement, Easement 2 as shown on plan attached hereto and made a part hereof.

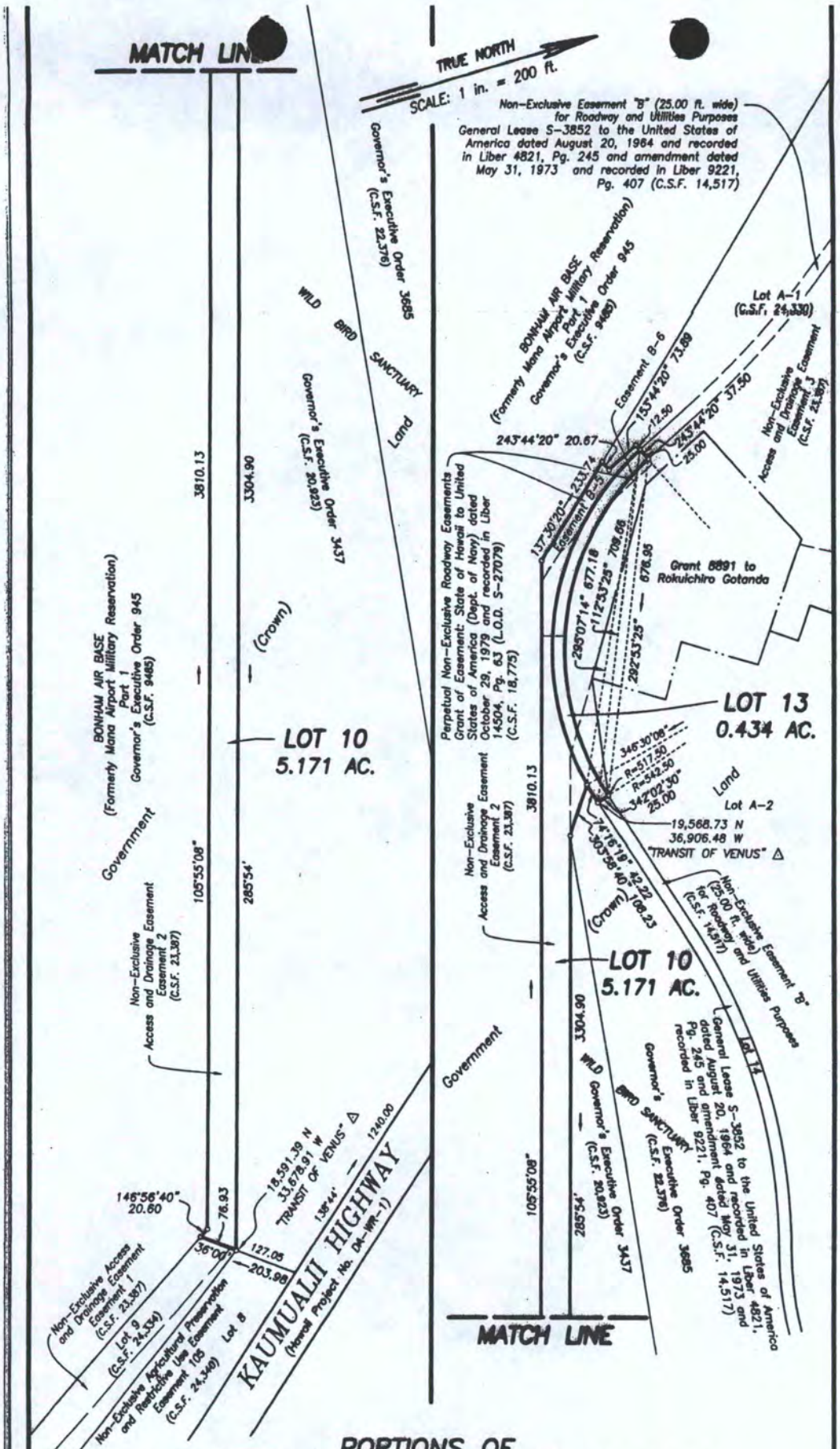
SURVEY DIVISION
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
STATE OF HAWAII

By: Glenn J. Kodani
Glenn J. Kodani
Land Surveyor

ml

Compiled from map and desc. furn.
by ControlPoint Surveying, Inc.
Said map and desc. have been examined
and checked as to form and mathematical
correctness but not on the ground by
the Survey Division.

PRELIM. APPR'D.
Department of the
Attorney General




# PORTIONS OF THE GOVERNMENT (CROWN) LAND OF WAIMEA

## LOTS 10 AND 13

REDUCED

*Kekaha, Waimea, Kaúai, Hawaii* NOT TO SCALE

Job K-298(06)

C. BK.

*Scale: 1 inch = 200 feet*

TAX MAP 1-2-02: Por. 01

C.S.F. NO. 24,335

SURVEY DIVISION
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
STATE OF HAWAII

PRELIM. APPR'D.
Department of the
Attorney General

**EXHIBIT H**

[redacted]

LAND COURT SYSTEM ) REGULAR SYSTEM

Return by Mail ( ) Pickup ( ) To:

Total Number of Pages:

Tax Map Key No. (4)1-2-02:por. 26

AMENDMENT OF GENERAL LEASE NO. S-3852

THIS AGREEMENT, made and entered into this 5th day of March, 20 03, by and between the State of Hawaii, by its Board of Land and Natural Resources, hereinafter referred to as the "Lessor," and the UNITED STATES OF AMERICA, whose address is c/o Department of the Navy, Pacific Division, Naval Facilities Engineering Command, 258 Makalapa Drive, Suite 100, Pearl Harbor, Hawaii 96860-7300, hereinafter referred to as the "Government";

WITNESSETH:

WHEREAS, the United States of America is the present Lessee of General Lease No. S-3852 dated August 20, 1964, recorded in the Bureau of Conveyances of the State of Hawaii in liber 4821, page 245, covering lands situate at Mana, Waimea (Kona), Kauai, Hawaii; and

WHEREAS, the lease was amended by Amendment to General Lease dated April 26, 1965, recorded in the Bureau of Conveyances of the State of Hawaii in liber 5302, page 330; and



PRELIM. APPR'D.
Department of the
Attorney General

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

Encl (6)3

WHEREAS, the lease was further amended by Amendment of General Lease No. S-3852 dated May 31, 1973, recorded in the Bureau of Conveyances of the State of Hawaii in liber 9221, page 407; and

WHEREAS, the lease was further amended by unrecorded Amendment of General Lease No. S-3852 dated August 28, 2000; and

WHEREAS, the Government desires that the general lease be further amended; and

WHEREAS, the Board of Land and Natural Resources, at its meeting held on October 25, 2002, has approved the amendment to General Lease No. S-3852 for the purposes of allowing the lease to be sublet and that the Lessor to receive all sublease rents.

NOW, THEREFORE, the Lessor and the Government covenant and agree that paragraph 30 be added to General Lease No. S-3852, as follows:

"30. Subletting. The Government shall not rent or sublet the whole or any portion of the premises, without the prior written approval of the Board of Land and Natural Resources ("Board").

The Government agrees that all sublease rents shall be payable to the Lessor."

IN CONSIDERATION THEREOF, the Lessor and the Government further agree that this Amendment of Lease Agreement is subject to all the covenants and conditions in the General Lease No. S-3852 dated August 20, 1964, and the amendments as above-referenced except as herein provided.

This Amendment, read in conjunction with the General Lease No. S-3852 dated August 20, 1964, and the amendments as above-referenced, sets forth the entire agreement between the Lessor and the Government; and the general lease as amended and modified hereby shall not be altered or modified in any particular except by a memorandum in writing signed by the Lessor and the Government.



PRELIM. APPR'D.
Department of the
Attorney General

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

IN WITNESS WHEREOF, the STATE OF HAWAII, by its Board of Land and Natural Resources, has caused the seal of the Department of Land and Natural Resources to be hereunto affixed and the parties hereto have caused these presents to be executed the day, month, and year first above written.

STATE OF HAWAII

By _____
Chairperson and Member
Board of Land and
Natural Resources

LESSOR

Approved by the Board of
Land and Natural Resources
at its meeting held on
October 25, 2002.

UNITED STATES OF AMERICA

By _____

DENNIS PACHT
Director, Operations Division
Pacific Division, Naval Facilities Engineering Command
Real Estate Contracting Officer

GOVERNMENT

APPROVED AS TO FORM:

_____
Deputy Attorney General

Dated: 2/25/03

PRELIM. APPR'D.
Department of the
Attorney General

24760_2.DOC



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

# Department of Land and Natural Resources

Division of Land Management
State Office Building
P. O. Box 621
Honolulu, Hawaii 96809

Receipt of the Document covered herein is hereby acknowledged.

**TO:**

- ☐ Governor of Hawaii
- ☐ Lt. Governor
- ☐ Chairman
- ☐ Bd. of Land & Natural Resources, Member
- ☐ Attorney General
- ☐ Surveyor
- ☐ Dept. of Transportation
- ☐ City & County of Honolulu
- ☐ County of _____
- ☐ Registrar of Land Court
- ☐ Bureau of Conveyances
- ☐ Land Agent of _____
- ☐ _____

**FOR:**

- ☑ Return
- ☐ Retention
- ☐ _____
- ☐ Approval
- ☐ Approval as to Form
- ☐ Signature
- ☐ Comment
- ☐ Recommendation
- ☐ Investigation & Report
- ☐ Appropriate Action
- ☐ _____
- ☐ _____

Signed _____

Date _____

*Approved by the Board at its meeting held on*

ITEM F-23
March 14, 1969

REMARKS: AMENDMENT TO STATE GENERAL LEASE NO. S-3852 (NAVY CONTRACT NO. NOy(R)-68046)

_____
Signature

June 1, 19 73

# Department of Land and Natural Resources

Division of Land Management
State Office Building
P. O. Box 621
Honolulu, Hawaii 96809

**TO:**

- ☐ Governor of Hawaii
- ☐ Lt. Governor
- ☐ Chairman
- ☐ Bd. of Land & Natural Resources, Member
- ☐ Attorney General
- ☐ Surveyor
- ☐ Dept. of Transportation
- ☐ City & County of Honolulu
- ☐ County of _____
- ☐ Registrar of Land Court
- ☐ Bureau of Conveyances
- ☐ Land Agent of _____
- ☐ _____

**FOR:**

- ☑ Return 1 signed copy
- ☐ Retention
- ☐ _____
- ☐ Approval
- ☐ Approval as to Form
- ☑ Signature
- ☐ Comment
- ☐ Recommendation
- ☐ Investigation & Report
- ☐ Appropriate Action
- ☐ _____
- ☐ _____

*Approved by the Board at its meeting held on*

ITEM F-23
March 14, 1969

REMARKS: AMENDMENT TO STATE GENERAL LEASE NO. S-3852 (NAVY CONTRACT NO. NOy(R)-68046)

Signature

June 1, 1973

3 4th copy

07 PBL
KWA
JW 6/7/73

LAND COURT SYSTEM ) REGULAR SYSTEM

Return by Mail ( ) Pickup ( ) To:

Total Number of Pages:

Tax Map Key No.(4)1-2-02:por. 1

AMENDMENT OF GENERAL LEASE NO. S-3852

THIS AGREEMENT, made and entered into this 28th day of August, 2000, by and between the State of Hawaii, by its Board of Land and Natural Resources, hereinafter referred to as the "Lessor," and the UNITED STATES OF AMERICA, whose address is c/o Department of the Navy, Pacific Division, Naval Facilities Engineering Command, Pearl Harbor, Hawaii 96860-7300, hereinafter referred to as the "Government";

WITNESSETH:

WHEREAS, the United States of America is the present Lessee of General Lease No. S-3852 dated August 20, 1964, recorded in the Bureau of Conveyances of the State of Hawaii in liber 4821, page 245, covering lands situate at Mana, Waimea (Kona), Kauai, Hawaii; and

WHEREAS, the lease was amended by Amendment to General Lease dated April 26, 1965, recorded in the Bureau of Conveyances of the State of Hawaii in liber 5302, page 330; and

PRELIM APPR'D
Department of the
Attorney General

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

Encl (1) 3

WHEREAS, the lease was further amended by Amendment of General Lease No. S-3852 dated May 31, 1973, recorded in the Bureau of Conveyances of the State of Hawaii in liber 9221, page 407; and

WHEREAS, the Government desires that the general lease be further amended; and

WHEREAS, the Board of Land and Natural Resources, at its meeting held on October 8, 1999, has approved the amendment to General Lease No. S-3852 for the purposes of adding an additional area of 14.372 acres, to accommodate construction of two (2) additional high explosive storage magazines, and to increase the annual rent to ONE HUNDRED FIFTY-SIX AND NO/100 DOLLARS ($156.00).

NOW, THEREFORE, the Lessor and the Government covenant and agree to the following:

A. Paragraph 2 of page 1, of General Lease No. S-3852, is hereby amended to add:

"2a. The Lessor hereby leases to the Government an area of 14.372 acres to accommodate construction of two (2) additional high explosive storage magazines, more particularly described in Exhibit "A" and delineated on Exhibit "B," attached hereto and made a part hereof."

B. Paragraph 4 of Page 2, of General Lease No. S-3852, is hereby amended to delete paragraph 4 in its entirety and to replace paragraph 4 with the following:

"4. The Government shall pay the Lessor an annual rental of ONE HUNDRED FIFTY-SIX AND NO/100 DOLLARS ($156.00), payable in advance, without notice or demand, in annual installments on August 20th of each and every year commencing October 9, 1999."

C. The Government shall be responsible for obtaining subdivision approval from the County of Kauai, Planning Commission and all associated costs.

IN CONSIDERATION THEREOF, the Lessor and the Government further agree that this Amendment of Lease Agreement is subject to all the covenants and conditions in the General Lease No. S-3852 dated August 20, 1964 and the amendments as above-referenced, except as herein provided.

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

This Amendment, read in conjunction with the General Lease No. S-3852 dated August 20, 1964 and the amendments as above-referenced, sets forth the entire agreement between the Lessor and the Government; and the general lease as amended and modified hereby shall not be altered or modified in any particular except by a memorandum in writing signed by the Lessor and the Government.

IN WITNESS WHEREOF, the STATE OF HAWAII, by its Board of Land and Natural Resources, has caused the seal of the Department of Land and Natural Resources to be hereunto affixed and the parties hereto have caused these presents to be executed the day, month, and year first above written.

STATE OF HAWAII

By _____
Chairperson and Member
Board of Land and
Natural Resources

LESSOR

Approved by the Board of
Land and Natural Resources
at its meeting held on
October 8, 1999.

UNITED STATES OF AMERICA

By _____
J. MICHAEL KILIAN
Head, Real Estate Department
Pacific Division, Naval Facilities Engineering Command
Real Estate Contracting Officer

GOVERNMENT

APPROVED AS TO FORM:

_____
Deputy Attorney General

Dated: August 10, 2000

gls-3852amd\usanavy\tmk(4)1-2-02:por.1\kekaha.pkm

PRELIM. APP'D.
Department of the
Attorney General



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

STATE OF HAWAII
SURVEY DIVISION
DEPT. OF ACCOUNTING AND GENERAL SERVICES
HONOLULU

C.S.F. No. 22,997

July 26, 2000

ADDITION TO
KAMOKALA RIDGE STORAGE AREA

Mana, Waimea, Kauai, Hawaii

Being a portion of the Government (Crown) Land of Waimea.

Beginning at the southeast corner of this parcel of land, and on the west boundary of Parcel 2, Tract E-3 of U.S. Military Reservation, the coordinates of said point of beginning referred to Government Survey Triangulation Station "NOHILI" being 9804.66 feet South and 9002.82 feet East, thence running by azimuths measured clockwise from True South:-

1. 86° 30' 30" — 13.07 feet along the remainder of Government (Crown) Land of Waimea;

2. Thence along the remainder of Government (Crown) Land of Waimea on a curve to the left with a radius of 107.50 feet, the chord azimuth and distance being: 59° 37' 55" — 97.19 feet;

3. 32° 45' 20" — 79.18 feet along the remainder of Government (Crown) Land of Waimea;

4. Thence along the remainder of Government (Crown) Land of Waimea on a curve to the right with a radius of 612.50 feet, the chord azimuth and distance being: 41° 21' — 183.06 feet;

5. 49° 56' 40" — 126.19 feet along the remainder of the Government (Crown) Land of Waimea;

6. Thence along the remainder of the Government (Crown) Land of Waimea on a curve to the right with a radius of 72.50 feet, the chord azimuth and distance being: 101° 05' 30" — 112.92 feet;



EXHIBIT A

7. 152° 14' 20" 53.33 feet along the remainder of the Government (Crown) Land of Waimea;

8. Thence along the remainder of the Government (Crown) Land of Waimea on a curve to the right with a radius of 292.50 feet, the chord azimuth and distance being: 164° 04' 35" 120.01 feet;

9. 175° 54' 50" 63.21 feet along the remainder of the Government (Crown) Land of Waimea;

10. Thence along the remainder of the Government (Crown) Land of Waimea on a curve to the left with a radius of 157.50 feet, the chord azimuth and distance being: 164° 11' 40" 63.98 feet;

11. 152° 28' 30" 142.35 feet along the remainder of the Government (Crown) Land of Waimea;

12. Thence along the remainder of the Government (Crown) Land of Waimea on a curve to the left with a radius of 307.50 feet, the chord azimuth and distance being: 147° 10' 50" 56.75 feet;

13. 141° 53' 10" 161.32 feet along the remainder of the Government (Crown) Land of Waimea;

14. Thence along the remainder of the Government (Crown) Land of Waimea on a curve to the left with a radius of 257.50 feet, the chord azimuth and distance being: 129° 17' 15" 112.33 feet;

15. 116° 41' 20" 196.91 feet along the remainder of the Government (Crown) Land of Waimea;

16. Thence along the remainder of the Government (Crown) Land of Waimea on a curve to the right with a radius of 182.50 feet, the chord azimuth and distance being: 129° 23' 80.21 feet;

17. 249° 18' 30" 980.90 feet along the remainder of the Government (Crown) Land of Waimea;

18. 349° 42' 845.30 feet along Parcel 2, Tract E-3 of U.S. Military Reservation to the point of beginning and containing an AREA OF 14.372 ACRES.

SUBJECT, HOWEVER, to the following easements as shown on plan attached hereto and made a part hereof:

1. Portions of Perpetual Non-Exclusive Easement 1 (20 ft. wide) for Electric Transmission Line Purposes covered by Grant of Easement: State of Hawaii to Kauai Electric, a Division of Citizens Utilities Company, dated December 6, 1979 and recorded in Liber 14420, Page 354 (Land Office Deed S-27071).

2. Portion of Kekaha Power Line Easement.

3. Portion of Non-Exclusive Easement "G" for Water Pipeline, Part III (5 ft. wide) covered by Amendment to General Lease S-3852 to United States of America (U.S. Navy) dated May 31, 1973 and recorded in Liber 9221, Page 407.

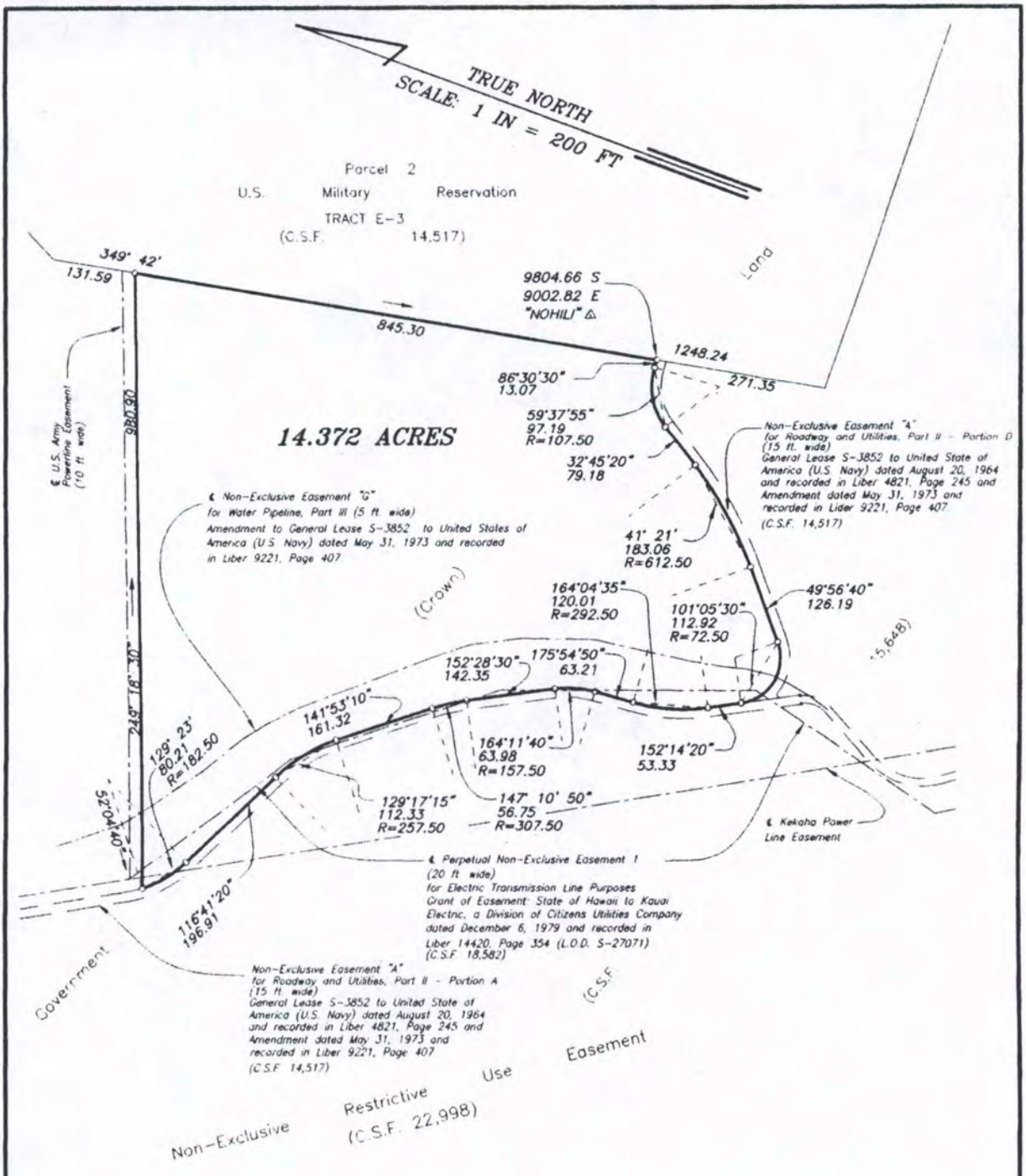
Access to and from Kaumualii Highway is provided by Non-Exclusive Easement "A" for Roadway and Utilities, Part I (25 ft. wide), Part II - Portion A (15 ft. wide) and Part II - Portion D (15 ft. wide) covered by General Lease S-3852 to United States of America (U.S. Navy) dated August 20, 1964 and recorded in Liber 4821, Page 245 and Amendment dated May 31, 1973 and recorded in Liber 9221, Page 407.

SURVEY DIVISION
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
STATE OF HAWAII

By: _____
Thomas H. Oi
Land Surveyor

gm

Compiled from data furn. by
ControlPoint, Inc., C.S.Fs
14517, 15648, 18582 & 22950
and other Govt. Survey
Records.
TMK: 1-2-02:por. 1




# ADDITION TO KAMOKALA RIDGE STORAGE AREA

Mana, Waimea, Kauai, Hawaii

Scale: 1 inch = 200 feet

**EXHIBIT B**

JOB K-309 (99)
C. BK.

REDUCED
NOT TO SCALE

TAX MAP: 1-2-02: por. 1

SURVEY DIVISION
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
STATE OF HAWAII

C.S.F. NO. 22,997

T.Oi July 26, 2000

69.36

45.3

.26

4

3

74.4

U.S. NAVY
COMMANDER, PACIFIC DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
FPO SAN FRANCISCO 96610 (Ph 43-31217) Mr. Alexanderson
Mr. Alexanderson

N/C 1C

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STATE OF HAWAII
BUREAU OF CONVEYANCES
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STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

AMENDMENT TO STATE GENERAL LEASE NO. S-3852
(NAVY CONTRACT NO. NOy(R)-68046)

THIS AMENDMENT, made and entered into this 31st day of May, 1973, by and between the STATE OF HAWAII, represented by its Board of Land and Natural Resources, whose address is P. O. Box 621, Honolulu, Hawaii 96809, for itself, its administrators, successors, and assigns, hereinafter called the "Lessor" and the UNITED STATES OF AMERICA, hereinafter called the "Government":

WITNESSETH:

WHEREAS, by State General Lease No. S-3852 made and entered into the 20th day of August 1964, recorded in the Bureau of Conveyances, State of Hawaii, in Liber 4821 at Page 245, the Lessor did lease to the Government four (4) tracts of land and appurtenant road access and utility rights-of-way described in Exhibit "A" attached thereto and made a part thereof; and

WHEREAS, by Amendment to said General Lease made and entered into the 26th day of April 1965, recorded in said Bureau of Conveyances, State of Hawaii, in Liber 5302 at Page 330, the Lessor did widen a portion of Easement "C" for Water Pipeline described in said Exhibit "A" from five (5.00) feet to fifteen (15.00) feet with a resulting increase in the aggregate area from 1.147 acres, more or less, to 1.869 acres, more or less; and

WHEREAS, the Government desires and the Lessor has agreed to further amend said General Lease, as amended, to provide for one (1) additional parcel of land, two (2) roadways and utility, communication cable and water pipeline rights-of-way;

NOW, THEREFORE, the parties hereto do agree to further amend said General Lease No. S-3852, as amended, as follows:

a. Easement "C" for Water Pipelines, as described on pages 23 through 27 of Exhibit "A" to said General Lease is hereby deleted in its entirety.

b. The Amendment to said General Lease, made and entered into 26 April 1965 and recorded in the Bureau of Conveyances of the State of Hawaii in Liber 5302 at Page 330, et. seq., is hereby deleted in its entirety.

c. Easements "A" and "B" of Exhibit "A" of said General Lease shall be amended to include utilities.

d. Add Tract E-2-A, Easement "E" for roadway, Easement "F" for communication cables, Easement "G" for water line, and Easement "H" for roadway, as described in Exhibit "B", attached hereto and made a part hereof.

In all other respects the terms and conditions of State General Lease No. S-3852, as amended, shall remain in full force and effect.

IN WITNESS WHEREOF, the parties have hereunto subscribed their names as of the date first above written.

STATE OF HAWAII

By _____
Chairman & Member
Board of Land and Natural Resources

And By _____
Member, Board of Land and Natural Resources

THE UNITED STATES OF AMERICA

By _____
By direction of the Commander, Naval Facilities Engineering Command, acting under the direction of the Secretary of the Navy

APPROVED AS TO FORM

_____
Deputy Attorney General

LAND SITUATE AT MANA, WAIMEA (KONA), KAUAI, HAWAII

PORTION OF THE GOVERNMENT LAND OF WAIMEA

TRACT E-2-A

Beginning at the Southwest corner of this piece of land on the Easterly boundary of Bonham Air Base of the land described in Part 2 of Governor's Executive Order No. 945 dated June 10, 1941, being also the Northwest corner of Parcel E-2 of the Addition to Bonham Air Base, the coordinates of said point of beginning referred to Government Survey Triangulation Station "NOHILI" being 3,773.94 feet South and 2,001.22 feet East and running by azimuths measured clockwise from true South:

1. 182° 40' 67.38 feet along the Easterly boundary of Bonham Air Base (Governor's Executive Order No. 945, Part 2);

2. 196° 40' 437.24 feet along the Easterly boundary of Bonham Air Base (Governor's Executive Order No. 945, Part 2);

3. 356° 42' 224.06 feet along remainder of Government land of Waimea;

Thence along remainder of Government land of Waimea, on a curve to the right with a radius of 380.00 feet, the chord azimuth and distance being:

4. 13° 14' 216.28 feet;

5. 29° 46' 14.00 feet along remainder of Government land of Waimea;

Thence along remainder of Government land of Waimea, on a curve to the left with a radius of 110.00 feet, the chord azimuth and distance being:

EXHIBIT "B"

| | | | |
|---|---|---|---|
| 6. | 17° 53' | 45.30 feet | to the North boundary of Tract E-2 of the Addition to Bonham Air Base; |
| 7. | 92° 40' | 71.14 feet | along the North boundary of Tract E-2 of the Addition to Bonham Air Base to the point of beginning and containing an area of 0.777 acre, and shown on PACDIV Real Estate Drawing No. RE-1013 attached hereto. |

SUBJECT, HOWEVER, to the existing "Nohili" Ditch traversing this parcel of land.

EASEMENT "E" FOR ROADWAY

LAND SITUATE AT MANA, WAIMEA (KONA), KAUAI, HAWAII

PORTION OF GOVERNMENT LAND OF WAIMEA

An easement for the construction, operation, maintenance and repair of a roadway on, over and across a strip of land thirty (30.00) feet wide, fifteen (15.00) feet on each side of the centerline described as follows:

Beginning at the Southwest end of this strip of land, at a point on the Easterly boundary of the Pacific Missile Range Facility, Barking Sands (formerly Bonham Air Base) (Governor's Executive Order No. 945, Part 1, dated 10 June 1941), said point of beginning being by true azimuth and distance 146° 56' 40" 6,653.02 feet from the East corner of former Kekaha Military Reservation (Portion Governor's Executive Order No. 945, Part 1), the coordinates of said point of beginning referred to Government Survey Triangulation Station "KANALOA" being 8,822.67 feet North and 9,177.91

feet West, thence running by an azimuth measured clockwise from true South:

1. 223° 30' 26" 640.48 feet along remainder of Government land of Waimea to the Southwest boundary of Kaumualii Highway 100-foot right-of-way and containing an area of 0.441 acre, the same as shown on PACDIV Real Estate Drawing No. 1037 attached hereto and made a part hereof.

SUBJECT, HOWEVER, to State of Hawaii General Lease No. S-4222 dated 1 January 1969 to Kekaha Sugar Company, Ltd.

EASEMENT "F" FOR COMMUNICATION CABLES

LAND SITUATE AT MANA, WAIMEA (KONA), KAUAI, HAWAII

PORTION OF GOVERNMENT LAND OF WAIMEA

Being an easement for the installation, operation, maintenance and repair of communication cables in, under, and across a strip of land ten (10.00) feet wide and lying five (5.00) feet on each side of the centerline described as follows:

Beginning at the Southwest end of this strip of land, on the Northeasterly boundary of the Pacific Missile Range Facility, Barking Sands (formerly Bonham Air Base) (Governor's Executive Order No. 945, Part 1 dated 10 June 1941), said point of beginning being by true azimuth and distance 317° 30' 20" 278.84 feet from the South corner of the parcel of land described as Tract E-2 in Exhibit "A", pages 2 through 7, the coordinates of said point of beginning referred to Government Survey Triangulation Station "KANALOA" being 13,993.11 feet North and 15,933.43 feet West, and running by an azimuth measured clockwise from true South:

1. 228° 59' 30" 214.32 feet along remainder of Government land of Waimea to the Southwest boundary of Easement "B" as described in Exhibit "A", pages 20 through 22 and containing an area of 0.049 acre, the same as shown on PACDIV Real Estate Drawing No. RE-1038, attached hereto and made a part hereof.

SUBJECT, HOWEVER, to State of Hawaii General Lease No. S-4222 dated 1 January 1969 to Kekaha Sugar Company, Ltd.

EASEMENT "G" FOR WATER PIPELINE

An easement for the construction, operation, maintenance and repair, including replacement of a water pipeline over, under and across the strips of land comprised of Part I, being fifteen (15.00) feet wide and lying seven and one-half (7.50) feet on each side of its centerline and Parts II, III, IV, V and VI, each being five (5.00) feet wide and lying two and one-half (2.50) feet on each side of their centerline, all of which centerlines being more particularly described as follows:

PART I

Beginning at the West end of this strip of land, said point of beginning being distant 29.49 feet from the end of Course No. 26 of the land described in the basic Lease as Tract E-2, and running by azimuths measured clockwise from true South:

1. 259° 19' 50" 975.00 feet along remainder of Government land of Waimea (also across a portion of Kaumualii Highway);

2. 254° 00' 00" 200.00 feet along remainder of Government land of Waimea (also across a portion of Kaumualii Highway);

3. 259° 45' 00" 500.00 feet along remainder of Government land of Waimea;

4. 251° 38' 06" 273.90 feet along remainder of Government land of Waimea to a point on the boundary of Kaumualii Highway, the coordinates of said point referred to Government Survey Triangulation Station "KANALOA" being 21,914.94 feet North and 14,812.21 feet West and containing an area of 29,233 square feet or 0.671 acre, the same as shown on PACDIV Real Estate Drawing No. RE-1039, attached hereto and made a part hereof.

SUBJECT, HOWEVER, to State of Hawaii General Lease No. S-4222 dated 1 January 1969 to Kekaha Sugar Company, Ltd.

PART II

Beginning at the West end of this strip of land at the end of Course No. 4 of the strip of land described above as Part I, and running by azimuths measured clockwise from true South:

5. 251° 38' 06" 84.57 feet along remainder of Government land of Waimea (also across a portion of Kaumualii Highway);

6. 262° 30' 00" 115.38 feet along remainder of Government land of Waimea (also across a portion of Kaumualii Highway);

thence along remainder of Government land of Waimea (also across a portion of Kaumualii Highway), on a curve to the left with a radius of 982.32 feet, the chord azimuth and distance being:

7. 264° 48' 03.5" 202.55 feet;

8. 258° 53' 00" 798.13 feet along remainder of Government land of Waimea (also across a portion of Kaumualii Highway) to a point on the boundary of Kaumualii Highway at the Easterly terminus of same, said point being by true azimuth and distance 168° 53' 00" 12.00 feet from the point of beginning of the centerline of Part I of Easement "A" as described in Exhibit "A", page 10, and containing an area of 6,003 square feet or 0.138 acre, the same as shown on PACDIV Real Estate Drawing No. RE-1039, attached hereto and made a part hereof.

SUBJECT, HOWEVER, to State of Hawaii General Lease No. S-4222 dated 1 January 1969 to Kekaha Sugar Company, Ltd.

PART III

Beginning at the Northwest end of this strip of land, at a point on the boundary of the strip of land described as Portion C of Part II of Easement "A" in Exhibit "A", page 15, and being by true azimuth and distance 165° 19' 45" 38.74 feet from the end of Course No. 38 thereof, and running by azimuths measured clockwise from true South:

9. 305° 05' 00" 82.99 feet along remainder of Government land of Waimea;

10. 316° 18' 03" 46.54 feet along same;

11. 328° 26' 20" 141.50 feet along same;

12. 318° 20' 00" 60.00 feet along same;

13. 321° 02' 40" 110.29 feet along same;

14. 308° 05' 00" 60.00 feet along same;

15. 306° 35' 00" 95.00 feet along same;

| | | | |
|---|---|---|---|
| 16. | 302° 15' 00" | 77.00 | feet along same; |
| 17. | 308° 38' 20" | 52.42 | feet along same; |
| 18. | 313° 35' 00" | 50.00 | feet along same; |
| 19. | 319° 20' 00" | 229.00 | feet along same; |
| 20. | 321° 54' 05" | 64.03 | feet along same; |
| 21. | 333° 20' 00" | 82.00 | feet along same; |
| 22. | 340° 50' 06" | 117.35 | feet along same; |
| 23. | 352° 42' 53" | 154.95 | feet along same; |
| 24. | 349° 35' 00" | 54.00 | feet along same; |
| 25. | 345° 55' 00" | 37.50 | feet along same; |
| 26. | 353° 00' 00" | 42.50 | feet along same; |
| 27. | 6° 30' 00" | 26.00 | feet along same; |
| 28. | 10° 49' 00" | 42.99 | feet along same to a point on the boundary of the strip of land described as Part III of Easement "A" in Exhibit "A", pages 17 thru 19, said point being by true azimuth and distance 197° 27' 47" 35.80 feet from the end of Course No. 45 thereof and containing an area of 8,120 square feet or 0.186 acre, the same as shown on PACDIV Real Estate Drawing No. RE-1040, attached hereto and made a part hereof. |

SUBJECT, HOWEVER, to State of Hawaii General Lease No. S-4222 dated 1 January 1969 to Kekaha Sugar Company, Ltd.

PART IV

Beginning at the Northwest end of this strip of land at a point on the boundary of the strip of land described as Part III of Easement "A" in Exhibit "A", pages 17 thru 19, said point of beginning being by true azimuth and distance 136° 36' 46" 25.00 feet from the end of Course No. 47 thereof and running by azimuths measured clockwise from true South:

| | | | |
|---|---|---|---|
| 29. | 29° 40' 30" | 13.57 feet | along remainder of Government land of Waimea; |
| 30. | 68° 39' 04" | 8.00 feet | along same; |
| 31. | 338° 39' 04" | 147.22 feet | along same; |
| 32. | 291° 30' 10" | 10.00 feet | along same; |
| 33. | 297° 47' 30" | 39.78 feet | along same; |
| 34. | 316° 06' 40" | 363.86 feet | along same; |
| 35. | 323° 17' 05" | 39.10 feet | along same; |
| 36. | 330° 01' 35" | 88.76 feet | along same; |
| 37. | 329° 46' 11" | 93.34 feet | along same; |
| 38. | 257° 41' 20" | 148.06 feet | along same; |
| 39. | 320° 32' 10" | 142.75 feet | along same; |
| 40. | 306° 21' 10" | 84.13 feet | along same; |
| 41. | 293° 24' 40" | 130.82 feet | along same; |
| 42. | 273° 52' 30" | 24.87 feet | along same; to a point on the Southwest boundary of the parcel of land described as Tract E-4 in Exhibit "A", pages 8 and 9, said point being distant 23.74 feet from the end of Course No. 5 thereof, and containing an area of 6,671 square feet or 0.153 acre, the same as shown on PACDIV Real Estate Drawing No. RE-1041, attached hereto and made a part hereof. |

SUBJECT, HOWEVER, to State of Hawaii General Lease No. S-4222 dated 1 January 1969 to Kekaha Sugar Company, Ltd.

PART V

Beginning at the West end of this strip of land, at a point on the South boundary of the parcel of land described as Tract E-4 in Exhibit "A", pages 8 and 9, said point being distant 17.48 feet from the end of Course No. 4 thereof, and running by azimuths measured clockwise from true South:

| | | | |
|---|---|---|---|
| 43. | 273° 52' 30" | 21.14 feet | along remainder of Government land of Waimea; |
| 44. | 254° 18' 30" | 33.60 feet | along same; to a point on the South boundary of said Tract E-4, said point being distant 71.47 feet from the end of Course No. 4 thereof and containing an area of 274 square feet, the same as shown on PACDIV Real Estate Drawing No. RE-1041 attached hereto and made a part hereof. |

SUBJECT, HOWEVER, to State of Hawaii General Lease No. S-4222 dated 1 January 1969 to Kekaha Sugar Company, Ltd.

PART VI

Beginning at the West end of this strip of land, at a point on the East boundary of the parcel of land described as Tract E-4 in Exhibit "A", pages 8 and 9, said point being distant 6.49 feet from the end of Course No. 3 thereof, and running by azimuths measured clockwise from true South:

| | | | |
|---|---|---|---|
| 45. | 254° 18' 30" | 71.91 feet | along remainder of Government land of Waimea; |
| 46. | 257° 07' 30" | 104.70 feet | along same; |

| | | | |
|---|---|---|---|
| 47. | 232° 49' 00" | 6.54 feet | along same, to a point on the Westerly boundary of Kekaha Sugar Company Pumphouse, and containing an area of 916 square feet, the same as shown on PACDIV Real Estate Drawing No. RE-1041, attached hereto and made a part hereof. |

SUBJECT, HOWEVER, to State of Hawaii General Lease No. S-4222 dated 1 January 1969 to Kekaha Sugar Company, Ltd.

TOTAL AGGREGATE AREA OF EASEMENT "G":

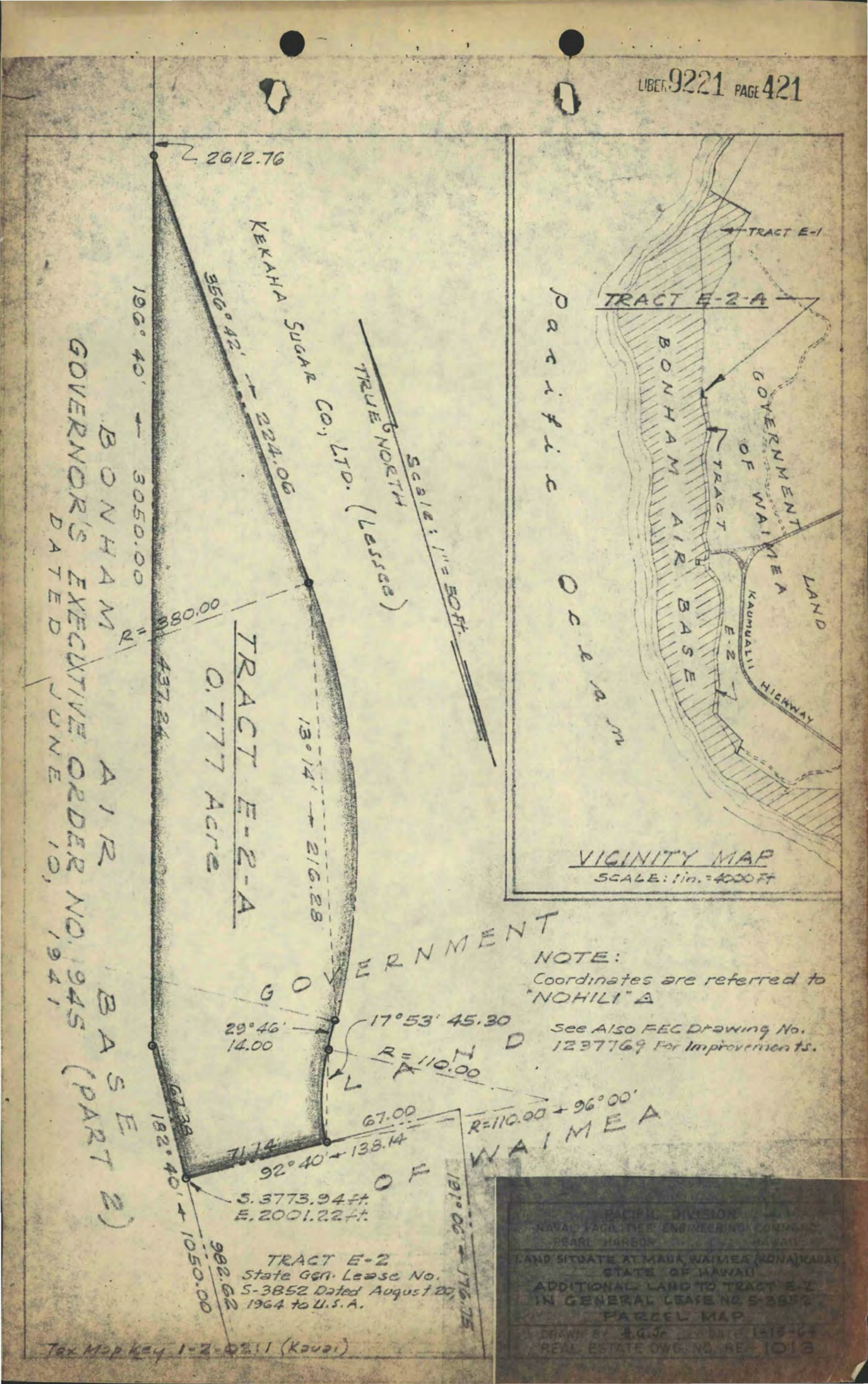
51,217 square feet or 1.176 acres, more or less.

EASEMENT "H" FOR ROADWAY

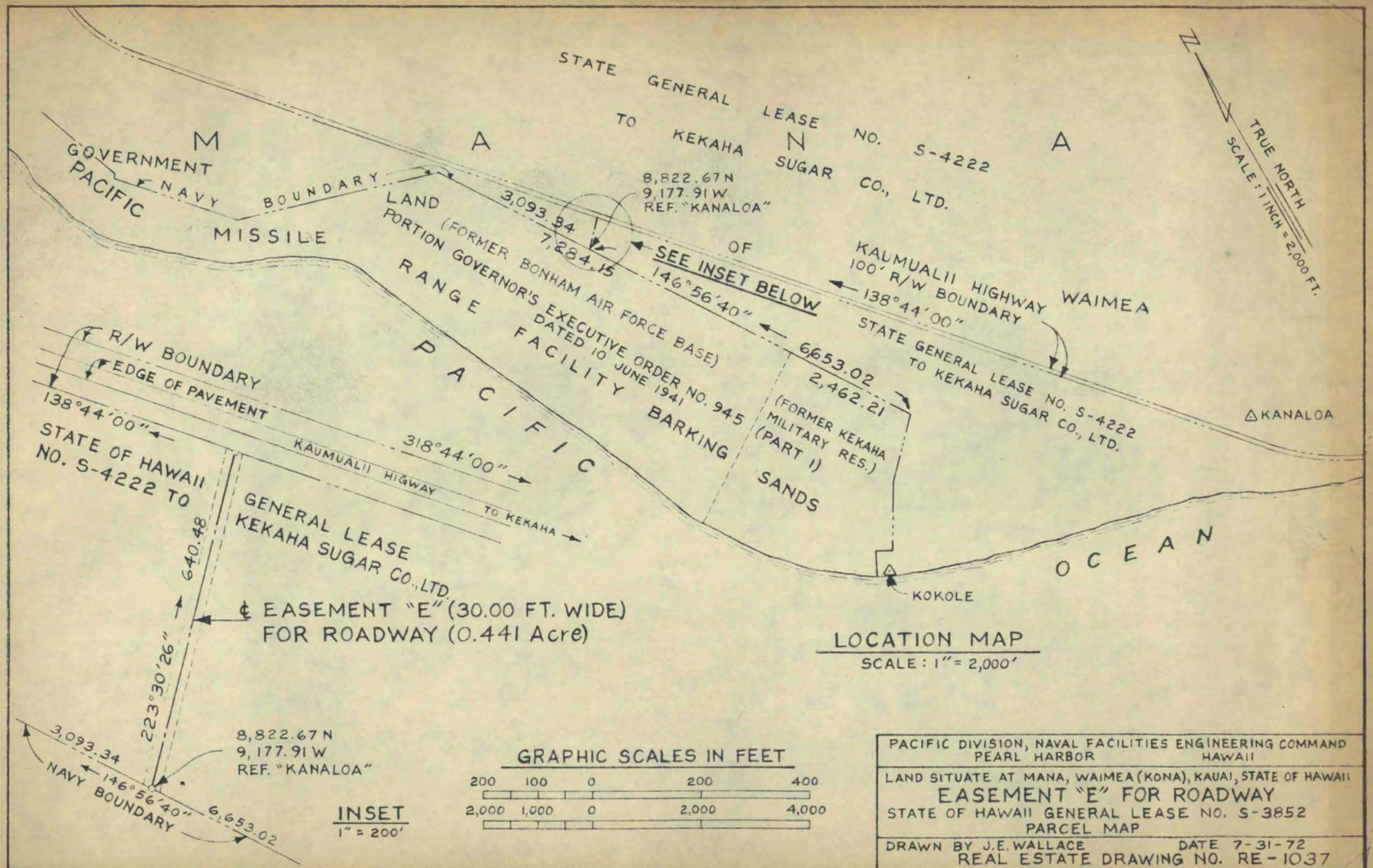
An easement for a roadway over and across a strip of land twenty-five (25.00) feet wide and lying twelve and one-half (12.50) feet on each side of the following described centerline:

Beginning at the East end of this strip of land, being also the Westerly terminus of the centerline of Kaumualii Highway, the coordinates of said point of beginning referred to Government Survey Triangulation Station "NOHILI" being 9,659.48 feet South and 914.64 feet East, and running by an azimuth measured clockwise from true South:

| | | | |
|---|---|---|---|
| 1. | 99° 58' 30" | 49.19 feet | along remainder of Government land of Waimea to a point on the Easterly boundary of the land described as Tract E-2 (Addition to Bonham Air Base), said point being distant 148.33 feet from the end of Course 23 thereof and containing an area of 1,230 square feet or 0.028 acre, the same as shown on PACDIV Real Estate Drawing No. RE-1039, attached hereto and made a part hereof. |


2612.76
KEKAHA SUGAR CO., LTD. (Lessee)
TRUE NORTH
Scale: 1" = 50 Ft.
196° 40' — 3050.00
356° 42' — 224.06
880.00
437.24
TRACT E-2-A
0.777 Acre
13° 14' — 216.28
GOVERNMENT
29° 46'
14.00
17° 53' 45.30
R = 110.00
67.00
R=110.00 + 96° 00'
67.38
182° 40' — 138.14
71.14
92° 40'
S. 3773.94 ft.
E. 2001.22 ft.
191° 06' — 176.75
982.62
1050.00
TRACT E-2
State Gen. Lease No.
S-3852 Dated August 20,
1964 to U.S.A.
Tax Map Key 1-2-02:11 (Kauai)
BONHAM AIR BASE
GOVERNOR'S EXECUTIVE ORDER NO. 945 (PART 2)
DATED JUNE 10, 1941
PACIFIC OCEAN
TRACT E-1
TRACT E-2-A
BONHAM AIR BASE
GOVERNMENT OF WAIMEA
LAND
TRACT E-2
KAUMUALII HIGHWAY
VICINITY MAP
SCALE: 1 in. = 4000 ft
NOTE:
Coordinates are referred to "NOHILI" A
See Also FEC Drawing No. 1237769 for Improvements.
GOVERNMENT LAND OF WAIMEA
PACIFIC DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
PEARL HARBOR HAWAII
LAND SITUATE AT MANA, WAIMEA (KONA), KAUAI, STATE OF HAWAII
ADDITIONAL LAND TO TRACT E-2 IN GENERAL LEASE NO. S-3852
PARCEL MAP
DRAWN BY H.G.J. DATE 1-15-64
REAL ESTATE DWG. NO. RE- 1013

LIBER 9221 PAGE 422




INSET
1" = 200'

LOCATION MAP
SCALE: 1" = 2,000'

GRAPHIC SCALES IN FEET

200 100 0 200 400

2,000 1,000 0 2,000 4,000

PACIFIC DIVISION, NAVAL FACILITIES ENGINEERING COMMAND
PEARL HARBOR HAWAII

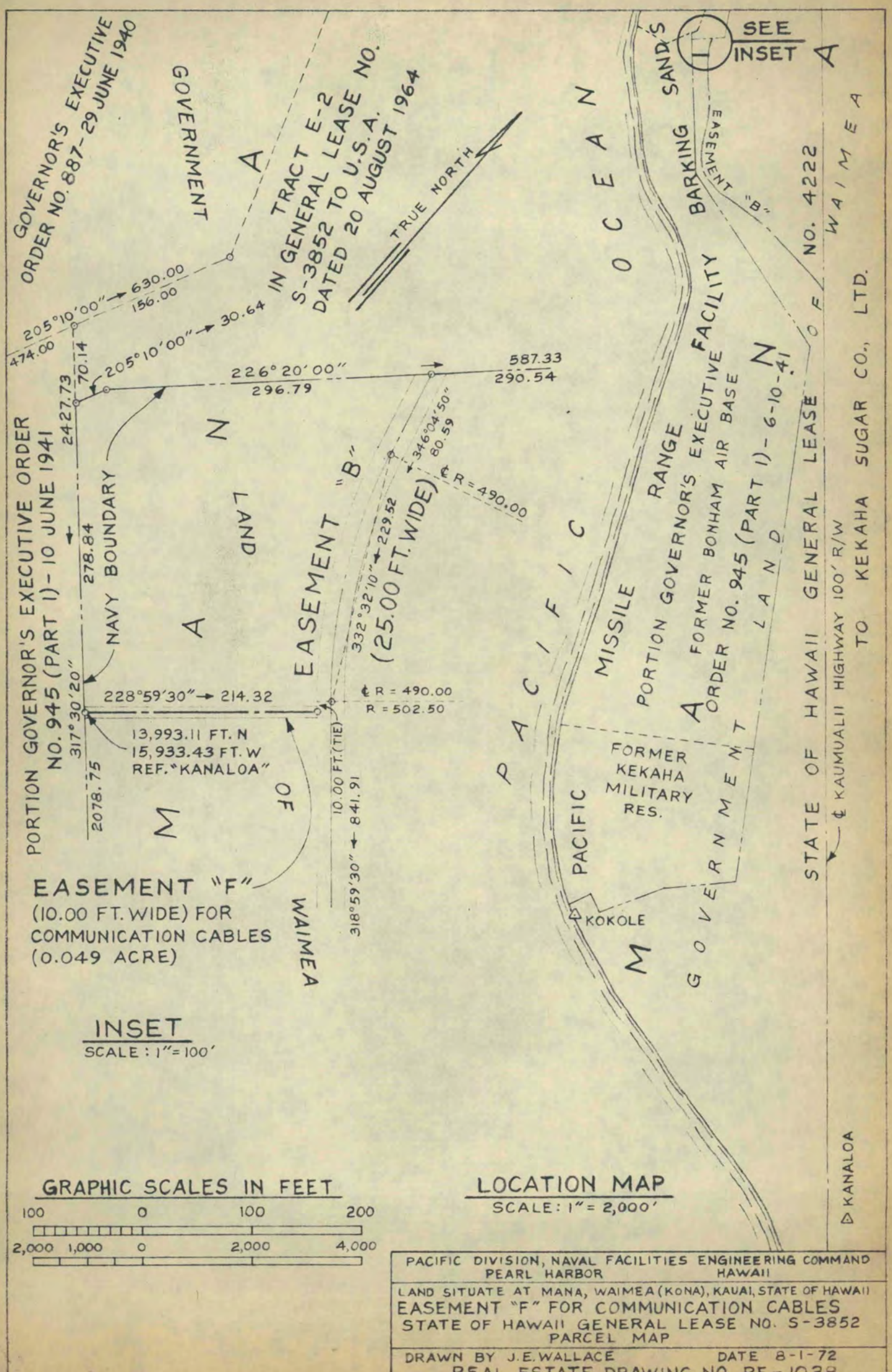
LAND SITUATE AT MANA, WAIMEA (KONA), KAUAI, STATE OF HAWAII

# EASEMENT "E" FOR ROADWAY

STATE OF HAWAII GENERAL LEASE NO. S-3852
PARCEL MAP

DRAWN BY J.E. WALLACE DATE 7-31-72

REAL ESTATE DRAWING NO. RE-1037




## INSET
SCALE: 1" = 100'

## GRAPHIC SCALES IN FEET
100 0 100 200
2,000 1,000 0 2,000 4,000

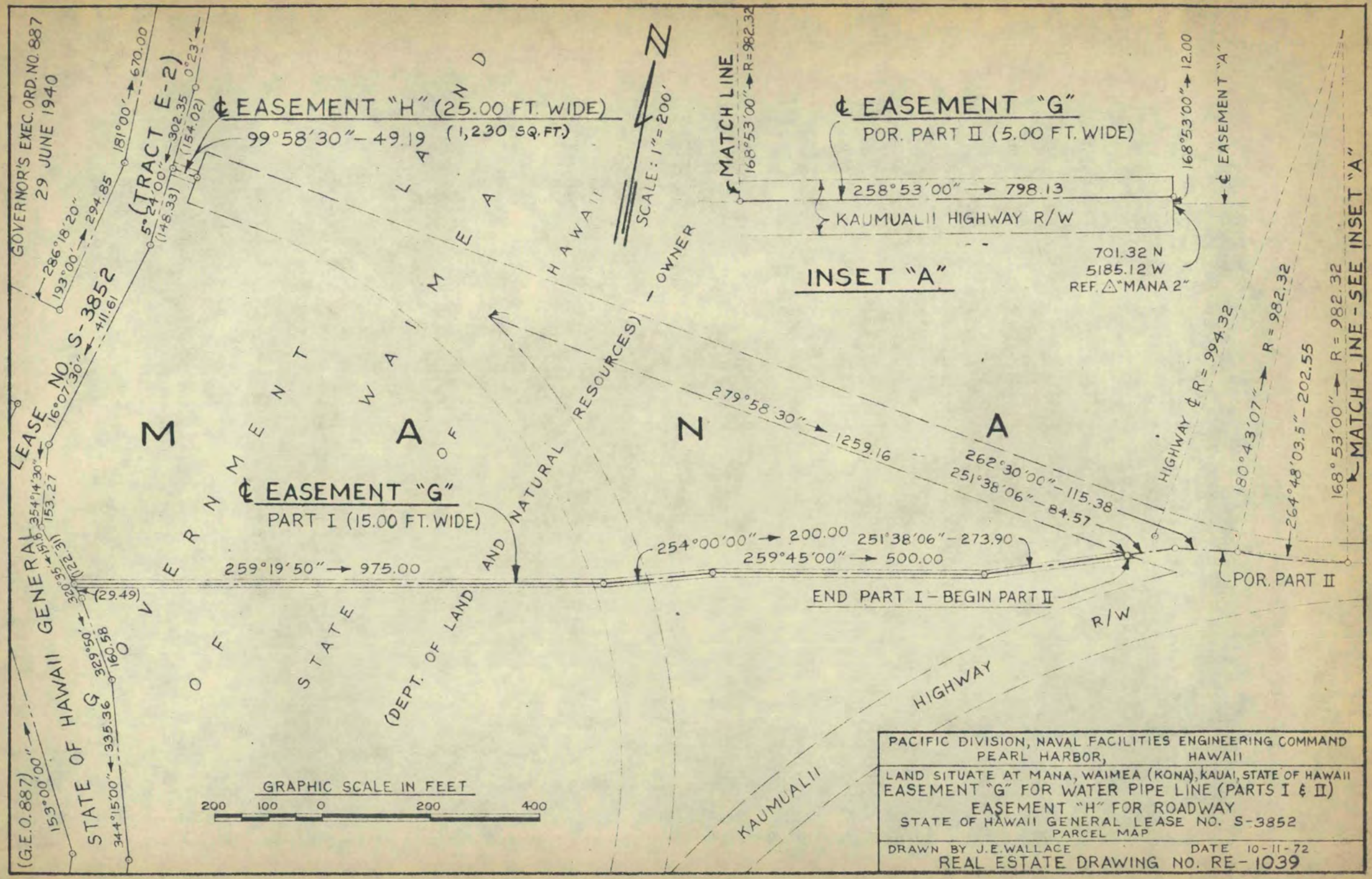
## LOCATION MAP
SCALE: 1" = 2,000'

PACIFIC DIVISION, NAVAL FACILITIES ENGINEERING COMMAND
PEARL HARBOR HAWAII

LAND SITUATE AT MANA, WAIMEA (KONA), KAUAI, STATE OF HAWAII
EASEMENT "F" FOR COMMUNICATION CABLES
STATE OF HAWAII GENERAL LEASE NO. S-3852
PARCEL MAP

DRAWN BY J.E. WALLACE DATE 8-1-72
REAL ESTATE DRAWING NO. RE-1038

LIBER 9221 PAGE 424

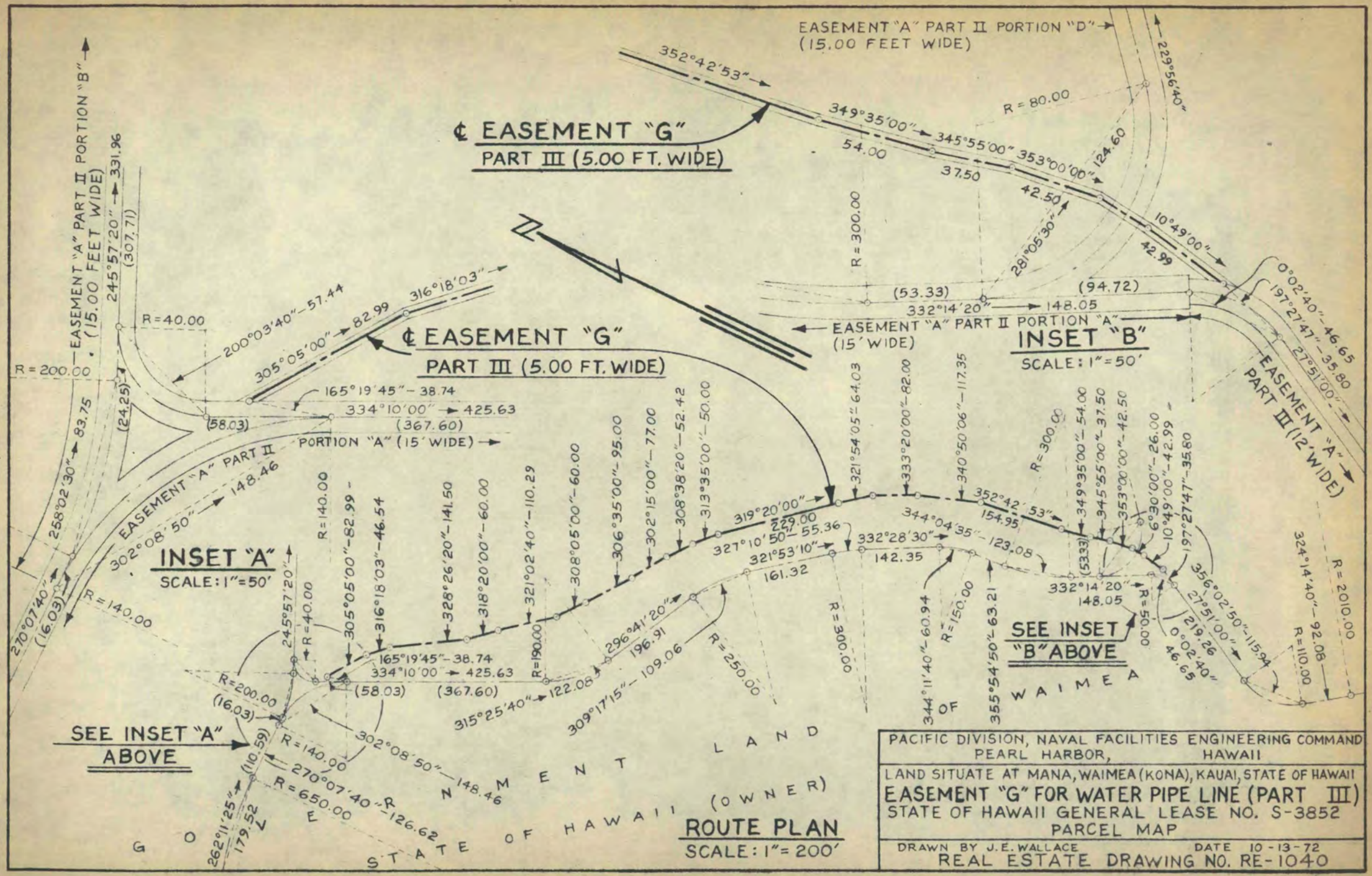



PACIFIC DIVISION, NAVAL FACILITIES ENGINEERING COMMAND
PEARL HARBOR, HAWAII

LAND SITUATE AT MANA, WAIMEA (KONA), KAUAI, STATE OF HAWAII
EASEMENT "G" FOR WATER PIPE LINE (PARTS I & II)
EASEMENT "H" FOR ROADWAY
STATE OF HAWAII GENERAL LEASE NO. S-3852
PARCEL MAP

DRAWN BY J.E. WALLACE DATE 10-11-72
REAL ESTATE DRAWING NO. RE-1039

LIBER 9221 PAGE 425




PACIFIC DIVISION, NAVAL FACILITIES ENGINEERING COMMAND
PEARL HARBOR, HAWAII

LAND SITUATE AT MANA, WAIMEA (KONA), KAUAI, STATE OF HAWAII

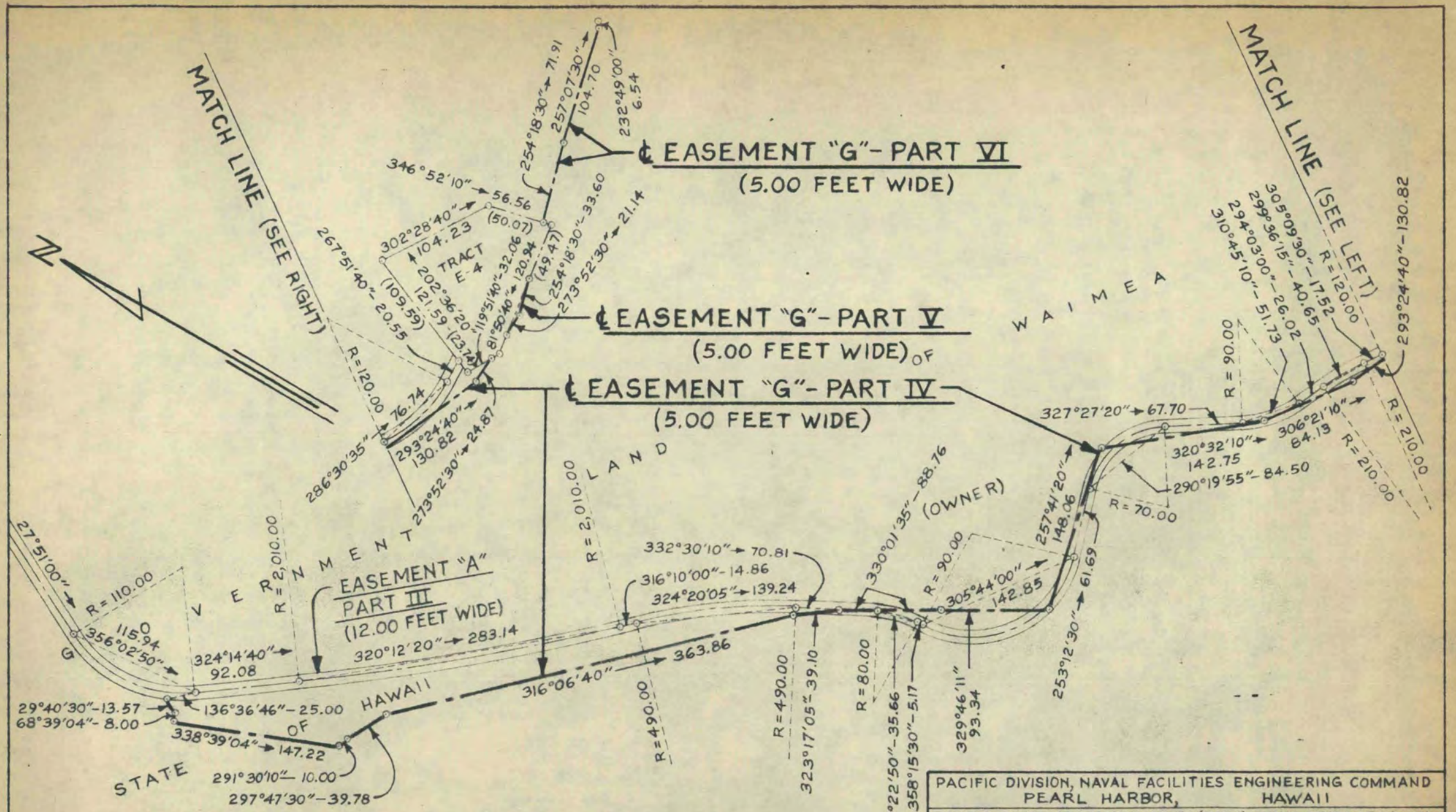
# EASEMENT "G" FOR WATER PIPE LINE (PART III)

STATE OF HAWAII GENERAL LEASE NO. S-3852
PARCEL MAP

DRAWN BY J.E. WALLACE DATE 10-13-72

REAL ESTATE DRAWING NO. RE-1040

LIBER 9221 PAGE 426




## ROUTE PLAN

SCALE: 1" = 100'

PACIFIC DIVISION, NAVAL FACILITIES ENGINEERING COMMAND
PEARL HARBOR, HAWAII

LAND SITUATE AT MANA, WAIMEA (KONA), KAUAI, STATE OF HAWAII

**EASEMENT "G" FOR WATER PIPE LINE - PARTS IV, V & VI**

STATE OF HAWAII GENERAL LEASE NO. S-3852

PARCEL MAP

DRAWN BY J.E. WALLACE DATE 10-16-72

REAL ESTATE DRAWING NO. RE-1041

[redacted]12079

RECORDATION REQUESTED BY:

AFTER RECORDATION, RETURN TO: Liber 5302 Page 330

RETURN BY: MAIL ( ) PICKUP ( )
REQUESTOR TO FILL ABOVE

SPACE ABOVE THIS LINE FOR REGISTRAR'S USE

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

AMENDMENT OF STATE GENERAL LEASE NO. S-3852
(NAVY CONTRACT NOy(R)-68046)

THIS AMENDMENT, made and entered into this 26th day of April, 1965, by and between the STATE OF HAWAII, represented by its Board of Land and Natural Resources, whose address is P. O. Box 621, Honolulu, Hawaii 96809, for itself, its administrators, successors, and assigns, hereinafter called the "Lessor" and THE UNITED STATES OF AMERICA, hereinafter called the "Government":

WITNESSETH:

WHEREAS, by State General Lease No. S-3852 made and entered into the 20th day of August 1964, recorded in the Bureau of Conveyances, State of Hawaii, in Liber 4821 at Page 245, the Lessor did lease to the Government four (4) tracts of land and appurtenant road access and utility rights-of-way described in Exhibit "A" attached thereto and made a part thereof; and

WHEREAS, the Government desires and the Lessor has agreed to amend said General Lease to provide for an increase in the width of a portion of Easement "C" for Water Pipe Line described in said Exhibit "A" from five (5.00) feet to fifteen (15.00) feet with a resulting increase in the aggregate area from 1.147 acres, more or less, to 1.869 acres, more or less.

NOW, THEREFORE, the parties hereto do agree to amend the said State General Lease No. S-3852 as follows:

1. The first paragraph of Easement "C" for Water Pipe Line on Page 23 of said Exhibit "A", shall be and the same is hereby amended to read:

> "An easement for the operation, maintenance, and repair of a water pipe line over, under, and across the strips of land comprised of Portions A, B, and C, being five (5) feet wide and lying two and one-half (2-1/2) feet on each side of the following described centerlines; except that Courses 1 through 10 of Portion A shall be fifteen (15) feet wide and lying seven and one-half (7-1/2) feet on each side of the centerline;"

2. The phrase following the description of Course No. 42 on Page 27 of said Exhibit "A" shall be and the same is hereby amended to read:

"and containing an aggregate area of 1.869 acres, more or less."

In all other respects the terms and conditions of State General Lease No. S-3852 shall remain in full force and effect.

IN WITNESS WHEREOF, the parties hereto have hereunto subscribed their names as of the date first above written.

STATE OF HAWAII

Board
at its meeting held on
April 23, 1965

By: L. L. Summers
[redacted] Member
Board of Land and Natural Resources

APPROVED AS TO FORM
L. P. Goo
Deputy Attorney General

And By: George S. Wanaka
Member
Board of Land and Natural Resources

THE UNITED STATES OF AMERICA

By: H. Deale
By direction of the Chief,
Bureau of Yards and Docks,
acting under the direction
of the Secretary of the Navy

RECORDATION REQUESTED BY:

NOy(R)-68046

STATE OF HAWAII
BUREAU OF CONVEYANCES
RECEIVED FOR RECORD
LIBER 4821 PAGE 245
'64 AUG 20 AM 10:49

Certified to be a true and correct copy of the original presented for record.
MICHIKI ADACHI, Registrar Clerk
By:

AFTER RECORDATION, RETURN TO:
U. S. NAVY REAL ESTATE DIVISION
DISTRICT PUBLIC WORKS OFFICE
14 N.D., PEARL HARBOR
c/o Harold Godfrey JR
Phone: 430-32164

RETURN BY: MAIL ( ) PICKUP ( )
REQUESTOR TO FILL ABOVE

SPACE ABOVE THIS LINE FOR REGISTRAR'S USE

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE GENERAL LEASE NO. S-3852

1. THIS LEASE, made and entered into this 20th day of August, in the year one thousand nine hundred and sixty-four by and between the STATE OF HAWAII, represented by its Board of Land and Natural Resources, whose address is P. O. Box 621, Honolulu, Hawaii 96809, and whose interest in the property hereinafter described is that of fee simple owner, for itself, its administrators, successors, and assigns, hereinafter called the "Lessor," and THE UNITED STATES OF AMERICA, hereinafter called the "Government":

WITNESSETH: The parties hereto for the consideration hereinafter mentioned covenant and agree as follows:

2. The Lessor hereby leases to the Government four (4) tracts of land and appurtenant road access and utility rights-of-way described on Exhibit "A" attached hereto and hereby made a part hereof, for the following purpose: Government purposes.

3. TO HAVE AND TO HOLD the said premises for a term of sixty-five (65) years beginning August 20, 1964 and

BONHAM

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ending August 19, 2029; subject, however, to the rights of the Government and the Lessor respectively to terminate this lease in accordance with provisions 6 and 18 hereof.

4. The Government shall pay the Lessor rent at the following rate: ONE DOLLAR ($1.00) for the term of the lease, the receipt and sufficiency whereof is acknowledged.

5. The Government shall have the right, during the existence of this lease, to attach fixtures, and erect structures or signs, in or upon the premises hereby leased, which fixtures and structures, or signs, so placed in, upon or attached to the said premises shall be and remain the property of the Government and may be removed or otherwise disposed of by the Government. In addition, the Government shall post and maintain signs on roads and trails entering dangerous areas to provide a warning of any dangerous or hazardous activities; provided, that the information placed on the posted signs anywhere within the demised premises shall not be incompatible with the terms of this lease and, in those instances where joint use of an area is permitted, the information placed on the signs may include the permitted joint activities.

6. The Government may terminate this lease at any time by giving thirty (30) days' notice in writing to the Lessor.

7. The Government shall have exclusive use and control of existing or future fenced areas and/or areas occupied by Government improvements or facilities, it being mutually understood and agreed that the Lessor shall have joint use of the leased premises outside of the Government's exclusive use area; provided, however, that the Lessor shall not construct any facilities within the joint use area and shall not interfere

with any utility lines serving the leased premises without obtaining the written consent of the Government.

8. The Government shall not strip, spoil or improperly use the demised premises, and Government representatives shall not shoot or destroy game thereon unless duly licensed by the Lessor and in accordance with the Lessor's rules and regulations appurtenant thereto.

9. The Government will not be responsible for any loss, liability, claim, or demand for property damage, property loss, or personal injury, including but not limited to death, arising out of any injury or damage caused by or resulting from any act or omission of the Lessor or members of the general public in connection with their use of the premises described herein.

10. In recognition of the limited amount of land available for public use, of the importance of forest reserves and watersheds in Hawaii, and of the necessity for preventing or controlling erosion, the Government hereby agrees that, commensurate with its use of the premises, it will take reasonable action during its use of the premises herein demised to prevent unnecessary damage to or destruction of vegetation, wildlife and forest cover, geological features and related natural resources and improvements constructed by the Lessor, help preserve the natural beauty of the premises, avoid pollution or contamination of all ground and surface waters and remove or bury all trash, garbage and other waste materials resulting from Government use of the said premises.

11. The Lessor hereby agrees that, commensurate with the public use of the premises herein demised, it will take reasonable action during the use of the said premises by the

general public, to remove or bury trash, garbage, and other waste materials resulting from use of the said premises by the general public.

12. The Government shall take every reasonable precaution to prevent the start of any fire in the areas herein demised and shall take immediate and continuing action to extinguish any and all fires started by or resulting from Government activities. Further, the Government shall establish and at all times maintain a standard operating procedure for fighting fires within or adjacent to the subject leased property resulting from Government activities during its use and occupancy of the premises; provided, further, that Government personnel actually using the premises shall be familiar with said standard procedure including the means of implementation.

13. The Lessor reserves unto itself all ground and surface water, ores, minerals and mineral rights of every description on, in or under the demised premises but shall exploit or permit others to exploit the said ores, minerals and mineral rights only with the consent of the Government. Notwithstanding the foregoing reservation, the Government shall have the right to develop and use for construction projects on the demised premises sources of coral, rock and similar materials occurring naturally on the said premises and to use said ground and surface waters for purposes incident to the rights granted by this lease.

14. The Government hereby agrees that the use and enjoyment of the land herein demised shall not be in support of any policy which discriminates against anyone based upon race, creed or color.

15. The Government shall not grant any interest in the demised premises; provided, however, that the Government

shall have the right to grant the use of portions of the premises to Governmental agencies or their contractors, in which case any land rental derived from such use of the premises shall be covered into the Treasury of the State of Hawaii.

16. Subject to obtaining the prior approval of the Government, the Lessor reserves the right to grant rights or privileges to others not inconsistent with the terms of this lease affecting areas not under exclusive Government use and control.

17. The Lessor will not be responsible for any loss, liability, claim, or demand for property damage, property loss, or personal injury, including but not limited to death, arising out of any injury or damage caused by or resulting from any act or omission of the Federal Government in connection with the Federal Government's use of the premises described herein.

18. In the event that the leased property is not used by the Government for a period of three (3) consecutive years, this lease may be terminated upon ninety (90) days' written notice from the Lessor to the Government; provided, however, that if prior to the expiration of the aforesaid 90-day period the Secretary of the Navy shall find and determine that the leased property is required for military purposes and shall notify the Lessor in writing of this finding and determination, this lease will continue in effect; provided, further, that periods during which a national emergency has been declared by the President or the Congress of the United States and periods during which major combat elements are temporarily deployed away from the State of Hawaii shall not be included in the said three-year period. During such period

of temporary deployment the parties hereto shall discuss and give consideration to and provide for additional public use of the demised premises compatible with then existing military requirements. The Government will assure that current military standards concerning adequate utilization are applied to these premises and will assure that such use is known and is a matter of record and available to the Lessor upon request.

19. When, at some future date, the mission of the Government agency using the demised premises is deemed by the Government to be compatible with greater joint use of the said premises, the parties hereto shall discuss and give consideration to and provide for the additional public use thereof not inconsistent with the then existing Government mission.

20. Any notice under the terms of this lease shall be in writing signed by a duly authorized representative of the party giving such notice, and if given by the Government shall be addressed to the Lessor at P. O. Box 621, Honolulu, Hawaii 96809, and if given by the Lessor shall be addressed to the District Public Works Officer, 14th Naval District, Navy No. 128, Box 94, F.P.O. San Francisco, California, 96614.

DIR. PAC DOCKS

21. The Government's compliance with all obligations placed on it by this lease shall be subject to the availability of funds.

22. The Lessor's compliance with any obligations which may be placed on it by this lease shall be subject to the availability of funds and/or personnel.

23. The Government agrees to reforest areas, as expeditiously as practicable and within a period mutually agreed upon, where it can be demonstrated that substantial

forest cover, including trees, has been destroyed as a direct result of Government activities; provided, however, that the Lessor shall obtain advance Government approval of all future plantings proposed by the Lessor.

24. The Government shall surrender possession of the premises upon the expiration or sooner termination of this lease and, if required by the Lessor, shall within sixty (60) days thereafter, or within such additional time as may be mutually agreed upon, remove its signs and other structures; provided that in lieu of removal of structures the Government abandon them in place. The Government shall also remove weapons and shells used in connection with its training activities to the extent that a technical and economic capability exists and provided that expenditures for removal of shells will not exceed the fair market value of the land.

25. (a) That, except as otherwise provided in this lease, any dispute concerning a question of fact arising under this lease which is not disposed of by agreement shall be decided by the DIR PACDOCKS District Public Works Officer, 14th Naval District, Honolulu, Hawaii, hereinafter referred to as said officer, who shall within a reasonable time reduce his decision and the reasons therefor to writing and mail or otherwise furnish a copy thereof to the Lessor. The decision of the said officer shall be final and conclusive unless, within thirty (30) days from the date of receipt of such copy, the Lessor mails or otherwise furnishes to the said officer a written appeal addressed to the Secretary of the Navy. The decision of the Secretary or his duly authorized representative for the determination of such appeals shall be final and conclusive unless determined by a court of competent jurisdiction

to have been fraudulent, or capricious, or arbitrary, or so grossly erroneous as necessarily to imply bad faith, or not supported by substantial evidence. In connection with any appeal proceeding under this condition, the Lessor shall be afforded an opportunity to be heard and to offer evidence in support of its appeal.

(b) This condition does not preclude consideration of law questions in connection with decisions provided for in paragraph (a) above: Provided, that nothing in this condition shall be construed as making final the decision of any administrative official, representative, or board on a question of law.

(c) That all appeals under this provision shall be processed expeditiously.

26. The Lessor warrants that no person or selling agency has been employed or retained to solicit or secure this lease upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by the Lessor for the purpose of securing business. For breach or violation of this warranty the Government shall have the right to annul this lease without liability or in its discretion to deduct from the lease price or consideration the full amount of such commission, percentage, brokerage, or contingent fee.

27. No member of or delegate to Congress or resident commissioner shall be admitted to any share or part of this lease or to any benefit that may arise therefrom, but this provision shall not be construed to extend to this lease if made with a corporation for its general benefit.

28. (a) The Government may, by written notice to the Lessor, terminate the right of the Lessor to proceed under this lease if it is found, after notice and hearing, by the Secretary of the Navy or his duly authorized representative, that gratuities (in the form of entertainment, gifts, or otherwise) were offered or given by the Lessor, or any agent or representative of the Lessor, to any officer or employee of the Government with a view toward securing a lease or securing favorable treatment with respect to the awarding or amending, or the making of any determinations with respect to the performing, of such lease; provided that the existence of facts upon which the Secretary of the Navy or his duly authorized representative makes such findings shall be in issue and may be reviewed in any competent court.

(b) In the event this lease is terminated as provided in paragraph (a) hereof, the Government shall be entitled (i) to pursue the same remedies against the Lessor as it could pursue in the event of a breach of the lease by the Lessor, and (ii) as a penalty in addition to any other damages to which it may be entitled by law, to exemplary damages in an amount (as determined by the Secretary of the Navy or his duly authorized representative) which shall be not less than three nor more than ten times the costs incurred by the Lessor in providing any such gratuities to any such officer or employee.

(c) The rights and remedies of the Government provided in this clause shall not be exclusive and are in addition to any other rights and remedies provided by law or under this lease.

29. This lease is not subject to Title 10, United States Code, Section 2662.

IN WITNESS WHEREOF, the parties hereto have hereunto subscribed their names as of the date first above written.

STATE OF HAWAII

By: _____
Chairman and Member
Board of Land and Natural Resources

And By: _____
Member
Board of Land and Natural Resources

SEAL

THE UNITED STATES OF AMERICA

By: _____
By direction of the Chief, Bureau of Yards and Docks, acting under the direction of the Secretary of the Navy

APPROVED AS TO FORM:

_____
BERT T. KOBAYASHI
Attorney General
State of Hawaii

_____
PETER C. LEWIS
Deputy Attorney General
State of Hawaii

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EXHIBIT "A"

LAND SITUATE AT MANA, WAIMEA (KONA), KAUAI, HAWAII

PORTION OF THE GOVERNMENT LAND OF WAIMEA

TRACT E-1

ADDITION TO BONHAM AIR BASE (FORMERLY MANA AIRPORT)

Beginning at the South corner of this piece of land on the Easterly boundary of Bonham Air Base of the land described in Governor's Executive Order No. 945, Part 2, dated June 10, 1941, the coordinates of said point of beginning referred to Government Survey Triangulation Station "NOHILI", being 606.67 feet South and 2,913.99 feet East, and running by azimuths measured clockwise from True South:-

| | | | |
|---|---|---|---|
| 1. | 191° 05' | 2,936.81 feet | along Bonham Air Base of the land described in Governor's Executive Order No. 945, Part 2, to Government Survey Triangulation Station "NOHILI 1"; |
| 2. | 224° 03' | 1,123.60 feet | along Bonham Air Base of the land described in Governor's Executive Order No. 945, Part 2; |

| | | | |
|---|---|---|---|
| 3. | 314° 03' | 1,194.24 feet | along remainder of Government land of Waimea; |
| 4. | 44° 03' | 1,506.89 feet | along remainder of Government land of Waimea; |
| 5. | 11° 05' | 742.14 feet | along remainder of Government land of Waimea; |
| 6. | 44° 03' | 1,458.00 feet | along remainder of Government land of Waimea to the point of beginning and containing an area of 69.562 acres. |

TRACT E-2

ADDITION TO BONHAM AIR BASE (FORMERLY MANA AIRPORT)

Beginning at a point on the Westerly boundary of this piece of land on the Easterly boundary of Bonham Air Base, being also the Northeast corner of the land described in Governor's Executive Order No. 887, dated June 29, 1940, and the Southeast corner of the land described in Part 2 in Governor's Executive Order No. 945, dated June 10, 1941, the coordinates of said point of beginning referred to Government Survey Triangulation Station "NOHILI" being 4,755.50 feet South and 1,955.50 feet East and running by azimuths measured clockwise from true South:

| | | | |
|---|---|---|---|
| 1. | 182° 40' | 982.62 feet | along the Easterly boundary of Bonham Air Base (Governor's Executive Order No. 945, Part 2); |
| 2. | 272° 40' | 138.14 feet | along remainder of Government land of Waimea; |
| 3. | 11° 06' | 176.75 feet | along remainder of Government land of Waimea; |
| 4. | 2° 46' | 304.55 feet | along remainder of Government land of Waimea; |
| 5. | 357° 49' | 317.01 feet | along remainder of Government land of Waimea; |
| 6. | 9° 05' | 255.65 feet | along remainder of Government land of Waimea; |

| | | | | |
|---|---|---|---|---|
| 7. | 15° | 19' | | 274.30 feet along remainder of Government land of Waimea; |
| 8. | 11° | 49' | | 267.80 feet along remainder of Government land of Waimea; |
| 9. | 25° | 48' | | 180.60 feet along remainder of Government land of Waimea; |
| 10. | 29° | 05' | | 326.22 feet along remainder of Government land of Waimea; |
| 11. | 21° | 43' | | 276.90 feet along remainder of Government land of Waimea; |
| 12. | 11° | 28' | | 460.00 feet along remainder of Government land of Waimea; |
| 13. | 3° | 02' | | 270.92 feet along remainder of Government land of Waimea; |
| 14. | 6° | 44' | 30" | 661.62 feet along remainder of Government land of Waimea; |
| 15. | 18° | 03' | | 244.98 feet along remainder of Government land of Waimea; |
| 16. | 11° | 26' | | 156.12 feet along remainder of Government land of Waimea; |
| 17. | 3° | 02' | | 299.35 feet along remainder of Government land of Waimea; |
| 18. | 14° | 10' | 30" | 140.75 feet along remainder of Government land of Waimea; |
| 19. | 28° | 23' | | 252.04 feet along remainder of Government land of Waimea; |
| 20. | 23° | 01' | | 540.31 feet along remainder of Government land of Waimea; |
| 21. | 13° | 32' | | 173.20 feet along remainder of Government land of Waimea; |
| 22. | 0° | 23' | | 351.61 feet along remainder of Government land of Waimea; |

| | | | | | |
|---|---|---|---|---|---|
| 23. | 5° | 24' | | 302.35 feet | along remainder of Government land of Waimea; |
| 24. | 16° | 07' | 30" | 411.61 feet | along remainder of Government land of Waimea; |
| 25. | 354° | 14' | 30" | 153.27 feet | along remainder of Government land of Waimea; |
| 26. | 320° | 35' | | 151.80 feet | along remainder of Government land of Waimea; |
| 27. | 329° | 50' | | 160.58 feet | along remainder of Government land of Waimea; |
| 28. | 344° | 15' | | 335.36 feet | along remainder of Government land of Waimea; |
| 29. | 357° | 09' | 30" | 518.90 feet | along remainder of Government land of Waimea; |
| 30. | 8° | 37' | | 184.64 feet | along remainder of Government land of Waimea; |
| 31. | 19° | 00' | 30" | 265.05 feet | along remainder of Government land of Waimea; |
| 32. | 15° | 50' | 30" | 604.48 feet | along remainder of Government land of Waimea; |
| 33. | 23° | 04' | | 1,090.37 feet | along remainder of Government land of Waimea; |
| 34. | 12° | 21' | | 676.47 feet | along remainder of Government land of Waimea; |
| 35. | 7° | 25' | 30" | 423.32 feet | along remainder of Government land of Waimea; |
| 36. | 8° | 48' | 30" | 203.04 feet | along remainder of Government land of Waimea; |
| 37. | 12° | 36' | | 232.73 feet | along remainder of Government land of Waimea; |
| 38. | 17° | 59' | | 193.71 feet | along remainder of Government land of Waimea; |

| | | | | | |
|---|---|---|---|---|---|
| 39. | 21° | 11' | 30" | 426.37 feet | along remainder of Government land of Waimea; |
| 40. | 2° | 29' | | 158.62 feet | along remainder of Government land of Waimea; |
| 41. | 344° | 12' | | 143.83 feet | along remainder of Government land of Waimea; |
| 42. | 329° | 11' | | 1,451.33 feet | along remainder of Government land of Waimea; |
| 43. | 46° | 20' | | 587.33 feet | along remainder of Government land of Waimea; |
| 44. | 25° | 10' | | 30.64 feet | along remainder of Government land of Waimea, to the Easterly boundary of Bonham Air Base (Governor's Executive Order No. 945, Part 1); |
| 45. | 137° | 30' | 20" | 70.14 feet | along the Easterly side of Bonham Air Base, to a point at the North corner of Governor's Executive Order No. 945, Part 1 and the Southeasterly boundary of Governor's Executive Order No. 887; |
| 46. | 205° | 10' | | 156.00 feet | along Bonham Air Base (Governor's Executive Order No. 887); |
| 47. | 161° | 00' | | 1,680.00 feet | along Bonham Air Base (Governor's Executive Order No. 887); |
| 48. | 202° | 00' | | 670.00 feet | along Bonham Air Base (Governor's Executive Order No. 887); |
| 49. | 191° | 00' | | 1,730.00 feet | along Bonham Air Base (Governor's Executive Order No. 887); |
| 50. | 202° | 40' | | 1,130.00 feet | along Bonham Air Base (Governor's Executive Order No. 887); |

51. 197° 00' 950.00 feet along Bonham Air Base (Governor's Executive Order No. 887);

52. 177° 00' 550.00 feet along Bonham Air Base (Governor's Executive Order no. 887);

53. 153° 00' 660.00 feet along Bonham Air Base (Governor's Executive Order No. 887);

54. 193° 00' 215.96 feet along Bonham Air Base (Governor's Executive Order No. 877);

55. 106° 18' 20" 337.39 feet along Bonham Air Base (Governor's Executive Order No. 877);

56. 196° 26' 30" 188.85 feet along Cemetery Lot along remainder of Government land of Waimea;

57. 286° 18' 20" 326.08 feet along Bonham Air Base (Governor's Executive Order No. 887);

58. 193° 00' 294.85 feet along Bonham Air Base (Governor's Executive Order No. 887);

59. 181° 00' 670.00 feet along Bonham Air Base (Governor's Executive Order No. 887);

60. 205° 00' 850.00 feet along Bonham Air Base (Governor's Executive Order No. 887);

61. 190° 34' 956.60 feet along Bonham Air Base (Governor's Executive Order No. 887);

62. 186° 00' 1,200.00 feet along Bonham Air Base (Governor's Executive Order No. 887);

63. 206° 00' 900.00 feet along Bonham Air Base (Governor's Executive Order No. 887);

64. 192° 00' 530.00 feet along Bonham Air Base (Governor's Executive Order No. 945, Part 2), to the point of beginning and containing an AREA OF 45.268 ACRES.

RESERVING, HOWEVER, to the Grantor, its permittees, lessees and assigns, a right of access to and from the following described parcel of land:

Beginning at the southeasterly corner of this parcel of land, said initial point being also the end of "Course 55" of Tract E-2 described hereinabove, marked by an iron pipe and running by azimuths measured clockwise from True South:-

1. 102° 58' 30" 91.20 feet along Bonham Air Base (Governor's Executive Order No. 887);

2. 187° 28' 30" 186.20 feet along Bonham Air Base (Governor's Executive Order No. 887);

3. 281° 28' 30" 120.50 feet along Bonham Air Base (Governor's Executive Order No. 887);

4. 16° 26' 30" 188.85 feet along "Course 56" of Parcel E-2 hereinabove described to the point of beginning and containing 0.454 ACRE more or less.

TRACT E-3

BONHAM AIR BASE (FORMERLY MANA AIRPORT) STORAGE AREA

Being a tract of land having an aggregate area of 74.463 acres and comprised of Parcels 1 and 2 described as follows:

PARCEL 1

Beginning at the Northwest corner of this piece of land being also the Northeast corner of Parcel 2 hereinafter described, said initial point being on the divisional line between the lands of the State of Hawaii and Hawaiian Home Land, the coordinates of said point of beginnning referred to Government Survey Triangulation Station "NOHILI" being 8,009.49 feet South and 9,806.81

feet East and running by azimuths measured clockwise from True South:-

| | | | | | |
|---|---|---|---|---|---|
| 1. | 265° | 32' | 40" | 930.14 feet | along remainder of Government land of Waimea; |
| 2. | 359° | 05' | 10" | 722.14 feet | along remainder of Government land of Waimea; |
| 3. | 23° | 47' | 20" | 1,397.98 feet | along remainder of Government land of Waimea to the divisional line between said lands of the State of Hawaii and Hawaiian Home Land; |
| 4. | 169° | 00' | | 1,965.09 feet | along remainder of Government land of Waimea along the land of the State of Hawaii, the same being along Parcel 2 hereinafter described to the point of beginning and containing an AREA OF 25.686 ACRES. |

PARCEL 2

Beginning at the Northeast corner of this piece of land, being also the initial point of Parcel 1 hereinabove described, and running by azimuths measured clockwise from true South:

| | | | | |
|---|---|---|---|---|
| 1. | 349° | 00' | 1,965.09 feet | along remainder of Government land of Waimea along the divisional line between the lands of the State of Hawaii and Hawaiian Home Land (along Parcel 1 hereinabove described); |
| 2. | 23° | 47' 20" | 128.83 feet | along remainder of Government land of Waimea; |
| 3. | 89° | 11' 20" | 1,078.56 feet | along remainder of Government land of Waimea; |
| 4. | 169° | 42' | 1,248.24 feet | along remainder of Government land of Waimea; |
| 5. | 206° | 32' 10" | 508.45 feet | along remainder of Government land of Waimea; |
| 6. | 175° | 31' 40" | 319.61 feet | along remainder of Government land of Waimea; |
| 7. | 265° | 32' 40" | 778.77 feet | along remainder of Government land of Waimea to the point of beginning and containing an area of 48.777 acres. |

TRACT E-4

BONHAM AIR BASE (FORMERLY MANA AIRPORT) WATER STORAGE AREA

Beginning at the West corner of this piece of land, the coordinates of said point of beginning referred to Government Survey Triangulation Station "MANA 2", being 801.42 feet South and 10,615.96 feet East, and running by azimuths measured clockwise from true South:

| | | | | |
|---|---|---|---|---|
| 1. | 202° | 36' 20" | 121.59 feet | along remainder of Government land of Waimea; |
| 2. | 302° | 28' 40" | 104.23 feet | along remainder of Government land of Waimea; |
| 3. | 346° | 52' 10" | 56.56 feet | along remainder of Government land of Waimea; |

| | | | | |
|---|---|---|---|---|
| 4. | 81° | 50' | 40" | 120.94 feet along remainder of Government land of Waimea; |
| 5. | 119° | 51' | 40" | 32.06 feet along remainder of Government land of Waimea to the point of beginning and containing an area of 0.264 acre. |

SUBJECT, HOWEVER, to the following:

1. That certain lease for 15 years and dated December 23, 1953, and being General Lease No. 3458 from the Territory (now State) of Hawaii to Kekaha Sugar Company, Limited, and filed with the Department of Land and Natural Resources of the State of Hawaii, Honolulu, Hawaii.

2. Easement C-1 being 80 feet wide over and across Tract E-2 hereinabove described, and the same being the extension of Easement C as described in said Executive Order No. 945, Part 2, and shown on the map filed with CSF No. 9485 in the Survey Division of the State of Hawaii, Honolulu, Hawaii.

TOGETHER WITH Easement A and Easement B for roadways, Easement C for a water line, and Easement D for a power line, said easements being more particularly described as follows:

EASEMENT "A" FOR ROADWAY

An easement for a roadway over and across the strips of land hereinafter described as Part I being twenty-five (25.00) feet wide, Part II comprised of Portions A, B, C, and D being fifteen (15.00) feet wide, and Part III being twelve (12.00) feet wide, and containing an aggregate area of 4.007 acres.

LAND SITUATE AT MANA, WAIMEA (KONA), KAUAI, HAWAII

Being a Portion of the Government Land of Waimea

PART I

Being a strip of land twenty-five (25.00) feet wide and lying twelve and one-half (12.50) feet on each side of the following described centerline:

Beginning at the West end of this strip of land, being also the Easterly terminus of the centerline of Kaumualii Highway, the coordinates of said point of beginning referred to Government Survey Triangulation Station "MANA 2", being 701.32 feet North and 5,185.12 feet East, and running by azimuths measured clockwise from true South:

1. 258° 52' 20" — 27.19 feet along remainder of Government land of Waimea;

   thence along remainder of Government land of Waimea, on a curve to the left with a radius of 1,730.00 feet, the chord azimuth and distance being:

2. 256° 07' 40" — 165.67 feet;

3. 253° 23' 00" — 380.10 feet along remainder of Government land of Waimea;

thence along remainder of Government land of Waimea, on a curve to the right with a radius of 10,260.00 feet, the chord azimuth and distance being:

4. 254° 11' 10" 287.50 feet;

5. 254° 59' 20" 484.69 feet along remainder of Government land of Waimea;

thence along remainder of Government land of Waimea, on a curve to the right with a radius of 5,130.00 feet, the chord azimuth and distance being:

6. 256° 35' 25" 286.72 feet;

7. 258° 11' 30" 18.66 feet along remainder of Government land of Waimea;

thence along remainder of Government land of Waimea, on a curve to the left with a radius of 5,090.00 feet, the chord azimuth and distance being:

8. 256° 13' 20" 349.85 feet;

9. 254° 15' 10" 1,549.33 feet along remainder of Government land of Waimea;

thence along remainder of Government land of Waimea, on a curve to the right with a radius of 650.00 feet, the chord azimuth and distance being:

10. 262° 11' 25" 179.52 feet and containing an area of 2.141 acres.

PART II

Being a strip of land fifteen (15.00) feet wide and lying seven and one-half (7.50) feet on each side of the centerline hereinafter described as Portions A, B, C, and D.

PORTION A

Beginning at the Westerly end of this strip of land, being also the end of the strip of land hereinabove described as Part I, and running by azimuths measured clockwise from true South:

11. 270° 07' 40" 110.59 feet along remainder of Government land of Waimea;

thence along remainder of Government land of Waimea, on a curve to the right with a radius of 140.00 feet, the chord azimuth and distance being:

12. 302° 08' 50" 148.46 feet;

13. 334° 10' 00" 367.60 feet along remainder of Government land of Waimea;

thence along remainder of Government land of Waimea, on a curve to the left with a radius of 190.00 feet, the chord azimuth and distance being:

14. 315° 25' 40" 122.08 feet;

15. 296° 41' 20" 196.91 feet along remainder of Government land of Waimea;

thence along remainder of Government land of Waimea, on a curve to the right with a radius of 250.00 feet, the chord azimuth and distance being:

16. 309° 17' 15" 109.06 feet;

17. 321° 53' 10" 161.32 feet along remainder of Government land of Waimea;

thence along remainder of Government land of Waimea, on a curve to the right with a radius of 300.00 feet, the chord azimuth and distance being:

18. 327° 10' 50" 55.36 feet;

19. 332° 28' 30" 142.35 feet along remainder of Government land of Waimea;

thence along remainder of Government land of Waimea, on a curve to the right with a radius of 150.00 feet, the chord azimuth and distance being:

20. 344° 11' 40" 60.94 feet;

21. 355° 54' 50" 63.21 feet along remainder of Government land of Waimea;

thence along remainder of Government land of Waimea, on a curve to the left with a radius of 300.00 feet, the chord azimuth and distance being:

22. 344° 04' 35" 123.08 feet;

23. 332° 14' 20" 148.05 feet along remainder of Government land of Waimea.

PORTION B

Beginning at the Westerly end of this strip of land, said initial point being also the end of Course No. 11 of the land hereinabove described as Portion A of Part II, and running by azimuths measured clockwise from true South:

24. 270° 07' 40" 16.03 feet along remainder of Government land of Waimea;

thence along remainder of Government land of Waimea, on a curve to the left with a radius of 200.00 feet, the chord azimuth and distance being:

25. 258° 02' 30" 83.75 feet;

26. 245° 57' 20" 331.96 feet along remainder of Government land of Waimea;

thence along remainder of Government land of Waimea, on a curve to the right with a radius of 170.00 feet, the chord azimuth and distance being:

27. 259° 33' 35" 79.97 feet;

28. 273° 09' 50" 127.80 feet along remainder of Government land of Waimea;

thence along remainder of Government land of Waimea, on a curve to the left with a radius of 130.00 feet, the chord azimuth and distance being:

29. 259° 15' 20" 62.50 feet;

30. 245° 20' 50" 206.32 feet along remainder of Government land of Waimea;

thence along remainder of Government land of Waimea, on a curve to the left with a radius of 160.00 feet, the chord azimuth and distance being:

31. 231° 22' 20" 77.28 feet;

| | | | | | |
|---|---|---|---|---|---|
| 32. | 217° | 23' | 50" | 234.73 feet | along remainder of Government land of Waimea; |
| | | | | | thence along remainder of Government land of Waimea, on a curve to the right with a radius of 210.00 feet, the chord azimuth and distance being: |
| 33. | 235° | 36' | 30" | 131.26 feet | along remainder of Government land of Waimea; |
| 34. | 253° | 49' | 10" | 52.37 feet | along remainder of Government land of Waimea; |
| | | | | | thence along remainder of Government land of Waimea, on a curve to the right with a radius of 1,020.00 feet, the chord azimuth and distance being: |
| 35. | 256° | 21' | 35" | 90.42 feet; | |
| 36. | 258° | 54' | 00" | 120.26 feet | along remainder of Government land of Waimea, to a point on the Westerly boundary of the land described as Tract E-3 (Storage Area), and said point being distant 185.23 feet from the end of Course No. 6 therefor. |

PORTION C

Beginning at the North end of this strip of land, said initial point being distant 307.71 feet from the end of Course No. 26 of the land hereinabove described as Portion B of Part II, and running by azimuths measured clockwise from true South:

| | | | | | |
|---|---|---|---|---|---|
| | | | | | Along remainder of Government land of Waimea, on a curve to the left with a radius of 40.00 feet, the chord azimuth and distance being: |
| 37. | 20° | 03' | 40" | 57.44 feet; | |
| 38. | 334° | 10' | 00" | 58.03 feet | along remainder of Government land of Waimea, to the end of Course No. 12 of the land hereinabove described as Portion A of Part II. |

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PORTION D

Beginning at the West end of this strip of land, being also distant 94.72 feet from the end of Course No. 23 of the land hereinabove described as Portion A of Part II, and running by azimuths measured clockwise from true South:

Along remainder of Government land of Waimea, on a curve to the left with a radius of 80.00 feet, the chord azimuth and distance being:

39. 281° 05' 30" 124.60 feet;

40. 229° 56' 40" 126.19 feet along remainder of Government land of Waimea;

thence along remainder of Government land of Waimea, on a curve to the left with a radius of 620.00 feet, the chord azimuth and distance being:

41. 221° 21' 00" 185.30 feet;

42. 212° 45' 20" 79.18 feet along remainder of Government land of Waimea;

thence along remainder of Government land of Waimea, on a curve to the right with a radius of 100.00 feet, the chord azimuth and distance being:

43. 239° 37' 55" 90.41 feet;

44. 266° 30' 30" 13.97 feet along remainder of Government land of Waimea, to a point on the West boundary of the land described as Tract E-3 (Storage Area), and said point being distant 984.44 feet from the end of Course No. 4 thereof.

Said Part II comprised of Portions A, B, C, and D contains a total area of 1.448 acres.

PART III

Being a strip of land twelve (12.00) feet wide and lying six (6.00) feet on each side of the following described center-line:

Beginning at the North end of this strip of land, being also the end of Portion A of Part II of the land hereinabove described, and running by azimuths measured clockwise from true South:

Along remainder of Government land of Waimea, on a curve to the right with a radius of 50.00 feet, the chord azimuth and distance being:

45. 0° 02' 40" 46.65 feet;

46. 27° 51' 00" 219.26 feet along remainder of Government land of Waimea;

thence along remainder of Government land of Waimea, on a curve to the left with a radius of 110.00 feet, the chord azimuth and distance being:

47. 356° 02' 50" 115.94 feet;

48. 324° 14' 40" 92.08 feet along remainder of Government land of Waimea;

thence along remainder of Government land of Waimea, on a curve to the left with a radius of 2,010.00 feet, the chord azimuth and distance being:

49. 320° 12' 20" 283.14 feet;

50. 316° 10' 00" 14.86 feet along remainder of Government land of Waimea;

thence along remainder of Government land of Waimea, on a curve to the right with a radius of 490.00 feet, the chord azimuth and distance being:

51. 324° 20' 05" 139.24 feet;

52. 332° 30' 10" 70.81 feet along remainder of Government land of Waimea;

thence along remainder of Government land of Waimea, on a curve to the right with a radius of 80.00 feet, the chord azimuth and distance being:

53. 345° 22' 50" 35.66 feet;

54. 358° 15' 30" 5.17 feet along remainder of Government land of Waimea;

thence along remainder of Government land of Waimea, on a curve to the left with a radius of 90.00 feet, the chord azimuth and distance being:

55. 305° 44' 00" 142.85 feet;

56. 253° 12' 30" 61.69 feet along remainder of Government land of Waimea;

thence along remainder of Government land of Waimea, on a curve to the right with a radius of 70.00 feet, the chord azimuth and distance being:

57. 290° 19' 55" 84.50 feet;

58. 327° 27' 20" 67.70 feet along remainder of Government land of Waimea;

thence along remainder of Government land of Waimea, on a curve to the left with a radius of 90.00 feet, the chord azimuth and distance being:

59. 310° 45' 10" 51.73 feet;

60. 294° 03' 00" 26.02 feet along remainder of Government land of Waimea;

thence along remainder of Government land of Waimea, on a curve to the right with a radius of 210.00 feet, the chord azimuth and distance being:

61. 299° 36' 15" 40.65 feet;

62. 305° 09' 30" 17.52 feet along remainder of Government land of Waimea;

thence along remainder of Government land of Waimea, on a curve to the left with a radius of 120.00 feet, the chord azimuth and distance being:

63. 286° 30' 35" 76.74 feet;

64. 267° 51' 40" 20.55 feet along remainder of Government land of Waimea to a point on the Northwest boundary of Tract E-4 (Water Storage), and said point being distant 109.59 from the end of Course No. 1 thereof, and containing an area of 0.455 acre.

EASEMENT "B" FOR ROADWAY

An easement for a roadway over and across a strip of land twenty-five (25.00) feet wide and lying twelve and one-half (12.50) feet on each side of the following described centerline:

Beginning at the Northwest end of this strip of land, said point of beginning being distant 296.79 feet from the end of Course No. 43 of the land hereinabove described as Tract E-2, the coordinates of said point of beginning referred to Government Survey Triangulation Station "MANA 2", being 6,763.30 feet South and 1,687.64 feet East, and running by azimuths measured clockwise from true South:

1. 346° 04' 50" — 80.59 feet along remainder of Government land of Waimea;

   thence along remainder of Government land of Waimea, on a curve to the left with a radius of 490.00 feet, the chord azimuth and distance being:

2. 332° 32' 10" — 229.52 feet;

3. 318° 59' 30" — 841.91 feet along remainder of Government land of Waimea;

   thence along remainder of Government land of Waimea, on a curve to the right with a radius of 3,390.00 feet, the chord azimuth and distance being:

4. 320° 57' 25" — 232.51 feet;

5. 322° 55' 20" — 229.15 feet along remainder of Government land of Waimea;

   thence along remainder of Government land of Waimea,

on a curve to the right with a radius of 2,020.00 feet, the chord and azimuth distance being:

6. 328° 19' 50" 380.78 feet;

7. 333° 44' 20" 119.88 feet along remainder of Government land of Waimea;

thence along remainder of Government land of Waimea, on a curve to the left with a radius of 530.00 feet, the chord azimuth and distance being:

8. 292° 53' 25" 693.31 feet;

9. 252° 02' 30" 305.67 feet along remainder of Government land of Waimea;

thence along remainder of Government land of Waimea, on a curve to the right with a radius of 1,160.00 feet, the chord azimuth and distance being:

10. 268° 09' 00" 643.69 feet;

11. 284° 15' 30" 53.60 feet along remainder of Government land of Waimea;

thence along remainder of Government land of Waimea, on a curve to the left with a radius of 630.00 feet, the chord azimuth and distance being:

12. 277° 49' 45" 141.09 feet;

13. 271° 24' 00" 316.92 feet along remainder of Government land of Waimea;

thence along remainder of Government land of Waimea, on a curve to the left with a radius of 1,170.00 feet, the chord azimuth and distance being:

14. 266° 40' 05" 193.04 feet;

15. 261° 56' 10" 110.35 feet along remainder of Government land of Waimea;

thence along remainder of Government land of Waimea, on a curve to the right with a radius of 1,490.00 feet, the chord azimuths and distance being:

16. 269° 45' 55" 405.94 feet;

17. 277° 35' 40" 320.21 feet along remainder of Government land of Waimea, to the Southwest side of Kaumualii Highway right of way, and containing an area of 3.084 acres.

## EASEMENT "C" FOR WATER PIPE LINE

An easement for the operation, maintenance, and repair of a water pipe line over, under, and across the strips of land comprised of Portions A, B, and C, being five (5.00) feet wide and lying two and one-half (2.50) feet on each side of the following described centerlines:

### PORTION A

See Map 998170 - Should be 29.49 ?

Beginning at the West end of this strip of land, said point of beginning being distant 39.49 feet from the end of Course No. 26 of the land hereinabove described as Tract E-2, and running by azimuths measured clockwise from true South:

| | | | | | |
|---|---|---|---|---|---|
| 1. | 259° | 19' | 50" | 1,078.06 feet | along remainder of Government land of Waimea (also across a portion of Kaumualii Highway); |
| 2. | 247° | 20' | 20" | 138.02 feet | along remainder of Government land of Waimea; |
| 3. | 243° | 12' | 40" | 286.97 feet | along remainder of Government land of Waimea; |
| 4. | 266° | 26' | 20" | 90.10 feet | along remainder of Government land of Waimea; |
| 5. | 307° | 05' | 20" | 46.30 feet | along remainder of Government land of Waimea; |
| | | | | | thence along remainder of Government land of Waimea, on a curve to the left with a radius of 100.00 feet, the chord azimuth and distance being: |
| 6. | 295° | 29' | 15" | 40.22 feet; | |
| 7. | 283° | 53' | 10" | 45.26 feet | along remainder of Government land of Waimea; |

| | | | | | |
|---|---|---|---|---|---|
| 8. | 263° | 29' | 10" | 281.46 feet | along remainder of Government land of Waimea; |
| 9. | 259° | 19' | 50" | 299.81 feet | along remainder of Government land of Waimea (being also across a portion of Kaumualii Highway); |
| 10. | 258° | 57' | 10" | 838.93 feet | along remainder of Government land of Waimea (being also across a portion of Kaumualii Highway); |
| 11. | 253° | 21' | 50" | 435.75 feet | along remainder of Government land of Waimea (being also across a portion of Kaumualii Highway); |
| 12. | 257° | 50' | 30" | 331.29 feet | along remainder of Government land of Waimea; |
| 13. | 255° | 56' | 50" | 127.63 feet | along remainder of Government land of Waimea; |
| 14. | 259° | 28' | 30" | 100.96 feet | along remainder of Government land of Waimea; |
| 15. | 338° | 34' | 40" | 246.40 feet | along remainder of Government land of Waimea; |
| 16. | 332° | 51' | 40" | 48.71 feet | along remainder of Government land of Waimea; |
| 17. | 354° | 16' | 20" | 289.16 feet | along remainder of Government land of Waimea; |
| 18. | 265° | 32' | 30" | 116.97 feet | along remainder of Government land of Waimea; |
| 19. | 265° | 50' | 30" | 680.93 feet | along remainder of Government land of Waimea; |
| 20. | 292° | 28' | 40" | 28.93 feet | along remainder of Government land of Waimea; |
| 21. | 266° | 24' | 20" | 241.48 feet | along remainder of Government land of Waimea; |

22. 336° 51' 30" 300.43 feet along remainder of Government land of Waimea;

thence along remainder of Government land of Waimea, on a curve to the left with a radius of 170.00 feet, the chord azimuth and distance being:

23. 315° 52' 50" 121.72 feet;

24. 294° 54' 10" 891.29 feet along remainder of Government land of Waimea;

thence along remainder of Government land of Waimea, on a curve to the left with a radius of 250.00 feet, the chord azimuth and distance being:

25. 270° 06' 05" 209.74 feet;

26. 245° 18' 00" 296.08 feet along remainder of Government land of Waimea;

thence along remainder of Government land of Waimea, on a curve to the right with a radius of 150.00 feet, the chord azimuth and distance being:

27. 256° 18' 50" 57.31 feet;

28. 267° 19' 40" 846.01 feet along remainder of Government land of Waimea;

thence along remainder of Government land of Waimea, on a curve to the right with a radius of 140.00 feet,the chord azimuth and distance being:

29. 282° 33' 35" 73.56 feet;

30. 297° 47' 30" 39.78 feet along remainder of Government land of Waimea;

31. 316° 06' 40" 363.86 feet along remainder of Government land of Waimea;

32. 328° 43' 40" 220.98 feet along remainder of Government land of Waimea;

33. 257° 41' 20" 148.06 feet along remainder of Government land of Waimea;

34. 320° 32' 10" 142.75 feet along remainder of Government land of Waimea;

35. 306° 21' 10" 84.13 feet along remainder of Government land of Waimea;

36. 293° 24' 40" 130.82 feet along remainder of Government land of Waimea;

37. 273° 52' 30" 24.87 feet along remainder of Government land of Waimea, to a point on the Southwest boundary of the land hereinabove described as Tract E-4, and said point being distant 23.74 feet from the end of Course No. 5 thereof.

PORTION B

Beginning at the West end of this strip of land, being also a point on the South boundary of the land hereinabove described as Tract E-4, and said point being distant 17.48 feet from the end of Course No. 4 thereof, and running by azimuths measured clockwise from true South:

38. 273° 52' 30" 21.14 feet along remainder of Government land of Waimea;

39. 254° 18' 30" 33.60 feet along remainder of Government land of Waimea, to a point on the South boundary of the land hereinabove described as Tract E-4, and said point being distant 71.47 feet from the end of Course No. 4 thereof.

PORTION C

Beginning at the West end of this strip of land, being also a point on the East boundary of the land hereinabove described as Tract E-4, and said point being distant 6.49 feet from the end of Course No. 3 thereof, and running by azimuths measured clockwise from true South:

| | | | | | |
|---|---|---|---|---|---|
| 40. | 254° | 18' | 30" | 71.91 feet | along remainder of Government land of Waimea; |
| 41. | 257° | 07' | 30" | 104.70 feet | along remainder of Government land of Waimea; |
| 42. | 232° | 49' | 00" | 6.54 feet | along remainder of Government land of Waimea, to a point on the Westerly boundary of Kekaha Sugar Company Pumphouse, and containing an aggregate of 1.147 acres, more or less. |

EASEMENT "D" FOR POWER LINE

An easement for the operation, maintenance, and repair of an electric power line on, over, and across a strip of land fifteen (15.00) feet wide and lying seven and one-half (7.50) feet on each side of the following described center-line:

Beginning at the Southwest end of this strip of land and said point of beginning being distant 23.48 feet from the end of Course No. 26 of the land hereinabove described as Tract E-2, and running by azimuths measured clockwise from true South:

| | | | | | |
|---|---|---|---|---|---|
| 1. | 259° | 10' | 50" | 1,250.76 feet | along remainder of Government land of Waimea (a portion being across Kaumualii Highway); |
| 2. | 200° | 23' | 30" | 389.81 feet | along remainder of Government land of Waimea (a portion being across Kaumualii Highway); |
| 3. | 279° | 53' | 50" | 598.81 feet | along remainder of Government land of Waimea (along Kaumualii Highway); |
| 4. | 274° | 34' | 50" | 138.58 feet | along remainder of Government land of Waimea (along Kaumualii Highway); |
| 5. | 263° | 45' | 50" | 217.98 feet | along remainder of Government land of Waimea (along Kaumualii Highway); |
| 6. | 258° | 52' | 20" | 671.75 feet | along remainder of Government land of Waimea (along Kaumualii Highway); |
| 7. | 263° | 01' | 00" | 181.64 feet | along remainder of Government land of Waimea (a portion being across Kaumualii Highway); |

| | | | | |
|---|---|---|---|---|
| 8. | 255° | 12' | 30" | 509.31 feet along remainder of Government land of Waimea to a point on the Kekaha Power Line and containing an AREA OF 1.363 ACRES. |

Easements B-3 and B-4 for culvert and slopes

Land Situate at Mana, Waimea (Kona), Kauai, Hawaii

Portion of the Government Land of Waimea

Being also a portion of General Lease No. S-4202 to Kekaha Sugar Company, Limited.

Easement B-3

Beginning at the East corner of this piece of land, on the Southwest side of Easement "B" twenty-five (25.00) feet wide for roadway, said Easement "B" being a portion of the lands described in State of Hawaii General Lease No. S-3852 to the United States of America, dated the 20th day of August, 1964, and recorded in the Bureau of Conveyances of the State of Hawaii in Liber 4821 at Page 245, said point of beginning being by true azimuth and distance 48° 59' 30" 12.50 feet from the end of Course No. 2 of said Easement "B", and the coordinates of said point of beginning referred to Government Survey Triangulation Station "Mana 2" being 7,053.38 feet South and 1,803.45 feet East, and running by azimuths measured clockwise from true South:

1. 48° 59' 30" 25.00 feet along remainder of Government Land of Waimea;

2. 99° 20' 20.00 feet along same;

3. 167°30' 68.00 feet along same;

4. 228°59'30" 10.96 feet along same;

thence along same, being also along the Southwest side of said Easement "B" of General Lease No. S-3852, on a curve to the left with a radius of 502.50 feet, the chord azimuth and distance being:

5. 323°17'32" 75.36 feet to the point of beginning and containing an area of 1,911 square feet.

Easement B-4

Beginning at the South corner of this piece of land, on the Northeast side of said Easement "B" for roadway, said point of beginning being by traverse:

a~~t~~ 228°59'30" 12.50 feet and
b~~t~~ 318°59'30" 112.00 feet,

from the end of Course No. 2 of said Easement "B", and the coordinates of said point of beginning referred to Government Survey Triangulation Station "Mana 2" being 7,121.49 feet South and

1,895.80 feet East, thence running by azimuths measured clockwise from true South:

1. 138°59'30" 112.00 feet along the Northeast side of said Easement "B";

Thence along same on a curve to the right with a radius of 477.50 feet, the chord azimuth and distance being:

2. 140°36'30" 26.95 feet;

3. 279°20' 67.68 along remainder of Lot [illegible] Land of Waimea;

4. 9°20' 28.00 feet along same;

5. 322°20' 21.00 feet along same;

6. 48°59'30" 7.00 feet along same;

7. 318°59'30" 45.00 feet along same;

8. 18°59'30" 14.00 feet along same to the point of beginning and containing an area of 2,901 square feet.

Check relationship of "Kaiwi" to Bdry. 6

| | | |
|---|---|---|
| 1. 320°37'24" | 405.64 | "P-1" |
| 2. 100°47'30" | 73.25 | P.I. |
| to "Kaiwi": 148°16'18" | 352.525 | |
| (328°18'00" | 352.93) | |

| | | |
|---|---|---|
| 1. 320°37'24" | 405.64 | |
| 2. 100°47'30" | 73.25 | |
| 3. 163°00' | 87.75 | |
| to "Kaiwi": 143°30'26" | 268.587 ft. | |
| (323°40'14" | 268.73 per 7023218) | |

| | | |
|---|---|---|
| 1. 328°18' | 352.93 | |
| 2. 163°00' | 87.75 | |
| to "Kaiwi": 143°33'05" | 268.976 ft. | |

Check relationship of Easement "B" to Bdy. 6:

| | | |
|---|---|---|
| 1. 205°10' | 30.64 | |
| 2. 226°20' | 296.79 | & Easmt B R = 490 P.C. |
| 3. 346°04'50" | 80.59 | |
| 4. 332°32'10" | 229.52 | P.T. |
| 5. 318°59'30" | 841.91 | R = 3390 P.C. |
| 6. 320°57'25" | 232.51 | P.T. |
| 7. 322°55'20" | 229.15 | R = 2020 P.C. |
| 8. 328°19'50" | 380.78 | P.T. |
| 9. 333°44'20" | 119.88 | P.C. |
| 10. 333°44'20" | 230.76 | |
| 11. 137°30'20" | 2287.23 | |

P.O.B. @ Bdy 6:

| | | |
|---|---|---|
| 1. | 137°30'20" | 2357.59 |
| 2. | 205°10' | 30.64 |
| 3. | 226°20' | 296.79 |
| 4. | 346°04'50" | 80.59 |
| 5. | 332°32'10" | 229.52 |
| 6. | 318°59'30" | 841.91 |
| 7. | 320°57'25" | 232.51 |
| 8. | 322°55'20" | 229.15 |
| 9. | 328°19'50" | 380.78 |
| 10. | 333°44'20" | 119.88 |

Close: 329°58'00" 298.96

From Fujinaka's survey: P.O.B. @ "Kaiwi"

| | | | |
|---|---|---|---|
| 1. | 152°24'44" | 617.03 | "P" |
| 2. | 139°02'04" | 1199.98 | "A" |
| 3. | 145°08'33" | 184.23 | "B" |
| 4. | 169°28'50" | 152.92 | at Bdy "D" |
| 5. | 346°04'50" | 80.59 | r = 490 L P.C. |
| 6. | 332°32'10" | 229.52 | L = 231.67 P.T. |
| 7. | 318°59'30" | 841.91 | r = 3390 R P.C. |
| 8. | 320°57'25" | 232.51 | L = 232.56 P.T. |
| 9. | 322°55'20" | 229.15 | r = 2020 R P.C. |
| 10. | 328°19'50" | 380.78 | L = 381.35 P.T. |
| 11. | 333°44'20" | 119.88 | r = 530 L P.C. |

L = 2117.11

to "Kaiwi": 12°44'21" 43.39 ft.

STA. 30 + 09 + 21 + 17.11 = 51 + 26.11

## Check Fujinaka's tie to Sta. Bdy.

| | | |
|---|---|---|
| "KAIWI" | | |
| "P" | 152°24'44" | 617.03 |
| "A" | 139°02'04" | 1199.98 |
| "B" | 145°08'33" | 184.23 |
| "D" | 169°28'50" | 152.92 |
| | 46°20' | 296.79 |
| | 25°10' | 30.64 |
| | 317°30'20" | 2357.59 |
| "KAIWI" | 143°40'14" | 268.73 |
| Close: | 241°35'17" | 0.002 |

OK

## Check against Hirota:

| | | |
|---|---|---|
| "KAIWI" | | |
| TRAV. 4-A | 160°17'20" | 248.08 |
| TRAV. 4 | 145°32'50" | 454.13 |
| ℄ P.T. | 135°15'25" | 62.55 |
| P.C. | 140°57'25" | 232.51 |
| P.T. | 138°59'30" | 841.91 |
| P.C. | 152°32'10" | 229.52 |
| ℄ @ BDY. ("D") | 166°04'50" | 80.59 |
| | 46°20' | 296.79 |
| | 25°10' | 30.64 |
| | 317°30'20" | 2357.59 |
| "KAIWI" | 143°40'14" | 268.73 |
| Close: | 215°38'04" | 5.2766 ft. |

Check Fujinaka's tie to ℄ Bridge 97:

Sta. 1+00 (℄ Bridge 97)

| | | |
|---|---|---|
| PT. "A" | 342°53 | 21.80 |
| PT. "P" | 319°02'04" | 1199.98 |
| "KAIWI" | 332°24'44" | 617.03 |
| Bdy. | 323°40'14" | 268.73 |
| | 137°30'20" | 2357.59 |
| | 205°10' | 30.64 |
| | 226°20' | 296.79 |
| | 346°04'50" | 80.59 |
| | 332°32'10" | 229.52 |
| Close: | 232°41'26.5" | 1,956 ft. |

Design Northeast side easement for Bridge 97

Get coords. of P.O.B. of easement:

S 6,763.30, E 1687.64 ref. "Mana 2" △ (P.O.B. Easmt "B")

1. 346°04'50" 80.59
2. 332°32'10" 229.52
3. 228°59'30" 12.50
4. 318°59'30" 112.00 S 7121.49, E 1895.80

Redesign easement for Bridge 97 improvements

Northeast side:

| | | |
|---|---|---|
| 1. | 9°20' | 28.00 |
| 2. | 322°20' | 24.00 |
| 3. | 48°59'30" | 7.00 |
| 4. | 318°59'30" | 45.00 |
| 5. | 48°59'30" | 14.00 |
| 6. | 138°59'30" | 112.00 |

Trav End Curl:

7. az. & dist to curve center: 228°59'30" 477.50
8. az. of line: 279°20'
9. chord: 140°36'30" 26.95
10. dist on line: 67.68

Area: 2,901 ☐

S 7121.49, E 1895.80 ref "MANA 2" △

| | | | |
|---|---|---|---|
| 1. | 138°59'30" | 112.00 | |
| 2. | 140°36'30" | 26.95 | R = 477.50 right |
| 3. | 279°20' | 67.68 | |
| 4. | 9°20' | 28.00 | |
| 5. | 322°20' | 24.00 | |
| 6. | 48°59'30" | 7.00 | northeast |
| 7. | 318°59'30" | 45.00 | side |
| 8. | 48°59'30" | 14.00 | EASEMENT "B-4" |

Area: 2,901 ☐

Design Southwest side:

1. 48°59'30" 25.00
2. 99°20' 20.00
3. 167°30' 68.00

Trav End Li Cur:

az. of line: 228°59'30"

P.O.B. - CC: 228°59'30" 502.50

dist. on line: 10.96

chord: 323°17'32" 75.36

az. from curve center: 57°35'34"

P.O.B.:

S 6763.30, E 1687.64

1. 346°04'50" 80.59
2. 332°32'10" 229.52
3. 48°59'30" 12.50 S 7053.38, E 1803.45

S 7053.38, E 1803.45

1. 48°59'30" 25.00
2. 99°20' 20.00
3. 167°30' 68.00
4. 228°59'30" 10.96
5. 323°17'32" 75.36 R = 502.50 left

Close: 321°38'20" 0.004

Area: 1,911 ☐ EASEMENT "B-3"

Southwest side

Check survey data at "Kaiwi":

| | | |
|---|---|---|
| 1. 315°15'25" | 62.55 | Trav. 4 |
| 2. 325°32'50" | 454.13 | " 4A |
| 3. 340°17'20" | 248.08' | "Kaiwi" |
| 4. 328°18' | ~~360.96~~ (352.93) | P.I. |
| 5. 163°00' | 87.75 | Mon. 6 |
| 6. 137°30'20" | 2357.59 ~~2427.73~~ | Mon. 7 |
| 7. 205°10' | 30.64 | Mon. 8 |
| 8. 226°20' | 296.79 | ℄ rd. |
| 9. 346°04'50" | 80.59 | R=490 P.C. |
| 10. 332°32'10" | 229.52 | P.T. |
| 11. 318°59'30" | 841.91 | R= P.C. |
| 12. 320°57'25" | 232.51 | P.O.B. |

Close: 39°41'16" 5.747 ft.

Check survey data from NF DWG. 7461537:
P.O.B. @ "Kaiwi"

| | | |
|---|---|---|
| 1. 328°18' | 352.93 | P.I. |
| 2. 163°00' | 87.75 | Mon 6 |
| 3. 137°30'20" | 2357.59 | Mon 7 |
| 4. 205°10' | 30.64 | Mon 8 |
| 5. 226°20' | 296.74 (296.79) | ℄ rd. |
| 6. 346°04'40" | 190.90 | R.I. |
| 7. 318°59'30" | 1082.07 | E-2 |
| 8. 320°00' | 259.84 | |
| 9. 332°24'30" | 617.03 | "Kaiwi" |

Close: 33°57'42" 10.775 ft.
or 27°58'09" 7.776 ft.

**Navy Lease S-3952**

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INSTALLATION : CNI PMRF HAWAII AREA
SITE : MAKAHA RIDGE BORE SITE
AGREEMENT TYPE : ILEAS
CONTRACT NUMBER: DLR 10-5-108
PARTY INVOLVED : UNITED STATES OF AMERICA ET AL
DATE : 31-Oct-1973

| TITLE | DATE | PAGES |
|---|---|---|
| STATUS OF REAL ESTATE TRANSACTION PACDOCKS 11011/1 | 20-Apr-1966 | 1 |
| MAP LOCATION PLAN SUBMERGED CABLE RIGHT OF WAY RESM NAVFAC 7005147 | | 1 |
| AMENDMENT TO GENERAL LEASE NO. S-3952, BETWEEN THE STATE OF HAWAII AND UNITED STATES OF AMERICA BY X, VARIOUS | 31-Oct-1973 | 8 |
| STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES STATE GENERAL LEASE NO. S-3952, BETWEEN THE STATE OF HAWAII AND UNITED STATES OF AMERICA BY X, VARIOUS | 17-Dec-1965 | 23 |
| TOTAL | | 33 |

STATUS OF REAL ESTATE TRANSACTION
PACDOCKS 11011/1

| ITEM | ACTION | DATE | BY |
|---|---|---|---|
| Legal Description | | | |
| Recording STATE OF HAWAII BUR of CONVEYANCES | LIBER 5248 PAGES 160 - 180 | FEB 1, 1966 | |
| Microfilm | Amd. to New Rec & Bureau | 11/4/74 4/25/66 | J & E.M. HRW |
| Summary Map need | NAVFAC DWG # 7005147 | | |
| Inventory | ok | 6/8/66 | JK |
| Grantor-Grantee Index | STATE OF HAW (BD. of LD. & NAT. RESOURCES) USA | 7/14/66 | HN |
| District Land Register | DLR 10-5 (108 KAUAI) | 7/14/66 | HN |
| Amendment * AMENDMENT TO GEN. LEASE S-3952 | RECORDED IN LIBER 9599 PAGE 361 | 3/6/74 | HJJ |
| Termination 16 DEC. 2030 (PARA. 3.) | AS NOTED PAR. 21 (~~16 DEC. 1966~~) | | J & E.M. HRW |
| | | | |
| | | | |
| | | | |
| | | | |

COMMENTS LAND LEASED AREAS:

A. PARCEL A - 35.04 ACS.
PARCEL B - 167.05 ACS. (NET - EXCLUDING PARCEL E) } PMR FAC
TOTAL 202.02

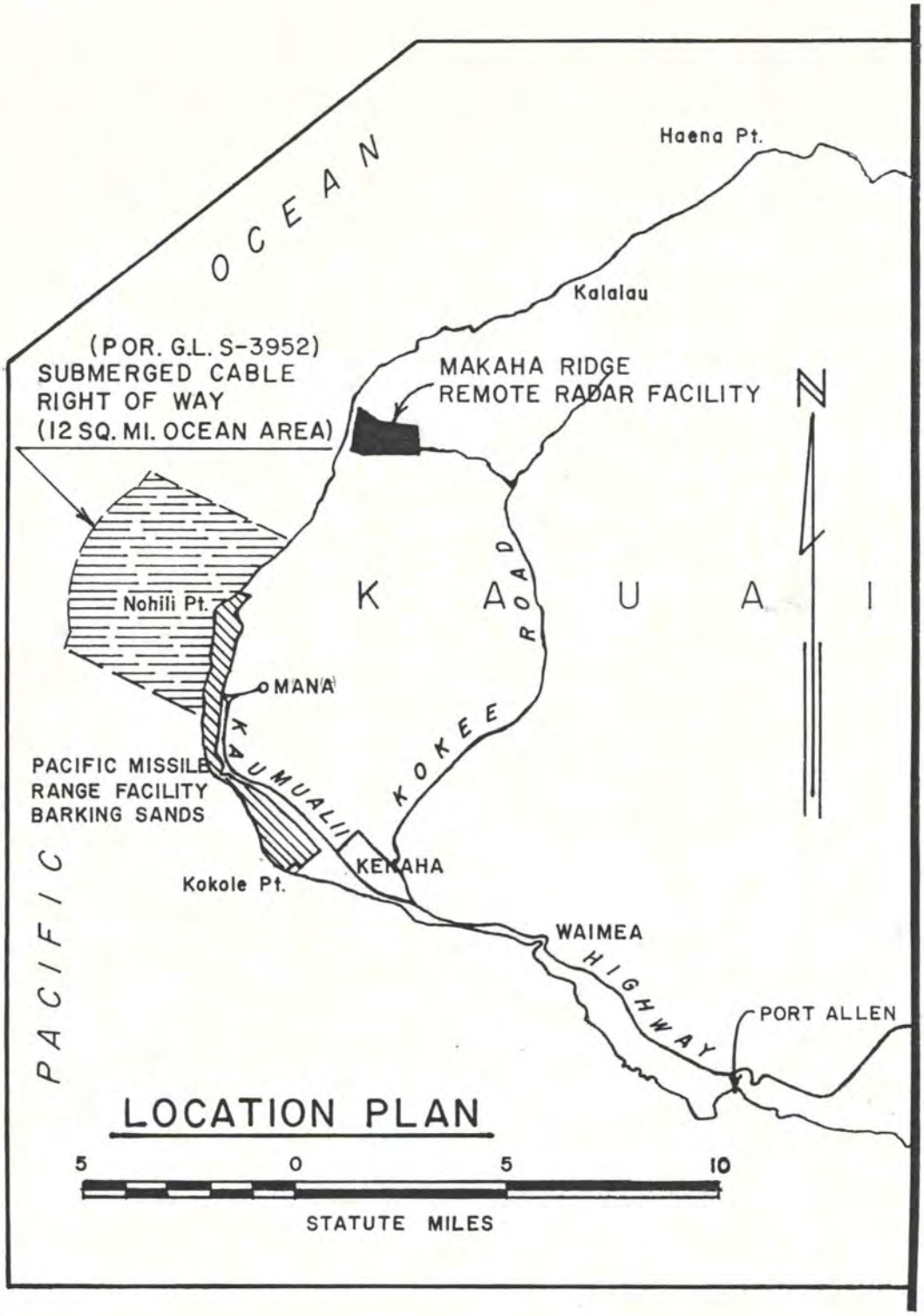
B. PARCEL C - 10.82
" D - 26.25
E - 4.53 (W/IN PARCEL B) } ACCESS ROADS
TOTAL 41.60

C. SUBMERGED CABLE R/W = BEING WITHIN 12 SQ. MILES OF OCEAN AREA OFF WESTERN COAST OF KAUAI

TOTAL LAND LEASE AREA = 243.69 ACS

* ADDITIONAL LAND AREA:
1. BORESIGHT TOWER SITE - 1.012
2. ACCESS ROAD - .613
1.625 ACS 1.625
245.315 ACS. HJJ

DLR - 10 - 5
R.E. FILE




RESM NAVFAC 7005147

Navy No. NOy(R)-68131

SECOND AMENDMENT TO GENERAL LEASE NO. S-3952

THIS INDENTURE, made and entered into this 18th day of Dec., 1995, by and between the STATE OF HAWAII, by its Board of Land and Natural Resources, hereinafter referred to as the "LESSOR" and THE UNITED STATES OF AMERICA, hereinafter referred to as the "Government",

WITNESSETH THAT:

WHEREAS, by General Lease No. S-3952, dated and effective December 17, 1965, for a term of sixty-five (65) years, the Lessor leased and demised to the Government two (2) parcels of land and appurtenant access, utility and aerial line-of-sight and submerged cable rights-of-way, for communication, research, development, testing, tracking, evaluation, guidance and related Government purposes, situate at Makaha Ridge, Waimea, Kauai, Hawaii, subject to the terms, covenants and conditions set forth in the abovementioned General Lease No. S-3952; and

WHEREAS, by letter dated February 1, 1968, the Government requested the abovementioned lease be amended to include an additional area for the construction of a boresight tower and access right-of-way to complete the communication circuitry; and

WHEREAS, the Board of Land and Natural Resources, at its meeting held on May 10, 1968, with the concurrence of the State Forester, approved the amendment of General Lease No. S-3952 by the addition of the requested area; and

DUPLICATE ORIGINAL

WHEREAS, by Amendment to General Lease No. S-3952 of October 31, 1973, the Lessor leased and demised to the Government the boresight tower and non-exclusive easement for access right-of-way subject to the terms, covenants and conditions set forth in the abovementioned Amendment to General Lease No. S-3952; and

WHEREAS, certain providers of cellular telephone service have proposed to expand cellular telephone service on the Island of Kauai by utilizing existing communications facilities upon the leased premises; and

WHEREAS, the availability of cellular telephone service along the western coast of Kauai would benefit both the Lessor and the Government by enhancing communications capabilities in the area; and

WHEREAS, the Board of Land and Natural Resources has adopted a policy of requiring collocation of remote communication facilities at existing sites so as to minimize the proliferation of such sites in wilderness areas; and

WHEREAS, by letter dated December 8, 1994, the Lessor requested the abovementioned lease be amended to provide for the installation of privately-owned cellular telephone antennas and related equipment upon the leased premises; and

WHEREAS, the Board of Land and Natural Resources, at it meeting held on April 28, 1995, with the concurrence of the State Forester, approved the amendment of General Lease No. S-3952 to provide for the installation of privately-owned cellular telephone equipment in and upon Government facilities within the leased premises;

NOW, THEREFORE, in consideration of the foregoing, General Lease No. S-3952 is hereby amended as follows:

Notwithstanding any other provision contained herein, the Government shall have the right to enter into license agreements for installation of privately-owned communications equipment in and upon Government facilities within the demised premises, SUBJECT to the following conditions:

1. Consent by the Board of Land and Natural Resources shall be required for all license agreements for private use of Government facilities within the demised premises;
2. The State of Hawaii shall be entitled to that portion of all license fees attributable to use of State land;
3. The Government shall be entitled to that portion of all license fees which are attributable to use of Government facilities;
4. The Government shall be entitled to reimbursement by the licensee for all utilities and services provided to the licensee;
5. The Government shall be entitled to pro-rata reimbursement for costs associated with maintenance of licensed facilities and access thereto;
6. Concurrence by the Division of State Parks;
7. Concurrence by the Division of Forestry and Wildlife;
8. Concurrence by the Governor; and

9. Such other conditions as may be prescribed by the Chairperson, Board of Land and Natural Resources.

Except as herein amended, the terms, covenants and conditions as set forth in General Lease No. S-3952 shall remain in full force and effect.

IN WITNESS WHEREOF, the STATE OF HAWAII, the Lessor herein by its Board of Land and Natural Resources, has caused the seal of the Department of Land and Natural Resources to be hereunto affixed and these presents to be duly executed this 18th day of December, 1995, and said Government, named above, has caused these presents to be executed on its behalf by its proper officers effective as of the day and year first above written.

STATE OF HAWAII

By: Albert S. Coloma-Agaran for
Chairman and Member
Board of Land and
Natural Resources

And
By: N/A
Member
Board of Land and
Natural Resources

THE UNITED STATES OF AMERICA

By: J. Michael Kilian

J. MICHAEL KILIAN
Director, Real Estate Division
Pacific Division, Naval Facilities Engineering Command
Real Estate Contracting Officer

APPROVED AS TO FORM
~~AND LEGALITY:~~

William M. Lam
Deputy Attorney General
Dated: 10/26/95

K 73- 88721

STATE OF HAWAII
BUREAU OF CONVEYANCES
RECEIVED FOR RECORD
LIBER 9599 PAGE 361
1973 NOV 16 AM 10: 02
INDEXED REGISTRAR

Recording requested by: Commander Pacific Division, Naval Facilities Engineering Command; FPO San Francisco 96610
After Recording Return To: Commander Pacific Division, Naval Facilities Engineering Command; FPO San Francisco 96610
Contact: K. Alexandersson 4331717

N/C

**AMENDMENT TO GENERAL LEASE NO. S-3952**

**THIS INDENTURE**, made and entered into this 31st day of October, 1973, by and between the **STATE OF HAWAII**, by its Board of Land and Natural Resources, hereinafter referred to as the "**LESSOR**", and **THE UNITED STATES OF AMERICA**, hereinafter referred to as the "**Government**",

**WITNESSETH THAT:**

**WHEREAS**, by General Lease No. S-3952, dated and effective December 17, 1965, for a term of sixty-five (65) years, the Lessor leased and demised to the Government two (2) parcels of land and appurtenant access, utility, and aerial line-of-sight and submerged cable rights-of-way, for communication, research, development, testing, tracking, evaluation, guidance and related Government purposes, situate at Makaha Ridge, Waimea, Kauai, Hawaii, subject to the terms, covenants and conditions set forth in the abovementioned General Lease No. S-3952; and

**WHEREAS**, by letter dated February 1, 1968, the Government has requested that the abovementioned lease be amended to include an additional area for the construction of a boresight tower and access right-of-way to complete the communication circuitry; and

**WHEREAS**, the Board of Land and Natural Resources, at its meeting held on May 10, 1968, with the concurrence of

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

R/S 2915

RECEIVED

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PACNAVFACENGCOM

the State Forester, approved the amendment of General Lease No. S-3952 by the addition of the requested area;

NOW, THEREFORE, in consideration of the foregoing, the Lessor does hereby lease and demise to the Government and the Government does hereby lease and hire from the Lessor the boresight tower and non-exclusive easement for access right-of-way, more particularly described in Exhibits "A" and "B", attached hereto and made a part hereof, SUBJECT to the following conditions:

1. The access right-of-way to the boresite will be a non-exclusive easement;
2. Any improvement to or realignment of the access route shall be subject to the approval of the District Forester assigned to the island of Kauai;
3. That the Government furnish the Lessor with a master plan for the proposed development of the Makaha Ridge complex to facilitate the review and approval of future requests and construction plans.
4. That other than the amendments contained herein, the terms, covenants and conditions as set forth in said General Lease No. S-3952 shall continue in full force and effect, and that nothing herein contained shall serve to release or discharge the Government from the observance and performance of all such terms, covenants and conditions.

IN WITNESS WHEREOF, the STATE OF HAWAII, the Lessor herein by its Board of Land and Natural Resources,

has caused the seal of the Department of Land and Natural Resources to be hereunto affixed and these presents to be duly executed this 8th day of November, 1973; and said Government, named above, has caused these presents to be executed on its behalf by its proper officers thereto duly authorized this 31st day of October, 1973, effective as of the day and year first above written.

STATE OF HAWAII

By: Sunao Kido
Chairman and Member
Board of Land and
Natural Resources

And By: Masuo Kealoha
Member
Board of Land and
Natural Resources

THE UNITED STATES OF AMERICA

By: J. D. Samaritan

By direction of the Commander, Naval Facilities Engineering Command, under the direction of the Secretary of the Navy

APPROVED AS TO FORM
AND LEGALITY:

K. A. Arita
Deputy Attorney General
Dated: 10-2-73

KA:bys

STATE OF HAWAII
SURVEY DIVISION
DEPT. OF ACCOUNTING AND GENERAL SERVICES
HONOLULU

C.S.F. No. 16,885

June 26, 1973

BORESIGHT TOWER SITE

AND

NON-EXCLUSIVE EASEMENT

for Access Right-of-Way

Waimea (Kona), Kauai, Hawaii

Being portions of the Government (Crown) Land of Waimea.

Being also portions of Puu Ka Pele Forest Reserve (Governor's Proclamation dated May 2, 1938).

BORESIGHT TOWER SITE:

Beginning at the northwest corner of this parcel of land, the coordinates of said point of beginning referred to Government Survey Triangulation Station "MAKAHA 2" being 1566.86 feet North and 5669.71 feet West, as shown on Government Survey Registered Map 2246, thence running by azimuths measured clockwise from True South:-

| | | |
|---|---|---|
| 1. | 270° 00' | 210.00 feet along the remainder of Government Land; |
| 2. | 360° 00' | 210.00 feet along the remainder of Government Land and passing over a 3/4-inch pipe at 21.00 feet and 189.34 feet; |
| 3. | 90° 00' | 210.00 feet along the remainder of Government Land; |
| 4. | 180° 00' | 210.00 feet along the remainder of Government Land, to the point of beginning and containing an AREA OF 44,100 SQUARE FEET. |

NON-EXCLUSIVE EASEMENT for Access Right-of-Way:

Beginning at the most easterly corner of this easement, on the southerly side of the Access Road (General Lease S-3952 to United States of America), the coordinates of said point of beginning referred to Government Survey Triangulation Station "MAKAHA 2" being 1473.47 feet North and

EXHIBIT "A"

CSF NO. 16,885 June 26, 1973



4629.51 feet West, as shown on Government Survey Registered Map 2246,

thence running by azimuths measured clockwise from True South:-

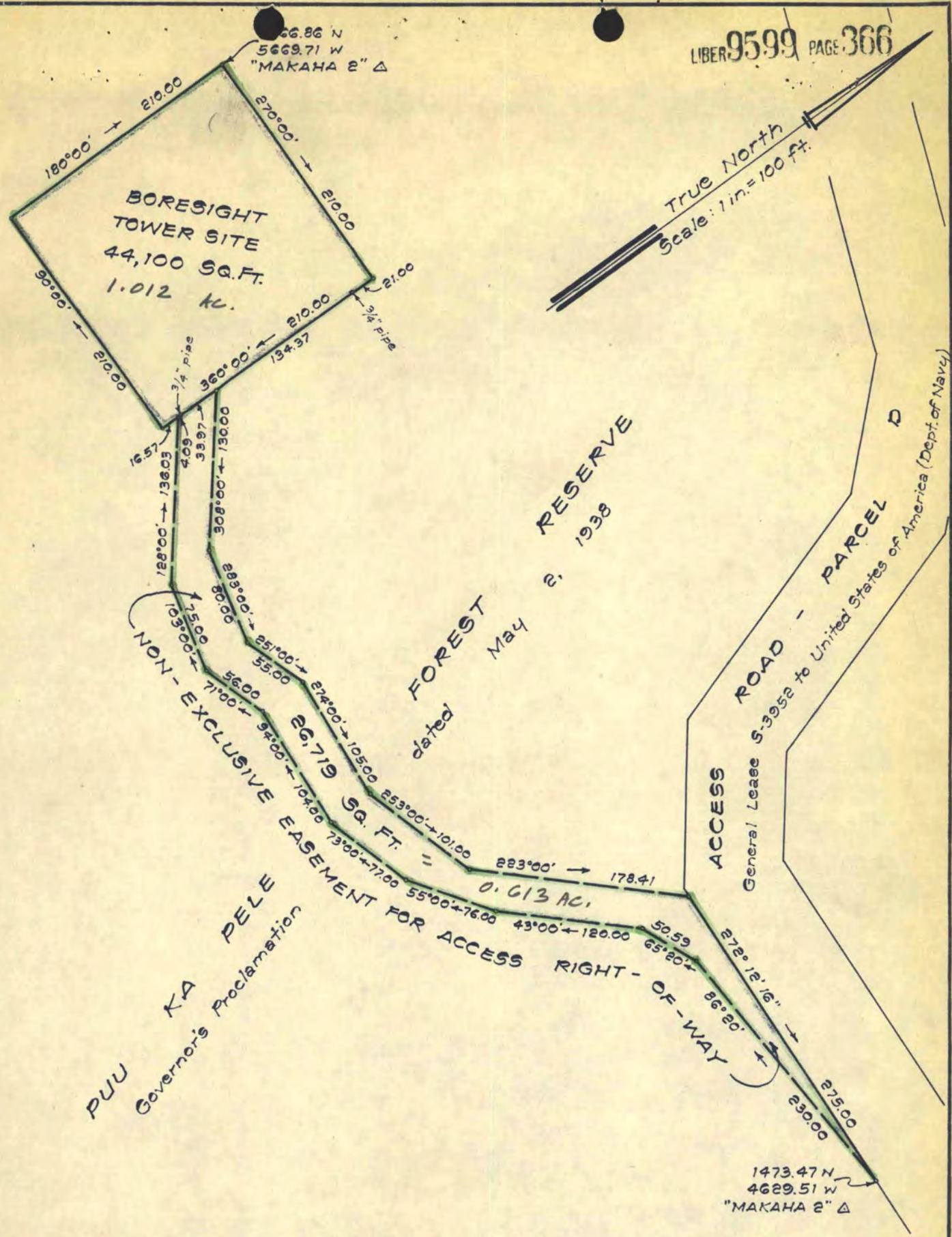
| | | | | |
|---|---|---|---|---|
| 1. | 86° | 20' | 230.00 feet; | |
| 2. | 65° | 20' | 50.59 feet; | |
| 3. | 43° | 00' | 120.00 feet; | |
| 4. | 55° | 00' | 76.00 feet; | |
| 5. | 73° | 00' | 77.00 feet; | |
| 6. | 94° | 00' | 104.00 feet; | |
| 7. | 71° | 00' | 56.00 feet; | |
| 8. | 103° | 00' | 75.00 feet; | |
| 9. | 128° | 00' | 136.03 feet | to the east side of the Boresight Tower Site; |
| 10. | 180° | 00' | 38.06 feet | along the east side of the Boresight Tower Site and passing over a 3/4-inch pipe at 4.09 feet; |
| 11. | 308° | 00' | 130.00 feet; | |
| 12. | 283° | 00' | 80.00 feet; | |
| 13. | 251° | 00' | 55.00 feet; | |
| 14. | 274° | 00' | 105.00 feet; | |
| 15. | 253° | 00' | 101.00 feet; | |
| 16. | 223° | 00' | 178.41 feet | to the southerly side of the Access Road (General Lease S-3952 to United States of America); |
| 17. | 272° | 12' 16" | 275.00 feet | along the southerly side of the Access Road (General Lease S-3952 to United States of America), to the point of beginning and containing an AREA OF 26,719 SQUARE FEET. |

SURVEY DIVISION
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
STATE OF HAWAII

By: _____
Paul T. Nuha
Land Surveyor

Compiled from maps
(I.D. No. 80091)
fur. by Dist.Pub.Wks.Office,
14th Naval Dist. and
Govt. Survey Records.

ac




# BORESIGHT TOWER SITE AND NON-EXCLUSIVE EASEMENT

for Access Right-of-Way

Waimea (Kona), Kauai, Hawaii

Scale: 1 inch = 100 feet

## EXHIBIT "B"

TOTAL AREA = 1.625 ACS.

JOB K-5997

C. BK 15M Fld. 1 (KAUAI)

TAX MAP 1-2-01:6

SURVEY DIVISION

DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES

STATE OF HAWAII

C. S. F. No. 16885

R.K. June 26, 1973

Navy No. NOyCR1-68131

DLR 10-5-108

RECORDATION REQUESTED BY: NOy(R)-68131
U.S. Navy Real Estate Office

AFTER RECORDATION, RETURN TO:
Harold Godfrey Jr
Phone 430-3264

Liber 5248
Pages 160-180

RETURN BY: MAIL ( ) PICKUP ( )
REQUESTOR TO FILL ABOVE SPACE ABOVE THIS LINE
FOR REGISTRAR'S USE

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE GENERAL LEASE NO. S-3952

1. THIS LEASE, made and entered into as of the 17th day of December, in the year one thousand nine hundred and sixty-five by and between the STATE OF HAWAII, represented by its Board of Land and Natural Resources, whose address is P. O. Box 621, Honolulu, Hawaii 96809, and whose interest in the property hereinafter described is that of fee simple owner, for itself, its successors and assigns, hereinafter called the "Lessor", and THE UNITED STATES OF AMERICA, hereinafter called the "Government":

WITNESSETH: That, for and in consideration of the covenants, promises, and agreements herein made, the parties hereto agree as follows:

2. The Lessor hereby leases to the Government two (2) parcels of land and appurtenant access, utility, and aerial line-of-sight and submerged cable rights-of-way, described on Exhibits "A", "B" and "C", attached hereto and

DLR 10-5-106

made a part hereof, for communication, research, development, testing, tracking, evaluation, guidance and related Government purposes.

3. TO HAVE AND TO HOLD the said premises for a term of sixty-five (65) years beginning 17 December 1965 and ending 16 December 2030; subject, however, to the rights of the Government and the Lessor respectively to terminate this lease in accordance with provisions 9 and 10 hereof.

4. The Lessor reserves unto itself:

(a) The right of ingress, egress and regress for its agents and representatives over the demised premises at any time for the purpose of performing any public or official duties; provided, that such reserved right shall be exercised only by agents or representatives who have security clearance and then only at times established by giving the Government at least twenty-four hours prior notice and, further, that such right shall be exercised only in company with a responsible official of the Government if the Government so requires.

(b) All ground and surface waters, ores, minerals and mineral rights of every description on, in or under the demised premises but it shall utilize or permit others to utilize the said reserved waters, ores, minerals and mineral

rights during the term of this lease only with the consent of the Government.

"Minerals" as used herein shall mean any or all oil, gas, coal, phosphate, sodium, sulfur, iron, titanium, laterite, gibbsite, alumina, all ores of aluminum and, without limitation thereon, all other mineral substances and ore deposits, whether solid, gaseous or liquid, in, on or under the land; provided, that "minerals" shall not include any of the foregoing substances and deposits when used in road or building construction in furtherance of the Government's permitted activities on the demised premises and not for sale to others.

(c) So much of the rocks, coral, soil, gravel or similar material in or on the demised premises as the Lessor may require for any and all purposes; provided, that the Government shall have the right, subject to prior approval of the Lessor, to develop and use the same for construction projects on the demised premises.

THE LESSOR AND THE GOVERNMENT, IN CONSIDERATION OF THE PREMISES, COVENANT AND AGREE AS FOLLOWS:

5. (a) The Government shall have the right, during the existence of this lease, to make alterations, attach fixtures, and erect additions, structures or signs in or upon the premises hereby leased, and such fixtures, additions,

structures and signs shall be and remain the property of the Government and may be removed or disposed of by the Government prior to the termination of this lease; provided, however, that all such fixtures, additions, structures and signs shall be so designed and placed as to detract as little as possible from the natural beauty of the surrounding area, and plans for such placement or construction, to the extent permitted by security considerations, shall be reviewed by the Lessor prior to such placement or construction.

The Lessor may upon not less than 60 days' written notice to the Government, before termination of the lease, require restoration of the leased premises as hereinafter described. In this event, prior to the expiration or termination of this lease, or prior to relinquishment of possession, whichever first occurs, the Government shall remove all above ground improvements located on Parcels "A" and "B" except those that may be abandoned in place by mutual agreement, reserving to the Government the right to remove any or all installed technical equipment.

(b) The Government shall have the right to trim and keep trimmed any tree or trees in the way of the utility pole and wire lines located within the access road and utility rights-of-way; provided, however, that such trimming shall be done in a manner satisfactory to the Lessor.

6. The Government, during the term of this lease and at its own cost and expense, shall at all times keep in good repair all Government improvements now on or hereafter to be constructed on the demised premises.

7. In order to prevent the introduction of undesirable plant species in the area, the Government shall not plant any trees, shrubs, flowers or other plants in the leased area except those approved for such planting by the Lessor.

8. The Government shall not knowingly appropriate, damage, remove, excavate, disfigure, deface or destroy any object of antiquity, prehistoric ruin or monument.

9. The Government may terminate this lease at any time by giving thirty (30) days' notice in writing to the Lessor.

10. The Lessor may terminate this lease at any time by giving the Government sixty (60) days' notice in writing in the event the Government violates any of the terms and conditions of this lease and continues and persists in such violation for a period of sixty (60) days from date of receipt of notice in writing of such violation.

11. The Government shall have exclusive use and control of Parcels "A" and "B" and/or surface areas occupied by Government improvements or facilities, it being mutually

understood and agreed that the Lessor shall have joint use of all other areas and rights-of-way herein demised; provided, however, that the Lessor shall not construct any facilities within the joint use area and shall not interfere with any utility line or submerged cable rights-of-way located on or above and serving the leased premises without obtaining the written consent of the Government.

12. No representative of the Government nor any person using the demised premises at the invitation and/or permission of the Government shall hunt, pursue, kill or take any game or destroy any wildlife in the area unless such person is duly licensed by the Lessor, has a hunting permit and is acting in accordance with the Lessor's rules and regulations and other State laws pertinent thereto.

13. The Government shall not make, permit or suffer any waste, strip, spoil, nuisance, damage, or unlawful, improper or offensive use of the demised premises.

14. The Government shall observe and comply with all rules, regulations, ordinances and laws of any county, municipal or State governmental authority applicable to the demised premises and not inconsistent with the Government regulations relating to the use of the premises for the use herein set forth or any other comparable use.

15. The Government will not be responsible for any loss, liability, claim, or demand for property damage, property loss, or personal injury, including but not limited to death, arising out of any injury or damage caused by or resulting from any act or omission of the Lessor in connection with its use of the premises described herein.

16. In recognition of the limited amount of land available for public use, of the importance of forest reserves and watersheds in Hawaii, and of the necessity for preventing or controlling erosion, the Government hereby agrees that, commensurate with its use of the premises, it will take reasonable precautions during its use of the premises herein demised to prevent damage to or destruction of vegetation, wildlife and forest cover, geological features and related natural resources and improvements constructed by the Lessor, help preserve the natural beauty of the premises, protect and prevent pollution or contamination of all ground and surface waters and that it will remove or otherwise effectively dispose of all trash, garbage and other waste materials resulting from Government use of said premises.

17. The Government shall take every reasonable precaution to prevent the start of any fire on the demised premises and shall take immediate and continuing action to extinguish any and all fires on the said premises or fires started by or resulting from any act or omission of the

Government. Further, the Government shall establish and at all times maintain a standard operating procedure for fighting fires within or adjacent to the subject leased property resulting from Government activities during its use and occupancy of the premises. Government personnel actually using the premises shall be familiar with said standard procedure including the means of implementation.

18. The Government hereby agrees that the use and enjoyment of the land herein demised shall not be in support of any policy which discriminates against anyone based upon race, creed, color or national origin.

19. The Lessor will not be responsible for any loss, liability, claim, or demand for property damage, property loss, or personal injury, including but not limited to death, arising out of any injury or damage caused by or resulting from any act or omission in connection with the Government's use of the premises described herein.

20. The Government shall not assign, sublease or grant any interest in the demised premises.

21. In the event that the leased property is not used by the Government for the purpose stated in paragraph 2 hereof for a period of three (3) consecutive years, this lease may be terminated upon sixty (60) days' written notice from the Lessor to the Government; provided, however, that, if prior to the expiration of the aforesaid sixty (60) day

period, the Commander, Pacific Missile Range or his duly authorized representative shall find and determine that the leased property is required for a comparable use and shall thereafter satisfy the Lessor that the proposed use is, in fact, a comparable use, this lease will continue in effect; provided, further, that periods during which a national emergency has been declared by the President or the Congress of the United States shall not be included in the said three-year period. The Government agrees that current Government standards concerning adequate utilization shall be applied to these premises; that such comparable use shall be communicated in writing to the Lessor immediately after such finding and determination by the said Commander, Pacific Missile Range or his duly authorized representative; and that, if the Lessor is satisfied that the proposed use is, in fact, a comparable use, the Government shall use the property for such comparable use within six (6) months after said finding and determination. The failure of the Lessor to communicate its approval or disapproval in writing to the Government within three (3) months after such finding and determination is communicated to it shall constitute approval by the Lessor of the proposed use.

22. Any notice under the terms of this lease shall be in writing signed by a duly authorized representative of

the party giving such notice, and if given by the Government shall be addressed to the Lessor at P. O. Box 621, Honolulu, Hawaii 96809, and if given by the Lessor shall be addressed to the Director, Pacific Division, Bureau of Yards and Docks, FPO San Francisco 96610.

23. The Government's compliance with all obligations placed on it by this lease shall be subject to the availability of funds.

24. The Lessor's compliance with any obligations placed on it by this lease shall be subject to the availability of funds and/or personnel.

25. The failure of the Lessor to insist upon strict performance of any term, covenant, or condition herein, or to exercise any right herein conferred or reserved, in any one or more instances, shall not be deemed a waiver or relinquishment of any such term, covenant, condition or right.

26. The Lessor warrants that no person or selling agency has been employed or retained to solicit or secure this lease upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by the Lessor for the purpose of securing business. For breach or violation of this warranty, the Government shall have the right to annul this lease without

liability or in its discretion to deduct from the lease price or consideration the full amount of such commission, percentage, brokerage or contingent fee.

27. No member of or delegate to Congress or resident commissioner shall be admitted to any share or part of this lease or to any benefit that may arise therefrom, but this provision shall not be construed to extend to this lease if made with a corporation for its general benefit.

28. This lease is not subject to Title 10, United States Code, Section 2662.

IN WITNESS WHEREOF, the parties hereto have hereunto subscribed their names as of the date first above written.

STATE OF HAWAII

By: _____
Chairman and Member
Board of Land and Natural Resources

Approved by the Board at its meeting held on December 17, 1965

And By: _____
Member
Board of Land and Natural Resources

APPROVED AS TO FORM

Deputy Attorney General
12-28-65

THE UNITED STATES OF AMERICA

By: _____
By direction of the Chief, Bureau of Yards and Docks, acting under the direction of the Secretary of the Navy

Remote Radar Facility - Parcel "A"

Waimea, Kauai, Hawaii

Being a portion of the Government Land of Waimea (Addition to Puu Ka Pele Forest Reserve - Governor's Proclamation dated May 2, 1938).

Beginning at the southeast corner of this tract of land, 0° 00', 9.86 feet from a pipe, the coordinates of said point of beginning referred to Government Survey Triangulation Station "Makaha 2" being 3,559.88 feet North and 8,185.76 feet West, and running by azimuths measured clockwise from True South:

| | | |
|---|---|---|
| 1. | 86° 00' | 450.00 feet along Government land; |
| 2. | 108° 30' | 1180.00 feet along same; |
| 3. | 188° 30' | 1270.00 feet along same; |
| 4. | 306° 08' 37" | 1709.15 feet along same; |
| 5. | 0° 00' | 591.00 feet along same to the point of beginning, passing over pipes at 300.00 feet and 581.14 feet. |

AREA 35.04 ACRES

EXHIBIT "A"

Remote Radar Facility - Parcel "B"

Waimea, Kauai, Hawaii

Being a portion of the Government Land of Waimea (Addition to Puu Ka Pele Forest Reserve - Governor's Proclamation dated May 2, 1938.)

Beginning at the southeast corner of this tract of land, 0° 00', 58.11 feet from a pipe, the coordinates of said point of beginning referred to Government Survey Triangulation Station "Makaha 2" being 1,953.20 feet North and 5,842.97 feet West, and running by azimuths measured clockwise from True South:

| | | |
|---|---|---|
| 1. | 87° 30' | 3600.00 feet along Government land; |
| 2. | 112° 00' | 930.00 feet along same; |
| 3. | 197° 18' 50" | 1841.82 feet along same; |
| 4. | 288° 30' | 1180.00 feet along same; |
| 5. | 266° 00' | 450.00 feet along same; |
| 6. | 180° 00' | 591.00 feet along same; |
| 7. | 293° 53' 24" | 2562.32 feet along same; |
| 8. | 0° 00' | 1160.00 feet along same to the point of beginning, passing over pipes at 690.00 feet and 1101.89 feet. |

AREA 171.58 ACRES

-4.53 ACRES (PARCEL "E")

167.05 ACRES NET

ACCESS ROAD - PARCEL "C"

WAIMEA, KAUAI, HAWAII

Being portions of the Hawaii Government Lands of Waimea (Kokee Park - Governor's Executive Order 1509, dated May 15, 1952 and Puu Ka Pele Park - Governor's Executive Order 131, dated January 24, 1923).

Being a road right-of-way eighty (80) feet wide and extending forty (40) feet on each side of the following described centerline:

Beginning at the Easterly end of this centerline on the Westerly side of Kokee Road right-of-way 76° 08' 49", 49.00 feet from a brass pin in the edge of pavement, the coordinates of said point of beginning referred to Government Survey Triangulation Station "Makaha 2" being 3305.98 feet South and 10,186.26 feet East, and running by azimuths measured clockwise from True South:

| | | |
|---|---|---|
| 1. | 76° 08' 49" | 170.35 feet; |
| 2. | 40° 26' 05" | 282.17 feet; |
| 3. | 22° 27' 09" | 348.12 feet passing over the Kokee Park and Puu Ka Pele Park boundary at 242.74 feet; |
| 4. | 102° 19' 34" | 133.06 feet; |
| 5. | 182° 11' 59" | 244.19 feet passing over said boundary at 69.04 feet; |
| 6. | 170° 40' 38" | 255.87 feet; |
| 7. | 113° 59' 50" | 115.89 feet; |
| 8. | 154° 36' 56" | 75.13 feet; |
| 9. | 195° 14' 02" | 234.51 feet; |

EXHIBIT "B"

10. 143° 26' 14" 67.98 feet;

11. 91° 38' 26" 466.11 feet;

12. 128° 23' 42" 91.37 feet;

13. 165° 08' 57" 166.44 feet;

14. 144° 51' 02" 113.65 feet;

15. 124° 33' 07" 209.71 feet;

16. 153° 03' 09" 118.70 feet;

17. 115° 19' 36" 29.59 feet;

18. 77° 36' 04" 301.37 feet;

19. 113° 16' 04" 128.69 feet;

20. 148° 56' 04" 258.80 feet;

21. 113° 37' 05" 179.16 feet;

22. 132° 48' 32" 168.49 feet;

23. 103° 25' 05" 170.41 feet;

24. 155° 55' 22" 159.78 feet;

25. 174° 33' 41" 308.29 feet;

26. 123° 47' 04" 114.50 feet;

27. 73° 00' 28" 177.47 feet;

28. 92° 59' 29" 209.26 feet;

29. 76° 41' 28" 141.96 feet;

30. 116° 46' 42" 230.63 feet;

31. 152° 54' 41" 119.40 feet;

32. 100° 55' 09" 101.82 feet and ending at a point on the West boundary of Kokee Park.

AREA = 10.82 acres

ACCESS ROAD - PARCEL "D"

WAIMEA, KAUAI, HAWAII

Being a portion of the Hawaii Government Land of Waimea (partly in the Na Pali - Kona Forest Reserve -- Governor's Proclamation dated June 12, 1907, and partly in the addition to the Puu Ka Pele Forest Reserve -- Governor's Proclamation dated May 2, 1938).

Being a road right-of-way eighty (80) feet wide and extending forty (40) feet on each side of the following described centerline:

Beginning at the Easterly end of this centerline on the West boundary of Kokee Park, the coordinates of said point of beginning referred to Government Survey Triangulation Station "Makaha 2" being 1295.21 feet South and 6460.69 feet East, and running by azimuths measured clockwise from True South:

| | | |
|---|---|---|
| 1. | 100° 55' 09" | 20.41 feet; |
| 2. | 130° 05' 56" | 105.80 feet; |
| 3. | 159° 16' 43" | 94.46 feet; |
| 4. | 130° 33' 30" | 76.79 feet; |
| 5. | 101° 50' 18" | 231.67 feet; |
| 6. | 93° 35' 48" | 135.18 feet; |
| 7. | 102° 47' 58" | 197.49 feet; |
| 8. | 81° 33' 47" | 500.75 feet; |
| 9. | 65° 41' 38" | 65.46 feet; |
| 10. | 99° 53' 46" | 61.53 feet; |
| 11. | 134° 05' 53" | 379.37 feet; |
| 12. | 116° 25' 45" | 124.19 feet; |
| 13. | 101° 22' 55" | 382.01 feet; |
| 14. | 132° 57' 24" | 159.00 feet; |

| | | |
|---|---|---|
| 15. | 167° 09' 10" | 295.76 feet; |
| 16. | 112° 23' 43" | 603.04 feet; |
| 17. | 85° 00' 04" | 73.10 feet; |
| 18. | 57° 36' 25" | 388.56 feet; |
| 19. | 24° 26' 53" | 181.52 feet; |
| 20. | 80° 19' 39" | 144.33 feet; |
| 21. | 139° 49' 38" | 288.62 feet; |
| 22. | 92° 16' 11" | 201.95 feet; |
| 23. | 48° 19' 56" | 283.27 feet; |
| 24. | 82° 33' 26" | 61.57 feet; |
| 25. | 116° 46' 56" | 124.43 feet; |
| 26. | 118° 37' 09" | 276.61 feet; |
| 27. | 103° 13' 02" | 206.46 feet; |
| 28. | 90° 35' 48" | 561.63 feet; |
| 29. | 110° 58' 46" | 237.65 feet; |
| 30. | 70° 42' 37" | 291.27 feet; |
| 31. | 90° 45' 28" | 273.48 feet; |
| 32. | 94° 32' 24" | 168.96 feet; |
| 33. | 64° 54' 21" | 271.44 feet; |
| 34. | 98° 39' 08" | 220.56 feet; |
| 35. | 151° 09' 08" | 171.41 feet; |
| 36. | 107° 48' 20" | 207.44 feet; |
| 37. | 56° 33' 25" | 204.78 feet; |
| 38. | 85° 55' 08" | 95.06 feet; |
| 39. | 115° 16' 51" | 178.31 feet; |
| 40. | 135° 21' 12" | 250.35 feet; |
| 41. | 117° 12' 20" | 188.79 feet; |
| 42. | 99° 03' 28" | 202.90 feet; |

| | | |
|---|---|---|
| 43. | 69° 48' 18" | 266.44 feet; |
| 44. | 114° 29' 04" | 154.83 feet; |
| 45. | 136° 02' 35" | 88.69 feet; |
| 46. | 157° 36' 05" | 251.29 feet; |
| 47. | 122° 16' 18" | 162.58 feet; |
| 48. | 106° 37' 58" | 151.58 feet; |
| 49. | 109° 49' 13" | 676.10 feet; |
| 50. | 115° 49' 11" | 700.35 feet; |
| 51. | 130° 43' 43" | 214.03 feet; |
| 52. | 93° 43' 13" | 132.15 feet; |
| 53. | 109° 36' 56" | 179.80 feet; |
| 54. | 125° 30' 39" | 155.29 feet; |
| 55. | 108° 51' 24" | 162.42 feet; |
| 56. | 92° 12' 16" | 606.03 feet; |
| 57. | 126° 58' 03" | 113.42 feet; |
| 58. | 161° 43' 56" | 226.44 feet; |
| 59. | 136° 10' 11" | 132.13 feet; |
| 60. | 110° 36' 27" | 461.77 feet; |
| 61. | 102° 06' 27" | 185.14 feet; |
| 62. | 110° 23' 09" | 86.38 feet and ending at a point 0° 00', 299.44 feet from a pipe and 180° 00', 112.45 feet from another pipe. |

AREA = 26.25 acres.

14 October 1965

ACCESS ROAD - PARCEL "E"

WAIMEA, KAUAI, HAWAII

Being a portion of the Hawaii Government Land of Waimea (Addition to Puu Ka Pele Forest Reserve - Governor's Proclamation dated May 2, 1938).

Being a road right-of-way sixty (60) feet wide and extending thirty (30) feet on each side of the following described centerline:

Beginning at the Easterly end of this centerline, 180° 00', 112.45 feet from a pipe and 0° 00', 299.44 feet from another pipe, the coordinates of said point of beginning referred to Government Survey Triangulation Station "Makaha 2" being 2,123.76 feet North and 5,842.97 feet West, and running by azimuths measured clockwise from True South:

| | | |
|---|---|---|
| 1. | 128° 58' 16" | 107.33 feet; |
| 2. | 139° 16' 27" | 345.14 feet; |
| 3. | 105° 01' 27" | 139.89 feet; |
| 4. | 115° 21' 17" | 145.82 feet; |
| 5. | 125° 41' 06" | 265.83 feet; |
| 6. | 106° 47' 33" | 66.57 feet; |
| 7. | 87° 54' 00" | 404.93 feet; |

Thence on a curve to the right with a radius of 325.00 feet, the chord azimuth and distance being:

| | | |
|---|---|---|
| 8. | 150° 38' 20" | 577.80 feet; |
| 9. | 213° 22' 40" | 111.08 feet; |
| 10. | 164° 32' 08" | 90.83 feet; |
| 11. | 115° 41' 37" | 335.06 feet; |

XERO XERO XERO XERO

12. 110° 16' 48" 428.49 feet;

13. 80° 41' 01" 134.47 feet and ending at a point 0° 00', 184.00 feet from a pipe and 180° 00', 97.14 feet from another pipe.

AREA = 4.53 acres
(All within Parcel "B")

XERO XERO XERO XERO

SUBMERGED CABLE RIGHTS-OF-WAY

BEING WITHIN TWELVE (12) SQUARE MILES

OF OCEAN AREA OFF THE WESTERN COAST OF KAUAI

EXHIBIT "C"

(See back cover for recording data)

4TH DIV. (KAUAI)
T.K. 1-01:6 & 1-4-01:2, 13 & 14

DLR 10-5-106

To B.of C. 2/1/66

THE ORIGINAL OF THE DOCUMENT
RECORDED AS FOLLOWS:
STATE OF HAWAII
OFFICE OF
BUREAU OF CONVEYANCES

Received for record this 1ST
day of February, A.D., 1966
at 1:49 o'clock P.M. and
recorded in Liber 5248
on Pages 160-180

**Navy Easement S-5804**

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## STATUS OF REAL ESTATE TRANSACTION

| ITEM | ACTION | DATE | BY |
|---|---|---|---|
| Legal Description | Yes | 27-Sep-06 | CPS |
| Recording | | | |
| Scan | | 7-Jun-10 | SB |
| Summary Map | YES | | SB |
| Property Record | | | RD |
| District Land Register | DLR 10-5-153 | | |
| Real Estate Contract | State Esmt No. S-5804 | | |
| Grantee | Dept. of the Navy | 1-Jun-07 | |
| Amendment | | | |
| Expiration | | 19-Aug-29 | |
| Termination | | | |

Non-Exclusive Agricultural and Restrictive Use Easements at PMRF. Includes Esmts 100 to 107.

'OMPLETED TRANSACTION FORM

ACTIVITY: Commander, Navy Region Hawaii N61449

PROJECT: PMRF AGRICULTURAL PRESERVATION AND NON-EXCLUSIVE RESTRICTIVE USE EASEMENT

DOCUMENT NO.:

PREVIOUS DOCUMENT NO. (if applicable): N/A

AREA (SQ FT/ACREAGE):

PREVIOUS PR NO. (if available):

WORKORDER NUMBER : 532404

| | INITIALS | DATE |
|---|---|---|
| 1. Project Manager | NPS | 5/11/2010 |
| a. Prepare distribution correspondence for signature. | | |
| b. Attach signed original/duplicate; place copy in project file. | | |
| c. Complete & attach APR. | | |
| d. Complete tickler/suspense card. | | |
| Tickler Dates: Term 22 yrs - Jan 2028 | | |
| Liability Insurance n/a | | |
| Fire Insurance n/a | | |
| e. Copy to City & County Tax Department Commercial outgrants one year or more. (Lease/License/Permit) | | |
| f. Project RES | _____ | _____ |
| g. Inventory RES | _____ | _____ |
| 2. RES1 | _____ | _____ |
| 3. RES | _____ | _____ |
| 4. RESA | _____ | _____ |
| 5. RES1 (Only if rental due) | _____ | _____ |
| 6. RES1C (Data Input) | _____ | _____ |
| 7. RES1C/RES1C1 NFADB Action _____ PR NO. | _____ | _____ |
| DLR Action _____ DLR NO. | _____ | _____ |
| a. DLR Index and File ~~10-5-151~~ 10-5-153 | | |
| b. Summary Map Entry _____ | | |
| c. Scan ~~6/7/10~~ | | |
| 8. NFADB Class 2 PM SENDS ELECTRONIC FILES TO APPROPRIATE REGION PERSONNEL FOR NFADB INPUT | | |
| 10. Project Manager | _____ | _____ |

LAND COURT SYSTEM ) REGULAR SYSTEM

Return by Mail ( ) Pickup ( ) To:

Total Number of Pages:

Tax Map Key No. (4) 1-2-02: Por. 1

AMENDMENT OF GRANT OF AGRICULTURAL PRESERVATION AND NON-EXCLUSIVE RESTRICTIVE USE TERM EASEMENT NO. S-5804

THIS AMENDMENT, made and entered into this 19th day of November, 2007, by and between the State of Hawaii, by its Board of Land and Natural Resources, hereinafter referred to as the "Grantor," and the UNITED STATES OF AMERICA, whose address is Department of the Navy, Naval Facilities Engineering Command, Pacific Division, 258 Makalapa Drive, Suite 100, Pearl Harbor, Hawaii 96860-3134, hereinafter referred to as the "Grantee."

WITNESSETH:

WHEREAS, the United States of America is the present Grantee of unrecorded Grant of Agricultural Preservation and Non-Exclusive Restrictive Use Term Easement No. S-5804 dated June 1, 2007 (Grant); and

WHEREAS, the Grantor and Grantee desire that the Grant be amended to correct errors in paragraphs 16 and 17 wherein all



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

PRELIM. APPR'D.
Department of the
Attorney General

references to the Department of Agriculture should be deleted and replaced with the Agribusiness Development Corporation.

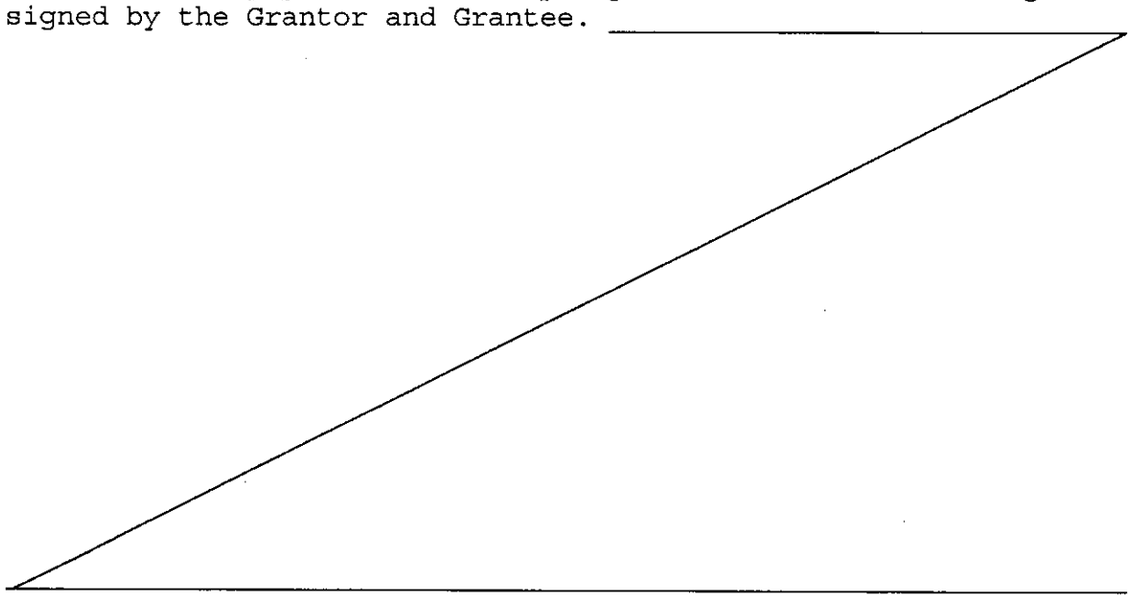
NOW, THEREFORE, the Grantor and Grantee covenant and agree that paragraphs 16 and 17 of the Grant are hereby deleted in their entirety and replaced with the following:

16. As to Easement 106, the easement area is encumbered by Governor's Executive Order No. 4007 to the State of Hawaii, Agribusiness Development Corporation, and therefore this grant of easement is subject to the State of Hawaii Governor's approval. Said concurrence was obtained on November 22, 2006.

17. As to Easement 106, the easement area is encumbered by Governor's Executive Order No. 4007 to the State of Hawaii, Agribusiness Development Corporation, and therefore this grant of easement is subject to the Agribusiness Development Corporation's approval. Said concurrence was obtained on May 7, 2004.

IN CONSIDERATION THEREOF, the Grantor and Grantee further agree that this Amendment of Grant is subject to all the covenants and conditions in the Grant, except as herein provided.

This Amendment, read in conjunction with the Grant sets forth the entire agreement between the Grantor and Grantee; and the Grant as amended and modified hereby shall not be altered or modified in any particular except by a memorandum in writing signed by the Grantor and Grantee.





DEPARTMENT OF LAND AND NATURAL RESOURCES
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HONOLULU, HAWAII 96809

PRELIM. APPR'D.
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Total Number of Pages:

Tax Map Key No. (4) 1-2-02: Por. 1

GRANT OF AGRICULTURAL PRESERVATION AND NON-EXCLUSIVE RESTRICTIVE USE TERM EASEMENT NO. S-5804

THIS INDENTURE, made and entered into this 1st day of June, 2007, by and between the STATE OF HAWAII, by its Board of Land and Natural Resources, hereinafter referred to as the "Grantor," and the UNITED STATES OF AMERICA, whose address is Department of the Navy, Naval Facilities Engineering Command, Pacific Division, 258 Makalapa Drive, Suite 100, Pearl Harbor, Hawaii 96860-3134, hereinafter referred to as the "Grantee."

WITNESSETH THAT:

WHEREAS, the Grantor is the owner of certain lands situate at Mana, Waimea, Kauai, Hawaii, hereinafter referred to as the "Premises", more fully described and delineated in Exhibits "A" through "L," all of which are attached hereto and made a part hereof; said exhibits being survey descriptions and survey maps prepared by the Survey Division, Department of Accounting and General Services, State of Hawaii, designated, C.S.F. Nos. 24,337 through 24,342, inclusive, dated September 27, 2006, together with rights of ingress and egress to and from the



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

PRELIM. APPR'D
Department of the
Attorney General

Enclosure 3

easement area for all purposes in connection with the rights granted hereby; and

WHEREAS, the Grantee operates the Pacific Missile Range Facility (hereinafter "PMRF"), a multi-environment test range, which provides testing environments for anti-submarine, air, surface, and subsurface weapon systems and testing environments for subsurface, surface, air and exo-atmospheric vehicles, all within the vicinity of the Premises; and

WHEREAS, the Grantee desires to acquire a restrictive easement, which, among other things, prohibits certain uses of the Premises and establishes height and development restrictions, to include prohibiting the erection of buildings at certain locations within the Premises, all for the purpose of encouraging compatible uses and preventing incompatible uses in relation to the Grantee's use of PMRF for runway and air operations, range operations, ordinance handling and storage, and communications and radar operations; and

WHEREAS, the Grantee and Grantor have amended State General Lease No. S-3852 to include lands adjacent to the Premises, under which the Grantee will assume responsibility for operation and maintenance costs of the drainage pumps, ditches and related infrastructure which support PMRF and the Premises; and

WHEREAS, at its meeting held May 24, 2004, the Grantor, through its Board of Land and Natural Resources approved the grant to the Grantee of such a non-exclusive restrictive use easement pursuant to Hawaii Revised Statutes sections 171-13 and 171-95.

NOW, THEREFORE, the Grantor, for and in consideration of the terms, conditions, and covenants herein contained, and on the part of the Grantee to be observed and performed, does hereby grant unto the Grantee, a non-exclusive restrictive use easement (hereinafter "Easement") in, over, under, and across the Premises in the nature and character of, and to constitute, a servitude upon said Premises and establishing the following non-exclusive easement rights:

1. Term. The term of this easement shall commence as of the date first above written and shall be co-terminus with General Lease No. S-3852 (hereby incorporated by reference) and expire August 19, 2029, unless sooner terminated in accordance with paragraph 9 herein, or upon the sooner termination of General Lease No. S-3852.



PRELIM. APPR'D.
Department of the
Attorney General

IN WITNESS WHEREOF, the STATE OF HAWAII, by its Board of Land and Natural Resources, has caused the seal of the Department of Land and Natural Resources to be hereunto affixed and the parties hereto have caused these presents to be executed the day, month, and year first above written.

STATE OF HAWAII

By _____
Chairperson
Board of Land and
Natural Resources

Approved by the Board of
Land and Natural Resources
at its meeting held on
May 24, 2004.

GRANTOR

UNITED STATES OF AMERICA

_____

Its _____
DENNIS PACHT
Realty Operations Officer
Naval Facilities Engineering Command, Pacific
Real Estate Contracting Officer

GRANTEE

APPROVED AS TO FORM:

_____
Deputy Attorney General

Dated: September 17, 2007

PRELIM. APPR'D.
Department of the
Attorney General

252983_1.DOC

2. Permitted Uses. The Premises may be used for the following purposes and no other:

a. Agricultural use which shall include only low intensive agricultural uses such as but not limited to the growing of crops, cultivation of soil, planting and manufacturing of seed, silviculture (subject to height restrictions), floriculture, viticulture, aquaculture, mariculture, pasture, cattle feed production, and the raising and keeping of livestock and other animals;

b. Conservation and open space;

c. Use and storage of machinery, tools and equipment, motor vehicles and other property as may be reasonably necessary for use of the Premises for agricultural purposes;

d. Low impact recreation and subsistence uses including, but without limitation, gathering and hunting; and

e. Access to, and through, the Premises to conduct the permitted uses enumerated in items 2.a to 2.d above.

3. Use Restrictions.

a. As to Easement 102, the Grantor covenants for itself and its assigns as follows:

i. Buildings or other structures to be used in support of agricultural uses may be constructed on the Premises, provided that facilities exceeding 30 feet in height or producing smoke or excessive amounts of light or electromagnetic radiation shall not be permitted. All construction plans shall be submitted to the Grantee for review and consent, which shall not be unreasonably withheld or delayed.

ii. No electromagnetic radiation sources producing radio frequency (RF) fields, including, but without limitation, generators, cellular communications towers, and television and radio towers, shall be constructed or operated on the Premises without the prior approval of the Grantee. This restriction does not preclude the use of commercially available wireless communication devices, cellular phones, walkie-talkies and pagers. Frequencies in government allocated bands and frequencies between 400 and 450 MHz shall not be used. No fixed stations, particularly those utilizing HF Frequencies, shall be established, constructed or operated on the Premises without the prior approval of the Grantee. For mobile radios, including vehicle installed devices; walkie-talkies, and cellular phones, effective radiated power must not exceed 5 watts. Other RF-





PRELIM. APPR'D.
Department of the
Attorney General

emitting devices must be approved in advance in writing by the Grantee. It is agreed and understood that the Grantee may require the requestor, at the requestor's own cost and expense, to complete RF compatibility studies as a condition of approval, which shall not be unreasonably withheld or delayed.

iii. No elevated lights (over 10 feet), lighted signs or other lighted objects shall be installed or constructed on the Premises without the prior written consent of the Grantee. To the extent permitted under applicable laws, this restriction does not preclude the use of temporary lights in connection with agricultural operations (e.g., night harvesting and use of properly shielded or downward-facing night lighting); provided that the Grantee shall be given advance notice of the purpose, location and dates that temporary lighting will be in use not less than thirty (30) days in advance of the use.

iv. No petroleum fuel, petrochemicals or nuclear material shall be stored on the Premises, with the exception of petroleum fuel contained in the fuel tanks of vehicles or stored in accordance with applicable regulations for the purpose of powering vehicles and equipment utilized in connection with the permitted uses set out in items 2.a through 2.d above.

v. Open fires, including crop burning, shall be permitted only upon prior consent of the Grantee, which shall not be unreasonably withheld or delayed. It is agreed and understood that the Grantee may reasonably withhold consent during preparation for operations and during ordinance handling.

vi. Overhead power lines shall be permitted only upon the prior approval of the Grantee. It is agreed and understood that the Grantee may require the requestor, at the requestor's own cost and expense, to complete RF compatibility studies as a condition of approval, which shall not be unreasonably withheld or delayed.

vii. No dwelling units shall be built or constructed on the Premises, nor shall residential uses of any sort be permitted without prior written consent of the Grantee, which shall not be unreasonably withheld or delayed.

b. As to Easements 100 and 101 the Grantor covenants for itself and its assigns as follows:

i. No building or structure of any kind shall be constructed on the Premises without the prior written consent of the Grantee, which shall not be unreasonably withheld or delayed.



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ii. No electromagnetic radiation sources producing radio frequency (RF) fields, including, but without limitation, generators, cellular communications towers, and television and radio towers, shall be constructed or operated on the Premises without the prior written approval of the Grantee. This restriction does not preclude the use of commercially available wireless communication devices, cellular phones, walkie-talkies and pagers. Frequencies in government allocated bands and frequencies between 400 and 450 MHz shall not be used. No fixed stations, particularly those utilizing HF Frequencies, shall be established, constructed or operated on the Premises without the prior written consent of the Grantee. For mobile radios, including vehicle installed devices, walkie-talkies, and cellular phones, effective radiated power must not exceed 5 watts. Other RF-emitting devices must be approved in advance in writing by the Grantee. It is agreed and understood that the Grantee may require the requestor, at the requestor's own cost and expense, to complete RF compatibility studies as a condition of approval, which shall not be unreasonably withheld or delayed.

iii. No elevated lights (over 10 feet), lighted signs or other lighted objects, shall be installed or constructed on the Premises without the prior written consent of the Grantee. To the extent permitted under applicable laws, the use of temporary lights in connection with agricultural operations (e.g., night harvesting and use of properly shielded or downward-facing night lighting) shall be permitted upon prior written consent of the Grantee, which shall not be unreasonably withheld or delayed. It is agreed and understood that the Grantee may reasonably withhold consent during preparation for operations.

iv. No petroleum fuel, petrochemicals or nuclear material shall be stored on the Premises, with the exception of petroleum fuel contained in the fuel tanks of vehicles or stored in accordance with applicable regulations for the purpose of powering vehicles and equipment utilized in connection with the permitted uses set out in items 2.a through 2.d above.

v. Open fires, including crop burning, shall be permitted only upon prior consent of the Grantee, which shall not be unreasonably withheld or delayed. It is agreed and understood that the Grantee may reasonably withhold consent during preparation for operations and ordinance handling.

vi. No overhead power lines shall be installed or constructed on the Premises without the prior approval of the Grantee. It is agreed and understood that the Grantee may require the requestor, at the requestor's own cost and expense, to



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complete RF compatibility studies as a condition of approval, which shall not be unreasonably withheld or delayed.

c. As to Easement 105, the Grantor covenants for itself and its assigns as follows:

i. No building or structure of any kind shall be constructed on the Premises without the prior written consent of the Grantee, which shall not be unreasonably withheld or delayed.

ii. No electromagnetic radiation sources producing, radio frequency (RF) fields, including, but without limitation, generators, cellular communications towers, and television and radio towers, shall be constructed or operated on the Premises without the prior approval of the Grantee. This restriction does not preclude the use of commercially available wireless communication devices, cellular phones, walkie-talkies and pagers. Frequencies in government allocated bands and frequencies between 400 and 450 MHz shall not be used. No fixed stations, particularly those utilizing HF Frequencies, shall be established, constructed or operated on the Premises without the prior written approval of the Grantee. For mobile radios, including vehicle installed devices, walkie-talkies, and cellular phones, effective radiated power must not exceed 5 watts. Other RF-emitting devices must be approved in advance in writing by the Grantee. It is agreed and understood that the Grantee may require the requestor, at the requestor's own cost and expense, to complete RF compatibility studies as a condition of approval, which shall not be unreasonably withheld or delayed.

iii. No elevated lights (over 10 feet), lighted signs or other lighted objects shall be installed or constructed on the Premises without the prior written consent of the Grantee. To the extent permitted under applicable laws, this restriction does not preclude the use of temporary lights in connection with agricultural operations (e.g., night harvesting and use of properly shielded or downward-facing night lighting); provided that the Grantee shall be given advance notice of the purpose, location and dates that temporary lighting will be in use not less than sixty (60) days in advance of the use.

iv. No petroleum fuel, petrochemicals or nuclear material shall be stored on the Premises, with the exception of petroleum fuel contained in the fuel tanks of vehicles or stored in accordance with applicable regulations for the purpose of powering vehicles and equipment utilized in connection with the permitted uses set out in items 2.a through 2.d above.

v. Open fires, including crop burning, shall be



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permitted only upon prior consent of the Grantee, which shall not be unreasonably withheld or delayed. It is agreed and understood that the Grantee may reasonably withhold consent during preparation for operations.

vi. No overhead power lines shall be installed or constructed on the Premises without the prior written approval of the Grantee. It is agreed and understood that the Grantee may require the requestor, at the requestor's own cost and expense, to complete RF compatibility studies as a condition of Grantee's approval, which shall not be unreasonably withheld or delayed.

d. As to Easements 103, 104 and 106, the Grantor covenants for itself and its assigns as follows:

i. No building or structure of any kind shall be constructed on the Premises without the prior written consent of the Grantee, which shall not be unreasonably withheld or delayed.

ii. Access to the Premises by persons other than authorized agricultural users including lessees, sublessees, licensees and permitees and their employees and contractors, shall be subject to the prior approval of the Chairperson of the Board of Land and Natural Resources and the Grantee.

iii. No public roads, trails or other public access routes shall be constructed on or across the Premises.

iv. No electromagnetic radiation sources producing radio frequency (RF) fields, including, but without limitation, generators, cellular communications towers, and television and radio towers, shall be constructed or operated on the Premises without the prior approval of the Grantee. This restriction also precludes the use of commercially available wireless communication devices, cellular phones, walkie-talkies and pagers.

v. No elevated lights (over 10 feet), lighted signs or other lighted objects shall be installed or constructed on the Premises without the prior written consent of the Grantee. To the extent permitted under applicable laws, the use of temporary lights in connection with agricultural operations (e.g., night harvesting and use of properly shielded or downward-facing night lighting) shall be permitted upon prior written consent of the Grantee, which shall not be unreasonably withheld or delayed. It is agreed and understood that the Grantee may reasonably withhold consent during preparation for operations.



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vi. No petroleum fuel, petrochemicals or nuclear material shall be stored on the Premises, with the exception of petroleum fuel contained in the fuel tanks of vehicles or stored in accordance with applicable regulations for the purpose of powering vehicles and equipment utilized in connection with the permitted uses set out in items 2.a through 2.d above.

vii. Open fires, including crop burning, shall be permitted only upon prior consent of the Grantee, which shall not be unreasonably withheld or delayed. It is agreed and understood that the Grantee may reasonably withhold consent during preparation for operations and during ordinance handling.

viii. No overhead power lines shall be installed or constructed on the Premises without the prior approval of the Grantee. It is agreed and understood that the Grantee may require the requestor, at the requestor's own cost and expense, to complete RF compatibility studies as a condition of approval, which shall not be unreasonably withheld or delayed.

4. Notices and Submittals.

a. The address for notices to the Grantee or requests for consent in connection with day-to-day operations, including crop burning, use of temporary lighting and use of non-stationary RF-emitting devices is as follows:

Pacific Missile Range Facility Range Scheduling Office
P.O. 128
Kekaha, HI 96752-0128

b. The request for Grantee's consent for installation or construction of any facility including, but without limitation, buildings, structures, overhead power lines, fixed RF-emitting stations and elevated lights is as follows:

Naval Facilities Engineering Command, Pacific Division
258 Makalapa Drive, Suite 100
Pearl Harbor, HI 96860-3134
Attn: Real Estate

c. Any request for Grantee's consent shall be deemed approved if the Grantee does not deny or grant conditional approval within thirty (30) days of receipt by Grantee.

THE GRANTEE COVENANTS AND AGREES WITH THE GRANTOR AS FOLLOWS:



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1. The Grantee shall be responsible for any claims for damage or injury caused by or resulting from any act or omission of the Grantee in connection with its use of the easement area described herein to the extent provided under applicable laws. This covenant shall survive the expiration or earlier termination of this easement.

2. The Grantor reserves unto itself, its successors and assigns, the full use of the easement area and to grant others rights and privileges for any and all purposes affecting the easement area, provided, however, that the rights herein reserved shall not be exercised by the Grantor and similar grantee(s) in any manner which interferes unreasonably with the use of the easement area for the purposes for which this easement is granted. It is expressly agreed and understood that nothing herein shall operate to restrict access to Polihale State Park or use of Lower Saki Mana Road or Polihale Road except as previously explicitly provided in Lease of Exclusive Easement No. S-5352, which is incorporated by reference.

3. The Grantee shall have the right to install signs to provide notification to the public of the restrictions contained herein. All signs placed in or upon the easement area by the Grantee shall be done without cost or expense to the Grantor and shall remain the property of the Grantee and may be removed or otherwise be disposed of by the Grantee at any time; provided, that the removal shall be accomplished with minimum disturbance to the easement, which shall be restored to its original condition, or as close thereto as possible, within a reasonable time after removal.

4. Upon completion of any work performed in or upon the easement area, the Grantee shall remove therefrom all equipment and unused or surplus materials, if any, and shall leave the easement area in a clean and sanitary condition satisfactory to the Grantor.

5. This easement or any rights granted herein shall not be sold, assigned, conveyed, granted, mortgaged, or otherwise transferred or disposed of, directly or by operation of law, except with the prior written consent of the Grantor.

6. The Grantee shall not make, permit or suffer, any waste, strip, spoil, nuisance or unlawful or improper or offensive use of the easement area.

7. The Grantee covenants for itself, its successors and assigns, that the use and enjoyment of the easement rights herein granted, shall not be in support of any policy which





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discriminates against anyone based upon race, creed, color, national origin, religion, marital status, familial status, ancestry, physical handicap, disability, age or HIV (human immunodeficiency virus) infection.

8. The Grantee, in the exercise of the rights granted herein, shall comply with the applicable requirements of federal, state and county authorities and shall observe all applicable county ordinances and state and federal statutes, rules and regulations, now in force or which may hereinafter be in force.

9. These easement rights shall cease and terminate and the easement area shall automatically be forfeited to the Grantor, without any action on the part of the Grantor, upon notice from the Grantee of its intent to relinquish the rights granted herein.

10. Any and all disputes or questions arising under this easement shall be referred to the Chairperson of the Board of Land and Natural Resources for resolution.

11. The Grantee shall be solely responsible for the Grantee's personal property in the easement area and, at the termination of this easement, for the removal of all of Grantee's personal property from the easement area unless Grantor has given written consent to a disposal of Grantee's personal property by its abandonment in place. This provision shall survive the termination of this easement.

12. This easement shall run with the land and shall be binding on Grantor's successors and assigns.

13. This easement may be enforced by the Grantee in law or in equity by a court of competent jurisdiction.

14. The terms and conditions of this easement shall be reviewed by the Grantor and the Grantee every ten (10) years during the term of the easement.

15. In the event any historic properties or burial sites, as defined in section 6E-2, Hawaii Revised Statutes, are found on the premises, the Grantee and the Grantee's agents, employees and representatives shall immediately stop all land utilization or work or both and contact the Historic Preservation Office in compliance with chapter 6E, Hawaii Revised Statutes.

16. As to Easement 106, the easement area is encumbered by Governor's Executive Order No. 4007 to the State of Hawaii, Department of Agriculture, and therefore this grant of easement



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is subject to the State of Hawaii Governor's approval. Said concurrence was obtained on November 22, 2006.

17. As to Easement 106, the easement area is encumbered by Governor's Executive Order No. 4007 to the State of Hawaii, Department of Agriculture, and therefore this grant of easement is subject to the State of Hawaii, Department of Agriculture's approval. Said concurrence was obtained on May 7, 2004.

IN WITNESS WHEREOF, the STATE OF HAWAII, by its Board of Land and Natural Resources, has caused the seal of the Department of Land and Natural Resources to be hereunto affixed and the parties hereto have caused this indenture to be executed as of the day, month, and year first above written.

Approved by the Board of
Land and Natural Resources
at its meeting held on
May 24, 2004.

STATE OF HAWAII

By _____
Chairperson
Board of Land and
Natural Resources

GRANTOR

UNITED STATES OF AMERICA

APPROVED AS TO FORM:

By _____

Its _____

Pamela E. Matsukawa
Deputy Attorney General

Dated: March 26, 2007

DENNIS PACHT
Realty Operations Officer
Naval Facilities Engineering Command, Pacific
Real Estate Contracting Officer

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STATE OF HAWAII
SURVEY DIVISION
DEPT. OF ACCOUNTING AND GENERAL SERVICES
HONOLULU

C.S.F. No. 24,337

September 27, 2006

NON-EXCLUSIVE AGRICULTURAL PRESERVATION
AND RESTRICTIVE USE EASEMENT

EASEMENTS 100 AND 101

Kekaha, Waimea, Kauai, Hawaii

Being portions of Lot 11 of the Government (Crown) Land of Waimea.

Being also portions of Agricultural and Related Purposes Site, Governor's Executive Order 4007.

EASEMENT 100

Beginning at the southwest corner of this easement, the northeast corner of Lot 3 of the Government (Crown) Land of Waimea and on the north side of Kaumualii Highway (Kao Road), the coordinates of said point of beginning referred to Government Survey Triangulation Station "TRANSIT OF VENUS" being 29,230.95 feet North and 38,156.53 feet West, thence running by azimuths measured clockwise from True South:-

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1. 185° 24' 122.46 feet along Lot 1 of the Government (Crown) Land of Waimea;

EXHIBIT A

| | | | | |
|---|---|---|---|---|
| 2. | 180° | 23' | 340.89 | feet along Lot 1 of the Government (Crown) Land of Waimea; |
| 3. | 193° | 32' | 143.47 | feet along Lot 1 of the Government (Crown) Land of Waimea; |
| 4. | 203° | 01' | 520.84 | feet along Lot 1 of the Government (Crown) Land of Waimea; |
| 5. | 208° | 23' | 263.70 | feet along Lot 1 of the Government (Crown) Land of Waimea; |
| 6. | 194° | 10' 30" | 174.08 | feet along Lot 1 of the Government (Crown) Land of Waimea; |
| 7. | 183° | 02' | 302.97 | feet along Lot 1 of the Government (Crown) Land of Waimea;; |
| 8. | 191° | 26' | 136.43 | feet along Lot 1 of the Government (Crown) Land of Waimea; |
| 9. | 198° | 03' | 251.16 | feet along Lot 1 of the Government (Crown) Land of Waimea; |
| 10. | 186° | 44' 30" | 681.33 | feet along Lot 1 of the Government (Crown) Land of Waimea; |
| 11. | 183° | 02' | 264.72 | feet along Lot 1 of the Government (Crown) Land of Waimea; |
| 12. | 191° | 28' | 435.49 | feet along Lot 1 of the Government (Crown) Land of Waimea; |
| 13. | 201° | 43' | 253.79 | feet along Lot 1 of the Government (Crown) Land of Waimea; |
| 14. | 209° | 05' | 320.86 | feet along Lot 1 of the Government (Crown) Land of Waimea; |
| 15. | 205° | 48' | 203.30 | feet along Lot 1 of the Government (Crown) Land of Waimea; |

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16. 191° 49' 281.61 feet along Lot 1 of the Government (Crown) Land of Waimea;

17. 195° 19' 277.88 feet along Lot 1 of the Government (Crown) Land of Waimea;

18. 189° 05' 278.61 feet along Lot 1 of the Government (Crown) Land of Waimea;

19. 177° 49' 325.32 feet along Lot 1 of the Government (Crown) Land of Waimea;

20. 182° 46' 287.14 feet along Lot 1 of the Government (Crown) Land of Waimea;

21. 191° 06' 260.84 feet along Lot 1 of the Government (Crown) Land of Waimea;

22. 176° 42' 411.20 feet along Lot 1 of the Government (Crown) Land of Waimea;

23. 196° 40' 2593.67 feet along Lot 1 of the Government (Crown) Land of Waimea;

24. 191° 05' 144.42 feet along Lot 1 of the Government (Crown) Land of Waimea;

25. 224° 03' 1458.00 feet along Lot 1 of the Government (Crown) Land of Waimea;

26. 191° 05' 732.36 feet along Lot 1 of the Government (Crown) Land of Waimea;

27. 224° 03' 1195.22 feet along Lot 1 of the Government (Crown) Land of Waimea;

28. Thence along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007 on a curve to the left with a radius of 310.00 feet, the chord azimuth and distance being:
4° 33' 323.79 feet;

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29. 333° 04' 145.13 feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007;

30. 336° 27' 936.57 feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007;

31. 44° 03' 3604.33 feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007;

32. 16° 40' 1440.89 feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007;

33. 356° 42' 398.77 feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007;

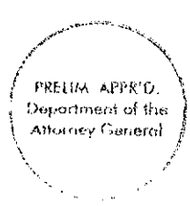
34. 11° 06' 274.21 feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007;

35. 2° 46' 258.12 feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007;

36. 357° 49' 339.18 feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007;

37. 9° 05' 316.89 feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007;

38. 15° 19' 283.86 feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007;



| | | | | | |
|---|---|---|---|---|---|
| 39. | 11° | 49' | | 304.63 | feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007; |
| 40. | 25° | 48' | | 241.12 | feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007; |
| 41. | 29° | 05' | | 311.93 | feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007; |
| 42. | 21° | 43' | | 215.28 | feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007; |
| 43. | 11° | 28' | | 394.63 | feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007; |
| 44. | 3° | 02' | | 254.38 | feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007; |
| 45. | 6° | 44' | 30" | 714.17 | feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007; |
| 46. | 18° | 03' | | 261.46 | feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007; |
| 47. | 11° | 26' | | 103.62 | feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007; |
| 48. | 3° | 02' | | 308.99 | feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007; |

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| | | | | | |
|---|---|---|---|---|---|
| 49. | 14° | 10' | 30" | 229.62 | feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007; |
| 50. | 28° | 23' | | 283.14 | feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007; |
| 51. | 23° | 01' | | 488.38 | feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007; |
| 52. | 13° | 32' | | 93.92 | feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007; |
| 53. | 0° | 23' | | 323.03 | feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007; |
| 54. | 5° | 24' | | 153.42 | feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007; |
| 55. | 99° | 58' | 30" | 250.81 | feet along the northerly side of Kaumualii Highway (Kao Road) to the point of beginning and containing an AREA OF 122.011 ACRES. |

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EASEMENT 101

Beginning at the westerly corner of this easement, the north corner of Bonham Air Base, Tract E-1, General Lease S-3852 to United States of America and at the northeast corner of Bonham Air Base (Formerly Mana Airport Military Reservation), Part 2 of Governor's Executive Order 945, the coordinates of said point of beginning referred to Government Survey Triangulation Station "TRANSIT OF VENUS" being 41,941.00 feet North and 34,915.88 feet West, thence running by azimuths measured clockwise from True South:-

1. 224° 03' 4385.90 feet along Polihale State Park, Governor's Executive Order 2901;

2. 325° 29' 35" 4557.72 feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007;

3. 4° 30' 7700.00 feet along the Hawaiian Home Land of Waimea;

4. 39° 59' 32" 5364.66 feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007;

5. Thence along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007 on a curve to the right with a radius of 5077.50 feet, the chord azimuth and distance being: 76° 13' 25" 348.99 feet;

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6. 78° 11' 35" 18.66 feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007;

7. Thence along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007 on a curve to the left with a radius of 5142.50 feet, the chord azimuth and distance being:
76° 35' 30" 287.42 feet;

8. 74° 59' 25" 484.69 feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007;

9. Thence along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007 on a curve to the left with a radius of 10,272.50 feet, the chord azimuth and distance being:
74° 11' 15" 287.85 feet;

10. 73° 23' 05" 380.10 feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007;

11. Thence along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007 on a curve to the right with a radius of 1717.50 feet, the chord azimuth and distance being:
76° 07' 45" 164.47 feet;

12. 78° 52' 25" 20.86 feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007;

13. 168° 53' 38.37 feet along the east end of Kaumualii Highway (Kao Road);

14. 78° 53' 798.13 feet along the northerly side of Kaumualii Highway (Kao Road);

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15. Thence along the northerly side of Kaumualii Highway (Kao Road) on a curve to the right with a radius of 944.32 feet, the chord azimuth and distance being: 89° 25' 45" 345.66 feet;

16. 99° 58' 30" 1533.83 feet along the northerly side of Kaumualii Highway (Kao Road);

17. 185° 24' 153.42 feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007;

18. 180° 23' 323.03 feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007;

19. 193° 32' 93.92 feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007;

20. 203° 01' 488.38 feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007;

21. 208° 23' 283.14 feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007;

22. 194° 10' 30" 229.62 feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007;

23. 183° 02' 308.99 feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007;

24. 191° 26' 103.62 feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007;

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25. 198° 03' 261.46 feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007;

26. 186° 44' 30" 714.17 feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007;

27. 183° 02' 254.38 feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007;

28. 191° 28' 394.63 feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007;

29. 201° 43' 215.28 feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007;

30. 209° 05' 311.93 feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007;

31. 205° 48' 241.12 feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007;

32. 191° 49' 304.63 feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007;

33. 195° 19' 283.86 feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007;

34. 189° 05' 316.89 feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007;

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35. 177° 49' 339.18 feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007;

36. 182° 46' 258.12 feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007;

37. 191° 06' 274.21 feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007;

38. 176° 42' 398.77 feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007;

39. 196° 40' 1440.89 feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007;

40. 224° 03' 3604.33 feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007;

41. 156° 27' 936.57 feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007;

42. 153° 04' 145.13 feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007;

43. Thence along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007 on a curve to the right with a radius of 310.00 feet, the chord azimuth and distance being:
195° 41' 419.80 feet;

44. 238° 18' 160.91 feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007;

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45. 134° 03' 1395.67 feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007 to the point of beginning and containing a GROSS AREA OF 1873.110 ACRES and a NET AREA OF 1841.530 ACRES after deducting therefrom Polihale Road (19.280 Acres), Grant 8153 to Baba Kaiwa (1.330 Acres) and Lower Saki-Mana Road (10.970 Acres).

SURVEY DIVISION
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
STATE OF HAWAII

By: Glenn J. Kodani
Glenn J. Kodani
Land Surveyor ml

Compiled from map and desc. furn. by ControlPoint Surveying, Inc. Said map and desc. have been examined and checked as to form and mathematical correctness but not on the ground by the Survey Division.

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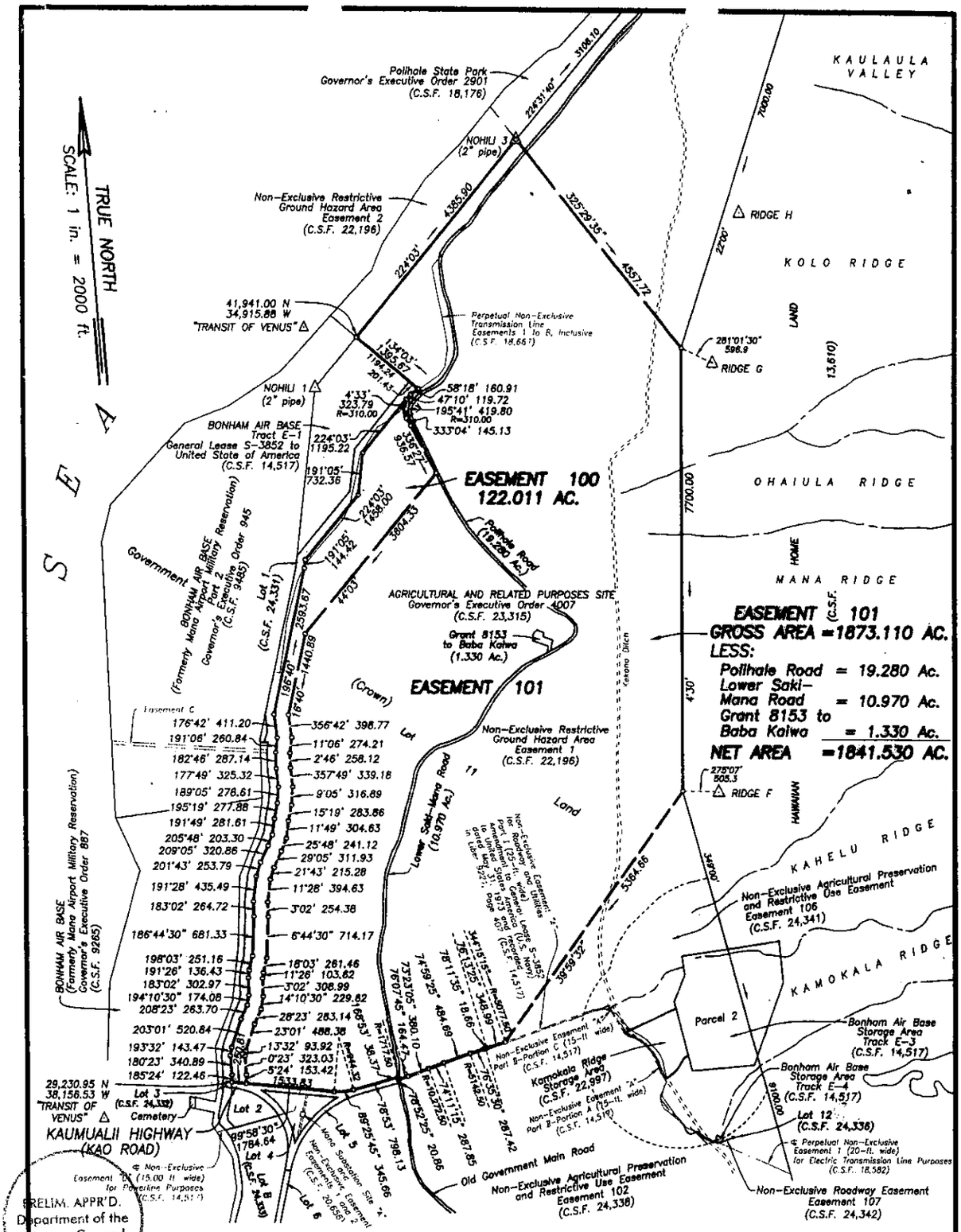


# NON-EXCLUSIVE AGRICULTURAL PRESERVATION AND RESTRICTIVE USE EASEMENT

## EASEMENTS 100 AND 101

Kekaha, Waimea, Kauai, Hawaii

Scale: 1 inch = 2000 feet

**EXHIBIT B**

REDUCED
NOT TO SCALE

JOB K-298(06)

C. BK.

TAX MAP 1-2-02: Pors. 01

SURVEY DIVISION
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
STATE OF HAWAII

C.S.F. NO. 24,337

JGL September 27, 2006

STATE OF HAWAII
SURVEY DIVISION
DEPT. OF ACCOUNTING AND GENERAL SERVICES
HONOLULU

C.S.F. No. 24,338

September 27, 2006

NON-EXCLUSIVE AGRICULTURAL PRESERVATION
AND RESTRICTIVE USE EASEMENT

EASEMENT 102

Kekaha, Waimea, Kauai, Hawaii

Being a portion of the Government (Crown) Land of Waimea.

Being also a portion of Agricultural and Related Purposes Site, Governor's Executive Order 4007.

Beginning at the north corner of this easement, the coordinates of said point of beginning referred to Government Survey Triangulation Station "TRANSIT OF VENUS" being 33,661.21 feet North and 29,888.59 feet West, thence running by azimuths measured clockwise from True South:-

1. 349° 00' 1572.77 feet along the Hawaiian Home Land of Waimea;

2. Thence along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007 on a curve to the left with a radius of 1800.00 feet, the chord azimuth and distance being:
78° 50' 32" 205.28 feet;

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Department of the
Attorney General

EXHIBIT C

3. 84° 09' 27" 107.55 feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007;

4. Thence along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007 on a curve to the left with a radius of 1800.00 feet, the chord azimuth and distance being:
67° 51' 27" 625.13 feet;

5. 50° 19' 42" 725.06 feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007;

6. Thence along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007 on a curve to the left with a radius of 1800.00 feet, the chord azimuth and distance being:
28° 58' 41" 787.14 feet;

7. Thence along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007 on a curve to the left with a radius of 1650.00 feet, the chord azimuth and distance being:
18° 05' 55" 1782.70 feet;

8. Thence along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007 on a curve to the left with a radius of 1650.00 feet, the chord azimuth and distance being:
281° 25' 56" 3174.80 feet;

9. 349° 00' 3695.31 feet along the Hawaiian Home Land of Waimea;

10. 329° 00' 8500.00 feet along the Hawaiian Home Land of Waimea;

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Attorney General

11. 323° 56' 15" 1495.26 feet along the Hawaiian Home Land of Waimea;

12. 43° 20' 6355.57 feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007;

13. 138° 44' 15,620.53 feet along the northeast side of Kaumualii Highway (Hawaii Project No. DA-WR-1);

14. Thence along the northeast side of Kaumualii Highway (Hawaii Project No. DA-WR-1) on a curve to the right with a radius of 2050.51 feet, the chord azimuth and distance being:
167° 22' 30" 1869.88 feet;

15. 196° 01' 2536.22 feet along the east side of Kaumualii Highway (Hawaii Project No. DA-WR-1);

16. Thence along the southerly side of Kaumualii Highway (Hawaii Project No. DA-WR-1) on a curve to the right with a radius of 1750.44 feet, the chord azimuth and distance being:
227° 27' 1825.73 feet;

17. 258° 53' 684.38 feet along the southerly side of Kaumualii Highway (Kao Road);

18. 168° 53' 61.63 feet along the east end of Kaumualii Highway (Kao Road);

19. 258° 52' 25" 20.86 feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007;

20. Thence along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007 on a curve to the left with a radius of 1717.50 feet, the chord azimuth and distance being:
256° 07' 45" 164.47 feet;

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21. 253° 23' 05" 380.10 feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007;

22. Thence along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007 on a curve to the right with a radius of 10,272.50 feet, the chord azimuth and distance being:
254° 11' 15" 287.85 feet;

23. 254° 59' 25" 484.69 feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007;

24. Thence along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007 on a curve to the right with a radius of 5142.50 feet, the chord azimuth and distance being:
256° 35' 30" 287.42 feet;

25. 258° 11' 35" 18.66 feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007;

26. Thence along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007 on a curve to the left with a radius of 5077.50 feet, the chord azimuth and distance being:
256° 13' 25" 348.99 feet;

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Attorney General

C.S.F. No. 24,338

September 27, 2006

| | | | |
|---|---|---|---|
| 27. | 219° | 59' 32" | 5364.66 feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007 to the point of beginning and containing a GROSS AREA OF 3172.549 ACRES, MORE OR LESS and a NET AREA OF 3150.093 ACRES, MORE OR LESS after excluding therefrom Lot 12 of the Government (Crown) Land of Waimea (0.026 Acre), Grant 8144 to Peter Pah On Leong (3.850 Acres) and Portion of Old Government Main Road (18.580 Acres). |

SURVEY DIVISION
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
STATE OF HAWAII

By: Glenn J. Kodani
Glenn J. Kodani
Land Surveyor

ml

Compiled from map and desc. furn. by ControlPoint Surveying, Inc. Said map and desc. have been examined and checked as to form and mathematical correctness but not on the ground by the Survey Division.

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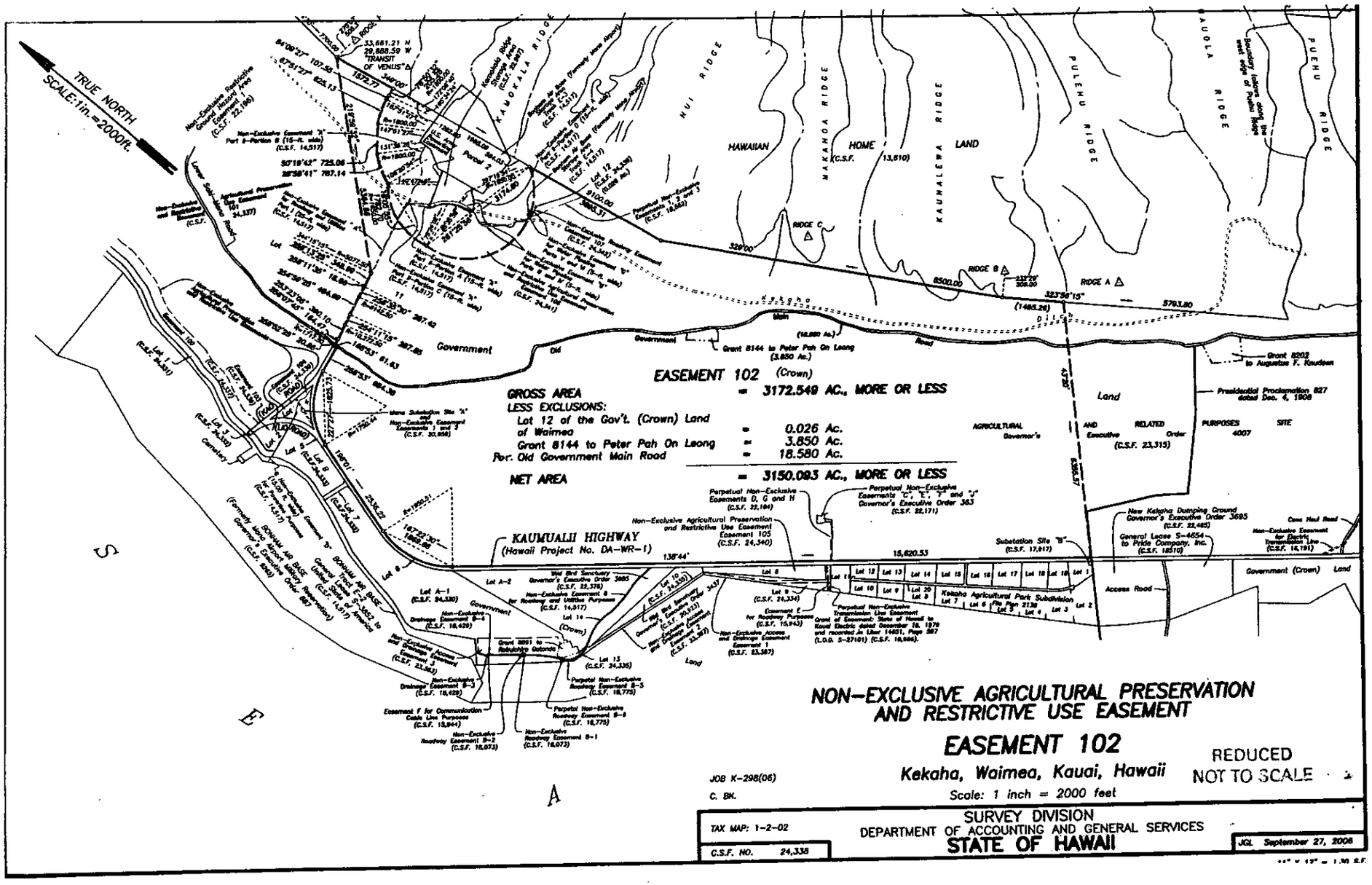
Attorney General

PRELIM. APP'R'D.
Department of the
Attorney General

**EXHIBIT D**


TRUE NORTH
SCALE: 1in. = 2000ft.
EASEMENT 102 (Crown)
GROSS AREA = 3172.549 AC., MORE OR LESS
LESS EXCLUSIONS:
Lot 12 of the Gov't. (Crown) Land of Waimea = 0.026 Ac.
Grant 8144 to Peter Pah On Leong = 3.850 Ac.
Por. Old Government Main Road = 18.580 Ac.
NET AREA = 3150.093 AC., MORE OR LESS
KAUMUALII HIGHWAY
(Hawaii Project No. DA-WR-1)
HAWAIIAN HOME LAND (C.S.F. 13,610)
KAMOKALA RIDGE
KUI RIDGE
MAKAHOA RIDGE
KAUHALEWA RIDGE
PUULEHU RIDGE
KAUOLA RIDGE
PUEHU RIDGE
RIDGE A
RIDGE B
RIDGE C
Old Government Main Road
Grant 8144 to Peter Pah On Leong (3.850 Ac.)
Grant 8202 to Augustus F. Knudsen
Presidential Proclamation 827 dated Dec. 4, 1909
Land AND RELATED PURPOSES SITE
Executive Order 4007
(C.S.F. 23,315)
AGRICULTURAL Governor's
Perpetual Non-Exclusive Easements D, G and H (C.S.F. 22,184)
Perpetual Non-Exclusive Easements "C", "E", "I" and "J" Governor's Executive Order 363 (C.S.F. 22,171)
Non-Exclusive Agricultural Preservation and Restrictive Use Easement Easement 105 (C.S.F. 24,340)
New Kekaha Dumping Ground Governor's Executive Order 3695 (C.S.F. 22,485)
General Lease S-4654 to Pride Company, Inc. (C.S.F. 18510)
Cane Haul Road
Non-Exclusive Easement for Electric Transmission Line (C.S.F. 16,191)
Subsation Site "B" (C.S.F. 17,917)
15,620.53
Kekaha Agricultural Park Subdivision File Plan 2136
Access Road
Government (Crown) Land
Wild Bird Sanctuary Governor's Executive Order 3685 (C.S.F. 22,376)
Non-Exclusive Easement B for Roadway and Utilities Purposes (C.S.F. 14,517)
Grant 8891 to Rebulohiyo Galonsk
Lot 10 (Crown)
Lot 13 (C.S.F. 24,335)
Lot 14 (C.S.F. 24,336)
Lot 15 (C.S.F. 24,337)
Lot A-1 (C.S.F. 24,330)
Lot A-2
Lot 6
Lot 7
Lot 8
Lot 9 (C.S.F. 24,334)
Lot 11 (C.S.F. 24,338)
Lot 12 (C.S.F. 24,339)
Easement E for Roadway Purposes (C.S.F. 15,945)
Perpetual Non-Exclusive Transmission Line Easement Grant of Easement: State of Hawaii to Kauai Electric dated December 18, 1979 and recorded in Liber 14651, Page 387 (L.O.D. S-27101) (C.S.F. 16,986).
Non-Exclusive Access and Drainage Easement 1 (C.S.F. 23,387)
Non-Exclusive Access Easement 2 (C.S.F. 23,387)
Non-Exclusive Access Easement 3 (C.S.F. 23,387)
Non-Exclusive Drainage Easement B-1 (C.S.F. 16,429)
Non-Exclusive Drainage Easement B-2 (C.S.F. 16,429)
Non-Exclusive Drainage Easement B-3 (C.S.F. 16,429)
Non-Exclusive Roadway Easement B-1 (C.S.F. 16,073)
Non-Exclusive Roadway Easement B-2 (C.S.F. 16,073)
Non-Exclusive Roadway Easement B-5 (C.S.F. 16,775)
Perpetual Non-Exclusive Roadway Easement B-6 (C.S.F. 16,775)
Easement F for Communication Cable Line Purposes (C.S.F. 15,944)
Lot 1 (R.S.F. No. 4,511)
Lot 2 (R.S.F. No. 4,511)
Lot 3 (R.S.F. No. 4,511) Cemetery
Lot 4 (R.S.F. No. 4,511)
Lot 5 (R.S.F. No. 4,511)
Lot 1 (R.S.F. No. 4,511)
Lot 2 (R.S.F. No. 4,511)
Lot 3 (R.S.F. No. 4,511)
Lot 4 (R.S.F. No. 4,511)
Lot 5 (R.S.F. No. 4,511)
Lot 6 (R.S.F. No. 4,511)
Lot 7 (R.S.F. No. 4,511)
Lot 8 (R.S.F. No. 4,511)
Lot

STATE OF HAWAII
SURVEY DIVISION
DEPT. OF ACCOUNTING AND GENERAL SERVICES
HONOLULU

C.S.F. No. 24,339

September 27, 2006

NON-EXCLUSIVE AGRICULTURAL PRESERVATION
AND RESTRICTIVE USE EASEMENT

EASEMENTS 103 AND 104

Kekaha, Waimea, Kauai, Hawaii

Being portions of the Government (Crown) Land of Waimea.

Being also portions of Agricultural and Related Purposes Site, Governor's Executive Order 4007.

EASEMENT 103

Being also all of Lot 2 of the Government (Crown) Land of Waimea.

Beginning at the northwest corner of this easement and at the southeast corner of Lot 3 of the Government (Crown) Land of Waimea, the coordinates of said point of beginning referred to Government Survey Triangulation Station "TRANSIT OF VENUS" being 29,131.07 feet North and 38,165.96 feet West, thence running by azimuths measured clockwise from True South:-

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Department of the
Attorney General

EXHIBIT E

1. 279° 58' 30" 21.97 feet along the south side of Kaumualii Highway (Kao Road);

2. Thence along the southwest side of Kaumualii Highway (Lio Road) on a curve to the right with a radius of 1049.89 feet, the chord azimuth and distance being: 306° 01' 39" 922.21 feet;

3. 79° 10' 50" 792.37 feet along Lot B of the Government (Crown) Land of Waimea;

4. 149° 50' 50.89 feet along Lot 1 of the Government (Crown) Land of Waimea;

5. 140° 35' 118.58 feet along Lot 1 of the Government (Crown) Land of Waimea;

6. 174° 14' 30" 78.90 feet along Lot 1 of the Government (Crown) Land of Waimea;

7. 196° 07' 30" 396.69 feet along Lot 1 of the Government (Crown) Land of Waimea;

8. 185° 24' 100.22 feet along Lot 1 of the Government (Crown) Land of Waimea to the point of beginning and containing an AREA OF 8.691 ACRES.

EASEMENT 104

Being also all of Lot 4 of the Government (Crown) Land of Waimea.

Beginning at the south corner of this easement, the coordinates of said point of beginning referred to Government Survey Triangulation Station "TRANSIT OF VENUS" being 28,075.33 feet North and 37,176.43 feet West, thence running by azimuths measured clockwise from True South:-

1. Along the northeasterly side of Kaumualii Highway (Lio Road) on a curve to the left with a radius of 1149.89 feet, the chord azimuth and distance being:
   152° 28' 11" 1094.64 feet;

2. 279° 58' 30" 1285.64 feet along the south side of Kaumualii Highway (Kao Road);

3. Thence along the south side of Kaumualii Highway (Kao Road) on a curve to the left with a radius of 1044.32 feet, the chord azimuth and distance being:
   278° 15' 31" 62.56 feet;

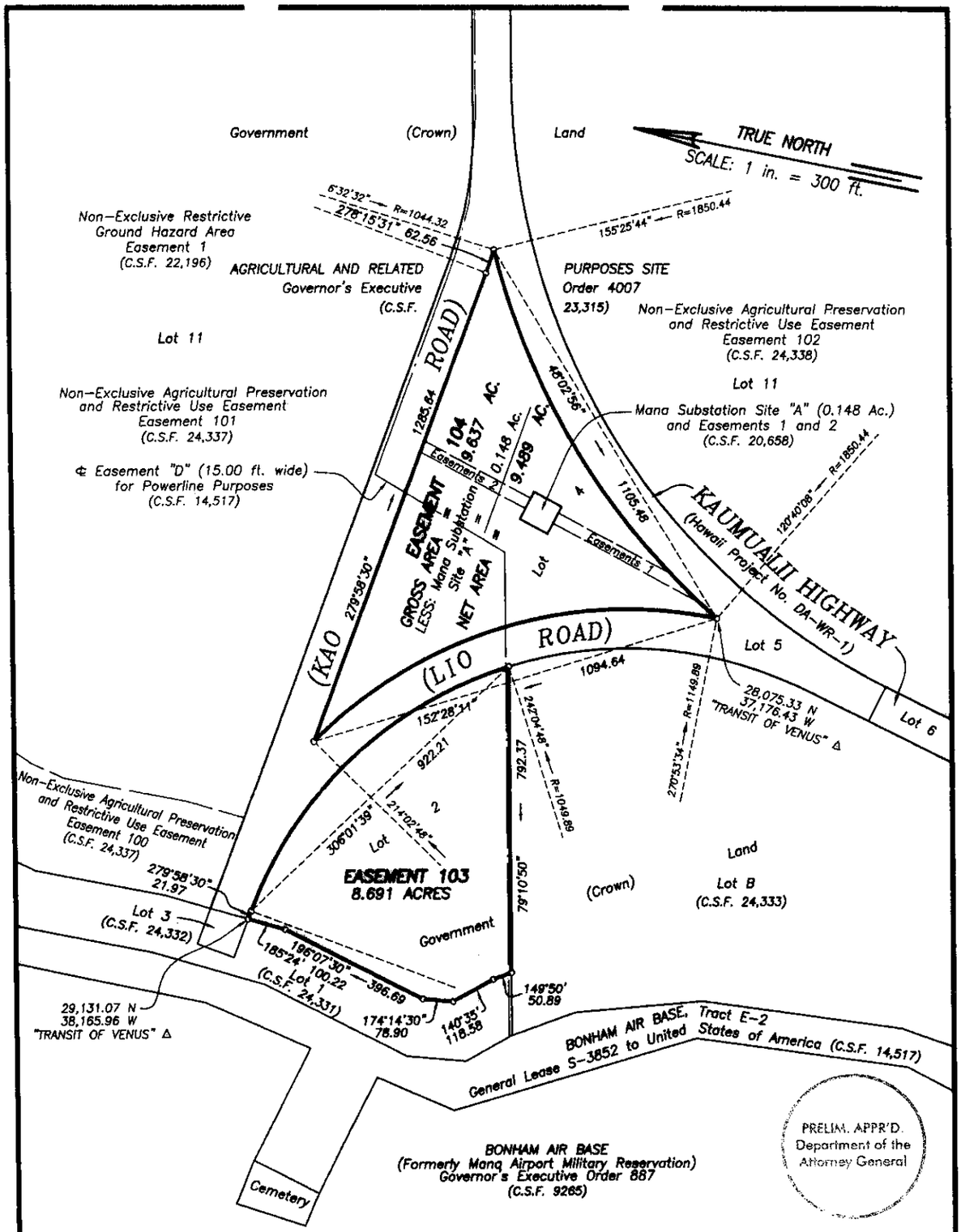
4. Thence along the northwest side of Kaumualii Highway (Hawaii Project No. DA-WR-1) on a curve to the left with a radius of 1850.44 feet, the chord azimuth and distance being:
48° 02' 56" 1105.48 feet
to the point of beginning and containing a GROSS AREA OF 9.637 ACRES and a NET AREA OF 9.489 ACRES after excluding therefrom Mana Substation Site "A" (0.148 Acre).

SURVEY DIVISION
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
STATE OF HAWAII

By: Glenn J. Kodani
Glenn J. Kodani
Land Surveyor ml

Compiled from map and desc. furnished by ControlPoint Surveying, Inc. Said map and desc. have been examined and checked as to form and mathematical correctness but not on the ground by the Survey Division.

PRELIM. APPR'D.
Department of the Attorney General




# NON-EXCLUSIVE AGRICULTURAL PRESERVATION AND RESTRICTIVE USE EASEMENT

## EASEMENTS 103 AND 104

**EXHIBIT F**

REDUCED
NOT TO SCALE

*Kekaha, Waimea, Kauai, Hawaii*

*Scale: 1 inch = 300 feet*

JOB K-298(06)
C. BK.

TAX MAP 1-2-02: Por. 01

C.S.F. NO. 24,339

SURVEY DIVISION
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
STATE OF HAWAII

JGL September 27, 2006

STATE OF HAWAII
SURVEY DIVISION
DEPT. OF ACCOUNTING AND GENERAL SERVICES
HONOLULU

C.S.F. No. 24,340

September 27, 2006

NON-EXCLUSIVE AGRICULTURAL PRESERVATION
AND RESTRICTIVE USE EASEMENT

EASEMENT 105

Kekaha, Waimea, Kauai, Hawaii

Being all of Lot 8 of the Government (Crown) Land of Waimea.

Being also a portion of Agricultural and Related Purposes Site, Governor's Executive Order 4007.

Beginning at the southeast corner of this easement, at the northwesterly corner of Lot 9 of the Government (Crown) Land of Waimea and on the southwesterly side of Kaumualii Highway (Hawaii Project No. DA-WR-1), the coordinates of said point of beginning referred to Government Survey Triangulation Station "TRANSIT OF VENUS" being 16,429.63 feet North and 31,617.13 feet West, thence running by azimuths measured clockwise from True South:-

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1. 43° 30' 26" 368.90 feet along Lot 9 of the Government (Crown) Land of Waimea;

2. 138° 48' 347.07 feet along Lot 9 of the Government (Crown) Land of Waimea;

EXHIBIT G

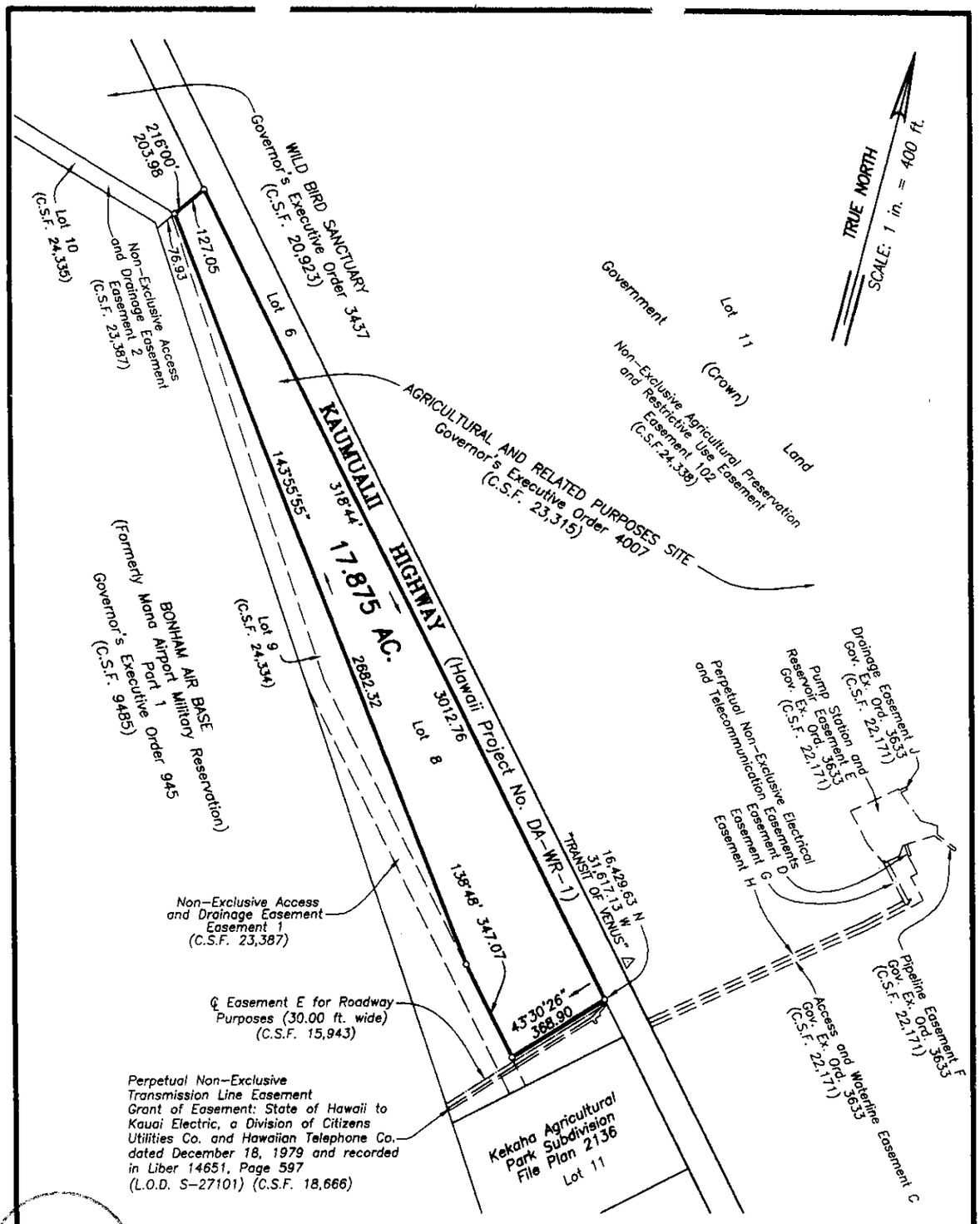
| | | | |
|---|---|---|---|
| 3. | 143° 55' 55" | 2682.32 | feet along Lot 9 of the Government (Crown) Land of Waimea; |
| 4. | 216° 00' | 127.05 | feet along Wild Bird Sanctuary, Governor's Executive Order 3437; |
| 5. | 318° 44' | 3012.76 | feet along the southwesterly side of Kaumualii Highway (Hawaii Project No. DA-WR-1) to the point of beginning and containing an AREA OF 17.875 ACRES. |

SURVEY DIVISION
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
STATE OF HAWAII

By: Glenn J. Kodani
Glenn J. Kodani
Land Surveyor ml

Compiled from map and desc. furn. by ControlPoint Surveying, Inc. Said map and desc. have been examined and checked as to form and mathematical correctness but not on the ground by the Survey Division.

PRELIM. APP'R'D.
Department of the
Attorney General




PRELIM. APPR'D.
Department of the Attorney General

# NON-EXCLUSIVE AGRICULTURAL PRESERVATION AND RESTRICTIVE USE EASEMENT

## EASEMENT 105

**EXHIBIT H**

*Kekaha, Waimea, Kauai, Hawaii*

*Scale: 1 inch = 400 feet*

REDUCED
NOT TO SCALE

*Job K-298(06)*
*C. BK.*

*TAX MAP 1-2-02: Por. 01*

SURVEY DIVISION
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
**STATE OF HAWAII**

*C.S.F. NO. 24,340*

*JGL September 27, 2006*

STATE OF HAWAII
SURVEY DIVISION
DEPT. OF ACCOUNTING AND GENERAL SERVICES
HONOLULU

C.S.F. No. 24,341

September 27, 2006

NON-EXCLUSIVE AGRICULTURAL PRESERVATION
AND RESTRICTIVE USE EASEMENT

EASEMENT 106

Kekaha, Waimea, Kauai, Hawaii

Being a portion of Lot 11 of the Government (Crown) Land of Waimea.

Being also a portion of Agricultural and Related Purposes Site, Governor's Executive Order 4007 and a portion of Tract E-4 of Bonham Air Base (Formerly Mana Airport) Water Storage Area.

Beginning at the northeast corner of this easement and on the west boundary of the Hawaiian Home Land of Waimea, the coordinates of said point of beginning referred to Government Survey Triangulation Station "TRANSIT OF VENUS" being 32,117.34 feet North and 29,588.49 feet West, thence running by azimuths measured clockwise from True South:-

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Attorney General

1. 349° 00' 1282.80 feet along the Hawaiian Home Land of Waimea;

2. 85° 32' 40" 778.77 feet along Parcel 2, Tract E-3 of Bonham Air Base (Formerly Mana Airport) Storage Area;

**EXHIBIT I**

3. 355° 31' 40" 319.61 feet along Parcel 2, Tract E-3 of Bonham Air Base (Formerly Mana Airport) Storage Area;

4. 26° 32' 10" 508.45 feet along Parcel 2, Tract E-3 of Bonham Air Base (Formerly Mana Airport) Storage Area;

5. 349° 42' 131.59 feet along Parcel 2, Tract E-3 of Bonham Air Base (Formerly Mana Airport) Storage Area;

6. 69° 18' 30" 980.90 feet along Kamokala Ridge Storage Area;

7. Thence along Kamokala Ridge Storage Area on a curve to the left with a radius of 182.50 feet, the chord azimuth and distance being:
309° 23' 80.21 feet;

8. 296° 41' 20" 196.91 feet along Kamokala Ridge Storage Area;

9. Thence along Kamokala Ridge Storage Area on a curve to the right with a radius of 257.50 feet, the chord azimuth and distance being:
309° 17' 15" 112.33 feet;

10. 321° 53' 10" 161.32 feet along Kamokala Ridge Storage Area;

11. Thence along Kamokala Ridge Storage Area on a curve to the right with a radius of 307.50 feet, the chord azimuth and distance being:
327° 10' 50" 56.75 feet;

12. 332° 28' 30" 142.35 feet along Kamokala Ridge Storage Area;

13. Thence along Kamokala Ridge Storage Area on a curve to the right with a radius of 157.50 feet, the chord azimuth and distance being:
344° 11' 40" 63.98 feet;

14. 355° 54' 50" 63.21 feet along Kamokala Ridge Storage Area;

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Attorney General

15. Thence along Kamokala Ridge Storage Area on a curve to the left with a radius of 292.50 feet, the chord azimuth and distance being:
344° 04' 35" 120.01 feet;

16. 332° 14' 20" 53.33 feet along Kamokala Ridge Storage Area;

17. Thence along Kamokala Ridge Storage Area on a curve to the left with a radius of 72.50 feet, the chord azimuth and distance being:
281° 05' 30" 112.92 feet;

18. 229° 56' 40" 126.19 feet along Kamokala Ridge Storage Area;

19. Thence along Kamokala Ridge Storage Area on a curve to the left with a radius of 612.50 feet, the chord azimuth and distance being:
221° 21' 183.06 feet;

20. 212° 45' 20" 79.18 feet along Kamokala Ridge Storage Area;

21. Thence along Kamokala Ridge Storage Area on a curve to the right with a radius of 107.50 feet, the chord azimuth and distance being:
239° 37' 55" 97.19 feet;

22. 266° 30' 30" 13.07 feet along Kamokala Ridge Storage Area;

23. 349° 42' 271.35 feet along Parcel 2, Tract E-3 of Bonham Air Base (Formerly Mana Airport) Storage Area;

24. 269° 11' 20" 1078.56 feet along Parcel 2, Tract E-3 of Bonham Air Base (Formerly Mana Airport) Storage Area;

25. 203° 47' 20" 128.83 feet along Parcel 2, Tract E-3 of Bonham Air Base (Formerly Mana Airport) Storage Area;

26. 349° 00' 584.03 feet along the Hawaiian Home Land of Waimea;

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Attorney General

27. Thence along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007 and the remainder of Tract E-4 of Bonham Air Base (Formerly Mana Airport) Water Storage Area on a curve to the right with a radius of 1650.00 feet, the chord azimuth and distance being:
101° 25' 56" 3174.80 feet;

28. Thence along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007 on a curve to the right with a radius of 1650.00 feet, the chord azimuth and distance being:
198° 05' 55" 1782.70 feet;

29. Thence along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007 on a curve to the right with a radius of 1800.00 feet, the chord azimuth and distance being:
208° 58' 41" 787.14 feet;

30. 230° 19' 42" 725.06 feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007;

31. Thence along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007 on a curve to the right with a radius of 1800.00 feet, the chord azimuth and distance being:
247° 51' 27" 625.13 feet;

32. 264° 09' 27" 107.55 feet along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007;

33. Thence along the remainder of Agricultural and Related Purposes Site, Governor's Executive Order 4007 on a curve to the right with a radius of 1800.00 feet, the chord azimuth and distance being: 258° 50' 32" 205.28 feet to the point of beginning and containing an AREA OF 176.372 ACRES.

SURVEY DIVISION
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
STATE OF HAWAII

By: Glenn J. Kodani
Glenn J. Kodani
Land Surveyor ml

Compiled from map and desc.
furn. by ControlPoint Surveying, Inc.
Said map and desc. have been
examined and checked as to form
and mathematical correctness but
not on the ground by the Survey Division.

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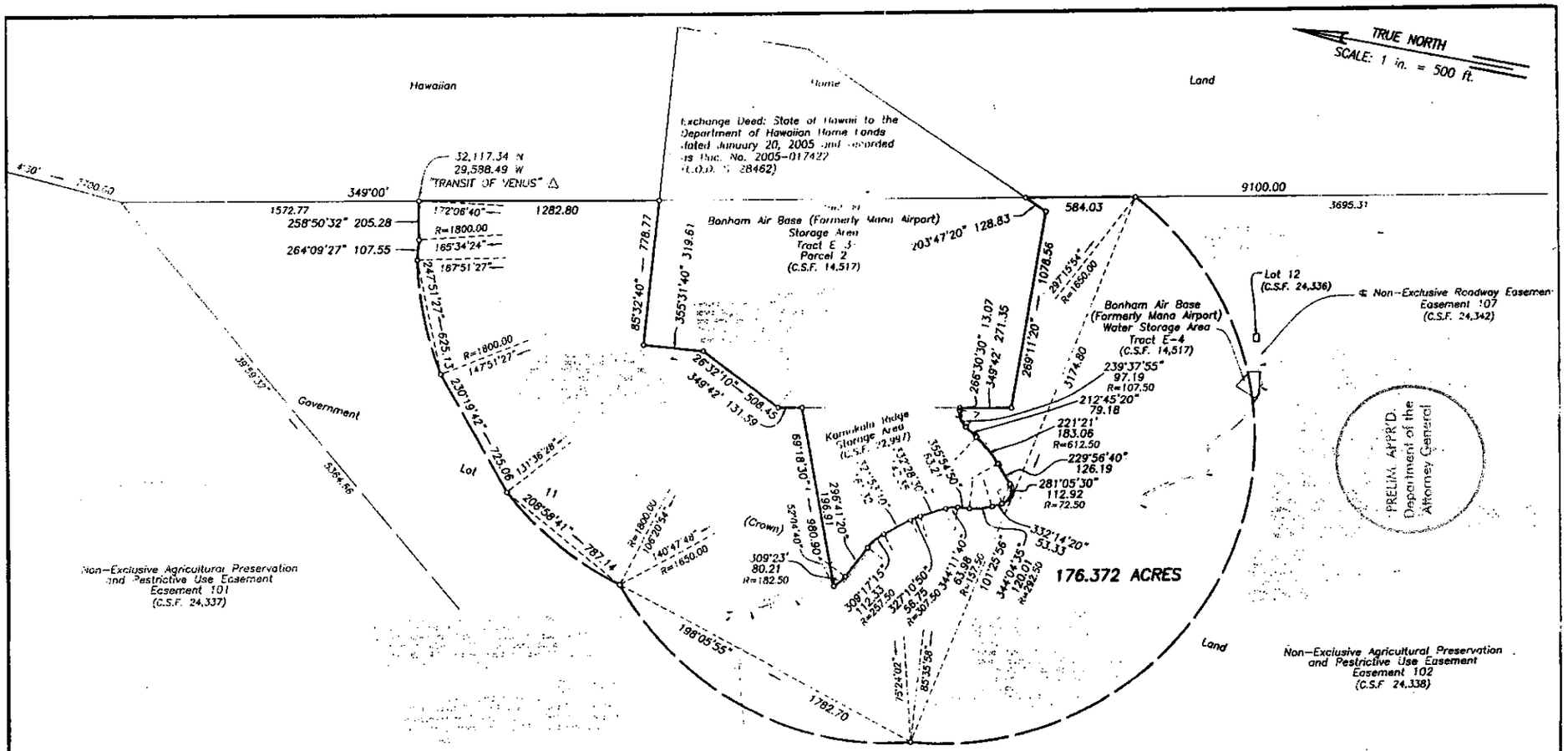
Department of the
Attorney General

EXHIBIT J




# NON-EXCLUSIVE AGRICULTURAL PRESERVATION AND RESTRICTIVE USE EASEMENT

## EASEMENT 106

Kekaha, Waimea, Kauai, Hawaii

Scale: 1 inch = 500 feet

REDUCED NOT TO SCALE

108 K-298(06)

C. BK.

TAX MAP 1-2-02: Por. 01

C.S.F. NO. 24,341

SURVEY DIVISION
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
STATE OF HAWAII

JGL September 27, 2006

STATE OF HAWAII
SURVEY DIVISION
DEPT. OF ACCOUNTING AND GENERAL SERVICES
HONOLULU

C.S.F. No. 24,342

September 27, 2006

NON-EXCLUSIVE ROADWAY EASEMENT

EASEMENT 107

Kekaha, Waimea, Kauai, Hawaii

Being a portion of Lot 11 of the Government (Crown) Land of Waimea.

Being also a portion of Agricultural and Related Purposes Site, Governor's Executive Order 4007.

Being a strip of land twenty (20.00) feet wide and extending ten (10.00) feet on each side of the following described centerline.

Beginning at the east end of this centerline and on the west boundary of Lot 12 of the Government (Crown) Land of Waimea, the coordinates of said point of beginning referred to Government Survey Triangulation Station "TRANSIT OF VENUS" being 27,571.33 feet North and 29,523.43 feet West, thence running by azimuths measured clockwise from True South:-

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Attorney General

1. 72° 38' 216.03 feet;

2. Thence on a curve to the right with a radius of 125.00 feet, the length of curve being 95.12 feet, the chord azimuth and distance being:
94° 26' 92.84 feet;

EXHIBIT K

3. 116° 14' 59.58 feet to the west end of this centerline and containing an AREA OF 0.170 ACRE.

SURVEY DIVISION
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
STATE OF HAWAII

By: Glenn J. Kodani
Glenn J. Kodani
Land Surveyor ml

Compiled from map and desc. furn. by ControlPoint Surveying, Inc. Said map and desc. have been examined and checked as to form and mathematical correctness but not on the ground by the Survey Division.

PRELIM. APP'D.
Department of the
Attorney General

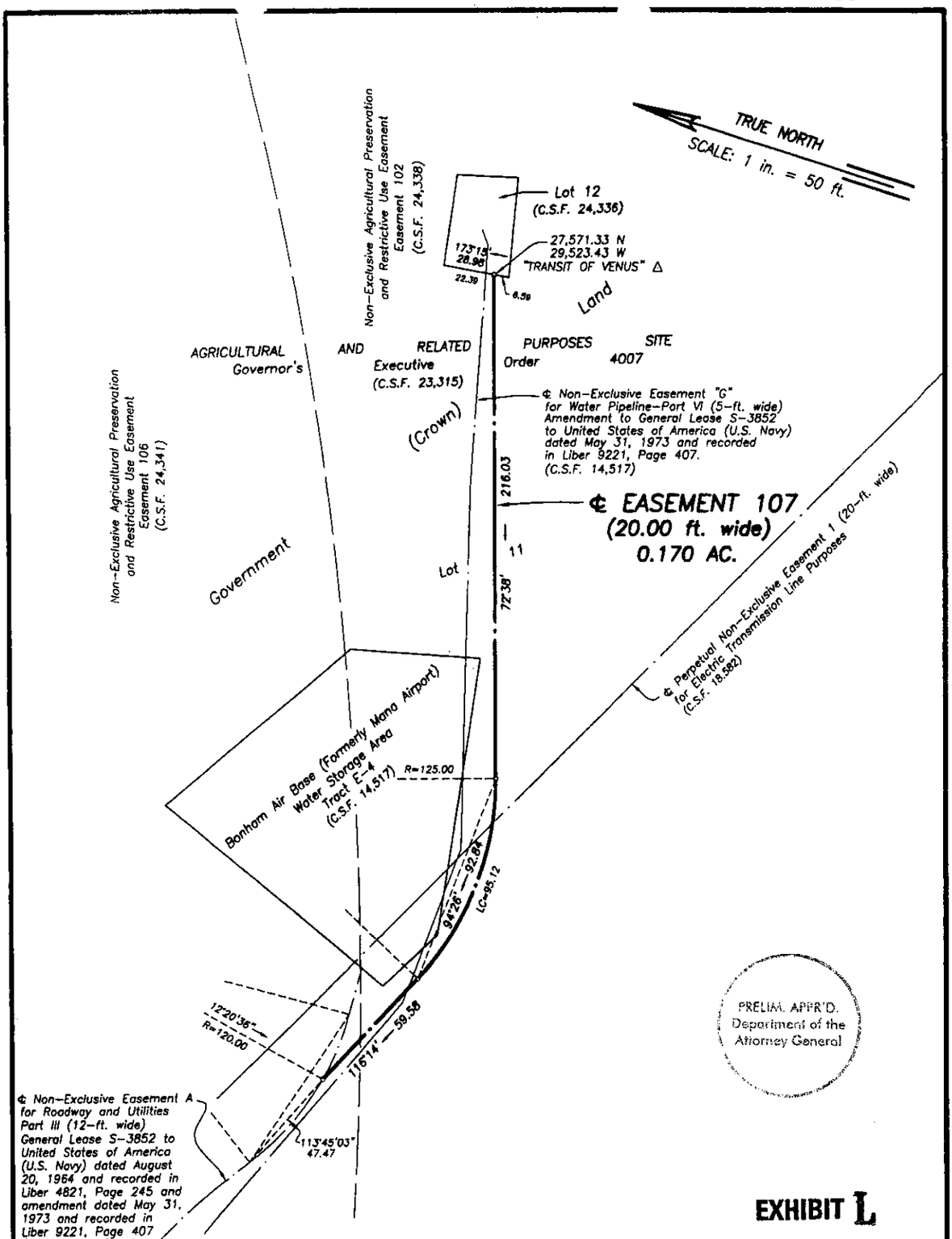



**EXHIBIT L**

# NON-EXCLUSIVE ROADWAY EASEMENT

## EASEMENT 107

*Kekaha, Waimea, Kauai, Hawaii*

*Scale: 1 inch = 50 feet*

REDUCED
NOT TO SCALE

*Job K-298(06)*

*C. BK.*

*TAX MAP 1-2-02: Por. 01*

*C.S.F. NO. 24,342*

SURVEY DIVISION
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
**STATE OF HAWAII**

*JGL September 27, 2006*

**Navy Easement S-5604**

INSTALLATION : CNI PMRF HAWAII AREA
SITE : KAMOKALA RIDGE
AGREEMENT TYPE : IEASE
CONTRACT NUMBER: DLR 10-5-151, 176,371 AC
PARTY INVOLVED : STATE OF HAWAII ET AL
DATE : 07-Jun-2002

| TITLE | DATE | PAGES |
|---|---|---|
| STATUS OF REAL ESTATE TRANSACTION | 26-Jul-2000 | 1 |
| GRANT OF NON-EXCLUSIVE RESTRICTIVE USE EASEMENT S-5604 BY AND BETWEEN THE STATE OF HAWAII, BOARD OF LAND AND NATURAL RESOURCES AND THE UNITED STATES OF AMERICA, C/O DEPARTMENT OF THE NAVY, PACIFIC DIVISION, NAVAL FACILITIES ENGINEERING COMMAND, TOTAL RENT $4,660.00, TAX MAP KEY NO. (4) 1-2-02:POR. 1 BY DENNIS PACHT, VARIOUS | 07-Jun-2002 | 6 |
| NON-EXCLUSIVE RESTRICTIVE USE EASEMENT MANA, WAIMEA, KAUAI, HAWAII, STATE OF HAWAII SURVEY DIVISION DEPT. OF ACCOUNTING AND GENERAL SERVICES HONOLULU, C.S.F. NO 22,998, EXHIBIT "A" BY THOMAS H. OI | 26-Jul-2000 | 4 |
| MAP, NON-EXCLUSIVE RESTRICTIVE USE EASEMENT MANA, WAIMEA, KAUAI, HAWAII, H.S.S. PLAT 3087-D, EXHIBIT "B" BY RANDALL M. HASHIMOTO, VARIOUS | 26-Jul-2000 | 1 |
| TOTAL | | 12 |

# STATUS OF REAL ESTATE TRANSACTION

| ITEM | ACTION | DATE | BY |
|---|---|---|---|
| Legal Description | Yes | 26-Jul-2000 | |
| Recording | | | |
| Scan | Scanned | 29-Jan-2004 | SB |
| Summary Map | | | |
| Property Record | | | |
| District Land Register | 10-5-151 | | |
| Real Estate Contract | Doc. No. S-5604 | | |
| Amendment | N/A | | |
| Expiration Date | 19-Aug-2029 | | |
| Termination | 30-Year Term | | |

Comments: State of Hawaii Grant of Non-Exclusive Restrictive Use of Easement.

LAND COURT SYSTEM ) REGULAR SYSTEM

Return by Mail ( ) Pickup ( ) To:

Total Number of Pages:

Tax Map Key No. (4) 1-2-02:Por. 1

GRANT OF NON-EXCLUSIVE RESTRICTIVE USE EASEMENT S-5604

THIS INDENTURE, made and entered into this 7th day of June, 2002, by and between the STATE OF HAWAII, by its Board of Land and Natural Resources, hereinafter referred to as the "Grantor," and the UNITED STATES OF AMERICA, whose address is c/o Department of the Navy, Pacific Division, Naval Facilities Engineering Command, 258 Makalapa Drive, Suite 100, Pearl Harbor, Hawaii 96860-3134, hereinafter referred to as the "Grantee."

WITNESSETH THAT:

The Grantor, for and in consideration of the total rent of FOUR THOUSAND SIX HUNDRED SIXTY AND NO/100 DOLLARS ($4,660.00), the receipt of which is hereby acknowledged, and of the terms, conditions, and covenants herein contained, all on the part of the Grantee to be kept, observed, and performed, does hereby grant unto the Grantee, the following non-exclusive and term easement rights:

PRELIM. APPR'D. Department of the Attorney General

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

final 03

A restrictive use easement in support of high explosive storage magazines and the explosive safety quantity distance arcs that emanate therefrom,

in, over, under and across that certain parcel of land ("area") situate at Mana, Waimea, Kauai, Hawaii, being identified as "Non-Exclusive Restrictive Use Easement," containing an area of 176.371 acres, more particularly described in Exhibit "A" and delineated on Exhibit "B," both of which are attached hereto and made parts hereof, said exhibits being respectively, a survey description and survey map prepared by the Survey Division, Department of Accounting and General Services, State of Hawaii, designated, respectively, C.S.F. No. 22,998 dated July 26, 2000 and H.S.S. Plat 3087-D, TOGETHER WITH the rights of ingress and egress to and from the easement area for all purposes in connection with the rights hereby granted.

During the term of this indenture, the Grantor covenants as follows:

a. All other uses within the easement area shall be restricted to agricultural purposes, such as growing of crops and the grazing of cattle, or uses that are not incompatible with the storage of explosives.

b. No building or structure shall be constructed within the easement area without the prior written consent of the Grantee, except for those buildings and structures presently existing.

c. Public access to the easement area will not be permitted.

TO HAVE AND TO HOLD the easement rights unto the Grantee, its successors and assigns, SUBJECT, HOWEVER, to the terms, conditions and covenants provided herein.

The TERM of this easement shall be thirty (30) years, commencing on the 9th day of October, 1999, up to and including the 19th day of August, 2029, unless sooner terminated as hereinafter provided.

THE GRANTEE COVENANTS AND AGREES WITH THE GRANTOR AS FOLLOWS:

1. The Grantee shall be responsible for any claims for damage or injury caused by or resulting from any act or



PRELIM. APPR'D.
Department of the
Attorney General

omission of the Grantee in connection with its use of the easement area described herein to the extent provided under applicable laws. This covenant shall survive the expiration or earlier termination of this easement.

2. The Grantor reserves unto itself, its successors and assigns, the full use and enjoyment of the easement area and to grant to others rights and privileges for any and all purposes affecting the easement area, provided, however, that the rights herein reserved shall not be exercised by the Grantor and similar grantee(s) in any manner which interferes unreasonably with the use of the easement area for the purposes for which this easement is granted.

3. All signs placed in or upon the easement area by the Grantee shall be done without cost or expense to the Grantor and shall remain the property of the Grantee and may be removed or otherwise disposed of by the Grantee at any time; provided, that the removal shall be accomplished with minimum disturbance to the easement area which shall be restored to its original condition, or as close thereto as possible, within a reasonable time after removal.

4. Upon completion of any work performed in or upon the easement area, the Grantee shall remove therefrom all equipment and unused or surplus materials, if any, and shall leave the easement area in a clean and sanitary condition satisfactory to the Grantor.

5. This easement or any rights granted herein shall not be sold, assigned, conveyed, granted, mortgaged, or otherwise transferred or disposed of, directly or by operation of law, except with the prior written consent of the Grantor.

6. The Grantee shall not make, permit or suffer, any waste, strip, spoil, nuisance or unlawful, improper, or offensive use of the easement area.

7. The Grantee covenants, for itself, its successors and assigns, that the use and enjoyment of the land herein granted shall not be in support of any policy which discriminates against anyone based upon race, creed, sex, color, national origin, religion, marital status, familial status, ancestry, physical handicap, disability, age or HIV (human immunodeficiency virus) infection.

8. The Grantee, in the exercise of the rights granted herein, shall comply with all of the applicable requirements of



PRELIM. APP'D.
Department of the
Attorney General

the federal, state, and county authorities and shall observe all applicable county ordinances and state and federal statutes, rules and regulations, now in force or which may hereinafter be in force.

9. These easement rights shall cease and terminate, and the easement area shall automatically be forfeited to the Grantor, without any action on the part of the Grantor, upon notice from the Grantee of its intent to relinquish the rights granted herein.

10. The Grantee shall be solely responsible for the Grantee's personal property in the easement area and, at the end of the term or other sooner termination of this easement, for the removal of any and all of Grantee's personal property from the easement area unless the Grantor has given written consent to a disposal of Grantee's personal property by its abandonment in place. This provision shall survive the termination of this easement.

11. The Grantee shall not cause or permit the escape, disposal or release of any hazardous materials except as permitted by law. Grantee shall not allow the storage or use of such materials in any manner not sanctioned by law or by the highest standards prevailing in the industry for the storage and use of such materials, nor allow to be brought onto the easement area any such materials except to use in the ordinary course of Grantee's business, and then only after written notice is given to Grantor of the identity of such materials and upon Grantor's consent which consent may be withheld at Grantor's sole and absolute discretion. If any governmental agency shall ever require testing to ascertain whether or not there has been any release of hazardous materials by Grantee, then the Grantee shall be responsible for conducting such testing. Grantee shall execute affidavits, representations and the like from time to time at Grantor's request concerning Grantee's best knowledge and belief regarding the presence of hazardous materials on the easement area placed or released by Grantee.

For the purpose of this easement "hazardous material" shall mean any pollutant, toxic substance, hazardous waste, hazardous material, hazardous substance, or oil as defined in or pursuant to the Resource Conservation and Recovery Act, as amended, the Comprehensive Environmental Response, Compensation, and Liability Act, as amended, the Federal Clean Water Act, or any other federal, state, or local environmental law, regulation, ordinance, rule, or bylaw, whether existing as of the date hereof, previously enforced, or subsequently enacted.



PRELIM. APPR'D.
Department of the
Attorney General

The Grantee shall employ and maintain measures and safeguards reasonably necessary to prevent the accumulation of debris upon and the pollution or contamination of the easement area. The Grantee shall be solely responsible for any environmental restoration of the easement area made necessary by any act or omission of the Grantee to the extent required by applicable environmental laws.

These covenants shall survive the expiration or earlier termination of this easement.

12. This easement shall be co-terminus with the remaining term under General Lease No. S-3852.

13. The Grantee shall coordinate access onto the easement area with other easement holders.

14. The Grantee shall have the right to post and maintain permanent warning signs at the edge and within the easement area advising the general public of the existence of the Explosive Safety Quantity Distance area and hazards related thereto.

15. The Grantee, as an agency of the federal government, is self-insured.

16. The Grantee shall comply with all applicable federal and state environmental impact regulations.



PRELIM. APPR'D.
Department of the
Attorney General

IN WITNESS WHEREOF, the STATE OF HAWAII, by its Board of Land and Natural Resources, has caused the seal of the Department of Land and Natural Resources to be hereunto affixed and the parties hereto have caused this Indenture to be executed as of the day, month, and year first above written.

STATE OF HAWAII

Approved by the Board of Land and Natural Resources at its meeting held on October 8, 1999.

By _____
Chairperson and Member
Board of Land and Natural Resources

GRANTOR

UNITED STATES OF AMERICA

By _____
DENNIS PACHT
Director, Operations Division
Pacific Division, Naval Facilities Engineering Command
Its Real Estate Contracting Officer

GRANTEE

APPROVED AS TO FORM:

_____
Deputy Attorney General

Dated: April 25, 2002

restrictiveuseesmtS-5604\usanavy\tmk(4)1-2-02:por1\esmt1.pkm

PRELIM. APPR'D.
Department of the
Attorney General



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

STATE OF HAWAII
SURVEY DIVISION
DEPT. OF ACCOUNTING AND GENERAL SERVICES
HONOLULU

C.S.F. No. 22,998

July 26, 2000

NON-EXCLUSIVE
RESTRICTIVE USE EASEMENT

Mana, Waimea, Kauai, Hawaii

Being a portion of the Government (Crown) Land of Waimea.

Beginning at the southeast corner of this easement and on the west boundary of the Hawaiian Home Land of Waimea, the coordinates of said point of beginning referred to Government Survey Triangulation Station "NOHILI" being 10,511.78 feet South and 10,293.21 feet East, as shown on Government Survey Registered Map H.S.S. Plat 3087-D, thence running by azimuths measured clockwise from True South:-

1. Along the remainder of the Government (Crown) Land of Waimea on a curve to the right with a radius of 1650.00 feet, the chord azimuth and distance being: 101° 25' 56" 3174.80 feet;

2. Thence along the remainder of the Government (Crown) Land of Waimea on a curve to the right with a radius of 1650.00 feet, the chord azimuth and distance being: 198° 05' 55" 1782.70 feet;

3. Thence along the remainder of the Government (Crown) Land of Waimea on a curve to the right with a radius of 1800.00 feet, the chord azimuth and distance being: 208° 58' 41" 787.14 feet;

4. 230° 19' 42" 725.06 feet along the remainder of the Government (Crown) Land of Waimea;



EXHIBIT "A"

5. Thence along the remainder of the Government (Crown) Land of Waimea on a curve to the right with a radius of 1800.00 feet, the chord azimuth and distance being: 247° 51' 27" 625.13 feet;

6. 264° 09' 27" 107.55 feet along the remainder of the Government (Crown) Land of Waimea;

7. Thence along the remainder of the Government (Crown) Land of Waimea on a curve to the right with a radius of 1800.00 feet, the chord azimuth and distance being: 258° 50' 32" 205.28 feet;

8. 349° 00' 1282.80 feet along the Hawaiian Home Land of Waimea;

9. 85° 32' 40" 778.77 feet along Parcel 2, Tract E-3 of U.S. Military Reservation;

10. 355° 31' 40" 319.61 feet along Parcel 2, Tract E-3 of U.S. Military Reservation;

11. 26° 32' 10" 508.45 feet along Parcel 2, Tract E-3 of U.S. Military Reservation;

12. 349° 42' 131.59 feet along Parcel 2, Tract E-3 of U.S. Military Reservation;

13. 69° 18' 30" 980.90 feet along Addition to Kamokala Ridge Storage Area;

14. Thence along Addition to Kamokala Ridge Storage Area on a curve to the left with a radius of 182.50 feet, the chord azimuth and distance being: 309° 23' 80.21 feet;

15. 296° 41' 20" 196.91 feet along Addition to Kamokala Ridge Storage Area;

16. Thence along Addition to Kamokala Ridge Storage Area on a curve to the right with a radius of 257.50 feet, the chord azimuth and distance being: 309° 17' 15" 112.33 feet;

17. 321° 53' 10" 161.32 feet along Addition to Kamokala Ridge Storage Area;

18. Thence along Addition to Kamokala Ridge Storage Area on a curve to the right with a radius of 307.50 feet, the chord azimuth and distance being: 327° 10' 50" 56.75 feet;

19. 332° 28' 30" 142.35 feet along Addition to Kamokala Ridge Storage Area;

20. Thence along Addition to Kamokala Ridge Storage Area on a curve to the right with a radius of 157.50 feet, the chord azimuth and distance being: 344° 11' 40" 63.98 feet;

21. 355° 54' 50" 63.21 feet along Addition to Kamokala Ridge Storage Area;

22. Thence along Addition to Kamokala Ridge Storage Area on a curve to the left with a radius of 292.50 feet, the chord azimuth and distance being: 344° 04' 35" 120.01 feet;

23. 332° 14' 20" 53.33 feet along Addition to Kamokala Ridge Storage Area;

24. Thence along Addition to Kamokala Ridge Storage Area on a curve to the left with a radius of 72.50 feet, the chord azimuth and distance being: 281° 05' 30" 112.92 feet;

25. 229° 56' 40" 126.19 feet along Addition to Kamokala Ridge Storage Area;

26. Thence along Addition to Kamokala Ridge Storage Area on a curve to the left with a radius of 612.50 feet, the chord azimuth and distance being: 221° 21' 183.06 feet;

27. 212° 45' 20" 79.18 feet along Addition to Kamokala Ridge Storage Area;

28. Thence along Addition to Kamokala Ridge Storage Area on a curve to the right with a radius of 107.50 feet, the chord azimuth and distance being: 239° 37' 55" 97.19 feet;

| | | | | |
|---|---|---|---|---|
| 29. | 266° | 30' | 30" | 13.07 feet along Addition to Kamokala Ridge Storage Area; |
| 30. | 349° | 42' | | 271.35 feet along Parcel 2, Tract E-3 of U.S. Military Reservation; |
| 31. | 269° | 11' | 20" | 1078.56 feet along Parcel 2, Tract E-3 of U.S. Military Reservation; |
| 32. | 203° | 47' | 20" | 128.83 feet along Parcel 2, Tract E-3 of U.S. Military Reservation; |
| 33. | 349° | 00' | | 584.03 feet along the Hawaiian Home Land of Waimea to the point of beginning and containing an AREA OF 176.371 ACRES. |

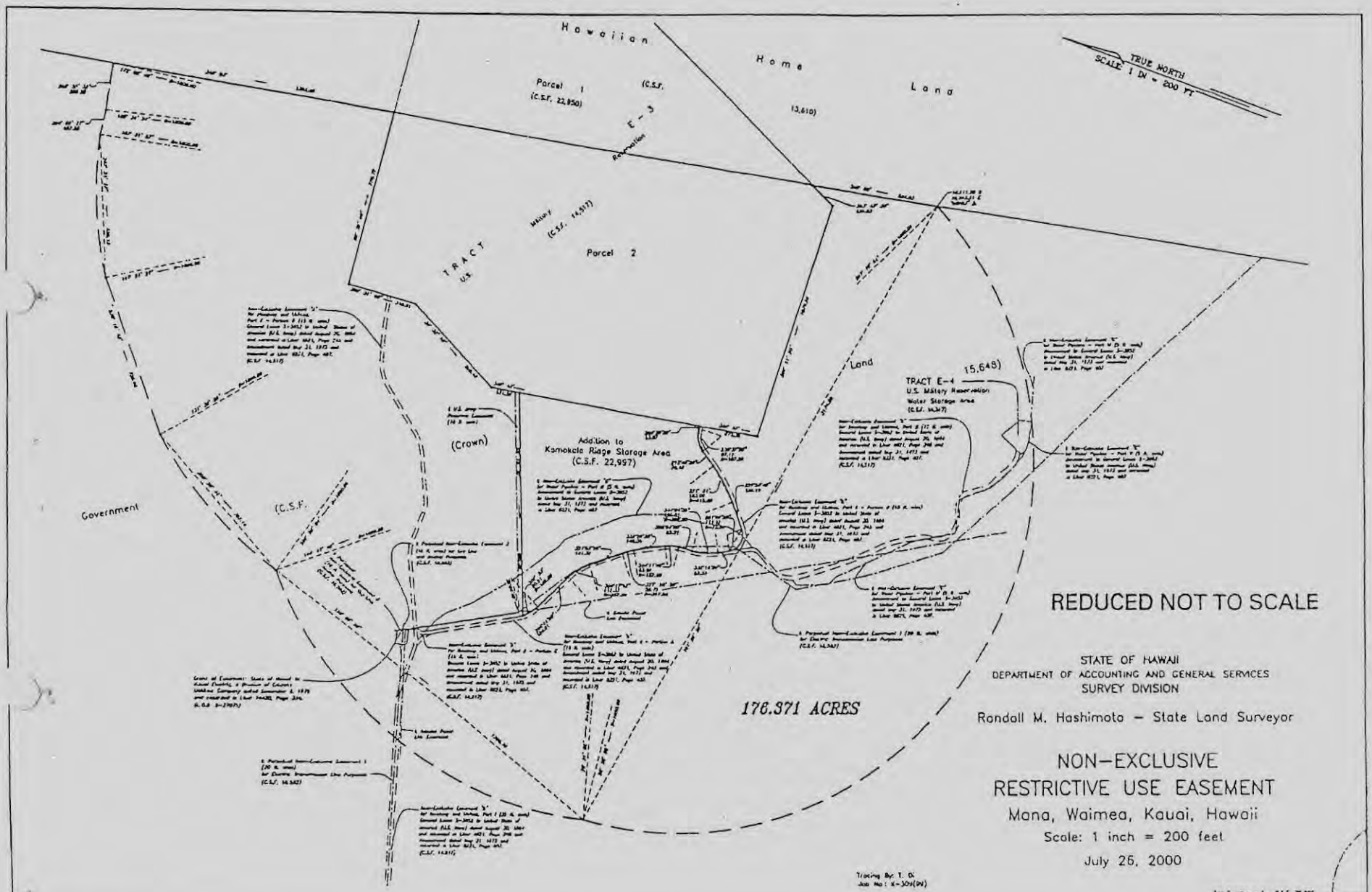
SURVEY DIVISION
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
STATE OF HAWAII

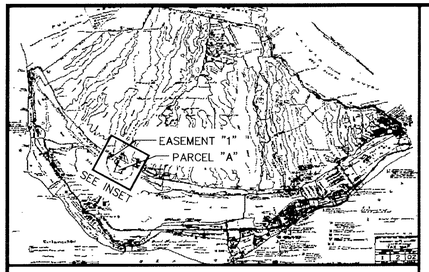
By: _____
Thomas H. Oi
Land Surveyor

gm

Compiled from date furn. by ControlPoint, Inc. C.S.Fs 14517, 15648, 18582 and 22950 and other Govt. Survey Records.
TMK: 1-2-02:por. 1

EXHIBIT "B"


Hawaiian
Home
Land
TRUE NORTH
SCALE 1 IN = 200 FT
Parcel 1
(C.S.F. 22,950)
(C.S.F.
13,610)
E-3
Reservation
TRACT
U.S.
Military
(C.S.F. 14,937)
Parcel 2
Land
15,648)
TRACT E-4
U.S. Military Reservation
Water Storage Area
(C.S.F. 14,347)
Addition to
Kamokala Ridge Storage Area
(C.S.F. 22,997)
(Crown)
Government
(C.S.F.
176.371 ACRES
REDUCED NOT TO SCALE
STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
SURVEY DIVISION
Randall M. Hashimoto – State Land Surveyor
NON–EXCLUSIVE
RESTRICTIVE USE EASEMENT
Mana, Waimea, Kauai, Hawaii
Scale: 1 inch = 200 feet
July 26, 2000
H.S.S. PLAT 3087–D




LOCATION MAP
NOT TO SCALE

HAWAIIAN HOME LAND

GOVERNMENT LAND

TRUE NORTH
SCALE: 1 IN = 200 FT

PARCEL 1

E-3 to America

S-3852 of

TRACK Lease States

General United

PARCEL 2

PROPOSED PARCEL "A"

OF

WAIMEA

TRACK E-4

Easement 1
176.371 acs.

172° 06' 40" R=1800.00
349° 00' 1282.80
258° 50' 32" 205.28
264° 09' 27" 107.55
165° 34' 24" R=1800.00
167° 51' 27" R=1800.00
247° 51' 27" 625.13
147° 51' 27" R=1800.00
230° 19' 42" 725.06
131° 36' 28" R=1800.00
208° 58' 41" 787.14
106° 20' 54" R=1650.00
140° 47' 48" R=1650.00
198° 05' 55" 1782.70
778.77
85° 32' 40"
355° 31' 40" 319.61
28° 32' 10" 808.45
131.59
349° 42' 845.30
1248.24
266° 30' 30" 13.07
271.35
239° 37' 55" 97.19 R=107.50
212° 45' 20" 79.18
221° 21' 183.06 R=612.50
229° 56' 40" 126.19
281° 05' 30" 112.92 R=72.50
332° 14' 20" 53.33
344° 04' 35" 120.01 R=292.50
327° 10' 50" 58.75 R=307.50
321° 53' 10" 161.32
309° 17' 15" 112.33 R=257.50
295° 41' 20" 196.91
309° 23' 80.21 R=182.50
980.90
69° 18' 30"
355° 54' 50" 63.21
344° 11' 40" 63.98 R=157.50
332° 28' 30" 142.35
269° 11' 20" 1078.58
349° 00' 584.03
203° 47' 20" 128.83
10,511.78 S
10,293.21 E
"NOHILI" △
291° 15' 54" R=1650.00
314.89
101° 25' 55"
75° 24' 02" R=1650.00
65° 35' 58" R=1650.00

Existing ℄ U.S. Army Powerline Easement (10 ft. wide)

Existing Easement "A" for Roadway Purposes Part II – Portion B (15 ft. wide)

Existing Easement "A" for Roadway Purposes Part II – Portion C (15 ft. wide)

Existing Kekaha Power Line Easement

Existing Easement "A" for Roadway Purposes Part II – Portion A (15 ft. wide)

Existing Easement "A" for Roadway Purposes Part I (25 ft. wide)

Existing Easement "A" for Roadway Purposes Part II – Portion D (15 ft. wide)

Existing Easement "A" for Roadway Purposes Part III (12 ft. wide)

Existing ℄ Easement C (6 ft. wide) for waterline purposes

INSET

Note:
Data compiled from Corps of Engineers, U.S. Army Map No. 18-01-02 (Sheet 2 of 4 Sheets)

Tax Map Key: (4) 1-2-02:1 por.

N:\SUBDIVISIONS\1998\98013-16\ESMT1.DWG

LICENSED PROFESSIONAL LAND SURVEYOR
WILFRED Y.K. CHIN
No. 3499
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

Wilfred Y.K. Chin
WILFRED Y.K. CHIN
Licensed Professional Land Surveyor
Certificate Number 3499-LS

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT– SCALE REDUCED ACCORDINGLY

CONTROLPOINT SURVEYING INC.
1043 WONG HO LANE
HONOLULU, HAWAII

| DES | DR | CHK |
|---|---|---|
| SUPV | CH ENG | |
| SUBMITTED BY: Wilfred Chin | DATE: Oct. 30, 1999 | |
| FIRM MEMBER (TITLE): | Project Surveyor | |
| PACDIV NFEC: RVD ____ BR MGR ____ DEPE ____ POE ____ NESM ____ DR ____ | | |
| APPROVED | DATE | |
| FOR COMMANDER, NAVFAC | | |

DEPT OF THE NAVY, NAVAL FACILITIES ENGINEERING COMMAND

PACIFIC MISSILE RANGE FACILITY, BARKING SANDS

# KAMOKALA RIDGE STORAGE AREA (ESQD (IBD) EASEMENT)

Waimea (Kona), Kauai, Hawaii

DATE: Oct. 30, 1999
SCALE: 1 in. = 200 Ft.
SHEET 1 OF 2

REAL ESTATE DRAWING NO.
No. 00-03

JOB No. 98013-16
FB No. 1593:55

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**Navy Easement for B-1 and B-2**

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STATE OF HAWAII
BUREAU OF CONVEYANCES
RECORDED
LIBER 13085 PG 56

78 AUG 16 P 3: 10

78- 82123

RECORDATION REQUESTED BY: Commander, Pacific Division, Naval Facilities Engineering Command - Navy Real Estate.

AFTER RECORDATION, RETURN TO: Commander, Pacific Division, Naval Facilities Engineering Command, Pearl Harbor, Hi. 96860
Contact: Mr. H. Godfrey, ph. 4-713217

RETURN BY: MAIL ( ) PICKUP (X)

Navy No. ~~XXXXXXXXXXXX~~
N6274279RP00019

GRANT OF EASEMENT

THIS AGREEMENT, made and entered into this 28 day of January, 1977, by and between the STATE OF HAWAII, by its Board of Land and Natural Resources, pursuant to the provisions of Section 171-95, Hawaii Revised Statutes, hereinafter referred to as the "GRANTOR", and the UNITED STATES OF AMERICA, for the Department of the Navy, hereinafter referred to as the "GRANTEE".

W I T N E S S E T H :

THAT the Grantor for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, and of the covenants of the Grantee as are hereinafter contained, does hereby grant unto the Grantee a non-exclusive easement and right-of-way over and across the real property situate at Mana, Waimea, Kauai, Hawaii, designated "Non-Exclusive Roadway Easement, Easements B-1 and B-2", more particularly described in Exhibit "A" and shown on Exhibit "B", attached hereto and made parts hereof, which real property is hereinafter referred to as the "premises", for bridge construction and access road purposes.

TO HAVE AND TO HOLD the said easement and right-of-way unto the Grantee for the term of fifty (50) years, from the date hereof.

DLR 10-5-127A

THE GRANTEE COVENANTS AND AGREES WITH THE GRANTOR AS FOLLOWS:

1. All work in connection with the construction, installation, operation, repair and replacement of the bridge shall be done without cost or expense to the Grantor.

2. The Grantee shall maintain the premises and the bridge in good condition at all times and shall promptly make all repairs thereto that may be necessary for the preservation of the condition of the premises and the continued operation and maintenance of the bridge.

3. The Grantee's rights hereunder shall be subject to such reasonable rules and regulations as may be prescribed by the Grantor to assure that the exercise of such rights will not interfere with the activity of the Grantee nor the activity of the holder of State General Lease No. S-4222.

4. The Grantor reserves to itself rights-of-way for all purposes on, over, under, or across the easements herein granted; provided, however, that such reserved rights-of-way shall be used in a manner that will not unreasonably interfere with the use and enjoyment by the Grantee of the easement rights granted herein.

5. All or any part of this easement may be terminated upon failure by the Grantee to comply with any of its terms and conditions; upon abandonment of the rights granted herein; or upon nonuse of such rights for a period of two consecutive years.

~~6. The Grantee shall at all times use due care for~~ public safety and agrees to defend, ~~hold~~ harmless and indemnify the Grantor, its ~~officers~~, agents and employees or any person ~~acting for and on its behalf, from and against all claims for~~



DLR 10-5-137A

6. That the Grantor will not be responsible for any loss, liability, claim, or demand for property damage, property loss, or personal injury, including but not limited to death, arising out of any injury or damage caused by or resulting from any act or omission of the Grantee in connection with the Grantee's use of the premises described herein.



DLR 10-5-127A

~~property damage, personal injury or death, arising on, about~~ or in connection with the exercise of the ~~rights~~ and privileges herein granted, caused ~~directly~~ or proximately by any failure on the part ~~of the~~ Grantee to use due care in accordance with ~~the terms and conditions of this grant~~.

7. The Grantee, in the exercise of the rights granted herein, shall comply with all of the requirements of all municipal, state and federal authorities and observe all municipal ordinances and state and federal statutes, rules and regulations, now in force or which may hereinafter be in force.

IN WITNESS WHEREOF, the parties hereto have caused this Indenture to be executed by their duly authorized officers as of the day and year first above written.

STATE OF HAWAII

By _____
Chairman and Member
Board of Land and
Natural Resources

APPROVED BY THE BOARD OF
LAND AND NATURAL RESOURCES
AT ITS MEETING HELD ON
JAN 28 1977

By _____
Member
Board of Land and
Natural Resources

UNITED STATES OF AMERICA

By _____
By direction of the Commander, Naval Facilities

APPROVED AS TO FORM:

_____
Deputy Attorney General
Dated: Oct. 7, 1977



DLR 10-5-127 A

STATE OF HAWAII
SURVEY DIVISION
DEPT. OF ACCOUNTING AND GENERAL SERVICES
HONOLULU

C.S.F. No. 18,073

June 15, 1977

NON-EXCLUSIVE ROADWAY EASEMENT

EASEMENTS B-1 AND B-2

Mana, Waimea, Kauai, Hawaii

Being portions of the Government Land of Waimea.

EASEMENT B-1:

Beginning at the southeast corner of this easement and on the southwesterly side of Easement "B" for Roadway and Communication Cables, the coordinates of said point of beginning referred to Government Survey Triangulation Station "MANA 2" being 7924.46 feet South and 2544.00 feet East, thence running by azimuths measured clockwise from True South:-

1. 52° 55' 20" 37.50 feet along the remainder of Government Land of Waimea;

2. 142° 55' 20" 80.00 feet along the remainder of Government Land of Waimea;

3. 232° 55' 20" 37.49 feet along the remainder of Government Land of Waimea;

4. Thence along the southwesterly side of Easement "B" on a curve to the right with a radius of 3377.50 feet, the chord azimuth and distance being:
322° 50' 14.5" 10.00 feet;

5. 322° 55' 20" 70.00 feet along the southwesterly side of Easement "B" to the point of beginning and containing an AREA OF 3000 SQUARE FEET.

EASEMENT B-2:

Beginning at the southwest corner of this easement and on the northeasterly side of Easement "B" for Roadway and Communication Cables,



EXHIBIT "A"

C.S.F. No. 18,073

June 15, 1977

the coordinates of said point of beginning referred to Government Survey Triangulation Station "MANA 2" being 7909.39 feet South and 2563.94 feet East, thence running by azimuths measured clockwise from True South:-

1. 142° 55' 20" 70.00 feet along the northeasterly side of Easement "B";

2. Thence along the northeasterly side of Easement "B" on a curve to the left with a radius of 3402.50 feet, the chord azimuth and distance being: 142° 50' 17" 10.00 feet;

3. 232° 55' 20" 37.51 feet along the remainder of the Government Land of Waimea;

4. 322° 55' 20" 80.00 feet along the remainder of the Government Land of Waimea;

5. 52° 55' 20" 37.50 feet along the remainder of the Government Land of Waimea to the point of beginning and containing an AREA OF 3000 SQUARE FEET.

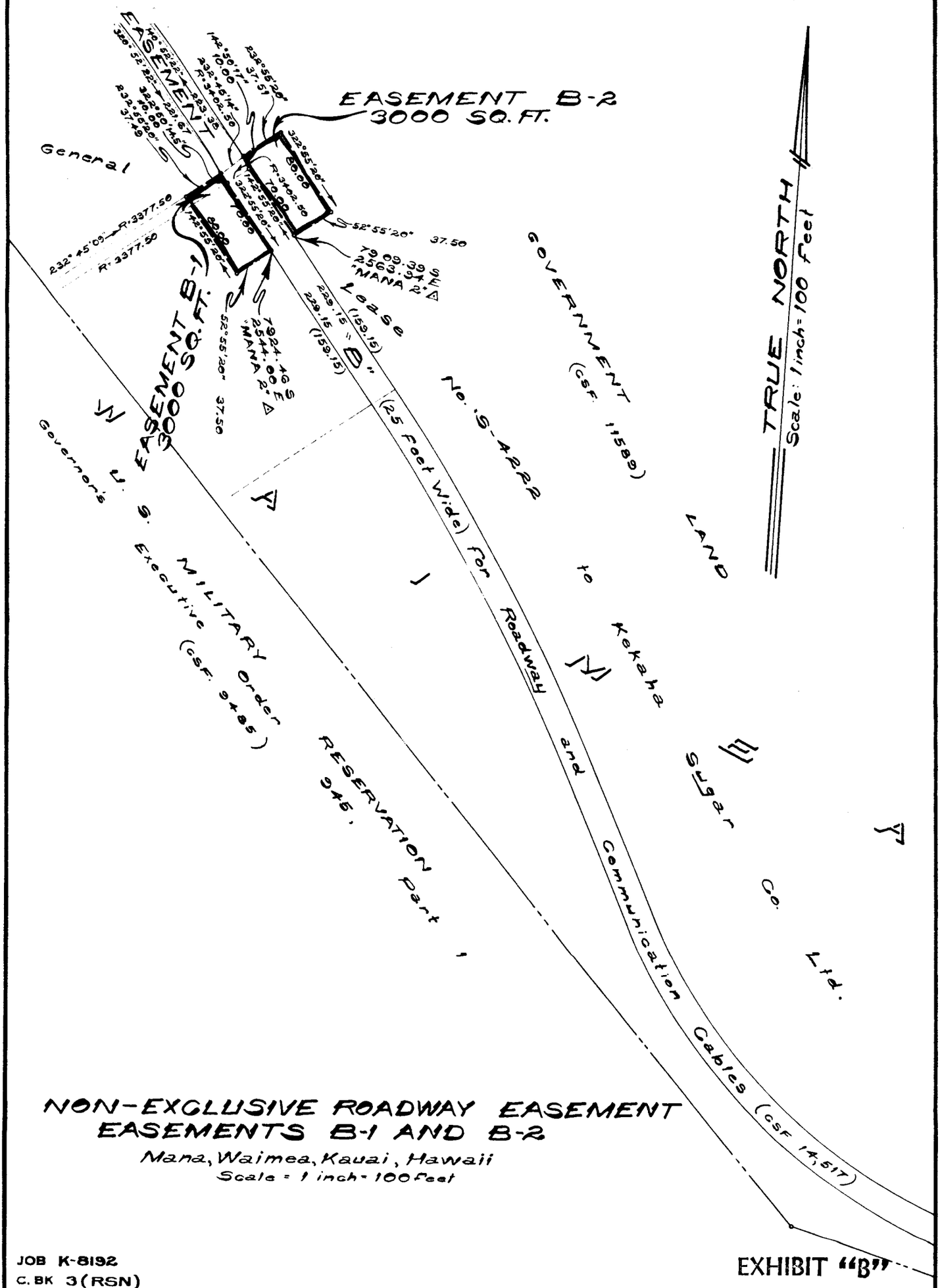
SURVEY DIVISION
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
STATE OF HAWAII

By: Raymond S. Nakamura
Raymond S. Nakamura
Land Surveyor fb

Compiled from U.S. Army Map (Barking Sands) No. 18-01-02 Sheet 3 of 4 Sheets, CSF 14,517 and Govt. Survey Records.



DLR: 10-2-77A




## NON-EXCLUSIVE ROADWAY EASEMENT
## EASEMENTS B-1 AND B-2

Mana, Waimea, Kauai, Hawaii
Scale = 1 inch = 100 feet

JOB K-8192
C. BK 3 (RSN)

EXHIBIT "B"

TAX MAP 1-2-02

SURVEY DIVISION
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
STATE OF HAWAII

C. S. F. No. 18,073

Rel. JUNE 15, 1977

DLR 10-5-127 A

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**Navy Easement for B-3 and B-4**

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STATUS OF REAL ESTATE TRANSACTION
PACDOCKS 11011/1 (11-66)

| ITEM | ACTION | DATE | BY |
|---|---|---|---|
| Legal Description | | | |
| Recording | LIBER 13638 PG. 524 | 4/25/79 | BUR. OF CONV. |
| Microfilm ~~need - on list~~ | to New Fac | 8/10/89 | J.E.N. |
| Summary Map on working copy 1069337-338 | | | |
| Inventory | entered | 11/9/79 | LAB |
| Grantor-Grantee Index | 10-5-132 | 12/12/79 | J.E.N. |
| District Land Register | " | " | J.E.N. |
| Amendment | | | |
| Termination | | | |
| | | | |
| | | | |
| | | | |

COMMENTS Easement "B-3" (1911 sq. ft.) and "B-4" (2901 sq. ft.) on each side of Easement "B" for roadway (por. of Lease 3-3852 from State) for improvements to Bridge 97 on S. Kalanamahiki Place. See also DLR 10-5-105A (S-3852) and DLR 10-5-127A for Easement N6274279RP00019 for Bridge 96 easement.

THE ORIGINAL OF THE DOCUMENT
RECORDED AS FOLLOWS:
STATE OF HAWAII
OFFICE OF
BUREAU OF CONVEYANCES

Received for record this 25th
day of April, A.D., 1979
at 3:24 o'clock P.M. and
Recorded at Liber 13638
on Pages 524
Document no: 79-44371

RECORDATION REQUESTED BY:
Commander, Pacific Division
Naval Facilities Engineering Command
Pearl Harbor, Hawaii 96860
AFTER RECORDATION, RETURN TO:
Commander, Pacific Division
Naval Facilities Engineering Command
Pearl Harbor, Hawaii 96860
RETURN BY: MAIL ( ) PICKUP (X)

Navy No. N6274279RP00030

GRANT OF EASEMENT NO. S-4597

THIS INDENTURE, made and entered into this 10th day of April, 1979, by and between the STATE OF HAWAII, by its Board of Land and Natural Resources, pursuant to the provisions of Section 171-95(a)(3), Hawaii Revised Statutes, hereinafter referred to as the "GRANTOR," and the UNITED STATES OF AMERICA, by its Department of the Navy, hereinafter referred to as the "GRANTEE,"

WITNESSETH THAT:

The Grantor, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, and of the terms, conditions and covenants herein contained, and on the part of the Grantee to be observed and performed, does hereby grant unto the Grantee nonexclusive easement rights:

For drainage purposes, including the right to construct, operate, maintain and repair culverts

in, over, under and across that certain parcel of land situate at Mana, Waimea (Kona), Kauai, Hawaii, being portions of Government (Crown) Land of Waimea, being also portions of Parcel 1 of Tax Map Key 1-2-02 encumbered under General Lease No. S-4222 to Kekaha Sugar Co., Ltd., designated as EASEMENT "B-3", containing an area of approximately 1,911 square feet,

DLR 10-5-132

and EASEMENT "B-4", containing an area of approximately 2,901 square feet, all more particularly described in Exhibit "A" and delineated on Exhibit "B", both of which are attached hereto and made parts hereof, said exhibits being, respectively, a survey description and survey map prepared by the Survey Division, Department of Accounting and General Services, State of Hawaii, both being designated C.S.F. No. 18,429 and dated October 2, 1978, TOGETHER WITH the rights of ingress and egress to and from said easement areas for all purposes in connection with the rights hereby granted.

TO HAVE AND TO HOLD the said easement rights unto the Grantee for a term of approximately fifty-one (51) years, commencing on the 8th day of September, 1978, up to and including the 19th day of August, 2029, unless sooner terminated as hereinafter provided, SUBJECT, HOWEVER, to the following terms, conditions and covenants:

1. The Grantee shall be responsible for any claims for damage or injury caused by or resulting from any act or omission of the Grantee in connection with the Grantee's use of the premises described herein as provided in the Federal Tort Claims Act (62 Stat. 869-982, 28 USC 2671-2680).

2. The Grantor reserves unto itself the full use and enjoyment of the said premises, and to grant to others rights and privileges for any and all purposes affecting the said premises, except as to the rights herein granted, provided, however, that the rights herein reserved shall not be

exercised by the Grantor or any agent, representative or assign of the Grantor in such manner so as to interfere unreasonably with the Grantee in the use of said land for the purpose for which this easement is granted.

3. All improvements placed in or upon the easement area by the Grantee shall be and remain the property of the Grantee and may be removed or otherwise disposed of by the Grantee at any time; provided, that such removal shall be accomplished with minimum disturbance to the premises, which shall be restored to its original condition, or as close thereto as possible, within a reasonable time after removal; provided, further, that all improvements may be abandoned in place with the prior written approval of Grantor.

4. Upon completion of any work performed in or upon the easement areas, the Grantee shall remove therefrom all equipment and unused or surplus materials, if any, and shall leave the said areas in a clean and sanitary condition satisfactory to the Grantor.

5. This easement or any rights granted herein shall not be sold, assigned, conveyed, leased, mortgaged or otherwise transferred or disposed of, directly or by operation of law, except with the prior consent of the Grantor.

6. The Grantee shall keep the said premises and the improvements therein in a clean, sanitary

and orderly condition, and shall not make, permit or suffer, any waste, strip, spoil, nuisance or unlawful, improper or offensive use of said premises.

7. The Grantee covenants, for itself, its successors and assigns, that the use and enjoyment of the land herein shall not be in support of any policy which discriminates against anyone based upon race, creed, color, national origin or physical handicap.

8. The Grantee shall comply with all of the requirements of all municipal, state and federal authorities and observe all municipal ordinances and state and federal statutes, pertaining to the said land, now in force or which may hereinafter be in force.

9. These easement rights shall cease and terminate, without any action on the part of the Grantor, in the event of non-use or abandonment by the Grantee of the easement areas, or any portion thereof, for a period of two (2) consecutive years.

10. Upon termination of the easement rights granted herein, if requested by Grantor, the Grantee, at its expense, shall remove any and all improvements installed or constructed hereunder, and restore the premises to its original condition, or as close thereto as possible, to the satisfaction of Grantor.

IN WITNESS WHEREOF, the parties hereto have caused this Indenture to be executed by their duly authorized officers as of the day and year first above written.

STATE OF HAWAII

By _____
Chairman and Member
Board of Land and
Natural Resources

APPROVED BY THE BOARD OF
LAND AND NATURAL RESOURCES
AT ITS MEETING HELD ON

September 8, 1978

And By _____
Member
Board of Land and
Natural Resources

UNITED STATES OF AMERICA
Department of the Navy

By _____

By direction of the Commander, Naval Facilities Engineering Command, acting under the direction of the Secretary of the Navy

APPROVED AS TO FORM
AND LEGALITY:

_____
Deputy Attorney General

Dated: February 15, 1979

CONSENT is hereby given to the attached license covering a portion of General Lease No. 3458, provided, however, that this consent shall in nowise be construed as varying in any respect the liabilities and obligations to the State of Hawaii of the lessee under said general lease; and provided further that no further assignment of said lease nor of any interest under said lease shall be made without the written consent of the Board of Land and Natural Resources being first obtained and endorsed thereon.

IN WITNESS WHEREOF, the STATE OF HAWAII by its Board of Land and Natural Resources, has caused the seal of the Department of Land and Natural Resources to be hereunto affixed and these presents to be duly executed this 10th day of July, 1964.

STATE OF HAWAII

Approved by the Board
at its meeting held on
July 10, 1964

By: L. L. Summers
~~Chairman and~~ Member
Board of Land and
Natural Resources

APPROVED AS TO FORM:

L. Arita
Deputy Attorney General

And By: Y. Nakamaye
Member
Board of Land and
Natural Resources

STATE OF HAWAII

SURVEY DIVISION

DEPT. OF ACCOUNTING AND GENERAL SERVICES

HONOLULU

C.S.F. No. 18,429

October 2, 1978

EASEMENTS "B-3" AND "B-4"

FOR DRAINAGE PURPOSES

Mana, Waimea (Kona), Kauai, Hawaii

Being portions of the Government (Crown) Land of Waimea.

EASEMENT "B-3"

Beginning at the east corner of this easement and on the southwest side of Easement B for Roadway, the coordinates of said point of beginning referred to Government Survey Triangulation Station "KANALOA" being 14,141.29 feet North and 15,778.26 feet West, thence running by azimuths measured clockwise from True South:-

1. 48° 59' 30" 25.00 feet along the remainder of Government Land;

2. 99° 20' 20.00 feet along the remainder of Government Land;

3. 167° 30' 68.00 feet along the remainder of Government Land;

4. 228° 59' 30" 10.96 feet along the remainder of Government Land;

5. Thence along the southwest side of Easement B for Roadway, on a curve to the left with a radius of 502.50 feet, the chord azimuth and distance being: 323° 17' 32" 75.36 feet, to the point of beginning and containing an AREA OF 1,911 SQUARE FEET.

EASEMENT "B-4"

Beginning at the southeast corner of this easement and on the northeast side of Easement B for Roadway, the coordinates of said point of beginning referred to Government Survey Triangulation Station "KANALOA" being 14,073.17 feet North and 15,685.91 feet West, thence running by azimuths measured clockwise from True South:-

1. 138° 59' 30" 112.00 feet along the northeast side of Easement B for Roadway;



EXHIBIT "A"

2. Thence along the northeast side of Easement B for Roadway, on a curve to the right with a radius of 477.50 feet, the chord azimuth and distance being:
140° 36' 30" 26.94 feet;

3. 279° 20' 67.68 feet along the remainder of Government Land;

4. 9° 20' 28.00 feet along the remainder of Government Land;

5. 322° 20' 24.00 feet along the remainder of Government Land;

6. 48° 59' 30" 7.00 feet along the remainder of Government Land;

7. 318° 59' 30" 45.00 feet along the remainder of Government Land;

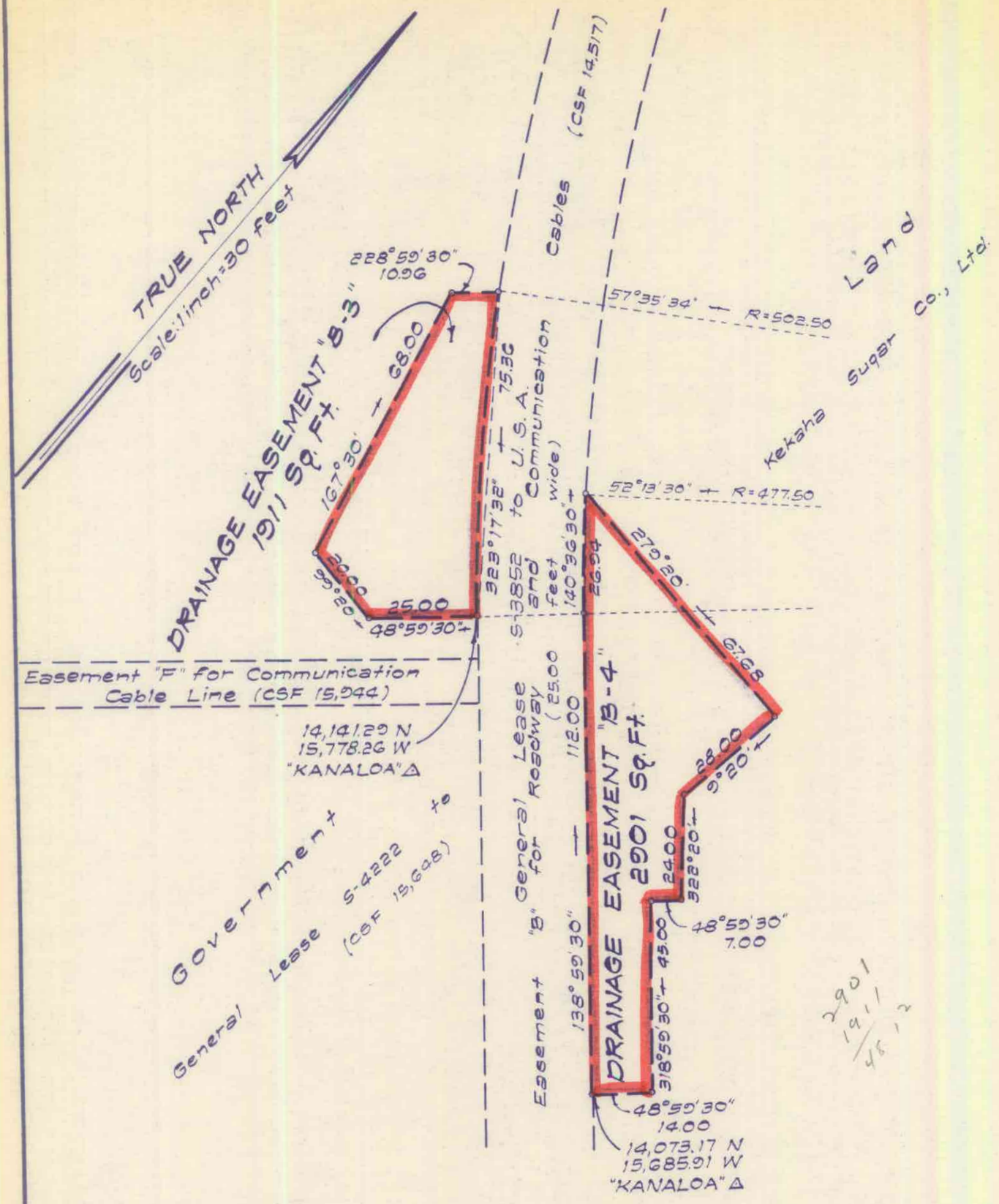
8. 48° 59' 30" 14.00 feet along the remainder of Government Land, to the point of beginning and containing an AREA OF 2,901 SQUARE FEET.

SURVEY DIVISION
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
STATE OF HAWAII

By: Paul T. Nuha
Paul T. Nuha
Land Surveyor

Compiled from map fur.by
Nav.Fac.Engr.Command,Pac.
Div. and Govt.Survey
Records.

gm




# EASEMENTS "B-3" AND "B-4" FOR DRAINAGE PURPOSES

Mana, Waimea (Kona) Kauai, Hawaii

Scale: 1 inch = 30 feet

**EXHIBIT "B"**

JOB K-8935
C. BK 2, P.Nuha

TAX MAP 1-2-02:1

C. S. F. No. 18,429

SURVEY DIVISION
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
STATE OF HAWAII

JMM. Oct. 2, 1978

**NASA Lease**

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STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
HONOLULU, HAWAII
Division of Land Management
May 14, 1965

Board of Land and
Natural Resources
Honolulu, Hawaii

Gentlemen:

KAUAI

DIRECT LEASE TO U. S.

STATUTE: Section 103A-90, R.L.H. 1955, Supplement of 1963.

APPLICANT: UNITED STATES OF AMERICA, Through its National Aeronautics and Space Administration (NASA)

FOR: Five (5) parcels of State land and appurtenant rights-of-way at Kokee, Kauai, being also a portion of the Kokee State Park.

AREA: The five (5) parcels contain an area of 16.065 acres and the rights-of-way comprise 6.40 acres for a total area of 22.465 acres, more or less.

TERM: Sixty-five (65) years.

RENTAL: $600.00 per annum.

STATUS: Now in use for the purpose for which a lease is requested -- as a facility of the Pacific Missile Range of NASA, under a right-of-entry for construction.

REMARKS: The PMR site was first requested by the Navy, then local administrative agent for PMR, by letter from Admiral Solomons to Governor Quinn on February 5, 1960.

By letter, also dated February 5, 1960, Mr. Robert F. Ellis, the Commissioner of Public Lands, gave the Navy an immediate right-of-entry to construct the required facilities. The area was then under the Department of Agriculture and Conservation which concurred in the grant. It was proposed that the area be set aside to the Navy by Governor's Executive Order.

By letter of July 21, 1960, the Navy recognized the possibility that the Governor, under newly-acquired Statehood, might not have the authority to set State land aside to the United States. A lease was suggested but the State land law prior to the passage of Act 32 in 1962 required all sales of leases to be made at public auction at the fair market value of the land.

The Land Board, at its July 22, 1960 meeting approved the Navy's request for a long-term lease subject to resolution of any legal problems resulting from the interim state of the land laws. The Legal Section was requested to attempt to iron out any legal problems which might exist.

It was decided to hold up processing of a lease until land law revision permitted more realistic dealing with government agencies.

By letter dated September 13, 1962, the Navy forwarded maps and descriptions of the five parcels and easements and requested a 65-year lease under the terms of Section 90 of Act 32.

Extensive negotiations as to terms and conditions of the lease, amount of rental etc., followed. As a lease document was about to be finalized, the Navy stepped out of the picture and the USAF moved in. More negotiations, this time with the U. S. Corps of Engineers, were required.

Now the USAF has bowed out and NASA is the current applicant. More minor modifications of the document are being made.

The Pacific Missile Range of the NASA installation is constructed and has been operative since 1961. The lease requested is to formalize the agreement.

Unfortunately, no rental was considered or agreed on until in recent negotiations when the $600.00 figure was set. It does not seem possible, under the circumstances, to make the rent retroactive.

RECOMMENDATION:

That the Board reaffirm the July 22, 1960 Board action to grant a lease to the United States for the PMR station at Kokee, Kauai, subject to the following:

1. That the lease be granted to the United States through its National Aeronautics and Space Administration rather than through the Navy or the USAF;

2. That the effective date of the lease be set at February 1, 1965 with annual rental of $600.00 to begin on that date;

3. That the lease document be subject to approval as to form by the Legal Section;

4. Such other terms and conditions as the Chairman may deem necessary to carry out the intent of the Board.

Respectfully submitted,

JAMES J. DETOR, Head
Division of Land Management

RECOMMENDED FOR APPROVAL:

JIM P. FERRY, Chairman

STATUS OF REAL ESTATE TRANSACTION
PACDOCKS 11011/1

| ITEM | ACTION | DATE | BY |
|---|---|---|---|
| Legal Description | | | |
| Recording | | | |
| Microfilm On List | | | |
| Summary Map | | | |
| Inventory | | | |
| Grantor-Grantee Index | Bd. of Land & Natural Resources - U.S.A. (NASA) | | |
| District Land Register | DLR. 10-5-106 A | | |
| Amendment dtd 22 Apr. | 1999 | 4/22/99 | HAA |
| Termination 2/1/65 to 6/30/65 - Indefinite Yr. to Year Extention for 65 yrs | | | HAA |
| | | | |
| | | | |

COMMENTS NASA use of 6 parcels of Land - 16.19 Acs.
16-20FT. wide Right-of-Ways - 6.71 Acs.
at Kokee Pacific Missile Range Facility (PMRF)
Waimea, Kauai, HI.
Amded--

LAND COURT SYSTEM ) REGULAR SYSTEM

Return by Mail ( ) Pickup ( ) To:

Total Number of Pages:

Tax Map Key No. (4) 1-4-01:3

AMENDMENT OF GENERAL LEASE NO. S-3917
(U. S. LEASE, CONTRACT NO. NAS5-9926)

THIS AGREEMENT, made and entered into this 22nd day of April, 1999, by and between the State of Hawaii, by its Board of Land and Natural Resources, hereinafter referred to as the "Lessor," and the UNITED STATES OF AMERICA, NATIONAL AERONAUTICS AND SPACE ADMINISTRATION, whose address is Goddard Space Flight Center, Greenbelt Road, Greenbelt, Maryland 20771, hereinafter referred to as the "Government";

WITNESSETH:

WHEREAS, the Government is the present lessee of General Lease No. S-3917 (U.S. Lease, Contract No. NAS5-9926) dated February 1, 1965, covering lands situate at Waimea, Island of Kauai, Hawaii; and

Approved by the Attorney General

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

WHEREAS, the Government desires that the general lease be amended; and

WHEREAS, the Board of Land and Natural Resources, at its meeting held on July 24, 1998, has approved the amendment to General Lease No. S-3917, for the purposes of: 1) deleting, in condition number 21, the reference to subleasing or granting any interest in the demised premises, and 2) including, in the lease's stated purpose on page one (1), paragraph two (2) the installation of privately-owned communication equipment in and upon government facilities.

NOW, THEREFORE, the Lessor and Government covenant and agree that the following paragraphs of General Lease No. S-3917, are hereby amended to be:

1. Page 1, paragraph 2, after "purposes" add "and for the installation of privately-owned communication equipment in and upon Government facilities within the demised premises."

2. Page 6, paragraph 21, delete ", sublease or grant."

Paragraphs 2 and 21 are subject, however, to the following:

a. Consent by the Board of Land and Natural Resources shall be required for all license agreements for private use of Government facilities within the demised premises.

b. The Lessor shall be entitled to that portion of all license fees attributable to use of the state land as determined by the Lessor's appraiser.

c. The Government shall be entitled to that portion of all license fees attributable to use of the Government facilities as determined by the Government's appraiser.

d. The Government shall be entitled to reimbursement by the licensees for all utilities and services provided to the licensees.

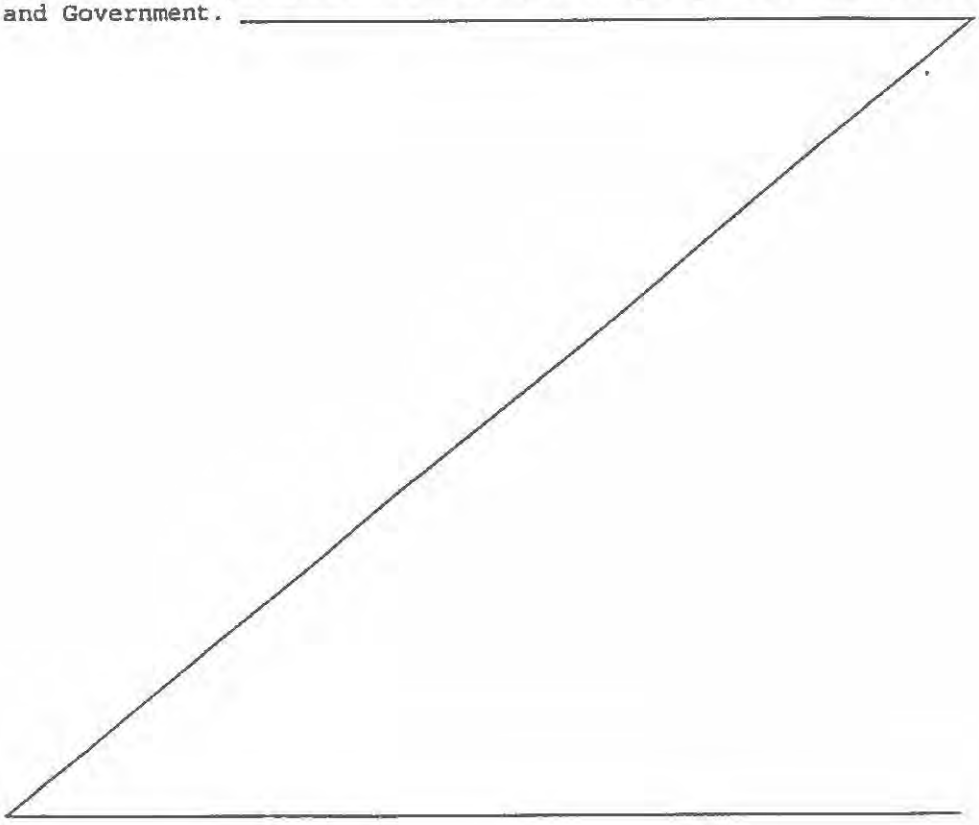


DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION
P.O. BOX 621
HONOLULU, HAWAII 96809

e. The Government shall be entitled to pro-rata reimbursement for costs associated with maintenance of licensed facilities and access thereto.

IN CONSIDERATION THEREOF, the Lessor and Government further agree that this Amendment of Lease Agreement is subject to all the covenants and conditions in the General Lease No. S-3917, except as herein provided.

This Amendment, read in conjunction with the General Lease No. S-3917 sets forth the entire agreement between the Lessor and Government; and the general lease as amended and modified hereby shall not be altered or modified in any particular except by a memorandum in writing signed by the Lessor and Government.





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

IN WITNESS WHEREOF, the STATE OF HAWAII, by its Board of Land and Natural Resources, has caused the seal of the Department of Land and Natural Resources to be hereunto affixed and the parties hereto have caused these presents to be executed the day, month, and year first above written.

STATE OF HAWAII

By _____
Chairperson and Member
Board of Land and
Natural Resources

LESSOR

Approved by the Board of
Land and Natural Resources
at its meeting held on
July 24, 1998.

UNITED STATES OF AMERICA, NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

By _____

W.W. Brubaker, Director, Facilities Engineering Division

And By _____
Its

APPROVED AS TO FORM:

_____
Deputy Attorney General

Dated: 4/9/99

GOVERNMENT

wpd\gls-3917amendment\tmk(4)1-4-01:3waimea\nasa.elk

RECORDATION REQUESTED BY:
U. S. Army Engineer Division,
Pacific Ocean

AFTER RECORDATION, RETURN TO:
U. S. Army Engineer Division,
Pacific Ocean (Ph. 542-986)

RETURN BY: MAIL ( ) PICKUP (X)

SPACE ABOVE THIS LINE FOR REGISTRAR'S USE

STATE OF HAWAII

DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE GENERAL LEASE NO. S-3917
U. S. LEASE, CONTRACT NO. ~~DA-94-626-ENG-102~~ NAS5-9926

1. THIS LEASE, made and entered into as of the 1st day of February, in the year one thousand nine hundred and sixty-five by and between the STATE OF HAWAII, represented by its Board of Land and Natural Resources, whose address is P. O. Box 621, Honolulu, Hawaii 96809, and whose interest in the property hereinafter described is that of fee simple owner, for itself, its successors and assigns, hereinafter called the "Lessor," and THE UNITED STATES OF AMERICA, hereinafter called the "Government":

WITNESSETH: The parties hereto for the consideration hereinafter mentioned covenant and agree as follows:

2. The Lessor hereby leases to the Government ~~five-(5)~~ six (6) parcels of land and appurtenant access, utility and aerial line-of-sight rights-of-way, described on Exhibit "A" attached hereto and made a part hereof, for communication, research, development, testing, tracking, evaluation, guidance and related Government purposes, and for the installation of privately-owned comm...

Amend 1

3. TO HAVE AND TO HOLD the said premises with their appurtenances for the term beginning February 1 through June 30, 1965, provided that, unless and until

the Government or the Lessor shall give notice of termination in accordance with provisions 10 and 11 hereof, this lease shall remain in force thereafter from year to year without further notice; provided, further, that adequate appropriations are available from year to year for the payment of rentals; and provided, further, that this lease shall in no event extend beyond 65 years.

4. The Lessor reserves unto itself:

(a) The right of ingress, egress and regress for its agents and representatives over the demised premises at any time for the purpose of performing any public or official duties; provided, that such reserved right shall be exercised only by agents or representatives who have security clearance and then only at times established by giving the Government at least twenty-four hours prior notice and, further, that such right shall be exercised only in company with a responsible official of the Government if the Government so requires.

(b) All ground and surface waters, ores, minerals and mineral rights of every description on, in or under the demised premises but it shall utilize or permit others to utilize the said reserved waters, ores, minerals and mineral rights during the term of this lease only with the consent of the Government.

"Minerals" as used herein shall mean any or all oil, gas, coal, phosphate, sodium, sulfur, iron, titanium, laterite, gibbsite, alumina, all ores of aluminum and, without limitation thereon, all other mineral substances and ore deposits, whether solid, gaseous or liquid, in, on or under the land; provided, that "minerals" shall not include any of the foregoing substances and deposits when used in road or building construction in furtherance of the Lessee's permitted activities on the demised premises and not for sale to others.

(c) So much of the rocks, coral, soil, gravel or similar material in or on the demised premises as the Lessor may require for any and all purposes; provided, that the Government shall have the right, subject to prior approval of the Lessor, to develop and use the same for construction projects on the demised premises.

THE LESSOR AND THE GOVERNMENT, IN CONSIDERATION OF THE PREMISES, COVENANT AND AGREE AS FOLLOWS:

5. The Government shall pay the Lessor rental at the following rate: Two Hundred Fifty Dollars ($250.00) for the initial period and Six Hundred Dollars ($600.00) for each successive annual term, the rent for each term to be paid at the end of its respective fiscal year. In the event of termination of this lease within a fiscal year, the proportionate share of the rental due shall be paid as soon after the date of termination as practicable. Invoices for rental due under the terms of this lease shall be submitted to the Fiscal Officer, Goddard Space Flight Center, Greenbelt, Maryland.

6. The Government shall have the right, during the existence of this lease, to make alterations, attach fixtures, and erect additions, structures or signs in or upon the premises hereby leased, and such fixtures, additions, structures and signs shall be and remain the property of the Government and may be removed or disposed of by the Government prior to the termination of this lease; provided, however, that all such fixtures, additions, structures and signs shall be so designed and placed as to detract as little as possible from the natural beauty of the surrounding area, and plans for such placement or construction, to the extent permitted by security considerations, shall be reviewed by the Lessor prior to such placement or construction.

Upon the expiration or sooner termination of this lease, at the option of the Lessor, the Government may be permitted to abandon said fixtures, structures and signs in place or be required to remove or otherwise dispose of them and restore the area to a condition comparable to that existing at the beginning of this lease, reasonable and ordinary wear and tear and damage by the elements excepted; provided, however, that if such restoration is required by the Lessor, the Lessor shall so notify the Government in writing at least thirty (30) days prior to the expiration date or sooner termination of this lease, and provided, further, that the Government shall have the right, in lieu of such restoration, to make a cash settlement with the Lessor and abandon such fixtures, structures and signs in place.

7. The Government, during the term of this lease and at its own cost and expense, shall at all times keep in good repair all Government improvements now on or hereafter to be constructed on the demised premises.

8. In order to prevent the introduction of undesirable plant species in the area, the Government shall not plant any trees, shrubs, flowers or other plants in the leased area except those approved for such planting by the Lessor.

9. The Government shall not knowingly appropriate, damage, remove, excavate, disfigure, deface or destroy any object of antiquity, prehistoric ruin or monument.

10. The Government may terminate this lease at any time by giving ninety (90) days' notice in writing to the Lessor, and no rental shall accrue after the effective date of termination and surrender of the premises.

11. The Lessor may terminate this lease at any time by giving the Government sixty (60) days' notice in writing in the event the Government violates any of the terms and conditions of this lease and continues and persists in such violation for a period of sixty (60) days from date of receipt of notice in writing of such violation.

12. The Government shall have exclusive use and control of existing or future fenced areas and/or surface areas occupied by Government improvements or facilities, it being mutually understood and agreed that the Lessor shall have joint use of all other areas and rights-of-way herein demised; provided, however, that the Lessor shall not construct any facilities within the joint use area and shall not interfere with any utility lines or line-of-sight rights-of-way located on or above and serving the leased premises without obtaining the written consent of the Government.

13. No representative of the Government nor any person using the demised premises at the invitation and/or permission of the Government shall hunt, pursue, kill or take any game or destroy any wildlife in the area unless such person is duly licensed by the Lessor, has a hunting permit and is acting in accordance with the Lessor's rules and regulations and other State laws pertinent thereto.

14. The Government shall not make, permit or suffer any waste, strip, spoil, nuisance, damage, or unlawful, improper or offensive use of the demised premises.

15. The Government shall observe and comply with all rules, regulations, ordinances and laws of any county, municipal or State governmental authority applicable to the demised premises and not inconsistent with the Government's regulations relating to the use of the premises for the use herein set forth or any other comparable use.

16. The Government will not be responsible for any loss, liability, claim, or demand for property damage, property loss, or personal injury, including but not limited to death, arising out of any injury or damage caused by or resulting from any act or omission of the Lessor in connection with its use of the premises described herein.

17. In recognition of the limited amount of land available for public use, of the importance of forest reserves and watersheds in Hawaii, and of the necessity for preventing or controlling erosion, the Government hereby agrees that, commensurate with its use of the premises, it will take reasonable precautions during its use of the premises herein demised to prevent damage to or destruction of vegetation, wildlife and forest cover, geological features and related natural resources and improvements constructed by the Lessor, help preserve the natural beauty of the premises, protect and prevent pollution or contamination of all ground and surface waters and that it will remove or otherwise effectively dispose of all trash, garbage and other waste materials resulting from Government use of said premises.

18. The Government shall take every reasonable precaution to prevent the start of any fire on the demised premises and shall take immediate and continuing action to extinguish any and all fires on the said premises or fires started by or resulting from any act or omission of the Government. Further, the Government shall establish and at all times maintain a standard operating procedure for fighting fires within or adjacent to the subject leased property

resulting from Government activities during its use and occupancy of the premises. Government personnel actually using the premises shall be familiar with said standard procedure including the means of implementation.

19. The Government hereby agrees that the use and enjoyment of the land herein demised shall not be in support of any policy which discriminates against anyone based upon race, creed, color or national origin.

20. The Lessor will not be responsible for any loss, liability, claim, or demand for property damage, property loss, or personal injury, including but not limited to death, arising out of any injury or damage caused by or resulting from any act or omission in connection with the Government's use of the premises described herein.

Amend 1

21. The Government shall not assign, ~~sublease or grant~~ any interest in the demised premises.

22. In the event that the leased property is not used by the Government for the purpose stated in paragraph 2 hereof for a period of three (3) consecutive years, this lease may be terminated upon sixty (60) days' written notice from the Lessor to the Government; provided, however, that, if prior to the expiration of the aforesaid sixty (60) day period the Administrator of National Aeronautics and Space Administration or his duly authorized representative shall find and determine that the leased property is required for a comparable use and shall notify the Lessor in writing of this finding and determination, this lease will continue in effect; provided, further, that periods during which a national emergency has been declared by the President or the Congress of the United States shall not be included in the said three-year-period. The Government agrees that current Government standards concerning adequate utilization shall be applied to these premises; that such comparable use shall be communicated to the Lessor immediately after such finding and determination by the said Administrator of National Aeronautics and Space Administration or his duly authorized representative; and that the

Government shall use the property for the new use within six (6) months after said finding and determination.

23. Any notice under the terms of this lease shall be in writing signed by a duly authorized representative of the party giving such notice, and if given by the Government shall be addressed to the Lessor at P. O. Box 621, Honolulu, Hawaii 96809, and if given by the Lessor shall be addressed to the Goddard Space Flight Center, Greenbelt, Maryland, Attn: ~~Dr. Goett.~~ Director

24. The Government's compliance with all obligations placed on it by this lease shall be subject to the availability of funds.

25. The Lessor's compliance with any obligations which may be placed on it by this lease shall be subject to the availability of funds and/or personnel.

26. The failure of the Lessor to insist upon strict performance of any term, covenant, or condition herein, or to exercise any right herein conferred or reserved, in any one or more instances, shall not be deemed a waiver or relinquishment of any such term, covenant, condition or right.

27. The Lessor warrants that no person or selling agency has been employed or retained to solicit or secure this lease upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by the Lessor for the purpose of securing business. For breach or violation of this warranty the Government shall have the right to annul this lease without liability or in its discretion to deduct from the lease price or consideration the full amount of such commission, percentage, brokerage or contingent fee.

28. No member of or delegate to Congress or resident commissioner shall be admitted to any share or part of this lease or to any benefit that may arise therefrom, but this provision shall not be construed to extend to this lease if made with a corporation for its general benefit.

29. (a) The Government may, by written notice to the Lessor, terminate the right of the Lessor to proceed under this lease if it is found, after notice and hearing, by the Administrator of NASA or his duly authorized representative, that gratuities (in the form of entertainment, gifts, or otherwise) were offered or given by the Lessor, or any agent or representative of the Lessor, to any officer or employee of the Government with a view toward securing a lease or securing favorable treatment with respect to the awarding or amending, or the making of any determinations with respect to the performing, of this lease; provided that the existence of facts upon which the Administrator of NASA or his duly authorized representative makes such findings shall be in issue and may be reviewed in any competent court.

(b) In the event this lease is terminated as provided in paragraph (a) hereof, the Government shall be entitled to pursue the same remedies against the Lessor as it could pursue in the event of a breach of the lease by the Lessor.

(c) The rights and remedies of the Government provided in this clause shall not be exclusive and are in addition to any other rights and remedies provided by law or under this lease.

~~30. This lease is not subject to Title 10, United States Code, Section 2662.~~

IN WITNESS WHEREOF, the parties hereto have hereunto subscribed their names as of the date first above written.

STATE OF HAWAII

By: _____
Chairman and Member
Board of Land and
Natural Resources

And By: _____
Member
Board of Land and
Natural Resources

THE UNITED STATES OF AMERICA

By: _____
for John F. Clarke
Lectus Director

8/16/65

APPROVED AS TO FORM:

_____
Legal Attorney General
4-7-65

NAS5-9926

KOKEE PACIFIC MISSILE RANGE FACILITY

LAND SITUATE AT WAIMEA, ISLAND OF KAUAI
STATE OF HAWAII

BEING PARCELS A THRU F, TOGETHER WITH THE LANDS

DESIGNATED AS RIGHTS OF WAY 1 THRU 16

APPURTENANT THERETO FOR ACCESS AND UTILITY PURPOSES

SAID LANDS ARE DESCRIBED AS FOLLOWS:

Being the lands situated within the Government land of Napali - Kona set aside for Kokee Park and Forest Reserve by Governor's Executive Order No. 1509.

PARCEL A

Beginning at a point on the Northeast boundary of this piece of land (being also the initial point for Right of Way 1), said point of beginning being by azimuth (measured clockwise from True South) and distance 158° 13' 33" 276.62 feet from Government Survey Triangulation Station "HALE 2" located within the land here described and thence running by azimuths:

| | | | | |
|---|---|---|---|---|
| 1. | 287° | 00' | 00" | 185.00 feet; |
| 2. | 349° | 35' | 00" | 406.20 feet; |
| 3. | 68° | 00' | 00" | 315.00 feet; |
| 4. | 158° | 00' | 00" | 375.00 feet; |
| 5. | 214° | 23' | 30" | 280.20 feet; |
| 6. | 287° | 00' | 00" | 25.00 feet to the point of beginning and containing an area of 3.79 acres, more or less. |

PARCEL B

Beginning at the point on the Southeast boundary of this piece of land (being also the initial point for Right of Way 2), the coordinates of said point of beginning from Government Survey Triangulation Station "HALE 2" being 1354.52 feet North and 267.92 feet East, and thence running by azimuths measured clockwise from True South:

| | | | | |
|---|---|---|---|---|
| 1. | 17° | 44' | | 80.00 feet; |
| 2. | 107° | 44' | | 190.00 feet; |
| 3. | 197° | 44' | | 285.00 feet; |
| 4. | 287° | 44' | | 190.00 feet; |
| 5. | 17° | 44' | | 205.00 feet and passing over a point at 158.98 feet, being the end of the center line for Right of Way 12 to the point of beginning and containing an area of 1.24 acres, more or less. |

PARCEL C

Beginning at a point on the Southwest boundary of this piece of land (being also the initial point for Right of Way 3), the coordinates of said point of beginning from Government Survey Triangulation Station "HALE 2) being 2267.77 feet North and 727.89 feet East and thence running by azimuths measured clockwise from True South:

Exhibit "A"

| | | | | |
|---|---|---|---|---|
| 1. | 118° | 46' | 00" | 25.00 feet; |
| 2. | 212° | 41' | 30" | 139.34 feet and passing over a point at 107.79 feet, being the initial point for Right of Way 6; |
| 3. | 292° | 45' | 50" | 96.58 feet and passing over a point at 75.00 feet, being the initial point for Right of Way 4; |
| 4. | 18° | 00' | 00" | 151.78 feet; |
| 5. | 118° | 46' | 00" | 108.94 feet to the point of beginning and containing an area of 0.38 acre, more or less. |

PARCEL D

Beginning at a point on the Southwest boundary of this piece of land, being also the end of the center line for Right of Way 4, the coordinates of said point of beginning from Government Survey Triangulation Station "HALE 2" being 3420.96 feet North and 1292.22 feet East and thence running by azimuths measured clockwise from True South:

| | | | | |
|---|---|---|---|---|
| 1. | 112° | 45' | 50" | 220.00 feet; |
| 2. | 202° | 45' | 50" | 571.92 feet; |
| 3. | 279° | 15' | 00" | 147.16 feet and passing over a point at 122.16 feet, being the initial point for Right of Way 5; |
| 4. | 292° | 45' | 50" | 176.90 feet; |
| 5. | 8° | 43' | 30" | 412.31 feet; |
| 6. | 22° | 45' | 50" | 206.31 feet; |
| 7. | 112° | 45' | 50" | 200.00 feet to the point of beginning and containing an area of 5.33 acres, more or less. |

PARCEL E

Beginning at a point on the Southwest boundary of this piece of land, being also the end of the center line for Right of Way 5, the coordinates of said point of beginning from Government Survey Triangulation Station "HALE 2" being 4467.00 feet North and 1505.03 feet East, and thence running by azimuths measured clockwise from True South:

| | | | |
|---|---|---|---|
| 1. | 99° | 15' | 200.00 feet; |
| 2. | 189° | 15' | 464.81 feet; |
| 3. | 279° | 15' | 168.08 feet; |
| 4. | 189° | 15' | 216.26 feet; |
| 5. | 279° | 15' | 277.02 feet; |
| 6. | 9° | 15' | 216.26 feet; |
| 7. | 99° | 15' | 80.32 feet; |
| 8. | 9° | 15' | 464.81 feet; |
| 9. | 99° | 15' | 164.78 feet to the point of beginning and containing an area of 5.27 acres, more or less. |

PARCEL F

Beginning at the West corner of this piece of land on the southeasterly boundary of Right of Way 4, the coordinates of said point of beginning from Government Survey Triangulation Station "HALE 2" being 2501.54 feet North and 532.27 feet East, and thence running by azimuths measured clockwise from True South:

| | | | | |
|---|---|---|---|---|
| 1. | 202° | 45' | 50" | 160.00 feet along Right of Way 4; |
| 2. | 292° | 45' | 50" | 50.00 feet; |
| 3. | 22° | 45' | 50" | 160.00 feet; |
| 4. | 112° | 45' | 50" | 50.00 feet to the point of beginning and containing an area of 0.18 acre, more or less. |

RIGHT OF WAY 1

Being a strip of land fifty (50) feet wide and extending twenty-five (25) feet on each side of the following described center line:

Beginning at the Southwest end of this strip of land (being also the initial point of Parcel A), said point of beginning being by azimuth (measured clockwise from True South) and distance 158° 13' 33" 276.62 feet from Government Survey Triangulation Station "HALE 2" and thence running by azimuths:

| | | | | |
|---|---|---|---|---|
| 1. | 197° | 00' | 00" | 400.00 feet; thence on a curve to the left, with a radius of 228.20 feet, the chord azimuth and distance being: |
| 2. | 184° | 38' | 30" | 97.68 feet; |
| 3. | 172° | 17' | 00" | 43.50 feet to the Southeasterly side of Kokee Road and containing an area of 0.62 acre, more or less. |

RIGHT OF WAY 2

Being a strip of land fifty (50) feet wide and extending twenty-five (25) feet on each side of the following described center line:

Beginning at the West end of this strip of land (being also the initial point for said Parcel B, the coordinates of said point of beginning from Government Survey Triangulation Station "HALE 2" being 1354.52 feet North and 267.92 feet East, and thence running by an azimuth measured clockwise from True South:

| | | | | |
|---|---|---|---|---|
| 1. | 287° | 44' | | 49.00 feet to the Northwest side of Kokee Road and containing an area of 0.06 acre, more or less. |

RIGHT OF WAY 3

Being a strip of land fifty (50) feet wide and extending twenty-five (25) feet on each side of the following described center line:

Beginning at the Northeast end of this strip of land (being also the initial point for Parcel C), the coordinates of said point of beginning from Government Survey Triangulation Station "HALE 2" being 2267.77 feet North and 727.89 feet East, and thence running by azimuths measured clockwise from True South:

| | | | | |
|---|---|---|---|---|
| 1. | 28° | 46' | 00" | 74.38 feet; thence on a curve to the left, with a radius of 60.00 feet, the chord azimuth and distance being: |
| 2. | 345° | 04' | 15" | 82.90 feet; |
| 3. | 301° | 22' | 30" | 84.00 feet to the Northwest side of Kokee Road (being also the end of the center line hereinafter described for Right of Way 14), and containing an area of 0.29 acre, more or less. |

NAS5-9926
EXHIBIT "A"

RIGHT OF WAY 4

Being a strip of land one hundred fifty (150) feet wide and extending seventy-five (75) feet on each side of the following described center line:

Beginning at the Southwest end of this strip of land on the Northeast boundary of Parcel C, the coordinates of said point of beginning from Government Survey Triangulation Station "HALE 2" being 2368.05 feet North and 850.40 feet East, and thence running by an azimuth measured clockwise from True South:

1. 202° 45' 49" — 1141.85 feet to a point on the Southwest boundary of Parcel D, described below and containing an area of 3.93 acres, more or less.

RIGHT OF WAY 5

Being a strip of land fifty (50) feet wide and extending twenty-five (25) feet on each side of the following described center line:

Beginning at the Southwest end of this strip of land on the Northerly boundary of Parcel D, the coordinates of said point of beginning from Government Survey Triangulation Station "HALE 2" being 4013.82 feet North and 1431.23 feet East, and thence running by an azimuth measured clockwise from True South:

1. 189° 15' 00" — 459.15 feet to a point on the Southwest boundary of Parcel E and containing an area of 0.53 acre, more or less.

RIGHT OF WAY 6

Being a strip of land twenty (20) feet wide and extending ten (10) feet on each side of the following described center line:

Beginning at the Southeast end of this strip of land on the Northwesterly boundary of Parcel C, the coordinates of said point of beginning from Government Survey Triangulation Station "HALE 2" being 2370.51 feet North and 764.20 feet East, and thence running by an azimuth measured clockwise from True South:

1. 142° 46' — 50.00 feet and containing an area of .02 acre, more or less.

RIGHT OF WAY 7

Beginning at the North corner of this piece of land, also being the East corner of Parcel C, the coordinates of said point of beginning from Government Survey Triangulation Station "HALE 2" being 2359.70 feet North and 870.30 feet East, and thence running by azimuths measured clockwise from True South:

1. 292° 45' 50" — 53.42 feet along Right of Way 4;
2. 86° 44' — 13.18 feet;
3. 352° 46' — 20.00 feet;

| | | |
|---|---|---|
| 4. 82° 46' | 54.71 feet; | |
| 5. 198° 00' | 50.63 feet | along Parcel C to the point of beginning and containing an area of 0.04 acre, more or less. |

RIGHT OF WAY 8

Beginning at the North corner of this piece of land on the Southwesterly boundary of Parcel C, also being on the Northeast corner of Right of Way 3, the coordinates of said point of beginning from Government Survey Triangulation Station "HALE 2" being 2255.74 feet North and 749.80 feet East, and thence running by azimuths measured clockwise from True South:

| | | |
|---|---|---|
| 1. 298° 46' | 38.99 feet | along Parcel C; |
| 2. 22° 46' | 50.00 feet; | |
| 3. 112° 46' | 44.46 feet; | |
| 4. 208° 46' | 54.36 feet | along Right of Way 3 to the point of beginning and containing an area of 0.05 acre, more or less. |

RIGHT OF WAY 9

Beginning at the West corner of this piece of land on the Southeasterly side of Kokee Road, being also the Northeast corner of Right of Way 1, the coordinates of said point of beginning from Government Survey Triangulation Station "HALE 2" being 800.01 feet North and 39.80 feet East, and thence running by azimuths measured clockwise from True South:

| | | |
|---|---|---|
| 1. 228° 09' 40" | 13.54 feet | along the Southeasterly side of Kokee Road; |
| 2. 237° 09' 20" | 33.87 feet | along the Southeasterly side of Kokee Road; |
| 3. 327° 09' 20" | 16.66 feet | and passing over a point at 9.16 feet, being the initial point for Right of Way 10; |
| 4. 18° 55' 00" | 114.69 feet | to the East side of Right of Way 1; thence along the East side of Right of Way 1, on a curve to the left with a radius of 253.20 feet, the chord azimuth and distance being: |
| 5. 176° 16' 40" | 35.28 feet; | |
| 6. 172° 17' 00" | 60.44 feet | along the East side of Right of Way 1, to the point of beginning and containing an area of 0.06 acre, more or less. |

RIGHT OF WAY 10

Being a strip of land fifteen (15) feet wide and extending seven and one-half (7.5) feet on each side of the following described center line:

Beginning at the Southwest end of this strip of land, being also a point on the Northeasterly boundary of Right of Way 9, the coordinates of said point of beginning from Government Survey Triangulation Station "HALE 2" being 819.72 feet North and 82.42 feet East, and thence running by azimuths measured clockwise from True South:

| | | | | |
|---|---|---|---|---|
| 1. | 237° | 09' | 20" | 59.93 feet; thence on a curve to the left with a radius of 252.50 feet, the chord azimuth and distance being: |
| 2. | 215° | 04' | 40" | 189.81 feet; |
| 3. | 193° | 00' | 00" | 127.68 feet; thence on a curve to the right with a radius of 997.50 feet, the chord azimuth and distance being: |
| 4. | 195° | 00' | 00" | 69.62 feet; |
| 5. | 197° | 00' | 00" | 179.08 feet to a point on the Southwest boundary of Right of Way 11, and containing an area of 0.22 acre, more or less. |

RIGHT OF WAY 11

Beginning at a point on the Southwest boundary of this piece of land (said initial point being also the end of the center line of Right of Way 10), the coordinates of said point of beginning from Government Survey Triangulation Station "HALE 2" being 1370.48 feet North and 340.95 feet East, and thence running by azimuths measured clockwise from True South:

| | | | | |
|---|---|---|---|---|
| 1. | 107° | 00' | 00" | 9.76 feet; |
| 2. | 194° | 37' | 50" | 22.75 feet and passing over a point at 11.66 feet, being the initial point for Right of Way 12; |
| 3. | 291° | 30' | 00" | 19.76 feet and passing over a point at 12.26 feet, being the initial point for Right of Way 13; |
| 4. | 21° | 02' | 00" | 21.23 feet; |
| 5. | 107° | 00' | 00" | 7.50 feet to the point of beginning and containing an area of 0.01 acre, more or less. |

RIGHT OF WAY 12

Being a strip of land ten (10) feet wide and extending five (5) feet on each side of the following described center line:

Beginning at the Southeast end of this strip of land on the Northwest boundary of Right of Way 11, the coordinates of said point of beginning from Government Survey Triangulation Station "HALE 2" being 1384.61 feet North and 334.57 feet East, and thence running by an azimuth measured clockwise from True South:

| | | | | |
|---|---|---|---|---|
| 1. | 104° | 37' | 50" | 54.40 feet to the Southeast boundary of Parcel B and containing an area of 0.01 acre, more or less. |

RIGHT OF WAY 13

Being a strip of land fifteen (15) feet wide and extending seven and one-half (7.5) feet on each side of the following described center line:

Beginning at the South end of this strip of land on the Northeast boundary of Right of Way 11, the coordinates of said point of beginning from Government Survey Triangulation Station "HALE 2" being 1390.85 feet North and 348.78 feet East, and thence running by azimuths measured clockwise from True South:

| | | | | | |
|---|---|---|---|---|---|
| 1. | 201° | 30' | 00" | 68.00 feet; | |
| | | | | | thence on a curve to the right with a radius of 137.50 feet, the chord azimuth and distance being: |
| 2. | 227° | 31' | 30" | 120.66 feet; | |
| 3. | 253° | 33' | 00" | 68.88 feet; | |
| | | | | | thence on a curve to the left with a radius of 152.50 feet, the chord azimuth and distance being: |
| 4. | 228° | 21' | 30" | 129.82 feet; | |
| 5. | 203° | 10' | 00" | 105.46 feet; | |
| | | | | | thence on a curve to the left with a radius of 1002.50 feet, the chord azimuth and distance being: |
| 6. | 200° | 30' | 00" | 93.28 feet; | |
| 7. | 197° | 50' | 00" | 19.74 feet; | |
| | | | | | thence on a curve to the right with a radius of 997.50 feet, the chord azimuth and distance being: |
| 8. | 200° | 47' | 30" | 102.96 feet; | |
| 9. | 203° | 45' | 00" | 125.89 feet | to the South end of Right of Way 14 and containing an area of 0.29 acre, more or less. |

RIGHT OF WAY 14

Being a strip of land twenty (20) feet wide and extending ten (10) feet on each side of the following described center line:

Beginning at the South end of this strip of land, said initial point being also on the North boundary of Right of Way 13, the coordinates of said point of beginning from Government Survey Triangulation Station "HALE 2" being 2053.70 feet North and 798.39 feet East, and thence running by azimuths measured clockwise from True South:

| | | | | | |
|---|---|---|---|---|---|
| | | | | | Following along a curve to the left with a radius of 14.00 feet, the chord azimuth and distance being: |
| 1. | 168° | 11' | 30" | 16.28 feet; | |
| 2. | 132° | 38' | | 13.43 feet | to the Northwest side of Kokee Road, being also the end of the center line for Right of Way 3, and containing an area of 0.01 acre, more or less. |

RIGHT OF WAY 15

Being a strip of land ten (10) feet wide and extending five (5) feet on each side of the following described center line:

Beginning at the Southwesterly end of this strip of land, being also a point on the East boundary of Parcel D, the coordinates of said point of beginning from Government Survey Triangulation Station "HALE 2" being 3931.48 feet North and 1617.50 feet East, and thence running by azimuths measured clockwise from True South:

| | | | | |
|---|---|---|---|---|
| 1. | 292° | 09' | 00" | 173.00 feet; |
| 2. | 200° | 37' | 10" | 50.24 feet; |
| 3. | 189° | 00' | 00" | 169.50 feet; |
| 4. | 202° | 00' | 00" | 117.00 feet; |
| 5. | 203° | 34' | 10" | 73.03 feet; |
| 6. | 200° | 29' | 00" | 151.05 feet; |
| 7. | 204° | 56' | 10" | 39.05 feet; |
| 8. | 213° | 52' | 40" | 303.01 feet; |
| 9. | 212° | 51' | 10" | 177.01 feet; |
| 10. | 217° | 46' | 30" | 42.05 feet; |
| 11. | 222° | 53' | 10" | 48.04 feet; |
| 12. | 231° | 47' | 20" | 20.10 feet; |
| 13. | 240° | 38' | 10" | 73.11 feet; |
| 14. | 236° | 25' | 50" | 107.02 feet; |
| 15. | 221° | 04' | 50" | 186.00 feet; |
| 16. | 140° | 00' | 00" | 179.00 feet; |
| 17. | 184° | 36' | 30" | 70.00 feet; |
| 18. | 229° | 36' | 30" | 60.00 feet; |
| 19. | 274° | 36' | 30" | 40.00 feet; |
| 20. | 229° | 36' | 30" | 290.00 feet to the end of this strip of land and containing an area of 0.54 acre, more or less. |

RIGHT OF WAY 16

Being a strip of land twenty (20) feet wide and extending ten (10) feet on each side of the following described center line:

Beginning at the Northwest end of this strip of land on the Southeasterly boundary of Parcel C, the coordinates of said point of beginning from Government Survey Triangulation Station "HALE 2" being 2269.48 feet North and 840.99 feet East, and thence running by an azimuth measured clockwise from True South:

| | | | |
|---|---|---|---|
| 1. | 322° | 46' | 68.00 feet and containing an area of 0.03 acre, more or less. |

Area of Parcels A through F totals 16.19 acres.

Area of Rights of Way 1 through 16 totals 6.71 acres.

COMPLETED TRANSACTION FORM

ACTIVITY: PACMISRANFAC

PROJECT: Amendment of State General Lease No S-3917 to provide for subleasing to telecommunications service providers

DOCUMENT NO. Amendment of State General Lease No S-3917 (NAS5-9926)

PREVIOUS DOCUMENT NO. (if applicable): State General Lease No S-3917

AREA (SQ FT/ACREAGE): N/A

PREVIOUS PR NO. (if available): N/A

| | INITIALS | DATE |
|---|---|---|
| 1. Project Manager | CC | 6/28/95 |
| a. ~~Prepare distribution correspondence for signature.~~ | | |
| b. ~~Attach signed original/duplicate; place copy in project file.~~ | | |
| c. ~~Complete & attach APR~~ N/A | | |
| d. ~~Complete tickler/suspense card:~~ | | |
| Tickler Dates: Term N/A | | |
| Liability Insurance N/A | | |
| Fire Insurance N/A | | |
| e. ~~Copy to City & County Tax Department Commercial outgrants one year or more (lease/license/permit) NOT APPLICABLE~~ | | |
| 2. 241 | [illegible] | 7/1 |
| 3. 24 | [illegible] | 7/14 |
| 6. 2414 (Data Input) | [illegible] | 7/13 |
| 7. 241C/241C1 RPI Action | ____ | ____ PR NO. ____ |
| DLR Action | ____ | 10-5-106.A DLR NO. ____ |
| a. DLR Index and File ____ | | |
| b. Summary Map Entry ____ | | |
| c. Microfilm ____ | | |
| 8. 202F RPI Class II (Only if Class II is involved) | ____ | ____ PR NO. ____ |
| 9. 2414 (Data Input - only if change in DLR information) | [illegible] | 7/13 ____ |
| 10. Project Manager | | |

# Navy-NASA Use Permit

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Navy Number
N62478-16-RP-00022

# USE PERMIT
# BETWEEN
# NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
# GODDARD SPACE FLIGHT CENTER
# AND
# DEPARTMENT OF THE NAVY
# COVERING THE USE OF PORTIONS
# OF THE
# KOKEE PARK GEOPHYSICAL OBSERVATORY (KPGO)

## I. AUTHORITY

Pursuant to the authority of the National Aeronautics and Space Act (51 U.S.C. 20113(e)) the National Aeronautics and Space Administration (NASA) hereby grants to Department of the Navy, acting by and through the Naval Facilities Engineering Command, Hawaii (Herein referred to as "NAVY"), , as pertaining to activities at the NASA, Goddard Space Flight Center, Kokee Park Geophysical Observatory (herein referred to as NASA, GSFC, or KPGO) a Use Permit (Permit) for the use of portions of the (KPGO) described in Exhibits A and B attached hereto and made a part hereof (herein referred to as the "Premises"). NAVY shall have the exclusive use of the facilities identified as "Exclusive Use Facilities" on Exhibit A. NAVY shall have exclusive use of the areas identified as "Exclusive Use Areas" on Exhibit B. Although NAVY shall have Exclusive Use of the facilities and areas identified in Exhibits A and B, NASA may enter into facilities or areas identified in Exhibits A and B upon providing reasonable advance notice for the purpose of inspection, inventory, or when otherwise deemed necessary for the protection of NASA interests. NAVY shall have non-exclusive use of the areas identified as "Common Use Areas" on Exhibit B. NASA and NAVY are herein referred to as the "Parties".

All activities under this Permit must be in compliance with the executed lease, as amended, between the State of Hawaii, Department of Land and Natural Resources S-3917 dated 1 February 1965, and amended by NAS5-9926 dated 22 April 1999. The entire lease, as amended, takes precedence over any provisions in the Permit and is herein incorporated as Exhibit C.

## II. PURPOSE

This Permit defines the requirements for NAVY use of the Premises at KPGO and establishes roles and responsibilities for the Parties at said Premises. In addition, this Permit will serve as the real estate agreement for the Parties and will follow all guidance set forth in Section 6 of NPR 8800.15b and 14 CFR 1204 subpart 5. Under the terms of this Permit, the NAVY will utilize NASA GSFC facilities at the Premises for the purpose of conducting Pacific Missile Range Facility mission support with radar, telemetry, and communications services at the NASA owned facilities

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## III. OCCUPANCY AND USE

In addition to this Permit, there is also a Memorandum of Agreement (MOA) between the National Aeronautics and Space Administration and Department of the Navy, Pacific Missile Range Facility, Barking Sands, which contains terms and conditions of NAVY's occupancy and use of the Premises. In the event of conflict between this Permit and the MOA, the Permit will prevail in connection with all Real Estate matters, to include but not limited to improvements and accountability. The MOA will prevail in regards to all other aspects of the agreement. The intention of this Permit is to establish more specific terms in connection with NASA real estate utilized by NAVY.

KPGO provides observations and facilities necessary to the fulfillment of NASA's mission and other national and international agreements consistent with its critical geodetic operations and capabilities. Furthermore, since KPGO geodetic observations are used daily in the operation of systems critical to national security, such as the Global Positioning System, it is required that this Permit between Parties does not compromise the geodetic mission of the KPGO. More specifically, any electromagnetic, optical, and mechanical (vibrational) interference to the sensitive instrumentation at the KPGO will not be tolerated and must be avoided.

## IV. PRIORITY OF USE

Any schedule or milestone in this Use Permit is estimated based upon the Parties' current understanding of the projected availability of its respective goods, services, facilities, or equipment. In the event that either Party's projected availability changes, NASA or NAVY, respectively, shall be given reasonable notice of that change, so that the schedule and milestones may be adjusted accordingly. The Parties agree that NASA's use of its own goods, services, facilities, or equipment shall have priority over the use planned in this Permit.

## V. REIMBURSEMENT FOR USE

Reimbursement attributable to Partner for use of the premises will be in accordance with the MOA and any other agreements that the Parties may negotiate.

## VI. ACCOUNTABILITY

NASA will retain property accountability for all NASA-owned real property reflected in Exhibits A and B to this Permit. Accountability for NAVY-owned and funded, non-severable improvements, including additions, will be the responsibility of NAVY. NAVY may transfer improvements to NASA-owned real property listed in Exhibits A and B, to NASA upon termination of the Permit in accordance with applicable laws and regulations. Any NAVY improvements constructed by NAVY on NASA controlled land will not be transferred to NASA without approval from Facilities and Real Estate Division (FRED) of NASA Headquarters. NAVY will promptly report to NASA any loss, damage or destruction to any NASA-owned real property. NAVY will assist

NASA with inventories and annual property reports as prescribed by the Federal Management Regulations.

## VII. ALTERATIONS, MODIFICATIONS, AND ADDITIONS TO THE PREMISES

Major alterations, modifications and additions to the Premises will not be undertaken by NAVY without prior approval of the Director, Management Operations Directorate, NASA GSFC. Construction plans and specifications for such projects will be furnished to NASA GSFC for review and concurrence. The NASA GSFC review will consider such factors as compliance with the NASA GSFC Master Facility Plan, compliance with NASA facility standards, compatibility with existing NASA facilities and utility systems and NASA safety criteria. NAVY will provide NASA GSFC with original project drawings updated to "as-built" configuration and the financial information required by federal property capitalization criteria for all NAVY projects not accomplished by NASA GSFC. In the construction of projects at NASA GSFC, NAVY will bear the ultimate responsibility for compliance with the National Environmental Policy Act of 1969, as amended, after proper consultation and coordination with NASA GSFC. Application for state or federal environmental permits required for construction will be accomplished by NAVY. Environmental permits for operations are the responsibility of NAVY but must be fully coordinated with NASA GSFC to ensure there is no interference with NASA GSFC current operations or future development.

## VIII. BUILDING OPERATIONS, MAINTENANCE, AND PROTECTION

A. NAVY will perform all operations and maintenance to the facilities and security of the same covered under Exhibit A of this Permit at no cost to NASA. This shall include protective maintenance and corrective maintenance of the facilities and infrastructure.

B. Responsibilities for the routine maintenance of the common use areas including roads and sidewalks are described in the MOA.

## IX. RESTORATION OR REPLACEMENT OF FACILITIES AND EQUIPMENT LOST OR DAMAGED BY ACCIDENT OR DISASTER

Responsibility for restoration or replacement of the Facilities identified on Exhibit A and built-in or affixed equipment located within the Premises which is lost or damaged by accident or disaster incident to the activities of either NASA GSFC or NAVY shall be assumed by the Party whose action is the proximate cause of the loss. If no Party action is involved due to natural disaster, act of God or act of war, then the Party having initially funded the construction of the building will be responsible for the restoration or replacement of the building. No restoration or replacement shall be made unless, in the opinion of the responsible Party, such restoration or replacement is necessary to accomplish the Agency's program objectives.

## X. ENVIRONMENTAL CONDITION, MANAGEMENT, AND COMPLIANCE

**X.1.** Definitions - As used in this Permit, "Hazardous Material" shall mean any substance that is (a) defined under any Environmental Law (as defined below) as a hazardous substance, hazardous waste, hazardous material, pollutant, or contaminant; (b) a petroleum hydrocarbon, including crude oil or any fraction or mixture thereof; (c) hazardous, toxic, corrosive, flammable, explosive, infectious, radioactive, carcinogenic, or a reproductive toxicant; or (d) otherwise regulated pursuant to any Environmental Law. As used in this Permit, "Environmental Law" shall mean all Federal, State, and local laws, statutes, ordinances, regulations, rules, judicial and administrative orders and decrees, permits, licenses, approvals, authorizations, and similar requirements of all Federal, State, and local governmental agencies or other governmental authorities pertaining to the protection of human health and safety or the environment, now existing or later adopted during the Term. As used in this Permit, "Permit Activities" shall mean the lawful activities of the NAVY that are part of the ordinary course of the NAVY's business in accordance with the Permitted Use. As used in this Permit, "Materials" shall mean the materials handled, used, or stored by the NAVY in the ordinary course of conducting Permit activities. As used in this Permit, "Permit Applications" shall mean permit application forms and supporting documentation, Notice of Intent forms and supporting documentation, registration forms, license forms, or other regulatory approval requests.

**X.2.** General Compliance - The NAVY shall ensure that all operations, activities, equipment, and facilities are in compliance with all Federal, State of Hawaii, and local environmental laws, statutes, regulations, and ordinances. Unless stated in this agreement, the NAVY shall be solely responsible for compliance with aforementioned environmental regulatory requirements including environmental permits. The NAVY shall be considered an independent entity responsible for its own actions for the purposes of environmental compliance and permitting matters. If formal enforcement actions are taken against NASA for environmental violations due to the NAVY's actions or inactions, the NAVY shall reimburse NASA for any fines or penalties assessed.

**X.3.** Existing Environmental Hazards - The NAVY accepts the facilities associated with this agreement in an "as is" environmental condition. The NAVY is responsible for mitigating/protecting workers from any environmental hazards and disposing of any disturbed hazardous materials according to environmental laws and regulations. Examples: lead-based paint, asbestos, polychlorinated biphenyl (PCB)-containing paint, PCB-containing electrical equipment, etc.

**X.4.** National Environmental Policy Act (NEPA) - The NAVY is responsible for funding, implementing, and maintaining any environmental mitigation measures identified in applicable NEPA documentation associated with the Permit Activities. Should Permit activities trigger the need for NEPA documentation during the term of the Permit that did not already exist prior to commencement of the Permit activity, the NAVY is responsible to fund those NEPA requirements, and involve NASA throughout the process as necessary.

X.5 Historical and Cultural Resources – The NAVY shall not remove or disturb, or cause or permit to be removed or disturbed, any historical, archaeological, architectural, or other cultural artifacts, relics, vestiges, remains, or objects of antiquity. In the event such items are discovered on the Premises, the NAVY shall cease its activities at the site and immediately notify said NASA offices and protect the site and material from further disturbance until said NASA offices give clearance to proceed. Any costs resulting from this delay shall be the responsibility of the NAVY. Any known "artifacts" associated with the facility will be removed before modifications/demolition and processed through the GSA Portal.

X.6 Waste Management and Disposal - All wastes generated by the NAVY shall be properly containerized, stored, labeled, manifested, shipped, and disposed of by the NAVY in full regulatory compliance at the NAVY's expense. Hazardous wastes generated by the NAVY shall be manifested, shipped, and disposed of under the NAVY's Environmental Protection Agency hazardous waste generator identification number.

X.7 Environmental Permitting - The NAVY shall obtain all required environmental permits, licenses, registrations, and approvals for their site activities. The NAVY shall prepare all permit applications and pay all permit application fees directly to the regulatory agency. The NAVY shall ensure that all operations, activities, equipment, and facilities are in full compliance with all permit conditions.

X.8 Spill Reporting and Cleanup - The NAVY shall take measures to prevent the release of hazardous materials on, about, or beneath the Property. The NAVY shall immediately respond to and cleanup all spills. A third party cleanup contractor shall be obtained if the NAVY does not have the immediate resources to accomplish the full cleanup and removal of the spill or release.

If the spill or release is reportable to any off-site authorities (e.g. National Response Center, State Emergency Response Commission, Hawaii Department of Environmental Protection), the NAVY shall make all required notifications. The NAVY shall subsequently file a report with NASA Medical and Environmental Management Division (MEMD) within 15 days advising of the notifications.

For all spills to pervious surfaces (such as grass, soil, sediment, etc.), the NAVY shall file a report with NASA MEMD within 15 days. Follow-up reports shall be filed every 30 days thereafter until a final closure of the release is documented.

All spills shall be cleaned up to State of Hawaii residential standards unless approved in writing by the NASA MEMD. The NAVY shall be responsible for shipment and disposal of any cleanup waste and contaminated media as described in the Waste Management and Disposal paragraph above. The liability of the NAVY under this section of this agreement shall survive the termination of this agreement with respect to acts or omissions that occur before such termination.

**X.9.** Cancellation of Permits & Registrations - Upon termination of this agreement, the NAVY shall cancel all permits/registrations/licenses held by the NAVY, remove permitted/registered equipment, and return the site to original condition.

**X.10.** Agreement Termination Inspection - Upon termination of this agreement, an Environmental Condition of Property shall be conducted by the NAVY to compare with the original Environmental Condition of Property to determine whether any environmental contamination occurred during the out-grant term. NASA MEMD staff shall perform a review of all pertinent records and information with NAVY personnel to ensure the removal of all hazardous materials and the proper closure of regulated activities and equipment.

**X.11.** Continuing Liability - This Article shall survive the termination of this Permit with respect to any damage, bodily or personal injury, illness, or death occurring prior to such termination. This Article shall survive the termination of this Permit with respect to any environmental non-compliance condition identified by NASA or the NAVY, and shall continue until such non-compliance condition is fully mitigated, remediated, abated, or otherwise remedied to the satisfaction of NASA and any federal, state, or local regulators with an interest in the non-compliance condition.

## XI. ABATEMENT OF INTERFERENCE WITH A NASA GSFC MISSION

Any interference by NAVY with a NASA GSFC mission or threat of damage to NASA GSFC property incident to the exercise of this Permit shall, upon written notice to the effect from the Director, NASA GSFC, be promptly ended or corrected to the satisfaction of the Director, NASA GSFC. NASA GSFC agrees it will use its best efforts to refrain from interfering with NAVY missions or damaging NAVY-occupied facilities.

## XII. CLAIMS AND LIABILITY

In the event that claims are asserted by third parties for injuries or damages occurring on the Premises or caused by operations on the Premises, the agency responsible for the operation, action or alleged failure of performance shall be responsible for the investigation, adjudication, settlement and payment of any claim asserted against the United States, except that, in all cases, the agency shall have the responsibility for the investigation, adjudication, settlement and payment of any claim with respect to third party liability arising out of the use, damage or destruction of loaned property in the custody and under the control of the agency. Without regard to the foregoing responsibilities, the Director, NASA GSFC, shall have the privilege at his/her option, of investigating and reporting in accordance with the following:

| | |
|---|---|
| NPR 8715.3 | NASA General Safety Program Requirements |
| NPR 8621.1 | NASA Procedural Requirements for Mishap and Close Call Reporting, Investigating, and Recordkeeping |
| GPD-8715.1B | Goddard Space Flight Center Safety Policy |

All accidents and incidents occurring at GSFC or involving NASA property the NAVY agrees to cooperate fully in such investigation.

## XIII. MODIFICATION OF PERMIT

This Permit shall be reviewed at least annually by both Parties for the purpose of assuring the currency of the Permit content and making required amendments. Any modification to this Permit shall be executed in writing and signed by an authorized representative of NASA and NAVY.

## XIV. TERM OF AGREEMENT AND RIGHTS TO TERMINATE

This Permit becomes effective upon the date of the last signature below and the terms of the Permit shall be reviewed every 4 years and shall remain in effect until the expiration of Exhibit "C".

NASA retains the right to terminate, in whole or in part, at no cost to NASA upon NAVY's failure to comply with any term or condition of the Permit. Upon NASA's determination of the NAVY's failure to comply with any terms of conditions of the Permit, NASA shall notify the NAVY in writing of NASA's determination of the failure to comply. This notice shall be specific as to the details of the NAVY's failure to comply with the Permit. The NAVY shall be afforded thirty (30) calendar days from the receipt of NASA's written notice to correct the non-compliance and avoid the termination of the Permit. If the NAVY fails to comply within thirty (30) days, NASA has the right to terminate, in part or in whole, the Permit at no cost to NASA.

NASA retains the right to terminate, in whole or in part, at no cost to NASA upon a determination by the Associate Administrator for Management Systems and Facilities, the Director, Facilities Engineering Division, or the Director of the Field Installation concerned that the interests of the national space program, the national defense, or the public welfare require the termination of the Permit, in accordance to CFR requirement 14 CFR 1204.504.e.3.ii.B. A 2-year written notice shall be given to the NAVY that a determination has been made that the interests of the national space program, the national defense, or the public welfare require the termination of the Permit.

Written notice of such termination shall be provided to the NAVY, or its successors or designees, by the NASA GSFC Director and termination shall be effective as of the date specified by such notice.

This Permit may also be terminated at any time by mutual agreement of the Parties, but otherwise, shall be terminated upon termination of the MOA.

## XV. RESTORATION

Upon termination of this Permit, NAVY shall vacate the Premises, remove its property in accordance with NASA Regulations and Federal Management Regulation Subchapter C

(FMR) and restore the Premises to NASA's satisfaction. This includes but is not limited to transfers, disposals, hazardous activity clean-up, environmental activities, historic preservation, etc. Also, if mutually agreed upon by the authorized representatives of both Parties, NAVY may abandon its property in place and title will automatically vest in NASA GSFC without reimbursement.

## XVI. USE OF PREMISES BY OTHER FEDERAL AGENCIES

NAVY shall have the right to allow the use of the Premises by other federal agencies with the approval of NASA.

## XVII. EXECUTION

National Aeronautics and
Space Administration

By: _____
RAYMOND J. RUBILOTTA
Director, Management Operations Directorate
Goddard Space Flight Center

Date: 21 July 16

For the Department of the Navy

By: _____
RICHARD GREEN, Real Estate Director
Naval Facilities Engineering Command,
Hawaii
Real Estate Contracting Officer
Date: 5/2/2016

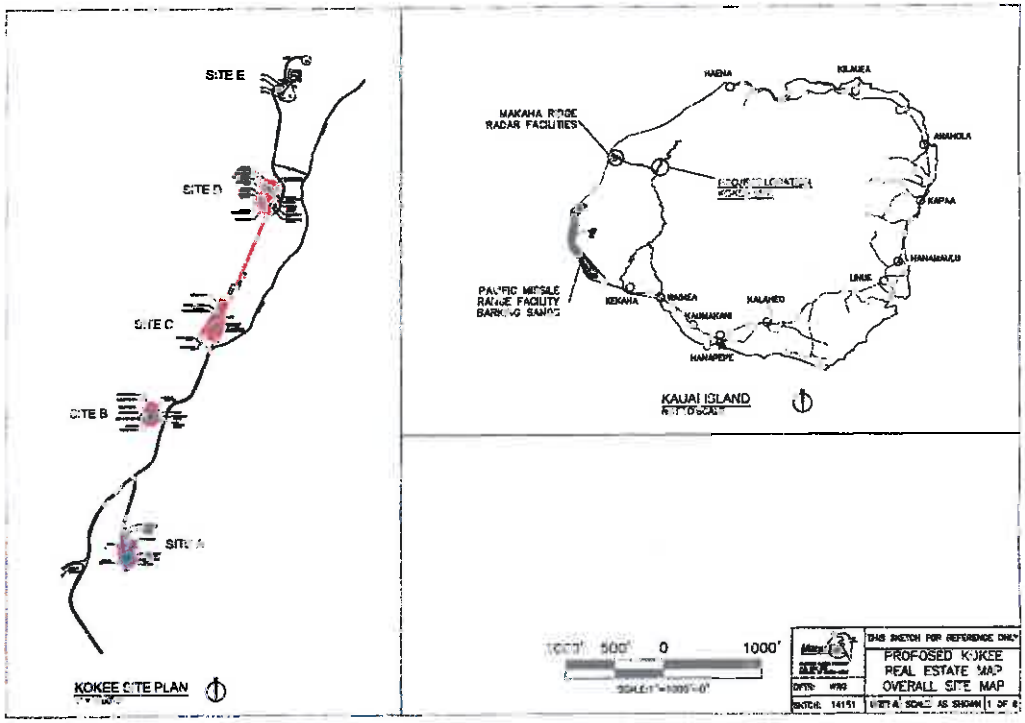
ORIGINAL

EXHIBIT A
TO
USE PERMIT
BETWEEN
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
GODDARD SPACE FLIGHT CENTER
AND
DEPARTMENT OF THE NAVY
COVERING THE USE OF PORTIONS
OF THE
KOKEE PARK GEOPHYSICAL OBSERVATORY (KPGO)

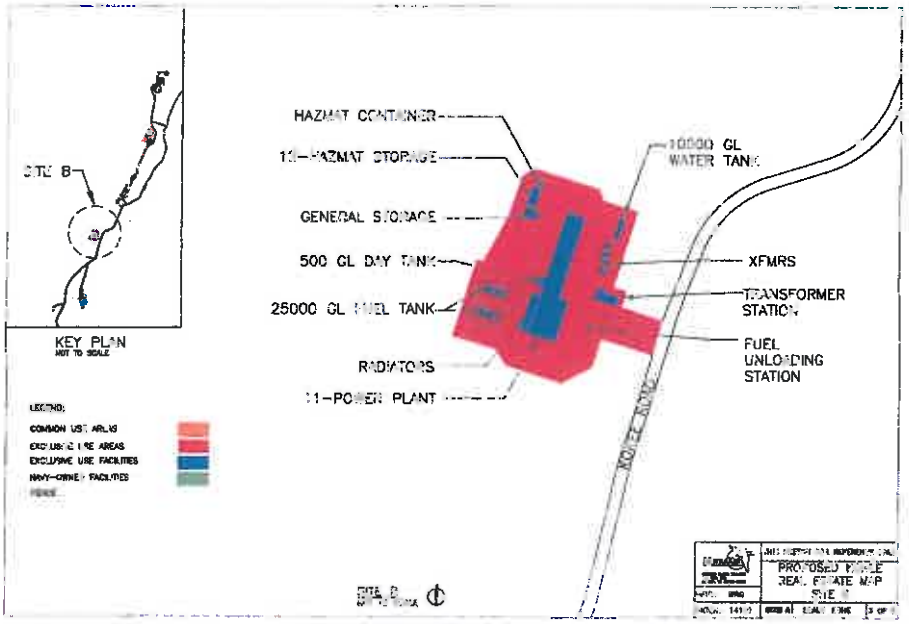
NAVY shall have exclusive use of the following NASA FUNDED FACILITIES:

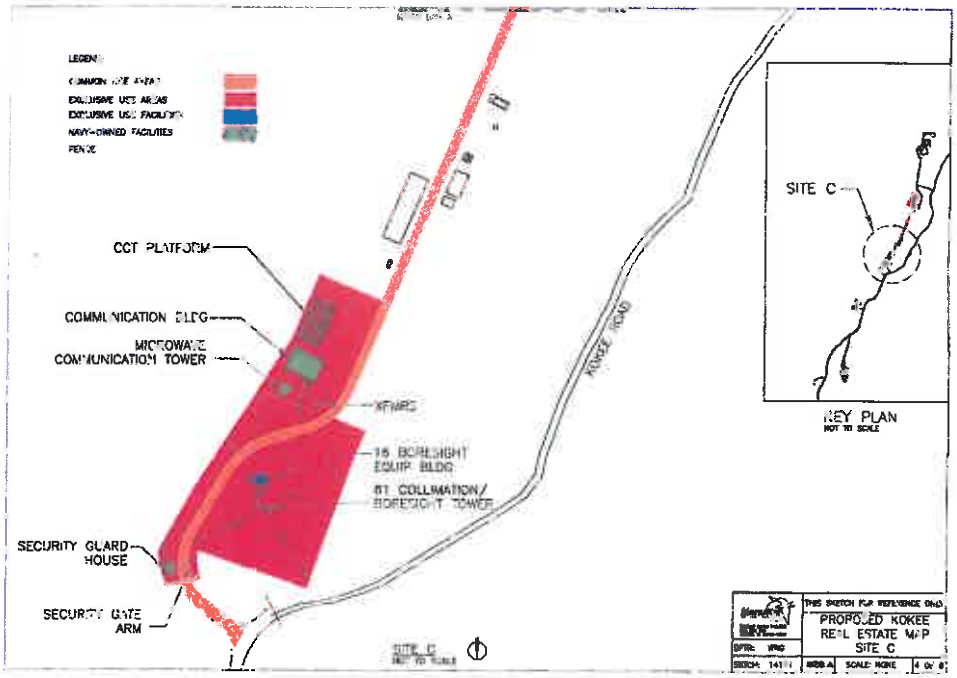
| Facility No. | Property Name | Site | QTY | UM | Current Facility Ownership |
|---|---|---|---|---|---|
| 1 | TELEMETRY & CONTROL BUILDING | A | 10500 | SF | NASA PROPERTY |
| 2 | LOGISTICS | A | 3040 | SF | NASA PROPERTY |
| 6 | SECURITY GUARD HOUSE | A | 264 | SF | NASA PROPERTY |
| 11 | POWER PLANT | B | 4656 | SF | NASA PROPERTY |
| 12 | HAZARD MATERIAL STORAGE | B | 216 | SF | NASA PROPERTY |
| | WAREHOUSE STORAGE FAC | B | 216 | SF | NASA PROPERTY |
| 16 | BORESITE EQUIPMENT BLDG. | C | 270 | SF | NASA PROPERTY |
| 61 | COLLIMINATION/BORESITE TOWER | C | 1 | EA | NASA PROPERTY |
| 21 | TELEMETRY BLS (AN/FPS-16 BLDG) | D | 3640 | SF | NASA PROPERTY |
| 22 | STORAGE AND SUPPLY BUILDING | D | 400 | SF | NASA PROPERTY |
| 23 | CABLE TERMINATION BLDG. | D | 121 | SF | NASA PROPERTY |

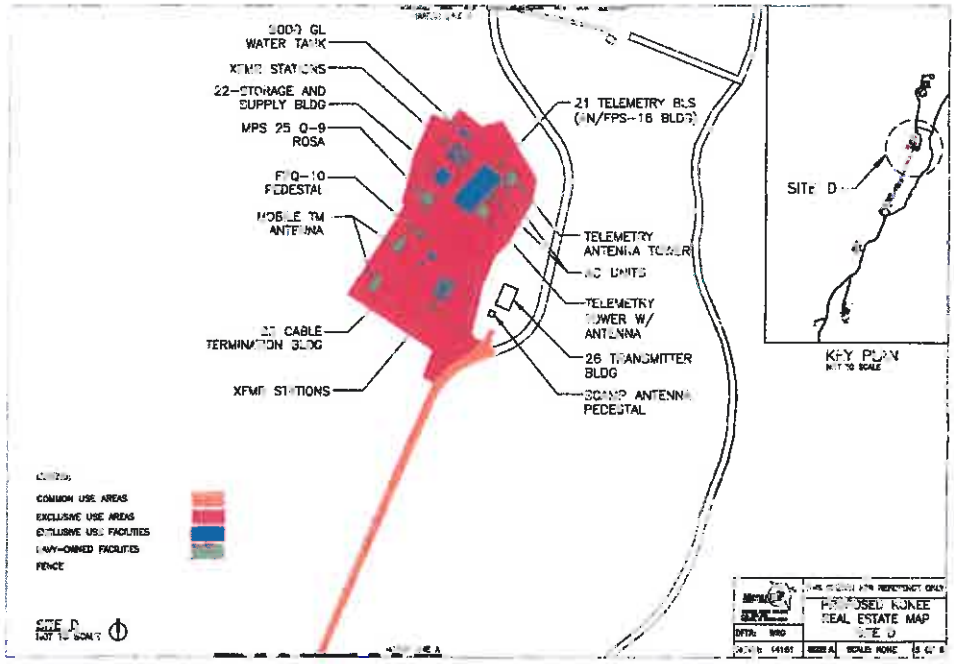
# EXHIBIT B

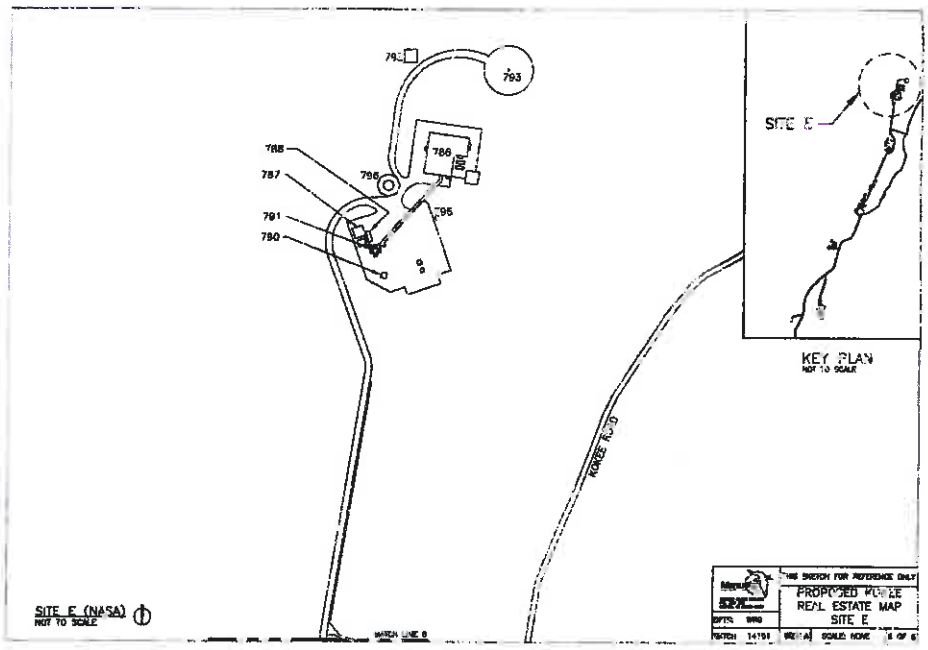

SITE E
SITE D
SITE C
SITE B
SITE A
KOKEE SITE PLAN
MAKAHA RIDGE RADAR FACILITIES
PACIFIC MISSILE RANGE FACILITY BARKING SANDS
KEKAHA
WAIMEA
KALAHEO
KAUMAKANI
HANAPEPE
LIHUE
KAPAA
ANAHOLA
KILAUEA
HANALEI
KAUAI ISLAND
1000'
500'
0
1000'
PROPOSED KOKEE
REAL ESTATE MAP
OVERALL SITE MAP

COMMON USE AREAS
EXCLUSIVE USE AREAS
EXCLUSIVE USE FACILITIES
NAVY-OWNED FACILITIES
FENCE
XFMRS
8500 GAL
WATER TANK
AC UNITS
KEY PLAN
PROPOSED KOKEE
REAL ESTATE MAP
SITE A


SITE B
KEY PLAN
HAZMAT CONTAINER
HAZMAT STORAGE
GENERAL STORAGE
500 GL DAY TANK
25000 GL FUEL TANK
RADIATORS
POWER PLANT
10000 GL WATER TANK
XFMRS
TRANSFORMER STATION
FUEL UNLOADING STATION
KOKEE ROAD
PROPOSED KOKEE REAL ESTATE MAP SITE B


CCT PLATFORM
COMMUNICATION BLDG
MICROWAVE COMMUNICATION TOWER
XFMRS
15 BORESIGHT EQUIP BLDG
61' COLLIMATION/ BORESIGHT TOWER
SECURITY GUARD HOUSE
SECURITY GATE ARM
KOKEE ROAD
SITE C
KEY PLAN
PROPOSED KOKEE REAL ESTATE MAP SITE C


300Ø GL
WATER TANK
XFMR STATIONS
22-STORAGE AND
SUPPLY BLDG
MPS 25 Q-9
ROSA
FIQ-10
PEDESTAL
MOBILE TM
ANTENNA
ST CABLE
TERMINATION BLDG
XFMR STATIONS
21 TELEMETRY BLS
(AN/FPS-16 BLDG)
TELEMETRY
ANTENNA TOWER
AC UNITS
TELEMETRY
TOWER W/
ANTENNA
26 TRANSMITTER
BLDG
SCAMP ANTENNA
PEDESTAL
SITE D
KEY PLAN
COMMON USE AREAS
EXCLUSIVE USE AREAS
EXCLUSIVE USE FACILITIES
NAVY-OWNED FACILITIES
FENCE
SITE D
PROPOSED NOLEE
REAL ESTATE MAP
SITE D


793
788
787
791
790
796
786
795
SITE E
KEY PLAN
NOLEE ROAD
SITE E (NASA)
PROPOSED NOLEE
REAL ESTATE MAP
SITE E

**Cooperative Agreement between U.S. Department of the Navy and State of Hawaii, Department of Land and Natural Resources (DLNR), Division of Forestry (DOFAW)**

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**COOPERATIVE AGREEMENT**
**BETWEEN THE U.S. DEPARTMENT OF THE NAVY AND State of Hawaii, Department of Land and Natural Resources (DLNR), Division of Forestry and Wildlife (DOFAW)**

**COOPERATIVE AGREEMENT NUMBER**
**N62742-23-2-0002**

September 2023

1. Introduction: This new award Cooperative Ecosystem Studies Unit (CESU) Cooperative Agreement is made by and between the Department of the Navy (DON) and the State of Hawaii, Department of Land and Natural Resources (DLNR), Division of Forestry and Wildlife (DOFAW). It is issued to:

State of Hawaii, Department of Land and Natural Resources (DLNR), Division of Forestry and Wildlife (DOFAW)
1151 Punchbowl St Rm 110
Honolulu, HI 96813-3047

CAGE Code: 068D0
Unique Entity ID: L3D1YEK6KAW6

Principal Investigator: Emma Yuen
Department: Land and Natural Resources

2. Purpose: The objective of this project is for the State of Hawaii, Department of Land and Natural Resources (DLNR), Division of Forestry and Wildlife (DOFAW) to restore natural ecological processes to enhance flood mitigation and water recharge above and adjacent to PMRF installations on Kauai. DLNR DOFAW will use the cooperative agreement funds, in compliance with enclosure (1), Terms and Conditions, to carry out the project further described by enclosure (2), Statement of Work (SOW), and in compliance with enclosure (3), Wage Determination 2015-5691. This project is not considered research and development (R&D).

3. Authorities: The authority for this Cooperative Agreement is 16 USC §670c-1 (Natural Resources Management - Sikes Act). The Catalog Federal Domestic Assistance number and title is 12.300 DON Basic and Applied Scientific Research.

4. Period of Performance: The period of performance covered by this Cooperative Agreement is sixty (60) months from the date of award. The award start date is September 14, 2023 and end date is September 13, 2028. However, the parties may extend the period of the CA by written modification.

5. Funding: The total obligated for this Cooperative Agreement is $4,140,000.00.

| | Federal Funds | Total amount |
|---|---|---|
| (A) Obligated or deobligated this action | $4,140,000.00 | $4,140,000.00 |
| (B) Cumulative obligations | $4,140,000.00 | $4,140,000.00 |

| | | |
|---|---|---|
| to date, including this and previous actions | | |
| (C) Planned project costs in the currently approved budget through the end of the period of performance, to include any future incremental funding obligations | $4,140,000.00 | $4,140,000.00 |
| (D) Total value, which includes any unexercised options for which amounts were established in the award. | $4,140,000.00 | $4,140,000.00 |

6. Accounting and Appropriations Data:

| Contract ACRN | APPN | SBH | O/C | BUCON | Sub All Num | AAA UIC | Tsn Type | PAA UIC | Cost Code | LOA Amt |
|---|---|---|---|---|---|---|---|---|---|---|
| AA | 9730100 | 1100 | 254 | | | 012215 | 2D | HQ0642 | 389131 | $4,140,000.00 |

ACRN AA: MIPR # HQ0642388808 ($4,140,000.00)

7. Awarding Office:

Naval Facilities Engineering Systems Command, Pacific
258 Makalapa Dr., STE 100
JBPHH, HI 96860-3134

8. Cooperative Agreement Administrative Office / Representative:

Kristopher Tom
Naval Facilities Engineering Systems Command, Pacific (Code CON32)
258 Makalapa Dr., STE 100
JBPHH, HI 96860-3134
(808) 474-4551
Email – kristopher.m.tom.civ@us.navy.mil

9. Paying Office:

DFAS Cleveland
Pacific Accounts Payable
P.O. Box 998023
Cleveland, OH 44199
See SOW for Wide Area Workflow (WAWF) Payment Instructions

10. Delegations: Full administration duties have been delegated to the administrative office (paragraph 8). Upon request, the awarding office (paragraph 7) will make the full text of delegated contract administration functions available. Please direct questions to those contacts.

11. Terms and Conditions: Additional general Cooperative Agreement terms and conditions are provided at enclosure (1). The award specific scope of work is provided at enclosure (2). Wage Determination 2015-5691 Revision 19 dated 17 July 2023, enclosure (3), is incorporated into the Cooperative Agreement. In the event of conflict between statutes, regulations, the general terms and conditions in enclosure (1), and award-specific terms and conditions, the order of precedence set out in paragraph 1 of enclosure (1) applies.

12. Signature of authorized representative for the State of Hawaii, Department of Land and Natural Resources (DLNR), Division of Forestry and Wildlife (DOFAW).

Sep 5, 2023

Dawn Chang
Chairperson
Hawaii Department of Land and Natural Resources

DATE

13. For the United States of America: Signature of awarding Grants Officer.

TOM.KRISTOPHER.M.1263786234 Digitally signed by TOM.KRISTOPHER.M.1263786234 Date: 2023.09.05 14:07:42 -10'00'

9/5/23

Kristopher M. Tom
Grants Officer
Naval Facilities Engineering Systems Command, Pacific

DATE

**COOPERATIVE AGREEMENT TERMS AND CONDITIONS**
**(SEPT 2006 Rev 2)**

**DoDGARs Part 22:**
http://www.dtic.mil/whs/directives/corres/pd32106r_041398/part22.pdf
**DoDGARs Part 33:**
http://www.dtic.mil/whs/directives/corres/pdf/32106r_041398/part33.pdf

**OMB Circulars:**
http://www.whitehouse.gov/omb/circulars/

**ARTICLES**

1. **Order of Precedence**
2. **Statutes and Regulations**
3. **Cost Principles and Audit ***
4. **Record Retention and Access Requirements ***
5. **Modification of Cooperative Agreement**
6. **Prior Approvals and Changes**
7. **Allowable Costs ***
8. **Unexpended Balance**
9. **Overpayment and Earned Interest**
10. **Future Funding**
11. **Subagreements ***
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13. **Hatch Act ***
14. **Lobbying ***
15. **Environmental Standards ***
16. **Nondiscrimination ***
17. **Cargo Preference ***
18. **Preference for U. S. Flag Air Carriers ***
19. **Profit or Fee ***
20. **Claims, Disputes, and Appeals ***
21. **Controlled Unclassified Information**
22. **Debarment and Suspension ***
23. **Drug Free Workplace ***
24. **Standards for Financial Management Systems ***
25. **Payment ***
26. **Procurement ***
27. **Property ***
28. **Reports ***
29. **Termination and Enforcement ***
30. **After-Award Requirements ***
31. **Cost Share or Match ***
32. **Resource Conservation and Recovery Act**

* Refer to DoDGARS, Part 22, appendices A-C for applicable modifications and requirements.

Enclosure (1)

1. **Order of Precedence**

This Cooperative Agreement is subject to the laws and regulations of the United States. Any inconsistency or conflict in the terms and conditions specified in this Cooperative Agreement shall be resolved according to the following order of precedence:

(a) The Federal statute authorizing this award, or any other Federal statutes directly affecting performance of this Cooperative Agreement.
(b) Department of Defense Grant and Assistance Regulations (DoDGARs) 32 CFR Part 33, Uniform Administrative Requirements for Grants and Agreements to State and Local Governments.
(c) These General Terms and Conditions.
(d) Other terms and conditions contained within this Cooperative Agreement and any attached schedules.

**2. Statutes and Regulations**

This Cooperative Agreement is subject to the laws and regulations of the United States that apply to assistance instruments including Chapter 63 of U.S. Code Title 31. DoDGARs Part 33 is hereby incorporated into this Cooperative Agreement by reference. The following OMB circulars, as appropriate, are also incorporated by reference into this Cooperative Agreement:

(a) A-87, "Cost Principles for State, Local, and Indian Tribal Governments"
(b) A-102, "Grants and Cooperative Agreements with State and Local Governments,"
(c) A-133, "Audits of States, Local Governments, and Non-Profit Organizations"

**3. Cost Principles and Audit**

DoDGARs Part 33, Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments, and the OMB Circulars below apply specifically to the Cooperator. The Cooperative Agreement shall be consistent with these authorities:

(1) A-87, "Cost Principles for State, Local, and Indian Tribal Governments"
(2) A-133 "Audits of States, Local Governments, and Non-Profit Organizations"

Cooperator shall submit a copy of OMB Circular A-133 audit reports to the agency Inspector General (IG) and to DoD (IG).

**4. Record Retention and Access Requirements**

All financial and programmatic records, supporting documents, statistical records, and other records of Cooperators or sub-Cooperators which are:

(i) Required to be maintained by the terms of this part, program regulations or the Cooperative agreement, or

(ii) Otherwise reasonably considered as pertinent to program regulations or the Cooperative agreement.

**5. Modification of Cooperative Agreement**

The only method by which this Cooperative Agreement can be modified is by a formal, written and signed modification Administrative modification(s) to the Cooperative Agreement may be accomplished

unilaterally by the signature of designated Cooperative Agreement Administrative Representative or Awarding Officer. Changes to the express clauses or terms of the Cooperative Agreement affecting price, quality, quantity or delivery of the Cooperator's duties shall be the subject of a bilaterally executed modification. No other communications, whether oral or in writing, shall modify this Cooperative Agreement.

**6. Prior Approvals and Changes**

Any program changes to the approved project must comply with 32 CFR 33.30.

**7. Allowable Costs**

Cooperative agreement funds may be applied only to those costs allowed under 32 CFR 33.22 and OMB Circular A-87.

**8. Unexpended Balance**

In the absence of any specific notice to the contrary, Cooperators are authorized to carry forward unexpended balances of funds received to subsequent funding periods.

**9. Overpayment and Earned Interest**

**Overpayment.** N/A

**Advances and Earned Interest.** The Recipient will be required to account for interest or other income earned annually. Investment income on the account principal will be used to fund eligible account purposes consistent with Title 10 U.S.C. § 2684a(d)(3)(B), Title 16 U.S.C. § 670c-1(b)(2)(B), and the terms of the Cooperative Agreement.

**10. Future Funding**

The Government's legal funding obligation is limited to the amount shown as the "Total Obligated on Award," section of the Cooperative Agreement document.

**11. Subagreements**

Cooperator shall comply with 32 CFR 33.37 in awarding any subagreement.

**12. Officials Not to Benefit**

No member of or delegate to Congress, or resident commissioner, shall be admitted to any share or part of this Cooperative Agreement, or to any benefit arising from it, in accordance with 41 U.S.C. 22.

**13. Hatch Act**

The Cooperator agrees to comply with the Hatch Act (5 U.S.C. 1501-1508 and 7324 - 7328), as implemented by the Office of Personnel Management at 5 CFR part 151, which limits political activity of employees or officers of State or local governments whose employment is connected to an activity financed in whole or part with Federal funds.

**14. Lobbying**

By signing and submitting this proposal, the Cooperator is providing the certification at Appendix A to 32 CFR Part 28 regarding lobbying.

**15. Environmental Standards**

By accepting funds under this Cooperative Agreement, the Cooperator assures that it will:

(a) Comply with applicable provisions of the Clean Air Act (42 U.S.C. 7401, et seq.) and Clean Water Act (33 U.S.C. 1251, et.seq.), as implemented by Executive Order 11738 [3 CFR, 1971-1975 comp., p. 799] and Environmental Protection Agency (EPA) rules at Subpart J of 40 CFR Part 32.

(b) Identify to the Cooperator agency any impact that this agreement may have on:

(1) The quality of the human environment, and provide help the agency may need to comply with the National Environmental Policy Act (NEPA, at 42 U.S.C. 4321, et seq.) and to prepare Environmental Impact Statements or other required environmental documentation. In such cases, the Cooperator agrees to take no action that will have an adverse environmental impact (e.g., physical disturbance of a site such as breaking of ground) until the agency provides written notification of compliance with the environmental impact analysis process.

(2) Coastal barriers, and provide help the agency may need to comply with the Coastal Barriers Resource Act (16 U.S.C. 3501, et seq.), concerning preservation of barrier resources.

(3) Any existing or proposed component of the National Wild and Scenic Rivers system, and provide help the agency may need to comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. 1271, et seq.).

**16. Nondiscrimination**

By accepting funds under this Cooperative Agreement, the Cooperator assures that it will comply with applicable provisions of the following national policies prohibiting discrimination:

(a) On the basis of race, color, or national origin, in Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d, et seq.), as implemented by DoD regulations at 32 CFR Part 195

(b) On the basis of race, color, religion, sex, or national origin, in Executive Order 11246 [3 CFR, 1964-1965 Comp., p.339], as implemented by Department of Labor regulations at 41 CFR part 60.

(c) On the basis of sex or blindness, in Title IX of the Education Amendments of 1972 (20 U.S.C. 1681, et seq.).

(d) On the basis of age, in the Age Discrimination Act of 1975 (42 U.S.C. 6101, et seq.) as implemented by Department of Health and Human Services regulations at 45 CFR Part 90.

(e) On the basis of handicap, in Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794), as implemented by Department of Justice regulations at 28 CFR Part 41 and DoD regulations at 32 CFR Part 56.

**17. Cargo Preference**

The Cooperator agrees that it will comply with the Cargo Preference Act of 1954 (46 U.S.C. 1241), as implemented by Department of Transportation regulations at 46 CFR 381.7, which require that

at least 50 percent of equipment, materials or commodities procured or otherwise obtained with U.S. Government funds under this Cooperative agreement, and which may be transported by ocean vessel, shall be transported on privately owned U.S.-flag commercial vessels, if available.

**18. Preference for U. S. Flag Air Carriers**

Travel supported by U.S. Government funds under this Cooperative agreement shall use U.S.-flag air carriers (air carriers holding certificates under 49 U.S.C. 41102) for international air transportation of people and property to the extent that such service is available, in accordance with the International Air Transportation Fair Competitive Practices Act of 1974 (49 U.S.C. 40118) and the interpretative guidelines issued by the Comptroller General of the United States in the March 31, 1981, amendment to Comptroller General Decision B138942.

**19. Profit or Fee**

In accordance with 32 CFR 22.205(b), no fee or profit may be charged to this Cooperative agreement.

**20. Claims, Disputes, and Appeals**

(a) Cooperator Claims.

Per 32 CFR 22.815, any claims arising out of this agreement must be:

(1) Submitted in writing to the Grants Officer;
(2) Specify the nature and basis for the relief requested, and;
(3) Include all data and relevant facts in support of the claim.

(b) DOD Component Claims.

Claims by a DOD Component shall be the subject of a written decision by the Grants Officer.

(c) Alternative Dispute Resolution (ADR).

The Parties shall use ADR to the maximum extent practicable, and comply with 32 CFR 22.815 ADR policies and procedures.

(d) Grants Officer Decisions.

(1) Within 60 calendar days after receipt of a written claim, the Grants Officer shall:

(a) Prepare a written decision, which shall include: the reasons for the decision; the relevant facts on which the decision is based; and the identity and mailing address of the cognizant Appeal Authority, and; shall be included in the award file, **or**

(b) Notify the Cooperator of a date when the written decision will be rendered. The notice shall address why additional time is needed.

(2) The Grants Officer's decision is final, unless appealed. In the event of an appeal, the Parties shall endeavor to use ADR procedures to the maximum extent practicable.

(e) Formal Administrative Appeals.

All formal administrative appeals shall comply with the applicable provisions of 32 CFR 22.815(e), Claims, disputes, and appeals.

(1) Appeal Authority. The Assistant Commander for Acquisition is the Appeal Authority to decide formal, administrative appeals under this Grant.

(f) Non-exclusivity of remedies.

Nothing in this section is intended to limit a Cooperator's right to any remedy under the law.

**21. Controlled Unclassified Information**

The parties understand that information and materials provided pursuant to or resulting from this Cooperative agreement may be export controlled, sensitive, for official use only, or otherwise protected by law, executive order or regulation. The Cooperator is responsible for compliance with all applicable laws and regulations. Nothing in this Cooperative agreement shall be construed to permit any disclosure in violation of those restrictions.

**22. Debarment and Suspension**

Cooperators shall comply with the requirements of DoDGARs Part 25, Subpart C, "Government-Wide Suspension and Debarment (Nonprocurement)", 32 CFR Part 25, Subpart C. The Cooperator shall also include a similar term or condition in any lower-tier covered transactions, as required by DoDGARs Part 25, Subpart B, 32 CFR Part 25 (2004).

**23. Drug Free Workplace**

By accepting funds under this Cooperative Agreement, the Cooperator agrees to comply with the "Government –Wide Drug-Free Workplace (Grants)" requirements specified by DoDGARS Part 26, Subpart B (or Subpart C, if the Cooperator is an individual) of 32 CFR Part 26 (2004), which implements Secs. 5151-5160 of the Drug-Free Workplace Act of 1988 (41 U.S.C. 701, et. seq.).

**24. Standards for Financial Management Systems**

By accepting funds under this Cooperative agreement, the Cooperator agrees to maintain a financial management system that complies with 32 CFR 33.20

**25. Payment**

Cooperator shall submit any request for payment in accordance with 32 CFR 33.21 and 33.41 Payment will be made in accordance with 32 CFR 33.21.

**For any advance payment** the Cooperator must maintain or demonstrate the willingness to maintain the conditions set forth at 32 CFR 33.21 (c). Include Cooperator is authorized to be paid in advance under the conditions set forth at 32 CFR 33.21 (c).

Reimbursement is the preferred method when the requirements in 32 CFR 33.21(d) cannot be met. Cooperator is authorized reimbursements under the conditions set forth at 32 CFR 33.21(d).

**26. Procurement**

Cooperator's system for acquiring goods and services under this Cooperative Agreement shall comply with 32 CFR 33.36, Procurement.

**27. Property**

Title shall vest in, and Cooperator shall manage, property under this Cooperative agreement in accordance with 32 CFR 33.31 through 33.34.

**28. Reports**

Cooperator shall maintain and submit reports in accordance with 32 CFR 33.40, Monitoring and Reporting Program Performance, and 32 CFR 33.41, Financial Reporting.

**29. Termination and Enforcement**

This award is subject to 32 CFR 33.43, Enforcement, and 33.44, Termination for Convenience

**30. After-Award Requirements**

Closeouts, subsequent adjustments, continuing responsibilities, and collection of amounts due are subject to the requirements in 32 CFR 33.50 through 33.52.

**31. Cost Share or Match**

Any cost share or cost match agreements shall comply with 32 CFR 33.24

**32. Resource Conservation and Recovery Act**

Cooperator shall comply with the requirements contained in 32 CFR 32.49.

[End of Items]

SCOPE OF WORK FOR
REPI Cooperative Agreement for Restoration of Natural Ecological Processes to Enhance Flood Mitigation and Water Recharge
Pacific Missile Range Facility, Barking Sands
Island of Kauai, Hawai'i
*N62742-23-2-0002*
*02 August 2023*


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## A. PURPOSE

Commander, Navy Region Hawai'i (CNRH) and Pacific Missile Range Facility (PMRF) Barking Sands in cooperation with State of Hawai'i, Department of Land and Natural Resources (DLNR), Division of Forestry and Wildlife (DOFAW) seek to safeguard future groundwater supplies used by the Navy. Through this agreement CNRH will provide funding of $4,140,000.00 as a lump sum payment to the Recipient for the purposes of undertaking conservation and management actions off-installation that further the objectives of CNRH and PMRF readiness needs and the protection of upland forests identified as a necessary action toward recovery of the aquifer and the replenishment of water that supports PMRF military resilience.

More specifically, this funding will be used to establish an effective ecosystem level forest enhancement and watershed restoration program, wildfire control program, as well as endangered species recovery programs. This project will benefit listed species by improving habitat conditions and reducing certain impacts such as ungulate disturbance and habitat loss. This project will benefit PMRF by managing and improving the watershed and mitigating encroachment above the installation in perpetuity.

Under this agreement, DLNR DOFAW, in coordination with Navy and other program partners will solicit for Requests for Proposals to implement the specific management priorities outlined in this agreement.

If additional work is identified for this Watershed project, changes can be made to this CA to incorporate additional scope and funding by written modification.

## B. BACKGROUND

The Readiness and Environmental Protection Integration (REPI) program funds innovative partnerships between military services and conservation partners to leverage public and private funds to preserve habitats on non-Department of Defense (DoD) lands and protect the military's capability to conduct operations, as authorized under Title 10 USC 2684a. Further, in CY 2017, congress expanded the Department's authorities under Section 103A of the Sikes Act, Title16 U.S.C. subsection 670c-1, to provide for "The maintenance and improvement of natural resources located off of a military installation… to relieve or eliminate current or anticipated challenges that could restrict, impede, or otherwise interfere with, whether directly or indirectly, current or anticipated military activities." This authority allows the Department to support natural resource management without necessitating an investment in land acquisition when doing so benefits the military mission.

The mission of DLNR's DOFAW is to responsibly manage and protect watersheds, native ecosystems, and cultural resources and provide outdoor recreation and sustainable forest products opportunities, while facilitating partnerships, community involvement and education. DOFAW manages roughly one million acres of public lands across Hawai'i.

This agreement is consistent with and will further natural resources management objectives which are carried out on PMRF through the Integrated Natural Resource Management Plan (INRMP). This project prevents and manages encroachment by supporting natural infrastructure solutions of lands directly above and adjacent to PMRF, approximately 33,125 acres. The natural infrastructure solutions will help protect and restore native forests, which is critical to flood mitigation and water supply. Additionally, this project will help mitigate reducing upland flood potential, upland soil erosion, upland wildfire potential, impacts to the endangered Nene on or near the base. Lastly, this project will enable critical habitat restoration near upland PMRF and supports community readiness to respond to wildfires and other natural disasters.

PMRF is the nation's premier testing and training range, providing instrumented battle space from the ocean floor up into space.

## C. LOCATION

The project is located on the island of Kauai that includes but is not limited toin west Kaua'i in the Nā Pali-Kona Forest Reserve, Pu'u Ka Pele Forest Reserve, Kuia Natural Area Reserve and Mānā Plain. The project area is approximately 33,125 acres.

## D. DESIGNATED REPRESENTATIVES

1. The Cooperative Agreement Administrator (CAA) is Kristopher Tom, Supervisory Contract Specialist, Naval Facilities Engineering Systems Command, Pacific, Environmental Contracts Branch, CON32, 258 Makalapa Drive Suite 100, JBPHH, HI 96860, email: kristopher.m.tom.civ@us.navy.mil.

2. The Cooperative Agreement Technical Representative (CATR) is officially designated by the Grants Officer, and is responsible for monitoring the Recipient's performance, in accordance with the terms and conditions of the Agreement. The CATR for this agreement is Roland Sosa, Natural Resources Specialist, NAVFAC Southwest, San Diego, CA, email: roland.a.sosa2.civ@us.navy.mil.

3. The Alternate CATR for this agreement is Jessica Behnke, Installation Environmental Program Director (IEPD), Pacific Missile Range Facility, Kekaha, HI, email: jessica.l.behnke.civ@us.navy.mil.

4. For the purposes of this Agreement, the term Recipient shall mean DLNR DOFAW and all designated representative(s). Emma Yuen, Natural Resources Management Program Specialist, DLNR DOFAW, has been so designated, Phone: (808) 587-4170; Email: emma.yuen@hawaii.gov.

5. Recipient of the Agreement: The Recipient of the Agreement is responsible for implementing the scope of the Agreement. The Recipient of the Agreement shall direct all communications to the CATRs. Unless otherwise directed by the CATR, the Recipient of the Agreement may directly channel technical/biological issues that need clarification from the Alternate CATRs identified in this agreement, but the CATR shall be concurrently notified for awareness.

## E. PERIOD OF PERFORMANCE

The period of performance will be sixty (60) months starting from the date of award. However, the parties may extend the period of the CA by written modification.

## F. SPECIFIC REQUIREMENTS

1. The Recipient (DLNR DOFAW) shall maintain the funds in an interest bearing or investment account. For accounting purposes, the account shall be distinguishable from all other accounts maintained.

2. The Recipient, in coordination with the CATR, and other project partners, will develop a concise five-year work plan detailing the anticipated schedule of actions to be implemented through the account. Types of activities for which the account may be used include but are not limited to site assessment and design planning studies described below:

    a. **Community Wildfire Fire Response**. Build community readiness for wildland fires and emergencies around PMRF. Drought, unmanaged forests, and lack of wildland fire fighting infrastructure and equipment can create a dangerous situation for PMRF and the westside community. Some or all of, but not limited to, the following items may be conducted under this action:

- Purchasing of firefighting equipment and supplies

- Firebreak maintenance within Puu Ka Pele and Na Pali Kona Forest Reserves

- Complete compliance, permits, security fencing and initial infrastructure installations to allow for immediate relocation of firefighting equipment and supplies closer to the westside of Kauai significantly shortening response time to PMRF.

b. **Forest Health**. Unmanaged, unhealthy forests create unbalanced ecosystems that increase wildfire risk and soil erosion. Some or all of, but not limited to, the following items may be conducted under this action:

   - Reforesting in Puu Ka Pele Forest Reserve in previously burnt areas and old eucalyptus and timber plantations adjacent to PMRF Makaha to include fencing, supplies

   - Perform Wilt-resistant koa (*Acacia koa*) screening

   - Rapid Ohi'a lehua (*Metrosideros polymorpha*) Death monitoring

c. **Invasive Species**. Non-native invasive species alter ecosystems and create monotypic stands that lead to soil erosion and increase flood potential. Diverse native forests help to encourage water absorption and recharge the aquifers. Some or all of, but not limited to, the following items may be conducted under this action:

   - Honopu vicinity weeding (Na Pali Kona Forest Reserve and Kuia Natural Area Reserve)

   - Alakai Wilderness Preserve weeding

d. **Seabirds Monitoring**. The seabird component of the project will cover a large area within two Forest Reserves and a portion of State Parks (all State lands) for exploratory surveys and song meter monitoring. At minimum, previously visited sites will be surveyed to locate seabird colonies more precisely but the exact acreages for these surveys will be further detailed in the implementation plan. Type of work to be conducted consists of the following, but is not limited to:

   1. Carry out auditory surveys in Na Pali Kona and Puu Ka Pele Forest Reserves that has not been well surveyed in the past to identify pockets of seabird activity. This will help closing the knowledge gaps in their distribution.

   2. Identify any accessible and manageable colonies at project sites to initiate future burrow monitoring (if applicable). This will enable future conservation management at these sites (e.g., predator removal/control, breeding success monitoring, social attraction etc.).

   3. Extend the long-term monitoring of call rates to the proposed areas to obtain comparable trend data.

   4. Identify threats to seabirds in the area for future conservation management.

e. **Nene**. The federally listed Nene (*Branta sandvicensis*) or Hawaiian Goose is negatively impacted by vehicular traffic on Kaumualii Highway, and nearby roads, to and from PMRF. It is imperative to identify potential mitigation solutions, acceptable to the Department of Transportation. Some of these potential mitigation actions are the

following, but not limited to:

- Harden both sides of the highway so Nene would not be attracted to nest there
- Change the vegetation type so it is not suitable Nene habitat
- Begin the process of working with pertinent stakeholders to reduce the speed limit on Kaumualii Highway and implement speeding fines.

3. The Recipient, via email, shall submit monthly project progress ~~reports~~ status briefs to Navy Representatives, established in the Kick-off meeting, to ensure alignment of priorities and deadlines. Quarterly virtual meetings (i.e. MS Teams or conference calls) will be conducted to continue to ensure alignment of deadlines and understanding of funding spent. Yearly project progress reports will be submitted and the specific time for this deliverable will be established in the Kick-off meeting"~~The monthly reports shall include invoicing of REPI funds spent within the past thirty (30) days, and can begin as soon as funding is awarded to the Recipient~~.

4. The Recipient shall complete State and federal regulatory permitting and compliance requirements, including but not limited to, signed documentation of environmental consideration under the National Environmental Policy Act (NEPA) and any associated consultations with the regulatory services prior to implementation of work funded under this cooperative agreement.

5. The Recipient shall conduct the procurement pursuant to State regulations to solicit and evaluate landscape-scale watershed restoration activities from qualified agencies and organizations to implement the coordinated strategy. The Recipient in coordination with the CATR and Installation representatives and other technical experts will develop a standard format for the procurement process for plan implementation.

6. The Recipient will establish an advisory team to review and evaluate proposals based on pre-established criteria. The Recipient will be responsible for reviewing applications to ensure all proposed budgets contain allowable costs and are otherwise consistent with appropriate Office of Management and Budget guidelines and Recipients policies. The Recipient will conduct follow-up discussions and/or convene meetings with members of the advisory team as necessary and appropriate. Final proposal selection will be done by the Recipient based evaluation and input from the advisory team.

7. The Recipient will carry out all financial, administrative, and contractual aspects of disbursements/awards from the account consistent with all applicable federal regulations. The Recipient will monitor the progress of all projects selected for funding to ensure they successfully meet their stated objectives.

8. The Recipient will be responsible for annually summarizing and reporting (refer to Section I) to the CATR accomplishments by sub-recipients and evaluating overall conservation outcomes relative to the purpose of the agreement. The Recipient will participate in appropriate meetings convened by the CATR to discuss the program results.

9. Substantial Involvement by the Government. In reference to this Agreement, substantial involvement is required between the Department of Navy (DoN) and Recipient during the period of performance based on the requirements prescribed in the scope of work. The anticipated involvement is deemed appropriate to carry out a public purpose of support to include a direct benefit to the Government.

    a. Assist with obtaining relevant maps and information pertaining to the species and project sites, to include data and literature generated from previous similar conservation projects;

b. Be involved in state/local and federal partner coordination and implementation strategy development;

c. Will assist with development of metrics and performance measures to be used in evaluating species response at the project site;

d. Assist, as needed, in inspections to ensure that projects are completed as approved in project proposals, and comply with other applicable rules, regulations, as desirable and appropriate;

e. Be involved in identifying and prioritizing projects for implementation and in preparing Requests for Proposal and evaluation criteria;

f. Will review progress reports detailing implementation status and conduct meetings with Recipient to determine if desired outcomes and milestones are met.

## G. ENVIRONMENTAL STANDARDS

By accepting funds under this Cooperative Agreement, the Cooperator assures that it will:

1. Comply with applicable provisions of the National Environmental Act of 1969 (42 USC, 4321-4370h) implemented by Executive Order 12114, Clean Water Act (33 U.S.C. 1251, et.seq.), Endangered Species Act (16 USC, 1531-1544), National Historic Preservation Act (54 USC, 300101 et. seq.), and Coastal Zone Management Act (16 USC, 1451-1466).

2. Identify to the Cooperator agency any impact that this agreement may have on:

    a. The quality of the human environment, and, as necessary, provide assistance to the agency to comply with the National Environmental Policy Act (NEPA, at 42 U.S.C. 4321, et seq.). Assistance could include reviewing and commenting on documents, as well as preparing NEPA documentation (with funding under this Cooperative Agreement). The Cooperator also agrees to support agency compliance with other environmental resource statutes including, but not limited to, the Endangered Species Act, Marine Mammal Protection Act, Magnuson-Stevens Fishery Conservation and Management Act, National Historic Preservation Act, and Coastal Zone Management Act. Assistance could include reviewing and commenting on documents, as well as preparing consultation packages (with funding provided under this Cooperative Agreement). The Cooperator agrees to take no action that will have an adverse environmental impact (e.g., physical disturbance of a site such as breaking of ground) until the agency provides written notification of NEPA compliance and completion of associated resource agency consultations, as applicable. Assistance for NEPA compliance may include reviewing and commenting on documents.

    b. Coastal barriers, and provide help the agency may need to comply with the Coastal Barriers Resource Act (16 U.S.C. 3501, et seq.), concerning preservation of barrier resources.

    c. Any existing or proposed component of the National Wild and Scenic Rivers system, and provide help the agency may need to comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. 1271, et seq.).

3. The Cooperator shall be responsible for obtaining any necessary Federal, State or local government permits or work plan approvals to conduct the services required. Permits and approvals may include but are not limited to State HEPA (Ch. 343) compliance, State Historic Preservation (Ch. 6E HRS) compliance.

## H. MEETINGS AND COORDINATION

1. The Recipient will coordinate and facilitate a kick-off meeting with the CATR and Installation representatives, and local partners to ensure coordination of activities. Within thirty (30) days of award, the Recipient will meet with the CATR and partners, including USFWS for a kick-off meeting to identify the actions that will be implemented to expand forest and watershed protection above PMRF.

2. The Recipient will coordinate quarterly meetings via telephone or other electronic communications with the CATR and Installation representatives to discuss implementation progress.

3. The Recipient will provide the CATR and Installation representatives brief monthly email updates regarding the status of project implementation

## I. SCHEDULES AND SUBMITTALS

1. **Kick-off meeting minutes**: The Recipient will submit meeting minutes within seven (7) days following the kick-off meeting for CATR review and approval.

2. **Draft Work Plan**: Within sixty (60) days from award, the Recipient will develop a work plan detailing how the Recipient proposes to accomplish the objectives under this Cooperative Agreement. An example of the contents of a work plan may include, but not limited to:
   (a) Introduction
   (b) Proposed methodology to accomplish objectives
   (c) Specific data to be collected, if any
   (d) Schedule with milestones and dates for completion of services and associated deliverables
   (e) List of personnel and description of the roles they will fill for this modification
   (f) Copies of any required permits or documentation developed to acquire permits required to complete the objectives in this modification.

   The draft work plan will be reviewed by the CATR and Installation representatives and the CATR and Installation representatives will provide the Recipient their respective comments, suggestions, or edits (if there are any) within 30 days from receipt.

3. **Final Work Plan**: The Recipient shall incorporate all comments, suggestions, or edits (if any) provided by the CATR and Installation representatives and submit the "Final Work Plan" (electronically via email) within thirty (30) days from receipt of comments from the CATR. The Work Plan must be approved by the CATR and Installation representatives prior to distribution of funds for implementation of management actions.

4. **Annual Progress Report** Within twelve (12) months of award, and every twelve (12) months thereafter or until the objectives of this modification are completed, for the period of performance, the Recipient will provide a draft Annual Progress Report (electronically via email) detailing implementation progress to the CATR, including expenditures from the account. The CATR will provide comments within thirty (30) days of receipt of the draft. The Recipient shall incorporate all comments, suggestions, or edits (if any) provided by the CATR and Installation representatives and submit the final Annual Progress Report (electronically via email) within thirty (30) days from receipt of comments from the CATR. The electronic copy shall include the final report and all associated figures, tables, maps, photographs, etc. and shall be provided in both PDF and MS Word.

   The Annual Progress Report shall include a summary of RFPs issued and projects awarded including final Scopes of Work, funds disbursed from the account, results obtained (if applicable), copy of submittals received by the Recipient for project implementation, problems encountered

or adjustments needed from Final Work Plan.

5. **Final Summary Report**: At the end of the project period, the Recipient will provide a Summary Report which will include a final programmatic report highlighting individual project accomplishments and summarizing overall project accomplishments. The Final Summary Report will include final financial reporting of all sub-award disbursements and administrative expenses. The report will include copies of all final reports from sub-recipients.

6. **Summary of Deliverables/Performance Reports**:

| Performance Reports | Copies | Date/Timing |
|---|---|---|
| Kickoff meeting minutes | Electronic-word doc format (email) | Seven (7) days after kickoff meeting |
| Draft Work Plan | Electronic-pdf, and MSWord format (email) | Sixty (60) days from award |
| Draft Accident Prevention Plan | Electronic-pdf, and MSWord format (email) | Sixty (60) days from award |
| Final Work Plan | Electronic-pdf, and MSWord format (email) | Thirty (30) days after receipt of Government comments |
| Final Accident Prevention Plan | Electronic-pdf, and MSWord format (email) | Thirty (30) days after receipt of Government comments |
| Draft Annual Progress Report (s) | Electronic MSWord format (email) | Every twelve (12) months for the period of performance or until all objectives are completed |
| Final Annual Report | Electronic-pdf, and MSWord format (email) | No later than thirty (30) days after receipt of Government comments |
| Draft Summary Report | Electronic-pdf, and MSWord format (email) | Forty-five (45) days prior to end of period of performance |
| Final Summary Report | Electronic-pdf, and MSWord format (email) | No later than thirty (30) business days after receipt of Government comments |

7. **Financial Reporting:** The Recipient will be required to account for interest or other income earned annually. Investment income on the account principal will be used to fund eligible account purposes consistent with Title 10 U.S.C. § 2684a(d)(3)(B), Title 16 U.S.C. § 670c-1(b)(2)(B), and the terms of the Cooperative Agreement.

   Financial Reports shall be prepared in accordance with 2 CFR 200, are required in accordance with the following schedule, and shall be submitted to the CAA and CATR.

| Financial Reports | Reporting Period | Due Date |
|---|---|---|
| Report of Federal Cash Transactions (SF425) | Quarterly beginning 90 days after award of the Cooperative Agreement | Thirty (30) days after the end of each Quarter |
| Annual Financial Status Report (SF425) | 12 month period from date of award | Forty-five (45) days prior to end of initial period of performance; 60 days after each Option Period ends |

## J. DELIVERABLE STANDARDS

1. All submittals/deliverables are expected to be of the highest professional quality and shall be free of typographical errors, spelling, and grammar mistakes; should be fully formatted (e.g. functional table of content links, consistent fonts/styles throughout document, accurate page numbers, accurate and complete stand-alone appendices [if applicable], accurate and functional figure titles, table titles, section headers, and table of contents need to be complete and accurate).

2. The draft report shall be a complete document that has been proofread for spelling and grammatical errors and contains all text, figures, graphics, photographs and tables provided for review.

3. All raw data, data sheets and electronic databases (including GIS data) shall be submitted as appendices or supplemental information with the draft Annual Report. If too large to be included with the other draft submittals, the Electronic databases shall be submitted on a labeled CD-ROM. The final versions of these databases will be included on the CD-ROM's attached to the final reports.

## K. DATA AND PUBLICATIONS

1. Publication of project results in appropriate professional journals is encouraged as an important method of recording and reporting scientific information. Project authors may make their project data publically available after coordinating and receiving approval from the Recipient and the CATR. The Recipient shall submit, for review and comment, any proposed professional, scientific or non-scientific report, paper or note published or unpublished or be part of any technical or non-technical presentation or be provided to anyone not a party to this Agreement to the DoN thirty (30) days prior to the submission of the work mentioned above.

2. The Recipient agrees that when releasing information relating to this agreement, the release shall include a statement to the effect that the project or effort undertaken was or is sponsored by the Department of Defense Readiness and Environmental Protection Integration Program.

3. The Recipient shall be responsible for ensuring all personnel participating in activities under this Agreement have read and acknowledged the DATA AND PUBLICATION provisions of this Agreement.

## L. RELEASE OF INFORMATION

The Recipient shall not respond to any inquiries about this Cooperative Agreement from the news media or non-governmental organizations or other persons during the term of this Cooperative Agreement unless it has first consulted with the Navy and a determination appropriately made by the Navy representative concerning release of information pursuant tothe authority (Federal or State) cited by the requester. All inquiries shall be directed to the CATR and Installation representatives.

## M. SAFETY

The Recipient will be required to develop an Accident Prevention Plan (APP) following the format in Appendix A of the EM 385-1-1, US Army Corps of Engineers Safety & Health Requirements Manual, 30 November 2014 or latest edition unless the CATR notifies the Cooperator it can utilize an Abbreviated APP. Additional specific plan or plans is/are required if the project involves work that is potentially hazardous. A list of specific plans is located in section (i) of Appendix A of the EM 385-1-1. Potentially hazardous activities include, but are not limited to the following:

- soil boring or digging test pits (excludes manual collection of de minimis surface soil samples)
- all field work on hazardous waste or munitions response sites
- work on, in, or near bodies of water where there a danger from drowning
- use of heavy equipment, e.g. backhoes, excavators, bulldozers, etc.

- excavation, backfilling, and compaction
- use of man lifts, ladders, and other climbing apparatus
- use of weight handing equipment, e.g. crane, forklifts, and hoists
- well drilling and/or well pump repair or replacement
- construction, demolition, or repair of site improvements
- remediation of hazardous material or waste, i.e. asbestos, paint with lead, and PCB
- work within 10 ten feet of high voltage lines, or high pressure gas, steam, or water lines

The minimum requirement for the Site Safety and Health Plan (SSHP) is in Section 28 of the EM 385-1-1. Include an Activity Hazard Analysis (AHA) for all tasks reasonably anticipated to be performed as part of this scope of work. Format and instructions for the AHA is in section 1 of the EM 385-1-1. As a minimum, references used to develop the APP, SSHP and AHA are: EM 385-1-1 US Army Corps of Engineers Safety & Health Requirements Manual, and Local Activity safety plans and standard operating procedures. When developing the APP, SSHP and AHA, address all sections that are deemed appropriate for performing the work in this CA, while ensuring a safe work environment for all personnel involved. The draft APP, SSHP and AHA have to be reviewed by the GDA (NAVFAC PAC EV Safety Office, PM, ROICC/FEAD) prior to start of field work activities.

NOTE: AHA is an attachment required by the APP. SSHP is also an attachment required by the APP if a project includes potentially hazardous activities. CTAR should verify with the NAVFAC PAC EV Safety Office prior to directing the Recipient to prepare a SSHP. The APP, SSHP and AHA will provide a safe and healthful environment for all personnel involved as well as personnel working near the sites for the DoN. The Recipient shall certify to CATR that the final APP, SSHP and AHA has been reviewed with each Recipient employee working on this CA prior to mobilization and start of fieldwork activities.

A Draft and Final APP, SSHP and AHA will be submitted concurrently with the Draft Work Plan but shall be printed under a separate cover from the Draft Work Plan. The final APP, SSHP and AHA shall be immediately accessible to the Site Safety and Health Officer (SSHO) and Project Manager at all times during the project, and a copy shall be available in every vehicle utilized for work under this CA. The SSHO is required to have completed the 10-hour OSHA Safety Training.

Man-hour reporting is also required by the EM 385-1-1 and the Unified Facilities Guide Specifications (UFGS) -01 35 26, (February 2012) change 2, 08/13. The Recipient will provide a Monthly Exposure Report (MER) and attach to the monthly billing request. The CATR will submit a copy of the MER to the NAVFAC PAC EV Safety Office.

## N. LIABILITY

The Government cannot assume any liability for accidents, bodily injury, illness, breach of contract, any other damages or loss, or any claims arising out of any activities undertaken pursuant to the agreement, whether with respect to persons or property of the Recipient or third parties. Recipient shall indemnify, hold harmless, defend and save Government harmless and shall pay all costs, expenses, and reasonable attorney's fees for all trial and appellate levels and post- judgment proceedings in connection with any fines, suits, actions, damages, liability, and causes of action of every nature whatsoever arising or growing out of,or in any manner connected with, the Agreement. However, this indemnity shall not extend to damages due to the sole fault of the Government or its employees, agents, servants, guests, invitees or contractors. This covenant shall survive the termination of this Agreement. The Recipient is advised to insure or otherwise protect it or others, as it may deem desirable.

The Recipient shall be responsible for obtaining any necessary licenses and permits, and for complying with any Federal, State and municipal laws, codes, and regulations applicable to the performance of the work (with funding provided under this Cooperative Agreement). The Recipient shall also be responsible for all damages to persons or property that occurs as a result of the Recipient's fault or negligence.

## O. INSURANCE

Recipient, as an agency of the State of Hawai'i, operates primarily on a self-insured basis. A statement of insurance is available upon request.

## P. PAYMENTS

Upon execution of this Agreement, the Government shall provide funding in the amount of $4,140,000.00 as a lump sum payment to the Recipient. Title 16 USC 670c-1 paragraph (b)(1)(B) authorizes funds to be paid in lump sum and include an amount intended to cover future costs of the natural resource maintenance and improvement activities provided for under this agreement. Funds shall be placed by the Recipient in an interest-bearing or other investment account, and any interest or income shall be applied for the same purposes as the principal. Funds provided by the Government shall be limited to the aforementioned REPI funds, and shall not include any other Government funds. Government-provided REPI funds can only be used for reasonable expenses, as determined by the Government.

This lump sum payment shall be made in accordance with 2 CFR 200.305 by electronic funds transfer (EFTs) to the bank account registered in System for Award Management (SAM) at https://www.sam.gov/portal/SAM/. The Recipient agrees to maintain its registration in SAM including information necessary to facilitate payment via EFT.

# ATTACHMENT A SELF-INSURANCE REQUIREMENTS FORM

**INSURANCE MUST CONFORM TO ALL THE REQUIREMENTS LISTED BELOW PRIOR TO RECIPENT BEING PERMITTED TO USE OR OCCUPY GOVERNMENT PREMISES OR PROPERTY PURSUANT TO THE COOPERATIVE AGREEMENT**

**1. PUBLIC LIABILITY AND PROPERTY DAMAGE**

a. Required minimum amounts of insurance listed below:

| | | |
|---|---|---|
| $ | N/A | Fire and Extended Coverage |
| $ | 1,000,000 | Third Party Property Damage |
| $ | 1,000,000 | Third Party Personal Injury Per Person |
| $ | 1,000,000 | Third Party Personal Injury Per Accident |

**2. SELF-INSURANCE REQUIREMENTS:** If your organization is self-insured, please provide evidence of self-insurance that meets or exceeds the insurance liability amounts in Item # 1.

The following information, written on your organization's letterhead, is also required:

• A brief description of your organization's self-insurance program, with reference to statutory or regulatory authority establishing the self-insurance program.
• The name and telephone number of your organization's self-insurance program administrator.
• Reference the appropriate military facility and cooperative agreement number.

**3. IF YOUR SELF-INSURANCE PROGRAM DOES NOT MEET THE ABOVE MINIMUM REQUIREMENTS:**

• Provide evidence of Excess Liability Insurance in the amount necessary to meet or exceed the minimum requirements in Item #1 above.

• The following endorsements are required for Excess Liability insurance policies:

a. "The insurer waives any right of subrogation against the United States of America which might arise by reason of any payment made under this policy."

b. "The Commanding Officer, Naval Facilities Engineering Systems Command, Hawaii shall be given thirty (30) days written notice prior to making any material change in or the cancellation of the self-insurance program."

c. "The United States of America (Department of the Navy) is added as an additional insured in operations of the policyholder at or from the premises licensed/leased from the United States".

d. "This insurance certificate is for use of facilities at PMRF under this Cooperative Agreement, No. TBD."

4. **NOTICE: "RIGHT TO USE" DOCUMENTS WILL NOT BE FULLY EXECUTED UNTIL CERTIFICATE IS RECEIVED WITH PROPER ENDORSEMENTS.**

**ATTACHMENT A (Continued)**
**NON SELF-INSURED REQUIREMENTS FORM**

**INSURANCE MUST CONFORM TO ALL THE REQUIREMENTS LISTED BELOW PRIOR TO RECIPENT BEING PERMITTED TO USE OR OCCUPY GOVERNMENT PREMISES OR PROPERTY PURSUANT TO THE COOPERATIVE AGREEMENT**

**1. PUBLIC LIABILITY AND PROPERTY DAMAGE**

a. Required minimum amounts of insurance listed below:

| | | |
|---|---|---|
| $ | N/A | Fire and Extended Coverage |
| $ | 1,000,000 | Third Party Property Damage |
| $ | 1,000,000 | Third Party Personal Injury Per Person |
| $ | 1,000,000 | Third Party Personal Injury Per Accident |

**2. THE CERTIFICATE OF INSURANCE MUST CONTAIN THE FOLLOWING ENDORSEMENTS:**

a. "The insurer waives any right of subrogation against the United States of America which might arise by reason of any payment made under this policy."

b. "The Commanding Officer, Naval Facilities Engineering Command, Facilities Engineering Command, shall be given thirty (30) days written notice prior to making any material change in or the cancellation of the policy."

c. "The United States of America (Dept. of the Navy) is added as an additional insured in operations of the policyholder at or from the premises **licensed/leased** from the United States."

d. "This insurance certificate is for use of facilities at PMRF under this Cooperative Agreement, No. NXXX."

e. Loss, if any, under this policy shall be adjusted with Recipient and the proceeds, at the direction of the Government, shall be payable to Recipient, and proceeds not paid to Recipient shall be payable to the Treasurer of the United States of America."

**3. NOTICE: "RIGHT TO USE" DOCUMENTS WILL NOT BE FULLY EXECUTED UNTIL CERTIFICATE IS RECEIVED WITH PROPER ENDORSEMENTS.**

# ATTACHMENT B ELECTRONIC DATA DELIVERABLE SPECIFICATIONS

## A-3 GEOSPATIAL DATA REQUIREMENTS

### A-3.1 Data Standards

Data standards facilitate the development, sharing, and use of geospatial data. The cooperator shall ensure that all geospatial data delivered is consistent with references (c) and (d), unless otherwise directed by the Government.

Geospatial data shall be delivered in a single file geodatabase format and accompanied by a data inventory spreadsheet unless otherwise directed by the Government. The data will be compatible with ArcGIS 10.1 and must be importable to an Oracle multi-user geodatabase using ArcSDE. Digital map files (.mxd files) shall be delivered in ArcGIS 10.0 format and the associated data layers shall be sourced by a relative file pathway to the file geodatabase. The cooperator shall provide an inventory spreadsheet that contains a field for File geodatabase name, Feature dataset, Feature class, feature label name, feature legend designation, data source, and a comment field. In addition, all geospatial data delivered by the cooperator shall adhere to the following criteria:

a) precise geographic coordinates in decimal degree format with four decimal precision;

b) units of nautical miles (nm) for expansive marine areas and statute miles (mi) for expansive land areas;

c) reference the GRS 1980 spheroid and the North American Datum 1983 (WGS-84); and

d) contain a projection file, if appropriate, based on format.

### A-3.2 Metadata Standards

The term “metadata” is defined as data about data. The term is often used to refer to information that allows either: (1) discovery of data, (2) understanding the provenance and quality of the data, or/and (3) analysis of the data via a set of machine readable instructions that describe the data and its relationships. The cooperator shall provide metadata in accordance with Content Standard for Digital Geospatial Metadata (CSDGM), reference (f), the current U.S. federal metadata standard.

The cooperator shall ensure that metadata is provided for all geospatial data delivered, including data furnished by the Government, a third party, or generated as a result of this project, and is compliant with reference (f). All metadata shall be in XML format. The cooperator shall reference the North American Profile of ISO 19115 2003 metadata style sheet in ArcCatalog when populating Service-level and Feature Class-level metadata. The cooperator is required to supply metadata for all fields within this style sheet.

### A-3.3 Mapping Guidelines

The cooperator shall comply with FGDC Geospatial Positioning Accuracy Standards, Part 4: Architecture, Engineering, Construction, and Facilities Management, reference (g), which provides accuracy standards for engineering drawings, maps, and surveys. Map or drawing scales will be determined by the NTR, given specific project requirements.

### A-3.4 GPS Surveys

The cooperator shall comply with the FGDC Geospatial Positioning Accuracy Standards, Part 1: Reporting Methodology, reference (h), when conducting GPS surveys and collecting geospatial data. Specifically, the cooperator shall ensure that the horizontal accuracy for planning grade GPS data collection shall be sub-meter, unless otherwise specified. Every effort shall be made to capture feature locations without using

offsets, unless obstructions are present. If offsets are used, the cooperator shall ensure that they are agreed to by the Government and documented, per direction of the CATR, given specific project requirements.

Data sets derived from GPS data collection efforts (mapping or survey grade) shall include metadata to record descriptions of the receiver and other equipment used during collection and processing, base stations used for differential corrections, software used for performing differential corrections, estimated horizontal and vertical accuracies obtained, and conversion routines used to translate the data into final geospatial data delivery format (see Section A-4.1). All metadata shall comply with the metadata format requirements as described in this document (see Section A-4.2). Metadata must include an accuracy statement at the 90% or 95% confidence interval. Accuracy statements shall include the method of determination, as specified in the FGDC Geospatial Positioning Accuracy Standards, Part 3: National Standard for Spatial Data Accuracy, reference (i).

**A-3.5 Data Integrity**

The cooperator shall employ appropriate QA/QC standards to ensure that data is topologically correct, accurate and complete, including:

a) no erroneous overshoots, undershoots, dangles or intersections in the line work;

b) point and line features shall be snapped together where appropriate to support networks, e.g. do not break linear features for labeling or other aesthetic purposes;

c) lines should be continuous and point features should be digitized as points;

d) no sliver polygons;

e) digital representation of the common boundaries for all graphic features must be coincident, regardless of feature layer; and

f) attribute information and labeling must be consistent throughout a GIS project

# ATTACHMENT C RIGHTS IN DATA-GENERAL

(a) Definitions. As used in this clause-

"Computer database" or "database means" a collection of recorded information in a form capable of, and for the purpose of, being stored in, processed, and operated on by a computer. The term does not include computer software.

"Computer software"-

(1) Means

(i) Computer programs that comprise a series of instructions, rules, routines, or statements, regardless of the media in which recorded, that allow or cause a computer to perform a specific operation or series of operations; and

(ii) Recorded information comprising source code listings, design details, algorithms, processes, flow charts, formulas, and related material that would enable the computer program to be produced, created, or compiled.

(2) Does not include computer databases or computer software documentation.

"Computer software documentation" means owner's manuals, user's manuals, installation instructions, operating instructions, and other similar items, regardless of storage medium, that explain the capabilities of the computer software or provide instructions for using the software.

"Data" means recorded information, regardless of form or the media on which it may be recorded. The term includes technical data and computer software. The term does not include information incidental to contract administration, such as financial, administrative, cost or pricing, or management information.

"Form, fit, and function data" means data relating to items, components, or processes that are sufficient to enable physical and functional interchangeability, and data identifying source, size, configuration, mating and attachment characteristics, functional characteristics, and performance requirements. For computer software it means data identifying source, functional characteristics, and performance requirements but specifically excludes the source code, algorithms, processes, formulas, and flow charts of the software.

"Limited rights" means the rights of the Government in limited rights data as set forth in the Limited Rights Notice of paragraph (g)(3) if included in this clause.

"Limited rights data" means data, other than computer software, that embody trade secrets or are commercial or financial and confidential or privileged, to the extent that such data pertain to items, components, or processes developed at private expense, including minor modifications.

"Restricted computer software" means computer software developed at private expense and that is a trade secret, is commercial or financial and confidential or privileged, or is copyrighted computer software, including minor modifications of the computer software.

"Restricted rights," as used in this clause, means the rights of the Government in restricted computer

software, as set forth in a Restricted Rights Notice of paragraph (g) if included in this clause, or as otherwise may be provided in a collateral agreement incorporated in and made part of this contract, including minor modifications of such computer software.

"Technical data" means recorded information (regardless of the form or method of the recording) of a scientific or technical nature (including computer databases and computer software documentation). This term does not include computer software or financial, administrative, cost or pricing, or management data or other information incidental to contract administration. The term includes recorded information of a scientific or technical nature that is included in computer databases (See 41 U.S.C. 116).

"Unlimited rights" means the rights of the Government to use, disclose, reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, in any manner and for any purpose, and to have or permit others to do so.

(b) Allocation of rights.

(1) Except as provided in paragraph (c) of this clause, the Government shall have unlimited rights in-
(i) Data first produced in the performance of this cooperative agreement;

(ii) Form, fit, and function data delivered under this cooperative agreement;

(iii) Data delivered under this cooperative agreement (except for restricted computer software) that constitute manuals or instructional and training material for installation, operation, or routine maintenance and repair of items, components, or processes delivered or furnished for use under this cooperative agreement; and

(iv) All other data delivered under this cooperative agreement unless provided otherwise for limited rights data or restricted computer software in accordance with paragraph (g) of this clause.

(2) The Cooperator shall have the right to-

(i) Assert copyright in data first produced in the performance of this cooperative agreement to the extent provided in paragraph (c)(1) of this clause;

(ii) Use, release to others, reproduce, distribute, or publish any data first produced or specifically used by the Cooperator in the performance of this cooperative agreement, unless provided otherwise in paragraph (d) of this clause;
(iii) Substantiate the use of, add, or correct limited rights, restricted rights, or copyright notices and to take other appropriate action, in accordance with paragraphs (e) and (f) of this clause; and

(iv) Protect from unauthorized disclosure and use those data that are limited rights data or restricted computer software to the extent provided in paragraph (g) of this clause.

(c) Copyright-

(1) Data first produced in the performance of this cooperative agreement.

(i) Unless provided otherwise in paragraph (d) of this clause, the Cooperator may, without prior approval of the Grants Officer, assert copyright in scientific and technical articles based on or containing data

first produced in the performance of this cooperative agreement and published in academic, technical or professional journals, symposia proceedings, or similar works. The prior, express written permission of the Grants Officer is required to assert copyright in all other data first produced in the performance of this cooperative agreement.

(ii) When authorized to assert copyright to the data, the Cooperator shall affix the applicable copyright notices of 17 U.S.C. 401 or 402, and an acknowledgment of Government sponsorship (including cooperative agreement number).

(iii) For data other than computer software, the Cooperator grants to the Government, and others acting on its behalf, a paid-up, nonexclusive, irrevocable, worldwide license in such copyrighted data to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly by or on behalf of the Government. For computer software, the Cooperator grants to the Government, and others acting on its behalf, a paid-up, nonexclusive, irrevocable, worldwide license in such copyrighted computer software to reproduce, prepare derivative works, and perform publicly and display publicly (but not to distribute copies to the public) by or on behalf of the Government.

(2) Data not first produced in the performance of this cooperative agreement. The Cooperator shall not, without the prior written permission of the Grants Officer, incorporate in data delivered under this contract any data not first produced in the performance of this cooperative agreement unless the Cooperator-

(i) Identifies the data; and

(ii) Grants to the Government, or acquires on its behalf, a license of the same scope as set forth in paragraph (c)(1) of this clause or, if such data are restricted computer software, the Government shall acquire a copyright license as set forth in paragraph (g)(4) of this clause (if included in this contract) or as otherwise provided in a collateral agreement incorporated in or made part of this cooperative agreement.

(3) Removal of copyright notices. The Government will not remove any authorized copyright notices placed on data pursuant to this paragraph (c), and will include such notices on all reproductions of the data.

(d) Release, publication, and use of data. The Cooperator shall have the right to use, release to others, reproduce, distribute, or publish any data first produced or specifically used by the Recipient in the performance of this cooperative agreement, except-

(1)As prohibited by Federal law or regulation (e.g., export control or national security laws or regulations);

(2)As expressly set forth in this cooperative agreement; or

(3)If the Cooperator receives or is given access to data necessary for the performance of this cooperative agreement that contain restrictive markings, the Cooperator shall treat the data in accordance with such markings unless specifically authorized otherwise in writing by the Grants Officer.

(e) Unauthorized marking of data.

(1) Notwithstanding any other provisions of this cooperative agreement concerning inspection or acceptance, if any data delivered under this cooperative agreement are marked with the notices specified in

paragraph (g)(3) or (g) (4) if included in this clause, and use of the notices is not authorized by this clause, or if the data bears any other restrictive or limiting markings not authorized by this cooperative agreement, the Grants Officer may at any time either return the data to the Cooperator, or cancel or ignore the markings. However, pursuant to 41 U.S.C. 4703, the following procedures shall apply prior to canceling or ignoring the markings.

(i) The Grants Officer will make written inquiry to the Cooperator affording the Cooperator 60 days from receipt of the inquiry to provide written justification to substantiate the propriety of the markings;

(ii)If the Cooperator fails to respond or fails to provide written justification to substantiate the propriety of the markings within the 60-day period (or a longer time approved in writing by the Grants Officer for good cause shown), the Government shall have the right to cancel or ignore the markings at any time after said period and the data will no longer be made subject to any disclosure prohibitions.

(iii)If the Cooperator provides written justification to substantiate the propriety of the markings within the period set in paragraph (e)(1)(i) of this clause, the Grants Officer will consider such written justification and determine whether or not the markings are to be cancelled or ignored. If the Grants Officer determines that the markings are authorized, the Cooperator will be so notified in writing. If the Grants Officer determines, with concurrence of the head of the contracting activity, that the markings are not authorized, the Grants Officer will furnish the Cooperator a written determination, which determination will become the final agency decision regarding the appropriateness of the markings unless the Cooperator files suit in a court of competent jurisdiction within 90 days of receipt of the Grants Officer's decision. The Government will continue to abide by the markings under this paragraph (e)(1)(iii) until final resolution of the matter either by the Grants Officer's determination becoming final (in which instance the Government will thereafter have the right to cancel or ignore the markings at any time and the data will no longer be made subject to any disclosure prohibitions), or by final disposition of the matter by court decision if suit is filed.

(2) The time limits in the procedures set forth in paragraph (e)(1) of this clause may be modified in accordance with agency regulations implementing the Freedom of Information Act ( 5 U.S.C. 552) if necessary to respond to a request thereunder.

(3) Except to the extent the Government's action occurs as the result of final disposition of the matter by a court of competent jurisdiction, the Cooperator is not precluded by paragraph (e) of the clause from bringing a claim, in accordance with the Disputes clause of this contract, that may arise as the result of the Government removing or ignoring authorized markings on data delivered under this contract.

(f) Omitted or incorrect markings.

(1) Data delivered to the Government without any restrictive markings shall be deemed to have been furnished with unlimited rights. The Government is not liable for the disclosure, use, or reproduction of such data.

(2)If the unmarked data has not been disclosed without restriction outside the Government, the Cooperator may request, within 6 months (or a longer time approved by the Grants Officer in writing for good cause shown) after delivery of the data, permission to have authorized notices placed on the data at the Cooperators's expense. The Grants Officer may agree to do so if the Cooperator-

(i) Identifies the data to which the omitted notice is to be applied;

(ii) Demonstrates that the omission of the notice was inadvertent;

(iii) Establishes that the proposed notice is authorized; and

(iv) Acknowledges that the Government has no liability for the disclosure, use, or reproduction of any data made prior to the addition of the notice or resulting from the omission of the notice.

(3)If data has been marked with an incorrect notice, the Grants Officer may-

(i) Permit correction of the notice at the Cooperator's expense if the Cooperator identifies the data and demonstrates that the correct notice is authorized; or

(ii) Correct any incorrect notices.

(g) Protection of limited rights data and restricted computer software.

(1) The Cooperator may withhold from delivery qualifying limited rights data or restricted computer software that are not data identified in paragraphs (b)(1)(i), (ii), and (iii) of this clause. As a condition to this withholding, the Cooperator shall-

(i) Identify the data being withheld; and

(ii) Furnish form, fit, and function data instead.

(2) Limited rights data that are formatted as a computer database for delivery to the Government shall be treated as limited rights data and not restricted computer software.

(3)[Reserved]

(h) Subcontracting. The Cooperator shall obtain from its subcontractors all data and rights therein necessary to fulfill the Cooperator's obligations to the Government under this cooperative agreement. If a subcontractor refuses to accept terms affording the Government those rights, the Cooperator shall promptly notify the Grants Officer of the refusal and shall not proceed with the subcontract award without authorization in writing from the Grants Officer.

(i) Relationship to patents or other rights. Nothing contained in this clause shall imply a license to the Government under any patent or be construed as affecting the scope of any license or other right otherwise granted to the Government.

(End of clause)

## ATTACHMENT D WIDE AREA WORKFLOW PAYMENT INSTRUCTIONS (DEC 2018)

(a) *Definitions*. As used in this clause—

"*Department of Defense Activity Address Code (DoDAAC)*" is a six position code that uniquely identifies a unit, activity, or organization.

"*Document type*" means the type of payment request or receiving report available for creation in Wide Area WorkFlow (WAWF).

"*Local processing office (LPO)*" is the office responsible for payment certification when payment certification is done external to the entitlement system.

"*Payment request*" and "*receiving report*" are defined in the clause at 252.232-7003, Electronic Submission of Payment Requests and Receiving Reports.

(b) *Electronic invoicing*. The WAWF system provides the method to electronically process vendor payment requests and receiving reports, as authorized by Defense Federal Acquisition Regulation Supplement (DFARS) 252.232-7003, Electronic Submission of Payment Requests and Receiving Reports.

(c) *WAWF access*. To access WAWF, the Recipient shall—

(1) Have a designated electronic business point of contact in the System for Award Management at *https://www.sam.gov*; and

(2) Be registered to use WAWF at *https://wawf.eb.mil/* following the step-by-step procedures for self-registration available at this web site.

(d) *WAWF training*. The Cooperator should follow the training instructions of the WAWF Web-Based Training Course and use the Practice Training Site before submitting payment requests through WAWF. Both can be accessed by selecting the "Web Based Training" link on the WAWF home page at *https://wawf.eb.mil/*.

(e) *WAWF methods of document submission*. Document submissions may be via web entry, Electronic Data Interchange, or File Transfer Protocol.

(f) *WAWF payment instructions*. The Cooperator shall use the following information when submitting payment requests and receiving reports in WAWF for this contract or task or delivery order:

(1) *Document type*. The Cooperator shall submit payment requests using the following document type(s):

(i) For cost-type line items, including labor-hour or time-and-materials, submit a cost voucher.

(ii) For fixed price line items—

(A) That require shipment of a deliverable, submit the invoice and receiving report specified by the Grants Officer.

**GRANT VOUCHER**

(B) For services that do not require shipment of a deliverable, submit either the Invoice 2in1, which meets the requirements for the invoice and receiving report, or the applicable invoice and receiving report, as specified by the Grants Officer.

**GRANT VOUCHER**

(iii) For customary progress payments based on costs incurred, submit a progress payment request.

(iv) For performance based payments, submit a performance based payment request.

(v) For commercial item financing, submit a commercial item financing request.

(2) Fast Pay requests are only permitted when Federal Acquisition Regulation (FAR) 52.213-1 is included in the contract.

(3) *Document routing*. The Cooperator shall use the information in the Routing Data Table below only to fill in applicable fields in WAWF when creating payment requests and receiving reports in the system.

Routing Data Table*

| Field Name in WAWF | Data to be entered in WAWF |
|---|---|
| Pay Official DoDAAC | **N68732** |
| Issue By DoDAAC | **N62742** |
| Admin DoDAAC | **N62742** |
| Inspect By DoDAAC | **N/A** |
| Ship To Code | **N/A** |
| Ship From Code | **N/A** |
| Mark For Code | **N/A** |
| Grant Approver (DoDAAC) | **N62742/ACQ32** |
| Service Acceptor (DoDAAC) | **N/A** |

| | |
|---|---|
| Accept at Other DoDAAC | **N/A** |
| LPO DoDAAC | **N/A** |
| DCAA Auditor DoDAAC | **N/A** |
| Other DoDAAC(s) | **N/A** |

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(4) *Payment request*. The Cooperator shall ensure a payment request includes documentation appropriate to the type of payment request in accordance with the payment clause, contract financing clause, or Federal Acquisition Regulation 52.216-7, Allowable Cost and Payment, as applicable.

(5) *Receiving report*. The Cooperator shall ensure a receiving report meets the requirements of DFARS Appendix F.

(g) *WAWF point of contact.*

**Kristopher Tom, kristopher.m.tom.civ@us.navy.mil, (808) 474-4551**

**Melissa Tsuha, melissa.n.tsuha.civ@us.navy.mil, (808) 351-0674**

**Jessi Behnke, jessica.l.behnke.civ@us.navy.mil, (808) 335-4064**

(2) Contact the WAWF helpdesk at 866-618-5988, if assistance is needed.

(End of clause)

**§ 200.216 Prohibition on certain telecommunications and video surveillance services or equipment.**

(a) Recipients and subrecipients are prohibited from obligating or expending loan or grant funds to:

(1) Procure or obtain;

(2) Extend or renew a contract to procure or obtain; or

(3) Enter into a contract (or extend or renew a contract) to procure or obtain equipment, services, or systems that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. As described in Public Law 115-232, section 889, covered telecommunications equipment is telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).

(i) For the purpose of public safety, security of government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities).

(ii) Telecommunications or video surveillance services provided by such entities or using such equipment.

(iii) Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of the National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

(b) In implementing the prohibition under Public Law 115-232, section 889, subsection (f), paragraph (1), heads of executive agencies administering loan, grant, or subsidy programs shall prioritize available funding and technical support to assist affected businesses, institutions and organizations as is reasonably necessary for those affected entities to transition from covered communications equipment and services, to procure replacement equipment and services, and to ensure that communications service to users and customers is sustained.

(c) See Public Law 115-232, section 889 for additional information.

(d) See also § 200.471.

**Link to payment instructions**:
https://www.acq.osd.mil/dpap/dars/pgi/pgi_htm/current/PGI204_71.htm#payment_instructions

## SERVICE CONTRACT LABOR STANDARDS (AUG 2018)

(a) *Definitions*. As used in this clause—

*Contractor*, when this clause is used in any subcontract, shall be deemed to refer to the subcontractor, except in the term "Government Prime Contractor."

*Service employee* means any person engaged in the performance of this contract other than any person employed in a bona fide executive, administrative, or professional capacity, as these terms are defined in Part 541 of Title 29, *Code of Federal Regulations*, as revised. It includes all such persons regardless of any contractual relationship that may be alleged to exist between a Contractor or subcontractor and such persons.

(b) *Applicability*. This contract is subject to the following provisions and to all other applicable provisions of 41 U.S.C. chapter 67, Service Contract Labor Standards, and regulations of the Secretary of Labor (29 CFR Part 4). This clause does not apply to contracts or subcontracts administratively exempted by the Secretary of Labor or exempted by 41 U.S.C. 6702, as interpreted in Subpart C of 29 CFR Part 4.

(c) Compensation.

(1) Each service employee employed in the performance of this contract by the Contractor or any subcontractor shall be paid not less than the minimum monetary wages and shall be furnished fringe benefits in accordance with the wages and fringe benefits determined by the Secretary of Labor, or authorized representative, as specified in any wage determination attached to this contract.

(2)

(i) If a wage determination is attached to this contract, the Contractor shall classify any class of service employee which is not listed therein and which is to be employed under the contract (*i.e.,* the work to be performed is not performed by any classification listed in the wage determination) so as to provide a reasonable relationship (*i.e.,* appropriate level of skill comparison) between such unlisted classifications and the classifications listed in the wage determination. Such conformed class of employees shall be paid the monetary wages and furnished the fringe benefits as are determined pursuant to the procedures in this paragraph (c).

(ii) This conforming procedure shall be initiated by the Contractor prior to the performance of contract work by the unlisted class of employee.
The Contractor shall submit Standard Form (SF) 1444, Request For Authorization of Additional Classification and Rate, to the Contracting Officer no later than 30 days after the unlisted class of employee performs any contract work. The Contracting Officer shall review the proposed classification and rate and promptly submit the completed SF 1444 (which must include information regarding the agreement or disagreement of the employees' authorized representatives or the employees themselves together with the agency recommendation), and all pertinent information to the Wage and Hour *Division, U.S.* Department of Labor. The Wage and Hour Division will approve, modify, or disapprove the action or render a final determination in the event of disagreement within 30 days of receipt or will notify the Contracting Officer within 30 days of receipt that additional time is necessary.

(iii) The final determination of the conformance action by the Wage and Hour Division shall be transmitted to the Contracting Officer who shall promptly notify the Contractor of the action taken. Each affected employee shall be furnished by the Contractor with a written copy of such determination or it shall be posted as a part of the wage determination.

(iv)

(A) The process of establishing wage and fringe benefit rates that bear a reasonable relationship to those listed in a wage determination cannot be reduced to any single formula. The approach used may vary from wage determination to wage determination depending on the circumstances. Standard wage and salary administration practices which rank various job classifications by pay grade pursuant to point schemes or other job factors may, for example, be relied upon. Guidance may also be obtained from the way different jobs are rated under Federal pay systems (Federal Wage Board Pay System and the General Schedule) or from other wage determinations issued in the same locality. Basic to the establishment of any conformable wage rate(s) is the concept that a pay relationship should be maintained between job classifications based on the skill required and the duties performed.

(B) In the case of a contract modification, an exercise of an option, or extension of an existing contract, or in any other case where a Contractor succeeds a contract under which the classification in question was previously conformed pursuant to paragraph (c) of this clause, a new conformed wage rate and fringe benefits may be assigned to the conformed classification by indexing (*i.e.,* adjusting) the previous conformed rate and fringe benefits by an amount equal to the average (mean) percentage increase (or decrease, where appropriate) between the wages and fringe benefits specified for all classifications to be used on the contract which are listed in the current wage determination, and those specified for the corresponding classifications in the previously applicable wage determination. Where conforming actions are accomplished in accordance with this paragraph prior to the performance of contract work by the unlisted class of employees,
the Contractor shall advise the Contracting Officer of the action taken but the other procedures in subdivision (c)(2)(ii) of this clause need not be followed.

(C) No employee engaged in performing work on this contract shall in any event be paid less than the currently applicable minimum wage specified under section 6(a)(1) of the Fair Labor Standards Act of1938, as amended.

(v) The wage rate and fringe benefits finally determined under this paragraph (c)(2) of this clause shall be paid to all employees performing in the classification from the first day on which contract work is performed by them in the classification. Failure to pay the unlisted employees the compensation agreed upon by the interested parties and/or finally determined by the Wage and Hour Division retroactive to the date such class of employees commenced contract work shall be a violation of the Service Contract Labor Standards statute and this contract.

(vi) Upon discovery of failure to comply with paragraph (c)(2) of this clause, the Wage and Hour Division shall make a final determination of conformed classification, wage rate, and/or fringe benefits which shall be retroactive to the date such class or classes of employees commenced contract work.

(3) *Adjustment of compensation*. If the term of this contract is more than 1 year, the minimum monetary wages and fringe benefits required to be paid or furnished thereunder to service employees under this contract shall be subject to adjustment after 1 year and not less often than once every 2 years, under wage determinations issued by the Wage and Hour Division.

(d) *Obligation to furnish fringe benefits*. The Contractor or subcontractor may discharge the obligation to furnish fringe benefits specified in the attachment or determined under paragraph (c)(2) of this clause by furnishing equivalent combinations of bona fide fringe benefits, or by making equivalent or differential cash payments, only in accordance with Subpart D of 29 CFR Part 4.

(e) *Minimum wage*. In the absence of a minimum wage attachment for this contract, neither the Contractor nor any subcontractor under this contract shall pay any person performing work under this contract (regardless of whether the person is a service employee) less than the minimum wage specified by section 6(a)(1) of the Fair Labor Standards Act of1938. Nothing in this clause shall relieve the Contractor or any subcontractor of any other obligation under law or contract for payment of a higher wage to any employee.

(f) *Successor contracts*. If this contract succeeds a contract subject to the Service Contract Labor Standards statute under which substantially the same services were furnished in the same locality and service employees were paid wages and fringe benefits provided for in a collective bargaining agreement, in the absence of the minimum wage attachment for this contract setting forth such collectively bargained wage rates and fringe benefits, neither the Contractor nor any subcontractor under this contract shall pay any service employee performing any of the contract work (regardless of whether or not such employee was employed under the predecessor contract), less than the wages and fringe benefits provided for in such collective bargaining agreement, to which such employee would have been entitled if employed under the predecessor contract, including accrued wages and fringe benefits and any prospective increases in wages and fringe benefits provided for under such agreement. No Contractor or subcontractor under this contract may be relieved of the foregoing obligation unless the limitations of 29 CFR 4.1 b(b) apply or unless the Secretary of Labor or the Secretary's authorized representative finds, after a hearing as provided in 29 CFR 4.10 that the wages and/or fringe benefits provided for in such agreement are substantially at variance with those which prevail for services of a character similar in the locality, or determines, as provided in 29 CFR 4.11, that the collective bargaining agreement applicable to service employees employed under the predecessor contract was not entered into as a result of arm's length negotiations. Where it is found in accordance with the review procedures provided in 29 CFR 4.10 and/or 4.11 and Parts6 and 8 that some or all of the wages and/or fringe benefits contained in a predecessor Contractor's collective bargaining agreement are substantially at variance with those which prevail for services of a character similar in the locality, and/or that the collective bargaining agreement applicable to service employees employed under the predecessor contract was not entered into as a result of arm's length negotiations, the Department will issue a new or revised wage determination setting forth the applicable wage rates and fringe benefits. Such determination shall be made part of the contract or subcontract, in accordance with the decision of the Administrator, the Administrative Law Judge, or the Administrative Review Board, as the case may be, irrespective of whether such issuance occurs prior to or after the award of a contract or subcontract (53 Comp. Gen. 401 (1973)). In the case of a wage determination issued solely as a result of a finding of substantial variance, such determination shall be effective as of the date of the final administrative decision.

(g) *Notification to employees*. The Contractor and any subcontractor under this contract shall notify each service employee commencing work on this contract of the minimum monetary wage and any fringe benefits required to be paid pursuant to this contract, or shall post the wage determination attached to this contract. The poster provided by the Department of Labor (Publication WH 1313) shall be posted in a prominent and accessible place at the work site. Failure to comply with this requirement is a violation of 41 U.S.C. 6703 and of this contract.

(h) *Safe and sanitary working conditions*. The Contractor or subcontractor shall not permit any part of the services called for by this contract to be performed in buildings or surroundings or under working conditions provided by or under the control or supervision of the Contractor or subcontractor which are unsanitary, hazardous, or dangerous to the health or safety of the service employees. The Contractor or subcontractor shall comply with the safety and health standards applied under 29 CFR Part 1925.

(i) *Records*.

(1) The Contractor and each subcontractor performing work subject to the Service Contract Labor Standards statute shall make and maintain for 3 years from the completion of the work, and make them available for inspection and transcription by authorized representatives of the Wage and Hour *Division, a* record of the following:

(i) For each employee subject to the Service Contract Labor Standards statute-

(A) Name and address and social security number;

(B) Correct work classification or classifications, rate or rates of monetary wages paid and fringe benefits provided, rate or rates of payments in lieu of fringe benefits, and total daily and weekly compensation;

(C) Daily and weekly hours worked by each employee; and

(D) Any deductions, rebates, or refunds from the total daily or weekly compensation of each employee.

(ii) For those classes of service employees not included in any wage determination attached to this contract, wage rates or fringe benefits determined by the interested parties or by the Administrator or authorized representative under the terms of paragraph (c) of this clause. A copy of the report required by subdivision (c)(2)(ii) of this clause will fulfill this requirement.

(iii) Any list of the predecessor Contractor's employees which had been furnished to the Contractor as prescribed by paragraph (n) of this clause.

(2) The Contractor shall also make available a copy of this contract for inspection or transcription by authorized representatives of the Wage and Hour Division.

(3) Failure to make and maintain or to make available these records for inspection and transcription shall be a violation of the regulations and this contract, and in the case of failure to

produce these records, the Contracting Officer, upon direction of the Department of Labor and notification to the Contractor, shall take action to cause suspension of any further payment or advance of funds until the violation ceases.

(4) The Contractor shall permit authorized representatives of the Wage and Hour Division to conduct interviews with employees at the work site during normal working hours.

(j) *Pay periods*. The Contractor shall unconditionally pay to each employee subject to the Service Contract Labor Standards statute all wages due free and clear and without subsequent deduction (except as otherwise provided by law or regulations, 29 CFR Part 4), rebate, or kickback on any account. These payments shall be made no later than one pay period following the end of the regular pay period in which the wages were earned or accrued. A pay period under this statute may not be of any duration longer than semi-monthly.

(k) *Withholding of payments and termination of contract*. The Contracting Officer shall withhold or cause to be withheld from the Government Prime Contractor under this or any other Government contract with the Prime Contractor such sums as an appropriate official of the Department of Labor requests or such sums as the Contracting Officer decides may be necessary to pay underpaid employees employed by the Contractor or subcontractor. In the event of failure to pay any employees subject to the Service Contract Labor Standards statute all or part of the wages or fringe benefits due under the Service Contract Labor Standards statute, the Contracting Officer may, after authorization or by direction of the Department of Labor and written notification to the Contractor, take action to cause suspension of any further payment or advance of funds until such violations have ceased. Additionally, any failure to comply with the requirements of this clause may be grounds for termination of the right to proceed with the contract work. In such event, the Government may enter into other contracts or arrangements for completion of the work, charging the Contractor in default with any additional cost.

(l) *Subcontracts*. The Contractor agrees to insert this clause in all subcontracts subject to the Service Contract Labor Standards statute.

(m) *Collective bargaining agreements applicable to service employees*. If wages to be paid or fringe benefits to be furnished any service employees employed by the Government Prime Contractor or any subcontractor under the contract are provided for in a collective bargaining agreement which is or will be effective during any period in which the contract is being performed, the Government Prime Contractor shall report such fact to the Contracting Officer, together with full information as to the application and accrual of such wages and fringe benefits, including any prospective increases, to service employees engaged in work on the contract, and a copy of the collective bargaining agreement. Such report shall be made upon commencing performance of the contract, in the case of collective bargaining agreements effective at such time, and in the case of such agreements or provisions or amendments thereof effective at a later time during the period of contract performance such agreements shall be reported promptly after negotiation thereof.

(n) *Seniority list*. Not less than 10 days prior to completion of any contract being performed at a Federal facility where service employees may be retained in the performance of the succeeding contract and subject to a wage determination which contains vacation or other benefit provisions based upon length of service with a Contractor (predecessor) or successor (29 CFR 4.173), the incumbent Prime Contractor shall furnish the Contracting Officer a certified list of the names of all

service employees on the Contractor's or subcontractor's payroll during the last month of contract performance. Such list shall also contain anniversary dates of employment on the contract either with the current or predecessor Contractors of each such service employee. The Contracting Officer shall turn over such list to the successor Contractor at the commencement of the succeeding contract.

(o) *Rulings and interpretations*. Rulings and interpretations of the Service Contract Labor Standards statute are contained in Regulations, 29 CFR Part 4.

(p) Contractor's certification.

(1) By entering into this contract, the Contractor (and officials thereof) certifies that neither it nor any person or firm who has a substantial interest in the Contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of the sanctions imposed under 41 U.S.C. 6706.

(2) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract under 41 U.S.C. 6706.

(3) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

(q) *Variations, tolerances, and exemptions involving employment*. Notwithstanding any of the provisions in paragraphs (b) through (o) of this clause, the following employees may be employed in accordance with the following variations, tolerances, and exemptions, which the Secretary of Labor, pursuant to 41 U.S.C. 6707 prior to its amendment by Pub.L.92-473, found to be necessary and proper in the public interest or to avoid serious impairment of the conduct of Government business:

(1) Apprentices, student-learners, and workers whose earning capacity is impaired by age, physical or mental deficiency, or injury may be employed at wages lower than the minimum wages otherwise required by 41 U.S.C. 6703(1) without diminishing any fringe benefits or cash payments in lieu thereof required under 41 U.S.C. 6703(2), in accordance with the conditions and procedures prescribed for the employment of apprentices, student-learners, persons with disabilities, and disabled clients of work centers under section 14 of the Fair Labor Standards Act of 1938, in the regulations issued by the Administrator (29 CFR parts 520, 521, 524, and 525).

(2) The Administrator will issue certificates under the statute for the employment of apprentices, student-learners, persons with disabilities, or disabled clients of work centers not subject to the Fair Labor Standards Act of 1938, or subject to different minimum rates of pay under the two statutes, authorizing appropriate rates of minimum wages (but without changing requirements concerning fringe benefits or supplementary cash payments in lieu thereof), applying procedures prescribed by the applicable regulations issued under the Fair Labor Standards Act of 1938 (29 CFR parts 520, 521, 524, and 525).

(3) The Administrator will also withdraw, annul, or cancel such certificates in accordance with the regulations in 29 CFR parts 525 and 528.

(r) *Apprentices*. Apprentices will be permitted to work at less than the predetermined rate for the work they perform when they are employed and individually registered in a bona fide apprenticeship program registered with a State Apprenticeship Agency which is recognized by the U.S. Department of Labor, or if no such recognized agency exists in a State, under a program registered with the Office of Apprenticeship Training, Employer, and Labor Services (OATELS), U.S. Department of Labor. Any employee who is not registered as an apprentice in an approved program shall be paid the wage rate and fringe benefits contained in the applicable wage determination for the journeyman classification of work actually performed. The wage rates paid apprentices shall not be less than the wage rate for their level of progress set forth in the registered program, expressed as the appropriate percentage of the journeyman's rate contained in the applicable wage determination. The allowable ratio of apprentices to journeymen employed on the contract work in any craft classification shall not be greater than the ratio permitted to the Contractor as to his entire work force under the registered program.

(s) *Tips*. An employee engaged in an occupation in which the employee customarily and regularly receives more than $30 a month in tips may have the amount of these tips credited by the employer against the minimum wage required by 41 U.S.C. 6703(1), in accordance with section 3(m) of the Fair Labor Standards Act and Regulations, 29 CFR Part 531. However, the amount of credit shall not exceed $1.34 per hour beginning January 1,1981. To use this provision-

(1) The employer must inform tipped employees about this tip credit allowance before the credit is utilized;

(2) The employees must be allowed to retain all tips (individually or through a pooling arrangement and regardless of whether the employer elects to take a credit for tips received);

(3) The employer must be able to show by records that the employee receives at least the applicable Service Contract Labor Standards minimum wage through the combination of direct wages and tip credit; and

(4) The use of such tip credit must have been permitted under any predecessor collective bargaining agreement applicable by virtue of 41 U.S.C. 6707(c).

(t) *Disputes concerning labor standards*. The U.S. Department of Labor has set forth in 29 CFR parts 4, 6, and 8 procedures for resolving disputes concerning labor standards requirements. Such disputes shall be resolved in accordance with those procedures and not the Disputes clause of this contract. Disputes within the meaning of this clause include disputes between the Contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

(End of clause)

"REGISTER OF WAGE DETERMINATIONS UNDER THE SERVICE CONTRACT ACT
By direction of the Secretary of Labor

Daniel W. Simms
Director

Division of Wage Determinations

U.S. DEPARTMENT OF LABOR
EMPLOYMENT STANDARDS ADMINISTRATION
WAGE AND HOUR DIVISION
WASHINGTON D.C. 20210

Wage Determination No.: 2015-5691
Revision No.: 19
Date Of Last Revision: 07/17/2023

Note: Contracts subject to the Service Contract Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658.

| | |
|---|---|
| If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022: | Executive Order 14026 generally applies to the contract. The contractor must pay all covered workers at least $16.20 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2023. |
| If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022: | Executive Order 13658 generally applies to the contract. The contractor must pay all covered workers at least $12.15 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2023. |

The applicable Executive Order minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the Executive Orders is available at www.dol.gov/whd/govcontracts.

State: Hawaii

Area: Hawaii Counties of Hawaii, Kauai
OCCUPATION NOTE:

STEVEDORING AND LONGSHOREMEN: Wage rates and fringe benefits can be found on Wage Determination 2000-0085

**Fringe Benefits Required Follow the Occupational Listing**

| OCCUPATION CODE - TITLE | FOOTNOTE | RATE |
|---|---|---|
| 01000 - Administrative Support And Clerical Occupations | | |
| 01011 - Accounting Clerk I | | 17.55 |
| 01012 - Accounting Clerk II | | 19.70 |
| 01013 - Accounting Clerk III | | 22.03 |
| 01020 - Administrative Assistant | | 36.06 |
| 01035 - Court Reporter | | 21.39 |
| 01041 - Customer Service Representative I | | 15.81*** |
| 01042 - Customer Service Representative II | | 17.25 |
| 01043 - Customer Service Representative III | | 19.36 |
| 01051 - Data Entry Operator I | | 18.28 |

| | |
|---|---|
| 01052 - Data Entry Operator II | 19.94 |
| 01060 - Dispatcher, Motor Vehicle | 24.09 |
| 01070 - Document Preparation Clerk | 17.03 |
| 01090 - Duplicating Machine Operator | 17.03 |
| 01111 - General Clerk I | 15.18*** |
| 01112 - General Clerk II | 16.56 |
| 01113 - General Clerk III | 18.60 |
| 01120 - Housing Referral Assistant | 23.84 |
| 01141 - Messenger Courier | 18.21 |
| 01191 - Order Clerk I | 17.59 |
| 01192 - Order Clerk II | 19.19 |
| 01261 - Personnel Assistant (Employment) I | 17.93 |
| 01262 - Personnel Assistant (Employment) II | 20.05 |
| 01263 - Personnel Assistant (Employment) III | 22.35 |
| 01270 - Production Control Clerk | 25.67 |
| 01290 - Rental Clerk | 17.37 |
| 01300 - Scheduler, Maintenance | 19.11 |
| 01311 - Secretary I | 19.11 |
| 01312 - Secretary II | 21.39 |
| 01313 - Secretary III | 23.84 |
| 01320 - Service Order Dispatcher | 21.54 |
| 01410 - Supply Technician | 36.06 |
| 01420 - Survey Worker | 21.39 |
| 01460 - Switchboard Operator/Receptionist | 17.52 |
| 01531 - Travel Clerk I | 16.56 |
| 01532 - Travel Clerk II | 17.90 |
| 01533 - Travel Clerk III | 20.38 |
| 01611 - Word Processor I | 16.04*** |
| 01612 - Word Processor II | 18.00 |
| 01613 - Word Processor III | 20.13 |
| 05000 - Automotive Service Occupations | |
| 05005 - Automobile Body Repairer, Fiberglass | 23.23 |
| 05010 - Automotive  Electrician | 22.43 |
| 05040 - Automotive Glass Installer | 22.00 |
| 05070 - Automotive Worker | 22.00 |
| 05110 - Mobile Equipment Servicer | 18.99 |
| 05130 - Motor Equipment Metal Mechanic | 24.41 |
| 05160 - Motor Equipment Metal Worker | 22.00 |
| 05190 - Motor Vehicle Mechanic | 25.65 |
| 05220 - Motor Vehicle Mechanic Helper | 17.39 |
| 05250 - Motor Vehicle Upholstery Worker | 20.80 |
| 05280 - Motor Vehicle Wrecker | 22.00 |
| 05310 - Painter, Automotive | 23.19 |
| 05340 - Radiator Repair Specialist | 22.00 |
| 05370 - Tire Repairer | 17.74 |
| 05400 - Transmission Repair Specialist | 24.37 |
| 07000 - Food Preparation And Service Occupations | |
| 07010 - Baker | 17.62 |
| 07041 - Cook I | 24.04 |
| 07042 - Cook II | 28.03 |
| 07070 - Dishwasher | 14.70*** |
| 07130 - Food Service Worker | 15.50*** |
| 07210 - Meat Cutter | 21.53 |
| 07260 - Waiter/Waitress | 19.34 |
| 09000 - Furniture Maintenance And Repair Occupations | |
| 09010 - Electrostatic Spray Painter | 30.86 |
| 09040 - Furniture Handler | 18.93 |
| 09080 - Furniture Refinisher | 31.23 |
| 09090 - Furniture Refinisher Helper | 22.94 |
| 09110 - Furniture Repairer, Minor | 27.18 |
| 09130 - Upholsterer | 30.86 |
| 11000 - General Services And Support Occupations | |
| 11030 - Cleaner, Vehicles | 14.64*** |
| 11060 - Elevator Operator | 17.92 |
| 11090 - Gardener | 24.27 |

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|---|---|
| 11122 - Housekeeping Aide | 17.92 |
| 11150 - Janitor | 17.92 |
| 11210 - Laborer, Grounds Maintenance | 18.34 |
| 11240 - Maid or Houseman | 21.27 |
| 11260 - Pruner | 16.41 |
| 11270 - Tractor Operator | 22.21 |
| 11330 - Trail Maintenance Worker | 18.34 |
| 11360 - Window Cleaner | 20.03 |
| 12000 - Health Occupations | |
| 12010 - Ambulance Driver | 26.85 |
| 12011 - Breath Alcohol Technician | 25.05 |
| 12012 - Certified Occupational Therapist Assistant | 32.07 |
| 12015 - Certified Physical Therapist Assistant | 31.88 |
| 12020 - Dental Assistant | 19.08 |
| 12025 - Dental Hygienist | 48.04 |
| 12030 - EKG Technician | 35.41 |
| 12035 - Electroneurodiagnostic Technologist | 35.41 |
| 12040 - Emergency Medical Technician | 26.85 |
| 12071 - Licensed Practical Nurse I | 20.89 |
| 12072 - Licensed Practical Nurse II | 23.37 |
| 12073 - Licensed Practical Nurse III | 26.05 |
| 12100 - Medical Assistant | 21.74 |
| 12130 - Medical Laboratory Technician | 29.08 |
| 12160 - Medical Record Clerk | 21.71 |
| 12190 - Medical Record Technician | 24.28 |
| 12195 - Medical Transcriptionist | 21.71 |
| 12210 - Nuclear Medicine Technologist | 51.36 |
| 12221 - Nursing Assistant I | 13.48*** |
| 12222 - Nursing Assistant II | 15.15*** |
| 12223 - Nursing Assistant III | 16.53 |
| 12224 - Nursing Assistant IV | 18.57 |
| 12235 - Optical Dispenser | 23.37 |
| 12236 - Optical Technician | 20.89 |
| 12250 - Pharmacy Technician | 20.21 |
| 12280 - Phlebotomist | 20.89 |
| 12305 - Radiologic Technologist | 40.27 |
| 12311 - Registered Nurse I | 29.29 |
| 12312 - Registered Nurse II | 35.82 |
| 12313 - Registered Nurse II, Specialist | 35.82 |
| 12314 - Registered Nurse III | 43.34 |
| 12315 - Registered Nurse III, Anesthetist | 43.34 |
| 12316 - Registered Nurse IV | 51.94 |
| 12317 - Scheduler (Drug and Alcohol Testing) | 31.05 |
| 12320 - Substance Abuse Treatment Counselor | 27.61 |
| 13000 - Information And Arts Occupations | |
| 13011 - Exhibits Specialist I | 23.38 |
| 13012 - Exhibits Specialist II | 28.95 |
| 13013 - Exhibits Specialist III | 35.41 |
| 13041 - Illustrator I | 23.38 |
| 13042 - Illustrator II | 28.95 |
| 13043 - Illustrator III | 35.41 |
| 13047 - Librarian | 32.07 |
| 13050 - Library Aide/Clerk | 17.60 |
| 13054 - Library Information Technology Systems Administrator | 26.53 |
| 13058 - Library Technician | 22.72 |
| 13061 - Media Specialist I | 20.89 |
| 13062 - Media Specialist II | 23.38 |
| 13063 - Media Specialist III | 26.05 |
| 13071 - Photographer I | 19.14 |
| 13072 - Photographer II | 22.01 |
| 13073 - Photographer III | 26.53 |
| 13074 - Photographer IV | 32.46 |
| 13075 - Photographer V | 39.26 |
| 13090 - Technical Order Library Clerk | 21.05 |

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| 13110 - Video Teleconference Technician | | 27.02 |
| 14000 - Information Technology Occupations | | |
| 14041 - Computer Operator I | | 19.29 |
| 14042 - Computer Operator II | | 21.58 |
| 14043 - Computer Operator III | | 25.08 |
| 14044 - Computer Operator IV | | 27.29 |
| 14045 - Computer Operator V | | 30.20 |
| 14071 - Computer Programmer I | (see 1) | |
| 14072 - Computer Programmer II | (see 1) | |
| 14073 - Computer Programmer III | (see 1) | |
| 14074 - Computer Programmer IV | (see 1) | |
| 14101 - Computer Systems Analyst I | (see 1) | |
| 14102 - Computer Systems Analyst II | (see 1) | |
| 14103 - Computer Systems Analyst III | (see 1) | |
| 14150 - Peripheral Equipment Operator | | 19.29 |
| 14160 - Personal Computer Support Technician | | 27.29 |
| 14170 - System Support Specialist | | 32.05 |
| 15000 - Instructional Occupations | | |
| 15010 - Aircrew Training Devices Instructor (Non-Rated) | | 33.45 |
| 15020 - Aircrew Training Devices Instructor (Rated) | | 40.47 |
| 15030 - Air Crew Training Devices Instructor (Pilot) | | 48.52 |
| 15050 - Computer Based Training Specialist / Instructor | | 33.45 |
| 15060 - Educational Technologist | | 36.26 |
| 15070 - Flight Instructor (Pilot) | | 48.52 |
| 15080 - Graphic Artist | | 27.80 |
| 15085 - Maintenance Test Pilot, Fixed, Jet/Prop | | 48.52 |
| 15086 - Maintenance Test Pilot, Rotary Wing | | 48.52 |
| 15088 - Non-Maintenance Test/Co-Pilot | | 48.52 |
| 15090 - Technical Instructor | | 24.24 |
| 15095 - Technical Instructor/Course Developer | | 29.65 |
| 15110 - Test Proctor | | 22.74 |
| 15120 - Tutor | | 22.74 |
| 16000 - Laundry, Dry-Cleaning, Pressing And Related Occupations | | |
| 16010 - Assembler | | 13.88*** |
| 16030 - Counter Attendant | | 13.88*** |
| 16040 - Dry Cleaner | | 17.17 |
| 16070 - Finisher, Flatwork, Machine | | 13.88*** |
| 16090 - Presser, Hand | | 13.88*** |
| 16110 - Presser, Machine, Drycleaning | | 13.88*** |
| 16130 - Presser, Machine, Shirts | | 13.88*** |
| 16160 - Presser, Machine, Wearing Apparel, Laundry | | 13.88*** |
| 16190 - Sewing Machine Operator | | 18.27 |
| 16220 - Tailor | | 19.25 |
| 16250 - Washer, Machine | | 14.99*** |
| 19000 - Machine Tool Operation And Repair Occupations | | |
| 19010 - Machine-Tool Operator (Tool Room) | | 32.65 |
| 19040 - Tool And Die Maker | | 41.05 |
| 21000 - Materials Handling And Packing Occupations | | |
| 21020 - Forklift Operator | | 27.85 |
| 21030 - Material Coordinator | | 25.67 |
| 21040 - Material Expediter | | 25.67 |
| 21050 - Material Handling Laborer | | 17.81 |
| 21071 - Order Filler | | 15.55*** |
| 21080 - Production Line Worker (Food Processing) | | 27.85 |
| 21110 - Shipping Packer | | 18.13 |
| 21130 - Shipping/Receiving Clerk | | 18.13 |
| 21140 - Store Worker I | | 15.83*** |
| 21150 - Stock Clerk | | 22.26 |
| 21210 - Tools And Parts Attendant | | 27.85 |
| 21410 - Warehouse Specialist | | 27.85 |
| 23000 - Mechanics And Maintenance And Repair Occupations | | |
| 23010 - Aerospace Structural Welder | | 42.53 |
| 23019 - Aircraft Logs and Records Technician | | 32.69 |
| 23021 - Aircraft Mechanic I | | 39.98 |
| 23022 - Aircraft Mechanic II | | 42.53 |

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|---|---|
| 23023 - Aircraft Mechanic III | 45.03 |
| 23040 - Aircraft Mechanic Helper | 27.58 |
| 23050 - Aircraft, Painter | 37.55 |
| 23060 - Aircraft Servicer | 32.69 |
| 23070 - Aircraft Survival Flight Equipment Technician | 37.55 |
| 23080 - Aircraft Worker | 35.12 |
| 23091 - Aircrew Life Support Equipment (ALSE) Mechanic I | 35.12 |
| 23092 - Aircrew Life Support Equipment (ALSE) Mechanic II | 39.98 |
| 23110 - Appliance Mechanic | 32.65 |
| 23120 - Bicycle Repairer | 26.20 |
| 23125 - Cable Splicer | 34.76 |
| 23130 - Carpenter, Maintenance | 35.60 |
| 23140 - Carpet Layer | 30.53 |
| 23160 - Electrician, Maintenance | 40.03 |
| 23181 - Electronics Technician Maintenance I | 30.53 |
| 23182 - Electronics Technician Maintenance II | 32.65 |
| 23183 - Electronics Technician Maintenance III | 34.76 |
| 23260 - Fabric Worker | 28.41 |
| 23290 - Fire Alarm System Mechanic | 34.76 |
| 23310 - Fire Extinguisher Repairer | 26.20 |
| 23311 - Fuel Distribution System Mechanic | 34.76 |
| 23312 - Fuel Distribution System Operator | 26.20 |
| 23370 - General Maintenance Worker | 26.40 |
| 23380 - Ground Support Equipment Mechanic | 39.98 |
| 23381 - Ground Support Equipment Servicer | 32.69 |
| 23382 - Ground Support Equipment Worker | 35.12 |
| 23391 - Gunsmith I | 26.20 |
| 23392 - Gunsmith II | 30.53 |
| 23393 - Gunsmith III | 34.76 |
| 23410 - Heating, Ventilation And Air-Conditioning Mechanic | 34.17 |
| 23411 - Heating, Ventilation And Air Contidioning Mechanic (Research Facility) | 36.34 |
| 23430 - Heavy Equipment Mechanic | 32.99 |
| 23440 - Heavy Equipment Operator | 34.11 |
| 23460 - Instrument Mechanic | 34.76 |
| 23465 - Laboratory/Shelter Mechanic | 32.65 |
| 23470 - Laborer | 17.81 |
| 23510 - Locksmith | 32.65 |
| 23530 - Machinery Maintenance Mechanic | 35.21 |
| 23550 - Machinist, Maintenance | 34.76 |
| 23580 - Maintenance Trades Helper | 23.31 |
| 23591 - Metrology Technician I | 34.76 |
| 23592 - Metrology Technician II | 36.98 |
| 23593 - Metrology Technician III | 39.14 |
| 23640 - Millwright | 34.76 |
| 23710 - Office Appliance Repairer | 31.57 |
| 23760 - Painter, Maintenance | 28.95 |
| 23790 - Pipefitter, Maintenance | 37.59 |
| 23810 - Plumber, Maintenance | 35.31 |
| 23820 - Pneudraulic Systems Mechanic | 34.76 |
| 23850 - Rigger | 34.76 |
| 23870 - Scale Mechanic | 30.53 |
| 23890 - Sheet-Metal Worker, Maintenance | 41.67 |
| 23910 - Small Engine Mechanic | 25.39 |
| 23931 - Telecommunications Mechanic I | 36.30 |
| 23932 - Telecommunications Mechanic II | 38.61 |
| 23950 - Telephone Lineman | 40.52 |
| 23960 - Welder, Combination, Maintenance | 28.69 |
| 23965 - Well Driller | 34.76 |
| 23970 - Woodcraft Worker | 34.76 |
| 23980 - Woodworker | 26.20 |
| 24000 - Personal Needs Occupations | |

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|---|---|
| 24550 - Case Manager | 17.80 |
| 24570 - Child Care Attendant | 14.06*** |
| 24580 - Child Care Center Clerk | 17.84 |
| 24610 - Chore Aide | 14.94*** |
| 24620 - Family Readiness And Support Services Coordinator | 17.80 |
| 24630 - Homemaker | 20.11 |
| 25000 - Plant And System Operations Occupations | |
| 25010 - Boiler Tender | 33.31 |
| 25040 - Sewage Plant Operator | 30.39 |
| 25070 - Stationary Engineer | 33.31 |
| 25190 - Ventilation Equipment Tender | 22.97 |
| 25210 - Water Treatment Plant Operator | 30.39 |
| 27000 - Protective Service Occupations | |
| 27004 - Alarm Monitor | 24.78 |
| 27007 - Baggage Inspector | 17.37 |
| 27008 - Corrections Officer | 30.08 |
| 27010 - Court Security Officer | 30.76 |
| 27030 - Detection Dog Handler | 19.43 |
| 27040 - Detention Officer | 30.08 |
| 27070 - Firefighter | 32.05 |
| 27101 - Guard I | 17.37 |
| 27102 - Guard II | 19.43 |
| 27131 - Police Officer I | 36.74 |
| 27132 - Police Officer II | 40.84 |
| 28000 - Recreation Occupations | |
| 28041 - Carnival Equipment Operator | 21.31 |
| 28042 - Carnival Equipment Repairer | 23.28 |
| 28043 - Carnival Worker | 15.74*** |
| 28210 - Gate Attendant/Gate Tender | 22.81 |
| 28310 - Lifeguard | 24.51 |
| 28350 - Park Attendant (Aide) | 25.50 |
| 28510 - Recreation Aide/Health Facility Attendant | 18.61 |
| 28515 - Recreation Specialist | 31.61 |
| 28630 - Sports Official | 20.30 |
| 28690 - Swimming Pool Operator | 27.14 |
| 29000 - Stevedoring/Longshoremen Occupational Services | |
| 29010 - Blocker And Bracer | |
| 29020 - Hatch Tender | |
| 29030 - Line Handler | |
| 29041 - Stevedore I | |
| 29042 - Stevedore II | |
| 30000 - Technical Occupations | |
| 30010 - Air Traffic Control Specialist, Center (HFO) (see 2) | 44.79 |
| 30011 - Air Traffic Control Specialist, Station (HFO) (see 2) | 30.88 |
| 30012 - Air Traffic Control Specialist, Terminal (HFO) (see 2) | 34.01 |
| 30021 - Archeological Technician I | 18.98 |
| 30022 - Archeological Technician II | 21.23 |
| 30023 - Archeological Technician III | 26.31 |
| 30030 - Cartographic Technician | 26.31 |
| 30040 - Civil Engineering Technician | 26.31 |
| 30051 - Cryogenic Technician I | 29.13 |
| 30052 - Cryogenic Technician II | 32.17 |
| 30061 - Drafter/CAD Operator I | 18.98 |
| 30062 - Drafter/CAD Operator II | 21.23 |
| 30063 - Drafter/CAD Operator III | 23.67 |
| 30064 - Drafter/CAD Operator IV | 29.13 |
| 30081 - Engineering Technician I | 16.90 |
| 30082 - Engineering Technician II | 18.98 |
| 30083 - Engineering Technician III | 22.50 |
| 30084 - Engineering Technician IV | 29.74 |
| 30085 - Engineering Technician V | 32.60 |
| 30086 - Engineering Technician VI | 39.41 |
| 30090 - Environmental Technician | 24.43 |
| 30095 - Evidence Control Specialist | 26.31 |

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|---|---|---|
| 30210 - Laboratory Technician | | 23.67 |
| 30221 - Latent Fingerprint Technician I | | 29.13 |
| 30222 - Latent Fingerprint Technician II | | 32.17 |
| 30240 - Mathematical Technician | | 26.31 |
| 30361 - Paralegal/Legal Assistant I | | 20.85 |
| 30362 - Paralegal/Legal Assistant II | | 25.84 |
| 30363 - Paralegal/Legal Assistant III | | 31.60 |
| 30364 - Paralegal/Legal Assistant IV | | 38.23 |
| 30375 - Petroleum Supply Specialist | | 32.17 |
| 30390 - Photo-Optics Technician | | 26.31 |
| 30395 - Radiation Control Technician | | 32.17 |
| 30461 - Technical Writer I | | 26.31 |
| 30462 - Technical Writer II | | 32.17 |
| 30463 - Technical Writer III | | 38.92 |
| 30491 - Unexploded Ordnance (UXO) Technician I | | 28.47 |
| 30492 - Unexploded Ordnance (UXO) Technician II | | 34.44 |
| 30493 - Unexploded Ordnance (UXO) Technician III | | 41.28 |
| 30494 - Unexploded (UXO) Safety Escort | | 28.47 |
| 30495 - Unexploded (UXO) Sweep Personnel | | 28.47 |
| 30501 - Weather Forecaster I | | 29.13 |
| 30502 - Weather Forecaster II | | 35.43 |
| 30620 - Weather Observer, Combined Upper Air Or Surface Programs | (see 2) | 23.67 |
| 30621 - Weather Observer, Senior | (see 2) | 26.31 |
| 31000 - Transportation/Mobile Equipment Operation Occupations | | |
| 31010 - Airplane Pilot | | 34.44 |
| 31020 - Bus Aide | | 15.02*** |
| 31030 - Bus Driver | | 21.55 |
| 31043 - Driver Courier | | 16.53 |
| 31260 - Parking and Lot Attendant | | 13.62*** |
| 31290 - Shuttle Bus Driver | | 16.84 |
| 31310 - Taxi Driver | | 15.02*** |
| 31361 - Truckdriver, Light | | 18.06 |
| 31362 - Truckdriver, Medium | | 19.59 |
| 31363 - Truckdriver, Heavy | | 24.47 |
| 31364 - Truckdriver, Tractor-Trailer | | 24.47 |
| 99000 - Miscellaneous Occupations | | |
| 99020 - Cabin Safety Specialist | | 16.79 |
| 99030 - Cashier | | 14.27*** |
| 99050 - Desk Clerk | | 23.52 |
| 99095 - Embalmer | | 28.47 |
| 99130 - Flight Follower | | 28.47 |
| 99251 - Laboratory Animal Caretaker I | | 18.04 |
| 99252 - Laboratory Animal Caretaker II | | 21.38 |
| 99260 - Marketing Analyst | | 30.14 |
| 99310 - Mortician | | 28.47 |
| 99410 - Pest Controller | | 20.97 |
| 99510 - Photofinishing Worker | | 15.25*** |
| 99710 - Recycling Laborer | | 27.26 |
| 99711 - Recycling Specialist | | 33.02 |
| 99730 - Refuse Collector | | 24.40 |
| 99810 - Sales Clerk | | 16.12*** |
| 99820 - School Crossing Guard | | 17.96 |
| 99830 - Survey Party Chief | | 34.37 |
| 99831 - Surveying Aide | | 18.79 |
| 99832 - Surveying Technician | | 25.76 |
| 99840 - Vending Machine Attendant | | 24.31 |
| 99841 - Vending Machine Repairer | | 30.96 |
| 99842 - Vending Machine Repairer Helper | | 24.31 |

***Workers in this classification may be entitled to a higher minimum wage under

Executive Order 14026 ($16.20 per hour) or 13658 ($12.15 per hour). Please see the Note at the top of the wage determination for more information. Please also note that the minimum wage requirements of Executive Order 14026 and 13658 are not currently being enforced as to contracts or contract-like instruments entered into with the federal government in connection with seasonal recreational services or seasonal recreational equipment rental for the general public on federal lands.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors, applies to all contracts subject to the Service Contract Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is the victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

ALL OCCUPATIONS LISTED ABOVE RECEIVE THE FOLLOWING BENEFITS:

HEALTH & WELFARE: (Hawaii): $2.15 per hour, up to 40 hours per week, or $86.00 per week, or $372.67 per month for all employees on whose behalf the contractor provides health care benefits pursuant to the Hawaii prepaid Health Care Act. For those employees who are not receiving health care benefits mandated by the Hawaii prepaid Health Care Act, the new health and welfare benefit rate will be $4.98 per hour, up to 40 hours per week.

HEALTH & WELFARE (Hawaii) EO 13706: $1.74 per hour up to 40 hours per week, or $69.60 per week, or $301.60 per month for all employees on whose behalf the contractor provides health care benefits pursuant to the Hawaii prepaid Health Care Act. For those employees who are not receiving health care benefits mandated by the Hawaii prepaid Health Care Act, the new health and welfare benefit rate will be $4.57 per hour, up to 40 hours per week. *

*This rate is to be used only when compensating employees for performance on an SCA-covered contract also covered by EO 13706, Establishing Paid Sick Leave for Federal Contractors. A contractor may not receive credit toward its SCA obligations for any paid sick leave provided pursuant to EO 13706.

VACATION: 2 weeks paid vacation after 1 year of service with a contractor or successor, 3 weeks after 10 years, and 4 weeks after 15 years. Length of service includes the whole span of continuous service with the present contractor or successor, wherever employed, and with the predecessor contractors in the performance of similar work at the same Federal facility. (See 29 CFR 4.173)

HOLIDAYS: A minimum of eleven paid holidays per year: New Year's Day, Martin Luther King Jr.'s Birthday, Washington's Birthday, Memorial Day, Juneteenth National Independence Day, Independence Day, Labor Day, Columbus Day, Veterans' Day, Thanksgiving Day, and Christmas Day. (A contractor may substitute for any of the named holidays another day off with pay in accordance with a plan communicated to the employees involved.) (See 29 CFR 4.174)

THE OCCUPATIONS WHICH HAVE NUMBERED FOOTNOTES IN PARENTHESES RECEIVE THE FOLLOWING:

1) COMPUTER EMPLOYEES: This wage determination does not apply to any individual employed in a bona fide executive, administrative, or professional capacity, as defined in 29 C.F.R. Part 541. (See 41 C.F.R. 6701(3)). Because most Computer Systems Analysts and Computer Programmers who are paid at least $27.63 per hour (or at least $684 per week if paid on a salary or fee basis) likely qualify as exempt computer professionals under 29 U.S.C. 213(a)(1) and 29 U.S.C. 213(a)(17), this wage

determination may not include wage rates for all occupations within those job families. In such instances, a conformance will be necessary if there are nonexempt employees in these job families working on the contract.

Job titles vary widely and change quickly in the computer industry, and are not determinative of whether an employee is an exempt computer professional. To be exempt, computer employees who satisfy the compensation requirements must also have a primary duty that consists of:

(1) The application of systems analysis techniques and procedures, including consulting with users, to determine hardware, software or system functional specifications;

(2) The design, development, documentation, analysis, creation, testing or modification of computer systems or programs, including prototypes, based on and related to user or system design specifications;

(3) The design, documentation, testing, creation or modification of computer programs related to machine operating systems; or

(4) A combination of the aforementioned duties, the performance of which requires the same level of skills. (29 C.F.R. 541.400).

Any computer employee who meets the applicable compensation requirements and the above duties test qualifies as an exempt computer professional under both section 13(a)(1) and section 13(a)(17) of the Fair Labor Standards Act. (Field Assistance Bulletin No. 2006-3 (Dec. 14, 2006)). Accordingly, this wage determination will not apply to any exempt computer employee regardless of which of these two exemptions is utilized.

2) AIR TRAFFIC CONTROLLERS AND WEATHER OBSERVERS - NIGHT PAY & SUNDAY PAY: If you work at night as part of a regular tour of duty, you will earn a night differential and receive an additional 10% of basic pay for any hours worked between 6pm and 6am. If you are a full-time employed (40 hours a week) and Sunday is part of your regularly scheduled workweek, you are paid at your rate of basic pay plus a Sunday premium of 25% of your basic rate for each hour of Sunday work which is not overtime (i.e. occasional work on Sunday outside the normal tour of duty is considered overtime work).

** HAZARDOUS PAY DIFFERENTIAL **

An 8 percent differential is applicable to employees employed in a position that represents a high degree of hazard when working with or in close proximity to ordnance, explosives, and incendiary materials. This includes work such as screening, blending, dying, mixing, and pressing of sensitive ordnance, explosives, and pyrotechnic compositions such as lead azide, black powder and photoflash powder. All dry-house activities involving propellants or explosives. Demilitarization, modification, renovation, demolition, and maintenance operations on sensitive ordnance, explosives and incendiary materials. All operations involving re-grading and cleaning of artillery ranges.

A 4 percent differential is applicable to employees employed in a position that represents a low degree of hazard when working with, or in close proximity to ordnance, (or employees possibly adjacent to) explosives and incendiary materials which involves potential injury such as laceration of hands, face, or arms of the employee engaged in the operation, irritation of the skin, minor burns and the like; minimal damage to immediate or adjacent work area or equipment being used. All operations involving, unloading, storage, and hauling of ordnance, explosive, and incendiary ordnance material other than small arms ammunition. These differentials are only applicable to work that has been specifically designated by the agency for ordnance, explosives, and incendiary material differential pay.

** UNIFORM ALLOWANCE **

If employees are required to wear uniforms in the performance of this contract (either by the terms of the Government contract, by the employer, by the state or local law, etc.), the cost of furnishing such uniforms and maintaining (by laundering or dry cleaning) such uniforms is an expense that may not be borne by an employee where such cost reduces the hourly rate below that required by the wage determination. The Department of Labor will accept payment in accordance with the following standards as compliance:

The contractor or subcontractor is required to furnish all employees with an adequate number of uniforms without cost or to reimburse employees for the actual cost of the uniforms. In addition, where uniform cleaning and maintenance is made the responsibility of the employee, all contractors and subcontractors subject to this wage determination shall (in the absence of a bona fide collective bargaining agreement providing for a different amount, or the furnishing of contrary affirmative proof as to the actual cost), reimburse all employees for such cleaning and maintenance at a rate of $3.35 per week (or $.67 cents per day). However, in those instances where the uniforms furnished are made of ""wash and wear"" materials, may be routinely washed and dried with other personal garments, and do not require any special treatment such as dry cleaning, daily washing, or commercial laundering in order to meet the cleanliness or appearance standards set by the terms of the Government contract, by the contractor, by law, or by the nature of the work, there is no requirement that employees be reimbursed for uniform maintenance costs.

** SERVICE CONTRACT ACT DIRECTORY OF OCCUPATIONS **

The duties of employees under job titles listed are those described in the ""Service Contract Act Directory of Occupations"", Fifth Edition (Revision 1), dated September 2015, unless otherwise indicated.

** REQUEST FOR AUTHORIZATION OF ADDITIONAL CLASSIFICATION AND WAGE RATE, Standard Form 1444 (SF-1444) **

Conformance Process:

The contracting officer shall require that any class of service employee which is not listed herein and which is to be employed under the contract (i.e., the work to be performed is not performed by any classification listed in the wage determination), be classified by the contractor so as to provide a reasonable relationship (i.e., appropriate level of skill comparison) between such unlisted classifications and the classifications listed in the wage determination (See 29 CFR 4.6(b)(2)(i)). Such conforming procedures shall be initiated by the contractor prior to the performance of contract work by such unlisted class(es) of employees (See 29 CFR 4.6(b)(2)(ii)). The Wage and Hour Division shall make a final determination of conformed classification, wage rate, and/or fringe benefits which shall be paid to all employees performing in the classification from the first day of work on which contract work is performed by them in the classification. Failure to pay such unlisted employees the compensation agreed upon by the interested parties and/or fully determined by the Wage and Hour Division retroactive to the date such class of employees commenced contract work shall be a violation of the Act and this contract. (See 29 CFR 4.6(b)(2)(v)). When multiple wage determinations are included in a contract, a separate SF-1444 should be prepared for each wage determination to which a class(es) is to be conformed.

The process for preparing a conformance request is as follows:

1) When preparing the bid, the contractor identifies the need for a conformed occupation(s) and computes a proposed rate(s).

2) After contract award, the contractor prepares a written report listing in order the proposed classification title(s), a Federal grade equivalency (FGE) for each proposed classification(s), job description(s), and rationale for proposed wage rate(s), including information regarding the agreement or disagreement of the

authorized representative of the employees involved, or where there is no authorized representative, the employees themselves. This report should be submitted to the contracting officer no later than 30 days after such unlisted class(es) of employees performs any contract work.

3) The contracting officer reviews the proposed action and promptly submits a report of the action, together with the agency's recommendations and pertinent information including the position of the contractor and the employees, to the U.S. Department of Labor, Wage and Hour Division, for review (See 29 CFR 4.6(b)(2)(ii)).

4) Within 30 days of receipt, the Wage and Hour Division approves, modifies, or disapproves the action via transmittal to the agency contracting officer, or notifies the contracting officer that additional time will be required to process the request.

5) The contracting officer transmits the Wage and Hour Division's decision to the contractor.

6) Each affected employee shall be furnished by the contractor with a written copy of such determination or it shall be posted as a part of the wage determination (See 29 CFR 4.6(b)(2)(iii)).

Information required by the Regulations must be submitted on SF-1444 or bond paper.

When preparing a conformance request, the ""Service Contract Act Directory of Occupations"" should be used to compare job definitions to ensure that duties requested are not performed by a classification already listed in the wage determination. Remember, it is not the job title, but the required tasks that determine whether a class is included in an established wage determination. Conformances may not be used to artificially split, combine, or subdivide classifications listed in the wage determination (See 29 CFR 4.152(c)(1))."

**Exchange Deed and Agreement to Exchange (DHHL and DLNR) for TMK Nos. (4) 1-8-07:18 and 1-2-05:29**

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R-1020 STATE OF HAWAII
BUREAU OF CONVEYANCES
RECORDED
JAN 28, 2005 12:00 PM

Doc No(s) 2005-017422

/s/ CARL T. WATANABE
REGISTRAR OF CONVEYANCES

20 1/3 Z2

LAND COURT SYSTEM REGULAR SYSTEM

Return by Mail ( ) Pickup (X) To:

DEPT. OF LAND AND NATURAL RESOURCES
LAND DIVISION

Total Number of Pages: 13

LOD No. 28,462 Tax Map Key Nos. (4)1-8-07:18 &
1-2-02:29

EXCHANGE DEED AND AGREEMENT TO EXCHANGE

THIS INDENTURE, made and entered into this 20th day of January, 2005, by and between the STATE OF HAWAII, DEPARTMENT OF HAWAIIAN HOME LANDS, by its Hawaiian Homes Commission, whose address is Post Office Box 1879, Honolulu, Hawaii 96805, hereinafter referred to as "DHHL," and the STATE OF HAWAII, by its Board of Land and Natural Resources, whose address is 1151 Punchbowl Street, Honolulu, Hawaii 96813, hereinafter referred to as the "State";

WITNESSETH:

WHEREAS, DHHL is the owner of that certain parcel of land situate at Waimea, Kauai, Hawaii, containing an area of 25.686 acres;

WHEREAS, the State is the owner of that certain parcel of land situate at Hanapepe, Waimea, Kauai, Hawaii, containing an area of 5.153 acres;

WHEREAS, pursuant to the Task Force of Department of Hawaiian Home Lands on "Land Title Status and Related Claims" the



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

PRELIM. APPR'D.
Department of the
Attorney General

DHHL claims that 25.686 acres of Hawaiian Home Lands (TMK No. (4) 1-2-02:29) at Kekaha, Waimea, Kauai, Hawaii, was disposed of improperly by the State on August 20, 1964, under General Lease No. S-3852 to the United States of America for ammunition storage purposes; and

WHEREAS, the State agreed that the DHHL parcel lies within the 15,061 acres of land selected by DHHL by Joint Resolution signed on December 16, 1961; and

WHEREAS, this land exchange of State land with DHHL land will enhance DHHL's holdings and allow DHHL to proceed with the DHHL's program objective of building homes for its constituents; and

WHEREAS, the land of DHHL has an appraisal value of TWELVE THOUSAND FOUR HUNDRED AND NO/100 DOLLARS ($12,400.00), and the land of the State has an appraisal value of TWELVE THOUSAND FOUR HUNDRED AND NO/100 DOLLARS ($12,400.00).

NOW, THEREFORE, for and in consideration of the above and the covenants, agreements, and conditions as hereinafter set forth, the parties agree as follows:

1. DHHL Conveyance.

DHHL, for itself, its successors and assigns, and in consideration of the covenant of the State as hereinafter described and conveyance to DHHL of State's land described in Exhibit "C" and delineated on Exhibit "D" herein, does by these presents, grant, bargain, sell and convey unto the State, its successors and assigns, forever in fee simple, that certain parcel of land situate at Waimea, Kauai, Hawaii, designated as "Portion of the Hawaiian Home Land of Waimea," containing an area of 25.686 acres, all more particularly described in Exhibit "A" and delineated on Exhibit "B," both of which are attached hereto and made parts hereof, said exhibits being respectively, a survey description and survey map prepared by the Survey Division, Department of Accounting and General Services, State of Hawaii, designated C.S.F. No. 22,950 and dated February 24, 2000.

TO HAVE AND TO HOLD the same, together with all buildings and improvements thereon and all tenements, rights, easements, privileges and appurtenances thereunto belonging, or appertaining or held and enjoyed therewith, unto the State, its successors and assigns, forever.

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

AND, said DHHL, its successors and assigns, warrants that it is lawfully seized of this land in fee simple, that it has good right to grant and convey the same as aforesaid; that the same is free and clear of all liens and encumbrances; and that DHHL, and DHHL's successors and assigns shall WARRANT AND DEFEND the same unto the State, its successors and assigns, against any and all lawful claims and demands of all persons whomsoever, forever.

AND, the State covenants that this purchase of real property has had prior approval as to form, exceptions, and reservations by the Attorney General pursuant to section 26-7 and section 107-10, Hawaii Revised Statutes.

AND, the DHHL warrants that if any lender or governmental agency shall ever require testing to ascertain whether there has been any release of hazardous materials by the DHHL on or adjacent to the Property, as determined by the State in its sole discretion, then the DHHL shall be responsible for the reasonable costs thereof. In addition, the DHHL shall execute affidavits, representations and the like from time to time at the State's request concerning DHHL's best knowledge and belief regarding the presence of hazardous materials on the Property placed or released by the DHHL.

The DHHL agrees to indemnify, defend, and hold the State harmless, from any damages and claims resulting from the release of hazardous materials on or about the Property occurring while DHHL was in possession of the Property, or elsewhere if caused by DHHL or persons acting through or under DHHL.

For the purpose of this deed "hazardous material" shall mean any pollutant, contaminant, toxic substance, hazardous waste, hazardous material, hazardous substance, or oil, as all of the above are defined in or pursuant to the Resource Conservation and Recovery Act, as amended, the Comprehensive Environmental Response, Compensation, and Liability Act, as amended, the Federal Clean Water Act, Chapter 128D, Hawaii Revised Statutes, or any other federal, state, or local law, regulation, ordinance, rule, or bylaw, whether existing as of the date hereof, previously enforced, or subsequently enacted.

AND, DHHL shall conduct a Phase I environmental site assessment no later than thirty days before the effective date of this deed, and then conduct any and all abatement and disposal, as warranted by that Phase I environmental site assessment, all as satisfactory to the standards required by the Federal



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Department of the
Attorney General

Environmental Protection Agency, and the Department of Health, as determined by the State in its sole discretion.

2. State Agreement and Conveyance.

The State, for and in consideration of the foregoing conveyance to it, and pursuant to the provisions of Section 171-95(a)(4), Hawaii Revised Statutes, as amended, does hereby covenant that it shall convey to the DHHL, the DHHL's successors and assigns, by a separate instrument in the nature and form of a Land Patent Grant, SUBJECT, HOWEVER, to mineral (including geothermal) and water reservations, and easements and encumbrances of record, and furthermore does hereby grant, bargain, sell and convey unto DHHL, DHHL's successors and assigns, forever in fee simple, that parcel of land situate at Hanapepe, Waimea, Kauai, Hawaii, designated as "Portion of the Government (Crown) Land of Hanapepe, Lot 2-B," containing an area of 5.153 acres, subject, however, to a Perpetual Non-Exclusive Drainage Easement containing an area of 2,013 square feet, and subject, also, to Non-Exclusive Drainage Easement D-1 containing an area of 8,033 square feet, all more particularly described in Exhibit "C" and delineated on Exhibit "D," both of which are attached hereto and made parts hereof, said exhibits being respectively, a survey description and survey map prepared by the Survey Division, Department of Accounting and General Services, State of Hawaii, designated C.S.F. No. 23,181 and dated November 15, 2001.

SUBJECT, FURTHER, that the Department of Land and Natural Resources shall be responsible for the removal of all trash debris and abandoned vehicles found on the land identified as Tax Map Key No. (4)1-8-07:18 as of the effective date of this land exchange, and shall complete said removal by no later than one (1) year after the effective date of this land exchange.

TO HAVE AND TO HOLD the same, together with all buildings and improvements thereon, and all tenements, rights, easements, privileges, and appurtenances thereunto belonging, or appertaining or held and enjoyed therewith, unto the DHHL, the DHHL's successors and assigns forever, subject to the encumbrances noted herein.

AND DHHL for itself, DHHL's successors and assigns, covenants that the use and enjoyment of the lands received from the State shall not be in support of any policy which discriminates against anyone based upon race, creed, sex, color, national origin, religion, marital status, familial status,



PRELIM. APP'D.
Department of the
Attorney General

ancestry, physical handicap, disability, age or HIV (human immunodeficiency virus) infection.

IN WITNESS WHEREOF, the DHHL, has caused these presents to be executed this 4th day of November, 20 04, and the STATE OF HAWAII, by its Board of Land and Natural Resources, has caused the seal of the Department of Land and Natural Resources to be hereunto affixed and these presents to be executed this 20th day of January, 20 05, both effective as of the day, month, and year first above written.

DEPARTMENT OF HAWAIIAN HOME LANDS, STATE OF HAWAII

Approved by the Board of Land and Natural Resources at its meetings held on June 10, 1993, June 24, 1997, and April 12, 2001.

By _____
MICAH A. KANE, CHAIRPERSON
HAWAIIAN HOMES COMMISSION

DHHL

APPROVED AS TO FORM:

_____
Deputy Attorney General

Dated: 11/4/2004

STATE OF HAWAII

By _____
Chairperson
Board of Land and Natural Resources

STATE

APPROVED AS TO FORM:

_____
Deputy Attorney General

Dated: 11/21/03

APPROVED:

_____
United States Secretary of the Interior

PRELIM. APPR'D
Department of the Attorney General

69136_1



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

STATE OF HAWAII
SURVEY DIVISION
DEPT. OF ACCOUNTING AND GENERAL SERVICES
HONOLULU

C.S.F. No. 22,950

February 24, 2000

PORTION OF THE HAWAIIAN HOME LAND OF WAIMEA

Waimea, Kauai, Hawaii

Being portion of the Government Land of Waimea designated as Hawaiian Home Lands by Section 203 of the Hawaiian Home Commission Act, 1920 and as approved by the Department of Hawaiian Home Lands and the Department of Land and Natural Resources by Joint Resolution dated December 16, 1961.

Being also portion of Parcel 1 of Tract E-3 of the U.S. Military Reservation covered by General Lease No. S-3852 to the United States of America

Beginning at the northwest corner of this parcel of land and on the boundary between the Government Land of Waimea and the Hawaiian Home Land of Waimea, the coordinates of said point of beginning referred to Government Survey Triangulation Station "NOHILI", being 8009.49 feet South and 9806.81 feet East, thence running by azimuths measured clockwise from True South:-

| | | | | |
|---|---|---|---|---|
| 1. | 265° | 32' | 40" | 930.14 feet along the remainder of the Hawaiian Home Land of Waimea; |
| 2. | 359° | 05' | 10" | 722.14 feet along the remainder of the Hawaiian Home Land of Waimea; |
| 3. | 23° | 47' | 20" | 1397.98 feet along the remainder of the Hawaiian Home Land of Waimea; |

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Department of the
Attorney General

EXHIBIT "A"

4. 169° 00' 1965.09 feet along Parcel 2 of Tract E-3 of the U.S. Military Reservation to the point of beginning and containing an AREA OF 25.686 ACRES.

SURVEY DIVISION
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
STATE OF HAWAII

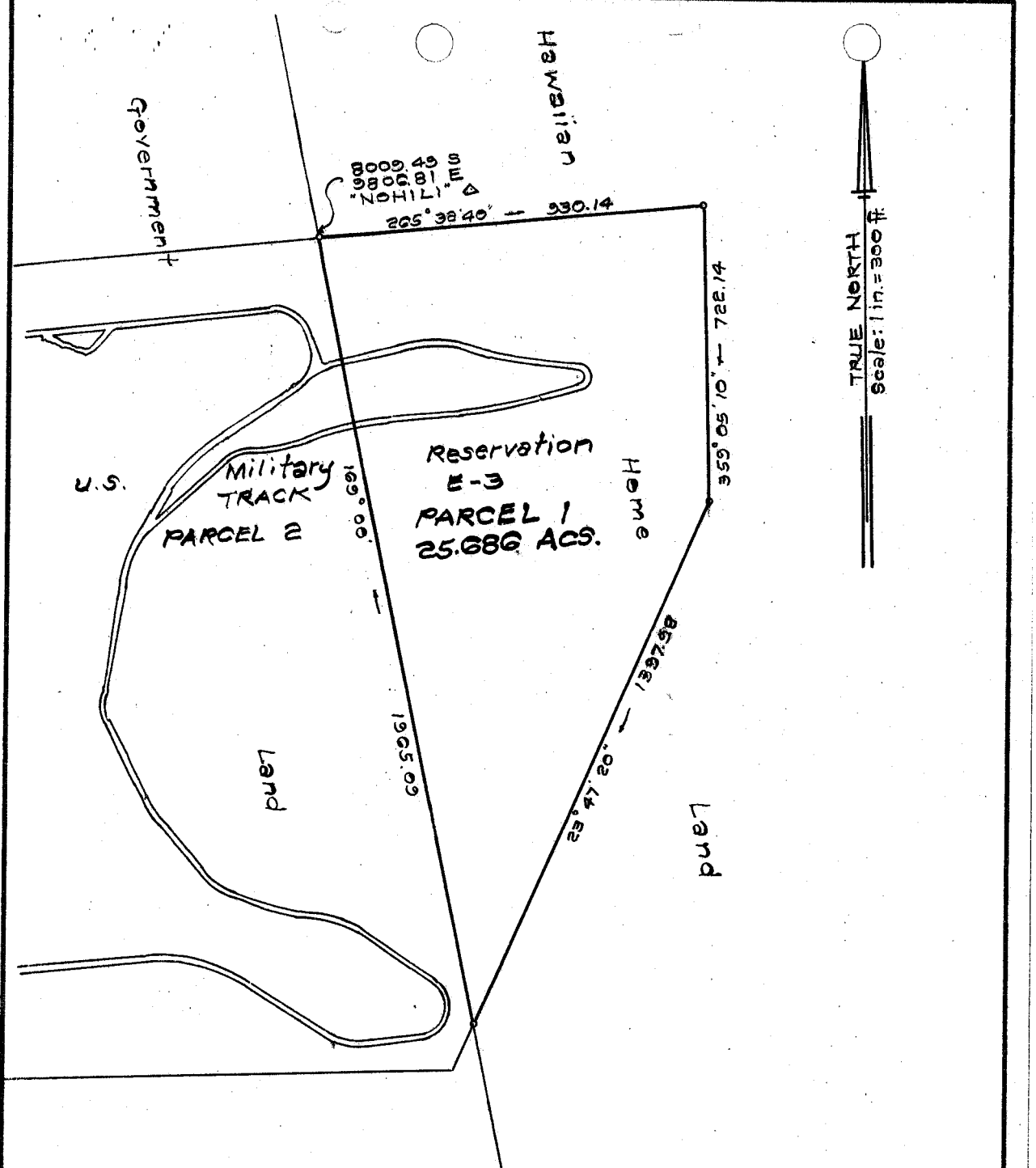
By: _____
Stanley T. Hasegawa
Licensed Land Surveyor No. 3632 gm

Reviewed and Approved by:

_____
Randall M. Hashimoto
State Land Surveyor

Compiled from H.S.S. Plat 3087-A, CSFs 13610, 14517, map filed in Cs. 4-55 and other Govt. Survey Records.
TMK:

PRELIM. APPR'D.
Department of the Attorney General




# PORTION OF THE HAWAIIAN HOME LAND OF WAIMEA

Waimea, Kauai, Hawaii
Scale: 1 inch = 300 feet

**REDUCED NOT TO SCALE**

JOB K-45(2000)
C. BK.

TAX MAP 1-2-02:29

C.S.F. NO. 22,950

SURVEY DIVISION
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
**STATE OF HAWAII**

S.T.H. Feb. 24, 2000

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Department of the
Attorney General



**EXHIBIT "B"**

STATE OF HAWAII
SURVEY DIVISION
DEPT. OF ACCOUNTING AND GENERAL SERVICES
HONOLULU

C.S.F. No. 23,181

November 15, 2001

PORTION OF THE
GOVERNMENT (CROWN) LAND OF HANAPEPE

LOT 2-B

Hanapepe, Waimea, Kauai, Hawaii

Being also the Buffer Zone situated along the west boundaries of Hanapepe Heights House Lots, Unit 2 and Parcels 3 and 7 of Grant S-15,713 to Housing Finance and Development Corporation.

Beginning at the southeast corner of this parcel of land and on the west side of Moi Road, the coordinates of said point of beginning referred to Government Survey Triangulation Station "PUOLU" being 7132.83 feet North and 4310.54 feet East, thence running by azimuths measured clockwise from True South:-

| | | | | | |
|---|---|---|---|---|---|
| 1. | 104° | 38' | 30" | 188.97 | feet along Lot 2-A of the Government (Crown) Land of Hanapepe; |
| 2. | 194° | 38' | 30" | 2992.00 | feet along Lot 2-A of the Government (Crown) Land of Hanapepe; |
| 3. | 284° | 38' | 30" | 73.00 | feet along L.P. Grant S-15,904 to the Department of Hawaiian Home Lands; |

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Department of the
Attorney General



EXHIBIT "C"

4. 14° 38' 30" 2942.00 feet along Parcels 3 and 7 of Grant S-15,713 to Housing Finance and Development Corporation and Hanapepe Heights House Lots, Unit 2;

5. 284° 38' 30" 124.91 feet along Hanapepe Heights House Lots, Unit 2;

6. Thence along the west side of Moi Road on a curve to the right with a radius of 365.00 feet, the chord azimuth and distance being:
24° 46' 23" 50.79 feet
to the point of beginning and containing an AREA OF 5.153 ACRES.

Subject, however, to a Perpetual Non-Exclusive Drainage Easement covered by Grant of Easement: State of Hawaii to the County of Kauai dated September 17, 2001 and recorded as Document No. 2001-146,800 (Land Office Deed 28,490). Said easement more particularly described as follows:

Beginning at the northeast corner of this easement and on the west boundary of Hanapepe Heights House Lots, Unit 2, the true azimuth and distance from the end of Course 3 of the above-described Lot 2-B of the Government (Crown) Land of Hanapepe being 14° 38' 30" 499.51 feet, thence running by azimuths measured clockwise from True South:-

1. 14° 38' 30" 49.50 feet along Parcel 7 of Grant S-15,713 to Housing Finance and Development Corporation and Hanapepe Heights House Lots, Unit 2;

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Department of the
Attorney General

| | | | | | |
|---|---|---|---|---|---|
| 2. | 59° | 38' | 30" | 40.00 | feet; |
| 3. | 149° | 38' | 30" | 35.00 | feet; |
| 4. | 239° | 38' | 30" | 75.00 | feet to the point of beginning and containing an AREA OF 2013 SQUARE FEET. |

Subject, also, to Non-Exclusive Drainage Easement D-1 in favor of the Department of Hawaiian Home Lands as shown on plan attached hereto and made a part hereof and more particularly described as follows:

Beginning at the northeast corner of this easement, being also the end of Course 3 of the above-described Lot 2-B of the Government (Crown) Land of Hanapepe, thence running by azimuths measured clockwise from True South:-

| | | | | | |
|---|---|---|---|---|---|
| 1. | 14° | 38' | 30" | 499.51 | feet along Parcels 3 and 7 of Grant S-15,713 to Housing Finance and Development Corporation; |
| 2. | 59° | 38' | 30" | 75.00 | feet; |
| 3. | 226° | 47' | | 71.49 | feet; |
| 4. | 194° | 38' | 30" | 492.01 | feet; |

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Department of the
Attorney General

5. 284° 38' 30" 15.00 feet along L.P. Grant S-15,904 to the Department of Hawaiian Home Lands to the point of beginning and containing an AREA OF 8033 SQUARE FEET.

SURVEY DIVISION
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
STATE OF HAWAII

By: _____
Stanley T. Hasegawa
Licensed Land Surveyor No. 3632 gm

Reviewed and Approved by:

_____
Randall M. Hashimoto
State Land Surveyor

Compiled from CSFs 5010, 9988, 12883, 13507, 16894, 20951, 21141, 22452, 22631 and Govt. Survey Records.
TMK: 1-8-07:18

PRELIM. APPR'D.
Department of the Attorney General

# PORTION OF THE GOVERNMENT (CROWN) LAND OF HANAPEPE
# LOT 2-B

Hanapepe, Waimea, Kauai, Hawaii

Scale: 1 inch = 300 feet

REDUCED NOT TO SCALE

TAX MAP 1-8-07:18

C.S.F. NO. 23,181

SURVEY DIVISION
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
STATE OF HAWAII

EXHIBIT "D"

E.T. Nov. 15, 2001

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# Appendix D

# Detailed List of Activities and Operational Elements Under Current Real Estate Agreements

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# D.1 List and Description of Navy Leaseholds and Easement Areas

List and Description of Leases and Easements at the Main Base

**Table D.1-1** includes a list of activities or operational elements for leaseholds and easements at the Main Base. Figures D-1 through D-3 depict the leaseholds and easement areas at the Main Base.

**Table D.1-1 Navy Leases and Easements on State Land at the Main Base**

| Name | TMK(s) | Grant Type | Activity/Operational Element | Size (ac) |
|---|---|---|---|---|
| Tract E-1 | 1-2-002-025 | Lease | Contains ordnance related facilities, and lands required to comply with Federal ATFP guidelines regarding setback distances around military bases. | 69.562 |
| Tract E-2<br>Tract E-2-A | 1-2-002-026 (por.), | Lease | Operations. Includes lands required to comply with Federal ATFP guidelines regarding setback distances around military bases. | 45.268<br>0.777 |
| Lot B | 1-2-002-001 (por.) | Lease | Encroachment. | 32.070 |
| Lot 1 | 1-2-002-001 (por.) | Lease | Drainage. | 47.937 |
| Lot 9 | 1-2-002-001 (por.) | Lease | Drainage. | 12.422 |
| Lot 3 | 1-2-002-001 (por.) | Lease | Access. | 0.232 |
| Lot 10 | 1-2-002-001 (por.) | Lease | Drainage. Includes lands required to facilitate the operation and maintenance of drainage ditches and pumps to protect adjacent lands from flooding. | 5.171 |
| Lot 13 | 1-2-002-001 (por.) | Lease | Access. Includes lands required to facilitate access in support of the operation and maintenance of drainage ditches and pumps to protect adjacent lands from flooding. | 0.434 |
| Lot 7 | 1-2-002-001 (por.) | Lease | Access. Includes Exclusive Roadway Access Easement. | 1.618 |
| Lot A-1 | 1-2-002-001 (por.) | Lease | Encroachment/Drainage. Includes Non-Exclusive Drainage Easement and Roadway Access Easement. | 176.16 |
| | | | **Main Base Leases Subtotal** | **391.651** |
| Easement 100<br>Easement 101<br>Easement 102<br>Easement 103 | 1-2-002-001 (por.) | Easement | Includes use of the lands for agricultural purposes to preclude encroachment on operations by development. | 122.011<br>1,841.53<br>3,150.093<br>8.691 |
| Easement 104<br>Easement 105 | 1-2-002-001 (por.) | Easement | Includes use of the lands for agricultural purposes to preclude encroachment on operations by development. | 9.489<br>17.875 |

| Name | TMK(s) | Grant Type | Activity/Operational Element | Size (ac) |
|---|---|---|---|---|
| Easement 107<br>Easement B<br>Easement B-1<br>Easement B-2<br>Easement B-3<br>Easement B-4 | 1-2-002-001 (por.) | Easement | Includes Non-Exclusive Roadway Access Easement. | 0.170<br>3.084<br>0.069<br>0.069<br>0.044<br>0.067 |
| Easement D | 1-2-002-001 (por.) | Easement | Electrical. | 1.363 |
| Easement E | 1-2-002-001 (por.) | Easement | Roadway. | 0.441 |
| Easement F | 1-2-002-001 (por.) | Easement | Cable. | 0.049 |
| Easement G Part 1 | 1-2-002-001 (por.) | Easement | Water. | 0.671 |
| Easement G Part 2 | 1-2-002-001 (por.) | Easement | Water. | 0.138 |
| Easement H | 1-2-002-001 (por.) | Easement | Roadway. | 0.028 |
| Easement A Part 1 | 1-2-002-001 (por.) | Easement | Access. | 2.141 |
| GHA Easement 1<br>GHA Easement 2 | 1-2-002-001 (por.), 1-2-002-024 (por.) | Easement | Ground hazard area. | 2,039.167<br>69.579 |
| | | | **Main Base Easements Subtotal** | **7,266.769** |
| | | | **Main Base Total Leases and Easements** | **7,658.42** |

*Key*: ATFP = Anti-terrorism/Force Protection; GHA=Ground Hazard Area; TMK = Tax Map Key.

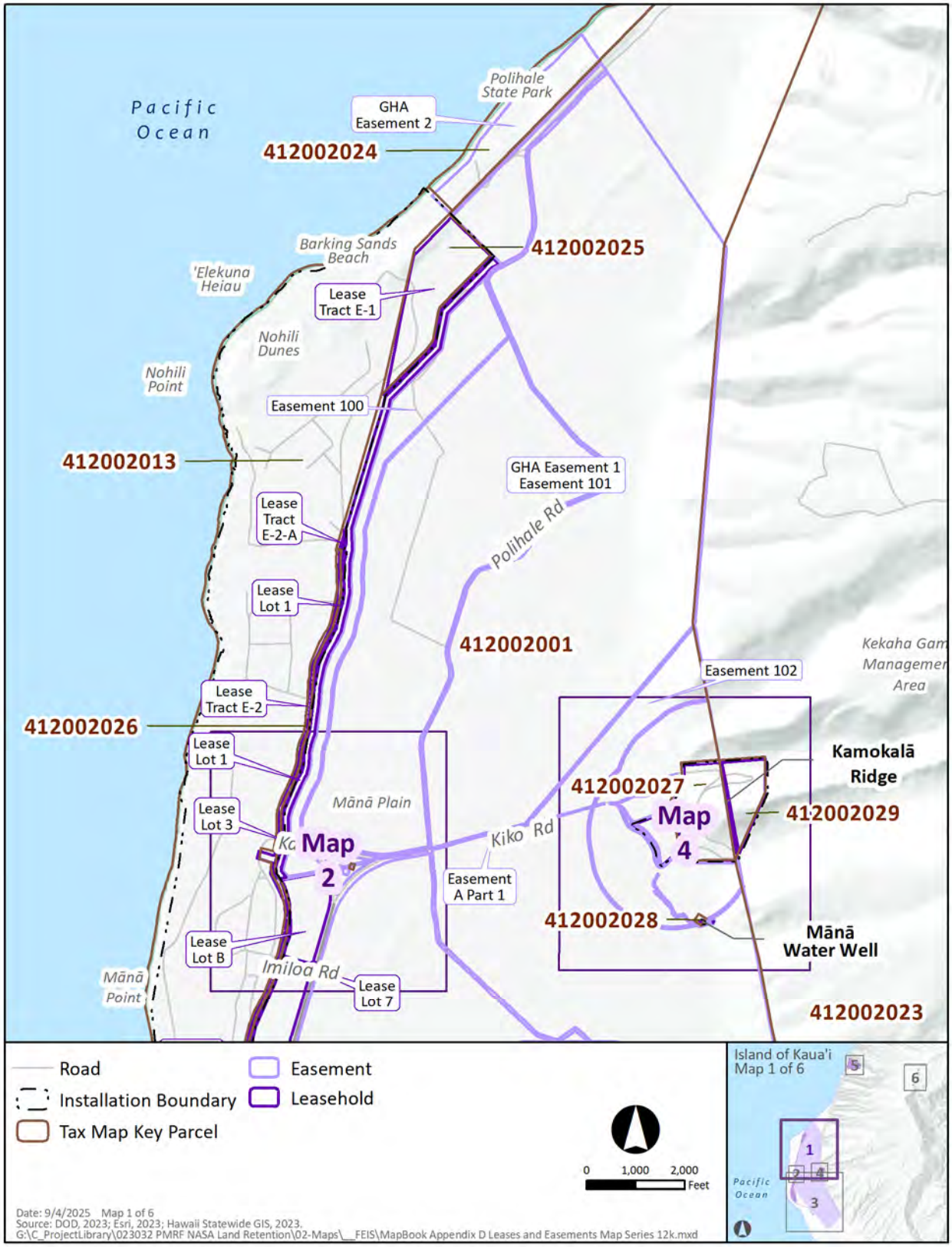



**Figure D-1 Leases and Easements at Main Base (Northern Part)**

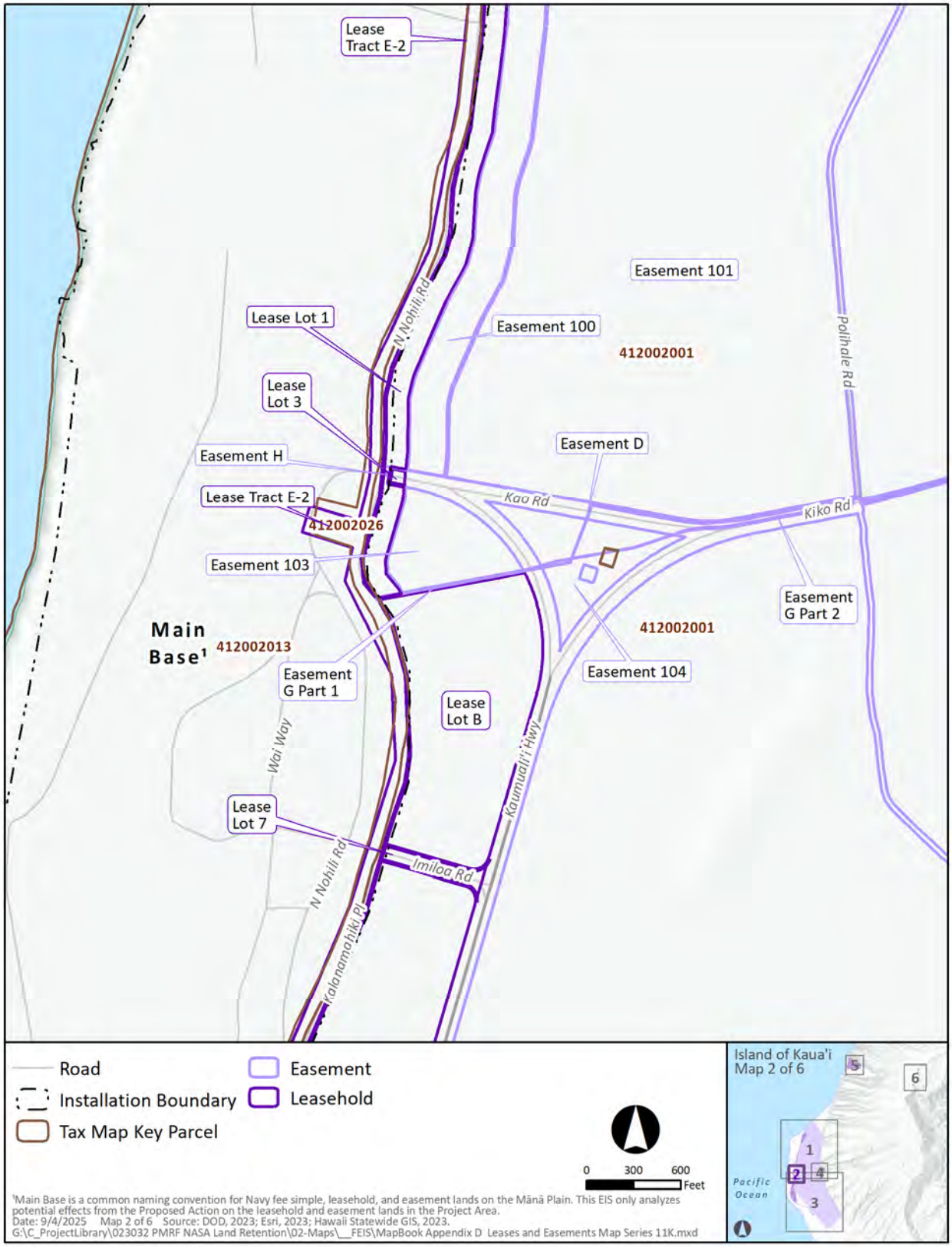



**Figure D-2 Leases and Easements at Main Base (Center)**

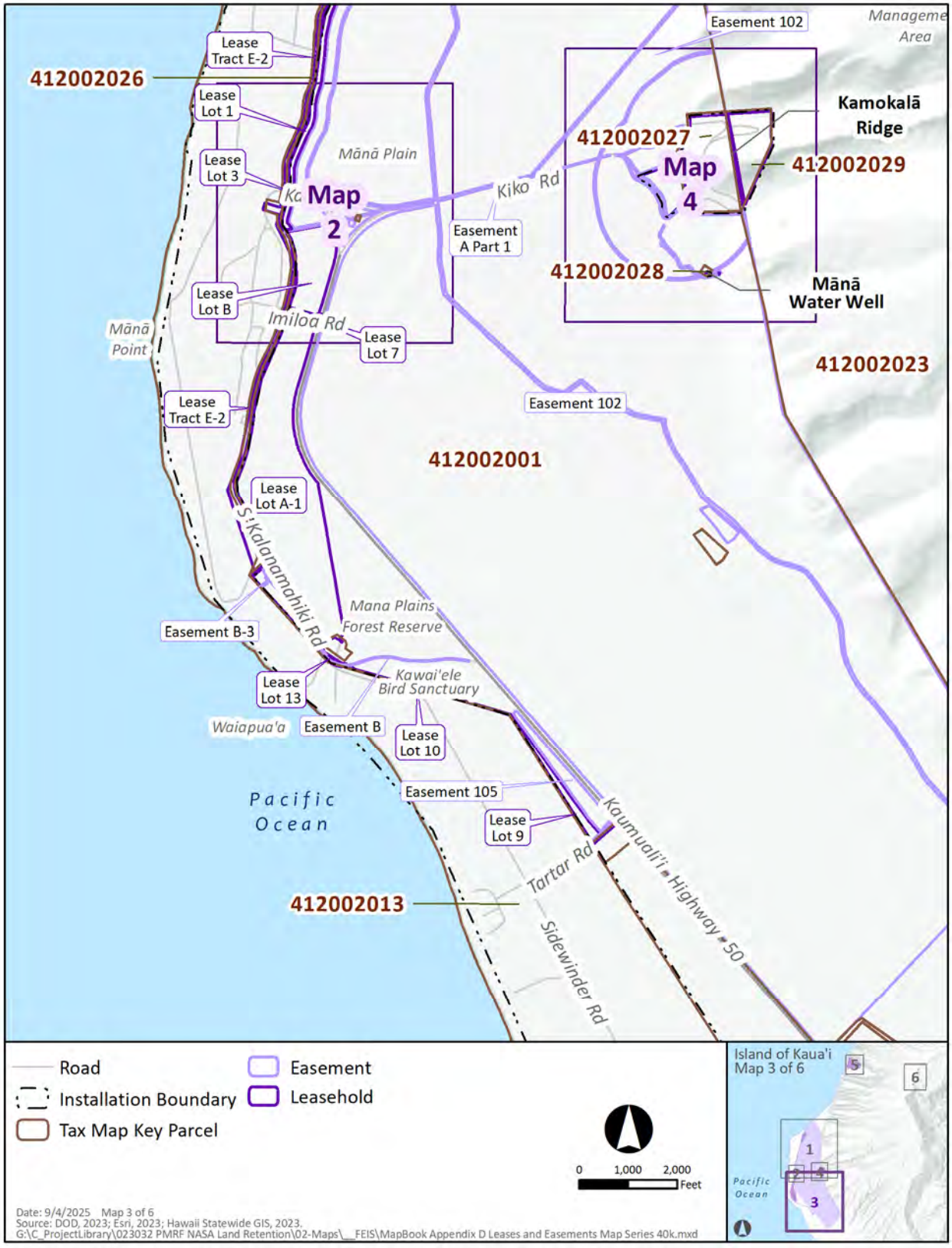



**Figure D-3 Leases and Easements at Main Base (Southern Part)**

List and Description of Leases and Easements at Kamokalā Ridge

**Table D.1-2** includes a list of activities or operational elements for leases and easements at Kamokalā Ridge. Figure D-4 depicts the leaseholds and easement areas at Kamokalā Ridge.

**Table D.1-2 Navy Leases and Easements on State Land at Kamokalā Ridge**

| Name | TMK(s) | Grant Type | Activity/Operational Element | Size (ac) |
|---|---|---|---|---|
| Tract E-3 Parcel 1<br>Tract E-3 Parcel 2 | 1-2-002-029, 1-2-002-027 | Lease | Magazines 1-12 are utilized for proper storage of explosives with effective flexibility to separate incompatible explosives. | 25.686<br>48.777 |
| Kamokalā Ridge Add | 1-2-002-001 (por.) | Lease | Magazines 12-13 are required for proper storage of explosives with effective flexibility to separate incompatible explosives. | 14.372 |
| | | | **Kamokalā Ridge Leases Subtotal** | **88.835** |
| Easement 106, ESQD Easement S-5604 | 1-2-002-001 (por.) | Easement | Restrictive Use. Includes use of the lands for agricultural purposes to preclude encroachment on operations by development. | 176.372 |
| Easement A Part 2 Por. A<br>Easement A Part 2 Por. B<br>Easement A Part 2 Por. C<br>Easement A Part 2 Por. D<br>Easement A Part 3 | 1-2-002-001 (por.) | Easement | Includes Non-Exclusive Roadway Access Easement. | 0.627<br>0.558<br>0.042<br>0.221<br>0.455 |
| Easement G Part 3<br>Easement G Part 4<br>Easement G Part 5<br>Easement G Part 6 | 1-2-002-001 (por.) | Easement | Water pipeline. | 0.186<br>0.153<br>0.006<br>0.021 |
| | | | **Kamokalā Ridge Easements Subtotal** | **178.641** |
| | | | **Kamokalā Ridge Total Leases and Easements** | **267.476** |

*Key*: TMK = Tax Map Key.

List and Description of Leases at the Mānā Water Well

**Table D.1-3** includes a list of leases at the Mānā Water Well. Figure D-4 depicts the leaseholds at Mānā Water Well.

**Table D.1-3 Navy Leases on State Land at the Mānā Water Well**

| Name | TMK(s) | Grant Type | Activity/Operational Element | Size |
|---|---|---|---|---|
| Tract E-4 | 1-2-002-028 | Lease | Infrastructure associated with well. | 0.264 |
| Lot 12 | 1-2-002-001 (por.) | Lease | Location of water well. | 0.026 |
| | | | **Water Well Total Leases** | **0.29** |

*Key*: TMK = Tax Map Key.

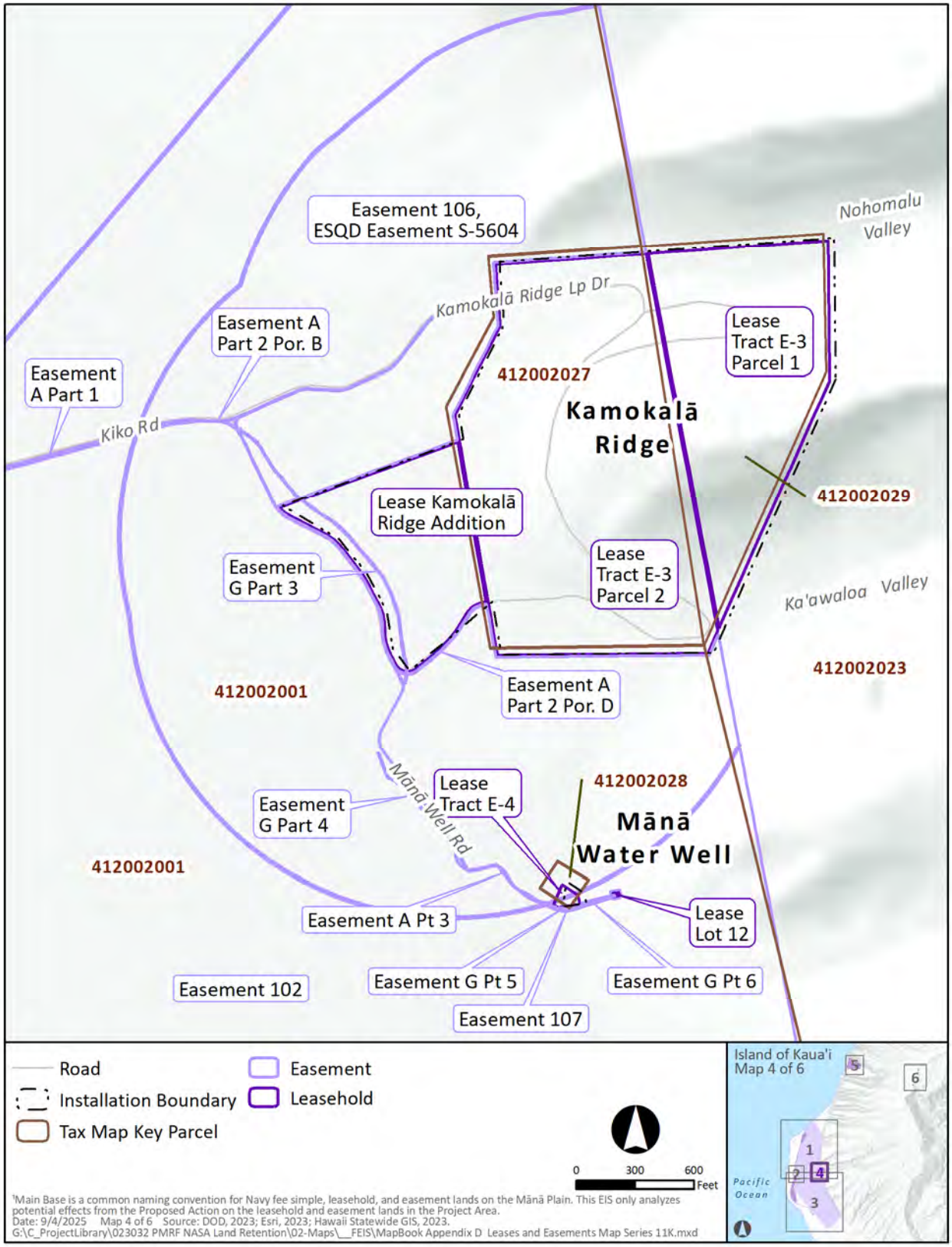



**Figure D-4 Leases and Easements at Kamokalā Ridge and Mānā Water Well**

List and Description of Leases at Miloliʻi Ridge

**Table D.1-4** includes a list of activities or operational elements for leases at Miloliʻi Ridge. Figure D-5 depicts the leaseholds at Miloliʻi Ridge.

**Table D.1-4 Navy Leases on State Land at Miloliʻi Ridge**

| Name | TMK(s) | Grant Type | Activity/Operational Element | Size (ac) |
|---|---|---|---|---|
| Miloliʻi Ridge No. 1<br>Miloliʻi Ridge No. 2<br>Miloliʻi Ridge No. 3 | 1-2-001-006 (por.) | Lease | Location of frequency shift reflector used with radar and telemetry stations. | 0.005<br>0.005<br>0.005 |
| | | | **Miloliʻi Ridge Total Leases** | **0.015** |

*Key*: TMK = Tax Map Key.

List and Description of Leases and Easements at Mākaha Ridge

**Table D.1-5** includes a list of activities or operational elements for leases and easements at Mākaha Ridge. Figure D-5 depicts the leaseholds and easement areas at Mākaha Ridge.

**Table D.1-5 Navy Leases and Easements on State Land at Mākaha Ridge**

| Name | TMK(s) | Grant Type | Activity/Operational Element | Size |
|---|---|---|---|---|
| Parcel A – Mākaha<br>Parcel B – Mākaha | 1-2-001-006 (por.) | Lease | The location has a guarded, secured entrance, a Frequency Interference Control Building, Maintenance Facility, Telemetry Building, a boresight tower, telemetry antennas, water tanks, a laboratory, radar sites, communications, a small power plant, antennas, and a helicopter landing pad. Most of these structures are on the top of the ridgeline and are in the line of sight of the Main Base. Unique location due to geography allowing coverage of both the base and ocean range. | 35.04<br>167.05 |
| Bore Site | 1-2-001-010 | Lease | Used to locate bore site targets for use with radar and telemetry stations. | 1.012 |
| | | | **Mākaha Ridge Lease Subtotal** | **203.102** |
| Parcel E Road | 1-2-001-006 (por.) | Easement | Includes Non-exclusive Roadway Access Easement. | 4.53 |
| Parcel D Road<br>Parcel C Road | 1-2-001-006 (por.), 1-4-001-014 (por.), 1-4-001-002 (por.), 1-4-001-013 (por.) | Easement | Includes Non-exclusive Roadway Access Easement. | 26.25<br>10.82 |
| Bore Site Access Road | 1-2-001-006 (por.) | Easement | Includes Non-exclusive Roadway Access Easement. | 0.613 |
| | | | **Mākaha Ridge Easement Subtotal** | **42.213** |
| | | | **Mākaha Ridge Total Leases and Easements** | **245.315** |

*Key*: TMK = Tax Map Key.

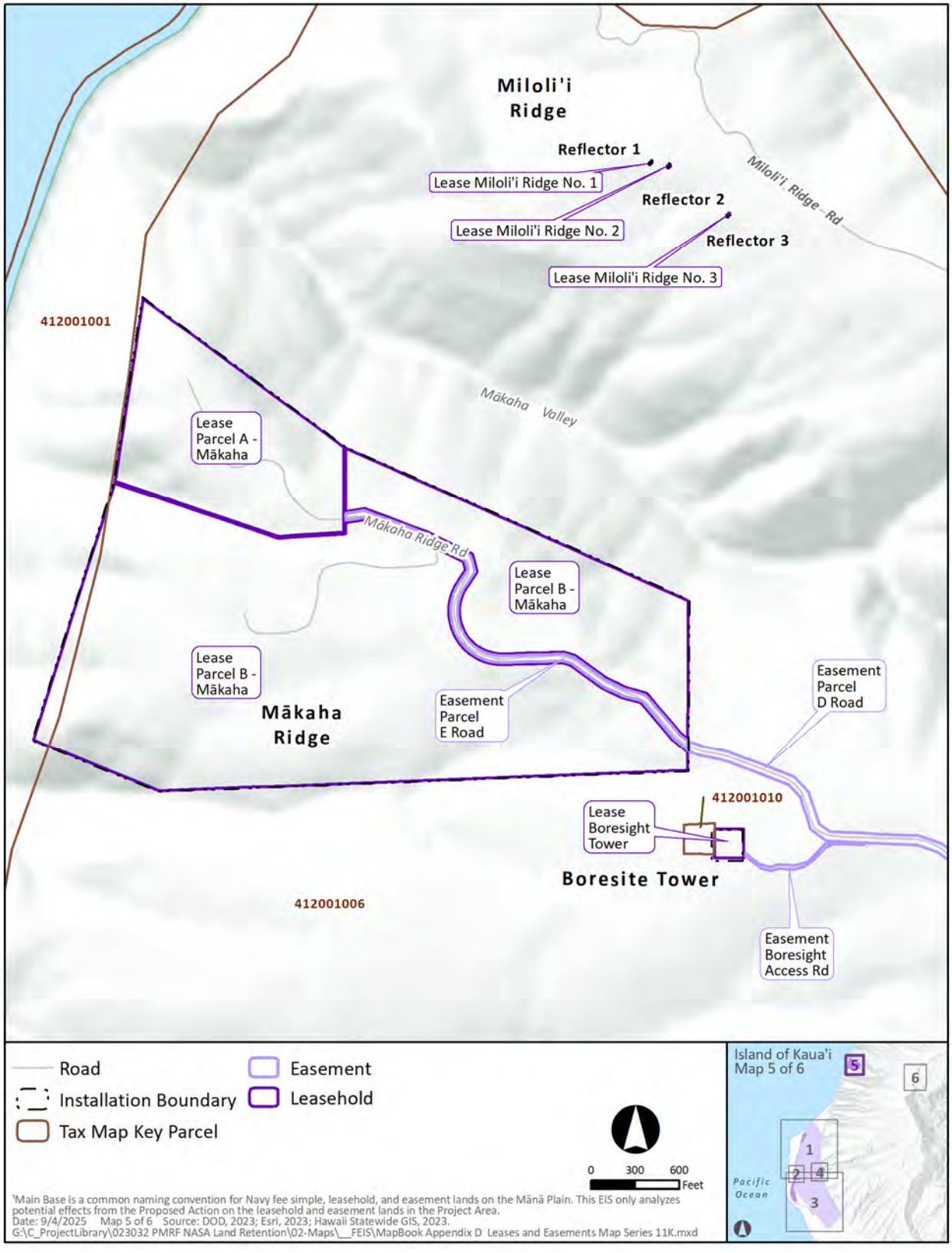



**Figure D-5 Leases and Easements at Mākaha Ridge and Miloli'i Ridge**

## D.2 List and Description of NASA Leaseholds and Easement Areas

**Table D.2-1** includes a list of activities or operational elements for leases and easements at Kōkeʻe Park Geophysical Observatory (KPGO). Figure D-6 depicts the leaseholds, easement areas, and the Navy use permit area at KPGO.

**Table D.2-1 NASA Leases and Easements on State Land at KPGO**

| Name | TMK(s) | Grant Type | Activity/Operational Element | Size |
|---|---|---|---|---|
| Sites A – E (6 parcels) | 1-4-001:013 (por.) | Lease, Easement | Facility housing radar antenna. Unique location due to geography allowing coverage of both the base and ocean range. | 22.900 |

*Key*: TMK = Tax Map Key.

## D.3 General Description of Navy and NASA Real Estate Agreements with DLNR

**Tables D.3-1** and **D.3-2** provide the location, number, size, type, expiration, and general type of associated actions for the existing leases and easements. Full lease agreements are found in Appendix C.

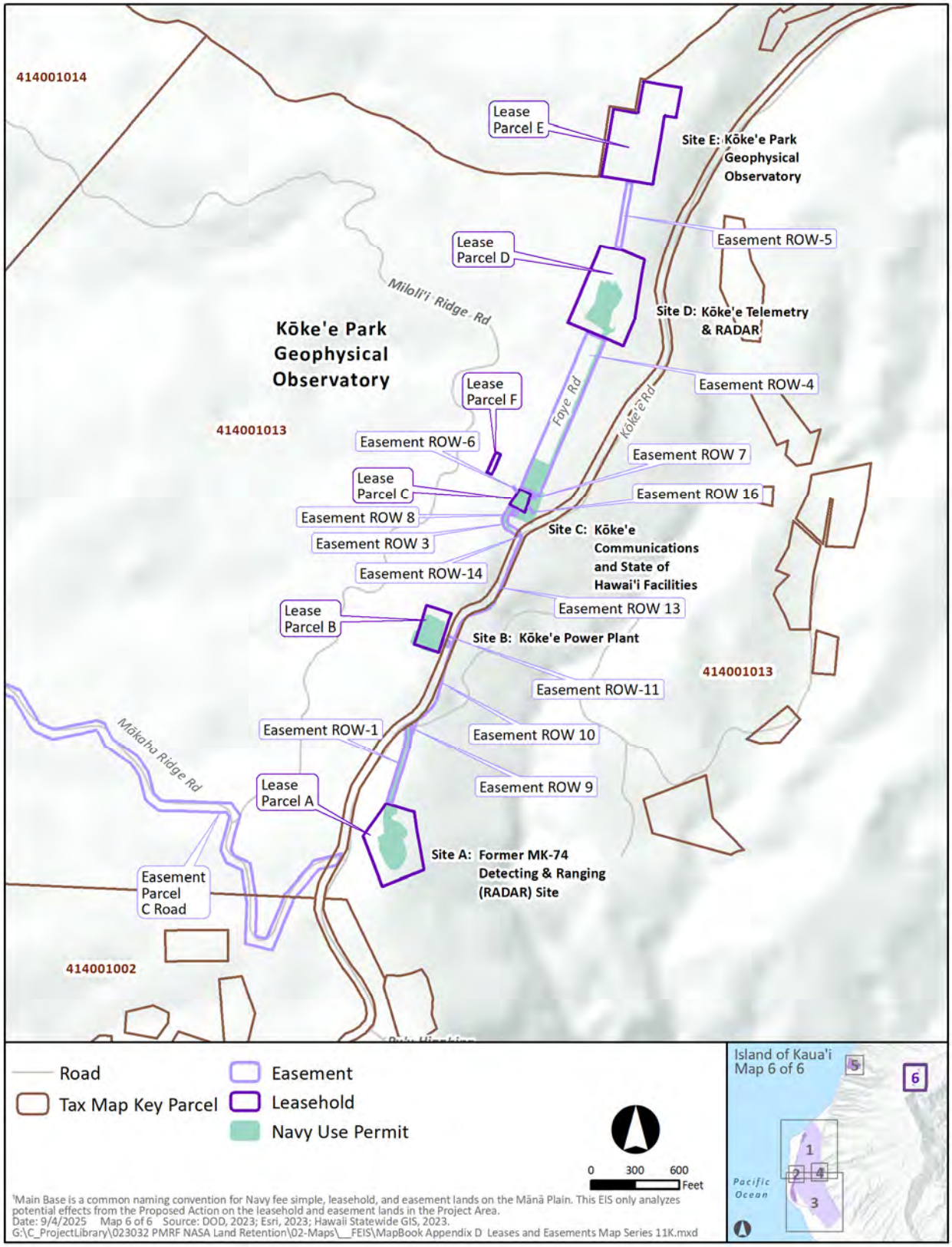
**Table D.3-1 Navy Leases on Kauaʻi with State of Hawaiʻi**

| Site Name | City | Size (acres) | Type | Lessor | Expiration Fiscal Year | Renewal Fiscal Year |
|---|---|---|---|---|---|---|
| PMRF Lease S-3852 | Kekaha | 480.78 | Lease | State of HI | 2029 | 2029 |
| PMRF Lease S-3852 | Kekaha | 10.18 | Easement | State of HI | 2029 | 2029 |
| PMRF Mākaha Ridge Lease S-3952 | Kekaha | 203.10 | Lease | State of HI | 2030 | 2030 |
| PMRF Mākaha Ridge Lease S-3952 | Kekaha | 7722.21 | Easement | State of HI | 2030 | 2030 |
| PMRF Miloliʻi Ridge Easement S-5352 | Kekaha | 2108.75 | Easement | State of HI | 2030 | 2030 |
| PMRF Miloliʻi Ridge Easement S-5804 | Kekaha | 5326.23 | Easement | State of HI | 2029 | 2029 |
| PMRF Easement 106, ESQD Easement S-5604 | Kekaha | 176.372 | Easement | State of HI | 2029 | 2029 |

*Source*: Draft Report to Congress on the Department's Efforts to Renew Department of Defense Leases and Easements in Hawaiʻi, September 2023.

**Table D.3-2 NASA Leases and Easements on Kauaʻi with State of Hawaiʻi**

| Site Name | City | Size (acres) | Type | Lessor | Expiration Fiscal Year | Purpose and Associated Actions |
|---|---|---|---|---|---|---|
| Kōkeʻe Park Geophysical Observatory (6 parcels) | Waimea | 23 | Lease, Easement | State of HI | 2030 | Collect geodetic data, contribute to daily measurements of the Earth's orientation in space and rotation. |




[1]Main Base is a common naming convention for Navy fee simple, leasehold, and easement lands on the Mānā Plain. This EIS only analyzes potential effects from the Proposed Action on the leasehold and easement lands in the Project Area.
Date: 9/4/2025 Map 6 of 6 Source: DOD, 2023; Esri, 2023; Hawaii Statewide GIS, 2023.
G:\C_ProjectLibrary\023032 PMRF NASA Land Retention\02-Maps__FEIS\MapBook Appendix D Leases and Easements Map Series 11K.mxd

**Figure D-6 Leases and Easements at Kōke'e Park Geophysical Observatory**

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# Appendix E

# Regulatory Setting, Navy and NASA Correspondence with Department of Land and Natural Resources, Office of Conservation and Coastal Lands, Coastal Zone Management Act Consistency Determination, and CZM Consistency Conditional Concurrence

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The United States (U.S.) Department of the Navy and NASA have jointly prepared this Environmental Impact Statement (EIS) based upon federal and state laws, statutes, regulations, and policies pertinent to the implementation of the Proposed Action. This appendix (E) lists the applicable principal federal, state, and local laws and regulations; identifies the names of the regulatory agencies responsible for their implementation; describes the relevance to the proposed action; identifies the relevant resources from the EIS; and describes briefly how compliance with these laws and regulations would be accomplished.

Table E-1 identifies federal laws, statutes, regulations, and policies applicable to the Project. Table E-2 identifies state laws, statutes, regulations, and policies as well as county-level ordinances and guidance relevant to the State's action to effectuate any of the action alternatives in the EIS.

**Table E-1 Federal Regulatory Setting**

| Agency | Federal Laws; Land Use Plans; Policies; Controls; and Guidance | Relevance to the Proposed Action | Relevant Resource(s) | Status of Compliance |
|---|---|---|---|---|
| AASHTO | AASHTO 7th Edition Highway and Street Design "Green Book" | The 7th Edition Highway and Street Design is a comprehensive manual that provides guidance for highway and street design. | Transportation | The Proposed Action would be implemented in accordance with these standards. |
| CEQ and Office of Science and Technology Policy | EO 13840 Ocean Policy to Advance the Economic, Security, and Environmental Interest of the U.S. | Ensure protection, maintenance, and restoration of the health of the ocean. | Water Resources; Biological Resources | The Proposed Action would be implemented in accordance with this Order. |
| CNRH | IAP | The IAP is a guidance document that provides aesthetic and functional direction in site design, architecture, landscape architecture, and signage for new development and renovation efforts. The IAP helps to protect and preserve the installation's natural and historic integrity and ensures a unified appearance for each installation and continuity across the region. | Visual Resources | This EIS was developed in accordance with the guidance in this plan. |
| Department of the Interior | NAGPRA Section 3001 of Title 25, U.S.C. (NAGPRA cultural items) | Governs the disposition of Native Hawaiian human remains and cultural items. It applies to cultural items and human remains discovered on federal or Tribal lands. | Cultural Resources, Archaeological and Historic Resources | This EIS was developed in accordance with this guidance. |
| DoD | DoD Instruction 4715.06 – Environmental Compliance in the U.S. | Establishes policies, assigns responsibilities, and provides procedures for achieving and maintaining environmental compliance in the U.S. | Hazardous Materials and Waste | The Proposed Action would be implemented in accordance with these standards. |
| DoD | DoD Instruction 4715.16 – Cultural Resources Management | Establishes policy, assigns responsibilities, and provides procedures for achieving and maintaining environmental compliance in the U.S. | Cultural Resources, Archaeological and Historic Resources | This EIS was developed in accordance with this guidance. |
| DoD | DoD Instruction 6050.05 – DoD Hazard Communication Program | Manages hazardous substances to minimize health and environmental risks and operational costs. Provides known hazard information to military personnel and civilian employees using hazardous chemicals, including engineered nanomaterials. | Hazardous Materials and Waste | The Proposed Action would be implemented in accordance with these standards. |
| DoD | NAVSUP Publication 573 (DLA Instruction 4145.11) – Storage and Handling of Hazardous Materials | Procedures for the receipt, storage, and handling of hazardous materials and wastes by DoD components, installation, and activities. | Hazardous Materials and Waste | The Proposed Action would be implemented in accordance with these standards. |

| Agency | Federal Laws; Land Use Plans; Policies; Controls; and Guidance | Relevance to the Proposed Action | Relevant Resource(s) | Status of Compliance |
|---|---|---|---|---|
| DoD | Defense Explosives Safety Regulation 6055.09 | Establishes explosives safety standards for the DoD that are designed to manage explosives-related risk associated with DoD operations and installations by providing protection criteria. | Hazardous Materials and Waste | The Proposed Action would be implemented in accordance with these standards. |
| DoD | DoD Directive 4710.03, Consultation with NHOs (October 25, 2011, incorporating Change 1, August 31, 2018) | Provides policy, prescribes procedures, and assigns responsibilities for the management of archaeological and historic resources located in and on waters and lands under DoD control. It is the policy of DoD to integrate historic preservation requirements with the planning and management of activities under DoD control. | Cultural Resources | Consultation with NHOs, if required for compliance with NHPA according to the PA, would be conducted in accordance with this directive. |
| DoD | Danger Zone and Restricted Area Regulations (33 CFR part 334) | Hazardous materials and wastes exposure, including MEC. | Public Health and Safety | The Proposed Action would be implemented in accordance with these standards. |
| DoD | Final Military Munitions Rule (40 CFR part 266, Subpart M) | Hazardous materials and waste exposure, including MEC. | Public Health and Safety | The Proposed Action would be implemented in accordance with these standards. |
| DoD | Naval Ordinance Safety and Security Activity Instruction 8020.15E. Explosives Safety Review, Oversight, and Verification of Munitions Responses | Munition exposure. | Public Health and Safety | The Proposed Action would be implemented in accordance with these regulations. |
| DoD | UFC | UFC documents "provide planning, design, construction, sustainment, restoration, and modernization criteria, and apply to the Military Departments, the Defense Agencies, and the DoD Field Activities." | Transportation | The Proposed Action would be implemented in accordance with these regulations. |
| EPA | 40 CFR section 125.94 | Compliance with BTA Standards. | Water Resources | The Proposed Action would be implemented in accordance with these standards. |
| EPA | National Primary Drinking Water Regulations 40 CFR part 141 | Affects management of water sources by way of setting standards for drinking water quality. Groundwater quality and quantity are regulated under several statutes and regulations, including the SDWA. | Water Resources; Public Health and Safety | The Proposed Action would be implemented in accordance with these regulations. |

| Agency | Federal Laws; Land Use Plans; Policies; Controls; and Guidance | Relevance to the Proposed Action | Relevant Resource(s) | Status of Compliance |
|---|---|---|---|---|
| EPA | CWA section 402, NPDES Program (42 U.S.C. section 7401 et seq.) *includes NPDES and SWPPP | Regulates discharges of pollutants from point source to WOTUS and requires compliance with standards, limitations, and regulations. NPDES permits authorize discharges of stormwater associated with construction and industrial activities. | Hazardous Materials and Waste; Water Resources | The Proposed Action would be implemented in accordance with these standards. |
| EPA | CWA section 401 (33 U.S.C. section 1341; 40 CFR sections 121.2(a)(3), (4), and (5) Water Quality Certification) | Any federally authorized activity that may result in any discharge into state waters requires a Water Quality Certification. | Biological Resources; Water Resources; Public Health and Safety | The Proposed Action would be implemented in accordance with these standards. |
| EPA | The SDWA 42 U.S.C. sections 300f–300j et seq. | SDWA is a federal law that protects public drinking water supplies throughout the U.S.; under the SDWA, EPA sets standards for drinking water quality. | Water Resources | The Proposed Action would be implemented in accordance with these regulations. |
| EPA | Energy Independence and Security Act; PL 110–140 section 438 | Federal agencies are required to reduce stormwater runoff from federal development and redevelopment projects to protect water resources. | Water Resources; Public Health and Safety | The Proposed Action would be implemented in accordance with these regulations. |
| EPA | 40 CFR part 763 as relates to hazardous waste management | Hazardous materials and wastes exposure. The EPA controls hazardous waste including generation, transportation, treatment, storage, and disposal of hazardous waste. | Hazardous Materials and Waste; Public Health and Safety | The Proposed Action would be implemented in compliance with this Act. |
| EPA | Toxic Substances and Disease Registry – CERCLA 42 U.S.C. sections 9601–9675; 40 CFR parts 300–311; 40 CFR part 373 | Hazardous materials and waste exposure. | Public Health and Safety | The Proposed Action would be implemented in compliance with this Act. |
| EPA | Pollution Prevention Act of 1990 (42 U.S.C. sections 13101–13109) | Hazardous materials and waste exposure. | Public Health and Safety | The Proposed Action would be implemented in accordance with these regulations. |
| EPA | Emergency Planning and Community Right-to-Know Act of 1986 (42 U.S.C. section 11001 et seq.; 40 CFR parts 350–372) | Hazardous materials and wastes exposure. Helps communities plan for chemical emergencies and requires industry to report on the storage, use, and releases of hazardous substances to federal, state, and local government. | Hazardous Materials and Waste; Public Health and Safety | The Proposed Action would be implemented in accordance with this Act. |
| EPA | Federal Insecticide, Fungicide, and Rodenticide Act of 1996 (7 U.S.C. section 136 et seq.) | Hazardous materials and waste exposure. | Public Health and Safety | The Proposed Action would be implemented in accordance with these regulations. |

| Agency | Federal Laws; Land Use Plans; Policies; Controls; and Guidance | Relevance to the Proposed Action | Relevant Resource(s) | Status of Compliance |
|---|---|---|---|---|
| EPA | Federal Environmental Pesticide Control Act of 1972 (7 U.S.C. sections 136–136y) | Hazardous materials and waste exposure. | Public Health and Safety, Hazardous Materials and Waste | The Proposed Action would be implemented in accordance with these regulations. |
| EPA | Federal Facilities Compliance Act of 1992 (PL 102–386) | Hazardous materials and waste exposure. | Public Health and Safety | The Proposed Action would be implemented in accordance with these regulations. |
| EPA | Noise Control Act of 1972 (PL 92–574, 42 U.S.C. section 4901 et seq.) and Amendments of 1978 (PL 95–609) | Establishes a national policy to promote an environment for all Americans free from noise that jeopardizes their health and welfare. | Public Health and Safety | The Proposed Action would be implemented in compliance with this Act. |
| EPA | 40 CFR part 50 | NAAQS. | Air Quality and Greenhouse Gases | The Proposed Action would not cause a violation of the NAAQS. |
| EPA | 40 CFR part 60 | New Source Performance Standards. | Air Quality and Greenhouse Gases | The Proposed Action would be implemented in accordance with these standards. |
| EPA | 40 CFR parts 61–63 | NESHAPs. | Air Quality and Greenhouse Gases | The Proposed Action would be implemented in accordance with these standards. |
| EPA | 40 CFR part 70 | State Operating Permits. | Air Quality and Greenhouse Gases | The Proposed Action would be implemented in accordance with these requirements. |
| EPA | 40 CFR part 93.158 | Federal actions are required to conform with the approved SIP for those areas of the U.S. designated as nonattainment or maintenance areas for any criteria air pollutant under the CAA. | Air Quality and Greenhouse Gases | The Proposed Action would be implemented in accordance with these requirements. |
| EPA | The Pollution Prevention Act, 42 U.S.C. section 13101 et seq. | The Pollution Prevention Act focuses on reducing the amount of pollution through changes in production, operation, and raw materials use. | Hazardous Materials and Waste | The Proposed Action would be implemented in compliance with this Act. |
| EPA; DoD | CWA (33 U.S.C. sections 1313, 1314, 303(d), 305(b) and most recent 304(a) list) | Mitigates impacts to surface water from construction activities and discharge to navigable waters. | Hazardous Materials and Wastes; Water Resources | The Proposed Action would be implemented in accordance with these regulations. |
| Federal Law | CWA (33 U.S.C. section 1344) | CWA establishes the basic structure for regulating discharges of pollutants into the WOTUS and sets quality standards for surface waters. | Water Resources | This EIS was developed in accordance with this guidance. |

| Agency | Federal Laws; Land Use Plans; Policies; Controls; and Guidance | Relevance to the Proposed Action | Relevant Resource(s) | Status of Compliance |
|---|---|---|---|---|
| Federal Law | NHPA, as amended (54 U.S.C. section 300101 et seq.) | Establishes national policy for the preservation of historic properties. Section 106 of the NHPA requires federal agencies to consider the effects of proposed undertakings, mitigate adverse effects of projects, and afford the ACHP and interested parties the opportunity to comment. | Cultural Resources | Compliance with the NHPA will be conducted according to the 2012 CNRH PA and any applicable amendments. |
| Federal Law | Protection of Historic Properties, 36 CFR section 800 | Provides procedures for federal actions subject to Section 106 of the NHPA. | Archaeological and Historic Resources | This EIS was developed in accordance with this guidance. |
| Federal Law | NAGPRA of 1990 (25 U.S.C. sections 3001–3013) | Provides for the protection and repatriation of Native Hawaiian human remains and cultural items discovered on federal or Tribal lands or currently curated by federal or federally assisted curation facilities. | Cultural Resources | The Proposed Action would be implemented in accordance with this law and its implementing regulation. |
| Federal Law | Archaeological Resources Protection Act of 1979 (16 U.S.C. sections 470aa-470ll) | Provides for the protection of archaeological resources and sites on public lands by requiring permits from the federal land manager for excavation or removal of archaeological resources. | Cultural Resources | The Proposed Action would be implemented in accordance with this law and its implementing regulation. |
| Federal Law | NEPA (42 U.S.C. section 4331); Fiscal Responsibility Act of 2023, PL 118-5 | NEPA of 1969 orders the Federal Government to utilize a systematic and interdisciplinary approach to analyze decision making and planning for major federal actions that may have an impact on the environment. | All Resources | This EIS has been prepared in accordance with federal and state laws including: NEPA of 1969 (42 U.S.C. section 4321 et seq.). The Fiscal Responsibility Act of 2023 was used to determine the joint status of NASA and Navy for the preparation of this EIS. |
| FEMA | Floodplain Management, EO 11988 | Requires federal agencies to avoid long- and short-term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct and indirect support of floodplain development. Flood potential of a site is usually determined by the 100-year floodplain, which is defined as the area that has a 1 percent chance of inundation by a flood event in a given year. | Water Resources | The Proposed Action would be implemented in accordance with this Order. |
| FEMA | The National Flood Insurance Act 42 U.S.C. section 4001 et seq. | The National Flood Insurance Act establishes the NFIP, a voluntary floodplain management program for communities that is implemented by FEMA. | Water Resources | The Proposed Action would be implemented in accordance with this regulation. |

| Agency | Federal Laws; Land Use Plans; Policies; Controls; and Guidance | Relevance to the Proposed Action | Relevant Resource(s) | Status of Compliance |
|---|---|---|---|---|
| FHWA | MUTCD for Streets and Highways, 11th Edition | Defines national standards for traffic control devices on streets, highways, and site roadways open to public travel. | Transportation | The Proposed Action would be implemented in accordance with this guideline. |
| NASA | NASA's Procedures for Implementing NEPA, 14 CFR part 1216 et seq. | Regulations governing NASA's compliance with NEPA and CEQ's 40 CFR parts 1500–1508. | All Resources | The Proposed Action would be implemented in accordance with these regulations. |
| NASA | NASA Environmental Management, NPD 8500.1 | NASA's environmental management policy. | All Resources | The Proposed Action would be implemented in accordance with these policies. |
| NASA | NASA NEPA Management Requirements, NPR 8580.1 | Establishes procedures and responsibilities for complying with requirements of NEPA, CEQ's implementing regulations, EO 12114 – Environmental Effects Abroad of Major Federal Actions, and NPD 8500.1. | All Resources | The Proposed Action would be implemented in accordance with these requirements. |
| Navy | PMRF INRMP 2023 | The INRMP, developed in accordance with the Sikes Act, establishes a framework for natural resource management at PMRF. It serves as a repository for natural resource information, provides guidance on how PMRF is to meet compliance requirements, and sets management goals, required actions, and resources necessary to protect and manage the installation's natural resources. | Biological Resources | This EIS was developed in accordance with the guidance. |
| Navy | PMRF Installation Development Plan | Land use constraints. | Land Use and Access | This EIS was developed in accordance with the guidance in this plan. |
| Navy | OPNAVINST 11010.40A | Establishes an encroachment management program to ensure operational maintenance that has direct bearing on land use planning on installations. | Land Use and Access | The Proposed Action would be implemented in accordance with this policy. |
| Navy | OPNAVINST 11010.36C | Provides guidance administering the AICUZ program, which recommends land uses that are compatible with noise levels, accident potential, and obstruction clearance criteria for military airfield operations. | Land Use and Access | The Proposed Action would be implemented in accordance with this policy. |
| Navy | OPNAVINST 3550.1A | Provides guidance for the RAICUZ program. This program includes range safety and noise analyses and provides land use recommendations that are compatible with Range Compatibility Zones and noise levels associated with military range operations. | Land Use and Access | The Proposed Action would be implemented in accordance with this policy. |

| Agency | Federal Laws; Land Use Plans; Policies; Controls; and Guidance | Relevance to the Proposed Action | Relevant Resource(s) | Status of Compliance |
|---|---|---|---|---|
| Navy | Environmental Readiness Program Manual (OPNAV M 5090.1) | Navy's policy guidance for environmental readiness. It discusses requirements, delineates responsibilities, and issues policy guidance for the management of the environmental, natural, and cultural resources for all Navy ships and shore activities. | All Resources | The Proposed Action would be implemented in accordance with this manual. |
| Navy | SECNAVINST 4000.35B DON Cultural Resource Program | Provides clarification on the responsibilities for management of historic buildings, structures, districts, archaeological sites and artifacts, historic ships and aircraft, and other cultural resources. | Cultural Resources | The Proposed Action would be implemented in accordance with this policy. |
| Navy | SECNAVINST 11010.14B DON Policy for Consultation with Federally Recognized Indian Tribes, Alaska Native Tribal Entities, and NHOs | Provides policy, procedures, and responsibilities when consulting with representatives of NHOs. | Cultural Resources | The Proposed Action would be implemented in accordance with this policy. |
| NAVFAC | PW6 600-01, Public Works Utilities Criteria for Design and Construction of Electrical, Sewer, and Water, April 10, 2006 | Utilities design criteria. | Utilities | The Proposed Action would be implemented in accordance with these requirements. |
| NAVFAC | PW6 600-01 Public Works Utility Criteria for Design and Construction of Water Utilities | Utilities design criteria. | Utilities | The Proposed Action would be implemented in accordance with these requirements. |
| NOAA | Marine Mammal Protection Act (16 U.S.C. section 1361–1407) | Presence of one marine mammal, Hawaiian monk seal (*Neomonachus schauinslandi*), which is known to appear in study area. | Biological Resources | The Proposed Action would be implemented in accordance with requirements of the MMPA to protect the Hawaiian monk seal. |
| NOAA | National Coastal Zone Management Act (16 U.S.C. section 1451, 15 CFR part 930) | Federal actions or activities that affect any land or water use or natural resource of the coastal zone are to be carried out in a manner consistent to the maximum extent practicable with the enforceable policies of federally approved state coastal management program. | Hazardous Materials and Waste; Land Use and Access; Water Resources | The Proposed Action would be implemented in accordance with this Act to the extent practicable, consistent with the enforceable policies of Hawai'i's federally approved coastal management program. |
| NOAA NMFS; USFWS | ESA (16 U.S.C. section 1531 et seq.) | Potential effects to federally listed species. | Biological Resources; Land Use and Access | The Proposed Action would be implemented in compliance with the ESA. No new effects to federally listed species on leasehold or easement lands would occur as a result of the Proposed Action. |

| Agency | Federal Laws; Land Use Plans; Policies; Controls; and Guidance | Relevance to the Proposed Action | Relevant Resource(s) | Status of Compliance |
|---|---|---|---|---|
| NOAA NMFS; HDOH | EO 12088, Federal Compliance with Pollution Control Standards | Ensures federal compliance with applicable pollution control standards. Related to impacts from sediment resuspension and runoff due to operations. | Water Resources | The Proposed Action would be implemented in accordance with this Order. |
| OSHA | Occupational Safety and Health Act of 1970 (PL 91-596); OSHA Occupational Noise Exposure (29 CFR section 1910.95); OSHA Hazard Communication (29 CFR section 1910.1200) | Workforce safety, including occupational noise exposure limits and hazard communication. | Public Health and Safety; Hazardous Materials and Waste. | The Proposed Action would be implemented in accordance with these requirements. |
| Office of the President | EO 11990, Protection of Wetlands (42 FR 26961, May 24, 1977) | Requires federal agencies to adopt a policy to avoid long- and short-term adverse impacts associated with destruction and modification of wetlands and to avoid the direct and indirect support of new construction in wetlands whenever there is a practicable alternative. | Water Resources; Hazardous Materials and Waste | The Proposed Action would be implemented in accordance with this Order. |
| Office of the President | EO 13112, Invasive Species (64 FR 6183; February 3, 1999) | Requires federal agencies whose actions may affect the status of invasive species to identify those actions and use relevant programs and authorities to prevent and manage the introduction of invasive species in consultation with the Invasive Species Council. | Biological Resources | The Proposed Action would be implemented in accordance with this Order. |
| Range Commanders Council | Range Commanders Council Standard 321-97 | Range Commanders Council Standard 321-97 sets requirements for minimally acceptable risk criteria to occupational and nonoccupational personnel, test facilities, and non-military assets during range operations. | Public Health and Safety | The Proposed Action would be implemented in accordance with this policy. |
| United States Congress | An Act to Provide for the Admission of the State of Hawai'i into the Union (Act of March 18, 1959, Pub L 86-3, 73 Stat 4) | The "Admission Act" admits the State of Hawai'i into the U.S. Section 5(b) of the Act conveys certain lands into state ownership for the public trust. In Section 5(f) of the Act, those lands are held by the State as a public trust for certain purposes. | Land Use and Access | The Proposed Action would be implemented in accordance with the public trust obligations. |
| USDA, NRCS | Farmland Protection Policy Act (7 U.S.C. sections 4201–4209 7) | Requires federal agencies to evaluate the adverse effects of their activities on farmland, which includes prime and unique farmland and farmland of statewide or local importance, and to consider alternative actions that could avoid adverse effects. | Land Use and Access | The Proposed Action would be implemented in accordance with this Act. This EIS includes an analysis to determine if federal actions would have adverse effects on farmland, which includes prime and unique farmland and farmland of statewide or local importance. |

| Agency | Federal Laws; Land Use Plans; Policies; Controls; and Guidance | Relevance to the Proposed Action | Relevant Resource(s) | Status of Compliance |
|---|---|---|---|---|
| USDOT | 49 CFR parts 100–109 | 49 CFR sections 100–109 address the interstate shipment of hazardous substances. | Hazardous Materials and Waste | The Proposed Action would be implemented in accordance with these standards. |
| USDOT | 49 CFR sections 171.1–172.558 | Regulates and ensures the safe and secure movement of hazardous materials to industry and consumers by all modes of transportation, including pipelines. | Hazardous Materials and Waste | The Proposed Action would be implemented in accordance with these regulations. |
| USDOT | USDOT Hazardous Materials Ground Transport Regulations/Hazardous Materials Transportation Act (49 CFR parts 100–185) | Transportation safety; hazardous materials and waste exposure. | Public Health and Safety; Transportation; Hazardous Materials and Waste | The Proposed Action would be implemented in accordance with these regulations. |
| USDOT | Federal Hazardous Materials Transportation Act, (49 U.S.C section 5101 et seq.) | The Federal Hazardous Materials Transportation Act gives HDOT the authority to regulate shipments of hazardous substances by air, sea, highway, or rail. | Hazardous Materials and Waste | The Proposed Action would be implemented in accordance with these regulations. |
| USFWS | Migratory Bird Treaty Act of 1918 (16 U.S.C. sections 703–712) | Potential impacts to bird species protected by the Act. | Biological Resources; Land Use and Access | The Proposed Action would be implemented in accordance with this Act. |
| USFWS | Sikes Act of 1960 (16 U.S.C sections 670a-670o) | The Sikes Act develops cooperative planning between the Department of the Interior and DoD with state agencies in developing and maintenance of fish and wildlife resources on military installations. | Land Use and Access | This EIS has been prepared in accordance with this Act. |

| Agency | Federal Laws; Land Use Plans; Policies; Controls; and Guidance | Relevance to the Proposed Action | Relevant Resource(s) | Status of Compliance |
|---|---|---|---|---|
| USFWS | EO 13186: Responsibilities of Federal Agencies to Protect Migratory Birds (January 10, 2001) | Potential impacts to migratory birds. | Biological Resources | The Proposed Action would be implemented in accordance with this Order. |

*Key*: AASHTO = American Association of State Highway and Transportation Officials; ACHP = Advisory Council on Historic Preservation; AICUZ = Air Installation Compatible Use Zone; BTA = Best Technology Available; CAA = Clean Air Act; CEQ = Council on Environmental Quality; CERCLA = Comprehensive Environmental Response, Compensation, and Liability Act; CFR = Code of Federal Regulations; CNRH = Commander Navy Region Hawaii; CWA = Clean Water Act; DLA = Defense Logistics Agency; DoD = Department of Defense; DON = Department of the Navy; EIS = Environmental Impact Statement; EO = Executive Order; EPA = U.S. Environmental Protection Agency; ESA = Endangered Species Act; FEMA = Federal Emergency Management Agency; FHWA = Federal Highway Administration; FR = Federal Register; GHG = greenhouse gas; HDOH = Hawai'i Department of Health; HDOT = Hawai'i Department of Transportation; IAP = Installation Appearance Plan; INRMP = Integrated Natural Resources Management Plan; MEC = munitions and explosives of concern; MMPA = Marine Mammal Protection Act; MUTCD = Manual on Uniform Traffic Control Devices; Navy = U.S. Department of the Navy; NAAQS = National Ambient Air Quality Standards; NAGPRA = Native American Graves Protection and Repatriation Act; NASA = National Aeronautics and Space Administration; NAVSUP = Naval Supply Systems Command; NEPA = National Environmental Policy Act; NESHAP = National Emission Standards for Hazardous Air Pollutant; NFIP = National Flood Insurance Program; NHO = Native Hawaiian Organization; NHPA = National Historic Preservation Act; NMFS = National Marine Fisheries Service; NOAA = National Oceanic and Atmospheric Administration; NPD = NASA Policy Directive; NPDES = National Pollutant Discharge Elimination System; NRCS = Natural Resources Conservation Service; OPNAV M = Office of the Chief of Naval Operations Manual; OPNAVINST = Office of the Chief of Naval Operations Instruction; OSHA = Occupational Safety and Health Administration; PA = Programmatic Agreement; PL = Public Law; PMRF = Pacific Missile Range Facility; RAICUZ = Range Air Installation Compatible Use Zone; SDWA = Safe Drinking Water Act; SECNAVINST = Secretary of the Navy Instruction; SIP = State Implementation Plan; SWPPP = Stormwater Pollution Prevention Plan; U.S. = United States; U.S.C. = United States Code; UFC = Unified Facilities Criteria; USDA = U.S. Department of Agriculture; USDOT = U.S. Department of Transportation; USFWS = U.S. Fish and Wildlife Service; WOTUS = Waters of the U.S.

**Table E-2 State and County Regulatory Setting**

| Agency | State, Local, and Regional Laws; Land Use Plans; Policies; Controls; and Guidance | Relevance to the Proposed Action | Relevant Resource(s) | Status of Compliance |
|---|---|---|---|---|
| County of Kaua'i | Kaua'i Kakou – Kaua'i County General Plan 2018 | The Kaua'i General Plan serves as the county's guiding policy framework concerning growth, land use, and development issues. The plan seeks to enhance and improve Kaua'i's physical and natural environment and overall quality of life. The plan is built upon a countywide vision and goals statement and sets forth key objectives and actions.<br>The General Plan underwent a comprehensive update in 2018.<br>Although the development plan does not apply to projects on federal property, protection of mountain and ocean views that benefit the visual quality of the ROI should be considered. | Visual Resources; Land Use and Access | This EIS conforms with the guidance in this plan. |
| County of Kaua'i | West Kaua'i County Community Plan 2020 | The Community Plan represents the County's land use policy at the regional level. It is a long-range plan that considers a 20-year planning timeframe to the year 2040. The Community plan is one of five community plans that guide the County's land use decisions and infrastructure investment priorities, while also advancing the goals of the Kaua'i County General Plan. | Visual Resources; Land Use and Access | The Proposed Action would conform with these standards. |
| County of Kaua'i | County of Kaua'i Street Design Manual | Provides guidance for street design in Kaua'i. It is designed to streamline roadway design and approval. | Transportation | The Proposed Action would conform with these standards. |
| County of Kaua'i | County of Kaua'i Comprehensive Zoning Ordnance (Chapter 8, Kaua'i County Code 1987) | Provides regulations and standards for land development and the construction of buildings and other structures in the County of Kaua'i. | Land Use and Access | The Proposed Action would conform with these standards. |
| County of Kaua'i Transportation Agency – The Kaua'i Bus | County of Kaua'i Transportation Agency standards for public transit operation (physical and operational) and DTS Roadway and Traffic Operations Guidelines | County of Kaua'i Transportation Agency operates the Kaua'i Bus, the public transit system that provides service to PMRF. | Transportation | The Proposed Action would conform with these standards. |

| Agency | State, Local, and Regional Laws; Land Use Plans; Policies; Controls; and Guidance | Relevance to the Proposed Action | Relevant Resource(s) | Status of Compliance |
|---|---|---|---|---|
| HDOH-CWB | Hawai'i Water Quality Standards (HAR 11- 55; HRS Chapter 342D) | Regulates discharges of pollutants from point source to WOTUS and requires compliance with standards, limitations, and regulations. NPDES permits authorized discharges of stormwater associated with construction and industrial activities. | Hazardous Materials and Waste; Water Resources | The Proposed Action would conform with these standards. |
| HDOH-CWB | Hawai'i Water Quality Standards (HAR 11-54; HRS Chapter 342D) | Water pollutants that enter state waters from all sources, point or non-point, shall comply with applicable requirements as established in HAR Chapter 11-54. | Biological Resources; Water Resources; Public Health and Safety | The Proposed Action would conform with these standards. |
| HDOH | CWA section 401 (33 U.S.C. section 1341, 40 CFR Sections 121.2(a)(3), (4), and (5) Water Quality Certification); Water Pollution Control Act (33 U.S.C. section 1251 et seq.) | Any federally authorized activity that may result in a discharge into state waters requires a Water Quality Certification. Potential impacts from the Proposed Action may occur through impacts on water quality. The Kawai'ele Pumping Station as well as Canal discharge may fall under these regulations. | Biological Resources; Hazardous Materials and Waste | The Proposed Action would conform with these regulations. |
| HDOH | 22 HAR Title 11, Chapter 59 | State AAQS. | Air Quality and Greenhouse Gases | The Proposed Action would conform with these regulations. |
| HDOH | 22 HAR Title 11, Chapter 60.1 | Air Pollution Control. | Air Quality and Greenhouse Gases | The Proposed Action would conform with these regulations. |
| HDOH | HAR Chapter 11-260.1 to 279.10 | The HAR guidebook provides guidance on the standards for the management of used oil. | Hazardous Materials and Waste | The Proposed Action would conform with these regulations. |
| HDOH | Hawai'i Hazardous Waste Management Act, HRS Chapter 19, Title 342J | Hawai'i State Hazardous Waste Management Program is a preventive as well as a regulatory program that gives priority to providing technical assistance to generators of hazardous waste to ensure safe and proper handling. | Hazardous Materials and Waste | The Proposed Action would conform with these regulations. |
| HDOH | Solid Waste Management Control HAR 11-58 | Establishes minimum standards governing design, construction, installation, operation, and maintenance of solid waste disposal, recycling, reclamation, and transfer systems. | Hazardous Materials and Waste | The Proposed Action would conform with these regulations. |
| HDOT | HDOT traffic operational and safety standards and HDOT roadway design standards | Regional and sub-regional roadways providing access to PMRF are under the jurisdiction of HDOT, specifically Kuhio Highway. | Transportation | The Proposed Action would conform with these standards. |
| State of Hawai'i, DLNR | State of Hawai'i Endangered Species Laws (HAR 12-124, Exhibit 2 and HRS Section 195D) | Potential effects to state-listed species. | Biological Resources; Land Use and Access | The Proposed Action would conform with these requirements. Potential effects to state-listed species on leased lands are addressed in this EIS. |

| Agency | State, Local, and Regional Laws; Land Use Plans; Policies; Controls; and Guidance | Relevance to the Proposed Action | Relevant Resource(s) | Status of Compliance |
|---|---|---|---|---|
| State of Hawai'i | HRS Chapter 343 | HRS Chapter 343 requires individuals and agencies to provide environmental assessments and or EISs when an action may affect the environment. | All Resources | This Proposed Action would conform with this guidance, given the action of DLNR to effectuate any of the action alternatives. |
| State of Hawai'i | HRS 128D-7 | Hawai'i State Contingency Plan, ensures the state complies with the National Contingency Plan. The Oil Pollution Prevention Regulation, 40 CFR part 112, addresses specific requirements and provisions for the preparation of SPCC Plans. | Hazardous Materials and Waste | The State's obligations in relation to this Proposed Action would be implemented in accordance with this law. |
| State of Hawai'i | HRS 10-13.5 | Mandates that twenty per cent of all funds derived from the public land trust shall be expended by the Office of Hawaiian Affairs. | Land Use and Access | The State's obligations in relation to this Proposed Action would be implemented in accordance with this law. |
| State of Hawai'i | HRS 171-95 | HRS 171-95 sets out a framework for selling, leasing, exchanging, or modifying leases and easements to governments, agencies, utilities, and renewable energy providers. | Land Use and Access | This EIS has been prepared to conform with this guidance. |
| State of Hawai'i | HRS 205 | HRS 205 sets out standards for land use management in Hawai'i; it classifies all lands into one of four districts, Urban, Rural, Conservation, and Agricultural. | Land Use and Access | This EIS has been prepared to conform with this guidance. |
| State of Hawai'i | HRS 183C | HRS 183C establishes the role of the DLNR in managing the Conservation District. | Land Use and Access | The Proposed Action would conform with this statute. |
| State of Hawai'i | HRS 46-4 | Grants zoning power to the counties. | Land Use and Access | The Proposed Action would conform with this statute, given the action of DLNR to effectuate any of the action alternatives. |
| State of Hawai'i | The Constitution of the State of Hawai'i, Article XII Section 7, Hawaiian Affairs, Traditional and Customary Rights | Article XII Section 7 guarantees traditional and customary native Hawaiian rights, subject to the right of the state to regulate such rights. Ka Pa'akai is a legal framework that government agencies in Hawai'i must follow when considering proposals that may impact the exercise of Native Hawaiian traditional and customary rights. | Cultural Resources | This EIS has been prepared in conformance with this guidance. |
| State of Hawai'i | The State Water Code HRS Chapter 174 | The State Water Code was enacted into law for the purpose of protecting Hawai'i water resources. It provides for the legal basis and establishment of the State of Hawai'i's Commission on Water Resource Management. | Water Resources | This EIS has been prepared in conformance with this guidance. |

| Agency | State, Local, and Regional Laws; Land Use Plans; Policies; Controls; and Guidance | Relevance to the Proposed Action | Relevant Resource(s) | Status of Compliance |
|---|---|---|---|---|
| State of Hawai'i | Hawai'i Administrative Code Title 19, 342F Noise Pollution | Describes environmental noise levels appropriate for noise sensitive land uses. | Public Health and Safety | The Navy considered applicable state regulations for noise-sensitive land uses. Sources of noise and the associated sensitive receptors in the human environment are analyzed in this EIS. |
| State of Hawai'i – BLNR | HRS Chapter 343 commonly referred to as The Hawai'i Environmental Policy Act ("HEPA"). The trigger for compliance is the use of state lands. | The State of Hawai'i BLNR will be the accepting agency for this EIS document for HRS Chapter 343. | All Resources | This EIS was developed in conformance with the HRS Chapter 343. |
| State of Hawai'i – DLNR | Exhibits 1-3, Title 13, HAR Chapter 124 "Indigenous Wildlife, Endangered and Threatened Wildlife, and Introduced Wild Birds, and Introduced Wildlife" | These rules: a) describe current conservation status and descriptions of Indigenous wildlife and birds; and b) prohibit, unless permitted by the DLNR, any attempt to take, possess, process, sell, offer for sale, or transport any endangered or threatened species, any young or egg of any endangered or threatened species. | Biological Resources | This EIS was developed in conformance with this guidance. |
| State of Hawai'i – DLNR, Historic Preservation Division | HRS 6E-8 | HRS 6E-8 requires any project involving a permit, license, certificate, land use change, subdivision, or other entitlement for use, which may affect historic property, aviation artifacts, or burial site, shall notify the Department of Historic Preservation and allow an opportunity for review and comment on the effect of the proposed project. | Archaeological and Historic Resources | This EIS has been prepared in conformance with this guidance. |

| Agency | State, Local, and Regional Laws; Land Use Plans; Policies; Controls; and Guidance | Relevance to the Proposed Action | Relevant Resource(s) | Status of Compliance |
|---|---|---|---|---|
| State of Hawai'i – Office of Planning and Sustainable Development | Coastal Zone Management Act section 307(c)(1), HRS Chapter 205A – Coastal Zone Management (CZM); CZM Program | The Hawai'i CZM Program was enacted to provide a common focus for state and county actions dealing with land and water uses and activities. The CZM is the guiding perspective for the design and implementation of allowable land and water uses and activities throughout the state. The CZM area encompasses the entire state because there is no point of land more than 30 miles from the ocean, a definite land-sea connection exists throughout the state. The project exists within the CZM area. | All Resources | A CZM federal consistency review and application will be completed and submitted to the State of Hawai'i CZM program office. Office of Planning and Sustainable Development is the lead state agency with the authority to conduct CZMA federal consistency reviews. |

*Key*: AAQS = ambient air quality standards; CWA = Clean Water Act; CWB = Clean Water Branch; CZM = Coastal Zone Management; DLNR = Department of Land and Natural Resources; DTS = Department of Transportation Services; EIS = Environmental Impact Statement; HAR = Hawai'i Administrative Rules; HDOH = Hawai'i Department of Health; HDOT = Hawai'i Department of Transportation; HEPA = Hawai'i Environmental Policy Act; HRS = Hawai'i Revised Statutes; NPDES = National Pollutant Discharge Elimination System; PMRF = Pacific Missile Range Facility; ROI = region of influence; SPCC = Spill Prevention, Control, and Countermeasure; U.S.C. = United States Code; WOTUS = Waters of the U.S.

**Navy Correspondence with Department of Land and Natural Resources, Office of Conservation and Coastal Lands**

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**From:** Smith, Parris C CIV USN NAVFAC HAWAII PEARL (USA) <parris.c.smith.civ@us.navy.mil>
**Sent:** Friday, January 17, 2025 2:34 PM
**To:** Cain, Michael <michael.cain@hawaii.gov>
**Cc:** Kuba, Sharleen K <sharleen.k.kuba@hawaii.gov>; Wells, Kerry Kylene CIV USN (USA) <kerry.k.wells.civ@us.navy.mil>; Chong, Jocelyn W CIV (USA) <jocelyn.w.chong.civ@us.navy.mil>; Allen, JESSE RYAN KAWELA CIV USN NAVFAC PAC PEARL HI (USA) <jesse.r.allen6.civ@us.navy.mil>; Minner-Cole, Carly J CIV USN NAVFAC HAWAII PEARL (USA) <carly.j.minner-cole.civ@us.navy.mil>; Kawakami-Wong, Devan M CIV USN NAVFAC PAC PEARL HI (USA) <devan.m.kawakami-wong.civ@us.navy.mil>; Manley, William R CIV USN CNIC WASHINGTON DC (USA) <william.r.manley4.civ@us.navy.mil>; Tallaksen, Brandy L CIV USN (USA) <brandy.l.tallaksen.civ@us.navy.mil>
**Subject:** RE: Pacific Missile Range Facility- Land Use Permit Requirements

Aloha Mr. Cain,

Thank you for your response.

Regards,

**Parris Smith**
Realty Specialist
Real Estate Division
Naval Facilities Engineering Systems Command, Hawaii
400 Marshall Road, Bldg X-11
JBPHH, Hawaii 96860-3139
☎(808) 471-4652| parris.c.smith.civ@us.navy.mil

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**From:** Cain, Michael <michael.cain@hawaii.gov>
**Sent:** Friday, January 17, 2025 2:27 PM
**To:** Smith, Parris C CIV USN NAVFAC HAWAII PEARL (USA) <parris.c.smith.civ@us.navy.mil>
**Cc:** Kuba, Sharleen K <sharleen.k.kuba@hawaii.gov>; Wells, Kerry Kylene CIV USN (USA) <kerry.k.wells.civ@us.navy.mil>; Chong, Jocelyn W CIV (USA) <jocelyn.w.chong.civ@us.navy.mil>; Allen, JESSE RYAN KAWELA CIV USN NAVFAC PAC PEARL HI (USA) <jesse.r.allen6.civ@us.navy.mil>; Minner-Cole, Carly J CIV USN NAVFAC HAWAII PEARL (USA) <carly.j.minner-cole.civ@us.navy.mil>; Kawakami-Wong, Devan M CIV USN NAVFAC PAC PEARL HI (USA) <devan.m.kawakami-wong.civ@us.navy.mil>; Manley, William R CIV USN CNIC WASHINGTON DC (USA) <william.r.manley4.civ@us.navy.mil>; Tallaksen, Brandy L CIV USN (USA) <brandy.l.tallaksen.civ@us.navy.mil>
**Subject:** [Non-DoD Source] RE: Pacific Missile Range Facility- Land Use Permit Requirements

Good afternoon,

Hawaii Administrative Rules (HAR) Chapter 13-5 address land uses in the Conservation District, with "land use" being defined as:

(1) The placement or erection of any solid material on land if that material remains on the land more than thirty days, or which causes a permanent change in the land area on which it occurs;
(2) The grading, removing, harvesting, dredging, mining, or extraction of any material or natural resource on land;
(3) The subdivision of land; or
(4) The construction, reconstruction, demolition, or alteration of any structure, building, or facility on land.

Real Estate transactions are not considered a land use, and do not trigger the need for Conservation District permitting.

Sincerely,
Michael Cain

---

**From:** Smith, Parris C CIV USN NAVFAC HAWAII PEARL (USA) <parris.c.smith.civ@us.navy.mil>

**Sent:** Friday, January 17, 2025 2:22 PM
**To:** Cain, Michael <michael.cain@hawaii.gov>
**Cc:** Kuba, Sharleen K <sharleen.k.kuba@hawaii.gov>; Wells, Kerry Kylene CIV USN (USA) <kerry.k.wells.civ@us.navy.mil>; Chong, Jocelyn W CIV (USA) <jocelyn.w.chong.civ@us.navy.mil>; Allen, JESSE RYAN KAWELA CIV USN NAVFAC PAC PEARL HI (USA) <jesse.r.allen6.civ@us.navy.mil>; Minner-Cole, Carly J CIV USN NAVFAC HAWAII PEARL (USA) <carly.j.minner-cole.civ@us.navy.mil>; Kawakami-Wong, Devan M CIV USN NAVFAC PAC PEARL HI (USA) <devan.m.kawakami-wong.civ@us.navy.mil>; Manley, William R CIV USN CNIC WASHINGTON DC (USA) <william.r.manley4.civ@us.navy.mil>; Tallaksen, Brandy L CIV USN (USA) <brandy.l.tallaksen.civ@us.navy.mil>
**Subject:** [EXTERNAL] Pacific Missile Range Facility- Land Use Permit Requirements

Aloha Mr. Cain,

The Navy is working toward securing new leases and easements of State land for the operational continuity and sustainment of the Pacific Missile Range Facility (PMRF) on Kauaʻi, Hawaiʻi. As part of this effort, the Navy is preparing an Environmental Impact Statement (EIS) together with the National Aeronautics and Space Administration (NASA). Currently, the Navy has leases and easements of State land that are within the State Land Use Conservation District, to include parcels at Mākaha Ridge, Miloliʻi Ridge, and the northern Main Base of PMRF.

The Navy was instructed by DLNR Land Division to reach out to the Office of Conservation and Coastal Lands to confirm any land use permit requirements in association with securing the new leases and easements.

The Navy views the proposed real estate transactions as distinct from land use itself, so understands permit requirements under HAR section 13-5 are not triggered. Further, our understanding is that your office had communicated this to NASA, and the Navy now seeks separate confirmation.

Please let us know if any additional information is required to aid in determining land use permit requirements.

Thank you,

**Parris Smith**
Realty Specialist
Real Estate Division
Naval Facilities Engineering Systems Command, Hawaii
400 Marshall Road, Bldg X-11
JBPHH, Hawaii 96860-3139
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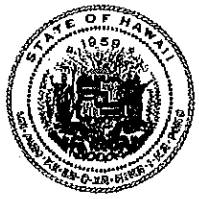
JOSH GREEN, M.D.
GOVERNOR | KE KIA'ĀINA

SYLVIA LUKE
LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA




KA MOKU'ĀINA 'O HAWAI'I
DEPARTMENT OF LAND AND NATURAL RESOURCES
KA 'OIHANA KUMUWAIWAI 'ĀINA
OFFICE OF CONSERVATION AND COASTAL LANDS
P.O. BOX 621
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AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

REF: OCCL: MK

SPA KA 25-07
Nov 4, 2024

Thomas Nizo, Deputy Public Works Officer
Pacific Missile Range Facility
PO Box 128
Kekaha, HI 96752

SUBJECT: Site Plan Approval (SPA) KA-24-10 for guard shack canopy at the Pacific Missile Range Facility, Located at Mākaha PMRF, Puu Ka Pele Forest Reserve, Upper Waimea, Island of Kaua'i
Tax Map Key (TMK): (4) 1-2-001:006

Dear Thomas Nizo:

The Office of Conservation and Coastal Lands (OCCL) is in receipt of your SPA application for the subject project. According to the information you have provided, the Pacific Missile Range Facility (PMRF) is proposing to construct a 40-ft (Length)x 40-ft (Width)x 20' and 4" (Height) canopy with four, three-ft diameter by 11-ft deep reinforced concrete footings for the guard shack at the Mākaha Ridge site gate (**Exhibit 1**). The project area lies in the Resource Subzone of the State Land Use Conservation District.

The proposed canopy is intended to provide weather protection for security personnel stationed at the guard shack. Materials will be transported through concrete and flatbed trucks in approximately two trips. Best management practices for construction will include straw wattles around the construction site for erosion control, sediment control, and storm water runoff control.

Cultural resources surveys have not identified any traditional Hawaiian archaeological sites, features, or buried cultural deposits at the Mākaha Ridge PMRF. The application states that the federal government has leased the Mākaha Ridge from the State of Hawai'i for communication, research, development, testing, tracking, evaluation, guidance, and related government purposes since 1965.

ANALYSIS:

The Mākaha Ridge Tracking Station is located seven miles north of Barking Sands at approximately 1,400 ft to 1,850 ft in elevation on a high ridge top of the central mountain

range of Kaua'i. The station encompasses approximately 244 acres of land leased from the State of Hawai'i within the Nā Pali-Kona Forest Reserve.

According to Department files, the U.S. Navy is leasing the land that contains the PMRF and proposed project area from the State of Hawai'i under General Lease S-3952 (gl5814). On May 12, 1978; the Board of Land and Natural Resources (BLNR) approved Conservation District Use Permit (CDUP) KA-1024 for Radar Related Facilities on the property subject to eight conditions. On December 13, 2023, the PMRF was granted site plan approval for a security crash barrier and electrical service rack, and the placement of 25 portable concrete jersey barriers along the pavement, subject to 26 conditions (SPA KA-24-10).

After reviewing the application, we have determined that the Mākaha Ridge PMRF Canopy Project is consistent with Hawai'i Administrative Rules (HAR) §13-5-22 P-9 STRUCTURES, ACCESSORY (B-1) *Construction or placement of structures accessory to existing facilities or uses*. This requires site plan approval from the OCCL.

The OCCL notes that the proposed overhead canopy project appears to be eligible for a Hawaii Revised Statutes (HRS) Chapter 343 exemption action. The "EXEMPTION LIST FOR THE DEPARTMENT OF LAND AND NATURAL RESOURCES" *General Exemption Type 3 Part 1 #21 Installation of hurricane or wind protection devices and other minor structural accessories that will facilitate resistance to damaging effects of natural hazards.*

The PMRF's Programmatic Agreement Record for Archaeology attached to the application for Section 106 compliance, issued on March 3, 2024, notes that the project will have "No effect determination based on literature review and site inspection validates that no listed, contributing, or eligible historic properties exist within the project area and the area is previously disturbed" (**Exhibit 2**).

Therefore, authorization is hereby granted to the PMRF for the proposed guard shack canopy project at the Mākaha Ridge PMRF located at Mākaha Ridge, Mākaha Ahupua'a, Nā Pali District, Island of Kaua'i on TMK: (4) 1-2-001:006. **All terms and conditions of SPA KA 24-10 shall remain in effect** (see attached).

Please acknowledge receipt of this approval, with the above noted conditions, in the space provided below. Please sign two copies. Retain one copy and return the other copy to our office within 30 days.

You may want to contact the Kaua'i District Land Office to see if a land disposition will be required.

Should you have any questions, please feel free to contact Mari Kurosawa of our office at (808) 587-0381 or at mari.i.kurosawa@hawaii.gov.

Sincerely,

S Michael Cain

Michael Cain, Administrator
Office of Conservation and Coastal Lands

Receipt acknowledged:

Applicant's signature

Date: 11/19/24

Attachment: Site Plan Approval KA 24-10

*CC: Land Division*
*City and County of Kaua'i- Department of Planning and Permitting*
*Division of Forestry and Wildlife*

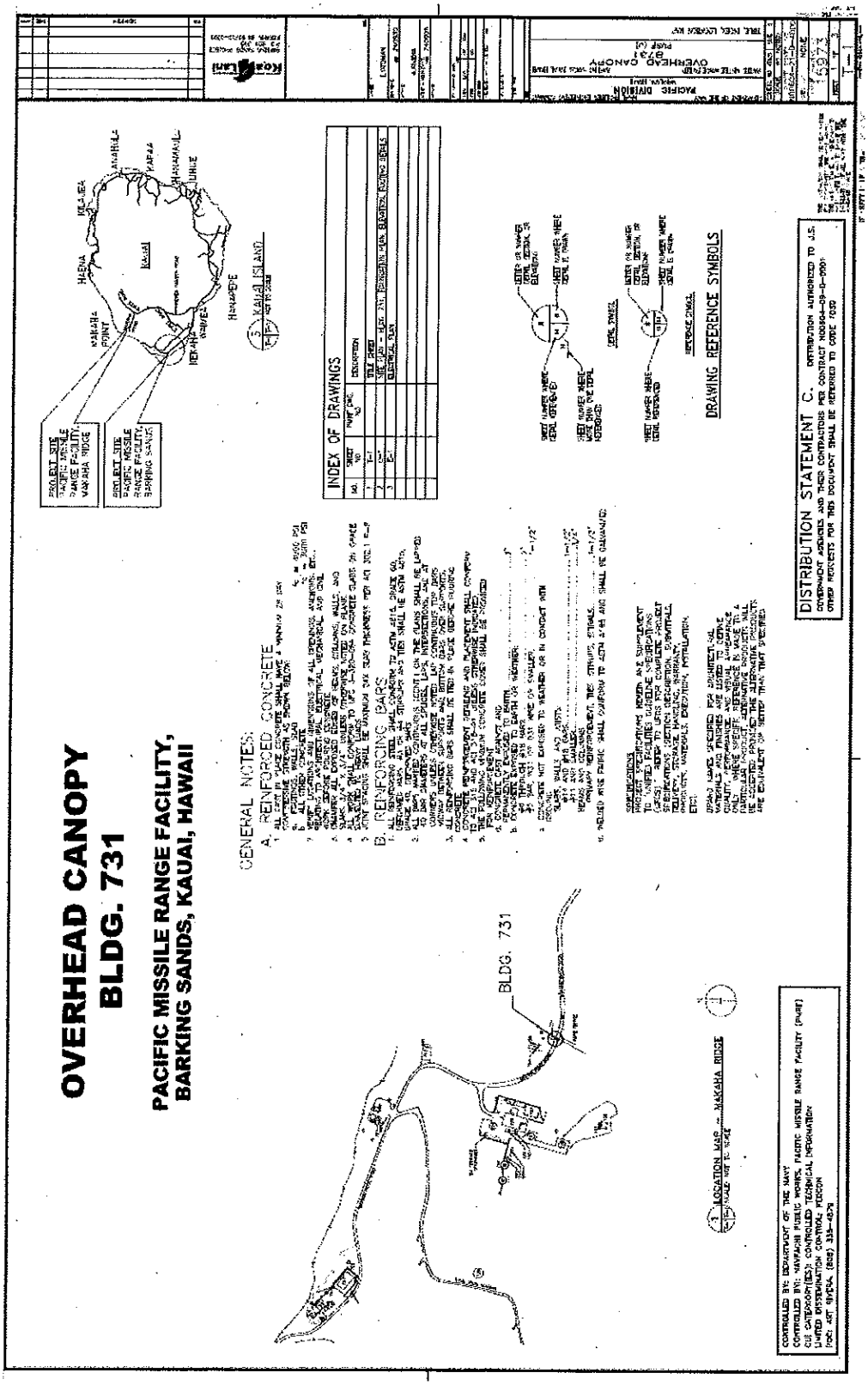
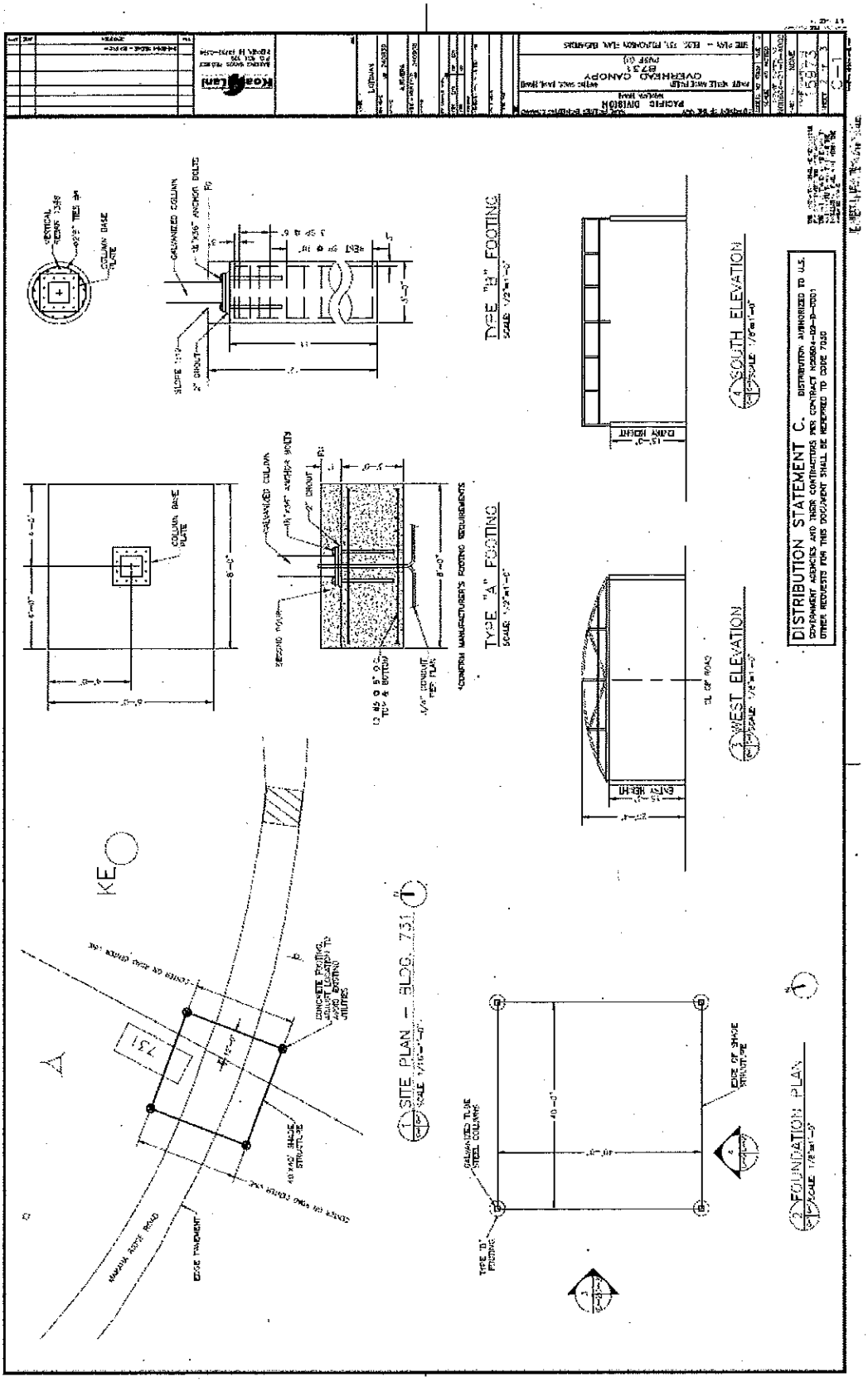
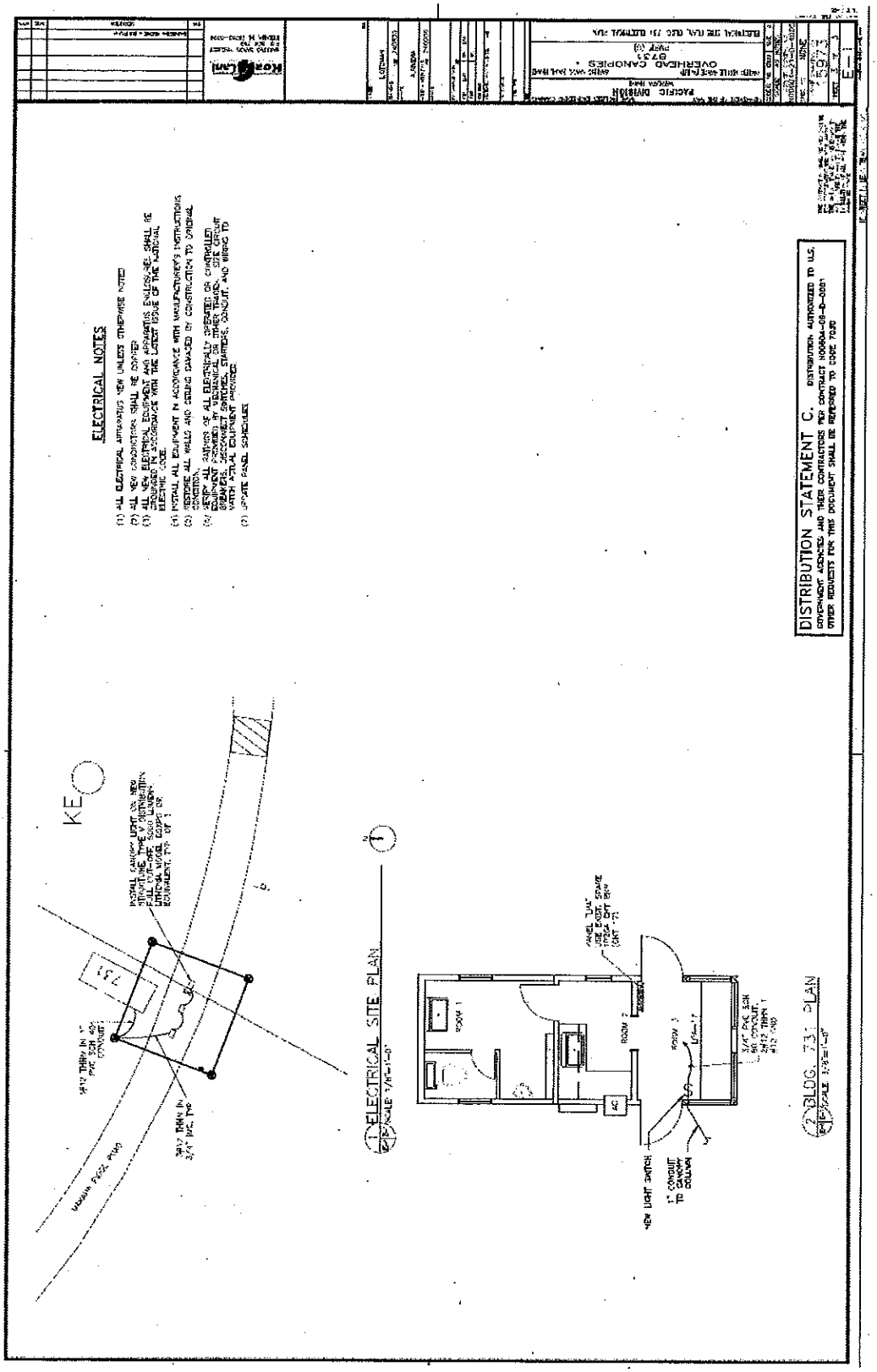

OVERHEAD CANOPY
BLDG. 731
PACIFIC MISSILE RANGE FACILITY,
BARKING SANDS, KAUAI, HAWAII
INDEX OF DRAWINGS
GENERAL NOTES:
A. REINFORCED CONCRETE
B. REINFORCING BARS
DRAWING REFERENCE SYMBOLS
DISTRIBUTION STATEMENT C.
BLDG. 731
KAUAI ISLAND
LOCATION MAP — MAKAHA RIDGE

Exhibit 1


SITE PLAN – BLDG. 731
FOUNDATION PLAN
TYPE "A" FOOTING
TYPE "B" FOOTING
SOUTH ELEVATION
WEST ELEVATION
DISTRIBUTION STATEMENT C.


ELECTRICAL NOTES
DISTRIBUTION STATEMENT C.
1 ELECTRICAL SITE PLAN
2 BLDG. 731 PLAN

PROGRAMMATIC AGREEMENT RECORD FOR ARCHAEOLOGY

| | |
|---|---|
| DATE: | 3/07/2024 |
| PROJECT TITLE: | PMRF Overhead Canopy |
| PROJECT LOCATION: | PMRF, Building 731 |
| REVIEWED BY: | Tara del Fierro, PMRF Barking Sands Archaeologist |
| PREPARED BY: | Dr. Alex Hazlett, RCUH PMRF/PCSU Archaeologist |
| ACTIVITY/CODE: | PMRF Barking Sands |
| TELEPHONE: | (808) 335-4630 |

**PROJECT DESCRIPTION:**

Scope: PMRF Security proposes to install an overhead canopy at the Makaha Ridge Entry Control Point (ECP) and Building 731 (Figure 1-2). The canopy at the Operations Gate and Main Gate will cover the south end of the building and the simplex lane. Construction plans for the Makaha Ridge ECP Canopy are attached below (See Figure 5 in Appendix 1).

Previous research: In 2009 a cultural landscape report (CLR) was completed which is intended to provide a comprehensive understanding of the historic significance of PMRF cultural landscapes and consider historic and cultural preservation concerns (TEC Inc. Joint Venture 2009). The CLR reports that the construction of the Makaha Ridge Complex was a huge undertaking and required massive earthmoving and vegetation clearing. When the Navy acquired the lease for Makaha Ridge in the leased area was void of vegetation and largely graded for infrastructure (TEC Inc. Joint Venture, 2009:4-115-118) (Figure 3). Previous archaeological investigations (Wulzen et al. 1997, Dowden and Rosendahl 1993, and Kikuchi 1982) have not identified documented archaeological sites or materials within the Makaha Ridge facility (Figure 4).

Present Conditions: The project area has been previous disturbed by legacy infrastructure (ground clearance and grading, as well as the construction of the road) (Figure 3). Previous archaeological investigations have not identified archaeological sites at Makaha Ridge. The proposed work will not alter existing building 731.

Determination of effect: **No effect determination based on literature review and site inspection validates that no listed, contributing, or eligible historic properties exist within the project area and the area is previously disturbed.** In the event that cultural materials are discovered, all work in the immediate vicinity shall be halted and the Navy archaeologist shall be contacted for notification and to implement document procedures.

Project Conditions: In the event that cultural materials are discovered, all work in the immediate vicinity shall be halted and the Navy archaeologist shall be contacted to implement document procedures. In the event of an inadvertent discovery, all work in the immediate vicinity shall be halted and the Navy archaeologist shall be contacted to implement procedures in the NAGPRA CA (2011) to determine custody, treatment, and disposition of Native Hawaiian remains and any associated funerary objects. All ground disturbing work will be conducted in accordance with the Navy's ICRMP (2012).

**ARCHAEOLOGICAL MANAGEMENT AREAS:**

| AREA: | N/A | | |
|---|---|---|---|
| | | Any National Register (eligible) sites present?(within 30m) | NO |
| | | Will this undertaking affect this sites? | NO |

**PROJECT DETERMINATION:**

Considering the items below, pursuant to the 2012 PA (revised) among the Commander Navy Region Hawaii, The Advisory Council on Historic Preservation and the Hawaii State Historic Preservation Officer regarding Navy undertakings in Hawaii, the proposed undertaking does not require further Section 106 review under the National Historic Preservation Act. This memorandum is to be retained as administrative record of this finding.

[Check all that apply.]

☐ Stipulation IX.A. 3
OR IX.A. I.C.24
The undertaking does not have the potential to cause effects to listed, contributing, or eligible historic properties (specifically archaeological sites/objects/traditional cultural places) as noted above.

**Exhibit 2**

**PROGRAMMATIC AGREEMENT RECORD FOR ARCHAEOLOGY**

[X] Stipulation I (B) 3
The undertaking is listed in Appendix A.

REVIEWER:

COPY TO:

DEL FIERRO DURAN.TARA.MA.NAEA.1525794020

Appendix B-

I.B.1: Maintenance or repair of underground utilities provided that no excavation or ground disturbance occurs outside existing trenches.

I.B.2: Landscaping, grounds maintenance, or removal of dead or dying trees that does not result in subsurface disturbance or root grubbing.

I.B.3: Ground disturbing activities that occur outside archaeologically sensitive areas indicated on ICRMP maps.

I.B.4: Ground disturbing activities that occur above depths established during the ICRMP map development process.

JOSH GREEN, M.D.
GOVERNOR | KE KIA'ĀINA

SYLVIA LUKE
LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA

STATE OF HAWAI'I | KA MOKU'ĀINA 'O HAWAI'I
DEPARTMENT OF LAND AND NATURAL RESOURCES
KA 'OIHANA KUMUWAIWAI 'ĀINA
Office of Conservation and Coastal Lands
P.O. BOX 621
HONOLULU, HAWAII 96809

DAWN N. S. CHANG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

LAURA H.E. KAAKUA
FIRST DEPUTY

M. KALEO MANUEL
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

REF: OCCL: TF

SPA: KA 24-10

Dec 13, 2023

Thomas Nizo
Deputy Public Works Officer
Pacific Missile Range Facility
P.O. Box 128
Kekaha, HI 96752

SUBJECT: Site Plan Approval (SPA) Application for the Makaha Ridge Pacific Missile Range Facility (PMRF) Vehicle Access Control Barrier Project.
Located at Makaha Ridge PMRF
Puu Ka Pele Forest Reserve, Upper Waimea, Kauai
Tax Map Key (TMK): (4) 1-2-001:006

Dear Mr. Nizo:

The Office of Conservation and Coastal Lands (OCCL) has reviewed your Site Plan Approval (SPA) application and attachments regarding the subject matter. According to the information in your SPA application, the U.S. Navy's Makaha Ridge Pacific Missile Range Facility (PMRF) is proposing to construct the Makaha Ridge Vehicle Access Control Barrier Project (**Exhibit 1**).

The proposed project will involve the installation of a surface mounted, electrical, crash-rated vehicle access control barrier and the placement of 25 moveable pre-cast concrete jersey barriers that can be reconfigured or relocated as necessary (**Exhibit 2**). The application notes that approximately 250 sq. ft of grading and grubbing will be required for the vehicle access control barriers and related equipment. The surface mounted, electrical, crash-rated vehicle access control barrier will require an approximately 16ft long x 10ft wide x 2ft deep excavation into the existing road (built in 1960) for the barrier and a 125ft long x 1ft wide x 3ft deep trench for the electrical power and control lines. The application states that the trench will run from the security guard shack (noted on plans as B731) to a new electrical service rack.

The new electrical service rack will be mounted on a new 4ft long x 3ft wide x 4in deep concrete slab that will be poured in place. The rack will include a control panel for the vehicle access control barrier. Additionally, the application states that the project will include the installation of a 3ft long x 6ft wide x 6in deep concrete slab for an emergency backup generator, a 16in x 16in x 24in footing for a traffic signal post, and two 18in diameter x 42in deep concrete footings for bollards (**Exhibit 3**).

The application notes that most of the proposed activities will occur in areas that have been disturbed in the past. Best management practices (BMPs) for construction will include straw wattles around the construction site for erosion control, sediment control, and storm water runoff control. The application states that materials will be transported by flatbed and pickup trucks in approximately 4 trips.

Cultural resources surveys have not identified any traditional Hawaiian archaeological sites, features, or buried cultural deposits at the Makaha Ridge PMRF. The application states that the federal government has leased the Makaha Ridge PMRF from the State of Hawaii for communication, research, development, testing, tracking, evaluation, guidance, and related government purposes since 1965.

On behalf of the Makaha Ridge PMRF, you are requesting SPA for the Makaha Ridge PMRF Vehicle Access Control Barrier Project.

ANALYSIS:

The OCCL notes that the proposed project area on TMK: (4) 1-2-001:006 lies within the Resource Subzone of the State Land Use Conservation District. According to Department files, the U.S. Navy is leasing the land that contains the PMRF and proposed project area from the State of Hawaii under General Lease S-3952 (gl5814). On May 12, 1978; the Board of Land and Natural Resources (BLNR) approved Conservation District Use Permit (CDUP) KA-1024 for Radar Related Facilities on the property subject to eight conditions. On September 12, 2022; the Federal Aviation Administration (FAA) was granted site plan approval for the FAA Weather Camera System project subject to fifteen conditions. On April 14, 2023; the PRMF was granted site plan approval for the concrete pad project subject to twenty conditions. On September 20, 2023; the PMRF was granted site plan approval for the Makaha Ridge PMRF Native Plant Restoration Project subject to twenty-eight conditions.

After reviewing the application, we have determined that the Makaha Ridge PMRF Vehicle Access Control Barrier Project is consistent with Hawaii Administrative Rules (HAR) §13-5-22 P-9 STRUCTURES, ACCESSORY (B-1) *Construction or placement of structures accessory to existing facilities or uses.* This requires site plan approval from the OCCL.

The application was provided to the Division of Forestry and Wildlife (DOFAW) for comments. DOFAW had no comments due to the project's lack of vegetation disturbance; however, previous conditions that were included SPA: KA 23-70 for the PMRF Native Plant Restoration Project are included where they align with the avoidance measures for natural and cultural resources and historic properties contained in the application's Record of Categorical Exclusion.

The OCCL notes that the proposed Makaha Ridge PMRF Vehicle Access Control Barrier Project appears to be eligible for a Hawaii Revised Statutes (HRS), Chapter 343 exemption action. The "EXEMPTION LIST FOR THE DEPARTMENT OF LAND AND NATURAL RESOURCES", General Exemption Type 3 Part 1 #2 *Construction of security features, including fencing, gates, cameras, and other similar items;* #10 *Construction, placement or installation of signage, pavement markings, buoys, or other similar structures;* and #13 *Installation of glare screens, bollards, guard rails, vehicular access barriers, and other similar appurtenances designed to protect the public.* The OCCL has consulted with the Kauai District Land Office (KDLO) and DOFAW regarding the proposed Makaha Ridge PMRF Vehicle Access Control Barrier Project,

and KDLO and DOFAW have concurred with the OCCL's determination that the project is a HRS, Chapter 343 exempt action.

The PMRF's Programmatic Agreement Record for Archaeology attached to the application for Section 106 compliance notes that the project will have "No effects as all areas are previously disturbed or tested."

Therefore, authorization is hereby granted to the PMRF for the proposed Vehicle Access Control Barrier Project at the Makaha Ridge PMRF located within the Puu Ka Pele Forest Reserve, Upper Waimea, Kauai on TMK: (4) 1-2-001:006, and is subject to the following conditions:

1. The permittee shall comply with all applicable statutes, ordinances, rules, and regulations of the federal, state, and county governments, and applicable parts of HAR, Chapter 13-5;

2. The permittee shall be liable, to the extent allowed by the Federal Tort Claims Act, for claims for personal injuries or property damage resulting from the negligent or wrongful act or omission of any employee of the United States while acting within the scope of his or her employment, arising out of this agreement;

3. The permittee shall comply with all applicable Department of Health administrative rules;

4. The permittee shall obtain a land disposition from the Kauai District Land Office (808) 274-3491 the use of State lands;

5. Unless otherwise authorized, any work or construction to be done on the land shall be initiated within one (1) year of the approval of such use and shall be completed within three (3) years of the approval of such use. The permittee shall notify the department in writing when construction activity is initiated and when it is complete;

6. The permittee understands and agrees that this permit does not convey any vested rights or exclusive privilege;

7. In issuing the approval, the department has relied on the information and data, which the applicant has provided in connection with the application. If, subsequent to the issuance of the approval such information and data prove to be false, incomplete, or inaccurate, this approval may be modified, suspended, or revoked, in whole or in part, and the department may, in addition, institute appropriate legal proceedings;

8. Where any interference, nuisance, or harm may be caused, or hazard established by the use the permittee shall be required to take measures to minimize or eliminate the interference, nuisance, harm, or hazard;

9. The permittee acknowledges that the approved work shall not hamper, impede, or otherwise limit the exercise of traditional, customary or religious practices of native Hawaiians in the immediate area, to the extent the practices are provided for by the Constitution of the State of Hawaii, and by Hawaii statutory and case law;

10. In the event that subsurface historic resources, including human skeletal remains, structural remains, cultural deposits, artifacts, sand deposits, or sink holes are identified

during the demolition and/or construction work, cease work in the immediate vicinity of the find, protect the find from additional disturbance, and contact the SHPD, at (808) 692-8015;

11. Should any unanticipated problems occur which may affect public health, safety, or welfare, the Department may require immediate removal of all project components;

12. Trees 15ft or taller shall not be trimmed or removed during the Hawaii Hoary bat birthing and pup rearing season from June 1st to September 15th;

13. The use of barbed wire fencing is prohibited;

14. The permittee shall have a qualified biologist conduct a survey Hawaiian nene geese and nests no earlier than three (3) days before initiation of the project to identify any nests within 100ft of any activity. No potential harmful work will be conducted within 100ft of a breeding or non-flighted goose;

15. Given the location near the Na Pali-Kona Forest Reserve, which serves as a critical forest reserve for nesting and breeding seabirds and given that listed seabirds have been detected within PMRF, the permittee and their agents shall consult with DOFAW Kauai Branch biologists ((808) 274-3433) and conduct a survey of potential nesting seabirds in the area that may be disturbed by the scope of the project. If listed seabirds are detected near the site, the permittee and their agents shall consult with DOFAW Kauai Branch Staff on avoidance and minimization measures;

16. The permittee shall adhere to the requirements of the Dark Skies program if work will require any lighting at night during the seabird peak fallout period September 15th to December 15th;

17. If nighttime construction is required during the seabird fledging season (September 15th to December 15th), the permittee shall have a qualified biologist be present at the project site to monitor and assess the risk of seabirds being attracted or grounded due to the lighting. If seabirds are seen circling around the area, lights shall be turned off;

18. If a downed seabird is detected in or near the project area(s), the permittee and their agents shall review and follow DOFAW's recommended response protocol at https://dlnr.hawaii.gov/wildlife/seabird-fallout-season/#response ;

19. Any landscaping shall be appropriate to the site location and shall give preference to plant materials that are endemic or indigenous to Hawaii. The introduction of invasive species is prohibited;

20. The permittee shall ensure that all project and construction related containers, equipment, and potted plants brought onto PMRF shall have undergone inspection by a qualified individual and are free from invasive pests such as, but not limited to, coqui frogs, little fire ants (LFA), and Coconut Rhinoceros Beetles (CRB). Use of Hawaiian native plants is required;

21. The permittee and their agents shall minimize the movement of plant or soil material between worksites. Soil and plant material may contain detrimental fungal pathogens

(e.g., Rapid Ohia Death, Coffee Leaf Rust), vertebrate and invertebrate pests (e.g., Coqui Frogs, Little Fire Ants, Coffee Borer, etc.) or invasive plant parts (e.g., Barbados Gooseberry, False Kava, Giant Reed, etc.) that could harm our native species and ecosystems. DOFAW recommends that PMRF and their agents consult with the Kauai Invasive Species Committee (KISC) at (808) 821-1490 to help plan, design, and construct the project, learn of any high-risk invasive species in the area, and ways to mitigate their spread;

22. The permitte and their agents shall ensure all equipment, materials, and personnel shall be cleaned of excess soil and debris to minimize the risk of spreading invasive species;

23. All representations relative to mitigation or best management practices as stated in the application or supplemental material submitted to the Department for the proposed project are incorporated as conditions of the permit;

24. Upon completion of the project, the permittee shall remove all project components and the areas restored to a more natural state and/or to the Department's satisfaction;

25. Other terms and conditions as prescribed by the OCCL; and

26. Failure to comply with any of these conditions may render this approval void as determined by the Department.

Please acknowledge receipt of this approval, with the above noted conditions, in the space provided below. Please sign two copies. Retain one and return the other within thirty (30) days. Should you have any questions, feel free to contact Trevor Fitzpatrick of our Office of Conservation and Coastal Lands at (808) 798-6660 or trevor.j.fitzpatrick@hawaii.gov .

Sincerely,

S Michael Cain

Michael Cain, Administrator
Office of Conservation and Coastal Lands

Receipt acknowledged:

Applicant's signature Date 11/19/24

*CC: Chairperson*
*Division of Forestry and Wildlife – Kauai Branch*
*Kauai Division Land Office*
*County of Kauai Planning Department*

REF: OCCL: TF

SPA: KA 24-10

# Makaha Ridge Vehicle Access Control Updates

PCSU BAHeindl 5/12/2023 9:35 AM

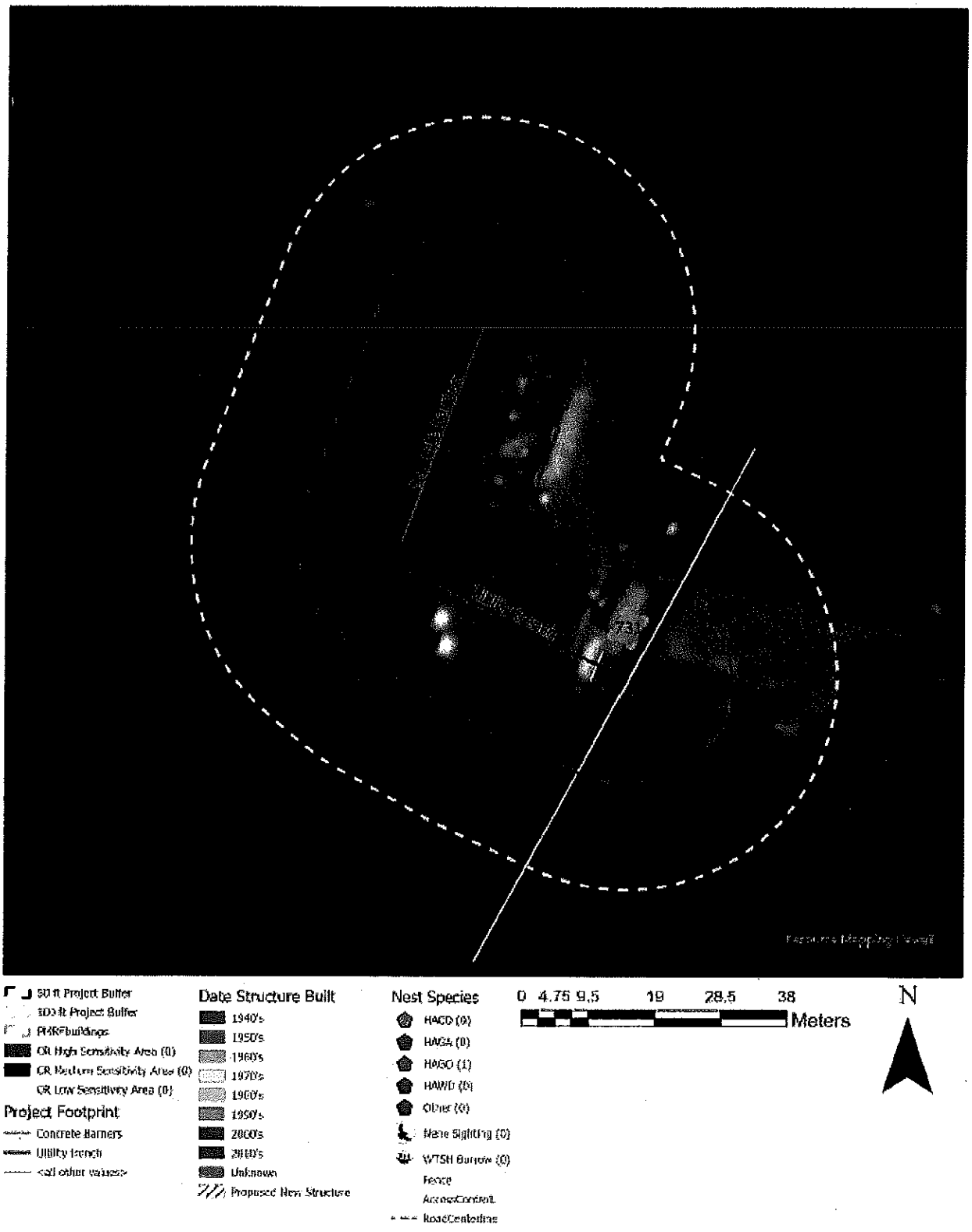



**Exhibit 1**

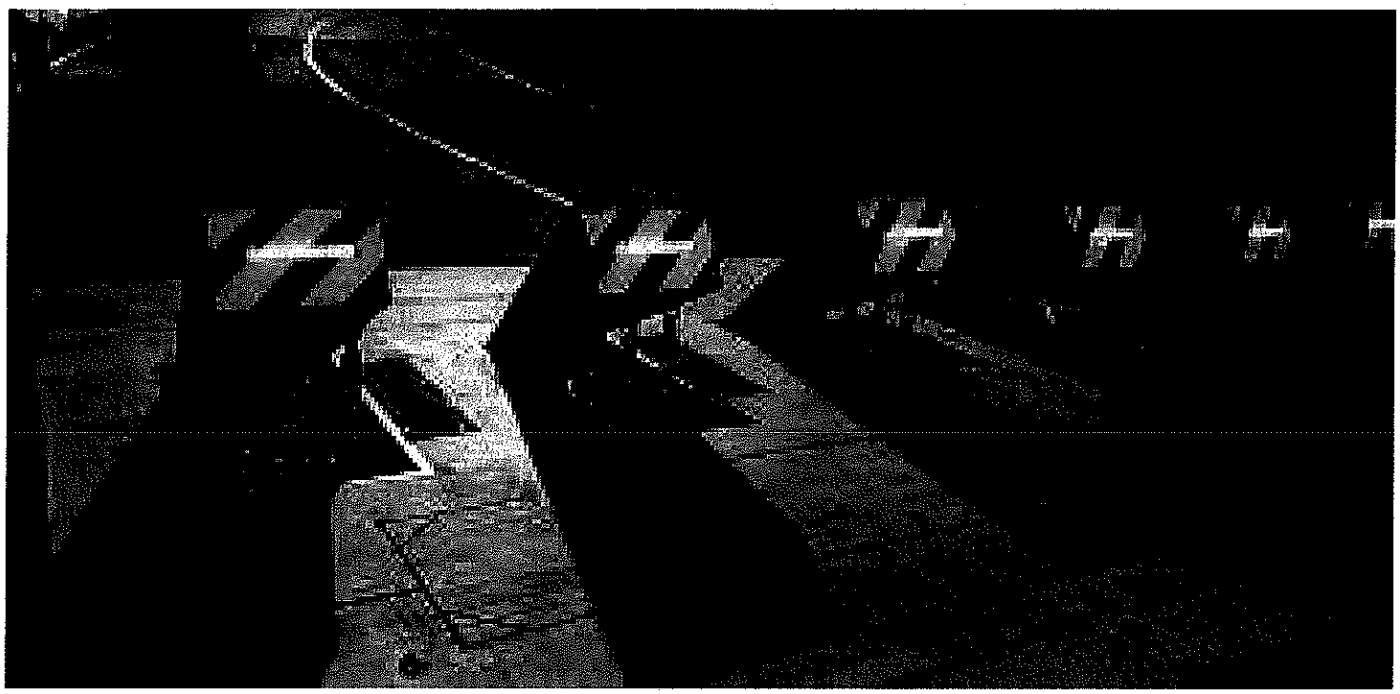


**Exhibit 2**

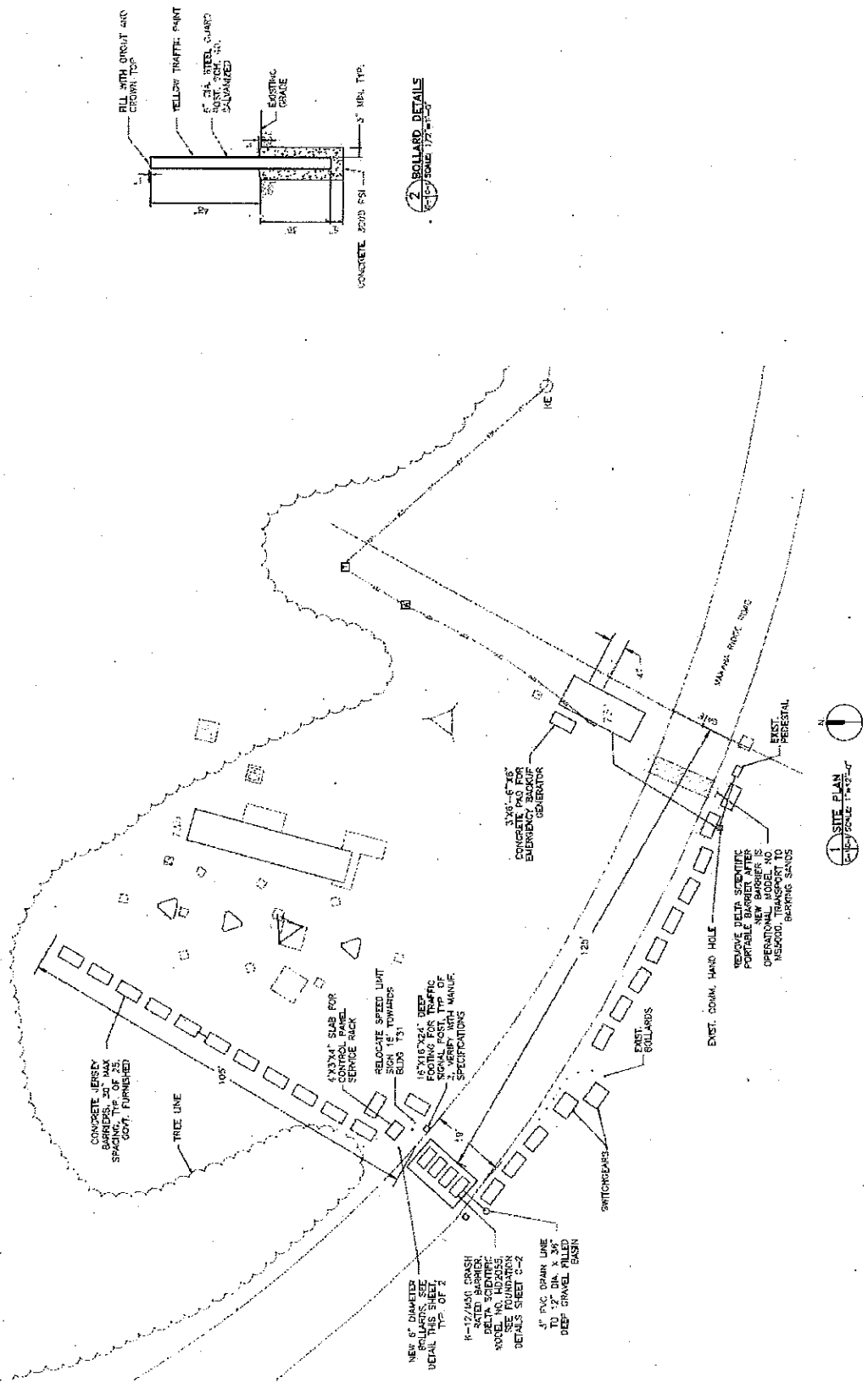
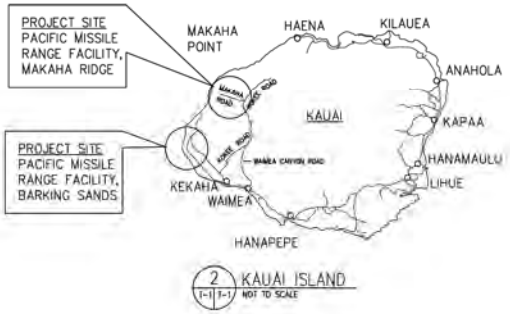

2 BOLLARD DETAILS
1 SITE PLAN
CONCRETE JERSEY BARRIERS, 30' MAX SPACING, TYP. OF 25, GOVT. FURNISHED
TREE LINE
4'X3'X4" SLAB FOR CONTROL PANEL SERVICE RACK
RELOCATE SPEED LIMIT SIGN 15' TOWARDS BLDG 731
16"X16"X24" DEEP FOOTING FOR TRAFFIC SIGNAL POST TYP OF 2, VERIFY WITH MANUF. SPECIFICATIONS
NEW 6" DIAMETER BOLLARDS, SEE DETAIL THIS SHEET, TYP. OF 2
K-17/M30 CRASH RATED BARRIER, DELTA SCIENTIFIC MODEL NO. MD2055 SEE FOUNDATION DETAILS SHEET C-2
4" PVC DRAIN LINE TO 12" DIA. x 36" DEEP GRAVEL FILLED BASIN
SWITCHGEARS
EXIST. BOLLARDS
EXIST. CONC. HAND HOLE
REMOVE DELTA SCIENTIFIC PORTABLE BARRIER AFTER NEW BARRIER IS OPERATIONAL, MODEL NO. MSD4000, TRANSPORT TO BARKING SANDS
EXIST. PEDESTAL
3'X8'-6"X6" CONCRETE PAD FOR EMERGENCY BACKUP GENERATOR
MAKAHA RIDGE ROAD
105'
125'
19'
45'
FILL WITH CRUSHED ROCK TO TOP
YELLOW TRAFFIC PAINT
5" DIA. STEEL GUARD BOLLARD WITH REFLECTORIZED STRIPES
EXISTING GRADE
3" MIN. TYP.
CONCRETE 3000 PSI

**Exhibit 3**

# MAKAHA RIDGE ROAD REPAIR

## PACIFIC MISSILE RANGE FACILITY, MAKAHA RIDGE, KAUAI, HAWAII



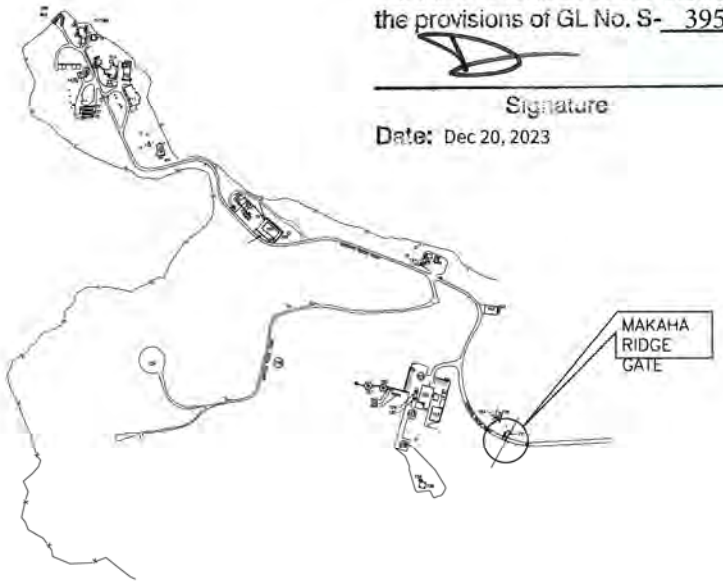

2 KAUAI ISLAND
T-1 T-1 NOT TO SCALE

These plans have been approved by the Chairperson of the Board of Land and Natural Resources in accordance with the provisions of GL No. S- 3952 .

KT

Signature

Date: Dec 20, 2023




1 LOCATION PLAN
T-1 T-1 SCALE: NOT TO SCALE

N

| DRAWING INDEX | | |
|---|---|---|
| SHEET NUMBER | SHEET | TITLE |
| 1 | T-1 | TITLE, INDEX & LOCATION MAPS |
| 2 | C-1 | SITE PLAN |
| 3 | C-2 | SITE PLAN (CONTINUED) |
| 4 | C-3 | ENLARGED SITE PLAN, DETAILS |
| | | |
| | | |

CONTROLLED BY: DEPARTMENT OF THE NAVY
CONTROLLED BY: NAVFACHI PUBLIC WORKS, PACIFIC MISSILE RANGE FACILITY (PMRF)
CUI CATEGORY(IES): CONTROLLED TECHNICAL INFORMATION
LIMITED DISSEMINATION CONTROL: FEDCON
POC: ART RIVERA, (808) 335-4879

90% SUBMITTAL
NOT FOR CONSTRUCTION

DISTRIBUTION STATEMENT C. DISTRIBUTION AUTHORIZED TO U.S. GOVERNMENT AGENCIES AND THEIR CONTRACTORS PER CONTRACT N00604-09-D-0001 OTHER REQUESTS FOR THIS DOCUMENT SHALL BE REFERRED TO CODE 7030

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE WORK AMONG THE VARIOUS TRADES AS NECESSARY TO AVOID CONFLICTS AND TO INSURE THE INSTALLATION OF ALL WORK WITHIN THE AVAILABLE SPACE.

IF SHEET IS LESS THAN 22" X 34" REDUCED PRINT – USE GRAPHIC SCALES

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
PACIFIC DIVISION
PEARL HARBOR, HAWAII

PACIFIC MISSILE RANGE FACILITY
MAKAHA RIDGE ROAD REPAIR
BARKING SANDS, KAUAI, HAWAII
PMRF(U)

TITLE, INDEX, LOCATION MAPS

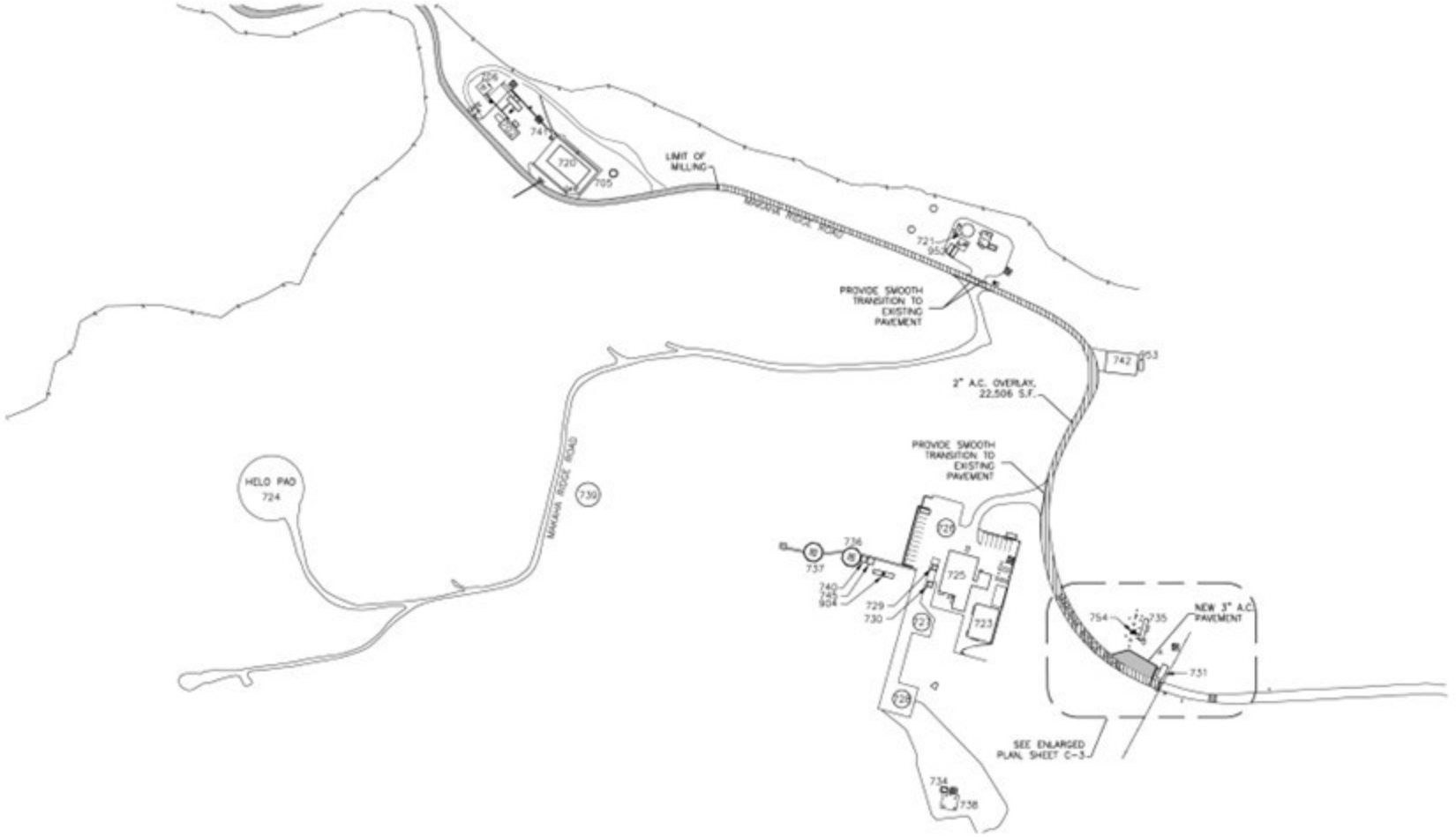
CODE ID. NO. 47609 | SIZE D
SCALE: AS SHOWN
CONST. CONTR. NO. N00604-21-D-4000
SPEC. NO. NONE
PMRF DRAWING NO. 24-03
SHEET 1 OF 4
T-1

DRAWING REVISION APRIL 2002

Koa Lani
BARKING SANDS PROJECT
P.O. BOX 1329
KEKAHA, HI 96752-0329

DESIGNING AGENCY | DESCRIPTION | DATE | APPR

PLOT SCALE: 1/1




1 SITE PLAN
C-1 SCALE: 1"=100'-0"

N

LEGEND

- 2" MILL, 2" ASPHALT CONCRETE PAVING
- 2" ASPHALT CONCRETE OVERLAY
- NEW 2" ASPHALT CONCRETE PAVEMENT

90% SUBMITTAL
NOT FOR CONSTRUCTION

DISTRIBUTION STATEMENT C. DISTRIBUTION AUTHORIZED TO U.S. GOVERNMENT AGENCIES AND THEIR CONTRACTORS PER CONTRACT N00604-09-D-0001 OTHER REQUESTS FOR THIS DOCUMENT SHALL BE REFERRED TO CODE 7030

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE WORK UNDER THE VARIOUS PHASES AS NECESSARY TO AVOID CONFLICTS AND TO ENSURE THE INSTALLATION OF ALL WORK WITHIN THE PROJECT LIMITS.

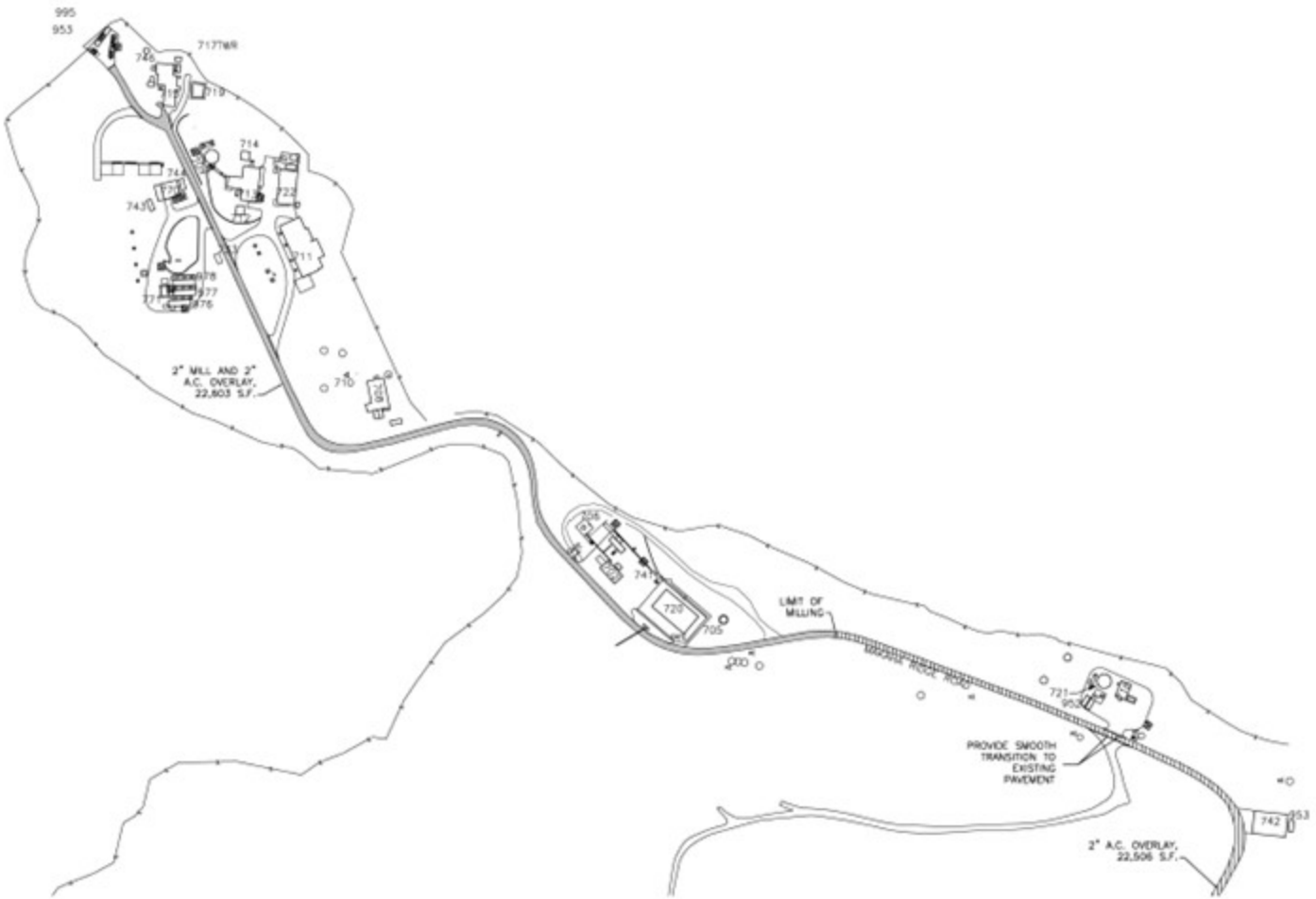
IF SHEET IS LESS THAN 22" X 34" REDUCED PRINT - USE GRAPHIC SCALES

PACIFIC DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
PEARL HARBOR, HAWAII

MAKAHA RIDGE ROAD REPAIRS
MAKAHA, OAHU, HAWAII

SITE PLAN

CODE & NO. 41691 | SIZE D
SCALE: AS SHOWN
CONST. CONTR. NO. N00604-21-D-4000
SPEC. NO. NONE
PWRT DRAWING NO. 24-03
SHEET 2 OF 4
C-1




1 SITE PLAN (CONTINUED)
C-60-1 SCALE: 1"=100'-0"

N

90% SUBMITTAL
NOT FOR CONSTRUCTION

DISTRIBUTION STATEMENT C. DISTRIBUTION AUTHORIZED TO U.S. GOVERNMENT AGENCIES AND THEIR CONTRACTORS PER CONTRACT N00604-09-D-0001 OTHER REQUESTS FOR THIS DOCUMENT SHALL BE REFERRED TO CODE 7030

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE WORK INDICATED ON VARIOUS PAGES AS NECESSARY TO AVOID CONFLICTS AND TO ENSURE THE INSTALLATION OF ALL WORK WITHIN THE PROJECT LIMITS.

IF SHEET IS LESS THAN 22" X 34" REDUCED PRINT - USE GRAPHIC SCALES

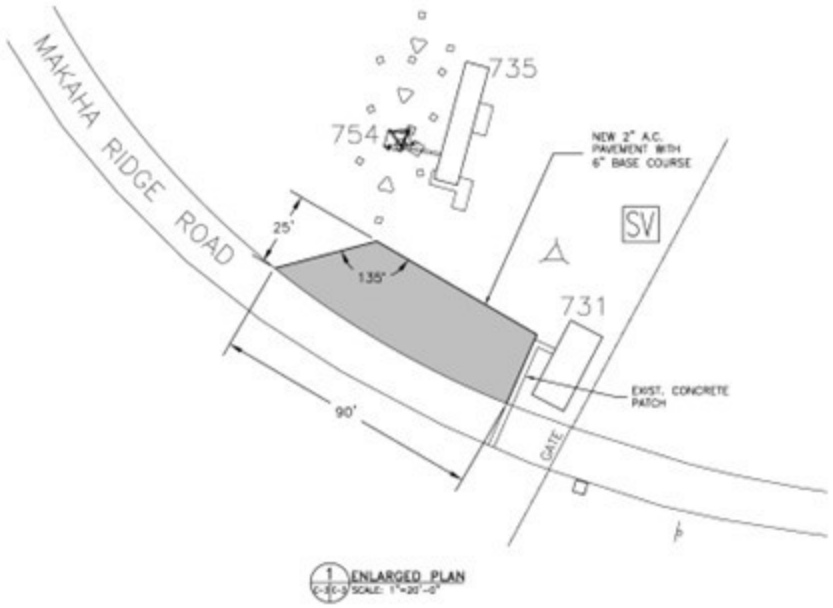
Koa Lani
JOINT BASE PEARL HARBOR-HICKAM
HONOLULU, HI 96782-0300

PACIFIC DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
PEARL HARBOR, HAWAII

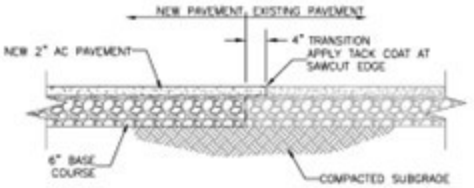
ROSE RIDGE (SOUTH) MAKAHA RIDGE ROAD REPAIRS
MAKAHA RIDGE ROAD REPAIRS
FMRP(U)

SITE PLAN (CONTINUED)

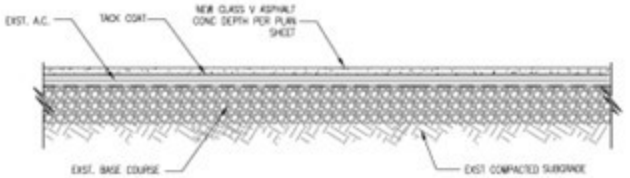
CODE ID. NO. 47939 SIZE D
SCALE: AS SHOWN
CONST. CONTR. NO.
N00604-21-D-4000
SPEC. NO. NONE
PWRY DRAWING NO.
24-03
SHEET 3 OF 4
C-2



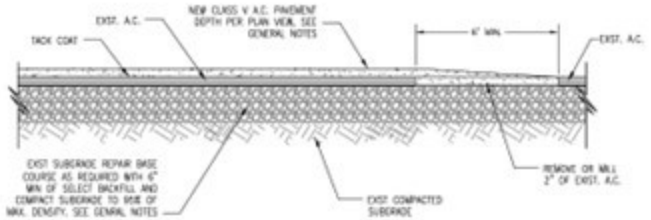

1 ENLARGED PLAN
C-3/C-3 SCALE: 1"=20'-0"




NEW AC PAVEMENT DETAIL
SCALE: NOT TO SCALE




MILL AND OVERLAY DETAIL
SCALE: NOT TO SCALE




OVERLAY DETAIL
SCALE: NOT TO SCALE

90% SUBMITTAL
NOT FOR CONSTRUCTION

DISTRIBUTION STATEMENT C. DISTRIBUTION AUTHORIZED TO U.S. GOVERNMENT AGENCIES AND THEIR CONTRACTORS PER CONTRACT N00604-09-D-0001 OTHER REQUESTS FOR THIS DOCUMENT SHALL BE REFERRED TO CODE 7030

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE WORK AMONG THE VARIOUS TRADES AS NECESSARY TO AVOID CONFLICTS AND TO ENSURE THE INSTALLATION OF ALL WORK WITH THE MINIMUM SPACE.

IF SHEET IS LESS THAN 22" X 34" REDUCED PRINT -- USE GRAPHIC SCALES

PACIFIC DIVISION
MAKAHA RIDGE ROAD REPAIRS
ENLARGED SITE PLAN, PAVEMENT DETAILS

SCALE: AS SHOWN
CONST. CONTR. NO. N00604-21-D-4000
SPEC. NO. NONE
PWRF DRAWING NO. 24-03
SHEET 4 OF 4
C-3

JOSH GREEN, M.D.
GOVERNOR | KE KIA'ĀINA

SYLVIA LUKE
LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA

STATE OF HAWAI'I | KA MOKU'ĀINA 'O HAWAI'I
DEPARTMENT OF LAND AND NATURAL RESOURCES
KA 'OIHANA KUMUWAIWAI 'ĀINA
Office of Conservation and Coastal Lands
P.O. BOX 621
HONOLULU, HAWAII 96809

DAWN N. S. CHANG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

LAURA H.E. KAAKUA
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CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

REF: OCCL: TF

SPA: KA 24-10

Dec 13, 2023

Thomas Nizo
Deputy Public Works Officer
Pacific Missile Range Facility
P.O. Box 128
Kekaha, HI 96752

SUBJECT: Site Plan Approval (SPA) Application for the Makaha Ridge Pacific Missile Range Facility (PMRF) Vehicle Access Control Barrier Project.
Located at Makaha Ridge PMRF
Puu Ka Pele Forest Reserve, Upper Waimea, Kauai
Tax Map Key (TMK): (4) 1-2-001:006

Dear Mr. Nizo:

The Office of Conservation and Coastal Lands (OCCL) has reviewed your Site Plan Approval (SPA) application and attachments regarding the subject matter. According to the information in your SPA application, the U.S. Navy's Makaha Ridge Pacific Missile Range Facility (PMRF) is proposing to construct the Makaha Ridge Vehicle Access Control Barrier Project (**Exhibit 1**).

The proposed project will involve the installation of a surface mounted, electrical, crash-rated vehicle access control barrier and the placement of 25 moveable pre-cast concrete jersey barriers that can be reconfigured or relocated as necessary (**Exhibit 2**). The application notes that approximately 250 sq. ft of grading and grubbing will be required for the vehicle access control barriers and related equipment. The surface mounted, electrical, crash-rated vehicle access control barrier will require an approximately 16ft long x 10ft wide x 2ft deep excavation into the existing road (built in 1960) for the barrier and a 125ft long x 1ft wide x 3ft deep trench for the electrical power and control lines. The application states that the trench will run from the security guard shack (noted on plans as B731) to a new electrical service rack.

The new electrical service rack will be mounted on a new 4ft long x 3ft wide x 4in deep concrete slab that will be poured in place. The rack will include a control panel for the vehicle access control barrier. Additionally, the application states that the project will include the installation of a 3ft long x 6ft wide x 6in deep concrete slab for an emergency backup generator, a 16in x 16in x 24in footing for a traffic signal post, and two 18in diameter x 42in deep concrete footings for bollards (**Exhibit 3**).

The application notes that most of the proposed activities will occur in areas that have been disturbed in the past. Best management practices (BMPs) for construction will include straw wattles around the construction site for erosion control, sediment control, and storm water runoff control. The application states that materials will be transported by flatbed and pickup trucks in approximately 4 trips.

Cultural resources surveys have not identified any traditional Hawaiian archaeological sites, features, or buried cultural deposits at the Makaha Ridge PMRF. The application states that the federal government has leased the Makaha Ridge PMRF from the State of Hawaii for communication, research, development, testing, tracking, evaluation, guidance, and related government purposes since 1965.

On behalf of the Makaha Ridge PMRF, you are requesting SPA for the Makaha Ridge PMRF Vehicle Access Control Barrier Project.

ANALYSIS:

The OCCL notes that the proposed project area on TMK: (4) 1-2-001:006 lies within the Resource Subzone of the State Land Use Conservation District. According to Department files, the U.S. Navy is leasing the land that contains the PMRF and proposed project area from the State of Hawaii under General Lease S-3952 (gl5814). On May 12, 1978; the Board of Land and Natural Resources (BLNR) approved Conservation District Use Permit (CDUP) KA-1024 for Radar Related Facilities on the property subject to eight conditions. On September 12, 2022; the Federal Aviation Administration (FAA) was granted site plan approval for the FAA Weather Camera System project subject to fifteen conditions. On April 14, 2023; the PRMF was granted site plan approval for the concrete pad project subject to twenty conditions. On September 20, 2023; the PMRF was granted site plan approval for the Makaha Ridge PMRF Native Plant Restoration Project subject to twenty-eight conditions.

After reviewing the application, we have determined that the Makaha Ridge PMRF Vehicle Access Control Barrier Project is consistent with Hawaii Administrative Rules (HAR) §13-5-22 P-9 STRUCTURES, ACCESSORY (B-1) *Construction or placement of structures accessory to existing facilities or uses.* This requires site plan approval from the OCCL.

The application was provided to the Division of Forestry and Wildlife (DOFAW) for comments. DOFAW had no comments due to the project's lack of vegetation disturbance; however, previous conditions that were included SPA: KA 23-70 for the PMRF Native Plant Restoration Project are included where they align with the avoidance measures for natural and cultural resources and historic properties contained in the application's Record of Categorical Exclusion.

The OCCL notes that the proposed Makaha Ridge PMRF Vehicle Access Control Barrier Project appears to be eligible for a Hawaii Revised Statutes (HRS), Chapter 343 exemption action. The "EXEMPTION LIST FOR THE DEPARTMENT OF LAND AND NATURAL RESOURCES", General Exemption Type 3 Part 1 #2 *Construction of security features, including fencing, gates, cameras, and other similar items;* #10 *Construction, placement or installation of signage, pavement markings, buoys, or other similar structures;* and #13 *Installation of glare screens, bollards, guard rails, vehicular access barriers, and other similar appurtenances designed to protect the public.* The OCCL has consulted with the Kauai District Land Office (KDLO) and DOFAW regarding the proposed Makaha Ridge PMRF Vehicle Access Control Barrier Project,

and KDLO and DOFAW have concurred with the OCCL's determination that the project is a HRS, Chapter 343 exempt action.

The PMRF's Programmatic Agreement Record for Archaeology attached to the application for Section 106 compliance notes that the project will have "No effects as all areas are previously disturbed or tested."

Therefore, authorization is hereby granted to the PMRF for the proposed Vehicle Access Control Barrier Project at the Makaha Ridge PMRF located within the Puu Ka Pele Forest Reserve, Upper Waimea, Kauai on TMK: (4) 1-2-001:006, and is subject to the following conditions:

1. The permittee shall comply with all applicable statutes, ordinances, rules, and regulations of the federal, state, and county governments, and applicable parts of HAR, Chapter 13-5;

2. The permittee shall be liable, to the extent allowed by the Federal Tort Claims Act, for claims for personal injuries or property damage resulting from the negligent or wrongful act or omission of any employee of the United States while acting within the scope of his or her employment, arising out of this agreement;

3. The permittee shall comply with all applicable Department of Health administrative rules;

4. The permittee shall obtain a land disposition from the Kauai District Land Office (808) 274-3491 the use of State lands;

5. Unless otherwise authorized, any work or construction to be done on the land shall be initiated within one (1) year of the approval of such use and shall be completed within three (3) years of the approval of such use. The permittee shall notify the department in writing when construction activity is initiated and when it is complete;

6. The permittee understands and agrees that this permit does not convey any vested rights or exclusive privilege;

7. In issuing the approval, the department has relied on the information and data, which the applicant has provided in connection with the application. If, subsequent to the issuance of the approval such information and data prove to be false, incomplete, or inaccurate, this approval may be modified, suspended, or revoked, in whole or in part, and the department may, in addition, institute appropriate legal proceedings;

8. Where any interference, nuisance, or harm may be caused, or hazard established by the use the permittee shall be required to take measures to minimize or eliminate the interference, nuisance, harm, or hazard;

9. The permittee acknowledges that the approved work shall not hamper, impede, or otherwise limit the exercise of traditional, customary or religious practices of native Hawaiians in the immediate area, to the extent the practices are provided for by the Constitution of the State of Hawaii, and by Hawaii statutory and case law;

10. In the event that subsurface historic resources, including human skeletal remains, structural remains, cultural deposits, artifacts, sand deposits, or sink holes are identified

during the demolition and/or construction work, cease work in the immediate vicinity of the find, protect the find from additional disturbance, and contact the SHPD, at (808) 692-8015;

11. Should any unanticipated problems occur which may affect public health, safety, or welfare, the Department may require immediate removal of all project components;

12. Trees 15ft or taller shall not be trimmed or removed during the Hawaii Hoary bat birthing and pup rearing season from June 1st to September 15th;

13. The use of barbed wire fencing is prohibited;

14. The permittee shall have a qualified biologist conduct a survey Hawaiian nene geese and nests no earlier than three (3) days before initiation of the project to identify any nests within 100ft of any activity. No potential harmful work will be conducted within 100ft of a breeding or non-flighted goose;

15. Given the location near the Na Pali-Kona Forest Reserve, which serves as a critical forest reserve for nesting and breeding seabirds and given that listed seabirds have been detected within PMRF, the permittee and their agents shall consult with DOFAW Kauai Branch biologists ((808) 274-3433) and conduct a survey of potential nesting seabirds in the area that may be disturbed by the scope of the project. If listed seabirds are detected near the site, the permittee and their agents shall consult with DOFAW Kauai Branch Staff on avoidance and minimization measures;

16. The permittee shall adhere to the requirements of the Dark Skies program if work will require any lighting at night during the seabird peak fallout period September 15th to December 15th;

17. If nighttime construction is required during the seabird fledging season (September 15th to December 15th), the permittee shall have a qualified biologist be present at the project site to monitor and assess the risk of seabirds being attracted or grounded due to the lighting. If seabirds are seen circling around the area, lights shall be turned off;

18. If a downed seabird is detected in or near the project area(s), the permittee and their agents shall review and follow DOFAW's recommended response protocol at https://dlnr.hawaii.gov/wildlife/seabird-fallout-season/#response ;

19. Any landscaping shall be appropriate to the site location and shall give preference to plant materials that are endemic or indigenous to Hawaii. The introduction of invasive species is prohibited;

20. The permittee shall ensure that all project and construction related containers, equipment, and potted plants brought onto PMRF shall have undergone inspection by a qualified individual and are free from invasive pests such as, but not limited to, coqui frogs, little fire ants (LFA), and Coconut Rhinoceros Beetles (CRB). Use of Hawaiian native plants is required;

21. The permittee and their agents shall minimize the movement of plant or soil material between worksites. Soil and plant material may contain detrimental fungal pathogens

(e.g., Rapid Ohia Death, Coffee Leaf Rust), vertebrate and invertebrate pests (e.g., Coqui Frogs, Little Fire Ants, Coffee Borer, etc.) or invasive plant parts (e.g., Barbados Gooseberry, False Kava, Giant Reed, etc.) that could harm our native species and ecosystems. DOFAW recommends that PMRF and their agents consult with the Kauai Invasive Species Committee (KISC) at (808) 821-1490 to help plan, design, and construct the project, learn of any high-risk invasive species in the area, and ways to mitigate their spread;

22. The permitte and their agents shall ensure all equipment, materials, and personnel shall be cleaned of excess soil and debris to minimize the risk of spreading invasive species;

23. All representations relative to mitigation or best management practices as stated in the application or supplemental material submitted to the Department for the proposed project are incorporated as conditions of the permit;

24. Upon completion of the project, the permittee shall remove all project components and the areas restored to a more natural state and/or to the Department's satisfaction;

25. Other terms and conditions as prescribed by the OCCL; and

26. Failure to comply with any of these conditions may render this approval void as determined by the Department.

Please acknowledge receipt of this approval, with the above noted conditions, in the space provided below. Please sign two copies. Retain one and return the other within thirty (30) days. Should you have any questions, feel free to contact Trevor Fitzpatrick of our Office of Conservation and Coastal Lands at (808) 798-6660 or trevor.j.fitzpatrick@hawaii.gov .

Sincerely,

S Michael Cain

Michael Cain, Administrator
Office of Conservation and Coastal Lands

Receipt acknowledged:

Applicant's signature Date 12/24/23

*CC: Chairperson*
*Division of Forestry and Wildlife – Kauai Branch*
*Kauai Division Land Office*
*County of Kauai Planning Department*

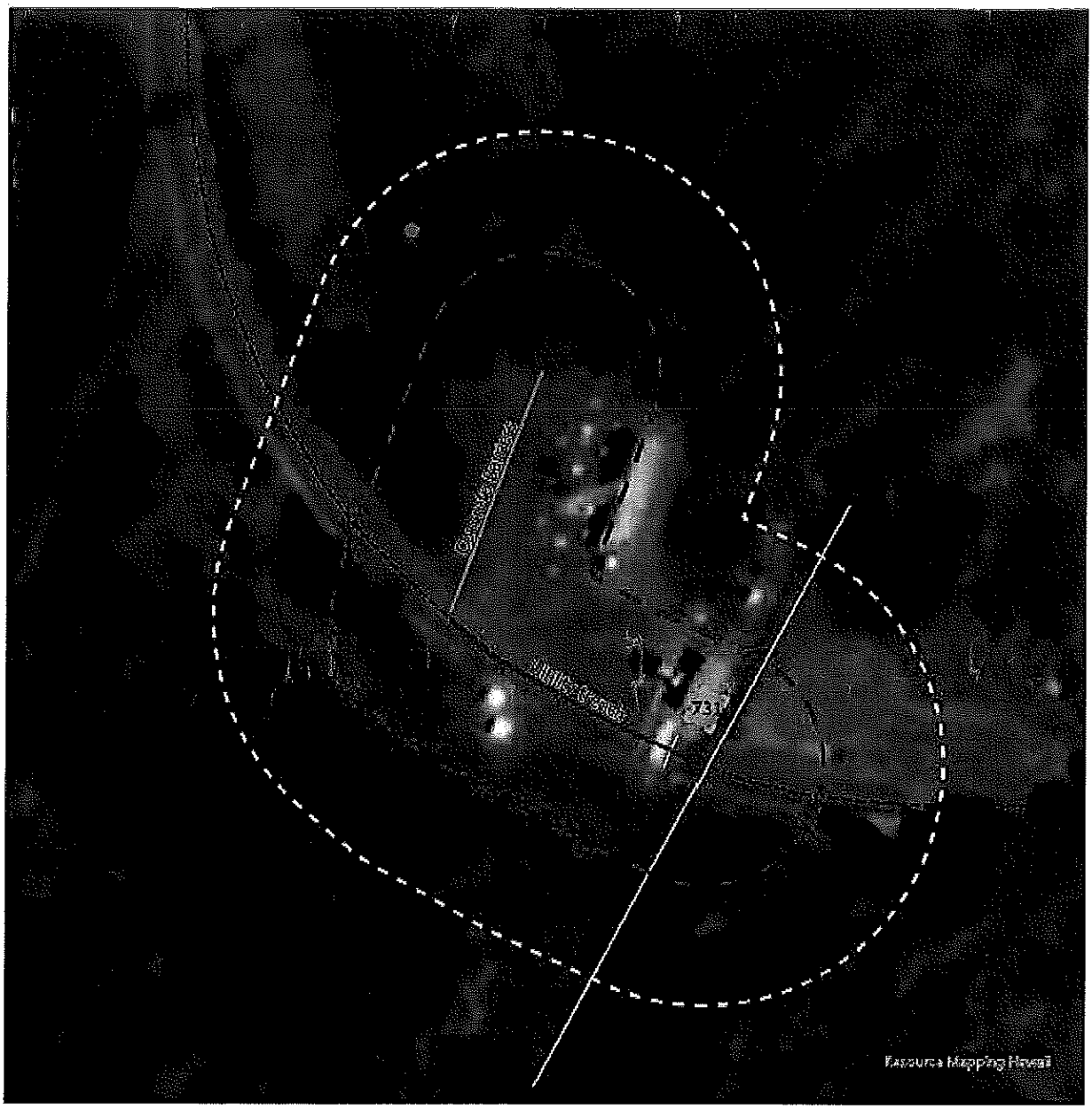
Attach.: Ck. #01 0000475545 ($50.00)

REF: OCCL: TF

SPA: KA 24-10

# Makaha Ridge Vehicle Access Control Updates

PCSU BAHeindl 5/12/2023 9:35 AM




- 50 ft Project Buffer
- 100 ft Project Buffer
- PMRF buildings
- CR High Sensitivity Area (0)
- CR Medium Sensitivity Area (0)
- CR Low Sensitivity Area (0)

**Project Footprint**

- Concrete Barriers
- Utility trench
- <all other values>

**Date Structure Built**

- 1940's
- 1950's
- 1960's
- 1970's
- 1980's
- 1990's
- 2000's
- 2010's
- Unknown
- Proposed New Structure

**Nest Species**

- HAGO (0)
- HASA (0)
- HAGO (1)
- HAWD (0)
- Other (0)
- Nene Sighting (0)
- WTSH Burrow (0)
- Fence
- AccessControlL
- RoadCenterline

0 4.75 9.5 19 28.5 38 Meters

N

**Exhibit 1**

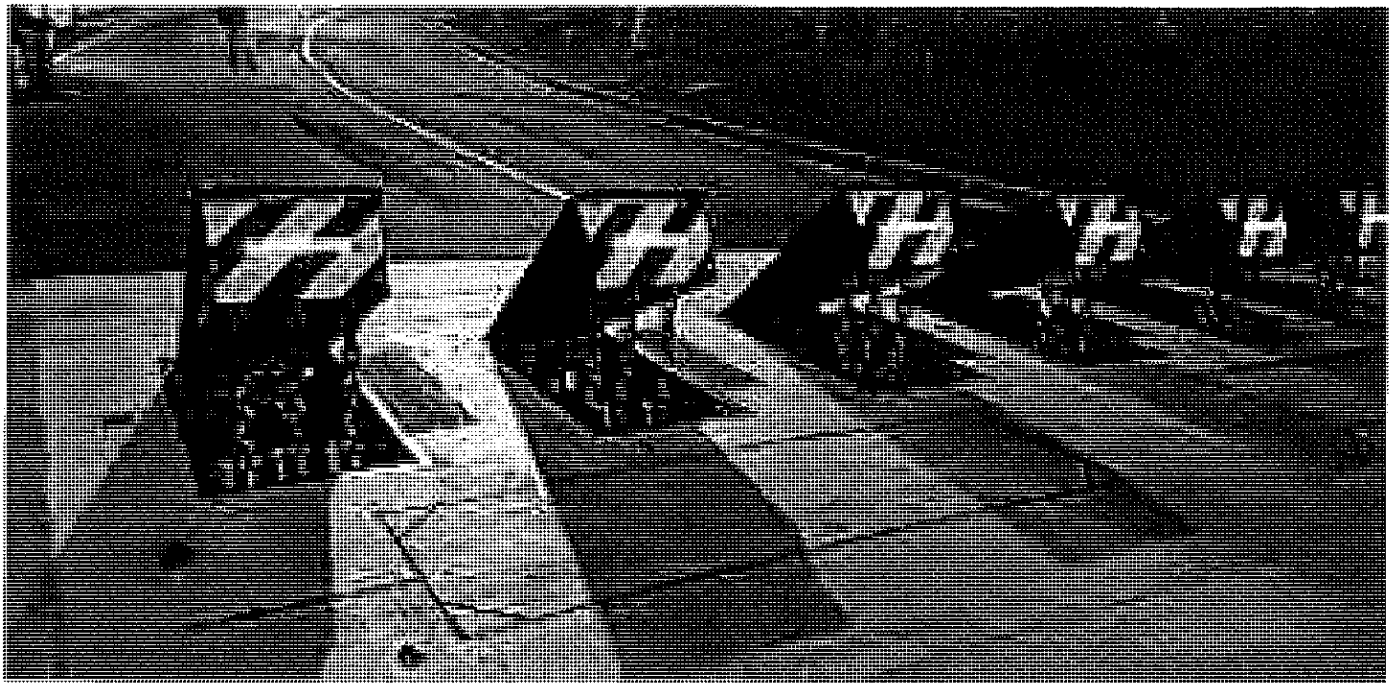


**Exhibit 2**

REF: OCCL: TF

SPA: KA 24-10

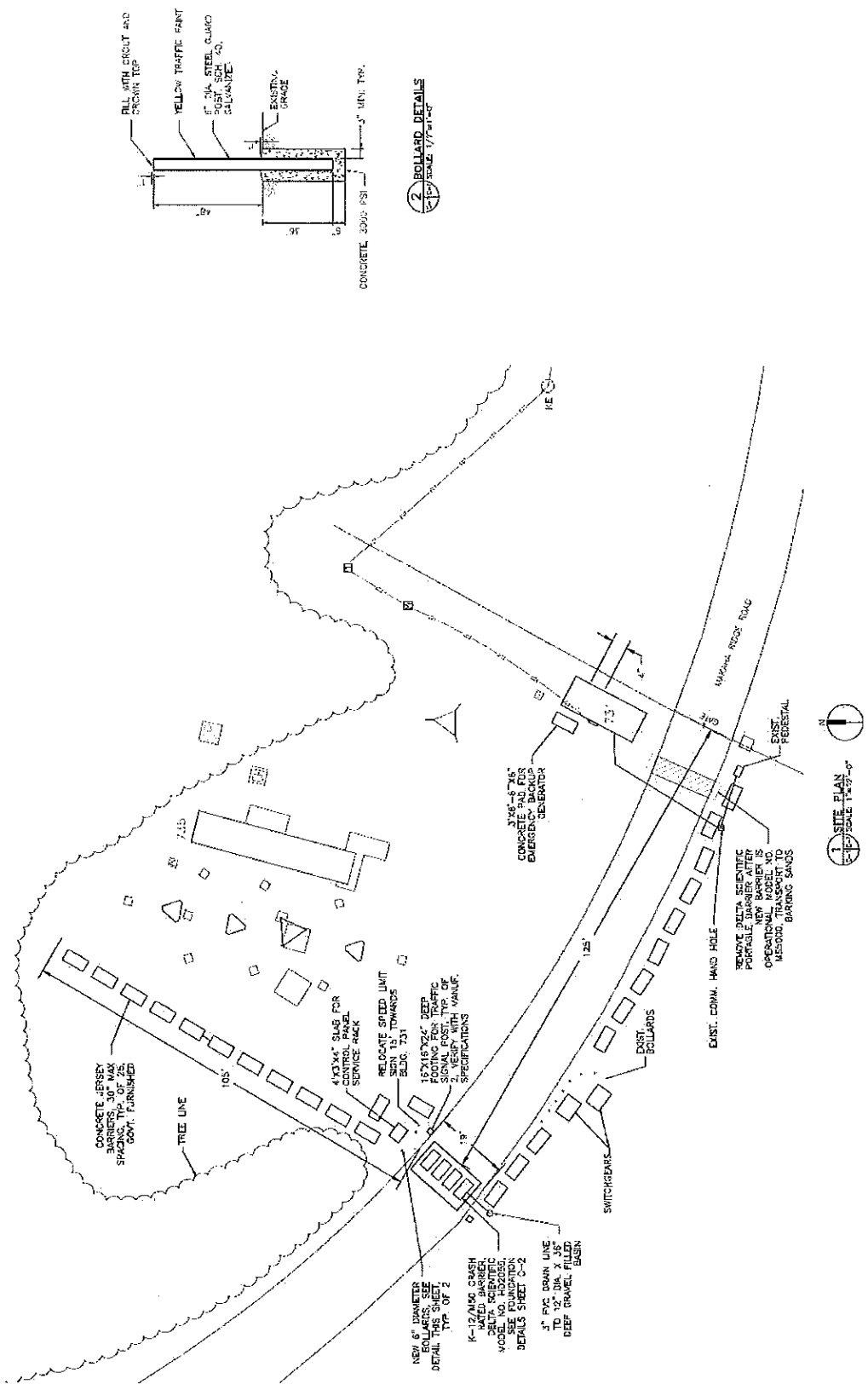



**Exhibit 3**

JOSH GREEN, M.D.
GOVERNOR | KE KIA'ĀINA

SYLVIA LUKE
LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA

STATE OF HAWAI'I | KA MOKU'ĀINA 'O HAWAI'I
DEPARTMENT OF LAND AND NATURAL RESOURCES
KA 'OIHANA KUMUWAIWAI 'ĀINA
Office of Conservation and Coastal Lands
P.O. BOX 621
HONOLULU, HAWAII 96809

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FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

REF: OCCL: TF

SPA: KA 23-70

Sep 20, 2023

Thomas Nizo
Deputy Public Works Officer
Pacific Missile Range Facility
P.O. Box 128
Kekaha, HI 96752

SUBJECT: Site Plan Approval (SPA) Application for the Makaha Ridge Pacific Missile Range Facility (PMRF) Native Plant Restoration Project.
Located at Makaha Ridge PMRF
Puu Ka Pele Forest Reserve, Upper Waimea, Kauai
Tax Map Key (TMK): (4) 1-2-001:006

Dear Mr. Nizo:

The Office of Conservation and Coastal Lands (OCCL) has reviewed your Site Plan Approval (SPA) application and attachments regarding the subject matter. According to the information in your SPA application, the U.S. Navy's Makaha Ridge Pacific Missile Range Facility (PMRF) is proposing to conduct a native plant restoration project along approximately 6 acres of Navy-leased land near the PMRF site on Makaha Ridge. The application notes that the purpose of the proposed project is to improve and support native ecosystems while reducing erosion near PMRF on Makaha Ridge. This will be accomplished in four distinct areas: Site A, B, C, and D (***Exhibit 1***).

The application states that the project would require the outplanting a variety of native plants in areas currently experiencing erosion, temporary irrigation lines, and temporary rain catchment systems/tanks to supply water at the four sites. The application notes that at Site D a temporary ungulate fence with access gate will be constructed utilizing t-posts and 500ft of 5ft-tall, galvanized wire fencing. See ***Exhibit 2***.

All plants species would be sourced from the Makaha Ridge ecoregion, or adjacent ecoregion, and would be selected for ability to successfully persist in the climate and soil present on site. Plants would be propagated by a contracted botanist in a nursery and inspected by the Navy prior to outplanting for pests and disease. The application states that no endangered or threatened plants would be collected or outplanted.

The application notes that restoration design and erosion mitigation may also include associated techniques, such as wattling, but would not include engineering solutions such as hardscaping or geotextile cloth. Each of the sites (A, B, C, and D) will require a temporary staging area and 1-2 temporary water tanks to provide irrigation for newly outplanted native species until they are established enough to no longer need water. Materials will be packaged and weighted so that they are secured from wind with extra precautions implemented near Site A and the adjacent PMRF helipad. Water tanks will be secured with straps and weighted down with cinderblocks until they are filled with water.

Outplanted plant would be tended to regularly for at least 12 months following initial outplanting to monitor for success. The application's work plan states that monitoring will begin when 90-100% of a site has been planted and will occur three times per week the first week; once per week the second, third, and fourth weeks following outplanting; and monthly thereafter. The water tanks and irrigation lines will also be inspected at this time to ensure that no water is leaking.

Once a final inspection is completed and the government/Navy are satisfied that all performance measures regarding the native outplanting project are met, demobilization will begin. The application and its associated materials states that all project related materials will be removed and disposed of unless an agreement has been discussed to keep any installed equipment in place.

The application states that no grading, grubbing, or substantial ground disturbance will be required by the project. All invasive plant species removal and native plant outplanting will be done by hand. Cultural resources surveys have not identified any traditional Hawaiian archaeological sites, features, or buried cultural deposits at the Makaha Ridge PMRF. The application states that the federal government has leased the Makaha Ridge PMRF from the State of Hawaii for communication, research, development, testing, tracking, evaluation, guidance, and related government purposes since 1965.

On behalf of the Makaha Ridge PMRF, you are requesting SPA for the Makaha Ridge PMRF Native Plant Restoration Project.

ANALYSIS:

The OCCL notes that the proposed project area on TMK: (4) 1-2-001:006 lies within the Resource Subzone of the State Land Use Conservation District. According to Department files, the U.S. Navy is leasing the land that contains the PMRF and proposed project area from the State of Hawaii under General Lease S-3952 (gl5814). On May 12, 1978; the Board of Land and Natural Resources (BLNR) approved Conservation District Use Permit (CDUP) KA-1024 for Radar Related Facilities on the property subject to eight conditions. On September 12, 2022; the Federal Aviation Administration (FAA) was granted site plan approval for the FAA Weather Camera System project subject to fifteen conditions. On April 14, 2023; the PRMF was granted site plan approval for the concrete pad project subject to twenty conditions.

After reviewing the application, we have determined that the Makaha Ridge PMRF Native Plant Restoration Project is consistent with Hawaii Administrative Rules (HAR) §13-5-22 P-13 LAND AND RESOURCE MANAGEMENT (B-2) *Planting of native and endemic plants and fence maintenance. New fence ex-closures for native plants or small native wildlife communities, in an area greater than one acre. The department or board reserves the right to require departmental*

*or board approval if it is determined that the proposed action may cause significant negative secondary impacts on natural or cultural resources.* This requires site plan approval from the OCCL.

OCCL sent the SPA application to the Division of Forestry and Wildlife (DOFAW) for comments regarding the Makaha Ridge PMRF Native Plant Restoration Project. DOFAW has recommended that the following site-specific conditions be included as part of the SPA approval for the Makaha Ridge project:

- Given the location near the Na Pali-Kona Forest Reserve, which serves as a critical forest reserve for nesting and breeding seabirds and given that listed seabirds have been detected within PMRF, PMRF staff and their agents shall consult with DOFAW Kauai Branch biologists ((808) 274-3433) and conduct a survey of potential nesting seabirds in the area that may be disturbed by the scope of the project. If listed seabirds are detected near the site, PMRF staff and their agents shall consult with DOFAW Kauai Branch Staff on avoidance and minimization measures.
- Remove the plant species *Acacia koaia*, *Osteomeles anthyllidifolia*, and *Wikstroemiauva-ursi* from the 'Native Plant List' (reference Attachment #5 [Final Draft Work Plan entitled "hamer. Makaha Ridge Erosion Control & Restoration"], Table 1) used for the outplanting project and adhere to the list otherwise.
- Apply for a Forest Reserve Collection Permit through DOFAW Kauai Branch ((808) 274-3433) to source seeds from relevant seed zones in the Makaha Ridge area.
- Address how the native plants being outplanted will be protected either through permanent ungulate-proof fencing on all sites or strategic ungulate control by the contractor.
- Identify when and how the PVC irrigation tubes will be removed and how the impact to the native vegetation planted will be avoided or minimized.

DOFAW concurs with the site-specific conditions to avoid construction and operational impacts to State-listed species including the opeapea or Hawaiian Hoary bat (*Lasiurus cinereus semotus*), nene or Hawaiian Goose (*Branta sandvicensis*), and seabirds. DOFAW also appreciates the measures outlined to minimize the movement of plant and soil material to prevent the spread of invasive species and for the use of native plants. DOFAW offers/provides the following additional comments regarding the potential for the proposed work to affect listed species in the vicinity of the project area.

If nighttime construction is required during the seabird fledging season (September 15 to December 15), DOFAW recommends that a qualified biologist be present at the project site to monitor and assess the risk of seabirds being attracted or grounded due to the lighting. If seabirds are seen circling around the area, lights should then be turned off. If a downed seabird is detected, please follow DOFAW's recommended response protocol by visiting https://dlnr.hawaii.gov/wildlife/seabird-fallout-season/#response . Permanent lighting also poses a risk of seabird attraction, and as such should be minimized or eliminated to protect seabird flyways and preserve the night sky. For illustrations and guidance related to seabird-friendly light styles that also protect seabirds and the dark starry skies of Hawaii, please visit https://dlnr.hawaii.gov/wildlife/files/2016/03/DOC439.pdf .

DOFAW concurs with the avoidance and minimization measures proposed for the opeapea or Hawaiian Hoary bat which could potentially occur in the vicinity of the project area. DOFAW would

also recommend that the use of barbed be avoided because bats can become ensnared and killed by such fencing during flight.

DOFAW recommends minimizing the movement of plant or soil material between worksites. Soil and plant material may contain detrimental fungal pathogens (e.g., Rapid Ohia Death, Coffee Leaf Rust), vertebrate and invertebrate pests (e.g., Coqui Frogs, Little Fire Ants, Coffee Borer, etc.) or invasive plant parts (e.g., Barbados Gooseberry, False Kava, Giant Reed, etc.) that could harm our native species and ecosystems. DOFAW recommends that PMRF and their agents consult with the Kauai Invasive Species Committee (KISC) at (808) 821-1490 to help plan, design, and construct the project, learn of any high-risk invasive species in the area, and ways to mitigate their spread. All equipment, materials, and personnel should be cleaned of excess soil and debris to minimize the risk of spreading invasive species.

DOFAW also recommends that Best Management Practices (BMPs) are employed during and after construction to contain soils and sediment with the purpose of preventing damage to near-shore waters and marine ecosystems.

DOFAW's comments and guidelines have been included as conditions of the authorization below. Additionally, PMRF staff were given the opportunity to review and respond to DOFAW's comments regarding the project. PMRF's responses to DOFAW's comments are attached as ***Exhibit 3***.

The OCCL notes that the proposed PMRF Native Plant Restoration Project appears to be eligible for a Hawaii Revised Statutes (HRS), Chapter 343 exemption action. The "EXEMPTION LIST FOR THE DEPARTMENT OF LAND AND NATURAL RESOURCES", General Exemption Type 3 Part 2 #1 *Natural resource management actions that the Department declares are designed specifically to monitor, conserve, or enhance the status of native species or native species' habitats, such as fences around or to manage rare, threatened or endangered plants. Fences shall contain step-overs or other features that permit pedestrian access for cultural and recreational use*; and, General Exemption Type 4 Part 1 #5 *Establish temporary or permanent vegetative cover including trees, shrubs, grasses, and sod for landscaping, reforestation, soil stabilization, watershed protection, native wildlife habitat, native ecosystem restoration, and rare plant preservation; provided, however, that this exemption shall not apply to vegetation that is likely to be invasive or for tree plantings for which harvesting is planned or is reasonably foreseeable* would suggest that the proposed project is eligible for Chapter 343 exemption. Furthermore, DOFAW notes that the DLNR's Exemption List and General Exemption Type 1 Part 1 #27; Type 2 Part 1 #20; Type 3 Part 2 #1; and Type 4 Part 1 #5 appear to apply to portions of the proposed project and would further suggest that the project is a HRS, Chapter 343 exemption action. The OCCL has consulted with the Kauai District Land Office (KDLO) and DOFAW regarding the proposed PMRF Native Plant Restoration Project, and KDLO and DOFAW have concurred with the OCCL's determination that the project is a HRS, Chapter 343 exempt action.

Therefore, authorization is hereby granted to the PMRF for the proposed Native Plant Restoration Project at the Makaha Ridge PMRF located within the Puu Ka Pele Forest Reserve, Upper Waimea, Kauai on TMK: (4) 1-2-001:006, and is subject to the following conditions:

1. The permittee shall comply with all applicable statutes, ordinances, rules, and regulations of the federal, state, and county governments, and applicable parts of HAR, Chapter 13-5;

2. The permittee shall be liable, to the extent allowed by the Federal Tort Claims Act, for claims for personal injuries or property damage resulting from the negligent or wrongful act or omission of any employee of the United States while acting within the scope of his or her employment, arising out of this agreement;

3. The permittee shall comply with all applicable Department of Health administrative rules;

4. The permittee shall obtain a land disposition from the Kauai District Land Office (808) 274-3491 the use of State lands;

5. Unless otherwise authorized, any work or construction to be done on the land shall be initiated within one (1) year of the approval of such use and shall be completed within three (3) years of the approval of such use. The permittee shall notify the department in writing when construction activity is initiated and when it is complete;

6. The permittee understands and agrees that this permit does not convey any vested rights or exclusive privilege;

7. In issuing the approval, the department has relied on the information and data, which the applicant has provided in connection with the application. If, subsequent to the issuance of the approval such information and data prove to be false, incomplete, or inaccurate, this approval may be modified, suspended, or revoked, in whole or in part, and the department may, in addition, institute appropriate legal proceedings;

8. Where any interference, nuisance, or harm may be caused, or hazard established by the use the permittee shall be required to take measures to minimize or eliminate the interference, nuisance, harm, or hazard;

9. The permittee acknowledges that the approved work shall not hamper, impede, or otherwise limit the exercise of traditional, customary or religious practices of native Hawaiians in the immediate area, to the extent the practices are provided for by the Constitution of the State of Hawaii, and by Hawaii statutory and case law;

10. In the event that subsurface historic resources, including human skeletal remains, structural remains, cultural deposits, artifacts, sand deposits, or sink holes are identified during the demolition and/or construction work, cease work in the immediate vicinity of the find, protect the find from additional disturbance, and contact the SHPD, at (808) 692-8015;

11. Should any unanticipated problems occur which may affect public health, safety, or welfare, the Department may require immediate removal of all project components;

12. Trees 15ft or taller shall not be trimmed or removed during the Hawaii Hoary bat birthing and pup rearing season from June 1st to September 15th;

13. The use of barbed wire fencing is prohibited;

14. The permittee shall have a qualified biologist conduct a survey Hawaiian nene geese and nests no earlier than three (3) days before initiation of the project to identify any nests

within 100ft of any activity. No potential harmful work will be conducted within 100ft of a breeding or non-flighted goose;

15. Given the location near the Na Pali-Kona Forest Reserve, which serves as a critical forest reserve for nesting and breeding seabirds and given that listed seabirds have been detected within PMRF, the permittee and their agents shall consult with DOFAW Kauai Branch biologists ((808) 274-3433) and conduct a survey of potential nesting seabirds in the area that may be disturbed by the scope of the project. If listed seabirds are detected near the site, the permittee and their agents shall consult with DOFAW Kauai Branch Staff on avoidance and minimization measures;

16. The permittee shall adhere to the requirements of the Dark Skies program if work will require any lighting at night during the seabird peak fallout period September 15th to December 15th;

17. If nighttime construction is required during the seabird fledging season (September 15th to December 15th), the permittee shall have a qualified biologist be present at the project site to monitor and assess the risk of seabirds being attracted or grounded due to the lighting. If seabirds are seen circling around the area, lights shall be turned off;

18. If a downed seabird is detected in or near the project area(s), the permittee and their agents shall review and follow DOFAW's recommended response protocol at https://dlnr.hawaii.gov/wildlife/seabird-fallout-season/#response ;

19. Any landscaping shall be appropriate to the site location and shall give preference to plant materials that are endemic or indigenous to Hawaii. The introduction of invasive species is prohibited;

20. The permittee and their agents shall adhere to the 'Native Plant List' (reference Attachment #5 [Final Draft Work Plan entitled "hamer. Makaha Ridge Erosion Control & Restoration"], Table 1) developed for the project, unless otherwise authorized in consultation with and approval from DOFAW. The plant species *Acacia koaia*, *Osteomeles anthyllidifolia*, and *Wikstroemiauva-ursi* shall not be utilized for the outplanting project;

21. The permittee shall obtain a Forest Reserve Collection Permit through DOFAW Kauai Branch ((808) 274-3433) to source seeds from relevant seed zones in the Makaha Ridge area for seedlings and outplanting for the project;

22. The permittee shall ensure that all project and construction related containers, equipment, and plotted plants brought onto PMRF shall have undergone inspection by a qualified individual and are free from invasive pests such as, but not limited to, coqui frogs, little fire ants (LFA), and Coconut Rhinoceros Beetles (CRB). Use of Hawaiian native plants is required;

23. The permittee and their agents shall minimize the movement of plant or soil material between worksites. Soil and plant material may contain detrimental fungal pathogens (e.g., Rapid Ohia Death, Coffee Leaf Rust), vertebrate and invertebrate pests (e.g., Coqui Frogs, Little Fire Ants, Coffee Borer, etc.) or invasive plant parts (e.g., Barbados Gooseberry, False Kava, Giant Reed, etc.) that could harm our native species and

ecosystems. DOFAW recommends that PMRF and their agents consult with the Kauai Invasive Species Committee (KISC) at (808) 821-1490 to help plan, design, and construct the project, learn of any high-risk invasive species in the area, and ways to mitigate their spread;

24. The permitte and their agents shall ensure all equipment, materials, and personnel shall be cleaned of excess soil and debris to minimize the risk of spreading invasive species;

25. All representations relative to mitigation or best management practices as stated in the application or supplemental material submitted to the Department for the proposed project are incorporated as conditions of the permit;

26. Upon completion of the project, the permittee shall remove all project components and the areas restored to a more natural state and/or to the Department's satisfaction;

27. Other terms and conditions as prescribed by the OCCL; and

28. Failure to comply with any of these conditions may render this approval void as determined by the Department.

Please acknowledge receipt of this approval, with the above noted conditions, in the space provided below. Please sign two copies. Retain one and return the other within thirty (30) days. Should you have any questions, feel free to contact Trevor Fitzpatrick of our Office of Conservation and Coastal Lands at (808) 798-6660 or trevor.j.fitzpatrick@hawaii.gov .

Sincerely,

S Michael Cain

Michael Cain, Administrator
Office of Conservation and Coastal Lands

Receipt acknowledged:

Applicant's signature Date 28 Sep 23

*CC: Division of Forestry and Wildlife*
*Kauai Division Land Office*
*County of Kauai Planning Department*

PMRF Makaha Ridge Native Plant Restoration and Erosion Control Project, Proposed areas

***Exhibit 1***

## Site A

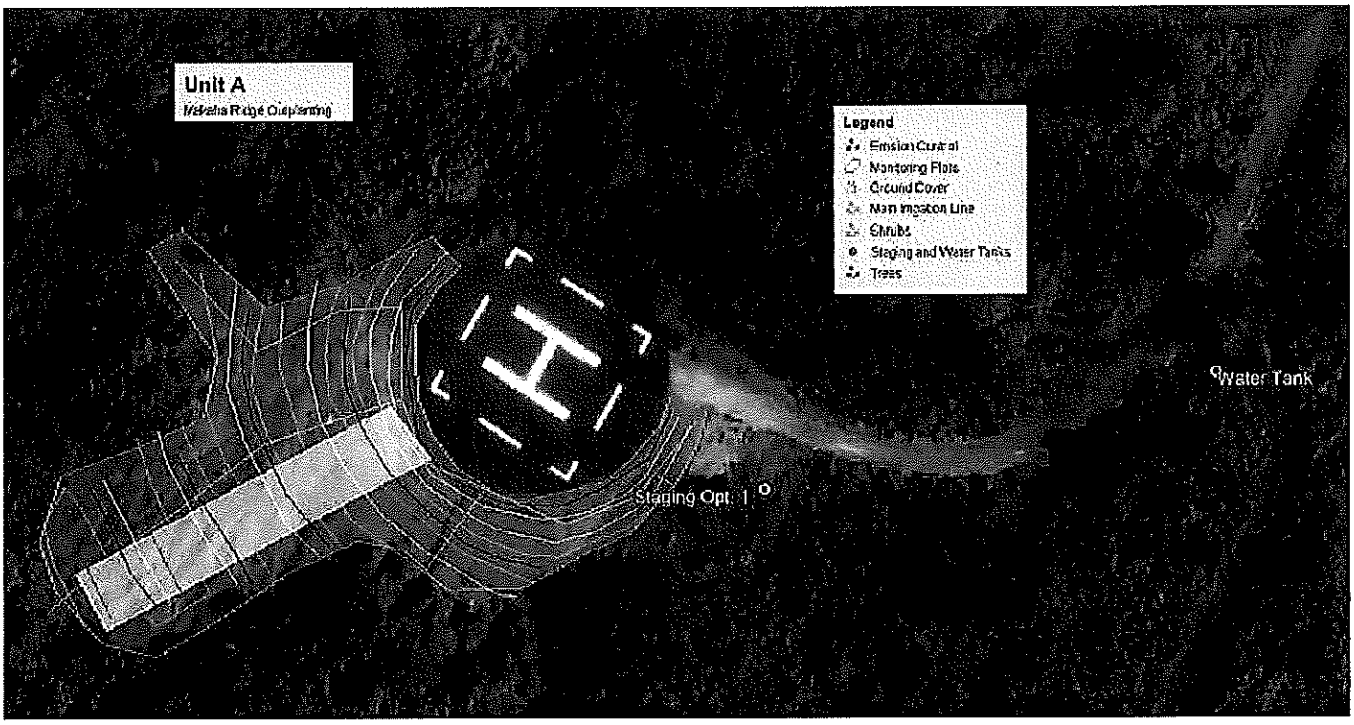


**Figure 3. Map of Site A. Lines indicate estimated spacing of planting rows, erosion control, and irrigation lines. All planting lines estimate locations of lateral irrigation lines as well.**

**Plant list for Site A, (primary species listed in bold).**

| Groundcover Species | | Approx. No. of Plants | Shrub Species | | Approx. No. of Plants | Tree Species | | Approx. No. of Plants |
|---|---|---|---|---|---|---|---|---|
| GC | ***Plumbago zeylanica*** | 180-270 | S | ***Dodonaea viscosa*** | 50-150 | T | *Acacia koa* | 2-13 |
| GC | ***Carex wahuensis*** | 60-230 | S | ***Chenopodium oahuense*** | 20-80 | T | *Erythrina sandwicensis* | 2-13 |
| GC | ***Heteropogon contortus*** | 0-150 | S/ GC | *Waltheria indica* | 0-60 | S/T | *Psydrax odorata* | 0-50 |
| GC | *Eragrostis variabilis* | 0-20 | | | | | | |
| GC | *Sida fallax* | 0-50 | | | | | | |
| ***Total*** | | **640** | | | | | | |

## Site B

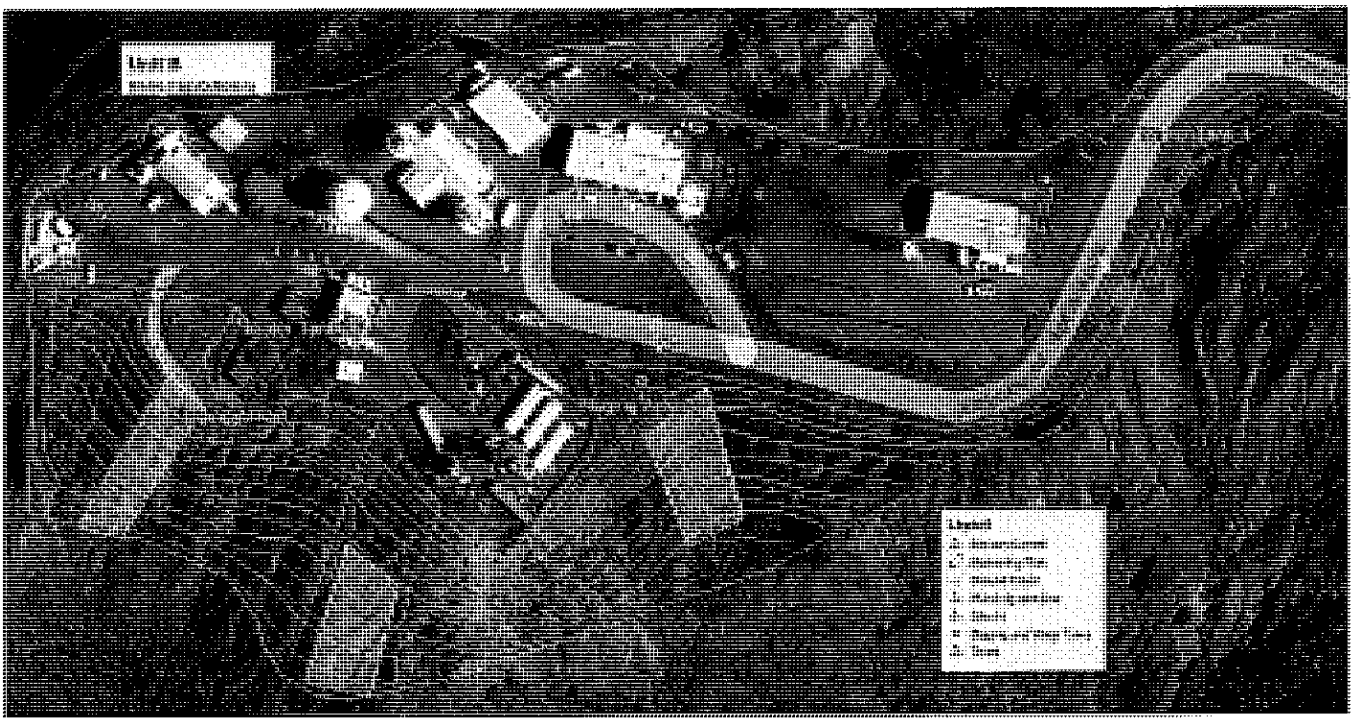

**Figure 4. Map of Site B including two (2) locations for staging and water tanks. Lines indicate estimated spacing of planting rows, erosion control, and irrigation lines. All planting lines additionally estimate locations of ¼-in drip irrigation lines.**

**Plant list for Site B, (primary species listed in bold).**

| Groundcover Species | | Approx. No. of Plants | Shrub Species | | Approx. No. of Plants | Tree Species | | Approx. No. of Plants |
|---|---|---|---|---|---|---|---|---|
| GC | ***Plumbago zeylanica*** | 900-1200 | S | ***Dodonaea viscosa*** | 800-1200 | S/T | *Psydrax odorata* | 50-150 |
| GC | ***Carex wahuensis*** | 1000-1700 | S | ***Chenopodium oahuense*** | 500-1100 | T | *Acacia koa* | 40-80 |
| GC | ***Heteropogon contortus*** | 250-500 | S/ GC | ***Waltheria indica*** | 400-1000 | T | *Sapindus oahuensis* | 10-75 |
| GC | *Eragrostis variabilis* | 80-200 | S | ***Nototrichium sandwicensis*** | 200-1000 | T | *Erythrina sandwicensis* | 10-17 |
| GC | *Vitex rotundifolia* | 50-200 | S | *Scaevola teccada* | 250-350 | ~~T~~ | ~~*Acacia koaia*~~ | ~~0-20~~ |
| GC | *Panicum torridum* | 50-150 | S | *Artemisia australis* | 50-80 | | | |
| GC | *Chrysopogon aciculatus* | 0-30 | S/ GC | *Capparis sandwichiana* | 20-100 | | | |
| GC/ S | *Wollostonia conata* | 0-30 | S | ~~*Osteomeles anthyllidifolia*~~ | ~~15-50~~ | | | |
| GC | *Sida fallax* | 0-50 | S | *Myoporum sandwicensis* | 0-100 | | | |
| | | | S | *Bidens sandwicensis* | 0-10 | | | |
| ***Total*** | | **3210** | | | | | | |

***Exhibit 2***

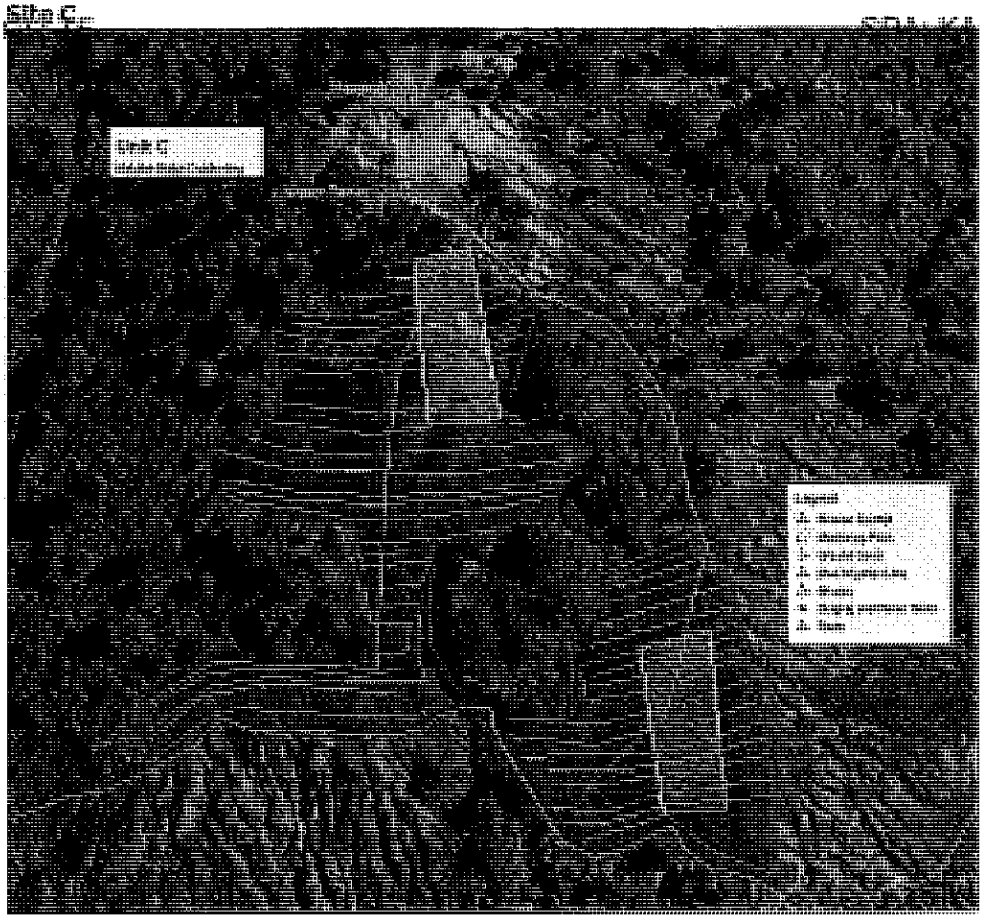

**Figure 5. Map of Site C and locations for two water tanks and a staging area. Lines indicate estimated spacing of planting rows, erosion control, and irrigation lines. All planting lines additionally estimate locations of ¼-in drip lines.**

**Plant list for Site C, (primary species listed in bold).**

| Ground Cover Species | | Approx. No. of Plants | Shrub Species | | Approx. No. of Plants | Tree Species | | Approx. No. of Plants |
|---|---|---|---|---|---|---|---|---|
| GC | ***Carex wahuensis*** | 250-650 | S | ***Dodonaea viscosa*** | 300-600 | S/T | ***Psydrax odorata*** | 80-350 |
| GC | ***Heteropogon contortus*** | 80-300 | S | ***Chenopodium oahuense*** | 250-600 | T | *Acacia koa* | 80-130 |
| GC | ***Eragrostis variabilis*** | 80-200 | S/ GC | ***Waltheria indica*** | 30-150 | T | *Sapindus oahuensis* | 50-100 |
| GC | ***Vitex rotundifolia*** | 50-300 | S | ***Nototrichium sandwicensis*** | 30-150 | T | *Erythrina sandwicensis* | 10-20 |
| GC | *Plumbago zeylanica* | 0-250 | S | *Scaevola teccada* | 30-100 | | | |
| GC | *Panicum torridum* | 50-150 | S | *Artemisia australis* | 10-40 | | | |
| GC | *Chrysopogon aciculatus* | 0-30 | S/ GC | *Capparis sandwichiana* | 0-30 | | | |
| GC/ S | *Wollostonia conata* | 0-30 | S | ~~*Osteomeles anthyllidifolia*~~ | ~~0-50~~ | | | |
| | | | S | *Myoporum sandwicensis* | 0-100 | | | |
| ***Total*** | | **1780** | | | | | | |

***Exhibit 2***

**Site D**

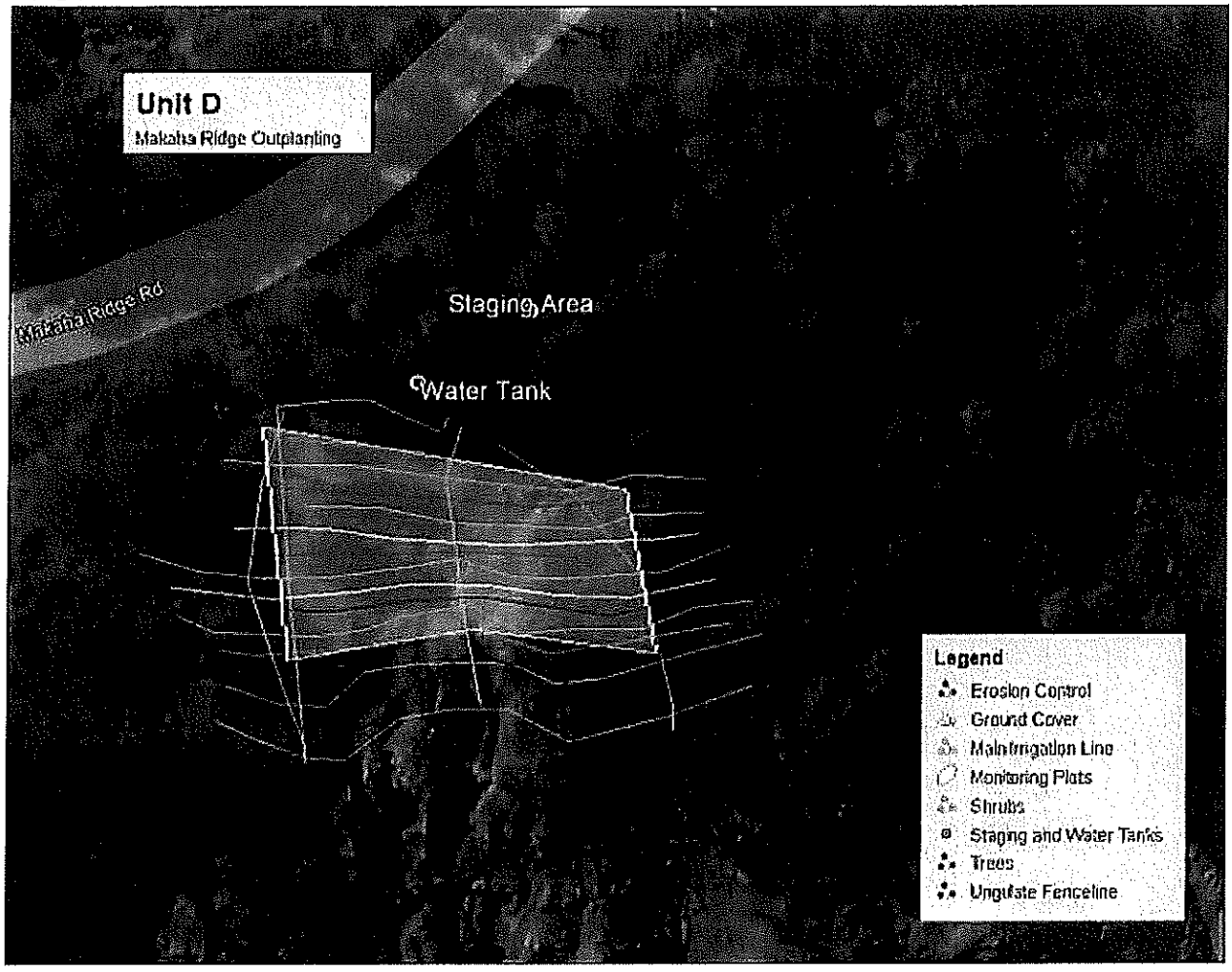


**Figure 6. Map of Site D, including a proposed temporary ungulate fence, water tank location, and staging area location. Lines indicate estimated spacing of planting rows, erosion control, and irrigation lines. All planting lines additionally estimate locations of ¼-in irrigation drip lines.**

**Plant list for Site D, (primary species listed in bold).**

| Ground Cover Species | | Approx. No. of Plants | Shrub Species | | Approx. No. of Plants | Tree Species | | Approx. No. of Plants |
|---|---|---|---|---|---|---|---|---|
| GC | ***Plumbago zeylanica*** | 50-175 | S | ***Myoporum sandwicensis*** | 25-200 | S/T | ***Psydrax odorata*** | 10-75 |
| GC | ***Vitex rotundifolia*** | 50-175 | S | ***Dodonaea viscosa*** | 50-150 | T | *Sapindus oahuensis* | 20-50 |
| S/ GC | *Capparis sandwichiana* | 0-50 | S | ***Nototrichium sandwicensis*** | 20-100 | T | *Acacia koa* | 10-45 |
| S/ GC | *Waltheria indica* | 0-50 | S | *Chenopodium oahuense* | 0-80 | T | *Erythrina sandwicensis* | 2-13 |
| GC | *Eragrostis variabilis* | 0-20 | S | *Artemisia australis* | 0-40 | | | |
| ***Total*** | | **390** | | | | | | |

PMRF appreciates the consideration of the proposed native plant restoration project at the Makaha Ridge Facility on Kaua'i, and the comments provided by DLNR. Please find the concerns addressed below, and let us know if there are further details needed.

- PMRF will consult with DOFAW Kaua'i Branch biologists and conduct a survey of potential nesting seabirds in the area that may be disturbed by the scope of the project. If listed seabirds are detected near the site, PMRF will consult with DOFAW Kaua'i Branch Staff on avoidance and minimization measures.

- As per prior conversations, PMRF will remove *Acacia koaia*, *Osteomeles anthyllidifolia*, and *Wikstroemiauvaursi* from the 'Native Plant List' (reference Attachment #5, Table 1) used for the outplanting project, will not outplant those species, and will adhere to the list otherwise.

- Following conversations and correspondence with Mapuana O'Sullivan (DLNR-DOFAW, Kaua'i Branch) clarifying that the only seeds that were collected were *Acacia koa* obtained onsite and no further collections are planned, PMRF understands that a Forest Reserve Collection Permit will not be required.

- Goat control has been underway at the Makaha Ridge Facility since 2020 when the existing fenceline around the installation was fully connected. Since that time, ungulate control has been actively conducted through passive one-way gates, by members of the PMRF Archery Club and by a Cooperative Agreement with USDA-WS. At this time, no goats are believed to remain inside the fenceline. Control as needed due to incursions will be ongoing via the current means. The entirety of the fenceline is inspected and maintained at least monthly, and after rain events.

  One restoration site is located outside of the fenceline. For this site, a temporary ungulate fence will be erected utilizing t-posts and 500 ft of 5-foot-tall, galvanized wire fixed-panel fencing. An access gate will be constructed out of additional fence material. The fence will be monitored to ensure no goats can access the outplanting area and will be repaired as needed. If goats are detected within the constructed fence at Site D, staff will open the fence and push any remaining animals out, and repair the fence as needed. The fence will be constructed of graduated, galvanized panels affixed to t-posts.

- The removal of water lines following establishment of irrigation will be conducted to prevent damage to the outplantings. Once irrigation is no longer needed, lines will be pulled row by planting row and will be cut, as needed, to ensure no damage to growing plants. Planting rows will be removed first, ensuring stables and drip emitters are carefully removed as well. Main irrigation lines will be removed last, followed by the tanks themselves. All irrigation supplies will be transported to the Kekaha landfill and the tanks will be sold.

- PMRF confirms that no nighttime construction will be conducted during the course of the project, and no lighting will be installed.

- PMRF confirms that no barbed wire will be used at any point during the course of the project.

- PMRF concurs with the recommendation that movement of soils and sediments be limited between site locations to limit spread of fungal pathogens, animals pests or invasive plant parts and will not be moving soil between sites.

- PMRF concurs with implementing Best Management Practices to contain any soils or sediments to prevent damage to near-shore waters and marine ecosystems.

JOSH GREEN, M.D.
GOVERNOR | KE KIA'ĀINA

SYLVIA LUKE
LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA

STATE OF HAWAI'I | KA MOKU'ĀINA 'O HAWAI'I
DEPARTMENT OF LAND AND NATURAL RESOURCES
KA 'OIHANA KUMUWAIWAI 'ĀINA
Office of Conservation and Coastal Lands
P.O. BOX 621
HONOLULU, HAWAII 96809

DAWN N. S. CHANG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

LAURA H.E. KAAKUA
FIRST DEPUTY

M. KALEO MANUEL
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

REF: OCCL: TF

SPA: KA 23-50

Apr 14, 2023

Thomas Nizo
Deputy Public Works Officer
Pacific Missile Range Facility
P.O. Box 128
Kekaha, HI 96752

SUBJECT: Site Plan Approval (SPA) Application for the Makaha Ridge Pacific Missile Range Facility (PMRF) Concrete Pad Project.
Located at Makaha Ridge PMRF
Puu Ka Pele Forest Reserve, Upper Waimea, Kauai
Tax Map Key (TMK): (4) 1-2-001:006

Dear Mr. Nizo:

The Office of Conservation and Coastal Lands (OCCL) has reviewed your Site Plan Approval (SPA) application and attachments regarding the subject matter. According to the information in your SPA application, the U.S. Navy's Makaha Ridge Pacific Missile Range Facility (PMRF) is proposing to construct a 70ft x 50ft x 6in-deep reinforced concrete pad and an electrical rack at the facility. The application notes that the purpose of the proposed concrete pad and electrical rack would be to provide a foundation for the placement of portable telemetry equipment and provision of electricity to the telemetry instruments.

The application states that site preparation will require excavating and then compacting the area with 6in of gravel. Construction of the electrical service rack will involve constructing two (2) concrete footings each approximately 1 sq. ft x 2ft-deep. A trench 40ft long x 1ft wide x 3ft deep will be dug for the placement of electrical conduit and wires that will be run from a nearby facility/structure on the PMRF site to the electrical service rack.

The application notes that base course materials will be transported by dump truck in approximately eleven (11) trips, concrete will be transported by concrete trucks in approximately twenty (20) trips, and other materials will be transported by flatbed truck in approximately three (3) trips. Containers, equipment, and potted plants (if needed) brought onto PMRF will have undergone inspection by a qualified individual to ensure that they are free from invasive species such as coqui frogs, little fire ants (LFA), and Coconut Rhinoceros Beetles (CRB). Any proposed landscaping will require the use of Hawaiian native plants. Best Management Practices (BMPs)

for construction activities will include straw wattles around the construction site(s) for erosion control, sediment control, and storm water runoff control.

The application notes that plant surveys of the Makaha Ridge PMRF were completed in 2000 and 2006, and an unmanned aerial drone survey was conducted in 2019. The application states that no threatened or endangered plants, or their critical habitat, occur within the proposed project area. Threatened or endangered species or their critical habitat which have the potential to occur in or adjacent to the project area include the Hawaiian hoary bat, Hawaiian nene goose, Newell's shearwater, Hawaii petrel, and band-rumped storm petrel. Potential impacts to these species will be mitigated through the avoidance of trimming or removal of trees 15ft tall or higher during the bat pupping season (June 1st to September 15th), having the site surveyed by a qualified biologist no earlier than three (3) days prior to project initiation to identify any potential nests within 100ft of any activity if work is to occur during breeding season (September to April), halting any work within 100ft of a breeding or non-flighted goose, and the avoidance of light at night and adherence to the requirements of the Dark Skies program during the peak fallout period.

The application states that the federal government has leased the Makaha Ridge PMRF from the State of Hawaii for communication, research, development, testing, tracking, evaluation, guidance, and related government purposes since 1965. The earliest structure constructed at the site was in the late 1960's. The PMRF contains a guard shack at the entrance, a Frequency Interference Control Building, Maintenance Facility, Telemetry Building, a boresight tower, telemetry antennas, water tanks, a laboratory, radar sites, communications, a power plant, antennas, a helicopter pad, and a "sea clutter site". The application notes that public access is restricted at the station.

Cultural resources surveys have not identified any traditional Hawaiian archaeological sites, features, or buried cultural deposits at the Makaha Ridge PMRF and proposed project site. The application notes that Section 106 compliance of the National Historic Preservation Act for this project has been met via a Programmatic Agreement memo between the State of Hawaii and federal government.

On behalf of the Makaha Ridge PMRF, you are requesting SPA for the Makaha Ridge PMRF Concrete Pad Project.

ANALYSIS:

The OCCL notes that the proposed project area on TMK: (4) 1-2-001:006 lies within the Resource Subzone of the State Land Use Conservation District. According to Department files, the U.S. Navy is leasing the land that contains the PMRF and proposed project area from the State of Hawaii under General Lease S-3952 (gl5814). On May 12, 1978, the Board of Land and Natural Resources (BLNR) approved Conservation District Use Permit (CDUP) KA-1024 for Radar Related Facilities on the property subject to eight (8) conditions. On September 12, 2022, the Federal Aviation Administration (FAA) was granted site plan approval for the FAA Weather Camera System project subject to fifteen (15) conditions.

After reviewing the application, we have determined that the Makaha Ridge PMRF Concrete Pad Project is consistent with Hawaii Administrative Rules (HAR) §13-5-22 P-9 STRUCTURES, ACCESSORY (B-1) *Construction or placement of structures accessory to existing facilities or uses*. This requires site plan approval from the OCCL.

The OCCL notes that the U.S. Navy PMRF believe the proposed action should be exempted from the National Environmental Policy Act (NEPA) and is within the scope of the Categorical Exclusion list (OPNAV M-5090.1) and items: (14) *Alterations of and additions to existing buildings, facilities, and systems (e.g., structures, roads, runways, vessels, aircraft, or equipment) when the environmental effects will remain substantially the same and the use is consistent with applicable regulations*; and, (35) *Acquisition, installation, modernization, repair, or operation of utility (including, but not limited to, water, sewer, and electrical) and communication systems (including, but not limited to, data processing cable and similar electronic equipment) that use existing right of way, easements, distribution systems, and facilities*. Additionally, the "EXEMPTION LIST FOR THE DEPARTMENT OF LAND AND NATURAL RESOURCES", General Exemption Type 5 Part 1 #1 *Conduct surveys or collect data on existing environmental conditions (e.g., noise, air quality, water flow, water quality, etc.)*; and, #5 *Installation of new, small groundwater, surface water, or climatological monitoring and data collection equipment, structures that house or protect this equipment, and installation of electrical, telemetry, or communications systems to service this equipment*. This would suggest that the proposed Makaha Ridge PMRF Concrete Pad Project is eligible for Hawaii Revised Statutes (HRS) Chapter 343 exemption. The U.S. Navy PMRF has consulted with the OCCL regarding the proposed Makaha Ridge PMRF Concrete Pad Project and the OCCL has concurred with the U.S. Navy PMRF's determination that the project is a NEPA and HRS Chapter 343 exempt action.

The OCCL notes that the U.S. Navy PMRF's RECORD OF CATEGORICAL EXCLUSION includes several mitigation measures to avoid impacts to threatened or endangered species that have the potential to occur within the vicinity of the project area that the PMRF and their agents will adhere to. These mitigation measures have been included as conditions of this site plan approval as conditions #12-16.

Therefore, authorization is hereby granted to the U.S. Navy PMRF for the proposed Makaha Ridge PMRF Concrete Pad Project at the Makaha Ridge PMRF located within the Puu Ka Pele Forest Reserve, Upper Waimea, Kauai on TMK: (4) 1-2-001:006, and is subject to the following conditions:

1. The permittee shall comply with all applicable statutes, ordinances, rules, and regulations of the federal, state, and county governments, and applicable parts of HAR, Chapter 13-5;

2. The permittee shall be liable, to the extent allowed by the Federal Tort Claims Act, for claims for personal injuries or property damage resulting from the negligent or wrongful act or omission of any employee of the United States while acting within the scope of his or her employment, arising out of this agreement;

3. The permittee shall comply with all applicable Department of Health administrative rules;

4. The permittee shall obtain a land disposition from the Kauai District Land Office (808) 274-3491 the use of State lands;

5. Unless otherwise authorized, any work or construction to be done on the land shall be initiated within one (1) year of the approval of such use and shall be completed within three (3) years of the approval of such use. The permittee shall notify the department in writing when construction activity is initiated and when it is complete;

6. The permittee understands and agrees that this permit does not convey any vested rights or exclusive privilege;

7. In issuing the approval, the department has relied on the information and data, which the applicant has provided in connection with the application. If, subsequent to the issuance of the approval such information and data prove to be false, incomplete, or inaccurate, this approval may be modified, suspended, or revoked, in whole or in part, and the department may, in addition, institute appropriate legal proceedings;

8. Where any interference, nuisance, or harm may be caused, or hazard established by the use the permittee shall be required to take measures to minimize or eliminate the interference, nuisance, harm, or hazard;

9. The permittee acknowledges that the approved work shall not hamper, impede, or otherwise limit the exercise of traditional, customary or religious practices of native Hawaiians in the immediate area, to the extent the practices are provided for by the Constitution of the State of Hawaii, and by Hawaii statutory and case law;

10. In the event that subsurface historic resources, including human skeletal remains, structural remains, cultural deposits, artifacts, sand deposits, or sink holes are identified during the demolition and/or construction work, cease work in the immediate vicinity of the find, protect the find from additional disturbance, and contact the SHPD, at (808) 692-8015;

11. Should any unanticipated problems occur which may affect public health, safety, or welfare, the Department may require immediate removal of all project components;

12. Trees 15ft or taller shall not be trimmed or removed during the Hawaii Hoary bat birthing and pup rearing season from June 1st to September 15th;

13. The permittee shall have a qualified biologist conduct a survey Hawaiian nene geese and nests no earlier than three (3) days before initiation of the project to identify any nests within 100ft of any activity. No potential harmful work will be conducted within 100ft of a breeding or non-flighted goose;

14. The permittee shall adhere to the requirements of the Dark Skies program if work will require any lighting at night during the seabird peak fallout period September 15th to December 15th;

15. Any landscaping shall be appropriate to the site location and shall give preference to plant materials that are endemic or indigenous to Hawaii. The introduction of invasive species is prohibited;

16. The permittee shall ensure that all project and construction related containers, equipment, and plotted plants brought onto PMRF shall have undergone inspection by a qualified individual and are free from invasive pests such as, but not limited to, coqui frogs, little fire ants (LFA), and Coconut Rhinoceros Beetles (CRB). Use of Hawaiian native plants is required;

17. All representations relative to mitigation or best management practices as stated in the application or supplemental material submitted to the Department for the proposed project are incorporated as conditions of the permit;

18. Upon completion of the project, the permittee shall remove all project components and the areas restored to a more natural state and/or to the Department's satisfaction;

19. Other terms and conditions as prescribed by the OCCL; and

20. Failure to comply with any of these conditions may render this approval void as determined by the Department.

Please acknowledge receipt of this approval, with the above noted conditions, in the space provided below. Please sign two copies. Retain one and return the other within thirty (30) days. Should you have any questions, feel free to contact Trevor Fitzpatrick of our Office of Conservation and Coastal Lands at (808) 798-6660 or trevor.j.fitzpatrick@hawaii.gov .

Sincerely,

S Michael Cain

Michael Cain, Administrator
Office of Conservation and Coastal Lands

Receipt acknowledged:

Applicant's signature Date 24 Apr 23

*CC: Kauai Division Land Office*
*County of Kauai Planning Department*

## Anderson, James J CIV USN PMRF KEKAHA HI (USA)

**From:** Narusawa, Grant M CIV USN NAVFAC HAWAII PEARL (USA)
**Sent:** Thursday, September 1, 2022 6:17 PM
**To:** Anderson, James J CIV USN PMRF KEKAHA HI (USA); Nizo, Thomas M CIV USN PMRF KEKAHA HI (USA)
**Cc:** Asuncion, Lyll Y CIV USN NAVFAC HAWAII PEARL (USA); Allen, Jesse RYAN KAWELA CIV USN NAVFAC PAC PEARL HI (USA)
**Subject:** Fw: Polihale Gate Repairs - S-3852
**Attachments:** Gate.pdf

**Follow Up Flag:** Follow up
**Flag Status:** Completed

**Categories:** Green Category

JJ,

Please see below for OCCL response on the Polihale Gate Repairs. Moving forward this would be a construction requirement, but the previous email elicited a response from OCCL and they came to a conclusion.

V/R,

Grant Narusawa
Realty Specialist
Naval Facilities Engineering Systems Command, Hawaii
Real Estate Business Line (REBL)
400 Marshall Road
JBPHH HI 96860-3139
Phone: (808) 471-4653
Mobile: (808) 382-2161 (Telework - Personal Cell)
grant.m.narusawa.civ@us.navy.mil

---

**From:** Mills, Kimberly T <kimberly.mills@hawaii.gov>
**Sent:** Thursday, September 1, 2022 5:58 PM
**To:** Narusawa, Grant M CIV USN NAVFAC HAWAII PEARL (USA) <grant.m.narusawa.civ@us.navy.mil>
**Cc:** Neustein, Alison <alison.neustein@hawaii.gov>; Tsuji, Russell Y <Russell.Y.Tsuji@hawaii.gov>; Asuncion, Lyll Y CIV USN NAVFAC HAWAII PEARL (USA) <lyll.y.asuncion.civ@us.navy.mil>
**Subject:** [Non-DoD Source] RE: Polihale Gate Repairs - S-3852

Hi Grant,
Thank you for your patience awaiting our review of this matter.
The OCCL has no record of authorization for the existing gate.
However I suspect we have no record of authorization because of the existing State General Lease No. S-3852 beginning August 20, 1964 and ending August 19, 2029 that states: 5. The Government shall have the right during the existence of this lease, to attach fixtures, and erect structures or signs, in or upon the premises hereby leased…

This lease was authorized prior to the advent of the Conservation District
Therefore no authorization would be required for the proposed replacement of the existing gate in the Conservation District at this time.

Take care,

~Tiger
**K. Tiger Mills, Staff Planner**
**State of Hawai`i**
**Department of Land and Natural Resources**
**Office of Conservation And Coastal Lands**
**P.O. Box 621**
**Honolulu, Hawai`i 96809**
**www.dlnr.hawaii.gov/occl**

---

**From:** Narusawa, Grant M CIV USN NAVFAC HAWAII PEARL (USA) <grant.m.narusawa.civ@us.navy.mil>
**Sent:** Monday, August 1, 2022 10:32 AM
**To:** Mills, Kimberly T <kimberly.mills@hawaii.gov>
**Cc:** Anderson, James J CIV USN PMRF KEKAHA HI (USA) <james.j.anderson149.civ@us.navy.mil>; Allen, Jesse RYAN KAWELA CIV USN NAVFAC PAC PEARL HI (USA) <jesse.r.allen6.civ@us.navy.mil>; Neustein, Alison <alison.neustein@hawaii.gov>; Tsuji, Russell Y <Russell.Y.Tsuji@hawaii.gov>; Asuncion, Lyll Y CIV USN NAVFAC HAWAII PEARL (USA) <lyll.y.asuncion.civ@us.navy.mil>
**Subject:** [EXTERNAL] Re: Polihale Gate Repairs - S-3852

Good Morning Tiger,

Please see attached letter in regards to the Polihale Gate Repairs. PMRF is planning to repair the Polihale Access Control Point (ACP) sometime in FY23. Alison (DLNR Kauai) advised me that the gate is located in a conservation district (attached map you provided me a while back) in the yellow area which is the GENERAL subzone. As I'm not too familiar with the process, but does the Navy need to do some type of approval/application in order to proceed with our repairs since it falls on the OCCL area? Or may we proceed with the repairs in FY23?

Thank you for your time.

V/R,

Grant Narusawa
Realty Specialist
Naval Facilities Engineering Systems Command, Hawaii
Real Estate Business Line (REBL)
400 Marshall Road
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Mobile: (808) 382-2161 (Telework - Personal Cell)
grant.m.narusawa.civ@us.navy.mil

**From:** Neustein, Alison <alison.neustein@hawaii.gov>
**Sent:** Thursday, July 14, 2022 11:03 AM
**To:** Narusawa, Grant M CIV USN NAVFAC HAWAII PEARL (USA) <grant.m.narusawa.civ@us.navy.mil>
**Cc:** Anderson, James J CIV USN PMRF KEKAHA HI (USA) <james.j.anderson149.civ@us.navy.mil>; Allen, Jesse RYAN KAWELA CIV USN NAVFAC PAC PEARL HI (USA) <jesse.r.allen6.civ@us.navy.mil>; Mills, Kimberly T <kimberly.mills@hawaii.gov>
**Subject:** [Non-DoD Source] RE: Polihale Gate Repairs - S-3852

Hi Grant-
Yes, please contact Tiger (Kimberly Mills) kimberly.mills@hawaii.gov.
Thank you-

Alison Neustein
District Land Agent
DLNR, Land Division
3060 Eiwa Street, Room 208
Lihue, HI 96766
Ph: 808-274-3491
Fax: 808-274-3535
Email: Alison.neustein@hawaii.gov

**From:** Narusawa, Grant M CIV USN NAVFAC HAWAII PEARL (USA) <grant.m.narusawa.civ@us.navy.mil>
**Sent:** Thursday, July 14, 2022 10:59 AM
**To:** Neustein, Alison <alison.neustein@hawaii.gov>
**Cc:** Anderson, James J CIV USN PMRF KEKAHA HI (USA) <james.j.anderson149.civ@us.navy.mil>; Allen, Jesse RYAN KAWELA CIV USN NAVFAC PAC PEARL HI (USA) <jesse.r.allen6.civ@us.navy.mil>
**Subject:** [EXTERNAL] Re: Polihale Gate Repairs - S-3852

Hi Alison,

I have not reached out to OCCL, but it seems as though this project might require some type of application for them to move forward. From my understanding I believe I should be consulting Tiger Mills (I'm new to this process)? Please advise.

Thank you for the help.

V/R,

Grant Narusawa
Realty Specialist
Naval Facilities Engineering Systems Command, Hawaii
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**From:** Neustein, Alison <alison.neustein@hawaii.gov>
**Sent:** Thursday, July 14, 2022 10:06 AM
**To:** Narusawa, Grant M CIV USN NAVFAC HAWAII PEARL (USA) <grant.m.narusawa.civ@us.navy.mil>
**Cc:** Anderson, James J CIV USN PMRF KEKAHA HI (USA) <james.j.anderson149.civ@us.navy.mil>; Allen, Jesse RYAN KAWELA CIV USN NAVFAC PAC PEARL HI (USA) <jesse.r.allen6.civ@us.navy.mil>
**Subject:** [Non-DoD Source] FW: Polihale Gate Repairs - S-3852

Aloha Grant-
Have you reached out to our OCCL (Office of Conservation and Coastal Lands) yet? From the look of it, the gate is located in the conservation district.
Please advise.
Thank you-

Alison Neustein
District Land Agent
DLNR, Land Division
3060 Eiwa Street, Room 208
Lihue, HI 96766
Ph: 808-274-3491
Fax: 808-274-3535
Email: Alison.neustein@hawaii.gov

**From:** Narusawa, Grant M CIV USN NAVFAC HAWAII PEARL (USA) <grant.m.narusawa.civ@us.navy.mil>
**Sent:** Friday, July 8, 2022 11:10 AM
**To:** Tsuji, Russell Y <Russell.Y.Tsuji@hawaii.gov>
**Cc:** Neustein, Alison <alison.neustein@hawaii.gov>; Allen, Jesse RYAN KAWELA CIV USN NAVFAC PAC PEARL HI (USA) <jesse.r.allen6.civ@us.navy.mil>; Anderson, James J CIV USN PMRF KEKAHA HI (USA) <james.j.anderson149.civ@us.navy.mil>
**Subject:** [EXTERNAL] Polihale Gate Repairs - S-3852

Good Morning Russell,

Please see attached for a letter in regards to the intentions PMRF and the Polihale Gate Repairs. I believe PMRF is going to start this project in FY23, if there are any questions or comments please advise me.

Thank you for your time.

V/R,

Grant Narusawa
Realty Specialist
Naval Facilities Engineering Systems Command, Hawaii
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grant.m.narusawa.civ@us.navy.mil

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**NASA Correspondence with Department of Land and Natural Resources, Office of Conservation and Coastal Lands**

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**From:** Cain, Michael <michael.cain@hawaii.gov>
**Sent:** Wednesday, November 6, 2024 6:10 PM
**To:** Eltringham, Darlene E. (HQ-LD062) <darlene.e.eltringham@nasa.gov>
**Cc:** Kuba, Sharleen K <sharleen.k.kuba@hawaii.gov>; Romero, Irene J. (GSFC-2500) <irene.j.romero@nasa.gov>
**Subject:** [EXTERNAL] Re: Real Prop Actions NASA KPGO

**CAUTION:** This email originated from outside of NASA. Please take care when clicking links or opening attachments. Use the "Report Message" button to report suspicious messages to the NASA SOC.

Good afternoon,

Conservation District Use Permits are required for land uses, defined as any structure or impact to the land that lasts longer than 30-days.

The lease itself is not a “land use” and so doesn’t trigger the need for a permit under HAR 13-5.

Any new land uses might require a permit, but existing uses do not.

Sincerely,
Michael Cain

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---

**From:** Eltringham, Darlene E. (HQ-LD062) <darlene.e.eltringham@nasa.gov>
**Sent:** Friday, November 1, 2024 9:41:08 AM
**To:** Cain, Michael <michael.cain@hawaii.gov>
**Cc:** Kuba, Sharleen K <sharleen.k.kuba@hawaii.gov>; Romero, Irene J. (GSFC-2500) <irene.j.romero@nasa.gov>
**Subject:** [EXTERNAL] RE: Real Prop Actions NASA KPGO

Mr. Cain:

During a site visit to in May/June of this year we discussed the renewal of the lease that NASA has

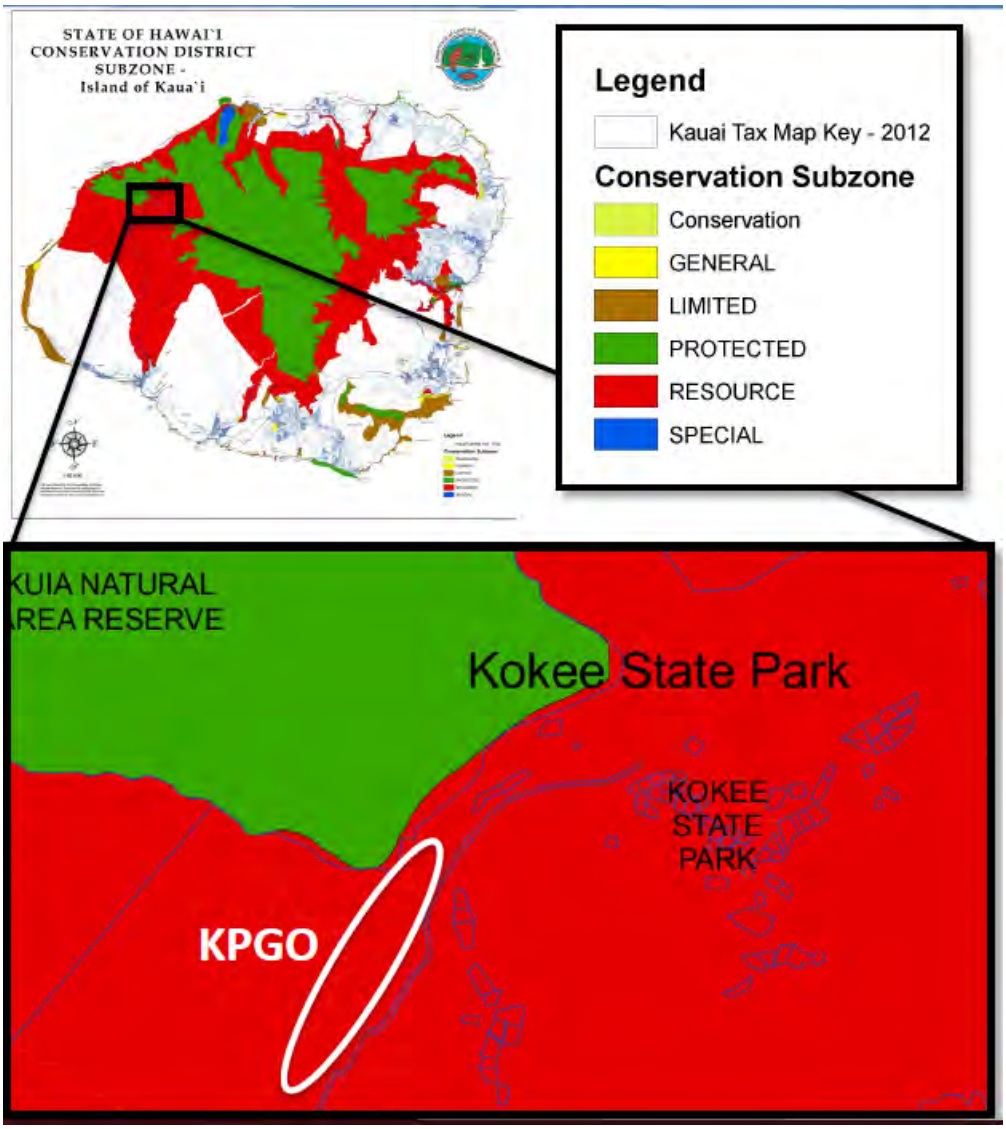
with the State of Hawaii. During that visit and as part of our lease renewal we were told to reach out to OCCL and to confirm the permit requirements for our lease. We believe we would fall under the Non-Confirming use and therefore no permit would be necessary but would like to confirm that.

Below is additional information but please let us know what information you will need to order to determine if there are any next steps or permits required.

- KPGO is located on a remote ridge within Kōkeʻe State Park in the western portion of Kauaʻi in an area outside of park recreation areas (see map).

  NASA operates KPGO to collect geodetic data that contributes to daily measurements of the Earth's orientation in space and rotation. This data is used for scientific studies and a wide variety of positioning and navigation applications, including spacecraft navigation and the geolocation of Earth observations, such as the Global Positioning System (GPS).

  The geodetic data from KPGO used by NASA and the scientific community enables and supports studies of ecosystems, water cycles, geological hazards, sea-level change, crustal-dynamics, and many other areas of Earth science. The data is locally valuable for studying the land motion of Kauaʻi. Finally, the KPGO data is used to tie the Hawaiian Islands into the International Terrestrial Reference Frame (ITRF), which is used to locate measurements on the Earth's surface and for various societal applications such as precision farming.
- NASA believes the continued operation at KPGO falls under HAR 13-5-22 Data Collection (B-1), and under the identified land use "B" HAR Sec 11-200-8(5) applies.

- 


**From:** Eltringham, Darlene E. (HQ-LD062)
**Sent:** Wednesday, September 18, 2024 2:51 PM
**To:** michael.cain@hawaii.gov
**Subject:** Real Prop Actions NASA KPGO

During a site visit to in May/June of this year we discussed the renewal of the lease that NASA has with the State of Hawaii. During that visit and as part of our lease renewal we were told to reach out to OCCL and to confirm the permit requirements for our lease. We believe we would fall under the Non-Confirming use and therefore no permit would be necessary but would like to confirm that.

Please let us know what information you will need to order to determine if there are any next steps or permits required.

Darlene Eltringham
Real Property Accountable Officer

NASA Headquarters
Office of Strategic Infrastructure
Facilities and Real Estate Division
Real Property Branch
Office: Remote, Greenbelt, MD

# Coastal Zone Management Act Consistency Determination

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# COASTAL ZONE MANAGEMENT ACT CONSISTENCY DETERMINATION FOR PACIFIC MISSILE RANGE FACILITY AND KŌKEʻE PARK GEOPHYSICAL OBSERVATORY REAL ESTATE

## KAUAʻI, HAWAIʻI

**May 2026**

**Prepared by:**
**United States (U.S.) Department of the Navy (Navy) and the National Aeronautics and Space Administration (NASA)**

**Prepared for:**
**State of Hawaiʻi**
**Office of Planning and Sustainable Development**
**Hawaiʻi Coastal Zone Management Program**

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# Pacific Missile Range Facility and Kōkeʻe Park Geophysical Observatory Real Estate
# Draft Coastal Zone Management Act Consistency Determination

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# Abbreviations and Acronyms

| | |
|---|---|
| AAQS | Ambient Air Quality Standards |
| AASHTO | American Association of State Highway and Transportation Officials |
| ACHP | Advisory Council on Historic Preservation |
| ADC | Agribusiness Development Corporation |
| ADS-B | Automatic Dependent Surveillance-Broadcast |
| AICUZ | Air Installations Compatible Use Zone |
| ATFP | Anti-Terrorism/Force Protection |
| BASH | Bird/Wildlife Aircraft Strike Hazard |
| BLNR | Board of Land and Natural Resources |
| BMP | Best Management Practice |
| BTA | Best Technology Available |
| CAA | Clean Air Act |
| CD | Consistency Determination |
| CEQ | Council on Environmental Quality |
| CERCLA | Comprehensive Environmental Response, Compensation, and Liability Act |
| CFR | Code of Federal Regulations |
| CHRIMP | Consolidated Hazardous Material Reutilization and Inventory Management Program |
| CNRH | Commander, Navy Region Hawai'i |
| COMPMTCINST | Commander Pacific Missile Test Center Instruction |
| CWA | Clean Water Act |
| CWB | Clean Water Branch |
| CZM | Coastal Zone Management |
| CZMA | Coastal Zone Management Act |
| dB | decibel |
| DBEDT | Department of Business, Economic Development, and Tourism |
| DHHL | Department of Hawaiian Home Lands |
| DLA | Defense Logistics Agency |
| DLNR | Department of Land and Natural Resources |
| DoD | Department of Defense |
| DOE | Department of Energy |
| DOFAW | Division of Forestry and Wildlife |
| DON | Department of the Navy |
| DORIS | Doppler Orbitography and Radiopositioning Integrated by Satellite |
| DREN | Defense Research and Engineering Network |
| DTS | Department of Transportation Services |
| EA | Environmental Assessment |
| EIS | Environmental Impact Statement |
| EISPN | Environmental Impact Statement Preparation Notice |
| EO | Executive Order |
| EPA | United States Environmental Protection Agency |
| EPCRA | Emergency Planning and Community Right-to-Know Act |
| ESA | Endangered Species Act |
| ESQD | Explosive Safety Quantity Distance |
| FAA | Federal Aviation Administration |
| FEIS | Final Environmental Impact Statement |
| FEMA | Federal Emergency Management Agency |
| FHWA | Federal Highway Administration |
| FONSI | Finding of No Significant Impact |
| FR | Federal Register |
| FTS | Flight Termination System |
| GAPE | Great Alaska Pacific Experiments |
| GHA | Ground Hazard Area |
| GNSS | Global Navigation Satellite System |
| gpm | Gallons Per Minute |
| GPS | Global Positioning System |
| HAR | Hawai'i Administrative Rules |
| HDOH | Hawai'i Department of Health |

| | |
|---|---|
| HDOT | Hawai‘i Department of Transportation |
| HEPA | Accepted Term for Hawai‘i Revised Statutes Chapter 343 |
| HRS | Hawai‘i Revised Statutes |
| IAP | Installation Appearance Plan |
| ICRMP | Integrated Cultural Resources Management Plan |
| ID | Identification |
| INRMP | Integrated Natural Resources Management Plan |
| ISI | Integrated Services Interface |
| JAXA | Japanese Aerospace Exploration Agency |
| KAA | Kekaha Agricultural Association |
| KISC | Kaua‘i Invasive Species Council |
| KPGO | Kōke‘e Park Geophysical Observatory |
| KTF | Kaua‘i Test Facility |
| MBTA | Migratory Bird Treaty Act |
| MDA | Missile Defense Agency |
| MEC | Munitions and Explosives of Concern |
| MIT | Massachusetts Institute of Technology |
| MMPA | Marine Mammal Protection Act |
| MOA | Memorandum of Agreement |
| MUTCD | Manual on Uniform Traffic Control Devices |
| N/A | Not Applicable |
| NAAQS | National Ambient Air Quality Standards |
| NAGPRA | Native American Graves Protection and Repatriation Act |
| NASA | National Aeronautics and Space Administration |
| NAVFAC | Naval Facilities Engineering Systems Command |
| NAVSUP | Naval Supply Systems Command |
| Navy | Department of the Navy |
| NEPA | National Environmental Policy Act |
| NESHAP | National Emission Standards for Hazardous Air Pollutants |
| NFIP | National Flood Insurance Program |
| NHO | Native Hawaiian Organization |
| NHPA | National Historic Preservation Act |
| NMFS | National Marine Fisheries Service |
| NOAA | National Oceanic and Atmospheric Administration |
| NPD | NASA Policy Directive |
| NPDES | National Pollutant Discharge Elimination System |
| NRCS | Natural Resources Conservation Service |
| NRHP | National Register of Historic Places |
| NSWCDD | Naval Surface Warfare Center, Dahlgren Division |
| OCCL | Office of Conservation and Coastal Lands |
| OEA | Overseas Environmental Assessment |
| OEIS | Overseas Environmental Impact Statement |
| OHA | Office of Hawaiian Affairs |
| OPNAV M | Office of the Chief of Naval Operations Manual |
| OPNAVINST | Office of the Chief of Naval Operations Instruction |
| OSHA | Occupational Safety and Health Administration |
| PA | Programmatic Agreement |
| PCB | Polychlorinated biphenyl |
| PEACESAT | Pan-Pacific Education and Communication Experiments by Satellite |
| PFAS | Per-and polyfluoroalkyl substances |
| PL | Public Law |
| PMRF | Pacific Missile Range Facility |
| PMRFINST | Pacific Missile Range Facility Instruction |
| QZSS | Quasi-Zenith Satellite System |
| RAICUZ | Range Air Installations Compatible Use Zone |
| RCRA | Resource Conservation and Recovery Act |

| | |
|---|---|
| REPI | Readiness and Environmental Protection Integration |
| ROI | Region of Influence |
| ROW | right-of-way |
| SDS | Safety Data Sheet |
| SDWA | Safe Drinking Water Act |
| SECNAVINST | Secretary of the Navy Instruction |
| SENSE | Space Exploration Network Services and Evolution |
| SHPO | State Historic Preservation Office(r) |
| SIHP | State Inventory of Historic Places |
| SIP | State Implementation Plan |
| SOP | Standard Operating Procedure |
| SOS | Save Our Shearwaters |
| SPCC | Spill Prevention, Control, and Countermeasure |
| STDN | Spacecraft Tracking and Data Network |
| SWPPP | Stormwater Pollution Prevention Plan |
| TCP | Traditional Cultural Place |
| TDRSS | Tracking and Data Relay Satellite System |
| TMK | Tax Map Key |
| TSCA | Toxic Substances Control Act |
| U.S. | United States |
| U.S.C. | United States Code |
| UFC | Unified Facilities Criteria |
| USCB | United States Census Bureau |
| USDA | United States Department of Agriculture |
| USDOT | United States Department of Transportation |
| USFWS | United States Fish and Wildlife Service |
| USNO | United States Naval Observatory |
| UT1 | Universal Time 1 |
| UTC | Coordinated Universal Time |
| VGOS | VLBI Global Observing System |
| VLBI | Very Long Baseline Interferometry |
| WOTUS | Waters of the United States |
| WS | Wildlife Services |

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# 1 Introduction

The United States (U.S.) Department of the Navy (Navy) and the National Aeronautics and Space Administration (NASA) have prepared this Federal Consistency Determination (CD) for real estate transaction and ongoing operations on State lands at Pacific Missile Range Facility (PMRF) and Kōkeʻe Park Geophysical Observatory (KPGO) on Kauaʻi, Hawaiʻi. The Navy and NASA propose to retain the use of 8,172[1] acres[2] and 23[3] acres, respectively, of State lands including leasehold and easement lands on Kauaʻi, Hawaiʻi, for the Navy's operational continuity and sustainment (in support of the military's continued and ongoing military training, testing, and facility operations) at PMRF, and NASA's continued operations including measurements of the Earth's rotation and local land motion at KPGO. Navy use of these State lands is required to maintain technological and safety capabilities supporting PMRF training and testing. Navy training and testing operations do not occur on these State lands. This CD is being submitted in accordance with the Coastal Zone Management Act of 1972 (CZMA), 16 U.S. Code (U.S.C.) section 1456 (c), and 15 Code of Federal Regulations (CFR) part 930 Subpart C. This CD is provided pursuant to 15 CFR section 930.39. The Navy and NASA have determined that the Proposed Action would have reasonably foreseeable effects on coastal resources and coastal use in Hawaiʻi. Therefore, this CD has been prepared to address the enforceable policies of the Hawaiʻi Coastal Zone Management program (Hawaiʻi Revised Statutes [HRS], Chapter 205A, Part I, Section 205A-2).

The authority of the Hawaiʻi Coastal Zone Management program, which was approved by the federal government in 1977, is defined in HRS (Chapter 205A Part 1). The Hawaiʻi Coastal Zone Management program provides objectives, policies, laws, standards, and procedures to guide and regulate public and private uses in the coastal zone management area. As defined in HRS (Chapter 205A, Part 1, Section 205A-1), the coastal zone management area is defined as "all lands of the State and area extending from the shoreline to the limit of the State's police power and management authority, including the United States territorial sea." The U.S. territorial sea extends 12 nautical miles from the coastline. However, under the Submerged Lands Act and 15 CFR section 923.32, the Hawaiʻi coastal zone extends to only 3 nautical miles from the coastline. Federally controlled lands are not part of the coastal zone (15 CFR section 923.33); however, federal agencies that conduct activities that may affect resources in the coastal zone must ensure that the activities are consistent to the maximum extent practicable with the State's Coastal Zone Management program.

## 1.1 Compliance Processes

The Navy and NASA have prepared the 2025 PMRF and KPGO Real Estate Draft Environmental Impact Statement (EIS) in accordance with the following: the National Environmental Protection Act (NEPA) 42 U.S.C. section 4321 et seq.); and HRS Chapter 343 (referred to as "HEPA") and Hawaiʻi Administrative Rules (HAR) Chapter 11-200.1. The Navy and NASA are each applicants in the HEPA process, and are joint lead agencies[4] for the purpose of this NEPA process.

[1] The actual acreage is 8,171.516 acres and has been rounded to 8,172 acres for readability in the EIS.
[2] The acreage presented during scoping and in the Environmental Impact Statement Preparation Notice (EISPN) double-counted one easement area (Easement 106 (Tax Map Key [TMK]: 1-2-002-001 (por.)) and Explosive Safety Quantity Distance Easement S-5604 (TMK: 1-2-002-001 (por.)), which cover the same area). Therefore, upon correction, the total acreage has been reduced from 8,348 acres to 8,172 acres (176-acre reduction in the easement area).
[3] The actual acreage is 22.9 acres and has been rounded to 23 acres for readability in the EIS.
[4] Joint lead agencies are federal agencies that share lead responsibility for preparing a NEPA environmental review document due to shared project involvement or jurisdiction.

Consultation with the U.S. Fish and Wildlife Service (USFWS) and National Oceanic and Atmospheric Administration (NOAA) Fisheries, also known as National Marine Fisheries Service (NMFS), is required for actions that may affect federally listed species or critical habitat under section 7 of the Endangered Species Act (ESA). Ongoing and existing activities at PMRF and KPGO have been previously covered under formal consultations with USFWS and NMFS, which resulted in the issuance of Biological Opinions in 2014, 2018, and 2025. Since there are no new activities resulting from the Proposed Action, the Navy and NASA have determined that there would be no new effects to ESA-listed species on leasehold and easement lands and reinitiation of consultation with USFWS and NMFS is not required per ESA regulations.

Additionally, the Navy and NASA are consulting with the U.S. Environmental Protection Agency (EPA), Hawai‘i Department of Land and Natural Resources (DLNR), and Hawai‘i Department of Health (HDOH) regarding the Proposed Action. With regard to cultural resources, the Navy and NASA are consulting with the Hawai‘i State Historic Preservation Officer (SHPO), AHA Moku Council (Kaua‘i and State), Native Hawaiian Organizations (NHOs) (including Office of Hawaiian Affairs [OHA]), and other parties.

A complete list and description of the Proposed Action’s consistency with federal and State of Hawai‘i laws, statutes, regulations, and policies can be found in Attachment A of this CD.

## 1.2 Previous Coastal Consistency Consultations

As mentioned above and described in further detail in Section 2, *Proposed Action*, the Navy and NASA propose to retain the use of 8,172 acres of State lands on Kaua‘i, Hawai‘i, in support of continued and ongoing military training, testing, and facility operations at PMRF. NASA proposes to retain the use of 23 acres of State lands on Kaua‘i in support of maintaining data collection efforts of global significance at KPGO. Navy training and testing operations do not occur on these lands. The environmental effects of these training and testing operations are fully analyzed in previous, focused environmental documents which included federal coastal consistency compliance, as appropriate to the action. Additionally, the Navy has submitted several *de minimis*[5] notifications for previous activities occurring in the Proposed Action area in coordination with the Hawai‘i Department of Business, Economic Development and Tourism (DBEDT) and DLNR.

The following is a list of previous federal coastal consistency compliance documents for PMRF:

- **2024 PMRF Missile Range Facility Land-Based Training and Testing Environmental Assessment (EA):** The Navy submitted notification of use of Navy *de minimis* activities and received acknowledgement.
- **2018 Hawaii-Southern California Training and Testing EIS/Overseas EIS (OEIS):** The Navy submitted a CD. The Navy completed consultations with the Hawai‘i Coastal Zone Management program.
- **2017 PMRF Photovoltaic and Battery Energy Storage Systems EA:** The Navy submitted notification of use of Navy *de minimis* activities and received acknowledgement.
- **2011 Advanced Hypersonic Weapon Program EA:** The U.S. Army Space and Missile Defense Command/Army Forces Strategic Command found that the proposed activities were incremental increases in activities already occurring at PMRF and were previously found to be

[5] *De minimis* activities are activities that are expected to have insignificant direct or indirect (cumulative and secondary) coastal effects and which the State agency concurs are *de minimis*.

consistent to the maximum extent practicable with the Hawai‘i Coastal Zone Management program in the 1998 PMRF Enhanced Capability EIS.

- **2008 Pacific Missile Range Facility Hawaii Range Complex Final EIS/OEIS:** The Navy found that the proposed activities were incremental increases in activities already occurring at PMRF and were previously found to be consistent to the maximum extent practicable with the Hawai‘i Coastal Zone Management program in the 1998 PMRF Enhanced Capability EIS.
- **1998 Pacific Missile Range Facility Enhanced Capability EIS:** The Navy determined that the Proposed Action would be consistent to the maximum extent practicable with the Hawai‘i Coastal Zone Management program enforceable policies.

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# 2 Proposed Action

The Navy proposes to retain the use of 8,172 acres of State lands on Kaua‘i in support of continued and ongoing military training and testing at PMRF. NASA proposes to retain the use of 23 acres of State lands on Kaua‘i in support of maintaining data collection efforts of global significance at KPGO. The Proposed Action includes current activities that occur on leasehold and easement lands. Figure 2-1 depicts the general location of the Proposed Action.

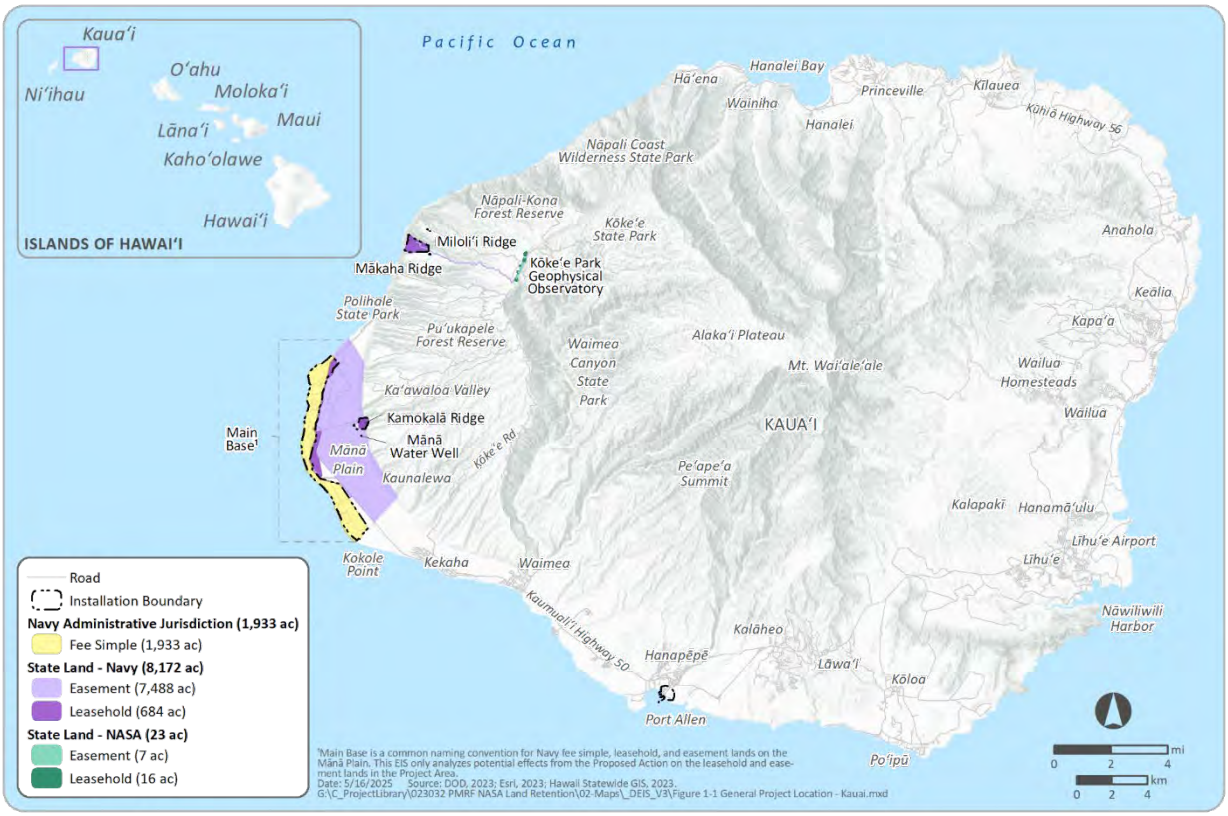


**Figure 2-1 General Location**

## 2.1 Purpose and Need

The Navy’s purpose of the Proposed Action is to maintain Department of Defense (DoD) use of 8,172 acres of State lands (including leasehold and easement lands) on Kaua‘i, Hawai‘i, for a period longer than 25 years for operational continuity and sustainment of the military readiness mission. NASA’s purpose of the Proposed Action is to maintain use of 23 acres of State lands (including leasehold and easement lands) on Kaua‘i for a period longer than 25 years for continued operations of KPGO. The Proposed Action is needed because the existing real estate agreements for these State lands are set to expire between 2027 and 2030. The Navy use of these State lands is required to maintain technological and safety capabilities supporting PMRF training and testing. For NASA, these State lands are critical to maintain data collection efforts of global significance. It also ensures the continued conservation management by the Navy and NASA of natural and cultural resources on these lands.

For BLNR, in addition to its role as the lessor of State lands, the proposed real estate action presents an opportunity for the agency to secure a revenue source to support its management of State lands and

associated environmental and conservation programs. Fees from leases and easements would be put into a State fund as required by law. Twenty percent of ceded[6] land revenue (fees from the leases and easements) would go to the OHA, and the rest to the Special Land Development Fund as required by law.

By ensuring continued Navy and NASA operations on Kauaʻi, the real estate action would also preserve local jobs and income for the residents of Kauaʻi, financially contribute to the overall economic well-being of Kauaʻi, and maintain continued conservation management of natural and cultural resources on State lands at no cost to the State of Hawaiʻi.

## 2.2 Project Location

PMRF and KPGO are located approximately 100 miles from Oʻahu on the northwest coast of the Hawaiian island of Kauaʻi shown in Figure 2-1. KPGO is located within Kōkeʻe State Park on the island of Kauaʻi, at an elevation of approximately 3,600 feet above sea level near Waimea Canyon. Elevation at PMRF varies from sea level (PMRF leasehold and easement lands at Main Base) to over 1,800 feet above sea level (Mākaha Ridge).

The Project Area overview is shown in Figure 2-2. The general locations of leasehold and easement lands at Main Base, Kamokalā Ridge, and Mānā Water Well portions of the Project Area are shown in Figure 2-3. Mākaha Ridge, Miloliʻi Ridge, and KPGO portions of the Project Area are shown in Figure 2-4. Detailed figures showing the location of the individual leaseholds and easements are provided in Appendix D of the 2025 Draft EIS. Tax Map Key (TMK) parcel numbers are also shown on Figures 2-3 and 2-4.

The Project Area (depicted in Figures 2-3 and 2-4) consists of the following:

- Main Base[7]: leaseholds (392 acres) and easement lands (7,267 acres[8]), located adjacent to the fee simple lands at the installation, used for PMRF operational support, as well as utilities and flood control, and as safety buffers and to preclude encroachment on the Mānā Plain (TMKs: 1-2-002-001 (por.), 1-2-002-024 (por.), 1-2-002-025, 1-2-002-026 (por.))
- Kamokalā Ridge: leaseholds (89 acres) used for ordnance storage, utilities access, and tsunami evacuation and easement lands (179 acres)[9] used as safety buffers and to preclude encroachment (TMKs: 1-2-002-001 (por.), 1-2-002-027, 1-2-002-029)
- Mānā Water Well: leaseholds (0.29 acre) used as the primary potable water source for PMRF (TMKs: 1-2-002-001 (por.), 1-2-002-028)
- Mākaha Ridge: leaseholds (203 acres) and easement lands (42 acres) used for missile tracking and surveillance (TMKs: 1-2-001-006 (por.), 1-4-001-014 (por.), 1-2-001-010, 1-4-001-002 (por.), 1-4-001-013 (por.))
- Miloliʻi Ridge: leaseholds (0.015 acre) used for radar and telemetry activities (TMK: 1-2-001-006 (por.))

[6] The term "ceded lands" is used to refer to the government lands of the Kingdom of Hawaiʻi and the Crown lands that were property of the Hawaiian monarch, which the Republic of Hawaii transferred or "ceded" to the United States government in the Joint Resolution of Annexation approved July 7, 1898 (30 Stat. 750). Upon statehood in 1959, the federal government returned to the State of Hawaiʻi all ceded lands not set aside for its own use in Section 5(f) of the Admission Act. The use of the term "ceded land" is consistent with usage by other State agencies (e.g., https://www.oha.org/about/abouthistory/).

[7] Note that "Main Base" is a common naming convention for Navy fee simple, leasehold, and easement lands on the Mānā Plain. This CD and the 2025 Draft EIS only analyzes potential effects from the Proposed Action on the leasehold and easement lands in the Project Area.

[8] Approximately 95 percent of the easement lands at Main Base are passively used for encroachment buffers and mission readiness; the remaining 5 percent of easement lands are used for access and utility easements.

[9] Easement 106 and ESQD Easement S-5604 cover the same area (176 acres).

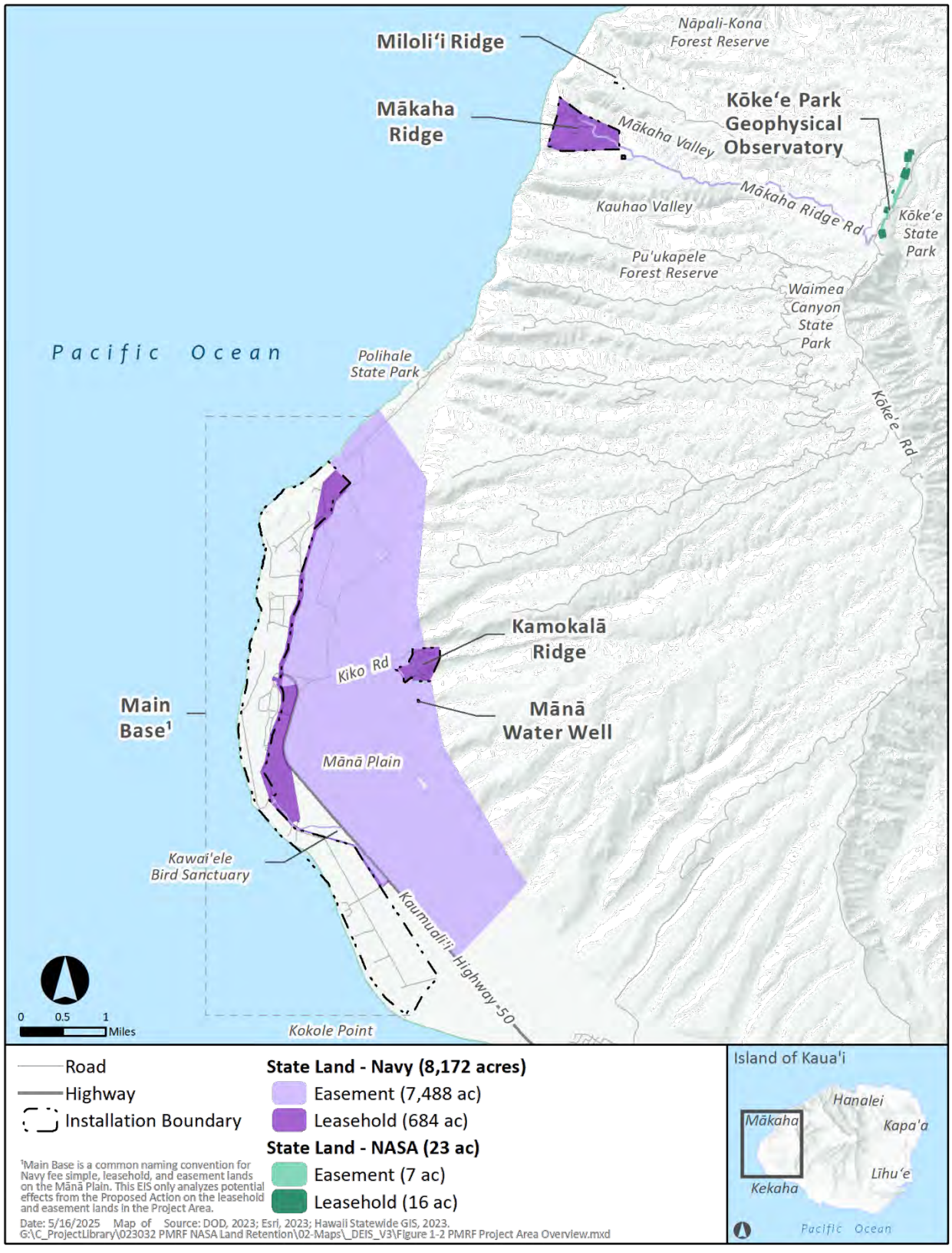


**Figure 2-2 Project Area: Overview**

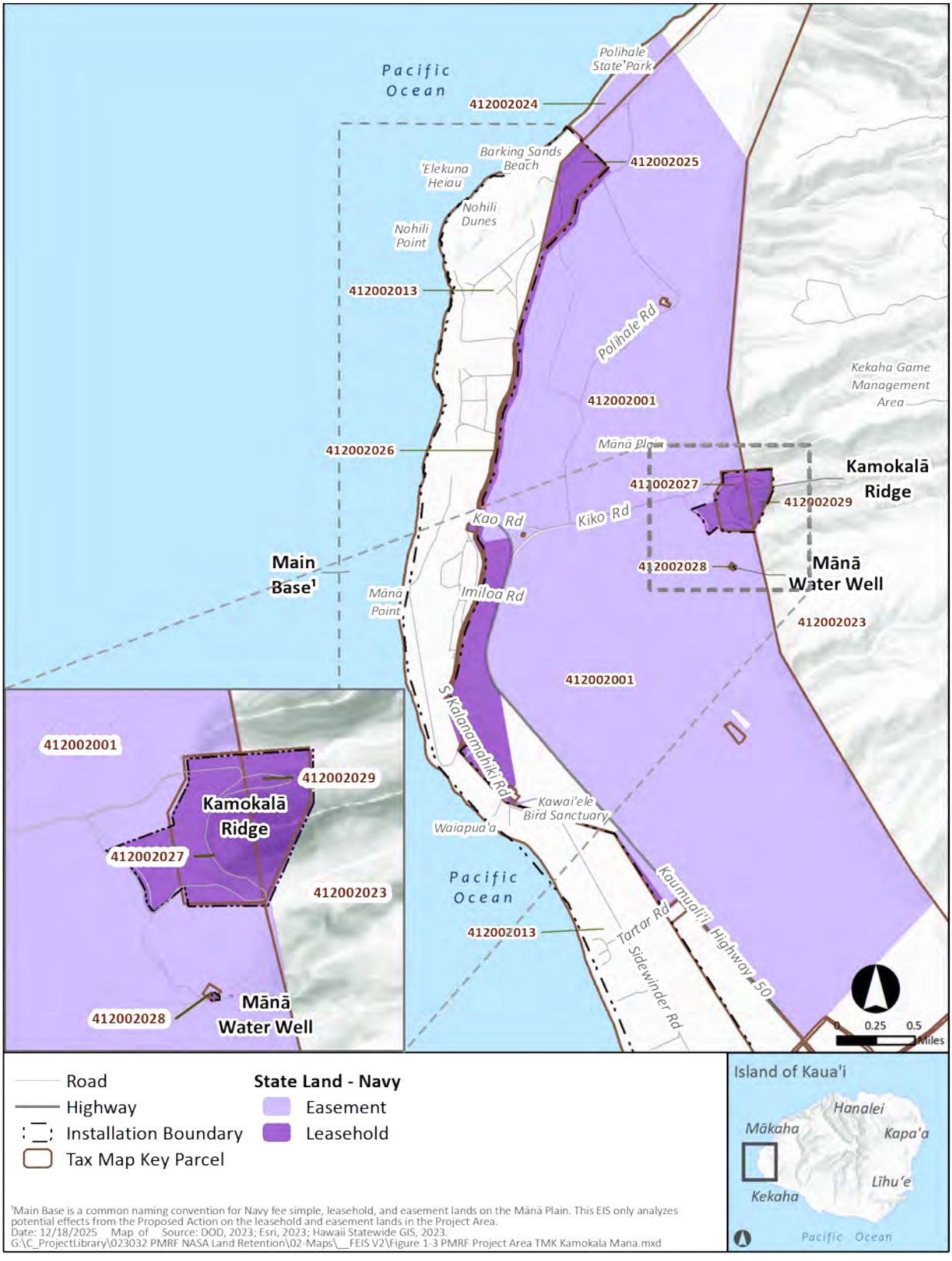


**Figure 2-3 Project Area: Main Base, Kamokalā Ridge, and Mānā Water Well**

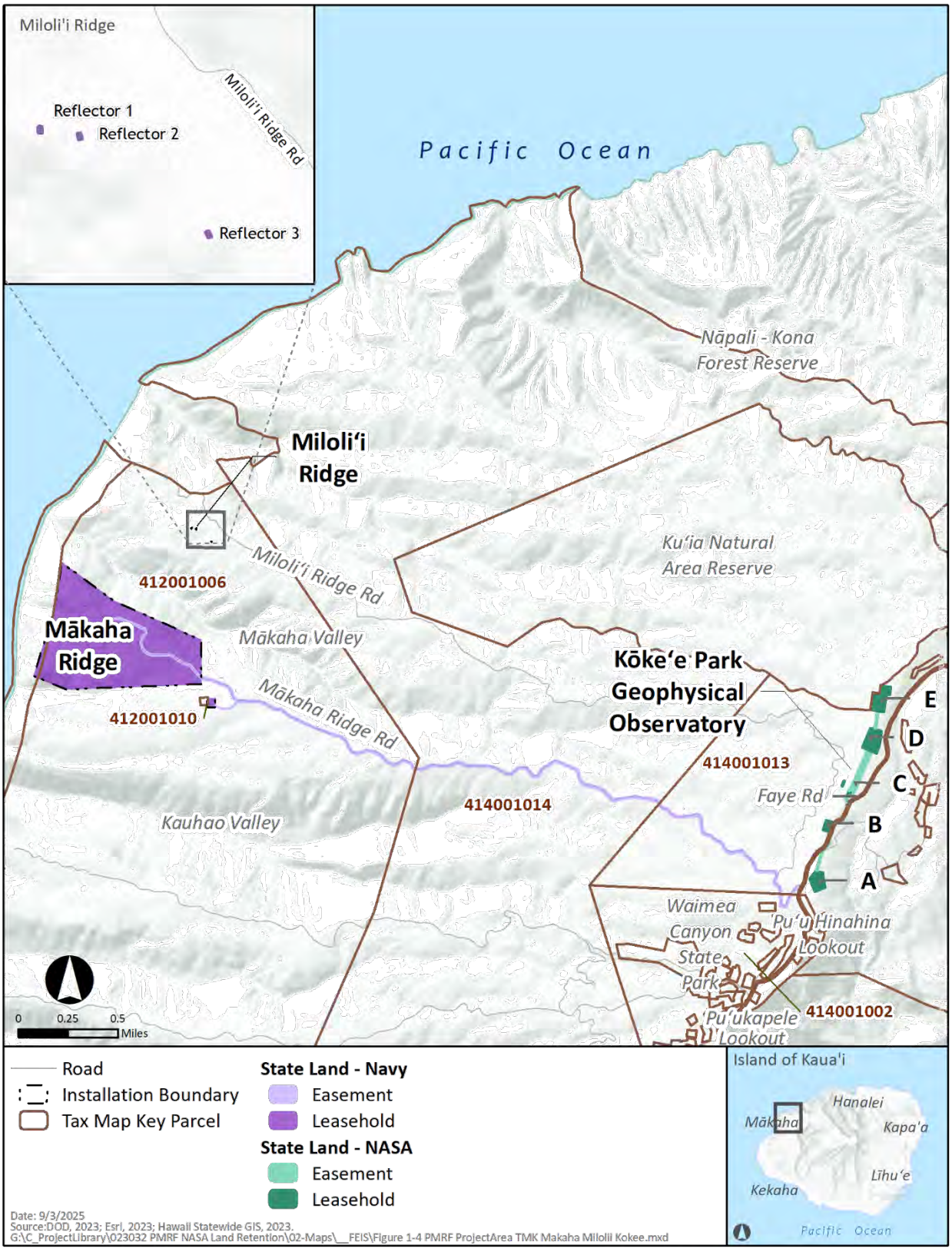


**Figure 2-4 Project Area: Mākaha Ridge, Miloli'i Ridge, and Kōke'e Park Geophysical Observatory**

- KPGO: leaseholds (16 acres) and easement lands (7 acres) used for NASA geodetic data collection and backup power generation, to provide consistent power during critical Navy missions as well as PMRF surveillance and tracking (TMK: 1-4-001:013 (por.))

### 2.3 Alternative 1: Succeeding Current Real Estate Agreements

Under this alternative, the Navy and NASA would apply to the Board of Land and Natural Resources (BLNR) to secure new real estate agreements, for a minimum duration of 25 years up to a maximum duration as negotiated with BLNR, and for the same uses as the current leases and easements. The Navy's agreements would include 684 acres of land leased exclusively by the Navy and 7,488 acres of easement lands (for a total of 8,172 acres). Approximately 95 percent of the easement lands are passively used for encroachment buffers and mission readiness; the remaining 5 percent are used for access and utility easements. NASA's agreements would include 16 acres of land leased exclusively by NASA and 7 acres of easements (for a total of 23 acres). NASA would enter into a new real estate agreement with the Navy for continued use of the leasehold and easement lands.

Securing the new real estate agreements at fair market value from BLNR must occur prior to expiration of the current real estate agreements to ensure uninterrupted operation of all federal agency missions. Under this alternative, there would be no changes to the type or frequency of current activities occurring on State leasehold and easement lands. This alternative would not change any use or maintenance of existing infrastructure and would not involve construction, renovation, or demolition of facilities. This alternative would also preserve the Navy- and NASA-funded natural and cultural resource management activities on the leased and easement lands.

The leasehold and easement areas are currently used for safety buffers and Anti-Terrorism/Force Protection (ATFP) security requirements (Main Base); leasehold areas are currently used for ordnance storage-related facilities (Kamokalā Ridge), potable water (Mānā Water Well), radar- and telemetry-related facilities (Miloliʻi and Mākaha Ridges), and data collection and tracking (KPGO). The easement areas are currently used for utilities, roadways, and as encroachment buffers for government activities on fee simple lands. Many of these easements also preserve existing land use and prevent incompatible development that would negatively affect the ability of PMRF and NASA to meet their mission requirements.

Under this alternative, the Navy and NASA would maintain succeeding agreements for the current real estate agreements, and this alternative meets all screening factors (see Section 2.2, *Alternative Screening Process*). This alternative (1) maintains use of State lands currently used to support DoD and NASA missions on Kauaʻi for a period longer than 25 years; (2) preserves current DoD and NASA operations on Kauaʻi; (3) retains existing DoD and NASA infrastructure on Kauaʻi; and (4) supports DLNR management of State lands and associated environmental and conservation programs on Kauaʻi.

Under Alternative 1, in addition to the existing governmental purposes of the leasehold and easement lands, Navy and NASA natural and cultural resource activities and responsibilities would continue (see Section 1.3, *Background* of the 2025 Draft EIS). This includes continued Navy funding for resource management actions and public use programs (see Section 1.3.6, *Environmental Management and Stewardship* of the 2025 Draft EIS); pursuing Readiness and Environmental Protection Integration (REPI) projects; continuing general natural resource management as identified in the PMRF Integrated Natural Resources Management Plan (INRMP); and continuing cultural resource management as identified in

the PMRF Integrated Cultural Resources Management Plan (ICRMP) (see Table 1-4 in Section 1.3.6 of the 2025 Draft EIS). Under this alternative, any new terms and conditions would be identified during real estate negotiations with the State.

The six locations are shown in Figure 2-5 (Main Base, Kamokalā Ridge, Mānā Water Well, Miloliʻi Ridge, Mākaha Ridge, KPGO).

## 2.4 Alternative 2: Fee Simple Acquisition of Current Real Estate Agreements for Leaseholds

Under this alternative, the Navy and NASA would pursue fee simple acquisition at fair market value of up to 700 acres (684 acres for Navy use and 16 acres for NASA use) of leaseholds and otherwise obtain use of the same easement lands as described in Alternative 1. The new Navy fee simple land of 684 acres would include 392 acres of land at Main Base, 89 acres at Kamokalā Ridge, 0.29 acre at the Mānā Water Well, 0.015 acre at Miloliʻi Ridge, 203 acres at Mākaha Ridge; and the NASA fee simple land would include 16 acres at KPGO (Figure 2-6). This acreage would be transferred from ownership by the State of Hawaiʻi to the U.S. Government.

This alternative would not change any use or maintenance of existing infrastructure and would not involve construction, renovation, or demolition of facilities. The activities described under Alternative 1 at these sites would continue (see Section 1.3, *Background* and Section 2.3, *Alternative 1: Succeeding Current Real Estate Agreements*). The land would be managed in perpetuity by the Navy and NASA according to federal requirements. Under this alternative, Navy and NASA activities and responsibilities on these lands would continue (see Section 1.3, *Background* and the description above for Section 2.3, *Alternative 1: Succeeding Current Real Estate Agreements*). Under this alternative, the Navy could continue to operate at KPGO under a new real estate agreement with NASA.

By acquiring the leased parcels, this alternative meets the purpose and need of the Proposed Action, secures the Navy and NASA use of State lands near Navy lands on Kauaʻi, and preserves the use of State lands for military readiness and continuation of Navy activities, as well as NASA's current geodetic activities. This alternative also meets all of the screening factors (see Section 2.2, *Alternative Screening Process* of the 2025 Draft EIS). This alternative (1) maintains use of lands currently used to support DoD and NASA missions on Kauaʻi for a period longer than 25 years; (2) preserves current DoD and NASA operations on Kauaʻi; (3) retains existing DoD and NASA infrastructure on Kauaʻi; and (4) supports DLNR management of State lands and associated environmental and conservation programs on Kauaʻi. It would result in federal ownership of land that is currently leased from the State of Hawaiʻi, which would allow the Navy to maintain use of DoD land on Kauaʻi for a period longer than 25 years, preserve current DoD and NASA operations, and retain existing DoD infrastructure. Under this alternative, the Navy and NASA would continue current management of natural and cultural resources on these lands, which are consistent with DLNR's environmental and conservation programs. Under this alternative, any new terms and conditions would be identified during real estate negotiations with the State.

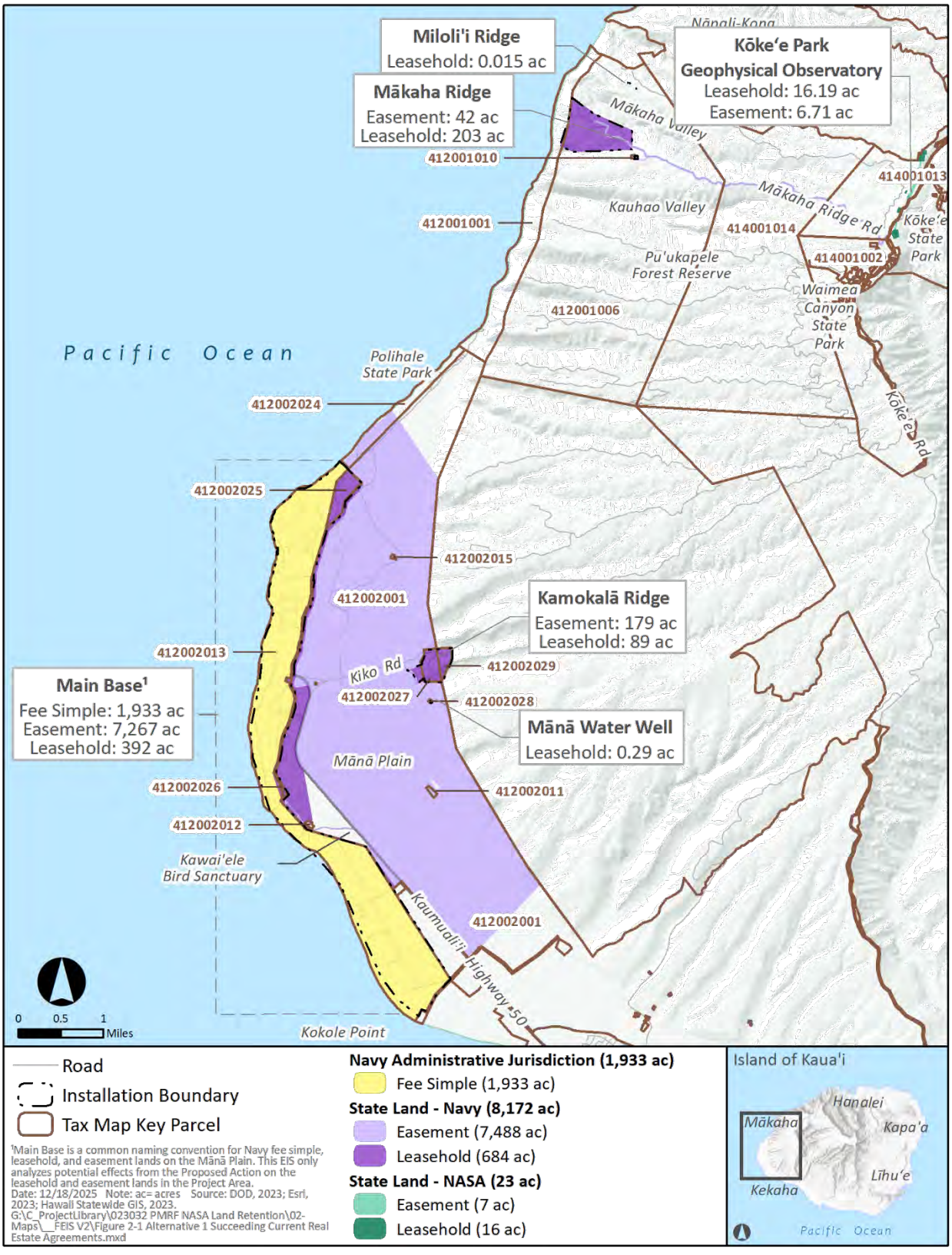


**Figure 2-5 Alternative 1: Succeeding Current Real Estate Agreements**

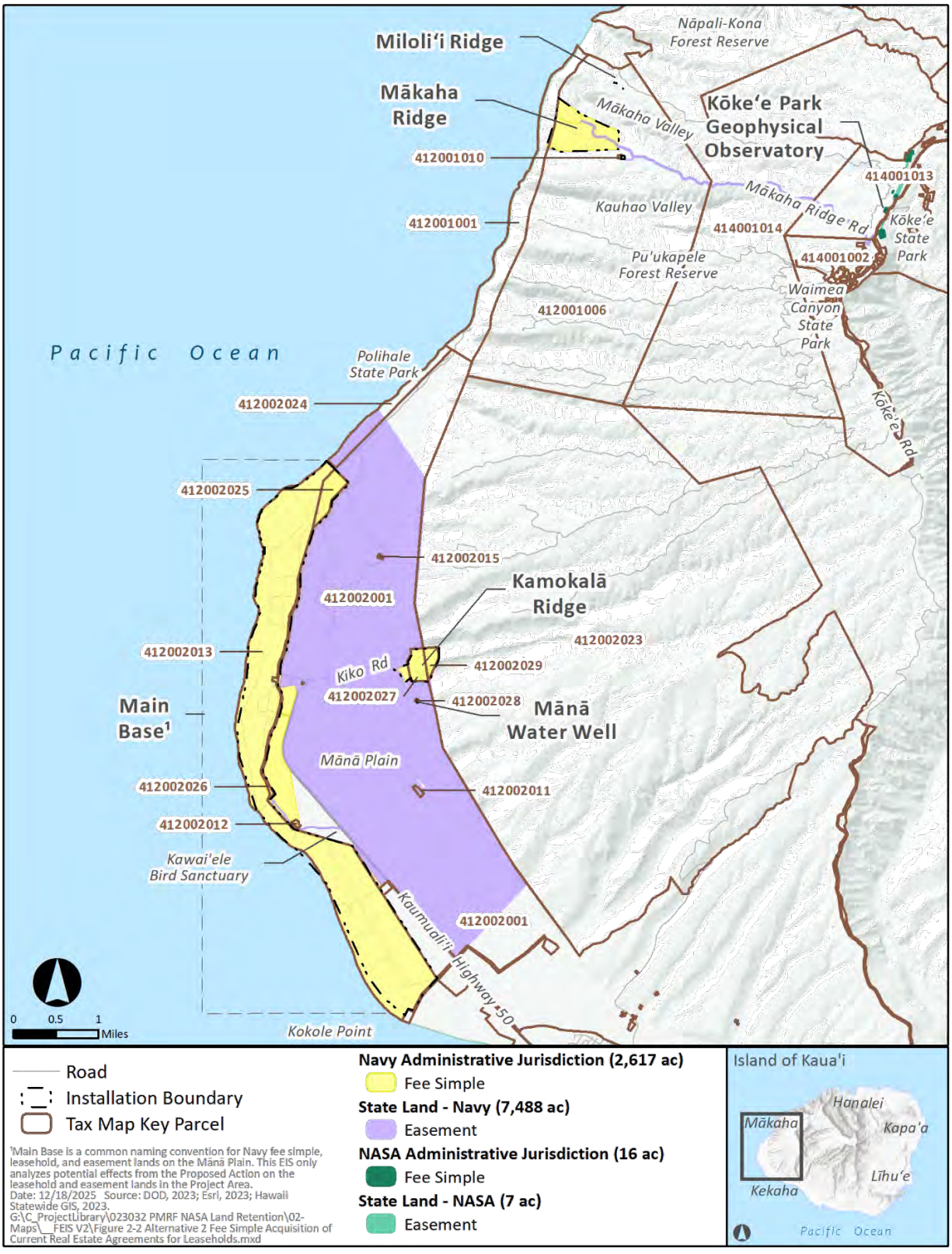


**Figure 2-6 Alternative 2: Fee Simple Acquisition of Current Real Estate Agreements for Leaseholds**

## 2.5 Background

### 2.5.1 Historic Land Use at PMRF

The Project Area is located on the Mānā Plain, in the traditional ahupuaʻa (a land division typically extending from mountains to the sea) of Mānā within the moku (traditional Hawaiian district) of Kona (Flores and Kaohi, 1992:2). The history of the Mānā Plain is complex, with the earliest known traditional Hawaiian archaeological site at PMRF dating to the eleventh century. The following brief overview of the historic land use at PMRF is condensed from the 2012 PMRF ICRMP (U.S. Navy PMRF, 2012).

Traditionally, the people of Mānā were noted fishermen. It is likely that permanent settlements were concentrated at the inland edge of the Mānā Plain, where houses, temples, and agricultural complexes were built in the foothills at the base of the cliffs, on high ground overlooking the wetlands and coastline. The coastal dunes of the Mānā Plain, particularly at Nohili, were the burial grounds of ancient Hawaiians. Several important heiau were located within the Mānā Plain. These heiau include Polihale, where rites associated with departing souls were conducted, and ʻElekuna, which King Kalākaua and his priests visited many times in the nineteenth century, and others such as Kahelu heiau and Hoʻoneʻenuʻu heiau.

In the 1920s, the Territory of Hawaiʻi built an airstrip. Beginning in 1940, the U.S. military acquired the airstrip and surrounding land to develop Barking Sands Army Air Base. During World War II, units from all branches of the armed forces and the Hawaiʻi National Guard were assigned to the base. The base was transferred to the Air Force in 1948. During the 1950s, the facility was redesignated Bonham Air Force Base, and the Navy, as a tenant of the base, began testing, evaluating, and training sailors on using guided missile systems. In 1958, the Navy's activity was named the Pacific Missile Range Facility as part of a newly designated larger Pacific Missile Range used by the DoD and NASA (U.S. Navy PMRF, 2012).

A more detailed history of land use at PMPRF is included in Section 3.2, *Archaeological and Architectural Resources* and Section 3.3, *Cultural Practices* of the 2025 Draft EIS, the Archaeological Inventory Survey at PMRF completed in August 2024 in Appendix F of the 2025 Draft EIS, and the 2012 PMRF ICRMP (U.S. Navy PMRF, 2012).

### 2.5.2 Historic Land Use at KPGO

KPGO is located on the remote Kaunuohua Ridge in Kōkeʻe State Park and shares a similar pre-contact history with PMRF, as both sites are located within the ancient ʻokana (now modern ahupuaʻa) of Waimea in the moku of Kona (Anae et al., 2024). While NASA originally leased the KPGO sites in 1965, NASA has been operational in this location since July 1960 (Letter No. 2.4055, 1960). In order to meet construction and operational schedules for Project Mercury (the U.S.'s first human spaceflight program), the Hawaiʻi Commissioner of Public Lands granted the Navy and NASA right-of-entry to a total of approximately 22 acres spread across five parcels of land and rights-of-way (ROWs). By letter No. 2.4055 of February 5, 1960, the State of Hawaiʻi granted the Navy an immediate right-of-entry to certain parcels of land, together with required connecting ROWs, for the construction of the Pacific Missile Range Instrumentation Facility at Kōkeʻe, Kauaʻi. The right-of-entry was granted as an interim measure to permit construction necessary to meet the world-wide coordinated construction and operational schedules to support NASA's Mercury Program. The location and area of the land parcels were required to support PMRF in its contribution to NASA's Mercury Program.

A more detailed history of land use at KPGO is included in Section 3.2, *Archaeological and Architectural Resources* and Section 3.3, *Cultural Practices*, and in Appendix F of the 2025 Draft EIS.

### 2.5.3 Navy and NASA Use of State Lands

While the Navy and NASA were granted use of certain parcels of land on Kaua'i as early as 1960, a formal lease with the State of Hawai'i was not executed until 1964 (Navy) and 1965 (NASA). The Navy conducts missile systems tests from the fee simple parcels at PMRF, and supporting Naval facilities that track and evaluate these tests are located on the leasehold and easement lands at Mākaha Ridge and KPGO. These tracking operations, and other activities on the leasehold and easement lands are covered in the 2025 Draft EIS.

The Navy originally acquired the fee simple land to develop sophisticated testing, evaluation, and training of military weapons systems at PMRF. Since the original land acquisition, PMRF's mission has expanded in response to new technologies and geopolitical threats. NASA's lease began in 1965 when KPGO was part of the NASA Manned Space Flight Network. Since that time, KPGO has supported many NASA and other projects with a variety of equipment. It is a highly versatile and multifunctional geodetic site.

The Navy and NASA's current activities on the leasehold and easement lands are shown in Table 2-3 and analyzed in the 2025 Draft EIS. Additionally, Appendix D of the 2025 Draft EIS includes a detailed list and figures showing all the current leases and easements at PMRF and KPGO, as well as acreage associated with each lease and easement.

**Table 2-3 Navy and NASA Activities on Leasehold and Easement Lands**

| *Area* | *Agency* | *Description of Activities* | *Figure Number in 2025 Draft EIS* |
|---|---|---|---|
| Main Base | Navy | Main Base consists of 1,933 acres of fee simple land as well as leasehold and easement lands. At Main Base, the Navy has 392 acres of leaseholds and 7,267 acres of easement lands. Main Base is the principal operations area for PMRF and supports surface, subsurface, air, and space activities. Activities on the leased parcels at Main Base include ordnance assembly, maintenance facilities, material storage, Pass and ID office, operation and maintenance of drainage ditches and pumps to protect adjacent land from flooding, travel along roadways, and accessing utilities. Additionally, undeveloped land serves as safety zone buffers for missile/target launch operations and explosives safety.<br><br>The majority of easement lands (95 percent) at Main Base are passively used for encroachment buffers and mission readiness; the remaining 5 percent of easement lands are used for access and utility easements. At Main Base on the Mānā Plain where the Navy holds restrictive use easements for passive buffers only, other entities hold their own leases with the State of Hawai'i for agricultural purposes. The Navy passively | 1-3 |

| *Area* | *Agency* | *Description of Activities* | *Figure Number in 2025 Draft EIS* |
|---|---|---|---|
| | | uses easement lands for ATFP and safety arcs. GHA safety arcs have a radius between 6,000 and 10,000 feet from the missile launch locations; the public and all nonessential personnel are excluded from being within this area prior to, during, and immediately following a launch. For the portion of the GHA on leased lands adjacent to Main Base, the Navy works with DLNR Division of State Parks to establish safety controls during missile launches and restricts entry to the southern portion of Polihale Beach Park prior to launches.<br><br>Explosives storage and munitions assembly locations have ESQD arcs for explosives safety zones based on quantities and types of ammunition stored in magazines, being transported, and staged on ordnance handling pads. ESQD arcs overlay ground areas of restricted non-ammunition-related facilities and activities located on an easement subject to a MOA with DLNR. | |
| Kamokalā Ridge | Navy | Kamokalā Ridge includes 268 acres consisting of 89 acres of leaseholds and 179 acres of easement lands. Easement 106 (TMK: 1-2-002-001 (por.)) and ESQD Easement S-5604 (TMK: 1-2-002-001 (por.)) cover the same area (176 acres). Kamokalā Ridge leasehold land provides ordnance storage for the Navy, Hawai‘i Air National Guard, DOE, and other military commands with requirements for training and storage. The site consists of ordnance storage magazines that have been excavated into the cliff face of Kamokalā Ridge. The magazines provide secure storage for Class 1.1 explosives. Activities on easements at Kamokalā Ridge include roadways to access utilities. This area also serves as a tsunami evacuation site for Main Base occupants. | 1-3 |
| Mānā Water Well | Navy | The Mānā Water Well consists of 0.29 acre of leasehold land. Activities include maintenance and use of the Mānā Water Well, which provides the majority of potable water for PMRF critical to activities on fee simple lands at Main Base. | 1-3 |
| Mākaha Ridge | Navy | Mākaha Ridge consists of 245 acres (203 acres of leasehold lands and 42 acres of easement lands). The Mākaha Ridge Tracking Station serves as PMRF’s secondary missile | 1-4 |

| *Area* | *Agency* | *Description of Activities* | *Figure Number in 2025 Draft EIS* |
|---|---|---|---|
| | | tracking and surveillance station. The station has tracking and surveillance radars as well as primary telemetry systems for the range. The site is also used by other agencies to test new radar technologies. Due to the sensitivity of the technology, public access is restricted at this location.<br><br>Activities on easement lands at Mākaha Ridge include roadways to and around the features, and a water line and underground communication line. | |
| Miloliʻi Ridge | Navy | Miloliʻi Ridge consists of 0.015 acre of leasehold land. Activities at Miloliʻi Ridge leaseholds include passive use of the frequency shift reflectors (a specific type of antenna system), which work with the radar and telemetry stations on Mākaha Ridge. The reflectors, which are passively used, do not generate emissions, and help calibrate and operate the radar systems used at Mākaha Ridge. | 1-4 |
| KPGO | Navy | KPGO consists of 16 acres of leasehold and 7 acres of easement lands. The Navy has a Use Permit with NASA for Sites A through D which support surveillance and tracking. An elevated line-of-site at the KPGO site is required for PMRF to maintain surveillance and tracking of airborne and surface units operating offshore of PMRF and that are beyond the range of the surveillance and tracking from the radars at Mākaha Ridge. Surveillance is primarily for safety reasons to ensure no surface vessels, aircraft, or personnel (private, commercial, or military) are in the hazard area, and for tracking the location of objects (i.e., missile test intercept). PMRF also has FTS telemetry at KPGO which is required by Range Safety for all missile launch events. Navy infrastructure at KPGO supports tracking radars as well as command and control systems. | 1-4 |
| | NASA | Sites A through E support KPGO activities which include collecting and coordinating geodetic data and contributing to daily measurements of the Earth's orientation in space and rotation. The diesel generator at Site B provides backup power to Sites A, C, D, and E to provide consistent power during critical Navy missions. | 1-4 |

| Area | Agency | Description of Activities | Figure Number in 2025 Draft EIS |
|---|---|---|---|
| | | Site C also hosts a NOAA weather radio broadcast transmitter and DLNR-managed facilities that support Kōkeʻe State Park, include a helicopter launch/landing area, maintenance building/storage building, pole barn, open storage yards/drums and vehicle storage areas, and small cinderblock shack. | |

*Key:* ATFP = Anti-Terrorism/Force Protection; DLNR = Department of Land and Natural Resources; DOE = Department of Energy; ESQD = Explosive Safety Quantity Distance; FTS = Flight Termination System; GHA = Ground Hazard Area; ID = Identification; KPGO = Kōkeʻe Park Geophysical Observatory; MOA = Memorandum of Agreement; NASA = National Aeronautics and Space Administration; NOAA = National Oceanic and Atmospheric Administration; PMRF = Pacific Missile Range Facility; TMK = Tax Map Key.

### 2.5.4 Environmental Management and Protection

The Navy manages natural and cultural resources on PMRF including leased and easement lands. Conservation management of natural and cultural resources is a priority for both mission readiness and long-term resource protection. This includes activities such as protecting endangered Hawaiian monk seal (*Neomonachus schauinslandi*), green sea turtle (*Chelonia mydas*), wetlands, archaeological sites, iwi kūpuna (Native Hawaiian ancestral human remains), and historic buildings and structures. The Navy also protects natural and cultural resources, including Native Hawaiian sacred resources, against encroachment. PMRF's awareness of the importance of Native Hawaiian cultural values is embodied in the phrase: E Pana Mai Ka Nonoi O Nohili – Answering the Requests of Nohili.

Table 2-4 lists Navy funded and managed natural and cultural programs on State lands.

**Table 2-4 Navy Programs on State Lands**

| Program | Description |
|---|---|
| REPI Projects | Addressing potential effects of sea level rise on agricultural land on the Mānā Plain by:<br>• creating an open floodable space to reduce the quantity and improve the quality of stormwater runoff discharged from agricultural drainage ditches into the nearshore environment at PMRF;<br>• reducing the threat erosion poses to PMRF infrastructure; and<br>• promoting the regeneration of historic wetland habitat for endemic and endangered Hawaiian waterbirds (https://www.repi.mil/Portals/44/Documents/Buffer_Fact_Sheets/Navy/PMRF_BarkingSands.pdf). |
| PMRF INRMP | Natural resource management that includes erosion management, invasive plant management, native plant management, federally listed plant species management (at Mākaha Ridge), wildland fire management, nuisance and invasive animal management, special status species management, terrestrial invertebrate and pollinator management, data collection, database and records management, outdoor recreation, and natural resources awareness, education, and training. PMRF INRMPs include natural resource management at KPGO. |
| PMRF ICRMP | Cultural resource management, including implementation of the cultural resources management program and oversight of all cultural resource operations and activities at the range. |

| *Program* | *Description* |
|---|---|
| Ka Lua Kupapa'u O Nohili | Nohili Dunes, at Main Base, is a spiritual place for Native Hawaiians as indicated through historical accounts, song, and mo'olelo, including its importance with gathering of marine resources, visitation, seasonal camping, and association with traditional Native Hawaiian mortuary practices. The Navy, in collaboration with Na 'Ohana Papa O Mānā, respectfully re-inters exposed remains in the Lua Kupapa'u O Nohili crypt located on base. Unveiling of the renovated crypt expansion occurred on October 10, 2024. https://www.dvidshub.net/news/483951/our-kuleana-pmrf-hosts-aha-awa-ceremony-rededicating-lua-kupapau-o-nohili-crypt-expansion-safe-keeping-iwi-kupuna |
| Agricultural Preservation Initiative | Ensures agricultural land areas surrounding the installation remain in agricultural use, which is compatible with PMRF activities. |
| Nature-based Solutions | The Navy is assessing options for nature-based solutions to address erosion control. |
| Resiliency Solutions | The Navy is assessing options to implement a composting facility for waste minimization, sustainability, resiliency, environmental compliance, community and environmental protection, and operational efficiency. |

*Key*: ICRMP = Integrated Cultural Resources Management Plan; INRMP = Integrated Natural Resources Management Plan; PMRF = Pacific Missile Range Facility; REPI = Readiness and Environmental Protection Integration.

PMRF and specific Navy long-term natural resource protection activities that occur on leased and easement lands at PMRF and KPGO are presented in detail in the 2025 Draft EIS, Section 2.5, *Best Management Practices,* and include:

- Responding to requests for public access and for cultural access to individuals and organizations.
- Maintaining ungulate exclusion fencing for erosion control at Mākaha Ridge.
- Outplanting and managing native plants in areas identified as having erosion and soil compaction issues.
- Improving and protecting habitat for the federally endangered Ni'ihau panicgrass (*Panicum niihauense)* and Hawaiian picture-wing fly (*Drosophila musaphilia* and *D. sharpi*).
- Continuing predator control to protect Migratory Bird Treaty Act (MBTA)-listed species including nēnē (*Branta sandvicensis*).
- Working with the PMRF Archery Club to control ungulate populations at Kamokalā Ridge and conducting observations to identify feral cats at Kamokalā Ridge (with possibility of expanding cat trapping if necessary).
- Removing deadfall in high-risk fire areas including near the Main Base missile launch site and the Kamokalā Magazines and replanting with native, low fire risk species.
- Coordinating with USFWS, DOFAW, PMRF Air Operations, and PMRF Public Works to update and implement nēnē (*Branta sandvicensis)* management procedures.
- Conducting targeted invasive plant species control efforts to protect native and sensitive habitat ecosystems at KPGO.

See Attachment C for a more detailed description of Navy and NASA best management practices (BMPs) and management strategies for natural and cultural resources.

### 2.6 Activities that May Affect Hawai'i Coastal Zone or Coastal Resources

The Proposed Action is a real estate agreement and the continuation of ongoing operations at PMRF on State lands. Use of these State lands is required to maintain technological and safety capabilities in support of PMRF and KPGO. Navy training and testing operations do not occur on these State lands. As discussed in the 2025 Draft EIS, there could be some adverse impacts to resources associated with

ongoing operations within the Hawai‘i coastal zone such as biological resources, cultural practices, land use and access, public health and safety, and hazardous materials and waste but none of the impacts would be considered significant. The Navy and NASA reviewed the Hawai‘i Coastal Zone Management program to identify the enforceable policies relevant to the Proposed Action in consideration of the potential impacts from ongoing activities (HRS Chapter 205A, Part I, Section 205A-2) and the analysis is presented below.

## 2.7 Effects Test

The Proposed Action activities must be evaluated for consistency with the State coastal zone policies if it is determined they have reasonably foreseeable effects on coastal zone uses or resources of the State. Thus, elements of the Proposed Action must first be examined to determine whether they have any reasonably foreseeable direct, indirect, or cumulative effects on coastal zone uses or resources of the State before determining consistency with the State’s enforceable policies. Coastal zone resources include both resources permanently located in the coastal zone and mobile resources that typically move into and out of the coastal zone as part of a natural cycle. The coastal zone uses and resources are included within the policies described in Chapter 205A-2 of the HRS (or Coastal Zone Management program). These resources are the following: Recreational Resources, Historic Resources, Scenic and Open Space Resources, Coastal Ecosystems, Economic Uses, Coastal Hazards, Managing Development, Public Participation, Beach and Coastal Dune Protection, Marine and Coastal Resources.

The effects test identifies potential stressors associated with the Proposed Action that could affect each coastal zone use or resources as identified above. If a coastal use or resource could be affected, then the Proposed Action has reasonably foreseeable effects on the coastal zone use or resources.

The Proposed Action occurs in the Hawai‘i coastal zone, and could have reasonably foreseeable effects on the coastal zone uses and resources associated with ongoing activities on the State lands that are analyzed under the Proposed Action. Therefore, the Proposed Action has been reviewed for consistency with the enforceable policies of the Hawai‘i Coastal Zone Management program.

# 3 Enforceable Policies of the Hawai‘i Coastal Zone Management Program

## 3.1 Enforceable Policies not Applicable to the Proposed Action

The Navy and NASA reviewed the Hawai‘i Coastal Zone Management program Objectives and Policies, approved as part of the coastal program, to identify the enforceable policies relevant to the Proposed Action (HRS Chapter 205A, Part I, Section 205A-2). The Hawai‘i Coastal Zone Management program Objectives and Policies that are not applicable to the Proposed Action are identified and discussed in Table 3-1.

**Table 3-1 Enforceable Policies of the Hawai‘i Coastal Zone Management Program Not Applicable to the Proposed Action**

| *Resource* | *Non-Applicable Policies* | *Explanation of Non-Applicability* |
|---|---|---|
| Marine and Coastal Resources | *(A) Ensure that the use and development of marine and coastal resources are ecologically and environmentally sound and economically beneficial;*<br><br>*(B) Coordinate the management of marine and coastal resources and activities to improve effectiveness and efficiency;*<br><br>*(C) Assert and articulate the interests of the State as a partner with federal agencies in the sound management of ocean resources within the United States exclusive economic zone;*<br><br>*(D) Promote research, study, and understanding of ocean and coastal processes, impacts of climate change and sea level rise, marine life, and other ocean resources to acquire and inventory information necessary to understand how coastal development activities relate to and impact ocean and coastal resources; and*<br><br>*(E) Encourage research and development of new, innovative technologies for exploring, using, or protecting marine and coastal resources.* | While the Proposed Action occurs within the coastal zone, it does not include “development” within the coastal zone as defined in HRS 205A-22. Coastal research activities (Subparts D and E) are outside the scope of ongoing operations on the State lands assessed under the Proposed Action. The Navy and NASA determined that the implementation of the Proposed Action would have no potential effects to airspace, marine navigation, and marine biological resources; therefore, these resources were not analyzed in the 2025 Draft EIS. |

*Key:* EIS = Environmental Impact Statement; HRS = Hawai‘i Revised Statutes; NASA = National Aeronautics and Space Administration.

## 3.2 Enforceable Policies of the Hawai'i Coastal Zone Management Program Applicable to the Proposed Action

The following enforceable polices of the Hawai'i Coastal Zone Management program are relevant to the Proposed Action because it has been determined they could affect a coastal zone resource or use addressed by the policy. The Hawai'i Coastal Zone Management program Enforceable Policies that are applicable to the Proposed Action are identified in Table 3-2. The analysis of the policies below is only for those aspects of the policies that are relevant to the Proposed Action. Each policy discussion delineates a "Region of Influence" (ROI) for that particular resource, which varies by resource. The ROI is the geographic area in which potential impacts to the coastal zone resources are evaluated.

**Table 3-2 Enforceable Policies of the Hawai'i Coastal Zone Management Program that are Applicable to the Proposed Action**

| *Resource* | *Applicable Policies* |
|---|---|
| Recreational Resources | *(B) Provide adequate, accessible, and diverse recreational opportunities in the coastal zone management area by:*<br><br>*(i) Protecting coastal resources uniquely suited for recreational activities that cannot be provided in other areas;*<br><br>*(v) Ensuring public recreational use of county, state, and federally owned or controlled shoreline lands and waters having recreational value consistent with public safety standards and conservation of natural resources.* |
| Historic Resources | *(A) Identify and analyze significant archaeological resources;*<br>*(B) Maximize information retention through preservation of remains and artifacts or salvage operations; and*<br>*(C) Support state goals for protection, restoration, interpretation, and display of historic resources.* |
| Scenic and Open Spaces Resources | *(C) Preserve, maintain, and, where desirable, improve and restore shoreline open space and scenic resources.* |
| Coastal Ecosystems | *(B) Preserve valuable coastal ecosystems, including reefs, of significant biological or economic importance.* |
| Economic Uses | *(C) Direct the location and expansion of coastal dependent developments to areas presently designated and used for such developments and permit reasonable long-term growth at such areas, and permit coastal dependent development outside of presently designated areas when;*<br>*(i) Use of presently designated locations is not feasible;*<br>*(ii) Adverse environmental effects are minimized; and*<br>*(iii) The development is important to the state's economy.* |
| Coastal Hazards | *(B) Control development in areas subject to storm wave, tsunami, flood, erosion, hurricane, wind, subsidence, and point and nonpoint source pollution hazards;*<br>*(C) Ensure that developments comply with requirements of the Federal Flood Insurance Program;*<br>*(D) Prevent coastal flooding from inland projects; and*<br>*(E) Develop a coastal point and nonpoint source pollution control program.* |

| *Resource* | *Applicable Policies* |
|---|---|
| Managing Development | *(C) Communicate the potential short- and long-term impacts of proposed significant coastal developments early in their life-cycle and in terms understandable to the public to facilitate public participation in the planning and review process.* |
| Public Participation | *(B) Disseminate information on coastal management issues by means of educational materials, published reports, staff contact, and public workshops for persons and organizations concerned with coastal related issues, developments, and government activities.* |
| Beach and Coastal Dune Protection | *(A) Locate new structures inland from the shoreline setback to conserve open space and to minimize loss of improvements due to erosion.* |

### 3.2.1 Recreational Resources

#### 3.2.1.1 Objective

*(A) Provide coastal recreational opportunities to the public.*

#### 3.2.1.2 Policies

*(A) Improve coordination and funding of coastal recreational planning and management; and*

*(B) Provide adequate, accessible, and diverse recreational opportunities in the coastal zone management area by:*

*(i) Protecting coastal resources uniquely suited for recreational activities that cannot be provided in other areas;*

*(ii) Requiring replacement of coastal resources having significant recreational value, including but not limited to surfing sites, fishponds, and sand beaches, when such resources will be unavoidably damaged by development; or requiring reasonable monetary compensation to the state for recreation when replacement is not feasible or desirable;*

*(iii) Providing and managing adequate public access, consistent with conservation of natural resources, to and along shorelines with recreational value;*

*(iv) Providing an adequate supply of shoreline parks and other recreational facilities suitable for public recreation;*

*(v) Ensuring public recreational use of county, state, and federally owned or controlled shoreline lands and waters having recreational value consistent with public safety standards and conservation of natural resources;*

*(vi) Adopting water quality standards and regulating point and nonpoint sources of pollution to protect, and where feasible, restore the recreational value of coastal waters;*

*(vii) Developing new shoreline recreational opportunities, where appropriate, such as artificial lagoons, artificial beach, and artificial reefs for surfing and fishing; and*

*(viii) Encouraging reasonable dedication of shoreline areas with recreational value for public use as part of discretionary approvals or permits by the land use commission, board of land and natural resources, county planning commissions; and crediting such dedication against the requirements of section 46-6.*

#### 3.2.1.3 Consistency Review

The following sections summarize the analysis and conclusions of potential effects on recreational resources from stressors associated with the Proposed Action. For additional information, see the 2025 Draft EIS, Section 3.5, *Land Use and Access* and Section 3.6, *Socioeconomics*.

##### 3.2.1.3.1 Region of Influence

The ROI for recreational resources is leasehold and easement lands at Main Base, Kamokalā Ridge, Mānā Water Well, Mākaha Ridge, Miloliʻi Ridge, and KPGO. The State currently manages certain land uses within the ROI. Recreational hunting, fishing, biking, hiking, and camping are the primary recreational use of lands in the ROI. Public access is available within the ROI, but public access is subject to certain restrictions.

The ROI for recreational resources can be seen in Figure 3-1.

##### 3.2.1.3.2 Recreational Resources

Recreation and tourism account for a third of Kauaʻi County's total economic output, and generate a quarter of the jobs in the County (County of Kauaʻi, 2018). Over 1.1 million visitors are drawn to Kauaʻi's beautiful natural environment and array of cultural and outdoor activities (County of Kauaʻi, 2018). These activities include tourism development that supports recreational activities, (e.g., hotels, resorts, restaurants, marinas, tackle shops, dive shops, and tour companies). These facilities support a variety of activities and experiences such as fishing, scuba diving/snorkeling, scenic tours, hiking, and surfing. Projections estimate that Average Daily Visitor Count would be more than 32,700 by 2030, a growth rate of 4.0 percent per year (County of Kauaʻi, 2018).

The growth of tourism on Kauaʻi can also result in negative social and environmental impacts. The 2015 Kauaʻi Tourism Strategic Plan reported that when Average Daily Visitor Count exceeds 25,000, there is a notable decline in both visitor experience and residential quality of life (Kauaʻi Tourism Strategic Plan, 2018). Kaua'i visitor destination areas are concentrated on the North Shore, East Kauaʻi, and South Kauaʻi.

All leasehold and easement lands held by the Navy and NASA in the recreational resource ROI are currently owned by the State. Access in the ROI is governed by statutes, ordinances, and regulations at the federal, State, and County levels.

The Navy, NASA, and DoD manage public access at PMRF and KPGO to comply with applicable laws and to be compatible with operational security, ATFP standards, and training programs. Access to DoD installations and other related facilities is controlled under DoD Manual 5200.08, *Volume 3 Physical Security Program: Access to DoD Installations*. Limited access to DoD installations ensures that operational security is safeguarded. These circumstances on PMRF are related to Force Protection Condition status, scheduled range operations, and the protection of natural resources.

Civilians have the opportunity to access Waiapuaʻa Bay, Polihale, and other designated beach areas at Main Base throughout the year by participating in the Morale, Welfare, and Recreation Guest Card Program at PMRF, which allows civilians to access PMRF through the main gate for various recreational activities. The Navy works with DLNR Division of State Parks to ensure the safety of the public during planned missile launches on fee simple lands at Main Base. The public is notified of restrictions of entry to the southern portion of Polihale Beach park prior to launches. Scheduled restrictions to Polihale are intermittent to ensure limited restrictions to public access for recreational and cultural activities.

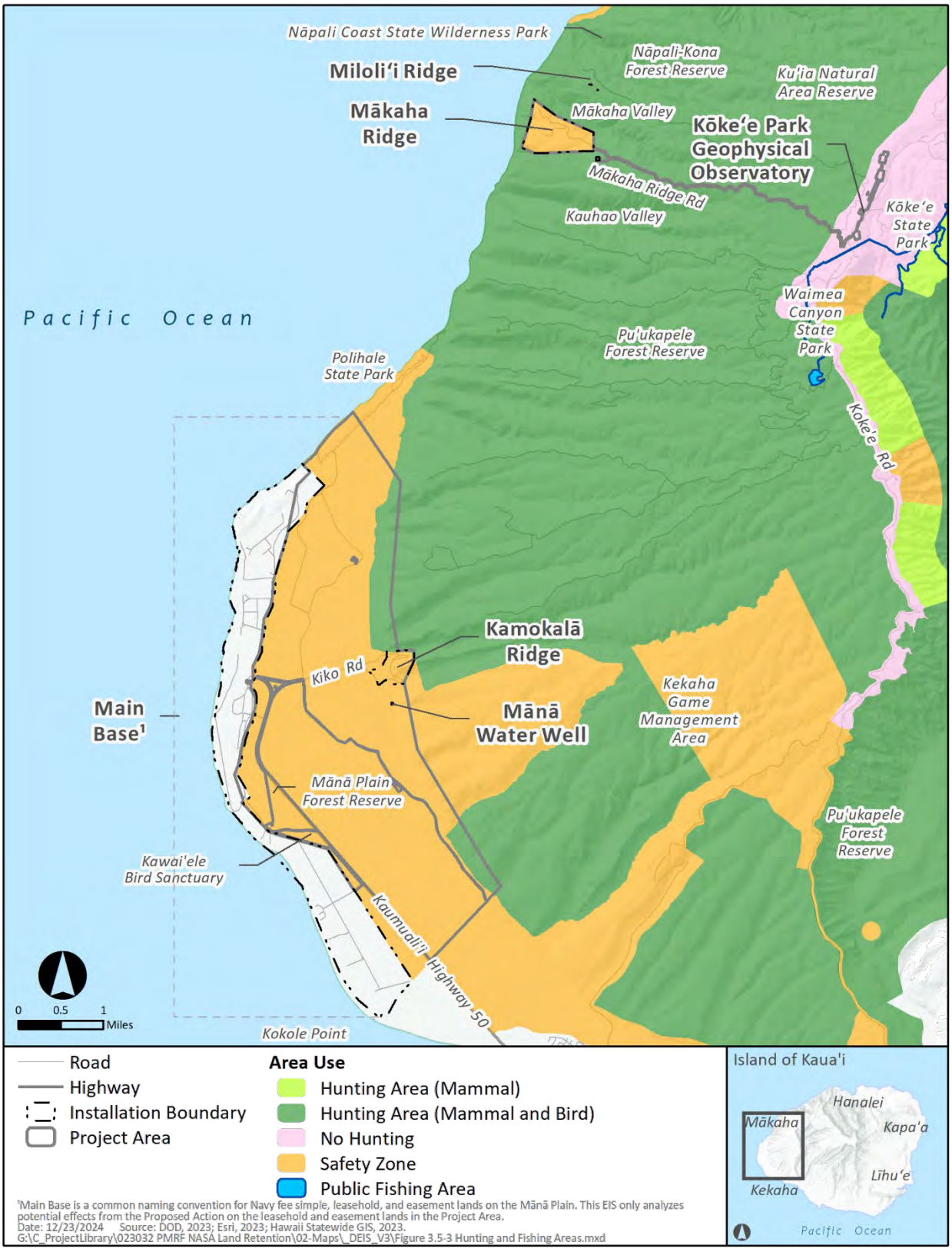


**Figure 3-1 Recreational Resources within the ROI**

#### 3.2.1.3.3 Main Base, Kamokalā Ridge, Mānā Water Well, Mākaha Ridge, Miloliʻi Ridge, and KPGO

***Agriculture***

In 2003, the State of Hawaiʻi DLNR Land Division set aside State land on the Mānā Plain for agriculture and related purposes to be under the control of the State of Hawaiʻi Agribusiness Development Corporation (ADC) through Executive Order (EO) 4007. In 2006, under EO 4165, ADC returned 300 acres identified in EO 4007 back to the DLNR. Additional land associated with Waimea and Kōkeʻe Ditches, not included in EO 4007, was transferred to ADC under EO 4287 in 2009. Although land on the Mānā Plain is controlled by DLNR Land Division, ADC supports the maintenance and licensing of the land. ADC is administratively attached to the State of Hawaiʻi DBEDT, governed by an 11-member Board of Directors. ADC's mandate is to develop an aggressive and dynamic agribusiness development program to facilitate the transition of agricultural lands and infrastructure from plantation operations into other agricultural enterprises, to carry on the marketing analysis necessary to direct the evolution of the agricultural industry, and to provide the leadership for the development, financing, improvement, and enhancement of the agricultural industry. ADC licenses land to tenants within the restrictive use easements for agricultural use to support their mandate. These ADC tenant farmers, ranchers, and agribusiness companies have a long history, and are currently conducting productive agribusiness activities within the restrictive use easements on the Mānā Plain. The Kekaha Agriculture Association (KAA) is an association of tenants on the Mānā Plain that supports the management of agricultural infrastructure, and development of economically viable and sustainable farms and agricultural endeavors in Kekaha. ADC and KAA have a Memorandum of Agreement (MOA) signed in 2008 that details the responsibilities for infrastructure maintenance and management on the Mānā Plain for agricultural purposes.

***Hunting***

Recreational hunting is defined in HAR Chapter 13-122 for the purpose of regulating game bird hunting, field trails, and commercial shooting preserves. Regulations of hunting game mammals are defined in HAR Chapter 13-123. Hunting in Hawaiʻi requires a license; this regulation applies to public and private lands. Requirements for hunting on public areas are managed by DOFAW. DOFAW maintains public hunting areas on the six major islands. DOFAW manages over 100,000 acres of public hunting areas on Kauaʻi; these hunting areas serve approximately 2,000 licensed hunters (DOFAW, 2024). These hunting areas are shown in Figure 3-1.

Hunting is allowed on portions of the restrictive use easements at Main Base. Access to fee simple parcels on Main Base for hunting and scouting activities is controlled under PMRF Instruction (PMRFINST) 1710.2A, *Pacific Missile Range Facility Hunting Instruction*. For safety and security, hunting on fee simple parcels on PMRF is limited to authorized personnel as described in PMRFINST 1710.2A.

#### 3.2.1.3.4 Stressors on Recreational Resources

Stressors to recreational resources include equitable access and availability. The Proposed Action would not result in a change of availability or access to recreational areas and/or activities. The general public would be able to continue to access recreational areas within the ROI under the same conditions as currently observed, including through the Main Base (fee simple lands) or from outside and through the State leasehold lands.

#### 3.2.1.4 Conclusion

Based on the analysis presented in the 2025 Draft EIS, Section 3.5, *Land Use and Access*, Section 3.6, *Socioeconomics*, and as summarized above, the Proposed Action would not result in a change to recreational resources in the coastal zone. Previously identified restrictions would continue at the same level as currently observed. The Navy and NASA would continue to coordinate with the public to protect coastal resources utilized for recreational activities. Therefore, the Proposed Action would be consistent to the maximum extent practicable with the recreational resources enforceable policies.

### 3.2.2 Historic Resources

#### 3.2.2.1 Objective

*(A) Protect, preserve, and, where desirable, restore those natural and manmade historic and prehistoric resources in the coastal zone management area that are significant in Hawaiian and American history culture.*

#### 3.2.2.2 Policies

*(A) Identify and analyze significant archaeological resources;*

*(B) Maximize information retention through preservation of remains and artifacts or salvage operations; and*

*(C) Support state goals for protection, restoration, interpretation, and display of historic resources.*

#### 3.2.2.3 Consistency Review

The following sections summarize the analysis and conclusions of potential effects on cultural and historic resources from stressors associated with the Proposed Action. For additional information, see the 2025 Draft EIS, Sections 3.2, *Archaeological and Architectural Resources* and 3.3, *Cultural Practices*.

##### 3.2.2.3.1 Region of Influence

The ROI for historic resources includes leasehold and easement lands at Main Base, Kamokalā Ridge, Mānā Water Well, Mākaha Ridge, Miloli‘i Ridge, and KPGO. Additionally, it includes any overlapping resources, whether individually or as a district, which may also experience direct or indirect effects (Figure 3-2).

##### 3.2.2.3.2 Historic Resources Studies

Archaeological and architectural surveys were conducted for all portions of the ROI where activities associated with the Proposed Action could affect these resources. These surveys covered all leaseholds and all easements for utilities and roadways in the ROI. Continued use and routine maintenance activities within these areas have the potential to affect archaeological and architectural resources. Per discussions with DLNR, the proposed restrictive use easement lands were not surveyed because those lands are under the jurisdiction of ADC, and the proposed easement terms and Navy uses of those lands would not have the potential to affect archaeological and architectural resources.

Figure 3-2 shows the locations of the archaeological and architectural surveys along with the lands under ADC jurisdiction. Archaeological surveys have been conducted at leaseholds on Main Base, Kamokalā, Mānā Water Well, and the access road to the Mākaha Ridge facility (Fitzpatrick et al., 2024), at Mākaha Ridge (Kikuchi, 1982; Dowden and Rosendahl, 1992; Wulzen et al., 1997), Miloliʻi Ridge (Cardno GS-AECOM Pacific Joint Venture, 2025a), and at KPGO (Pacific Legacy, Inc., 2025). Architectural surveys have been conducted at Main Base, Kamokalā, and Mākaha Ridge (Cardno GS-AECOM Pacific Joint Venture, 2025b), Mānā Well and Miloliʻi Ridge (Cardno GS-AECOM Pacific Joint Venture, 2025c), and at KPGO (DAWSON, 2025). A desktop analysis of previous archaeological studies was conducted to identify archaeological and architectural resources located within these restrictive use easements.

Traditional Cultural Places (TCPs) in the ROI were identified in several studies: a 1992 study by Flores and Kaohi, a 2004 study by Tuggle and Tomonari-Tuggle, and in the 2012 ICRMP (U.S. Navy PMRF, 2012). Additionally, the Navy is currently preparing an updated TCP study, which is anticipated to be completed in 2026.

#### 3.2.2.3.3 Main Base

***Archaeological Resources***

A total of six archaeological resources have been recorded at Main Base leasehold areas. All but one of these resources have been determined or recommended as not National Register of Historic Places (NRHP)-eligible or HRS Chapter 6E significant. Two of these resources were recorded in the recent pedestrian survey and given temporary site numbers and evaluated using 1- by 1-meter excavation units to assess their NRHP eligibility and HRS Chapter 6E significance. These two newly identified sites on Main Base leaseholds were determined to not be NRHP-eligible or HRS Chapter 6E significant under any Criteria (U.S. Navy PMRF, 2012; Fitzpatrick et al., 2024).

***Architectural Resources***

The 2025 *Architectural Survey Report: Pacific Missile Range Facility and Kōkeʻe Park Geophysical Observatory* surveyed 12 architectural resources at Main Base that were constructed between 1969 and 1988 within the Project Area. One property, the Missile Assembly and Blockhouse, was recommended as NRHP-eligible under Criterion A and significant under HRS Chapter 6E Criterion “a,” for its direct and important role in the installation’s Cold War missions. The other 11 resources were recommended not NRHP-eligible or HRS Chapter 6E significant under any Criteria (Cardno GS-AECOM Pacific Joint Venture, 2025b).

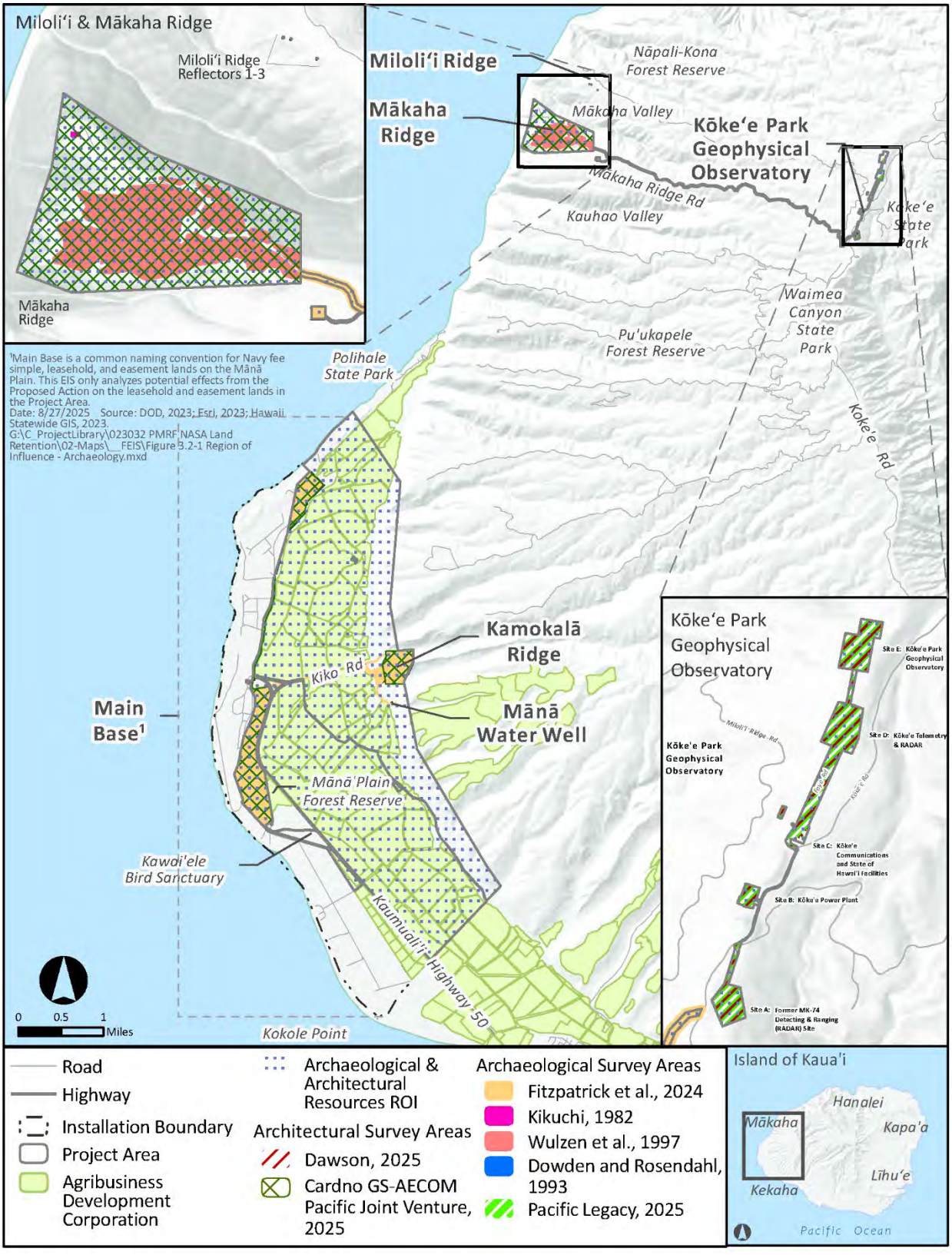


**Figure 3-2 Historic Resources within the Region of Influence**

***Traditional Cultural Places***

A number of native Hawaiian place names exist on the landscape within the Kona Moku. While Hawaiian place names impart traditional knowledge, not all named places meet the NRHP eligibility criteria to be considered TCPs. Section 3.3.1 in the 2025 Draft EIS discusses such places as they relate to cultural resources and practices. The following text describes TCPs that have been assessed as eligible under the NRHP criteria. Among the previous studies to identify TCPs at PMRF, there is one identified in association with the leasehold parcels at Main Base. The Nohili Dune (State Inventory of Historic Places [SIHP] Site 50-30-05-1860) is an archaeological site that spans Navy fee simple and leasehold parcels. This property has been evaluated as NRHP-eligible under Criterion A for its association with traditional native Hawaiian beliefs and practices and Criterion D for its potential to contain information from the past (U.S. Navy PMRF, 2012). It has been evaluated as HRS Chapter 6E significant under Criteria "a" and "e" for its associations with traditional Native Hawaiian cultural beliefs and practices and Criterion "d" for its potential to contain information about the past.

#### 3.2.2.3.4 Kamokalā Ridge

***Archaeological Resources***

A total of 14 archaeological resources have been identified at Kamokalā Ridge. Five of these resources have been determined or recommended as not NRHP or HRS Chapter 6E eligible. Nine have been recommended as NRHP-eligible under Criterion D and HRS Chapter 6E significant under Criterion "d" for their potential to provide important information about the prehistory and history of Kauaʻi and Hawaiʻi, and also under HRS Chapter 6E Criterion "e" for their important value to the Native Hawaiian people due to associations with cultural practices once carried out, or still carried out, at the property. These latter resources were recorded in the recent pedestrian survey and given temporary site numbers and evaluated using 1- by 1-meter excavation units to assess their NRHP eligibility and HRS Chapter 6E significance (U.S. Navy PMRF, 2012; Fitzpatrick et al., 2024).

***Architectural Resources***

Ten ammunition magazines at Kamokalā Ridge were evaluated as NRHP-eligible prior to 2005. Since then, the Advisory Council on Historic Preservation's (ACHP's) *DoD Ammunition Magazine Program Comment* has mitigated adverse effects to these property types and, therefore, these structures are no longer managed or treated as NRHP-eligible under the National Historic Preservation Act (NHPA). These structures are HRS Chapter 6E significant under Criterion "a" for their association with the development of Barking Sands Army Air Base and under Criterion "c" as a distinctive type of ammunition magazine. The *Architectural Survey Report: Pacific Missile Range Facility and Kōkeʻe Park Geophysical Observatory* surveyed an additional building at Kamokalā Ridge. This property, an Equipment Shed constructed in 1967, was recommended not NRHP-eligible or HRS Chapter 6E significant under any Criteria (Cardno GS-AECOM Pacific Joint Venture, 2025b).

***Traditional Cultural Places***

Neither the PMRF ICRMP, nor previous studies, have identified TCPs within the Kamokalā Ridge area. Navy is preparing a TCP study for PMRF that is anticipated to be completed in 2026.

#### 3.2.2.3.5 Mānā Water Well, Mākaha Ridge, Miloliʻi Ridge

***Archaeological Resources***

Neither the PMRF ICRMP, nor the archaeological surveys in Appendix F of the 2025 Draft EIS have identified archaeological resources within the Mānā Water Well, Mākaha Ridge (or associated road corridor), or Miloliʻi Ridge areas.

***Architectural Resources***

All of the architectural resources at Mānā Water Well are younger than 50 years, thereby requiring the application of Criteria Consideration G for exceptional importance. None were determined to have exceptional importance; therefore, no architectural resources are NRHP-eligible or HRS Chapter 6E significant.

The *Architectural Survey Report: Pacific Missile Range Facility and Kōkeʻe Park Geophysical Observatory* surveyed 23 Cold-War properties at Mākaha Ridge. These properties were all constructed between 1966 and 1989. Of the 23 properties, 17 are recommended NRHP-eligible as a historic district that is NRHP-eligible under Criteria A and C and HRS Chapter 6E significant under Criteria "a" and "c." The district is significant for its role in the Barking Sands Tactical Underwater Range and Barking Sands Underwater Range Expansion mission during the Cold War, as well as its importance in defining technological or scientific capabilities in communications, radar and telemetry technologies, intelligence, and weapons systems testing during the Cold War. Architecturally, the district is also significant for its distinct method or type of construction conveyed through a large concentration of domed telemetry towers as highly specialized and which feature design innovations in engineering, communications, and radar and telemetry technologies. Five of the 17 contributors reflect this architectural significance under NRHP Criterion C and HRS Chapter 6E Criterion "c." Two of the properties, those built after 1975, also met the threshold for exceptional importance under Criteria Consideration G. The other six properties at Mākaha Ridge were recommended as not NRHP-eligible or HRS Chapter 6E significant under any Criteria because they lacked a direct and important association to the installation's Cold War programs (Cardno GS-AECOM Pacific Joint Venture, 2025b).

Several structures are present at Miloliʻi Ridge, but these have been determined not NRHP-eligible or HRS Chapter 6E significant under any Criteria (Cardno GS-AECOM Pacific Joint Venture, 2025c).

***Traditional Cultural Places***

Neither the PMRF ICRMP nor previous studies have identified TCPs within the Mānā Water Well, Mākaha Ridge (or associated road corridor), or Miloliʻi Ridge areas.

#### 3.2.2.3.6 KPGO

***Archaeological Resources***

An archaeological survey of KPGO sites A, B, C, D, and E (Pacific Legacy, Inc., 2025) identified one archaeological resource, a post-Contact stone terrace at Site E assigned a temporary field number TS-003. The terrace is recommended as not NRHP-eligible or HRS Chapter 6E significant as it has not yielded, nor is it likely to yield, information important in prehistory or history.

***Architectural Resources***

An architectural survey of 43 properties and associated infrastructure across KPGO sites A, B, C, D, and E recommended 22 buildings and structures as NRHP-eligible as part of a Kōkeʻe Tracking Station Historic

District, a twentieth-century NASA facility. These contributors to the district were built prior to 1975 while 21 non-contributing properties were either ancillary to the district's significance or were moved to their current location within the past 50 years. The Kōke'e Tracking Station district was recommended as NRHP-eligible under Criterion A and HRS Chapter 6E significant under Criteria "a" for its association with NASA's 1961–1989 manned space missions. This period of significance corresponds with its use as a NASA tracking station (DAWSON, 2025).

***Traditional Cultural Places***

An archaeological survey of KPGO sites A, B, C, D, and E (Pacific Legacy, Inc., 2025) did not identify TCPs within the KPGO area.

#### 3.2.2.3.7 Stressors on Historic Resources

Development-related actions from land clearing, construction, and subsequent operations and maintenance activities from past and present actions (listed in Table 4.1-1 of the 2025 Draft EIS) have the potential to result in effects to archaeological and architectural resources within the ROI. Future projects described in Table 4.1-1 of the 2025 Draft EIS, such as the DLNR Visitor Center at Polihale, propose creation of a cultural preservation area that could protect archaeological resources in the ROI. All projects with a federal nexus are required to comply with Section 106 of the NHPA to determine if they have effects to federally listed historic properties and to then avoid, minimize, or resolve any adverse effects. As part of the Section 106 process, federal agencies are required to afford the ACHP, SHPO, NHOs, other interested parties, and the public an opportunity to comment on undertakings with the potential to affect historic properties, as applicable. The Navy's intent is to meet responsibilities pursuant to Section 106 of the NHPA for Navy undertaking(s) in accordance with the Programmatic Agreement (PA) among Commander, Navy Region Hawai'i (CNRH), the ACHP, and the Hawai'i SHPO regarding Navy Undertakings in Hawai'i. The CNRH PA is the Section 106 Program Alternative which provides an established framework for professional standards, reviews, post-review discoveries, emergencies, and reporting as well as a process for input from NHOs and consulting parties.

Cultural practices and access to locations where cultural practices occur in the ROI have been impacted by past, present, and reasonably foreseeable actions described in Table 4.1-1 of the 2025 Draft EIS. Future projects described in Table 4.1-1 of the 2025 Draft EIS, such as the DLNR Visitor Center at Polihale, propose creation of a cultural preservation area and restoration of lo'i (traditional Hawaiian taro patch) and wetlands that could protect and enhance cultural practices in the ROI. The Environmental Impact Statement Preparation Notice (EISPN) prepared for the Waimea 400 project identified that cultural knowledge has been integrated into the planning process and impacts to cultural practices and resources would be minimized.

Cultural practices in the ROI include the veneration of iwi kūpuna (Native Hawaiian ancestral human remains) and ancestors, traditional cultural practices at the shoreline, and a location at Kaunalewa with spiritual qualities. Cultural practices at the shoreline include fishing and gathering marine resources such as shells, mollusks, seaweed, and salt; lā'au lapa'au (traditional Hawaiian medicine) uses of the one (sand); camping; and surfing. Those actions with a federal nexus and with an HRS Chapter 343 requirement would be analyzed and potential effects to cultural practices mitigated. The 2025 Draft EIS identified only temporary effects to cultural practices at Nohili Dune and Polihale from the Proposed Action that are similar to current effects.

The Proposed Action would not result in any new or additional effects to cultural practices, nor would the reasonably foreseeable actions listed in Table 4.1-1 of the 2025 Draft EIS have any significant direct or indirect disruption of cultural practices, or disturbance of or restriction of access to resources necessary for the exercise of cultural practices. Through ongoing coordination with NHOs and lineal descendants, and compliance with applicable State protections for traditional and customary Native Hawaiian practices, the Proposed Action when added to past, present, and reasonably foreseeable actions would not result in cumulative effects to cultural practices in the ROI.

#### 3.2.2.4 Conclusion

Based on the analysis presented in the 2025 Draft EIS, Section 3.2, *Archaeological and Architectural Resources* and Section 3.3, *Cultural Practices*, and as summarized above, the Navy and NASA have determined that the Proposed Action would be carried out in a manner that would protect and preserve those natural and manmade historic and culturally significant resources within the coastal zone management area. Under the Proposed Action, the Navy would continue to update the ICRMP to proactively identify, document, and analyze important archaeological and cultural resources in the ROI. The Navy and NASA would continue to support State goals for protecting historic resources. The Proposed Action would not result in adverse effects to identified historic resources. Additionally, there would be no change to ongoing implementation of current management practices currently in place protecting historic and culturally important resources. Therefore, the Proposed Action is consistent to the maximum extent practicable with the historic resources enforceable policies.

### 3.2.3 Scenic and Open Space Resources

#### 3.2.3.1 Objective

*(A) Protect, preserve, and, where desirable, restore or improve the quality of coastal scenic and open space resources.*

#### 3.2.3.2 Policies

*(A) Identify valued scenic resources in the coastal zone management area;*

*(B) Ensure that new developments are compatible with their visual environment by designing and location such developments to minimize the alteration of natural landforms and existing public views to the along the shoreline;*

*(C) Preserve, maintain, and, where desirable, improve and restore shoreline open space and scenic resources; and*

*(D) Encourage those developments which are not coastal dependent to locate in inland areas.*

#### 3.2.3.3 Consistency Review

The following sections summarize the analysis and conclusions of potential effects on scenic and open spaces from stressors associated with the Proposed Action. For additional information, see the 2025 Draft EIS, Section 3.13, *Visual Resources*.

##### 3.2.3.3.1 Region of Influence

The ROI for scenic and open space resources includes leasehold and easement lands at Main Base, Kamokalā Ridge, Mānā Water Well, Mākaha Ridge, Miloliʻi Ridge, and KPGO.

#### 3.2.3.3.2 Scenic and Open Space Resources

Visual resources on Kaua'i include both natural features typical to the Pacific Islands and human-built features. When viewed together as a landscape, these elements combine to create a sense of place characterized by scenic views of tropical beaches, native forests, and mountain ridgelines. Natural views from coastal areas on Kaua'i include shorelines, seascapes, and cliffs. Notable human-built and maintained features that contribute to the visual environment include historic and cultural features, unique structures, agricultural areas, parks and landscaping, and suburban-to-rural development.

#### 3.2.3.3.3 Main Base

The leaseholds and easement areas in this location are relatively flat and consist primarily of agricultural and other undeveloped, partially vegetated lands.

The ridges that run east of these areas are the dominant view from Main Base. The Pacific Ocean and coastlines can be viewed from higher elevation vantage points. Kaumuali'i Highway (Highway 50) is the main paved roadway in this area. Typical views from the highway include mixed vegetation and agricultural areas along both sides of the road, with the mountains in the distance to the east, if traveling northbound on Kaumuali'i Highway toward Barking Sands Beach and Polihale State Park. The facilities on these leaseholds and fee simple lands are visible to the west for some stretches when traveling northbound on Kaumuali'i Highway. Figures 3.11-1 through 3.11-3 of the 2025 Draft EIS show the roadways within leasehold and easement lands at Main Base.

#### 3.2.3.3.4 Kamokalā Ridge

The ordnance storage facility and paved access roads are the primary human-made structures in the area. Vegetation of various heights is adjacent to both sides of the access roads. Obscured views of the Pacific Ocean and coastlines occur from certain vantage points along the roadway. Due to its higher elevation and the relatively dense vegetation in this area, the ordnance storage facility is not visible from Main Base, Kaumuali'i Highway, or other public roads west of the Kamokalā Ridge leasehold area. Figure 3.11-4 of the 2025 Draft EIS shows the roads at Kamokalā Ridge.

#### 3.2.3.3.5 Mānā Water Well

The well facility and paved access roads are the primary human-made structures in the area. Vegetation of various heights is adjacent to both sides of the access roads. Obscured views of the Pacific Ocean and coastlines occur from certain vantage points along the roadway. Figure 3.11-4 of the 2025 Draft EIS shows the road accessing the Mānā Water Well.

#### 3.2.3.3.6 Mākaha Ridge

The Mākaha Ridge area is located on the cliffs of the Nā Pali Coast State Wilderness Park, approximately 1 mile south of Miloli'i Ridge (see Figure 3.11-5 of the 2025 Draft EIS). Mākaha Ridge is accessed via the Mākaha Ridge Road, which can be accessed by the public up to a gate outside of the radar site. Mākaha Ridge Road has forest vegetation lining both sides of the road, obstructing a view of any vista. Most of these structures are on the top of the ridgeline and are in the line of sight of Main Base. The radar facilities are only partially visible from the segment of the Mākaha Ridge Road near the radar site gate.

#### 3.2.3.3.7 Miloli'i Ridge

The Miloli'i Ridge leasehold area is approximately 8 miles north of Main Base. Views of the Pacific Ocean and coastlines are not available due to dense vegetation coverage at this site. The facilities at Miloli'i

Ridge are not visible from public vantage points because of its secluded location. Figure 3.11-5 of the 2025 Draft EIS shows Miloliʻi Ridge Road.

#### 3.2.3.3.8 KPGO

KPGO is located within Kōkeʻe State Park at an elevation of approximately 3,600 feet above sea level near Waimea Canyon. The observatory encompasses five sites with various facilities set within a forested area. The topography west and east of KPGO declines rapidly, and visibility is often restricted by vegetation and changes in topography. Formal public lookouts within Kōkeʻe State Park include the Waimea Canyon Lookout, Puʻu Hinahina Lookout, Kalalau Lookout, and Puʻu O Kila Lookout (Department of the Navy [DON], 1998, 2008). Figure 3.11-6 of the 2025 Draft EIS shows the roads at KPGO and the surrounding public outlooks. Details on the five KPGO sites and public outlooks are outlined in the 2025 Draft EIS.

#### 3.2.3.3.9 Stressors on Scenic and Open Spaces

Stressors to scenic and open spaces include natural processes such as changes in precipitation patterns and increased intensity of extreme weather. Stressors from ongoing operations could include the continued visual presence of existing structures such as the facilities, radar sites, antennas, and towers on the leasehold and easement lands, although many of these buildings are generally not visible to the public.

Under the Proposed Action, there would be no effect and no change in views in the vicinity of the leasehold and easement lands at Main Base, Kamokalā Ridge, Mānā Water Well, Mākaha Ridge, Miloliʻi Ridge, or KPGO. Public viewpoints in the area would be of the same character and levels of obstruction with no changes to the current facilities and activities. The facilities, radar sites, antennas, and towers, where present, would remain. Scenic views of ocean, coastline/beach areas, mountains, and other landforms would remain unchanged.

### 3.2.3.4 Conclusion

Based on the analysis presented in the 2025 Draft EIS, Section 3.13, *Visual Resources*, and as summarized above, the Navy and NASA have determined that the Proposed Action would be carried out in a manner that would protect and preserve scenic and open spaces currently within the coastal zone. The Proposed Action would not result in adverse effects to scenic and open spaces. Additionally, there would be no change to ongoing implementation of current management practices to preserve scenic and open spaces. Therefore, the Proposed Action is consistent to the maximum extent practicable with the scenic and open spaces enforceable policies.

## 3.2.4 Coastal Ecosystems

### 3.2.4.1 Objective

*(A) Protect valuable coastal ecosystems, including reefs, from disruption and minimize adverse impacts on all coastal ecosystems.*

### 3.2.4.2 Policies

*(A) Improve the technical basis for natural resource management;*

*(B) Preserve valuable coastal ecosystems, including reefs, of significant biological or economic importance;*

*(C) Minimize disruption or degradation of coastal water ecosystems by effective regulation of stream diversions, channelization, and similar land and water uses, recognizing competing water needs; and*

*(D) Promote water quantity and quality planning and management practices which reflect the tolerance of fresh water and marine ecosystems and prohibit land and water uses which violate state water quality standards.*

#### 3.2.4.3 Consistency Review

The following sections summarize the analysis and conclusions of potential effects to valuable coastal ecosystems of significant biological or economic importance from stressors associated with the Proposed Action. For additional information, and information on the general flora and fauna communities in the ROI, see the 2025 Draft EIS, Section 3.4, *Biological Resources*.

##### 3.2.4.3.1 Region of Influence

The ROI for coastal ecosystems in the coastal zone includes leasehold and easement lands at Main Base, Kamokalā Ridge, Mānā Water Well, Mākaha Ridge, Miloliʻi Ridge, and KPGO.

##### 3.2.4.3.2 Coastal Ecosystems Resources

Hawaiʻi's unique environment and native species have evolved together in isolation over the last 70 million years. Due to this isolation, Hawaiʻi has high numbers of endemic species with approximately 10,000 of its native species being found nowhere else (Hawaiʻi Invasive Species Council, 2015).

***Vegetation Communities***

Vegetation communities and land cover types vary across the ROI due to topography and water availability, as depicted in Figure 3-3. The data shown in Figure 3-3 reflect vegetative cover types described in the PMRF INRMP and also include vegetative communities found on PMRF fee simple lands. The vegetative communities on fee simple lands, although outside the ROI, are presented because these data reflect general vegetative communities in the area. Detailed vegetation inventory surveys were not conducted on easement lands as part of this EIS. Per discussions with DLNR, the proposed restrictive use easement lands were not surveyed because those lands are under the jurisdiction of ADC, and the proposed easement terms and Navy uses of those lands would not have the potential to affect biological resources.

***Main Base***

Vegetation communities at the easement lands at Main Base in the ROI include: kiawe-koa haole scrub (*Neltuma pallida–Leucaena leucocephala*), kiawe scrub, pōhinahina–naupaka dune (*Vitex rotundifolia–Scaevola sericea*), shoreline (dunes), wetlands, ruderal, and agricultural lands (Naval Facilities Engineering Systems Command [NAVFAC] Pacific, 2023a). The kiawe-koa haole and kiawe scrub communities are the dominant vegetation in the undeveloped portions. Dune vegetation, located on the seaward facing slopes of the Nohili sand dunes, consist mostly of native vegetation community, including pōhinahina, naupaka, pōhuehue or beach morning glory (*Ipomoea pes-caprae*), and ʻaki'aki grass (*Sporobolus virginicus*). Other native plants found close to the beach include ʻilima (*Sida fallax*), kanuaʻoa pehu or love-vine (*Cassytha filiformis*), ʻākulikuli or sea purselane (*Sesuvium portulacastrum*), aʻaliʻi (*Dodonaea viscosa*), milo (*Thespesia populnea*), and hau (*Hibiscus tiliaceus*) (NAVFAC Pacific, 2023b).

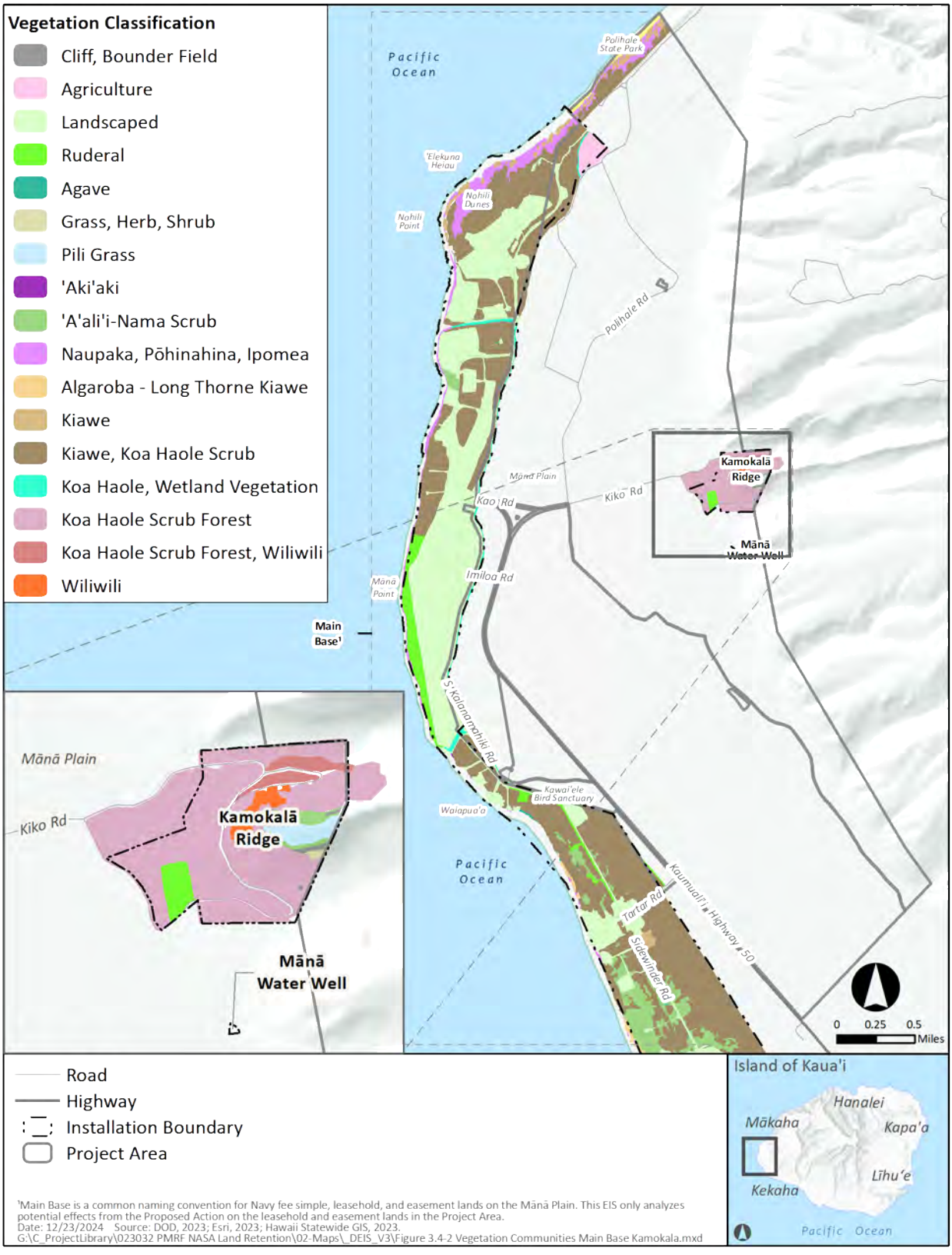


**Figure 3-3 Vegetation Communities: Main Base, Kamokalā Ridge, and Mānā Water Well**

The inland side of the dunes contains mostly windswept patches of kiawe and koa haole scrub. Portions of leasehold lands at Main Base are landscaped on a regular basis. Vegetation at the low elevation on leaseholds and easements of Main Base is in the "kiawe and lowland scrub" zone of Hawai'i, a classification used to describe areas below 1,000 feet elevation, where the annual rainfall is less than 20 inches (Department of Energy [DOE], 2019). Main Base has a nominal elevation of 15 feet above mean sea level (NAVFAC Pacific, 2023b). Wetland vegetation occurs throughout the easements in the ROI. Ruderal (disturbed, weedy) vegetation is present along roadsides (Appendix L of the 2025 Draft EIS) (see Figure 3-3).

***Kamokalā Ridge and Mānā Water Well***

The higher elevations at Kamokalā Ridge and the Mānā Water Well contain kiawe-koa haole and kiawe scrub communities, with interspersed native wiliwili (*Erythrina sandwicensis*) trees (NAVFAC Pacific, 2023b). Along the cliff faces and the top of the ridge are silk oak (*Grevillea robusta*) trees and scrub-shrub with non-native grasses (NAVFAC Pacific, 2023a) (see Figure 3-3).

***Mākaha Ridge and Miloli'i Ridge***

The vegetation communities on Mākaha and Miloli'i Ridges include plants accustomed to dry, drought tolerant, and disturbed regions. Non-native canopy consists of pine (*Pinus elliottii*), eucalyptus (*Eucalyptus* spp.), and silk oak trees, while understory consists of non-native and invasive grasses and non-native scrub, such as lantana (NAVFAC Pacific, 2023a, 2023b). Forested vegetation communities include native species such as koa (*Acacia koa*), alahe'e (*Psydrax odorata*), a'ali'i, and pūkiawe (*Leptecophylla tameiameiae*). Grass lawns are regularly mowed at Mākaha Ridge and vegetation is routinely cleared from around infrastructure at Miloli'i Ridge. The coastal cliff community below the ridges is primarily composed of mixed shrub species, sparse vegetation, and barren unvegetated areas. Plant restoration efforts occur on a few cliffside and bare areas to reduce erosion (NAVFAC Pacific, 2023a, 2023b) (Figure 3-4).

***KPGO***

Vegetation and land cover mapping was conducted by desktop and refined in the field during surveys to document common plant species. KPGO is 79 percent (15.1 acres) evergreen forest, 6 percent (1.2 acres) scrub-shrub land covers, and 15 percent (2.9 acres) developed open space (managed grasses like lawn or low-lying vegetation). Native tree species include koa (*Acacia koa*), 'ōhi'a (*Metrosideros polymorpha*), hame (*Antidesma platyphyllum*), and sandalwood or 'iliahi (*Santalum freycinetianum*). Non-native tree species include paperbark tree (*Melaleuca quinquenervia*), avocado (*Persea americana*), and banana (*Musa x paradisiaca*) (Appendix K of the 2025 Draft EIS) (Hamer Environmental, 2025a) (Figure 3-5).

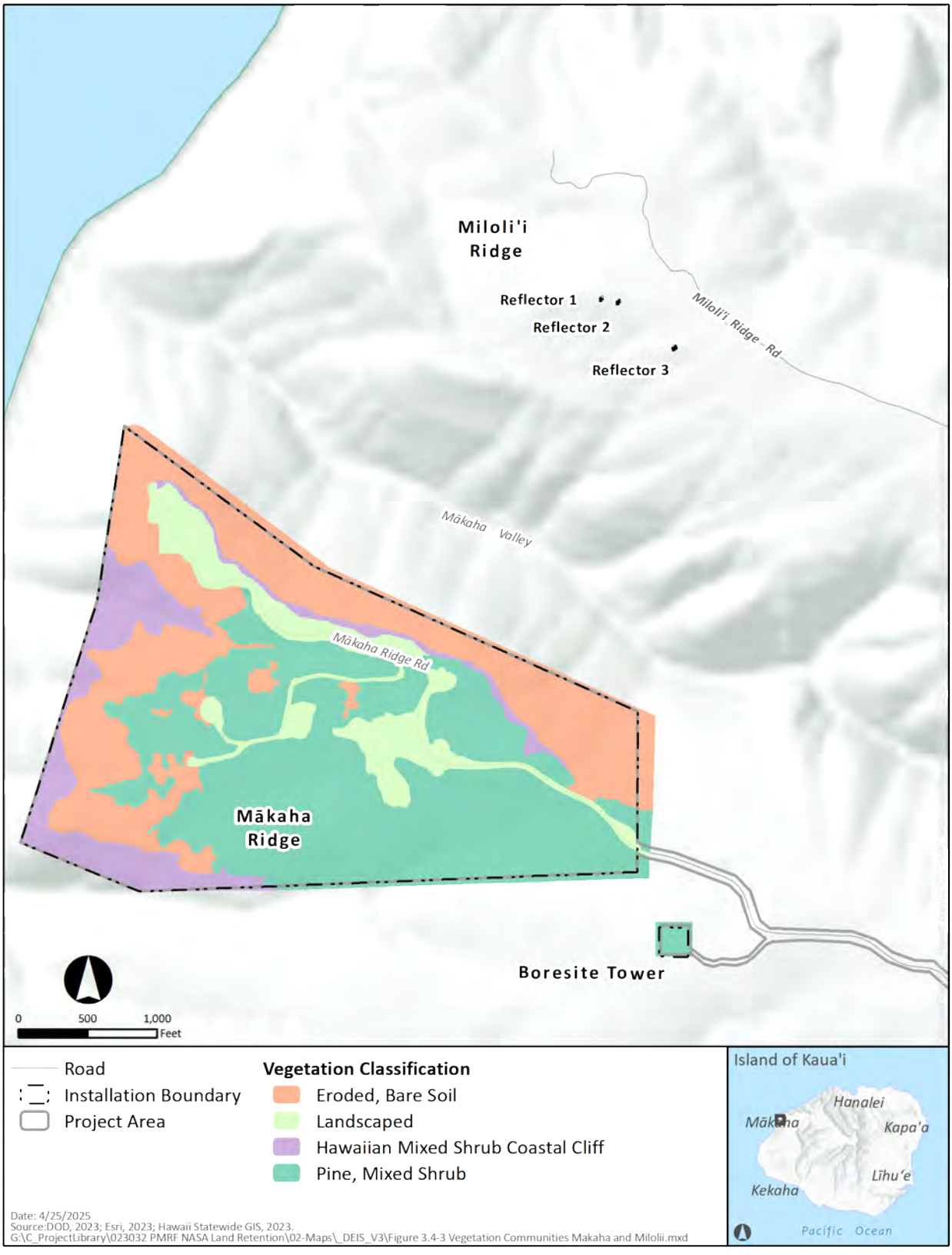


**Figure 3-4 Vegetation Communities: Mākaha Ridge and Miloli'i Ridge**

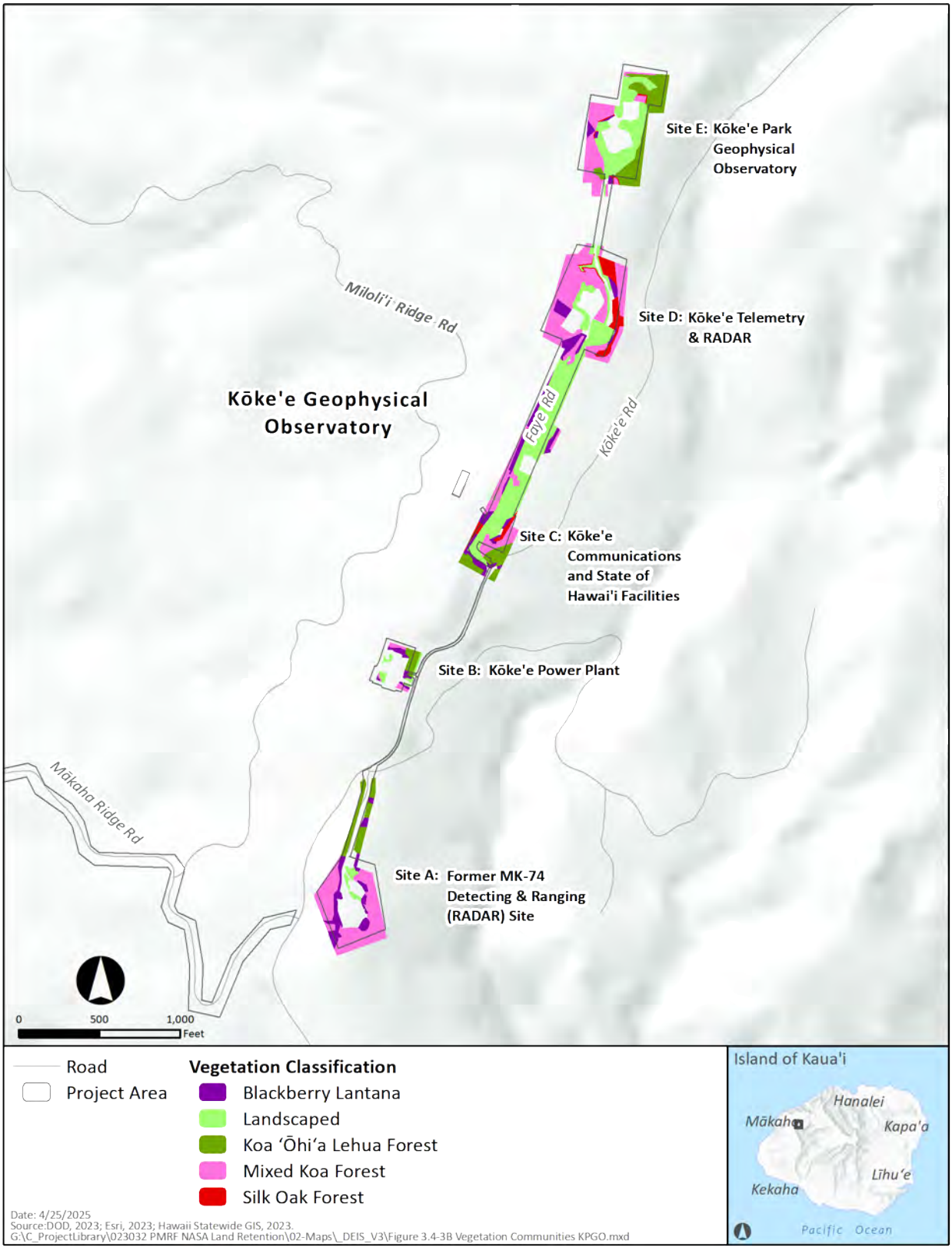


**Figure 3-5 Vegetation Communities: KPGO**

#### 3.2.4.3.3 Critical Habitat-Plants

***Main Base***

Critical habitat for ʻōhai (*Sesbania tomentosa*) has been designated just north of Polihale State Park (Figure 3-6). Much of PMRF's coastal strand vegetation within the ROI supports unoccupied (meaning that there is no historical record of presence there) USFWS designated critical habitat for lauʻehu or Niʻihau panicgrass (*Panicum niihauense*). The USFWS has determined that these areas contain the primary constituent elements necessary for the recovery of the species and are essential to the recovery of the species because not enough areas outside of PMRF exist to support recovery. During vegetation surveys conducted in the fall of 2023, four lauʻehu individuals were observed in the sand dune region on easement lands of Polihale State Park (NAVFAC Pacific, 2023b).

***Kamokalā Ridge and Mānā Water Well***

No critical habitat for plants occurs in Kamokalā Ridge and Mānā Water Well.

***Mākaha Ridge and Miloliʻi Ridge***

Upper portions of Mākaha Ridge Road overlap with critical habitat for the following plants: *Poa manni*, *Poa siphonoglossa,* broadleaf dubautia or koholāpehu (*Dubautia latifolia*)*,* ʻakoko*,* ʻaiea (*Nothocestrum peltatum*)*, Cyperus pennatiformis,* pōpolo or pōpolo ʻaiakeakua (*Solanum sandwicense*)*, and Xylosma crenatum.*

Critical habitat for plants exists outside of the ROI, north of Mākaha and Miloliʻi Ridge such as *Cyperus trachysanthos*, *Scheidea apokremnos*, *Brighamia insignis*, *Hedyotis stjohnii*, *Centaurium sebaeoides*, *Pteralyxia kauaiensis*, *Scheidea membranacea*, *Melicope knudsenii*, *Lipochaeta fauriei*, *Schiedea kauaiensis*, and *Wilkesia hobdyi* (Figure 3-6).

***KPGO***

Initially, critical habitat for three plant species were identified at KPGO, including koholāpehu, ʻaiea or hālena (*Nothocestrum* sp.), and pōpolo or pōpolo ʻaiakeakua. Upon further review, USFWS determined that an incidental overlap resulted from the geographic information system polygon drawing process and no critical habitat exists within KPGO.

#### 3.2.4.3.4 Critical Habitat-Wildlife

***Main Base***

Proposed critical habitat for the green sea turtle (*Chelonia mydas*) is located just north and south on easement lands within the ROI (Figure 3-7). Critical habitat for Hawaiian monk seal is located north and south of the ROI. No designated critical habitat for amphibian or invertebrate wildlife is found on leaseholds or easements at Main Base.

***Kamokalā Ridge, Mānā Water Well, Mākaha Ridge, Miloliʻi Ridge, and KPGO***

No designated critical habitat for avian, reptilian, amphibian, or invertebrate wildlife is found at Kamokalā Ridge*,* Mānā Water Well, Mākaha or Miloliʻi Ridge, or KPGO (Figure 3-7).

#### 3.2.4.3.5 Special Status Plants

A list of all special status plant species known to occur or with potential to occur in the ROI is included in Table 3-3.

**Figure 3-6 Critical Habitat for Special Status Plants**

**Figure 3-7 Critical Habitat for Special Status Wildlife at Main Base, Kamokalā Ridge, Mānā Water Well, Mākaha Ridge, Miloli'i Ridge and KPGO.**

## Table 3-3 Special Status Plant Species Known to or with Potential to Occur within the Region of Influence

| *Species Information* | | | | *Location of Species*[1] | | |
|---|---|---|---|---|---|---|
| ***Scientific Name*** | ***Common Name*** | ***Hawaiian Name*** | ***Regulatory Status*** | ***Main Base*** | ***Mākaha Ridge*** | ***KPGO*** |
| *Alphitonia ponderosa* | - | Kauila | SC | | | X |
| *Lobelia niihauensis* | Niʻihau Lobelia | - | FE, SE | | X | |
| *Ochrosia kauaiensis* | - | Holei | SC | | | X[2] |
| *Panicum niihauense* | Niʻihau Panicgrass | Lauʻehu | FE, SE | X | | |
| *Peucedanum sandwicense* | - | Makou | FT, ST | | X | |
| *Pritchardia minor* | Alakaʻi Swamp Pritchardia | Loulu | SC | | | X[2] |
| *Psychotria grandiflora* | - | Kōpiko | FE, SE | | | X |
| *Schiedea apokremnos* | Kauaʻi Schiedea | Maʻoliʻoli | FE, SE | | X | |
| *Sesbania tomentosa* | Oʻahu Riverhemp | ʻŌhai | FE, SE | X | | |
| *Spermolepis hawaiiensis* | Hawaiʻi Scaleseed | - | FE, SE | | X | |
| *Wilkesia hobdyi* | - | Dwarf iliʻau | FE, SE | | X | |
| *Zanthoxylum kauaense* | Kauaʻi Pricklyash | Aʻe | SC | | | X |

*Note*: [1]No special status plants have been documented at Kamokalā Ridge, Mānā Water Well, or Miloliʻi Ridge.
[2]Native restoration outplant area, December 2022.
*Key*: FE= federally endangered; FT = federally threatened; KPGO = Kōkeʻe Park Geophysical Observatory; SE = State Endangered; SC = Species of Concern; ST = State Threatened.
*Source*: NAVFAC Pacific, 2023a, 2023b.

### *Main Base*

Lauʻehu or Niʻihau panicgrass (*Panicum niihauense*) is an ESA-listed endangered plant that previously inhabited the coastal vegetation community within the ROI. This perennial bunchgrass is currently only known to occur on Kauaʻi but was also known historically from Niʻihau. Four lauʻehu individuals were observed at Polihale State Park on the easements of Main Base during a recent vegetation survey (Appendix K of the 2025 Draft EIS). ʻŌhai (*Sesbania tomentosa*) is an ESA-listed endangered plant that is found at Polihale State Park on easement lands in the ROI. This shrub to small tree is known to occur on Oʻahu, Molokaʻi, Maui, Kauaʻi, Kahoʻolawe, and Hawaiʻi. While these plant species have not been found on PMRF in recent surveys, there is the potential that they could occur within the ROI.

### *Mākaha Ridge*

Four ESA-listed endangered species are known to occur on PMRF at Mākaha Ridge: dwarf iliʻau (*Wilkesia hobdyi*), Hawaiʻi scaleseed (*Spermolepis hawaiiensis*), Niʻihau lobelia (*Lobelia niihauensis*), and Kauaʻi schiedea or māʻoliʻoli (*Schiedea apokremnos*). Additionally, one ESA-listed threatened species, makou (*Peucedanum sandwicense*), is known to occur.

### *Kamokalā Ridge, Mānā Water Well, and Miloliʻi Ridge*

No ESA-listed plants have been documented at Kamokalā Ridge, Mānā Water Well, or Miloliʻi Ridge.

### *KPGO*

Four special status plant species have been identified during vegetation surveys of KPGO, the federal and State endangered kōpiko (*Psychotria grandiflora*), and three federal species of concern, kauila

(*Alphitonia ponderosa*), Kauaʻi pricklyash or aʻe (*Zanthoxylum kauaense*), and Alakaʻi Swamp pritchardia or loulu (*Pritchardia minor*). A small population of five kōpiko plants was observed within the KPGO study area, reflecting the broader trend of population decline. Primary threats include habitat degradation from ungulates and herbivory by insects. The small populations of kauila, aʻe, and loulu were generally noted as healthy. Although federally endangered ʻakoko (*Euphorbia halemanui*) was previously documented outside Site D of KPGO, the plant species was not identified during the 2024 vegetation surveys (Hamer Environmental, 2025a). ʻOheʻohe (*Polyscias kavaiensis*), a State species of concern, was noted previously in the KPGO study area. While ʻoheʻohe was not observed during this survey, two others, ʻohe (*Polyscias hawaiensis*) and ʻohe kiko ʻolā (*Polyscias waimeae*), both endemic and a closely related species of the same genus, were documented (Appendix K of the 2025 Draft EIS) (Hamer Environmental, 2025a).

#### 3.2.4.3.6 Special Status Avian Wildlife

***ESA-Listed Avian Wildlife***

Table 3-4 provides the ESA- and State of Hawaiʻi-listed wildlife species known to or with potential to occur within the ROI. Observations from surveys conducted in 2023 and 2024 are depicted in Figure 3-8 (NAVFAC Pacific, 2024).

**Table 3-4 ESA-Listed and State of Hawaiʻi-Listed Wildlife Known to or with Potential to Occur within the Region of Influence**

| *Species Information* | | | | *Location* | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ***Scientific Name*** | ***Common Name*** | ***Hawaiian Name*** | ***Regulatory Status*** | ***Main Base*** | ***Kamokalā Ridge*** | ***Mānā Water Well*** | ***Mākaha Ridge*** | ***Miloliʻi Ridge*** | ***KPGO*** |
| **Waterbirds** | | | | | | | | | |
| *Anas wyvilliana* | Hawaiian Duck | Koloa maoli | FE, SE | X | | | | | |
| *Branta sandvicensis* | Hawaiian Goose | Nēnē | FT, SE | X | X | X | X | X | X |
| *Fulica alai* | Hawaiian Coot | ʻAlae keʻokeʻo | FE, SE | X | | | | | |
| *Gallinula galeata sandvicensis* | Hawaiian Gallinule | Alae ʻula | FE, SE | X | | | | | |
| *Himantopus mexicanus knudseni* | Hawaiian Black-necked Stilt | Aeʻo | FE, SE | X | | | | | |
| **Forest Birds** | | | | | | | | | |
| *Drepanis coccinea* | Scarlet Honeycreeper | ʻIʻiwi | FT, SE | | | | | | X |
| **Seabirds** | | | | | | | | | |
| *Hydrobates castro* | Band-Rumped Storm Petrel | ʻAk ēʻak ē | FE, SE | X | X | X | X | X | X |
| *Phoebastria albatrus* | Short-tailed Albatross | Makalena | FE, SE | X | | | | | |
| *Pterodroma sandwichensis* | Hawaiian Petrel | ʻUaʻu | FE, SE | X | X | X | X | X | X |

| *Species Information* | | | | *Location* | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ***Scientific Name*** | ***Common Name*** | ***Hawaiian Name*** | ***Regulatory Status*** | ***Main Base*** | ***Kamokalā Ridge*** | ***Mānā Water Well*** | ***Mākaha Ridge*** | ***Miloli'i Ridge*** | ***KPGO*** |
| *Puffinus newelli* | Newell's Shearwater | ʻAʻo | FT, ST | X | X | X | X | X | X |
| **Mammals** | | | | | | | | | |
| *Aeorestes semotus* | Hawaiian Hoary Bat | ʻŌpeʻapeʻa | FE, SE | X | X | X | X | X | X |
| *Neomonachus schauinslandi* | Hawaiian Monk Seal | ʻĪlio holo i ka uaua | FE, SE | X | | | | | |
| **Reptiles** | | | | | | | | | |
| *Chelonia mydas* | Green Sea Turtle | Honu | FT, ST | X | | | | | |
| *Eretmochelys imbricata* | Hawksbill Sea Turtle | Honuʻea | FE, SE | X | | | | | |
| **Invertebrates** | | | | | | | | | |
| *Drosophila musaphilia* | Hawaiian Picture-wing Fly | - | FE, SE | | | | | | X |
| *Drosophila sharpi* | Hawaiian Picture-wing Fly | - | FE, SE | | | | | | X |

*Key*: FE= federally endangered; FT = federally threatened; KPGO = Kōkeʻe Park Geophysical Observatory; PMRF = Pacific Missile Range Facility; SE = State endangered; ST = state threatened.

*Sources*: NAVFAC Pacific 2023a, 2024.

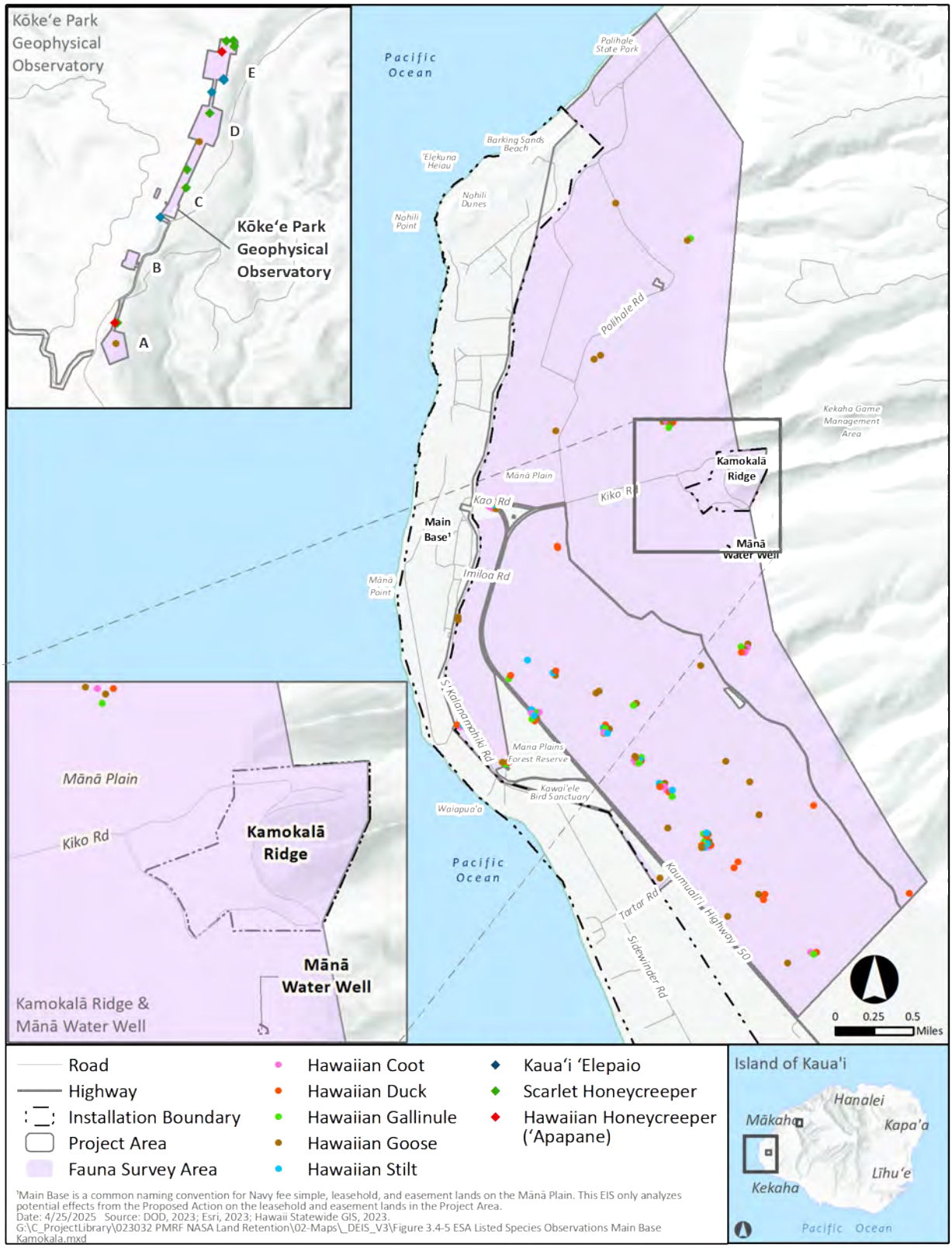


**Figure 3-8 Endangered Species Act-Listed Wildlife Species Observations in 2022–2024: Main Base, Kamokalā Ridge, Mānā Water Well, and KPGO**

***Seabirds***

**Main Base, Kamokalā Ridge, Mānā Water Well, Mākaha Ridge, Miloliʻi Ridge, and KPGO**

Four ESA-listed seabirds have the potential to occur in the ROI, including Newell's shearwater or ʻaʻo (*Puffinus newelli*), band-rumped storm petrel or ʻakēʻakē (*Hydrobates castro*), Hawaiian petrel or ʻuaʻu (*Pterodroma sandwichensis*), and short-tailed albatross or makalena (*Phoebastria albatrus*). Kauaʻi provides the majority of Hawaiʻi's habitat for the threatened Newell's shearwater. The Newell's shearwater nests from April to November in the interior mountains of Kauaʻi. Fledglings leave the nesting grounds at night in October and November and head for the open ocean. The band-rumped storm petrel is an endangered breeding visitor that typically arrives in February and has been detected in the cliffs below the Mākaha facility, from its nesting grounds to the sea.

On Kauaʻi, several grounded band-rumped storm petrel fledglings have been found in recent years as part of the Newell's shearwater recovery program. Most birds have been found near the mouth of Waimea Canyon, indicating that some birds still breed in the vicinity. Band-rumped storm petrels are nocturnal over land and are active around dusk to dawn. Nesting occurs from April through May. Chicks begin hatching in late June and fledge in late October to November. Hawaiian petrels are endangered breeding visitors, whose breeding season begins in February and continues through May, with fledgling season occurring in November or December. Hawaiian petrels and fledglings have been observed flying between nesting sites in the cliffs and at-sea for foraging purposes. Although Newell's shearwater, Hawaiian petrel, and band-rumped storm petrel are not known to nest or roost at Main Base, they are known to fly over or near the ROI. There has been only one sighting of the endangered short-tailed albatross on fee simple lands at Main Base in March 2000, resting on the grass on the inland side of the PMRF runway (NAVFAC Pacific, 2023a).

***Waterbirds***

**Main Base**

Five ESA-listed waterbirds have the potential to occur in the ROI at Main Base, including the Hawaiian coot or ʻalae keʻokeʻo (*Fulica alai*), Hawaiian goose or nēnē (*Branta sandvicensis*), Hawaiian duck or koloa maoli (*Anas wyvilliana*), Hawaiian gallinule or ʻalae ʻula (*Gallinula galeata sandvicensis*), and Hawaiian stilt or aeʻo (*Himantopus mexicanus knudseni*). ESA-listed waterbird habitat within the ROI is associated with (1) Kawaiʻele wildlife sanctuaries that include a State Waterbird Refuge for Hawaiʻi's endangered waterbird species, adjacent to the ROI; and (2) agricultural drainages from the Nohili and Kawaiʻele ditches. Agricultural drains within the ROI are located on fee simple, leaseholds, and easement lands of Main Base and provide habitat for ESA-listed waterbirds.

The Hawaiian goose is a year-round resident that has been observed and has nested at the Main Base, on fee simple lands, near the runway and beach cottages. From 2000 to 2014, the numbers of Hawaiian geese at Main Base increased, as has been generally experienced across Kauaʻi (NAVFAC Pacific, 2023a). Hawaiian geese have been observed flying down into lower elevation habitats on Mānā Plain. Hawaiian geese are also attracted to the adjacent Kinikini Ditch and State-managed Kawaiʻele Waterbird Sanctuary located just east of the base. In July 2012, a record high of 91 Hawaiian geese were observed near Kawaiʻele Wetlands, within sight of the PMRF runway (DOE, 2019). Despite efforts to discourage their use of PMRF through hazing, nesting continues to occur (DOE, 2019). During 2023 and 2024 surveys, Hawaiian geese were prevalent throughout PMRF and in the ROI (NAVFAC Pacific, 2024).

Hawaiian duck, Hawaiian coot, Hawaiian gallinule, and Hawaiian black-necked stilt have been observed utilizing the ditches, including Nohili Ditch and the ditch systems along the eastern edge of Kauaʻi Test Facility (KTF) as well as and ponds and reservoirs in the ROI. During 2023 and 2024 surveys, these Hawaiian waterbirds were prevalent throughout leasehold and easement lands on the Mānā Plain (NAVFAC Pacific, 2024) (see Figure 3-8). These Hawaiian waterbirds regularly utilize wetland areas adjacent to the ROI including Kawaiʻele Waterbird Sanctuary and Mānā Plains Forest Reserve as well as degraded aquatic habitat.

**Kamokalā Ridge, Mānā Water Well, Mākaha Ridge, Miloliʻi Ridge, and KPGO**

With the exception of the Hawaiian goose, waterbirds have not been recorded at Kamokalā Ridge, Mānā Water Well, Mākaha Ridge, Miloliʻi Ridge, or KPGO (Appendix K, PMRF Fauna Survey Report, KPGO Fauna Survey Report) (Hamer Environmental, 2025b; NAVFAC Pacific, 2023a, 2024).

***Migratory Bird Treaty Act Avian Wildlife***

**Main Base**

MBTA bird species on leasehold and easement lands at Main Base include waterfowl, seabirds, shorebirds, and one raptor. The pueo or Hawaiian short-eared owl (*Asio flammeus sandwichensis*) is the only endemic non-migratory bird species that occurs in the region and is not federally listed as threatened or endangered. The pueo is State-listed as endangered on the island of Oʻahu and can be observed on the leasehold and easement lands at Main Base. Laysan albatross or mōlī (*Phoebastria immutabilis*) and black-footed albatross or kaʻupu (*Phoebastria nigripes*) are MBTA-listed species known to occur within the ROI at Main Base. A few individual black-footed albatross have been observed loafing on base during the breeding season, but this species has not attempted to nest at PMRF. In contrast, Laysan albatross nest in the vegetated area to the west of the PMRF central runway and use the lawn-like ruderal vegetation areas on KTF (ROI at Main Base) for courtship and nesting (NAVFAC Pacific, 2023a).

A nesting colony of wedge-tailed shearwaters or ʻuaʻu kani (*Ardenna pacifica*) is also located near the beach cottages on fee simple lands on Main Base. Nesting colony restoration efforts begun in 2006 included removing non-native trees and planting naupaka seedlings and native beach vegetation such as pōhinahina, ʻilima, and ʻakiʻaki seeds. There were an estimated 276 breeding pairs in the compound in 2006 (DOE, 2019). The Navy also installed polyvinyl chloride pipe segments into the compound to provide some artificial burrows that would not collapse (PMRF, 2010).

Many other MBTA-listed species have been documented on leasehold and easement lands at Main Base, such as brown booby (*Sula leucogaster*), sanderling (*Calidris alba*), black-crowned night heron (*Nycticorax nycticorax*), wandering tattler (*Tringa incana*), ruddy turnstone (*Arenaria interpres*), and Pacific golden plover or kōlea (*Pluvialis fulva*) (NAVFAC Pacific, 2023a).

**Kamokalā Ridge, Mānā Water Well, Mākaha Ridge, and Miloliʻi Ridge**

In the higher elevation regions among the cliff regions of Kamokalā Ridge, Mānā Water Well, Mākaha Ridge, and Miloliʻi Ridge, white-tailed tropicbirds (*Phaethon lepturus*) have been observed. Other MBTA species listed above also have the potential to occur at these higher elevations, such as the Pacific golden plover and cattle egret (NAVFAC Pacific, 2023a).

**KPGO**

MBTA protected species observed at KPGO included the Pacific golden plover, white-tailed tropicbird, and native Hawaiian honeycreepers, such as Kaua‘i ‘amakihi (*Chlorodrepanis stejnegeri*), and ‘apapane (*Himatione sanguinea*). Non-native MBTA birds observed included invasive cattle egret, house finch (*Haemorhous mexicanus*), northern mockingbird (*Mimus polyglottos*), and the most abundant migratory species, northern cardinal (*Cardinalis cardinalis*) (Appendix K of the 2025 Draft EIS) (Hamer Environmental, 2025b).

#### 3.2.4.3.7 Special Status Mammalian Wildlife

ESA-listed mammalian species that have the potential to be located on PMRF and are protected by the ESA and/or State of Hawai‘i are discussed in the sections below.

***Main Base***

Hawaiian monk seals or ‘īlio holo i ka uaua (*Neomonachus schauinslandi*) are frequently sighted both in nearshore waters and hauled out on beaches on fee simple lands at Main Base. Since May 2006, the majority of these observations of Hawaiian monk seals are north of Kinikini Ditch on fee simple land. Hawaiian monk seals are most often observed in areas where sandy beach, smooth bench or sandy pockets are found (PMRF, 2010). Sightings of Hawaiian monk seal haul outs are regularly documented by the PMRF Natural Resource Staff. Potential habitat for Hawaiian monk seals extends north of fee simple lands and extends into the ROI on Main Base easements at Polihale State Park (NAVFAC Pacific, 2023a).

***Main Base, Kamokalā Ridge, Mānā Water Well, Mākaha Ridge, Miloli‘i Ridge, and KPGO***

The endangered Hawaiian hoary bat or ‘ōpe‘ape‘a (*Aeorestes semotus*) is the only native terrestrial mammal in Hawai‘i. In 2010 and 2011, the Navy contracted U.S. Geological Survey biologists to survey for bat occurrence at PMRF on fee simple lands (Bonaccorso and Pinzari, 2011). While detectability and bat call activity remained relatively consistent year-round, monitoring results showed bat occurrence was highest between September and December and dropped between February and May. Detection data indicated that Main Base may be used during the fall months by adult bats for “fall swarming” in preparation for mating (DOE, 2019). A bat survey conducted from 2020–2021 confirmed general bat activity levels were consistent with activity recorded during the 2010–2011, but bat occupancy rates were higher in 2020–2021 (Welch et al., 2021). In 2023 and 2024, surveys were conducted to detect and document presence/absence of Hawaiian hoary bats at six locations across the ROI in PMRF (Figure 3.4-7 in the 2025 Draft EIS). While recent detections continue to indicate year-round activity, detectability has remained consistent and high at northern leaseholds and easements at Main Base and Mākaha and Miloli‘i Ridges from October to June (NAVFAC Pacific, 2025). A decrease in detectability occurred between April and June in 2024 (NAVFAC Pacific, 2025).

***KPGO***

The Hawaiian hoary bat has been observed or detected at Sites A, C, and D, and occurrence is year-round at KPGO (Hamer Environmental, 2025c; NAVFAC Pacific, 2023a). During 2024–2025 surveys, individuals were detected on 240 nights out of 300 detector-nights sampled across all pooled monitoring sites and months, resulting in a detection rate of 0.80. Overall detection rates were generally high, with bats exhibiting “high detectability” levels (above 0.50 for the proportion of nights with bat detections) at all three survey locations, and detection rates peaked in August 2024. Survey location 1, located within Site D, consistently had the highest detection rates. Nightly bat activity was high across all

sites. Survey location 1 had detections on 93.8 percent of nights surveyed, survey location 2 (located within Site C) had detections on 80 percent of nights surveyed, and the third survey location (located within Site A) had detections on 63.4 percent of nights surveyed. Foraging buzzes were detected at all three sites throughout the survey period. While foraging buzzes made up a small percentage of overall detections, they occurred throughout the monitoring period at all three sites. The percentage of detections flagged as foraging buzzes was highest at Site 1 (Hamer Environmental, 2025c).

#### 3.2.4.3.8 Special Status Reptilian Wildlife

ESA-listed reptile species that have the potential to be located in the ROI (there are no ESA-listed amphibian species) are discussed in the sections below (NAVFAC Pacific, 2023a).

***Main Base***

Green sea turtles or honu (*Chelonia mydas*) are an endangered species and are the only marine reptiles in the ROI. As adults, green sea turtles forage and rest in the shallow waters around the main Hawaiian Islands in late summer and early fall. Reproduction in the Hawaiian population occurs primarily in the northwest Hawaiian Islands in the summer, but green sea turtles have used fee simple Main Base sand beaches for nesting. Turtle nesting has been documented as far back as 1988 at PMRF (1988, 1989, 1999, and 2010). Between 2015 and 2021, a total of 10 green sea turtle nests were documented on fee simple lands (DOE, 2019; NAVFAC Pacific, 2023a). Green sea turtles are regularly observed basking onshore in the vicinity of the ditch and further north below the dunes at Nohili; haul outs of green sea turtles elsewhere on fee simple lands on Main Base are rare (DOE, 2019). Potential habitat for green sea turtles extends north of fee simple lands and extends into the ROI on easements at Polihale State Park.

The Hawksbill turtle or honu‘ea (*Eretmochelys imbricata*) has been reported in the open waters offshore of Kaua‘i. There are no known records of hawksbill turtles coming ashore or nesting within or adjacent to fee simple lands on Main Base (NAVFAC Pacific, 2023a), although they do nest elsewhere on Kaua‘i (M. Olry, DLNR-DAR, personal communication, October 7, 2024). Hawksbill turtles are most often found in shallow water around reefs, bays, and inlets and potential habitat is located in the ROI on easements at Polihale State Park.

***Kamokalā Ridge, Mānā Water Well, Mākaha Ridge, Miloli‘i Ridge, and KPGO***

No ESA-listed reptilian wildlife has been documented at Kamokalā Ridge, Mānā Water Well, Mākaha Ridge, Miloli‘i Ridge, or KPGO. A comprehensive reptile survey has not been conducted on KPGO. There are no terrestrial reptile species native to Hawai‘i; therefore, any reptiles observed would be considered invasive.

#### 3.2.4.3.9 Special Status Invertebrate Wildlife

***Main Base***

No special status invertebrate wildlife were observed during the 2021 invertebrate surveys.

***Kamokalā Ridge, Mānā Water Well, Mākaha Ridge, and Miloli‘i Ridge***

The 2021 invertebrate surveys were not conducted at Kamokalā Ridge and Mānā Water Well due to dominance of non-native habitat and absence of potential habitat for special status invertebrate species. Recent surveys were not conducted at Mākaha Ridge and Miloli‘i Ridge due to heavy degradation by ungulates; however, ongoing habitat restoration is working to improve native ecosystems. In turn, these native restoration efforts could increase the potential habitat for special

status invertebrate species. Although no recent surveys have been conducted in these areas, monitoring and inventory efforts are ongoing as required by the INRMP and described in Table 2-7 of the 2025 Draft EIS.

***KPGO***

*Drosophila musaphilia* and *Drosophila sharpi*, Hawaiian picture-wing flies, are single-island endemic species to Kaua'i. *D. musaphilia* were discovered immediately adjacent to the ROI during terrestrial invertebrate surveys in 2021 by a qualified entomologist and conservation biologist (Magnacca, 2022). No additional specialized Hawaiian picture-wing fly surveys were conducted in 2024. However, host trees (koa, 'ohe, lapalapa [*Cheirodendron platyphyllum*]) at Sites A–E were inspected during spring fauna surveys by qualified biologists. No sap seeps or picture-wing flies were observed.

#### 3.2.4.3.10 Stressors on Coastal Ecosystems

Stressors to coastal ecosystems include noise, habitat loss, and conservation management. The Proposed Action would result in no changes to the type or frequency of current activities occurring on leasehold and easement lands. Additionally, there would not be a change in use or maintenance of existing infrastructure and would not involve construction, renovation, or demolition of facilities. Therefore, no new effects to vegetation, wildlife, and critical habitat would occur, and ongoing effects would continue under the Proposed Action under similar conditions as currently present.

The Navy and NASA have coordinated with multiple federal and Hawai'i State agencies during the development of the Proposed Action to ensure compliance with federal regulations in addition to the CZMA.

To avoid and minimize adverse effects on coastal ecosystems, the Navy and NASA would continue to operate in accordance with the PMRF INRMP, NASA's Space Exploration Network Services and Evolution (SENSE) Environmental Management Plan, and standard operating procedures (SOPs). The Navy and NASA would continue to implement BMPs and conservation measures, as appropriate; coordinate and implement monitoring and survey programs; and comply with all biological opinions, including the 2014, 2018, and 2025 Biological Opinions prepared for PMRF.

Under the Proposed Action, there would be no effect and no change in coastal ecosystems on and in the vicinity of the lease and easement lands at Main Base, Kamokalā Ridge, Mānā Water Well, Mākaha Ridge, Miloli'i Ridge, and KPGO. While projects within the ROI may affect individual plants and wildlife species, overall effects to coastal ecosystems would not be significantly affected through compliance with federal and applicable State environmental laws and regulations. The Proposed Action would not itself result in any new or additional effects to coastal ecosystems.

### 3.2.4.4 Conclusion

Based on the analysis presented in the 2025 Draft EIS, Section 3.4, *Biological Resources*, and as summarized above, the Navy and NASA have determined that the Proposed Action would be carried out in a manner that would adhere to federal and applicable State policies for protecting coastal ecosystems within the coastal zone. Under the Proposed Action, the Navy and NASA would continue to support natural resources management programs and practices designed to protect natural resources within the coastal zone. The Proposed Action would not result in adverse effects to coastal ecosystems. Therefore, the Proposed Action is consistent to the maximum extent practicable with the coastal ecosystems enforceable policies.

### 3.2.5 Economic Uses

#### 3.2.5.1 Objective

*(A) Provide public or private facilities and improvements important to the state's economy in suitable locations.*

#### 3.2.5.2 Policies

*(A) Concentrate coastal dependent development in appropriate areas;*

*(B) Ensure that coastal dependent development such as harbors and ports, and coastal related development such as visitor industry facilities and energy generating facilities, are located, designed, and constructed to minimize adverse social, visual, and environmental impacts in the coastal zone management area; and*

*(C) Direct the location and expansion of coastal dependent developments to areas presently designated and used for such developments and permit reasonable long-term growth at such areas, and permit coastal dependent development outside of presently designated areas when;*

*(i) Use of presently designated locations is not feasible;*

*(ii) Adverse environmental effects are minimized; and*

*(iii) The development is important to the state's economy.*

#### 3.2.5.3 Consistency Review

The following sections summarize the analysis and conclusions of potential effects on economic uses from stressors associated with the Proposed Action. For additional information, see the 2025 Draft EIS, Section 3.6, *Socioeconomics*.

##### 3.2.5.3.1 Region of Influence

The ROI for economic uses resources is Kaua'i County.

The population totals for the State and ROI are included in Table 3-5.

**Table 3-5 Population in the Region of Influence**

| *Location* | *Population 2010* | *Population 2020* | *Percentage Population Change 2010–2020 (percent)* | *Population (2017–2022)* | *Population Forecast Estimated (2030)* |
|---|---|---|---|---|---|
| State of Hawai'i | 1,360,300 | 1,453,490 | 6.9 | 1,450,590 | 1,501,150 |
| Kaua'i County | 67,090 | 73,250 | 9.2 | 73,510 | 78,360 |
| Waimea Census Defined Place | 1,855 | 2,057 | 9.8 | 1,950 | N/A |

*Key:* N/A = Not Applicable.
*Source:* U.S. Census Bureau (USCB), 2021, 2024; DBEDT, 2024.

Economic indicators of employment and income for the ROI, Kaua'i County, Hawai'i, and the U.S. are included in Table 3-6 (U.S. Census Bureau [USCB], 2022).

**Table 3-6 Economic Indicators**

| *Location* | *Civilian Labor Force 2018–2022* | *Unemployment Rate 2018–2022 (percent)* | *Number of Households 2018–2022* | *Median Household Income 2018–2022* |
|---|---|---|---|---|
| United States | 167,857,207 | 5.3 | 125,136,353 | $75,149 |
| State of Hawai‘i | 710,984 | 5.1 | 483,906 | $94,810 |
| Kaua‘i County | 37,198 | 4.1 | 22,978 | $88,869 |

The U.S. Census Bureau American Community Survey 5-year Estimates reported the median household income for Kaua‘i County from 2018–2022 at $88,869 compared to $94,810 for the State overall (USCB, 2022) (see Table 3-6). Unemployment rate from 2018–2022 was 4.1 percent in Kaua‘i County, slightly lower than 5.1 percent for the State of Hawai‘i (USCB, 2022) (see Table 3-6). In 2023, the Bureau of Labor Statistics reported a 2.6 percent unemployment rate in the County of Kaua‘i, about the same as the State of Hawai‘i (3.0 percent) (Federal Reserve Economic Data Bank, 2024).

#### 3.2.5.3.2 Economic Uses Resources

The following sections summarize the analysis and conclusions of potential effects economic uses associated with the Proposed Action. For additional information, see the 2025 Draft EIS, Section 3.6, *Socioeconomics*.

#### 3.2.5.3.3 Main Base, Kamokalā Ridge, Mānā Water Well, Mākaha Ridge, and Miloli‘i Ridge

PMRF is the foundation of technology-based business on Kaua‘i. As the largest high-tech and third largest overall employer on Kaua‘i, PMRF employs about 900 people, including defense personnel and civilian contractors (DBEDT, 2023). PMRF contributes approximately $150 million annually in salaries, contract goods, and services to the local economy (Navy Region Hawai‘i Public Affairs, 2024).

In addition to economic contributions, PMRF is involved with the local community, including participating in and supporting events in the ROI such as the Waimea Town Celebration, the Veterans Day parade, Armed Forces Day parade, Toys for Tots, United Way, Boy Scouts of America, Girl Scouts of America, Navy League, recycling programs, and the Federal Junior Fellowship Program (County of Kaua‘i, 2020). PMRF air operations, crash fire rescue team, security, base support, emergency medical team, and marine departments all provide services and mutual aid to the communities around PMRF (County of Kaua‘i, 2020).

#### 3.2.5.3.4 KPGO

As of 2022, the staff at KPGO Site E consists of seven full-time local employees who are employed by Peraton Corporation under the SENSE contract to NASA for the operation and maintenance of the observatory (Coughlin, 2022).

#### 3.2.5.3.5 Stressors on Economic Uses

Stressors to economic uses, in relation to leasehold and easement lands, include loss of industries, decreased wages, and changing economic conditions. Agriculture used to be a dominant economic driver of West Kaua‘i (region adjacent to PMRF and KPGO), but this has been replaced by major employers which include the West Kaua‘i Medical Center, PMRF, and the State Department of Education (County of Kaua‘i, 2020). Workers frequently commute to other areas for jobs since there are more workers than jobs in the region. Lack of economic opportunities in West Kaua‘i has contributed to outmigration of young adults (County of Kaua‘i, 2020). According to forecasters for the State of Hawai‘i,

job growth for the State between 2022 and 2030 will be about 5 percent, with Kaua'i adding almost 3,000 jobs (6.5 percent). Job growth is predicted to be fastest in the professional and health services sectors (DBEDT, 2024). The range of services covered by defense contracts has supported many industries, including facility support, construction, and research and development (DBEDT, 2023). PMRF contributes approximately $150 million annually in salaries, contract goods, and services to the local economy (Navy Region Hawai'i Public Affairs, 2024). Additionally, various federal, State, and local agencies and groups contribute to the local economy by traveling to PMRF for training.

In addition to the above, it is anticipated that any real estate agreement payment would reflect current market value. Although unknown at this time, this payment would represent a sizable increase over existing agreements and would therefore provide a beneficial socioeconomic effect. The Proposed Action would not include any new economic activities within the coastal zone other than those previously discussed above. Although some locations within the Proposed Action areas include agricultural lands, their use would not change under the Proposed Action.

#### 3.2.5.4 Conclusion

Based on the analysis presented in the 2025 Draft EIS, Section 3.6, *Socioeconomics,* and as summarized above, the Navy and NASA have determined that the Proposed Action would be carried out in a manner that would adhere to federal and applicable State policies for enhancing economic uses within the coastal zone. While the Proposed Action analyzed in this CD does not include development, the Navy and NASA would continue to operate in a manner that would support and ensure ongoing operations and any potential future coastal development is designed and implemented to minimize adverse effects to social, visual, and environmental impacts within the coastal zone. The Proposed Action would not result in adverse effects to economic uses. Therefore, the Proposed Action is consistent to the maximum extent practicable with the economic uses enforceable policies.

### 3.2.6 Coastal Hazards

#### 3.2.6.1 Objective

*(A) Reduce hazard to life and property from tsunami, storm waves, stream flooding, erosion, subsidence, and pollution.*

#### 3.2.6.2 Policies

*(A) Develop and communicate adequate information about storm wave, tsunami, flood, erosion, subsidence, and point and nonpoint source pollution hazards;*

*(B) Control development in areas subject to storm wave, tsunami, flood, erosion, hurricane, wind, subsidence, and point and nonpoint source pollution hazards;*

*(C) Ensure that developments comply with requirements of the Federal Flood Insurance Program;*

*(D) Prevent coastal flooding from inland projects; and*

*(E) Develop a coastal point and nonpoint source pollution control program.*

#### 3.2.6.3 Consistency Review

The following sections summarize the analysis and conclusions of potential effects on coastal hazards from stressors associated with the Proposed Action. For additional information, see the 2025 Draft EIS, Section 3.7, *Water Resources*.

#### 3.2.6.3.1 Region of Influence

The ROI for coastal hazards includes leasehold and easement lands held by the Navy at Main Base, Kamokalā Ridge, Mānā Water Well, Mākaha Ridge, Miloliʻi Ridge, and KPGO.

#### 3.2.6.3.2 Coastal Hazards Resources

The coastal location, low elevation, and dunal system at Polihale make the leasehold and easement lands at Main Base susceptible to tsunamis and tidal waves, and some portions are within the tsunami evacuation area. Several tsunamis have occurred in the past 70 years; the most damaging occurred in 1946 when a wave inundated an area of the Main Base. Kamokalā Ridge, Mānā Water Well, Mākaha Ridge, Miloliʻi Ridge, KPGO are located outside of tsunami areas.

#### 3.2.6.3.3 Groundwater-Main Base

Leasehold and easement lands at Main Base are located on the Mānā Plain. The Mānā Plain is in the rain shadow of Mount Waiʻaleʻale and receives under 20 inches of precipitation annually as shown in Figure 3-9. The majority of groundwater recharge occurs with storm rainfall, irrigation percolation, and seepage from the caprock sediments, especially where the sediment layer is thin near the inland margin of the Plain. The Kekaha groundwater aquifer in the area of the Mānā Plain contains a lower aquifer in the basalt at depth and an upper aquifer in the sedimentary caprock (Nance, 1994).

A natural drainage network in the ROI conveys water from mauka (mountains) to makai (ocean). Water in the Mānā Plain generally flows from higher elevations in the mountain areas, including Mākaha and Miloliʻi Ridge, downgradient through a combination of natural and manmade features toward the Pacific Ocean. In the 1850s, an extensive canal network was excavated across the Mānā Plain to dewater marshes to use the area for sugar cane production. Today, these canals, together with a system of pumps, siphons, and connections, distribute water primarily for agricultural use throughout the Mānā Plain. The agricultural lands of the Mānā Plain are managed by the State of Hawaiʻi ADC; however, the KAA, Navy, Hawaiʻi DLNR, the County of Kauaʻi, and ADC work collaboratively to manage and maintain the network of ditches, canals, drainages, and reservoirs that convey and store water across the plain (Hart Crowser, 2020).

The highest point of groundwater, or water table, in the Mānā Plain intersects with the series of canals and drainage ditches, filling them with groundwater (rising from below the ditch base) and surface water (entering from rainfall). In this way, the groundwater levels can be determined through the water level within the ditches. Two pump stations, the Nohili Pump Station (currently inactive) and the Kawaiʻele Pump Station, are located on leasehold land and are used to pump water out of the canal and ditch system. By regulating water levels through pumping and other management measures, groundwater levels are controlled, and the canals and ditches are prevented from overflowing. Consequently, the acreage of productive agricultural land in the Mānā Plain is maximized.

Because water within the ditch and canal system is typically a mixture of groundwater and surface water, the role of the Kawaiʻele Pump Station in managing surface water levels is also discussed below (Hart Crowser, 2020).

#### 3.2.6.3.4 Groundwater-Mānā Water Well

Groundwater used at PMRF comes from the Mānā Water Well. This 90-foot-deep, hand-dug well, is located southeast of Kamokalā Ridge and is the main source of potable water for PMRF fee simple land.

**Figure 3-9 Annual Rainfall, Flood Hazard Areas, and Aquifers within the Region of Influence**

Per a 1960 paper published by the State of Hawai'i Division of Hydrography, the Mānā Well was dug by the Kekaha Sugar Company in 1938 (Macdonald et al., 1960). The small shed structure on the parcel was built in 2007 when the Navy acquired the leasehold land. The Mānā Water Well is owned by DLNR and maintained by the Navy, and all operations and maintenance tasks are performed by PMRF personnel.

Potable groundwater within the ROI comes from the shallow, caprock Kekaha Aquifer pumped through the Mānā Water Well. The current average pumping rate at Mānā Water Well is approximately 1,400 gallons per minute (gpm) (DON, 2024a). Water that is pumped from the Mānā Water Well undergoes disinfection before it is distributed throughout the base. Daily water quality monitoring is performed on water from the Mānā Water Well at five established test stations throughout the water distribution system to test for sudden or gradual changes in water parameters. Monthly samples are taken for testing and laboratory analysis by HDOH for total coliform contamination. As required, the samples are taken to a certified HDOH or EPA laboratory to be tested for specifically defined contamination parameters.

In 2023, the Navy conducted drinking water testing to ensure that PMRF drinking water source met all EPA and State standards. Over 70 regulated contaminants that have the potential to be in drinking water were tested, and in all cases, the levels measured were well within requirements for safe drinking water (DON, 2024b). Per- and polyfluoroalkyl substances (PFAS) were also tested and were all below the reporting limit (DON, 2024b). As part of the Navy water quality policy, sampling for perchlorate was initiated at PMRF in 2006. The most recent EPA guidance recommends that it not exceed 15 parts per billion in drinking water (EPA, 2014). This level has also been adopted in the Navy Perchlorate Sampling and Management Policy. In accordance with the policy, sampling has been conducted at the two drinking water supply locations. Perchlorate concentrations at both sites were less than the initial screening level of 4 parts per billion. Based on guidance PMRF received from Navy Region Hawai'i, since the two consecutive samples were less than 4 parts per billion, no further analysis was required. Further discussion on Mānā Water Well distribution system including average use, pump capacity, maintenance programs, water disinfection procedures, and drinking water quality can be found in Section 3.8 of the 2025 Draft EIS.

#### 3.2.6.3.5 Groundwater-Kamokalā Ridge

Leasehold lands at Kamokalā Ridge are located within the Kekaha Aquifer System shown in Figure 3-9. Mean annual rainfall at Kamokalā Ridge is 25 inches as shown in Figure 3-9.

#### 3.2.6.3.6 Groundwater-Mākaha and Miloli'i Ridges

Mākaha and Miloli'i Ridges are located on the western portion of Kaua'i within the Waimea Watershed. There are no active wells at these ridge sites. Mean annual rainfall at Mākaha and Miloli'i Ridges is 30 inches (NAVFAC Pacific, 2023b).

#### 3.2.6.3.7 Groundwater-KPGO

Neither NASA nor the Navy use groundwater on KPGO, and there are no active wells on site. KPGO sits roughly 3,600 feet above sea level, and the surrounding volcanic terrain contains major valleys and dendritic drainage patterns. Mean annual rainfall at KPGO ranges from 50 to 60 inches (NAVFAC Pacific, 2023a).

#### 3.2.6.3.8 Floodplains-Main Base

The only floodplains in the ROI are on the easements at Main Base, where the primary floodplain hazard is from overflow of the ditches that drain the Mānā Plain. The water within the irrigation ditches and reservoirs do not mix with the drainage system under normal conditions. It is only during flood conditions when these waters may comingle if stormwater inputs overload the system and the divides between the elevated drainage ditches, reservoirs, and irrigations ditches become washed out from heavy flow and enter fields and drainage system. During a storm event, rising water levels in the canal system can also result in shoreline discharge from one or both ditches either by erosion of typically latent sand berms. Parts of leasehold and easement lands are located in the Federal Emergency Management Area (FEMA) Special Hazard Flood Area (FEMA, 2021). Special Hazard Flood Areas, areas that have at least a 1 percent chance (or more) of being inundated by a flood event in any given year, are determined by the FEMA Flood Insurance Rate Maps (FEMA, 2024). These areas are shown in Figure 3-9.

The Navy contracts with a third party to support the State in management and maintenance of the Kawaiʻele and Nohili Pump Stations, both located on leased land. The Nohili Pump Station is currently inactive. Both pump stations are owned by the State; however, the Navy maintains the Kawaiʻele Pump Station to help manage water levels adjacent to Main Base leaseholds and easements and to reduce flood risk. Kawaiʻele Pump Station operates automatically based on real-time water level measurements; pumping floodwaters from the ditch system to the Kawaiʻele Outlet at Waiapuaʻa Bay. As described in Section 3.2.6.3.3, Groundwater-Main Base, this pumping action lowers groundwater levels by removing excess water from the canals, which also reduces surface water levels and flood risk. In addition to the Kawaiʻele Outlet, several other discharge points in the canal system provide capacity to release water during heavy rainfall events. When fully operational, the Nohili Pump Station and Kawaiʻele Pump Station discharge an average of 8 and 19.5 million gallons per day, respectively (Hart Crowser, 2020).

#### 3.2.6.3.9 Floodplains-Kamokalā Ridge, Mānā Water Well, Mākaha Ridge, Miloliʻi Ridge, and KPGO

There are no floodplains at the Kamokalā Ridge, Mānā Water Well, Mākaha Ridge, Miloliʻi Ridge, or KPGO parcels.

#### 3.2.6.3.10 Stressors to Coastal Hazards

Stressors to coastal hazards resources are increasing frequency and strength of extreme weather events, increased erosion of natural shorelines, and deterioration of geological features.

Under the Proposed Action, per existing conditions, the Navy would continue to maintain Kawaiʻele Pump Station, which would continue to move water as needed from the easement lands and lower-lying areas of the Mānā Plain. The Navy would also work with stakeholders to continue to manage the movement of sand berms along the shoreline to alleviate flooding as needed. Current operations do not include any new construction within a floodplain or impedance to the functions of floodplains in conveying floodwaters and would continue not to do so under the Proposed Action. There would be no change to the floodplains as a result of the implementation of the Proposed Action and therefore no effects would be expected.

Groundwater would continue to be managed by procedures identified in the PMRF SOPs and BMPs identified in Table 3.7-2 of the 2025 Draft EIS. Current operations do not affect the quality, quantity, and accessibility of groundwater and this would continue under the Proposed Action.

The Navy currently employs policies and plans for mitigation and preventing soil erosion of coastal dunes through REPI projects and the PMRF INRMP as discussed in Table 1-4 of the 2025 Draft EIS. The Proposed Action would not include any development within the coastal zone.

#### 3.2.6.4 Conclusion

Based on the analysis presented in the 2025 Draft EIS, Section 3.7, *Water Resources*, and as summarized above, the Navy and NASA have determined that the Proposed Action would be carried out in a manner that would adhere to federal and applicable State policies for protecting coastal hazards within the coastal zone. The Navy and NASA would continue to work with the public and stakeholders to communicate and develop methods of mitigating and preventing floods within the Proposed Action area including considering comments submitted on the 2025 Draft EIS. The Navy and NASA would ensure ongoing operations consider how the Proposed Action could be affected by coastal hazards including storm wave, tsunami, flood, erosion, hurricane, wind, subsidence, and point and nonpoint source pollution hazards. The Proposed Action would not result in adverse effects to coastal hazards. Therefore, the Proposed Action is consistent to the maximum extent practicable with the coastal hazards enforceable policies.

### 3.2.7 Managing Development

#### 3.2.7.1 Objective

*(A) Improve the development review process, communication, and public participation in the management of coastal resources and hazards.*

#### 3.2.7.2 Policies

*(A) Use, implement, and enforce existing law effectively to the maximum extent possible in managing present and future coastal zone development;*

*(B) Facilitate timely processing of applications for development permits and resolve overlapping or conflicting permit requirements; and*

*(C) Communicate the potential short and long-term impacts of proposed significant coastal developments early in their life-cycle and in terms understandable to the public to facilitate public participation in the planning and review process.*

#### 3.2.7.3 Consistency Review

The following sections summarize the analysis and conclusions of potential effects on managing development resources from stressors associated with the Proposed Action. For additional information, see the 2025 Draft EIS, Section 3.6, *Socioeconomics*.

##### 3.2.7.3.1 Region of Influence

The ROI for managing development resources includes leasehold and easement lands at Main Base, Kamokalā Ridge, Mānā Water Well, Mākaha Ridge, Miloliʻi Ridge, and KPGO.

##### 3.2.7.3.2 Managing Development Resources

The Navy and NASA have jointly prepared the 2025 Draft EIS and published a separate Notice of Intent in accordance with federal and State law including: the NEPA (42 U.S.C. sections 4321 et seq.); all applicable federal environmental laws and agency guidance listed in Appendix E of the 2025 Draft EIS;

HRS Chapter 343 (the State law governing preparation of an EIS and commonly referred to as "HEPA"); and HAR Chapter 11-200.1 (implementing HRS Chapter 343).

The Navy and NASA determined that an EIS is the appropriate level of analysis for the Proposed Action. This determination was made because the EIS process provides for a comprehensive analysis, including opportunities for public input, for the decision makers before issuance of any real estate agreement. HAR section 11-200.1-14(d)(2) supports this determination, which provides "[if the] proposing agency or approving agency determines, through its judgment and experience that an EIS is likely to be required, then the proposing agency may choose to prepare, or an approving agency may authorize an applicant to prepare, an EIS in accordance with subchapter 10, beginning with preparation of an EISPN."

The Navy and NASA solicited public and agency comments during the scoping period from May 8, 2024 through June 17, 2024. The Navy and NASA informed the public about the Proposed Action and how to provide feedback via notifications such as mailed postcards and letter invitations, stakeholder letters, newspapers, social media-related pages, the EIS website (https://www.PMRF-KPGO-EIS.com), and public meetings. Public scoping meetings during the scoping period were held on Kauaʻi on June 4, 5, and 6, 2024, from 5:00 p.m. to 8:00 p.m. (Hawaiʻi Standard Time) in Līhuʻe, Kekaha, and Kapaʻa, respectively. Scoping comments were accepted verbally and/or in writing during the public scoping meetings, via the EIS website, email, and postal mail at NAVFAC, Hawaiʻi.

The Navy and NASA solicited public and agency comments during the Draft EIS public comment period from June 20 and June 23, 2025 through August 7, 2025. The Navy and NASA informed the public about the availability of the Draft EIS and how to provide feedback via notifications such as mailed postcards and letter invitations, stakeholder letters, newspapers, social media-related pages, the EIS website (https://www.PMRF-KPGO-EIS.com), and public meetings. Public meetings during the Draft EIS comment period were held on Kauaʻi on July 15, 16, and 17, 2025 from 5:00 p.m. to 8:00 p.m. (Hawaiʻi Standard Time) in Līhuʻe, Kekaha, and Kapaʻa, respectively. Comments were accepted verbally and/or in writing during the public meetings, via the EIS website, email, and postal mail at NAVFAC, Hawaiʻi.

#### 3.2.7.3.3 Stressors on Managing Development Resources

Stressors on managing development resources can include lack of financial support, access to tools allowing for managed development, and decrease in agency and public involvement. The Navy and NASA operate in a manner that adheres to all federal requirements to ensure development is carried out in a sustainable and directed manner.

### 3.2.7.4 Conclusion

Based on the analysis presented in the 2025 Draft EIS, Section 3.6, *Socioeconomics*, and 1.7, *Public and Agency Participation and Intergovernmental Coordination,* and as summarized above, the Navy and NASA have determined that the Proposed Action would be carried out in a manner that would adhere to federal and applicable State development objectives and policies within the coastal zone. The continued lease of the lands would be in a manner that ensures timely applications for future development and would communicate potential short- and long-term impacts to the public. Through Enhanced Engagements identified in Attachment C of this CD, the Navy and NASA would continue to support the public's opportunity to understand potential impacts to managing development resources. The Proposed Action would not result in adverse effects to development policies and plans. Therefore, the Proposed Action is consistent to the maximum extent practicable with the managing development enforceable policies.

### 3.2.8 Public Participation

#### 3.2.8.1 Objective

*(A) Stimulate public awareness, education, and participation in coastal management.*

#### 3.2.8.2 Policies

*(A) Maintain a public advisory body to identify coastal management problems and to provide policy advice and assistance to the coastal zone management program;*

*(B) Disseminate information on coastal management issues by means of educational materials, published reports, staff contact, and public workshops for persons and organizations concerned with coastal related issues, developments, and government activities; and*

*(C) Organize workshops, policy dialogues, and site-specific mediations to respond to coastal issues and conflicts.*

#### 3.2.8.3 Consistency Review

The following sections summarize the analysis and conclusions of public participation with the Proposed Action. For additional information, see the 2025 Draft EIS, Section 1.7, *Public and Agency Participation and Intergovernmental Coordination*.

##### 3.2.8.3.1 Region of Influence

The ROI for public participation resources includes leasehold and easement lands at Main Base, Kamokalā Ridge, Mānā Water Well, Mākaha Ridge, Miloliʻi Ridge, and KPGO.

##### 3.2.8.3.2 Public Participation Resources

Public scoping meetings during the scoping period for the 2025 Draft EIS were held on June 4, 5, and 6, 2024 on Kauaʻi in Līhuʻe, Kekaha, and Kapaʻa, respectively. Public scoping served as an opportunity to obtain input from the community, agencies, and other stakeholders regarding the issues and resources they would like to see addressed and analyzed throughout the EIS process, as well as identify reasonable alternatives. The public was invited to provide oral and written comments at the scoping meetings. The scoping meetings also served as an opportunity to obtain public input concerning potential effects to historic properties pursuant to Section 106 of the NHPA and HRS section 6E-8. Appendix G of the 2025 Draft EIS includes the materials used at the public scoping meetings.

The Navy and NASA released the 2025 Draft EIS for public review and comment on June 23, 2025. The public comment period on the Draft EIS was initiated through publication in *The Environmental Notice* and publication of the Notice of Availability in the *Federal Register*. Similarly, letters notifying the public of the availability to review and comment on the Draft EIS were sent to individuals, agencies, and organization stakeholders and elected officials, including those individuals, agencies, and organizations who submitted written (or oral) comments during the scoping meetings (see Appendix G of the 2025 Draft EIS). Publication of the Draft EIS initiated the 45-day public review period during which the public and interested agencies and organizations had the opportunity to review the Draft EIS and submit their written and oral comments. Additionally, public meetings were held during the Draft EIS comment period. Meetings were held in-person and were also broadcast live. The public meetings also served as an opportunity to obtain public input concerning potential effects to historic properties pursuant to Section 106 of NHPA and HRS section 6E-8.

The PMRF Cultural Resources department demonstrates extensive community outreach efforts by actively engaging with various stakeholders. Department personnel coordinate with lineal descendants and representatives of local cultural groups, attend community meetings, and consult with NHOs regarding requests to visit culturally significant areas or significant discoveries. The department also facilitates access for educational institutions and cultural practitioners, supports cleanup initiatives, and collaborates with local associations. Additionally, department personnel organize and participate in ceremonies to honor cultural heritage and work closely with NHOs on important projects, such as the construction of burial crypts and repatriation efforts. These activities highlight the department's commitment to preserving and respecting cultural resources through comprehensive and inclusive community engagement as shown in Table 3-7.

### Table 3-7 Ongoing Community Coordination Conducted by the Navy and NASA

| *Description* | *Navy/NASA* |
|---|---|
| **Management of Cultural Resources[1]** | |
| Coordinate with community of the Kona Moku Ahupua'a. | Navy |
| Coordinate with Aha Moku representative (Kona Moku). | Navy |
| Through an existing Comprehensive Agreement for NAGPRA, Navy engages in NHO consultations in the event of discovery of human skeletal remains determined to be of Native Hawaiian descent. | Navy |
| Coordinate access to Nohili or cultural areas for cultural access. | Navy |
| Coordinate with DHHL on debris cleanup. | Navy |
| Coordinate with Leadership Kaua'i and recommend PMRF employees participate in the Leadership Kaua'i program. | Navy |
| In coordination with PMRF Natural Resources Program, coordinate access to Mānā Plain for huli'ia (Hawaiian observation) and 'Āina Momona training. | Navy |
| Coordinate access to Nohili with various research institutions and educational groups to collect intertidal survey data and conduct monitoring to advise and direct management strategies which support intertidal fishery productivity, specifically 'ōpihi. | Navy |
| Engage with Native Hawaiian Community for Native Hawaiian ceremonies related to NAGPRA and long-term cultural resource protection (Native Hawaiian places names). | Navy |
| Coordinate with NHOs on maintenance of Lua Kupapa'u O Nohili (Nohili Burial Crypt) and ongoing coordination for repatriation. | Navy |
| **Management of Natural Resources** | |
| Support of a downed seabird aid/collection station provided and staffed by SOS, as well as wedged-tailed shearwater banding training event. | Navy |
| Coordinate with the Morale, Welfare, and Recreation to place natural resources-related information in and around recreational areas on PMRF, including the visitor check-in building and beach cottages. | Navy |
| Translocation coordination of Laysan albatross to Na 'Āina Kai Botanical Garden and Sculpture Park. | Navy |
| Collaborate working relationship with KISC in regard to invasive species management. | Navy |
| Participate as an active member of the Kaua'i Conservation Alliance, an informal outreach forum for natural resource managers and general public. | Navy |
| Provide educational information to tenants, residents, and visitors regarding lights and seabirds. | Navy |
| Coordinate ungulate control at Mākaha Ridge with PMRF Archery Club. | Navy |
| Host an annual Earth Day and Cleanup event where local environmental organizations and work service projects provide educational presentations to local students. | Navy |

| *Description* | *Navy/NASA* |
|---|---|
| Participate in educational Science, Technology, Engineering, and Mathematics events for local elementary students and Girl Scouts. | Navy |
| Project partnership and collaboration with DLNR-DOFAW, National Fish and Wildlife Foundation, ADC/KAA in regard to REPI Projects. | Navy |
| Support site tours for any local schools or community groups that are interested. | NASA |
| Allow the State to use the site LZ (field) (TMK (4) 1-4-001:013 (por.)) for helicopter operations in support of many State of Hawai'i projects involving State Parks, Forestry, and DLNR. Many of these projects involve control of invasive plant species and wildlife preservation. | NASA |
| Allow full access for first responders for rescue efforts where they fly rescue helicopters in and out of the site as needed for injured or lost persons in the State Park recreational areas. KPGO is one of the few places in the State Park that supports efforts like this. | NASA |

*Note:* [1]Includes activities conducted by PMRF Cultural Resources Management Program, CPLO, and Cultural Protocol Officer.

*Key:* ADC = Agribusiness Development Corporation; DHHL = Department of Hawaiian Home Lands; DLNR = Department of Land and Natural Resources; DOFAW = Department of Forestry and Wildlife; KAA = Kekaha Agricultural Association; KISC = Kaua'i Invasive Species Committee; NAGPRA = Native American Graves Protection and Repatriation Act; NASA = National Aeronautics and Space Administration; NHO = Native Hawaiian Organization; PMRF = Pacific Missile Range Facility; REPI = Readiness and Environmental Protection Integration; SOS = Save Our Shearwaters; TMK = Tax Map Key; USDA = U.S. Department of Agriculture; WS = Wildlife Services.

#### 3.2.8.3.3 Stressors on Public Participation

Stressors on public participation can be financial, public interest, and/or accessibility. The Navy and NASA operate in a manner that adheres to all federal requirements for public participation and invite public comments and review at designated times during the NEPA process. Additionally, the PMRF Cultural Resources department actively engages with various stakeholders, as discussed above. The Proposed Action would not result in any new or additional effects to public participation.

### 3.2.8.4 Conclusion

Based on the analysis presented in the 2025 Draft EIS, Section 1.7, *Public and Agency Participation and Intergovernmental Coordination*, and as summarized above, the Navy and NASA have determined that the Proposed Action would be carried out in a manner that would continue to support the dissemination of information about the potential effects to coastal resources to the public through Enhanced Engagements and PMRF Kaua'i identified in Attachment C in this CD. The Proposed Action would not result in adverse effects to public participation. Additionally, there would be no change to ongoing implementation of current public participation practices currently in place. Therefore, the Proposed Action is consistent to the maximum extent practicable with the public participation enforceable policies.

## 3.2.9 Beach and Coastal Dune Protection

### 3.2.9.1 Objective

*(A) Protect beaches for public use and recreation.*

### 3.2.9.2 Policies

*(A) Locate new structures inland from the shoreline setback to conserve open space and to minimize loss of improvements due to erosion.*

*(B) Prohibit construction of private erosion-protection structures seaward of the shoreline, except when they result in improved aesthetic and engineering solutions to erosion at the sites and do not interfere with existing recreational and waterline activities; and*

*(C) Minimize the construction of public erosion-protection structures seaward of the shoreline.*

#### 3.2.9.3 Consistency Review

The following sections summarize the analysis and conclusions of potential effects on beach and coastal dune resources from stressors associated with the Proposed Action. For additional information, see the 2025 Draft EIS, Section 3.7, *Water Resources* and Section 3.4, *Biological Resources*.

##### 3.2.9.3.1 Region of Influence

The ROI for beach and coastal dune protection includes leases and easements on Main Base. No beaches or coastal dunes exist at Kamokalā Ridge, Mānā Water Well, Mākaha Ridge, Miloli‘i Ridge, and KPGO.

##### 3.2.9.3.2 Beach and Coastal Dune Protection

Under the Proposed Action, the Navy would continue to work with stakeholders as part of ongoing operations to manage the movement of sand berms along the shoreline to alleviate flooding as needed. The Navy is currently assessing options for nature-based solutions to address erosion control. The Proposed Action would not include any new construction within the coastal zone near Polihale Beach or coastal dunes on the easement lands. There would be no change to the condition of beaches or coastal dunes as a result of the implementation of the Proposed Action and therefore no effects would be expected.

##### 3.2.9.3.3 Stressors on Beach and Coastal Dune Protection

Stressors to beach and coastal dune protection include increased frequency and strength of extreme weather events, and increased erosion of natural shorelines. The Navy currently employs policies and plans for mitigation and prevention of soil erosion of coastal dunes through REPI projects and the PMRF INRMP as discussed in Table 1-4 of the 2025 Draft EIS. The Proposed Action would not include any development near and/or within the coastal zone.

#### 3.2.9.4 Conclusion

Based on the analysis presented in the 2025 Draft EIS, Section 3.7, *Water Resources* and Section 3.4, *Biological Resources*, and as summarized above, the Navy and NASA have determined that the Proposed Action would be carried out in a manner that would not negatively affect beach and coastal dune protection within the coastal zone. The Proposed Action would not result in adverse effects to beach and coastal dune protection since the action has no proposed construction. The Navy and NASA would continue to implement projects identified in the REPI program to mitigate potential effects from continued activity on and near beaches and coastal dunes within the ROI. Therefore, the Proposed Action is consistent to the maximum extent practicable with the beach and coastal dune protection enforceable policies.

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# 4 Statement of Consistency

The Navy and NASA conducted an effects test to analyze how and to what degree the Proposed Action would affect Hawai‘i coastal zone uses and resources, as defined in the State’s CZMA enforceable policies. Results of the effects test indicate some ongoing activities that would occur under the Proposed Action could have temporary and local effects on Hawai‘i coastal zone uses and resources. The Navy and NASA would reduce the potential effects of the Proposed Action on coastal zone uses and resources protected under enforceable policies by adhering to SOPs and BMPs, continuing the use of mitigation measures, and implementing Enhanced Engagements, as described in Attachment B and Attachment C of this CD. Therefore, the Proposed Action is consistent to the maximum extent practicable with the enforceable policies of the Hawai‘i Coastal Zone Management program.

**Consistency with Federal Laws and Regulations**

The Navy and NASA are preparing the 2026 Final EIS in accordance with applicable federal and State of Hawai‘i laws, statutes, regulations, and policies applicable to implementation of the Proposed Action.

The Navy and NASA are consulting with the Hawai‘i SHPO as part of their NHPA requirements and coordinating with the DLNR, State Historic Preservation Division to satisfy Section 106 and HRS section 6E-8 requirements. The Navy and NASA are also in coordination with the Aha Moku Council and NHOs.

A description of the Proposed Action’s consistency with applicable laws, policies, and regulations, as well as the names of regulatory agencies responsible for their implementation, are found in Attachment A of this CD.

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# Attachment A

## Table A-1 Federal Regulatory Setting

| *Agency* | *Federal Laws; Land Use Plans; Policies; Controls; and Guidance* | *Relevance to the Proposed Action* | *Relevant Resource(s)* | *Status of Compliance* |
|---|---|---|---|---|
| AASHTO | AASHTO 7th Edition Highway and Street Design "Green Book" | The 7th Edition Highway and Street Design is a comprehensive manual that provides guidance for highway and street design. | Transportation | The Proposed Action would be implemented in accordance with these standards. |
| CEQ and Office of Science and Technology Policy | EO 13840 Ocean Policy to Advance the Economic, Security, and Environmental Interest of the U.S. | Ensure protection, maintenance, and restoration of the health of the ocean. | Water Resources; Biological Resources | The Proposed Action would be implemented in accordance with this Order. |
| CNRH | IAP | The IAP is a guidance document that provides aesthetic and functional direction in site design, architecture, landscape architecture, and signage for new development and renovation efforts. The IAP helps to protect and preserve the installation's natural and historic integrity and ensures a unified appearance for each installation and continuity across the region. | Visual Resources | This EIS was developed in accordance with the guidance in this plan. |
| Department of the Interior | NAGPRA Section 3001 of Title 25, U.S.C. (NAGPRA cultural items) | Governs the disposition of Native Hawaiian human remains and cultural items. It applies to cultural items and human remains discovered on federal or Tribal lands. | Cultural Resources, Archaeological and Historic Resources | This EIS was developed in accordance with this guidance. |
| DoD | DoD Instruction 4715.06 – Environmental Compliance in the U.S. | Establishes policies, assigns responsibilities, and provides procedures for achieving and maintaining environmental compliance in the U.S. | Hazardous Materials and Waste | The Proposed Action would be implemented in accordance with these standards. |
| DoD | DoD Instruction 4715.16 – Cultural Resources Management | Establishes policy, assigns responsibilities, and provides procedures for achieving and maintaining environmental compliance in the U.S. | Cultural Resources, Archaeological and Historic Resources | This EIS was developed in accordance with this guidance. |

| *Agency* | *Federal Laws; Land Use Plans; Policies; Controls; and Guidance* | *Relevance to the Proposed Action* | *Relevant Resource(s)* | *Status of Compliance* |
|---|---|---|---|---|
| DoD | DoD Instruction 6050.05 – DoD Hazard Communication Program | Manages hazardous substances to minimize health and environmental risks and operational costs. Provides known hazard information to military personnel and civilian employees using hazardous chemicals, including engineered nanomaterials. | Hazardous Materials and Waste | The Proposed Action would be implemented in accordance with these standards. |
| DoD | NAVSUP Publication 573 (DLA Instruction 4145.11) – Storage and Handling of Hazardous Materials | Procedures for the receipt, storage, and handling of hazardous materials and wastes by DoD components, installation, and activities. | Hazardous Materials and Waste | The Proposed Action would be implemented in accordance with these standards. |
| DoD | Defense Explosives Safety Regulation 6055.09 | Establishes explosives safety standards for the DoD that are designed to manage explosives-related risk associated with DoD operations and installations by providing protection criteria. | Hazardous Materials and Waste | The Proposed Action would be implemented in accordance with these standards. |
| DoD | DoD Directive 4710.03, Consultation with NHOs (October 25, 2011, incorporating Change 1, August 31, 2018) | Provides policy, prescribes procedures, and assigns responsibilities for the management of archaeological and historic resources located in and on waters and lands under DoD control. It is the policy of DoD to integrate historic preservation requirements with the planning and management of activities under DoD control. | Cultural Resources | Consultation with NHOs, if required for compliance with NHPA according to the PA, would be conducted in accordance with this directive. |
| DoD | Danger Zone and Restricted Area Regulations (33 CFR part 334) | Hazardous materials and wastes exposure, including MEC. | Public Health and Safety | The Proposed Action would be implemented in accordance with these standards. |
| DoD | Final Military Munitions Rule (40 CFR part 266, Subpart M) | Hazardous materials and waste exposure, including MEC. | Public Health and Safety | The Proposed Action would be implemented in accordance with these standards. |

| *Agency* | *Federal Laws; Land Use Plans; Policies; Controls; and Guidance* | *Relevance to the Proposed Action* | *Relevant Resource(s)* | *Status of Compliance* |
|---|---|---|---|---|
| DoD | Naval Ordinance Safety and Security Activity Instruction 8020.15E. Explosives Safety Review, Oversight, and Verification of Munitions Responses | Munition exposure. | Public Health and Safety | The Proposed Action would be implemented in accordance with these regulations. |
| DoD | UFC | UFC documents "provide planning, design, construction, sustainment, restoration, and modernization criteria, and apply to the Military Departments, the Defense Agencies, and the DoD Field Activities." | Transportation | The Proposed Action would be implemented in accordance with these regulations. |
| EPA | 40 CFR section 125.94 | Compliance with BTA Standards. | Water Resources | The Proposed Action would be implemented in accordance with these standards. |
| EPA | National Primary Drinking Water Regulations 40 CFR part 141 | Affects management of water sources by way of setting standards for drinking water quality. Groundwater quality and quantity are regulated under several statutes and regulations, including the SDWA. | Water Resources; Public Health and Safety | The Proposed Action would be implemented in accordance with these regulations. |
| EPA | CWA section 402, NPDES Program (33 U.S.C. section 1342) *includes NPDES and SWPPP | Regulates discharges of pollutants from point source to WOTUS and requires compliance with standards, limitations, and regulations. Also requires development and implementation of a Stormwater Pollution Prevention Plan (SWPPP) for covered activities. NPDES permits authorize discharges of stormwater associated with construction and industrial activities. | Hazardous Materials and Waste; Water Resources | The Proposed Action would be implemented in accordance with these standards. |
| EPA | CWA section 401 (33 U.S.C. section 1341; 40 CFR sections 121.2(a)(3), (4), and (5) Water Quality Certification) | Any federally authorized activity that may result in any discharge into state waters requires a Water Quality Certification. | Biological Resources; Water Resources; Public Health and Safety | The Proposed Action would be implemented in accordance with these standards. |

| *Agency* | *Federal Laws; Land Use Plans; Policies; Controls; and Guidance* | *Relevance to the Proposed Action* | *Relevant Resource(s)* | *Status of Compliance* |
|---|---|---|---|---|
| EPA | The SDWA 42 U.S.C. sections 300f–300j et seq. | SDWA is a federal law that protects public drinking water supplies throughout the U.S.; under the SDWA, EPA sets standards for drinking water quality. | Water Resources | The Proposed Action would be implemented in accordance with these regulations. |
| EPA | Energy Independence and Security Act; PL 110–140 section 438 | Federal agencies are required to reduce stormwater runoff from federal development and redevelopment projects to protect water resources. | Water Resources; Public Health and Safety | The Proposed Action would be implemented in accordance with these regulations. |
| EPA | 40 CFR part 763 as relates to hazardous waste management | Hazardous materials and wastes exposure. The EPA controls hazardous waste including generation, transportation, treatment, storage, and disposal of hazardous waste. | Hazardous Materials and Waste; Public Health and Safety | The Proposed Action would be implemented in compliance with this Act. |
| EPA | Toxic Substances and Disease Registry – CERCLA 42 U.S.C. sections 9601–9675; 40 CFR parts 300–311; 40 CFR part 373 | Hazardous materials and waste exposure. | Public Health and Safety | The Proposed Action would be implemented in compliance with this Act. |
| EPA | Pollution Prevention Act of 1990 (42 U.S.C. sections 13101–13109) | Hazardous materials and waste exposure. | Public Health and Safety | The Proposed Action would be implemented in accordance with these regulations. |
| EPA | Emergency Planning and Community Right-to-Know Act of 1986 (42 U.S.C. section 11001 et seq.; 40 CFR parts 350–372) | Hazardous materials and wastes exposure. Helps communities plan for chemical emergencies and requires industry to report on the storage, use, and releases of hazardous substances to federal, state, and local government. | Hazardous Materials and Waste; Public Health and Safety | The Proposed Action would be implemented in accordance with this Act. |
| EPA | Federal Insecticide, Fungicide, and Rodenticide Act of 1996 (7 U.S.C. section 136 et seq.) | Hazardous materials and waste exposure. | Public Health and Safety | The Proposed Action would be implemented in accordance with these regulations. |

| *Agency* | *Federal Laws; Land Use Plans; Policies; Controls; and Guidance* | *Relevance to the Proposed Action* | *Relevant Resource(s)* | *Status of Compliance* |
|---|---|---|---|---|
| EPA | Federal Environmental Pesticide Control Act of 1972 (7 U.S.C. sections 136–136y) | Hazardous materials and waste exposure. | Public Health and Safety, Hazardous Materials and Waste | The Proposed Action would be implemented in accordance with these regulations. |
| EPA | Federal Facilities Compliance Act of 1992 (PL 102–386) | Hazardous materials and waste exposure. | Public Health and Safety | The Proposed Action would be implemented in accordance with these regulations. |
| EPA | Noise Control Act of 1972 (PL 92–574, 42 U.S.C. section 4901 et seq.) and Amendments of 1978 (PL 95–609) | Establishes a national policy to promote an environment for all Americans free from noise that jeopardizes their health and welfare. | Public Health and Safety | The Proposed Action would be implemented in compliance with this Act. |
| EPA | 40 CFR part 50 | NAAQS. | Air Quality and Greenhouse Gases | The Proposed Action would not cause a violation of the NAAQS. |
| EPA | 40 CFR part 60 | New Source Performance Standards. | Air Quality and Greenhouse Gases | The Proposed Action would be implemented in accordance with these standards. |
| EPA | 40 CFR parts 61–63 | NESHAPs. | Air Quality and Greenhouse Gases | The Proposed Action would be implemented in accordance with these standards. |
| EPA | 40 CFR part 70 | State Operating Permits. | Air Quality and Greenhouse Gases | The Proposed Action would be implemented in accordance with these requirements. |
| EPA | 40 CFR part 93.158 | Federal actions are required to conform with the approved SIP for those areas of the U.S. designated as nonattainment or maintenance areas for any criteria air pollutant under the CAA. | Air Quality and Greenhouse Gases | The Proposed Action would be implemented in accordance with these requirements. |
| EPA | The Pollution Prevention Act, 42 U.S.C. section 13101 et seq. | The Pollution Prevention Act focuses on reducing the amount of pollution through changes in production, operation, and raw materials use. | Hazardous Materials and Waste | The Proposed Action would be implemented in compliance with this Act. |

| *Agency* | *Federal Laws; Land Use Plans; Policies; Controls; and Guidance* | *Relevance to the Proposed Action* | *Relevant Resource(s)* | *Status of Compliance* |
|---|---|---|---|---|
| EPA; DoD | CWA (33 U.S.C. sections 1313, 1314, 303(d), 305(b) and most recent 304(a) list) | Mitigates impacts to surface water from construction activities and discharge to navigable waters. | Hazardous Materials and Wastes; Water Resources | The Proposed Action would be implemented in accordance with these regulations. |
| Federal Law | CWA (33 U.S.C. section 1344) | CWA establishes the basic structure for regulating discharges of pollutants into the WOTUS and sets quality standards for surface waters. | Water Resources | This EIS was developed in accordance with this guidance. |
| Federal Law | NHPA, as amended (54 U.S.C. section 300101 et seq.) | Establishes national policy for the preservation of historic properties. Section 106 of the NHPA requires federal agencies to consider the effects of proposed undertakings, mitigate adverse effects of projects, and afford the ACHP and interested parties the opportunity to comment. | Cultural Resources | Compliance with the NHPA will be conducted according to the 2012 CNRH PA and any applicable amendments. |
| Federal Law | Protection of Historic Properties, 36 CFR section 800 | Provides procedures for federal actions subject to Section 106 of the NHPA. | Archaeological and Historic Resources | This EIS was developed in accordance with this guidance. |
| Federal Law | NAGPRA of 1990 (25 U.S.C. sections 3001–3013) | Provides for the protection and repatriation of Native Hawaiian human remains and cultural items discovered on federal or Tribal lands or currently curated by federal or federally assisted curation facilities. | Cultural Resources | The Proposed Action would be implemented in accordance with this law and its implementing regulation. |
| Federal Law | Archaeological Resources Protection Act of 1979 (16 U.S.C. sections 470aa-470ll) | Provides for the protection of archaeological resources and sites on public lands by requiring permits from the federal land manager for excavation or removal of archaeological resources. | Cultural Resources | The Proposed Action would be implemented in accordance with this law and its implementing regulation. |

| *Agency* | *Federal Laws; Land Use Plans; Policies; Controls; and Guidance* | *Relevance to the Proposed Action* | *Relevant Resource(s)* | *Status of Compliance* |
|---|---|---|---|---|
| Federal Law | NEPA | NEPA of 1969 orders the Federal Government to utilize a systematic and interdisciplinary approach to analyze decision making and planning for major federal actions that may have an impact on the environment. | All Resources | This EIS has been prepared in accordance with federal and state laws including: NEPA of 1969 (42 U.S.C. section 4321 et seq.). |
| FEMA | Floodplain Management, EO 11988 | Requires federal agencies to avoid long- and short-term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct and indirect support of floodplain development. Flood potential of a site is usually determined by the 100-year floodplain, which is defined as the area that has a 1 percent chance of inundation by a flood event in a given year. | Water Resources | The Proposed Action would be implemented in accordance with this Order. |
| FEMA | The National Flood Insurance Act 42 U.S.C. section 4001 et seq. | The National Flood Insurance Act establishes the NFIP, a voluntary floodplain management program for communities that is implemented by FEMA. | Water Resources | The Proposed Action would be implemented in accordance with this regulation. |
| FHWA | MUTCD for Streets and Highways, 11th Edition | Defines national standards for traffic control devices on streets, highways, and site roadways open to public travel. | Transportation | The Proposed Action would be implemented in accordance with this guideline. |
| NASA | NASA's Procedures for Implementing NEPA, 14 CFR part 1216 et seq. | Regulations governing NASA's compliance with NEPA and CEQ's 40 CFR parts 1500–1508. | All Resources | The Proposed Action would be implemented in accordance with these regulations. |
| NASA | NASA Environmental Management, NPD 8500.1 | NASA's environmental management policy. | All Resources | The Proposed Action would be implemented in accordance with these policies. |
| NASA | NASA NEPA Management Requirements, NPR 8580.1 | Establishes procedures and responsibilities for complying with requirements of NEPA, CEQ's implementing regulations, EO 12114 – Environmental Effects Abroad of Major Federal Actions, and NPD 8500.1. | All Resources | The Proposed Action would be implemented in accordance with these requirements. |

| *Agency* | *Federal Laws; Land Use Plans; Policies; Controls; and Guidance* | *Relevance to the Proposed Action* | *Relevant Resource(s)* | *Status of Compliance* |
|---|---|---|---|---|
| Navy | PMRF INRMP 2023 | The INRMP, developed in accordance with the Sikes Act, establishes a framework for natural resource management at PMRF. It serves as a repository for natural resource information, provides guidance on how PMRF is to meet compliance requirements, and sets management goals, required actions, and resources necessary to protect and manage the installation's natural resources. | Biological Resources | This EIS was developed in accordance with the guidance. |
| Navy | PMRF Installation Development Plan | Land use constraints. | Land Use and Access | This EIS was developed in accordance with the guidance in this plan. |
| Navy | OPNAVINST 11010.40A | Establishes an encroachment management program to ensure operational maintenance that has direct bearing on land use planning on installations. | Land Use and Access | The Proposed Action would be implemented in accordance with this policy. |
| Navy | OPNAVINST 11010.36C | Provides guidance administering the AICUZ program, which recommends land uses that are compatible with noise levels, accident potential, and obstruction clearance criteria for military airfield operations. | Land Use and Access | The Proposed Action would be implemented in accordance with this policy. |
| Navy | OPNAVINST 3550.1A | Provides guidance for the RAICUZ program. This program includes range safety and noise analyses and provides land use recommendations that are compatible with Range Compatibility Zones and noise levels associated with military range operations. | Land Use and Access | The Proposed Action would be implemented in accordance with this policy. |

| *Agency* | *Federal Laws; Land Use Plans; Policies; Controls; and Guidance* | *Relevance to the Proposed Action* | *Relevant Resource(s)* | *Status of Compliance* |
|---|---|---|---|---|
| Navy | Environmental Readiness Program Manual (OPNAV M 5090.1) | Navy's policy guidance for environmental readiness. It discusses requirements, delineates responsibilities, and issues policy guidance for the management of the environmental, natural, and cultural resources for all Navy ships and shore activities. | All Resources | The Proposed Action would be implemented in accordance with this manual. |
| Navy | SECNAVINST 4000.35B DON Cultural Resource Program | Provides clarification on the responsibilities for management of historic buildings, structures, districts, archaeological sites and artifacts, historic ships and aircraft, and other cultural resources. | Cultural Resources | The Proposed Action would be implemented in accordance with this policy. |
| Navy | SECNAVINST 11010.14B DON Policy for Consultation with Federally Recognized Indian Tribes, Alaska Native Tribal Entities, and NHOs | Provides policy, procedures, and responsibilities when consulting with representatives of NHOs. | Cultural Resources | The Proposed Action would be implemented in accordance with this policy. |
| NAVFAC | PW6 600-01, Public Works Utilities Criteria for Design and Construction of Electrical, Sewer, and Water, April 10, 2006 | Utilities design criteria. | Utilities | The Proposed Action would be implemented in accordance with these requirements. |
| NAVFAC | PW6 600-01 Public Works Utility Criteria for Design and Construction of Water Utilities | Utilities design criteria. | Utilities | The Proposed Action would be implemented in accordance with these requirements. |
| NOAA | Marine Mammal Protection Act (16 U.S.C. section 1361–1407) | Presence of one marine mammal, Hawaiian monk seal (*Neomonachus schauinslandi*), which is known to appear in study area. | Biological Resources | The Proposed Action would be implemented in accordance with requirements of the MMPA to protect the Hawaiian monk seal. |

| *Agency* | *Federal Laws; Land Use Plans; Policies; Controls; and Guidance* | *Relevance to the Proposed Action* | *Relevant Resource(s)* | *Status of Compliance* |
|---|---|---|---|---|
| NOAA | National Coastal Zone Management Act (16 U.S.C. section 1451, 15 CFR part 930) | Federal actions or activities that affect any land or water use or natural resource of the coastal zone are to be carried out in a manner consistent to the maximum extent practicable with the enforceable policies of federally approved state coastal management program. | Hazardous Materials and Waste; Land Use and Access; Water Resources | The Proposed Action would be implemented in accordance with this Act to the extent practicable, consistent with the enforceable policies of Hawai'i's federally approved coastal management program. |
| NOAA NMFS; USFWS | ESA (16 U.S.C. section 1531 et seq.) | Potential effects to federally listed species. | Biological Resources; Land Use and Access | The Proposed Action would be implemented in compliance with the ESA. No new effects to federally listed species on leasehold or easement lands would occur as a result of the Proposed Action. |
| NOAA NMFS; HDOH | EO 12088, Federal Compliance with Pollution Control Standards | Ensures federal compliance with applicable pollution control standards. Related to impacts from sediment resuspension and runoff due to operations. | Water Resources | The Proposed Action would be implemented in accordance with this Order. |
| OSHA | Occupational Safety and Health Act of 1970 (PL 91-596); OSHA Occupational Noise Exposure (29 CFR section 1910.95); OSHA Hazard Communication (29 CFR section 1910.1200) | Workforce safety, including occupational noise exposure limits and hazard communication. | Public Health and Safety; Hazardous Materials and Waste. | The Proposed Action would be implemented in accordance with these requirements. |
| Office of the President | EO 11990, Protection of Wetlands (42 FR 26961, May 24, 1977) | Requires federal agencies to adopt a policy to avoid long- and short-term adverse impacts associated with destruction and modification of wetlands and to avoid the direct and indirect support of new construction in wetlands whenever there is a practicable alternative. | Water Resources; Hazardous Materials and Waste | The Proposed Action would be implemented in accordance with this Order. |

| *Agency* | *Federal Laws; Land Use Plans; Policies; Controls; and Guidance* | *Relevance to the Proposed Action* | *Relevant Resource(s)* | *Status of Compliance* |
|---|---|---|---|---|
| Office of the President | EO 13112, Invasive Species (64 FR 6183; February 3, 1999) | Requires federal agencies whose actions may affect the status of invasive species to identify those actions and use relevant programs and authorities to prevent and manage the introduction of invasive species in consultation with the Invasive Species Council. | Biological Resources | The Proposed Action would be implemented in accordance with this Order. |
| Range Commanders Council | Range Commanders Council Standard 321-97 | Range Commanders Council Standard 321-97 sets requirements for minimally acceptable risk criteria to occupational and nonoccupational personnel, test facilities, and non-military assets during range operations. | Public Health and Safety | The Proposed Action would be implemented in accordance with this policy. |
| United States Congress | An Act to Provide for the Admission of the State of Hawai‘i into the Union (Act of March 18, 1959, Pub L 86-3, 73 Stat 4) | The “Admission Act” admits the State of Hawai‘i into the U.S. Section 5(b) of the Act conveys certain lands into state ownership for the public trust. In Section 5(f) of the Act, those lands are held by the State as a public trust for certain purposes. | Land Use and Access | The Proposed Action would be implemented in accordance with the public trust obligations. |
| USDA, NRCS | Farmland Protection Policy Act (7 U.S.C. sections 4201–4209 7) | Requires federal agencies to evaluate the adverse effects of their activities on farmland, which includes prime and unique farmland and farmland of statewide or local importance, and to consider alternative actions that could avoid adverse effects. | Land Use and Access | The Proposed Action would be implemented in accordance with this Act. This EIS includes an analysis to determine if federal actions would have adverse effects on farmland, which includes prime and unique farmland and farmland of statewide or local importance. |
| USDOT | 49 CFR parts 100–109 | 49 CFR sections 100–109 address the interstate shipment of hazardous substances. | Hazardous Materials and Waste | The Proposed Action would be implemented in accordance with these standards. |
| USDOT | 49 CFR sections 171.1–172.558 | Regulates and ensures the safe and secure movement of hazardous materials to industry and consumers by all modes of transportation, including pipelines. | Hazardous Materials and Waste | The Proposed Action would be implemented in accordance with these regulations. |

| *Agency* | *Federal Laws; Land Use Plans; Policies; Controls; and Guidance* | *Relevance to the Proposed Action* | *Relevant Resource(s)* | *Status of Compliance* |
|---|---|---|---|---|
| USDOT | USDOT Hazardous Materials Ground Transport Regulations/Hazardous Materials Transportation Act (49 CFR parts 100–185) | Transportation safety; hazardous materials and waste exposure. | Public Health and Safety; Transportation; Hazardous Materials and Waste | The Proposed Action would be implemented in accordance with these regulations. |
| USDOT | Federal Hazardous Materials Transportation Act, (49 U.S.C section 5101 et seq.) | The Federal Hazardous Materials Transportation Act gives HDOT the authority to regulate shipments of hazardous substances by air, sea, highway, or rail. | Hazardous Materials and Waste | The Proposed Action would be implemented in accordance with these regulations. |
| USFWS | Migratory Bird Treaty Act of 1918 (16 U.S.C. sections 703–712) | Potential impacts to bird species protected by the Act. | Biological Resources; Land Use and Access | The Proposed Action would be implemented in accordance with this Act. |
| USFWS | Sikes Act of 1960 (16 U.S.C sections 670a-670o) | The Sikes Act develops cooperative planning between the Department of the Interior and DoD with state agencies in developing and maintenance of fish and wildlife resources on military installations. | Land Use and Access | This EIS has been prepared in accordance with this Act. |

| *Agency* | *Federal Laws; Land Use Plans; Policies; Controls; and Guidance* | *Relevance to the Proposed Action* | *Relevant Resource(s)* | *Status of Compliance* |
|---|---|---|---|---|
| USFWS | EO 13186: Responsibilities of Federal Agencies to Protect Migratory Birds (January 10, 2001) | Potential impacts to migratory birds. | Biological Resources | The Proposed Action would be implemented in accordance with this Order. |

*Key*: AASHTO = American Association of State Highway and Transportation Officials; ACHP = Advisory Council on Historic Preservation; AICUZ = Air Installations Compatible Use Zone; BTA = Best Technology Available; CAA = Clean Air Act; CEQ = Council on Environmental Quality; CERCLA = Comprehensive Environmental Response, Compensation, and Liability Act; CFR = Code of Federal Regulations; CNRH = Commander, Navy Region Hawaii; CWA = Clean Water Act; DLA = Defense Logistics Agency; DoD = Department of Defense; DON = Department of the Navy; EIS = Environmental Impact Statement; EO = Executive Order; EPA = U.S. Environmental Protection Agency; ESA = Endangered Species Act; FEMA = Federal Emergency Management Agency; FHWA = Federal Highway Administration; FR = Federal Register; HDOH = Hawai'i Department of Health; HDOT = Hawai'i Department of Transportation; IAP = Installation Appearance Plan; INRMP = Integrated Natural Resources Management Plan; MEC = munitions and explosives of concern; MMPA = Marine Mammal Protection Act; MUTCD = Manual on Uniform Traffic Control Devices; Navy = U.S. Department of the Navy; NAAQS = National Ambient Air Quality Standards; NAGPRA = Native American Graves Protection and Repatriation Act; NASA = National Aeronautics and Space Administration; NAVSUP = Naval Supply Systems Command; NEPA = National Environmental Policy Act; NESHAP = National Emission Standards for Hazardous Air Pollutants; NFIP = National Flood Insurance Program; NHO = Native Hawaiian Organization; NHPA = National Historic Preservation Act; NMFS = National Marine Fisheries Service; NOAA = National Oceanic and Atmospheric Administration; NPD = NASA Policy Directive; NPDES = National Pollutant Discharge Elimination System; NRCS = Natural Resources Conservation Service; OPNAV M = Office of the Chief of Naval Operations Manual; OPNAVINST = Office of the Chief of Naval Operations Instruction; OSHA = Occupational Safety and Health Administration; PA = Programmatic Agreement; PL = Public Law; PMRF = Pacific Missile Range Facility; RAICUZ = Range Air Installations Compatible Use Zone; SDWA = Safe Drinking Water Act; SECNAVINST = Secretary of the Navy Instruction; SIP = State Implementation Plan; SWPPP = Stormwater Pollution Prevention Plan; U.S. = United States; U.S.C. = United States Code; UFC = Unified Facilities Criteria; USDA = U.S. Department of Agriculture; USDOT = U.S. Department of Transportation; USFWS = U.S. Fish and Wildlife Service; WOTUS = Waters of the U.S.

## Table A-2 State and County Regulatory Setting

| *Agency* | *State, Local, and Regional Laws; Land Use Plans; Policies; Controls; and Guidance* | *Relevance to the Proposed Action* | *Relevant Resource(s)* | *Status of Compliance* |
|---|---|---|---|---|
| County of Kaua'i | Kaua'i Kakou – Kaua'i County General Plan 2018 | The Kaua'i General Plan serves as the county's guiding policy framework concerning growth, land use, and development issues. The plan seeks to enhance and improve Kaua'i's physical and natural environment and overall quality of life. The plan is built upon a countywide vision and goals statement and sets forth key objectives and actions.<br>The General Plan underwent a comprehensive update in 2018.<br>Although the development plan does not apply to projects on federal property, protection of mountain and ocean views that benefit the visual quality of the ROI should be considered. | Visual Resources; Land Use and Access | This EIS conforms with the guidance in this plan. |
| County of Kaua'i | West Kaua'i County Community Plan 2020 | The Community Plan represents the County's land use policy at the regional level. It is a long-range plan that considers a 20-year planning timeframe to the year 2040. The Community plan is one of five community plans that guide the County's land use decisions and infrastructure investment priorities, while also advancing the goals of the Kaua'i County General Plan. | Visual Resources; Land Use and Access | The Proposed Action would conform with these standards. |
| County of Kaua'i | County of Kaua'i Street Design Manual | Provides guidance for street design in Kaua'i. It is designed to streamline roadway design and approval. | Transportation | The Proposed Action would conform with these standards. |

| *Agency* | *State, Local, and Regional Laws; Land Use Plans; Policies; Controls; and Guidance* | *Relevance to the Proposed Action* | *Relevant Resource(s)* | *Status of Compliance* |
|---|---|---|---|---|
| County of Kaua'i | County of Kaua'i Comprehensive Zoning Ordnance (Chapter 8, Kaua'i County Code 1987) | Provides regulations and standards for land development and the construction of buildings and other structures in the County of Kaua'i. | Land Use and Access | The Proposed Action would conform with these standards. |
| County of Kaua'i | Special Management Area Rules and Regulations of the County of Kaua'i, pursuant to HRS Chapter 205A | It is state policy to preserve, protect, and where possible, restore the natural resources of the coastal zone of Hawai'i. Special controls on development along the shoreline are necessary to avoid coastal zone damage. | Land Use and Access | The Proposed Action would conform with these standards. |
| County of Kaua'i | Shoreline Setback and Sea Level Rise constraints, pursuant to HRS Chapter 205A | It is city policy to reduce exposure to coastal hazards, increase resiliency of the community, and protect and preserve the natural shoreline by creating shoreline setback rules. | Land Use and Access | The Proposed Action would conform with these standards. |
| County of Kaua'i Transportation Agency – The Kaua'i Bus | County of Kaua'i Transportation Agency standards for public transit operation (physical and operational) and DTS Roadway and Traffic Operations Guidelines | County of Kaua'i Transportation Agency operates the Kaua'i Bus, the public transit system that provides service to PMRF. | Transportation | The Proposed Action would conform with these standards. |
| HDOH-CWB | Hawai'i Water Quality Standards (HAR 11- 55; HRS Chapter 342D) | Regulates discharges of pollutants from point source to WOTUS and requires compliance with standards, limitations, and regulations. NPDES permits authorized discharges of stormwater associated with construction and industrial activities. | Hazardous Materials and Waste; Water Resources | The Proposed Action would conform with these standards. |
| HDOH-CWB | Hawai'i Water Quality Standards (HAR 11-54; HRS Chapter 342D) | Water pollutants that enter state waters from all sources, point or non-point, shall comply with applicable requirements as established in HAR Chapter 11-54. | Biological Resources; Water Resources; Public Health and Safety | The Proposed Action would conform with these standards. |

| *Agency* | *State, Local, and Regional Laws; Land Use Plans; Policies; Controls; and Guidance* | *Relevance to the Proposed Action* | *Relevant Resource(s)* | *Status of Compliance* |
|---|---|---|---|---|
| HDOH | CWA section 401 (33 U.S.C. section 1341, 40 CFR Sections 121.2(a)(3), (4), and (5) Water Quality Certification); Water Pollution Control Act (33 U.S.C. section 1251 et seq.) | Any federally authorized activity that may result in a discharge into state waters requires a Water Quality Certification. Potential impacts from the Proposed Action may occur through impacts on water quality. The Kawaiʻele Pumping Station as well as Canal discharge may fall under these regulations. | Biological Resources; Hazardous Materials and Waste | The Proposed Action would conform with these regulations. |
| HDOH | 22 HAR Title 11, Chapter 59 | State AAQS. | Air Quality and Greenhouse Gases | The Proposed Action would conform with these regulations. |
| HDOH | 22 HAR Title 11, Chapter 60.1 | Air Pollution Control. | Air Quality and Greenhouse Gases | The Proposed Action would conform with these regulations. |
| HDOH | HAR Chapter 11-260.1 to 279.10 | The HAR guidebook provides guidance on the standards for the management of used oil. | Hazardous Materials and Waste | The Proposed Action would conform with these regulations. |
| HDOH | Hawaiʻi Hazardous Waste Management Act, HRS Chapter 19, Title 342J | Hawaiʻi State Hazardous Waste Management Program is a preventive as well as a regulatory program that gives priority to providing technical assistance to generators of hazardous waste to ensure safe and proper handling. | Hazardous Materials and Waste | The Proposed Action would conform with these regulations. |
| HDOH | Solid Waste Management Control HAR 11-58 | Establishes minimum standards governing design, construction, installation, operation, and maintenance of solid waste disposal, recycling, reclamation, and transfer systems. | Hazardous Materials and Waste | The Proposed Action would conform with these regulations. |
| HDOT | HDOT traffic operational and safety standards and HDOT roadway design standards | Regional and sub-regional roadways providing access to PMRF are under the jurisdiction of HDOT, specifically Kuhio Highway. | Transportation | The Proposed Action would conform with these standards. |

| *Agency* | *State, Local, and Regional Laws; Land Use Plans; Policies; Controls; and Guidance* | *Relevance to the Proposed Action* | *Relevant Resource(s)* | *Status of Compliance* |
|---|---|---|---|---|
| State of Hawai'i, DLNR | State of Hawai'i Endangered Species Laws (HAR 12-124, Exhibit 2 and HRS Section 195D) | Potential effects to state-listed species. | Biological Resources; Land Use and Access | The Proposed Action would conform with these requirements. Potential effects to state-listed species on leased lands are addressed in this EIS. |
| State of Hawai'i | HRS 128D-7 | Hawai'i State Contingency Plan, ensures the state complies with the National Contingency Plan. The Oil Pollution Prevention Regulation, 40 CFR part 112, addresses specific requirements and provisions for the preparation of SPCC Plans. | Hazardous Materials and Waste | The State's obligations in relation to this Proposed Action would be implemented in accordance with this law. |
| State of Hawai'i | HRS 10-13.5 | Mandates that twenty per cent of all funds derived from the public land trust shall be expended by the Office of Hawaiian Affairs. | Land Use and Access | The State's obligations in relation to this Proposed Action would be implemented in accordance with this law. |
| State of Hawai'i | HRS 171-95 | HRS 171-95 sets out a framework for selling, leasing, exchanging, or modifying leases and easements to governments, agencies, utilities, and renewable energy providers. | Land Use and Access | This EIS has been prepared to conform with this guidance. |
| State of Hawai'i | HRS 205 | HRS 205 sets out standards for land use management in Hawai'i; it classifies all lands into one of four districts, Urban, Rural, Conservation, and Agricultural. | Land Use and Access | This EIS has been prepared to conform with this guidance. |
| State of Hawai'i | HRS 183C | HRS 183C establishes the role of the DLNR in managing the Conservation District. | Land Use and Access | The Proposed Action would conform with this statute. |
| State of Hawai'i | HRS 46-4 | Grants zoning power to the counties. | Land Use and Access | The Proposed Action would conform with this statute, given the action of DLNR to effectuate any of the action alternatives. |

| *Agency* | *State, Local, and Regional Laws; Land Use Plans; Policies; Controls; and Guidance* | *Relevance to the Proposed Action* | *Relevant Resource(s)* | *Status of Compliance* |
|---|---|---|---|---|
| State of Hawai‘i | The Constitution of the State of Hawai‘i, Article XII Section 7, Hawaiian Affairs, Traditional and Customary Rights | Article XII Section 7 guarantees traditional and customary native Hawaiian rights, subject to the right of the state to regulate such rights. Ka Pa‘akai is a legal framework that government agencies in Hawai‘i must follow when considering proposals that may impact the exercise of Native Hawaiian traditional and customary rights. | Cultural Resources | This EIS has been prepared in conformance with this guidance. |
| State of Hawai‘i | The State Water Code HRS Chapter 174 | The State Water Code was enacted into law for the purpose of protecting Hawai‘i water resources. It provides for the legal basis and establishment of the State of Hawai‘i’s Commission on Water Resource Management. | Water Resources | This EIS has been prepared in conformance with this guidance. |
| State of Hawai‘i | Hawai‘i Administrative Code Title 19, 342F Noise Pollution | Describes environmental noise levels appropriate for noise sensitive land uses. | Public Health and Safety | The Navy considered applicable state regulations for noise-sensitive land uses. Sources of noise and the associated sensitive receptors in the human environment are analyzed in this EIS. |
| State of Hawai‘i – BLNR | HRS Chapter 343 commonly referred to as The Hawai‘i Environmental Policy Act (“HEPA”). The trigger for compliance is the use of State lands. | The State of Hawai‘i BLNR will be the accepting agency for this EIS document for HRS Chapter 343. | All Resources | This EIS was developed in conformance with the HRS Chapter 343. |
| State of Hawai‘i – DLNR | Exhibits 1-3, Title 13, HAR Chapter 124 “Indigenous Wildlife, Endangered and Threatened Wildlife, and Introduced Wild Birds, and Introduced Wildlife” | These rules: a) describe current conservation status and descriptions of Indigenous wildlife and birds; and b) prohibit, unless permitted by the DLNR, any attempt to take, possess, process, sell, offer for sale, or transport any endangered or threatened species, any young or egg of any endangered or threatened species. | Biological Resources | This EIS was developed in conformance with this guidance. |

| *Agency* | *State, Local, and Regional Laws; Land Use Plans; Policies; Controls; and Guidance* | *Relevance to the Proposed Action* | *Relevant Resource(s)* | *Status of Compliance* |
|---|---|---|---|---|
| State of Hawai'i – DLNR, Historic Preservation Division | HRS 6E-8 | HRS 6E-8 requires any project involving a permit, license, certificate, land use change, subdivision, or other entitlement for use, which may affect historic property, aviation artifacts, or burial site, shall notify the Department of Historic Preservation and allow an opportunity for review and comment on the effect of the proposed project. | Archaeological and Historic Resources | This EIS has been prepared in conformance with this guidance. |
| State of Hawai'i – Office of Planning and Sustainable Development | Coastal Zone Management Act section 307(c)(1), HRS Chapter 205A – Coastal Zone Management (CZM); CZM Program | The Hawai'i CZM program was enacted to provide a common focus for state and county actions dealing with land and water uses and activities. The CZM is the guiding perspective for the design and implementation of allowable land and water uses and activities throughout the state. The CZM area encompasses the entire state because there is no point of land more than 30 miles from the ocean, a definite land-sea connection exists throughout the state. The project exists within the CZM area. | All Resources | A CZM federal consistency review and application will be completed and submitted to the State of Hawai'i CZM program office. Office of Planning and Sustainable Development is the lead state agency with the authority to conduct CZMA federal consistency reviews. |

*Key*: AAQS = ambient air quality standards; BLNR = Board of Land and Natural Resources; CWA = Clean Water Act; CWB = Clean Water Branch; CZM = Coastal Zone Management; CZMA = Coastal Zone Management Act; DLNR = Department of Land and Natural Resources; DTS = Department of Transportation Services; EIS = Environmental Impact Statement; HAR = Hawai'i Administrative Rules; HDOH = Hawai'i Department of Health; HDOT = Hawai'i Department of Transportation; HEPA = Hawai'i Environmental Policy Act; HRS = Hawai'i Revised Statutes; NPDES = National Pollutant Discharge Elimination System; PMRF = Pacific Missile Range Facility; ROI = region of influence; SPCC = Spill Prevention, Control, and Countermeasure; U.S.C. = United States Code; WOTUS = Waters of the U.S.

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# Attachment B

## Table B-1 List of Relevant Mitigation Measures from Previous Environmental Review Documents for Activities in the Project Area

| *Document* | *Type of Environmental Review Document (HEPA/NEPA)* | *Location on Leasehold and Easement Lands in Project Area* | *Resource* | *Potential Effects from Ongoing Activities* | *Existing Mitigation Measures* |
|---|---|---|---|---|---|
| 1993 Final EIS for the Restrictive Easement | HEPA | Main Base | Hazardous Materials and Waste | Hazardous materials and waste may be introduced from missiles that have landed in the GHA as a result of early flight termination[10]. | Hazardous waste resulting from early flight termination is cleared from the area in accordance with the cleanup procedures described in the 1992 Final EIS for the Strategic Target System[11]. |
| 1993 Final EIS for the Restrictive Easement | HEPA | Main Base | Land Use and Access | Use of the southern end of Polihale State Park would be interrupted 20 minutes prior to launch. The interruptions would occur up to 30 times per year and would include access to and from the State Park. No significant effects to recreational resources would occur because the total closure time for the southern end of the State Park would be approximately 15 hours per year. No persons within the developed camping or picnicking areas would be affected and people entering and exiting the park would only be | People within the easement are notified 3 hours prior to launch. |

[10] Early flight termination is defined as the purposeful, controlled termination of a missile launch. The missile flight safety officer controls early flight termination. The missile flight safety officer maintains positive control over the missile at all times and continuously monitors the flight trajectory in relation to the predicted impact area for debris. If the missile approaches an unsafe trajectory, the flight will be terminated.

[11] https://pmrf-kpgo-eis.com/media/z2rbc1ea/1992-strategic-target-system-feis-volume-1.pdf

| *Document* | *Type of Environmental Review Document (HEPA/NEPA)* | *Location on Leasehold and Easement Lands in Project Area* | *Resource* | *Potential Effects from Ongoing Activities* | *Existing Mitigation Measures* |
|---|---|---|---|---|---|
| | | | | delayed during the short closure period. | |
| 1993 Final EIS for the Restrictive Easement | HEPA | Main Base | Public Health and Safety | Potential effects to public health and safety from missile launch activities, such as exposure to hazardous wastes or fire if safety procedures are not followed. | Road closure and surveillance flights ~~will~~ occur prior to launch to ensure GHAs are clear. Fire crews will be on stand-by in case of fire. |
| 1998 PMRF Enhanced Capability Final EIS | HEPA/NEPA | Main Base | Archaeological and Architectural Resources | Potential effects, such as accidental damage, to archaeological resources from ground disturbance if work occurs in a culturally sensitive area. | Personnel are briefed that they are working in a culturally sensitive area and on the federal laws protecting the resources within that area. |
| 1998 PMRF Enhanced Capability Final EIS | HEPA/NEPA | Main Base | Archaeological and Architectural Resources | Fire damage to archaeological or cultural resources could occur from missile launch if fire management mitigations are not followed. | Water is sprayed on vegetation within the immediate vicinity surrounding the launch vehicle prior to launch. In the event ignition of vegetation does occur, fire suppression personnel are instructed to use an open spray nozzle, whenever possible, rather than a directed stream to quell the fire. This minimizes erosion damage to areas (such as the sand dunes) and prevents possible destruction of potential cultural resources. |
| 1998 PMRF Enhanced Capability Final EIS | HEPA/NEPA | Kamokalā Ridge | Archaeological and Architectural Resources | Risk of incidental removal of cultural materials or destruction of sites by personnel during construction or operation. | Adherence to ICRMP procedures, NAGPRA, and briefings to construction and operational personnel. |
| 1998 PMRF Enhanced Capability Final EIS | HEPA/NEPA | Main Base | Biological Resources | Noise from launches may startle nearby wildlife but no significant effects would occur due to the infrequency and short duration of | The use of shielded lighting mitigates impacts to the Newell's shearwater. |

| *Document* | *Type of Environmental Review Document (HEPA/NEPA)* | *Location on Leasehold and Easement Lands in Project Area* | *Resource* | *Potential Effects from Ongoing Activities* | *Existing Mitigation Measures* |
|---|---|---|---|---|---|
| | | | | launch events. Project floodlights could disorient the threatened Newell's shearwater | |
| 1998 PMRF Enhanced Capability Final EIS | HEPA/NEPA | Main Base | Biological Resources | Vegetation fires near launch pad may occur during launches. | The installation of a portable blast deflector on the launch pad could protect the vegetation of the adjacent sand dunes. The potential for starting a fire would be further reduced by clearing dry vegetation from around the launch pad. Spraying the vegetation adjacent to the launch pad with water just before launch would reduce the risk of ignition. Emergency fire crews are available during all Strategic Target system launches to quickly extinguish any fire and minimize its effects. An open (spray) nozzle is used, when possible, rather than a directed stream when extinguishing fires, to avoid erosion damage to the sand dunes and to prevent possible destruction of cultural resources. |
| 1998 PMRF Enhanced Capability Final EIS | HEPA/NEPA | Main Base | Hazardous Materials and Waste | Accidental spill or misuse of oil or fuels could occur if existing plans were not followed. | PMRF outlines procedures in SPCC Plan and the Installation Spill Contingency Plan. The Installation Spill Contingency Plan contains immediate procedures (in flow chart form) to be carried out by personnel once a discharge is detected, notification and reporting requirements, response equipment, hazard analysis, recommended spill actions and |

| *Document* | *Type of Environmental Review Document (HEPA/NEPA)* | *Location on Leasehold and Easement Lands in Project Area* | *Resource* | *Potential Effects from Ongoing Activities* | *Existing Mitigation Measures* |
|---|---|---|---|---|---|
| | | | | | cleanup, training, environmental protection, and SDS. |
| 1998 PMRF Enhanced Capability Final EIS | HEPA/NEPA | Main Base | Hazardous Materials and Waste | Hazardous waste at PMRF can include batteries, contaminated soil, asbestos, gasoline, paint-related material, oil, methanol, ammonia solution, sand blast material, otto fuel, isopropyl alcohol, and sea water/otto fuel. Exposure to hazardous waste can be harmful to humans. | Hazardous waste is not stored beyond a 90-day collection period on ~~PMRF~~ Main Base. |
| 1998 PMRF Enhanced Capability Final EIS | HEPA/NEPA | Main Base | Hazardous Materials and Waste | Hazardous materials can pose risks to humans if not controlled, tracked, and disposed of properly. | Navy's CHRIMP is a DoD program which reduces the hazardous materials that are procured, stored, distributed, and disposed of as waste by using a centralized control and inventory point. This program also provides tracking and environmental reporting. |
| 1998 PMRF Enhanced Capability Final EIS | HEPA/NEPA | Main Base | Hazardous Materials and Waste | Unintended release of PCBs poses potential effects to water quality, human health, and the environment. PCBs found at PMRF/Main Base were contained in fluorescent lamp ballasts and capacitors in certain electronic equipment. | Components are labeled according to TSCA, 40 CFR part 761, requirements for shipping, and disposed of through the Defense Reutilization Marketing Office or a contractor within 1 year of the waste's initial storage. |
| 1998 PMRF Enhanced Capability Final EIS | HEPA/NEPA | Mākaha Ridge | Hazardous Materials and Waste | Hazardous materials can pose risks to humans if not controlled, tracked, and reduced in usage properly. | PMRFINST 5100.2J, Hazardous Material Control and Management Program[12] and CHRIMP. |

[12] https://pmrf-kpgo-eis.com/media/v1thhdtv/pmrfinst-51002j.pdf

| *Document* | *Type of Environmental Review Document (HEPA/NEPA)* | *Location on Leasehold and Easement Lands in Project Area* | *Resource* | *Potential Effects from Ongoing Activities* | *Existing Mitigation Measures* |
|---|---|---|---|---|---|
| | | | | Hazardous materials used at Mākaha Ridge include lubricating oils and solvents. | |
| 1998 PMRF Enhanced Capability Final EIS | HEPA/NEPA | Main Base | Public Health and Safety | Potential effects to public health and safety, such as injury to people, during missile launch activities if the public is not cleared from appropriate areas. | Implementation of defined explosive safety quantity distance arcs. |
| 1998 PMRF Enhanced Capability Final EIS | HEPA/NEPA | Main Base | Public Health and Safety | Potential effects to public health and safety, such as injury to people, from premature, unintentional, or unauthorized detonation of ordnance. | Implementation of Explosive Safety Approval. Ordnance transported by trained ordnance personnel and within special vehicles for transit and in accordance with U.S. DOT regulations 49 CFR parts 100–109. |
| 1998 PMRF Enhanced Capability Final EIS | HEPA/NEPA | Main Base | Public Health and Safety | Potential effects to public health and safety from accidental release of liquid fuels during transportation of liquid fuels to Main Base that could result in exposure to liquid fuels. | Transportation of these materials is conducted in compliance with U.S. DOT regulation 49 CFR parts 100–109 and 49 CFR sections 171.1–172.558. |
| 1998 PMRF Enhanced Capability Final EIS | HEPA/NEPA | Main Base | Public Health and Safety | Potential effects to public health and safety from electromagnetic radiation to people within the radiation area. Exposure risk would be negligible outside of the radar beam. | All operations conducted in accordance with COMPMTCINST 5100.15, Radiological Safety Manual, and establishment of safety zones and conducting sector blanking (a feature that prevents radar from transmitting to unwanted angles/reflections and improves accuracy) in occupied areas (current management procedures documented by the NSWCDD, Electromagnetic Measurements and Engineering Branch [Dahlgren, 2020]). |

| *Document* | *Type of Environmental Review Document (HEPA/NEPA)* | *Location on Leasehold and Easement Lands in Project Area* | *Resource* | *Potential Effects from Ongoing Activities* | *Existing Mitigation Measures* |
|---|---|---|---|---|---|
| | | | | | Warning lights are also illuminated when radar is operational. |
| 1998 PMRF Enhanced Capability Final EIS | HEPA/NEPA | Main Base | Public Health and Safety | Potential effects to public health and safety, such as injury, during missile launch activities if the public is not cleared from missile launch area. | SOPs implemented for all ground hazard areas. Members of the public and personnel are excluded from the ground hazard area during launch. These SOPs include establishing road control points and clearing the area using vehicles and helicopters (if necessary). The road control points are established 3 hours prior to launch to allow security forces to monitor traffic as it passes through the GHA. At 20 minutes prior to launch, the area is determined to be clear of the public and personnel to ensure that, in the unlikely event of early flight termination, no injuries or damage to persons or property would occur. After the Range Safety Officer declares the area safe, the security force gives the all-clear signal, and the public is allowed to reenter the area. |
| 1998 PMRF Enhanced Capability Final EIS | HEPA/NEPA | Mākaha Ridge | Public Health and Safety | Potential effects to public health and safety from electromagnetic radiation to people within the radar area. Exposure risk is negligible outside of the radar beam. | The site is regularly surveyed for radiation hazards, and all systems have warning lights to inform personnel when radar units are operating. |
| 2008 Hawaii Range Complex FEIS/OEIS | NEPA | Main Base | Hazardous Materials and Waste | Potential accidental release of oil or fuels if prevention procedures are not followed. | The PMRF SPCC outlines procedures that prevent and control discharge of oil or oil products and outlines the immediate response plan should an unintentional |

| *Document* | *Type of Environmental Review Document (HEPA/NEPA)* | *Location on Leasehold and Easement Lands in Project Area* | *Resource* | *Potential Effects from Ongoing Activities* | *Existing Mitigation Measures* |
|---|---|---|---|---|---|
| | | | | | discharge occur. The Installation Spill Contingency Plan contains immediate procedures (in flow chart form) to be carried out by personnel once a discharge is detected, notification and reporting requirements, response equipment, hazard analysis, recommended spill actions and cleanup, training, environmental protection, and SDS. |
| 2008 Hawaii Range Complex FEIS/OEIS | NEPA | Main Base | Hazardous Materials and Waste | Exposure to hazardous waste can be harmful to humans. | Hazardous waste is not stored beyond a 90-day collection period on ~~PMRF~~ Main Base. |
| 2008 Hawaii Range Complex FEIS/OEIS | NEPA | Main Base | Hazardous Materials and Waste | Hazardous materials, including oil and fuels, can pose risks to humans if not controlled, tracked, and disposed of properly. | PMRF outlines procedures in the Hazardous Waste Management Plan and holds a Used Oil transporter/processor permit through DOH. |
| 2008 Hawaii Range Complex FEIS/OEIS | NEPA | Main Base | Hazardous Materials and Waste | Hazardous materials can pose risks to humans if not controlled, tracked, and disposed of properly. | Navy's CHRIMP is a DoD program which reduces the hazardous materials that are procured, stored, distributed, and disposed of as waste by using a centralized control and inventory point. This program also provides tracking and environmental reporting. |
| 2008 Hawaii Range Complex FEIS/OEIS | NEPA | Mākaha Ridge | Hazardous Materials and Waste | Hazardous materials can pose risks to humans if not controlled, tracked, and reduced in usage properly. Hazardous materials used at Mākaha Ridge include lubricating oils, low sulfur diesel fuel, and solvents. | PMRFINST 5100.2C, Hazardous Material Control and Management Program. |

| *Document* | *Type of Environmental Review Document (HEPA/NEPA)* | *Location on Leasehold and Easement Lands in Project Area* | *Resource* | *Potential Effects from Ongoing Activities* | *Existing Mitigation Measures* |
|---|---|---|---|---|---|
| 2008 Hawaii Range Complex FEIS/OEIS | NEPA | Mākaha Ridge | Hazardous Materials and Waste | Potential effects from accidental release of oil or fuels, including risk to the environment. | All tanks are above ground with appropriate containment devices. |
| 2008 Hawaii Range Complex FEIS/OEIS | NEPA | Main Base | Hazardous Materials and Waste | Potential effects from unintentional release of hazardous materials, such as fire or environmental pollution. | No solid propellant missile launches occur during rainy conditions, and the launch system will not use a water deluge system for cooling and noise suppression. Activation of the PMRF Fire Department and Spill Response Team. |
| 2008 Hawaii Range Complex FEIS/OEIS | NEPA | Main Base | Public Health and Safety | Potential effects to public health and safety, such as injury to people, during missile launch activities if safety procedures are not followed. | Employment of system safety concepts and risk assessment methodology. |
| 2008 Hawaii Range Complex FEIS/OEIS | NEPA | Main Base | Public Health and Safety | Potential effects to public health and safety, such as injury to people, during missile launch activities if SOPs were not in place. | SOPs implemented for all GHAs and use of PMRF Missile Accident Emergency Team. These SOPs include establishing road control points and clearing the area using vehicles and helicopters (if necessary). Road control points are established 3 hours prior to launches. This allows security forces to monitor traffic that passes through the GHAs. At 20 minutes before a launch, the GHA is cleared of the public to ensure that, in the unlikely event of early flight termination, no injuries or damage to persons or property would occur. After the Range Safety Officer declares the area safe, the security force gives the all-clear signal, and the public is allowed to reenter the area. Public and personnel are |

| *Document* | *Type of Environmental Review Document (HEPA/NEPA)* | *Location on Leasehold and Easement Lands in Project Area* | *Resource* | *Potential Effects from Ongoing Activities* | *Existing Mitigation Measures* |
|---|---|---|---|---|---|
| | | | | | excluded from the GHA during launch. Implementation of defined ESQD arcs. |
| 2008 Hawaii Range Complex FEIS/OEIS | NEPA | Main Base | Public Health and Safety | Potential effects to public health and safety, such as injury to people, from premature, unintentional, or unauthorized detonation of ordnance. | Implementation of Explosive Safety Approval, PMRFINST 8020.5C, Explosive Safety Criteria for Range Users Ordnance Operations[13]. Defined ESQD arcs are implemented. |
| 2008 Hawaii Range Complex FEIS/OEIS | NEPA | Kamokalā Ridge | Public Health and Safety | Potential effects to public health and safety, such as injury to people, from premature, unintentional, or unauthorized detonation of ordnance during transportation. | PMRFINST 8023.G, implementation of defined ESQD arcs, ordnance is transported in accordance with U.S. DOT regulations. |
| 2008 Hawaii Range Complex FEIS/OEIS | NEPA | Main Base | Public Health and Safety | Potential effects to public health and safety from transportation of liquid fuels to leasehold and easement lands at Main Base that could result in exposure to liquid fuels. | Transportation of these materials is conducted in compliance with U.S. DOT regulations 49 CFR parts 100–109. |
| 2008 Hawaii Range Complex FEIS/OEIS | NEPA | Main Base | Public Health and Safety | Potential effects to public health and safety, such as injury to people, during missile launch activities if the public is not cleared from appropriate areas. | Flight termination and clearance of specified regions. Before a launch is allowed to proceed, the range is determined cleared using input from ship sensors, visual surveillance from aircraft and range safety boats, radar data, and acoustic information. |
| 2008 Hawaii Range Complex FEIS/OEIS | NEPA | Main Base | Archaeological and Architectural Resources | Inadvertent ignition of vegetation during launch activities and subsequent fire suppression | Water is sprayed on vegetation within the immediate vicinity surrounding the launch vehicle prior to launch. In the event ignition of vegetation does occur, fire suppression |

[13] https://pmrf-kpgo-eis.com/media/vhkhufz2/pmrfinst-80205c.pdf

| *Document* | *Type of Environmental Review Document (HEPA/NEPA)* | *Location on Leasehold and Easement Lands in Project Area* | *Resource* | *Potential Effects from Ongoing Activities* | *Existing Mitigation Measures* |
|---|---|---|---|---|---|
| | | | | activities could damage archaeological resources. | personnel are instructed to use an open spray nozzle, whenever possible, rather than a directed stream to quell the fire, to avoid erosion damage to the sand dunes, and to prevent possible destruction of cultural resources. |
| 2008 Hawaii Range Complex FEIS/OEIS | NEPA | Main Base | Archaeological and Architectural Resources | Potential effects to archaeologically sensitive areas, such as damage from increased human presence as a result of training or maintenance activities. | Briefing personnel working in culturally sensitive areas, including providing information on federal laws protecting cultural resources. |
| 2008 Hawaii Range Complex FEIS/OEIS | NEPA | Mākaha Ridge | Archaeological and Architectural Resources | Unexpected discovery of archaeological or Native Hawaiian resources. | Hawai'i SHPO and Native Hawaiian stakeholders are notified in accordance with the Programmatic Agreement. |
| 2008 Hawaii Range Complex FEIS/OEIS | NEPA | Main Base | Biological Resources | Unintentional introduction of invasive species. | Military Customs Inspectors are responsible for implementing federal customs statutes and agricultural regulations for transfers of military goods and personnel from overseas into U.S. jurisdiction. Military inspectors do not inspect goods and personnel transferred to Hawai'i from the U.S. mainland, because inspections apply only to shipments entering Hawai'i from foreign sources or those bound to the mainland from Hawai'i. Military inspectors are trained to look for prohibited animals, soil, seeds, and other pests. Inbound flights carrying cargo from the mainland and landing at PMRF are advised to inspect and |

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|---|---|---|---|---|---|
| | | | | | secure their cargo prior to shipment to ensure it is free of invasives. To prevent transport of invasive seeds from Main Base to Kōkeʻe, ground crews are tasked to blow/wash down vehicles and equipment prior to movement. |
| 2008 Hawaii Range Complex FEIS/OEIS (VOL 2) Ch. 4–11 | NEPA | Main Base | Cultural Practices | Restricted access to traditional religious and cultural properties (Nohili Dune). | Access to identified cultural resources within PMRF Barking Sands is managed through written requests processed and approved by the PMRF Cultural Resources Manager and the installation Commanding Officer. |
| 2010 PMRF Intercept Test Support EA/OEA | NEPA | Main Base and Mākaha Ridge | Archaeological and Architectural Resources | Unanticipated encounter of cultural resources (particularly human remains) may occur during any activity. | All activities cease in the immediate vicinity of the find; subsequent actions and notifications follow the guidance provided in the PMRF ICRMP. |
| 2010 PMRF Intercept Test Support EA/OEA | NEPA | Main Base | Archaeological and Architectural Resources | Post flight anomalies, such as fire, may occur during launches and this may damage archaeological resources. | Water is sprayed on vegetation within the immediate vicinity surrounding the launch vehicle prior to launch. In the event ignition of vegetation does occur, fire suppression personnel are instructed to use an open spray nozzle, whenever possible, rather than a directed stream to quell the fire, to avoid erosion damage to the sand dunes, and to prevent possible destruction of cultural resources. |
| 2010 PMRF Intercept Test Support EA/OEA | NEPA | Main Base | Biological Resources | Unintentional introduction of invasive species. | The Navy will prepare a Hazard Analysis and Critical Control Point Plan or a similar invasive species risk assessment plan that will address viable concerns that are or may be applicable to this project. |

| *Document* | *Type of Environmental Review Document (HEPA/NEPA)* | *Location on Leasehold and Easement Lands in Project Area* | *Resource* | *Potential Effects from Ongoing Activities* | *Existing Mitigation Measures* |
|---|---|---|---|---|---|
| 2010 PMRF Intercept Test Support EA/OEA | NEPA | Main Base | Biological Resources | Newell's shearwater and other night-flying migratory birds may be impacted from lighting at PMRF. Light at night can disrupt flight and migratory paths of these species. | Full cutoff, shielded exterior lighting is installed following USFWS guidelines to minimize reflection and effects on light-sensitive wildlife to protect the Newell's shearwater and other night-flying migratory birds. PMRF works directly with SOS to minimize effects on the birds from its activities. If avoidance of activities during bird fallout season is not practicable, monitoring for downed birds near the new towers would be conducted as appropriate per PMRF Dark Skies Program. |
| 2010 PMRF Intercept Test Support EA/OEA | NEPA | Main Base | Biological Resources | Wedge-tailed shearwater and albatross may be disrupted by construction activities or could be involved in bird-aircraft strikes. | PMRF manages the PMRF wedge-tailed shearwater colony through the clearing of invasive vegetation and monitoring by qualified, professional field biologists to produce detailed reports that document shearwater nesting success and health and growth of the colony. PMRF will continue its permitted relocation of albatross and albatross eggs from the KTF area to inhibit nesting there as part of its BASH program. |
| 2010 PMRF Intercept Test Support EA/OEA | NEPA | Main Base | Biological Resources | Wedge-tailed shearwaters may be disrupted by construction activities. | To the extent practicable, construction activities are scheduled so that as much as possible will occur outside of the nesting season (Nesting: March–May; Egg Laying, Hatching, Chick Rearing: June–October; Fledging: November). |

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|---|---|---|---|---|---|
| 2010 PMRF Intercept Test Support EA/OEA | NEPA | Kamokalā Ridge | Hazardous Materials and Waste | Potential effects to public health and safety, such as injury to people, from premature, unintentional, or unauthorized detonation of ordnance during transportation. | Materials are contained in required devices with proper ventilation, marking, and placarding. |
| 2010 PMRF Intercept Test Support EA/OEA | NEPA | Kamokalā Ridge | Public Health and Safety | Potential effects to health and safety, such as injury to people, due to transfer and storage of ordnance. | Safety arcs and storage standards are implemented in accordance with DoD and Navy standards as well as PMRFINST 8023.G. |
| 2010 PMRF Intercept Test Support EA/OEA | NEPA | Main Base | Public Health and Safety | Potential effects to public health and safety from transportation of liquid fuels to Main Base, such as exposure to fuel. | The following transportation procedures are implemented to minimize the potential for liquid fuel mishap: Trained spill response teams are on standby for the transportation of all missile liquid propellants. Truck shipments on Kaua‘i have trained escorts. All shipments are scheduled to avoid peak traffic periods for roads and to avoid high-use times for harbors. Local fire and police, and local area State transportation officials are notified in advance of shipments, and informed by experienced personnel (and trained, if necessary) of existing safety procedures to be used during transportation on Kaua‘i. Notice of shipment to State and local officials. Propellant vapor leak check and liquid propellant container inspection prior to offloading propellant from ship and after loading propellant into trucks. |

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|---|---|---|---|---|---|
| 2010 PMRF Intercept Test Support EA/OEA | NEPA | Main Base | Public Health and Safety | Potential effects to public health and safety, such as injury to people, during missile launch activities. | Flight termination and clearance of specified regions. |
| 2013 Final EA for Hawai'i Joint Services Solar Power Generation | NEPA | Main Base | Water Resources | Photovoltaic ground mount systems could result in minor increase in rainwater runoff due to increase in impervious surface area. | As appropriate, the project will implement BMPs to capture and retain stormwater on site and allow it to infiltrate into the soil or to be discharged at a rate that would not exceed the predevelopment hydrology to adjacent surface waters. A permit will be obtained for sites with construction exceeding 1 acre (0.4 hectare). |
| 2019 FONSI Continued Operation of the Kaua'i Test Facility (2018 Site-Wide EA Sandia National Laboratories Kaua'i Test Facility) | NEPA | Main Base | Archaeological and Architectural Resources | Archaeological or architectural resources could be damaged or disturbed from construction. | A cultural resources professional monitors construction activities and would contact SHPO and Native Hawaiian stakeholders to address any potential effects. |
| 2019 FONSI Continued Operation of the Kaua'i Test Facility (2018 Site-Wide EA Sandia National Laboratories Kaua'i Test Facility) | NEPA | Main Base | Archaeological and Architectural Resources | Potential effects on soil from contamination from fuel, lubricant, paint, and solvent spills. | Implementing policies such as handling all products in accordance with manufacturer's recommendations; refueling on impermeable surfaces; inspecting equipment regularly for safety, cleanliness, and leaks; removing leaking equipment from service; and performing rapid cleanup if such releases were to occur. |
| 2019 FONSI Continued Operation of the Kaua'i Test | NEPA | Main Base | Hazardous Materials and Waste | Hazardous materials can pose risks to humans if exposure occurs. | Controlled access for authorized personnel through gates, badging, and designated public access points. |

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|---|---|---|---|---|---|
| Facility (2018 Site-Wide EA Sandia National Laboratories Kaua'i Test Facility) | | | | | |
| 2019 FONSI Continued Operation of the Kaua'i Test Facility (2018 Site-Wide EA Sandia National Laboratories Kaua'i Test Facility) | NEPA | Main Base | Public Health and Safety | Potential for unintentional discharge of oil, and risks to human health if exposure occurs. | PMRF SPCC Plan. |
| 2019 FONSI Continued Operation of the Kaua'i Test Facility (2018 Site-Wide EA Sandia National Laboratories Kaua'i Test Facility) | NEPA | Main Base | Biological Resources | Potential for seabird fallout as a result of nighttime lighting and night operations during fledging season. | 2018 Biological Opinion of the USFWS for the Proposed Base-wide Infrastructure, Operations, and Maintenance Activities at the Pacific Missile Range Facility, Island of Kaua'i, Hawai'i. |
| 2019 FONSI Continued Operation of the Kaua'i Test Facility (2018 Site-Wide EA Sandia National Laboratories Kaua'i Test Facility) | NEPA | Main Base | Hazardous Materials and Waste | Potential for unintentional discharge of oil. | PMRF SPCC Plan. |
| 2019 FONSI Continued Operation of the Kaua'i Test Facility (2018 Site- | NEPA | Main Base | Hazardous Materials and Waste | Unintentional release of hazardous materials could occur if safety measures are not followed. | EPCRA, Toxic Release Inventory, Federal Insecticide, Fungicide, and Rodenticide Act, Toxic Substances Control Act, and CWA. |

| *Document* | *Type of Environmental Review Document (HEPA/NEPA)* | *Location on Leasehold and Easement Lands in Project Area* | *Resource* | *Potential Effects from Ongoing Activities* | *Existing Mitigation Measures* |
|---|---|---|---|---|---|
| Wide EA Sandia National Laboratories Kaua'i Test Facility) | | | | | |
| 2019 FONSI Continued Operation of the Kaua'i Test Facility (2018 Site-Wide EA Sandia National Laboratories Kaua'i Test Facility) | NEPA | Main Base | Hazardous Materials and Waste | Waste can be generated during routine maintenance or modification to a facility. Hazardous waste can pose risks to humans if exposure occurs. | Implementation of Site Sustainability plan, Federal Facility Compliance Act, RCRA, Pollution Prevention and Waste Minimization, and Pollution Prevention Act. |
| 2019 FONSI Continued Operation of the Kaua'i Test Facility (2018 Site-Wide EA Sandia National Laboratories Kaua'i Test Facility) | NEPA | Main Base | Public Health and Safety | Potential effects to public health and safety, including injury to people, if proper handling processes for explosives are not followed. | All processes involving high-energy source use and storage are performed in accordance with DOE Explosives Order and 10 CFR part 851. |

| *Document* | *Type of Environmental Review Document (HEPA/NEPA)* | *Location on Leasehold and Easement Lands in Project Area* | *Resource* | *Potential Effects from Ongoing Activities* | *Existing Mitigation Measures* |
|---|---|---|---|---|---|
| 2019-FONSI Continued Operation of the Kaua'i Test Facility (2018 Site-Wide EA Sandia National Laboratories Kaua'i Test Facility) | NEPA | Main Base | Public Health and Safety | Potential effects to public health and safety, such as injury to people, during missile launch activities. | During launch activities, all authorized personnel not at an assigned duty station are evacuated to a point outside the explosive safety distance and GHAs. |

*Key*: BASH = Bird/Wildlife Aircraft Strike Hazard; BMP = Best Management Practice; CFR = Code of Federal Regulations; CHRIMP = Consolidated Hazardous Material Reutilization and Inventory Management Program; COMPMTCINST = Commander Pacific Missile Test Center Instruction; CWA = Clean Water Act; dB = decibel; DoD = Department of Defense; DOE = Department of Energy; EA = Environmental Assessment; EIS = Environmental Impact Statement; EPA = United States Environmental Protection Agency; EPCRA = Emergency Planning and Community Right-to-Know Act; ESQD = Explosive Safety Quantity Distance; FEIS = Final Environmental Impact Statement; FONSI = Finding of No Significant Impact; GHA = Ground Hazard Area; HEPA = Accepted Term for Hawai'i Revised Statutes Chapter 343; HDOH = Hawai'i Department of Health; ICRMP = Integrated Cultural Resources Management Plan; KTF = Kaua'i Test Facility; NAGPRA = Native American Graves Protection and Repatriation Act; NEPA = National Environmental Policy Act; NPDES = National Pollutant Discharge Elimination System; NSWCDD = Naval Surface Warfare Center, Dahlgren Division; OEA = Overseas Environmental Assessment; OEIS = Overseas Environmental Impact Statement; PCB = polychlorinated biphenyl; PMRF = Pacific Missile Range Facility; PMRFINST = Pacific Missile Range Facility Instruction; RCRA = Resource Conservation and Recovery Act; SDS = Safety Data Sheet; SHPO = State Historic Preservation Office; SOP = Standard Operating Procedure; SOS = Save our Shearwaters; SPCC = Spill Prevention, Control, and Countermeasure; TSCA = Toxic Substances Control Act; U.S. = United States; USDOT = United States Department of Transportation; USFWS = United States Fish and Wildlife Service.

# Attachment C

## Table C-1 Summary of PMRF and KPGO Proposed Enhanced Engagements

| *Enhanced Engagements* | *Resource* | *Description of Proposed Enhanced Engagements* | *Applicability in the Project Area* | *Frequency of Implementation* | *Site-Specific Conservation Goals* | *How and With Whom Engagement Will be Conducted* | *Goals* |
|---|---|---|---|---|---|---|---|
| Enhanced Engagement-1 | Archaeological and Architectural Resources | In addition to continuing existing historic preservation compliance, increase access to information about archaeological and architectural resources. Ensure stakeholders have access to the ICRMP, subject to the confidentiality restrictions placed on the dissemination of information about archaeological sites and certain NHO resources. Provide educational materials about these resources to schools and libraries, and post on the PMRF Kaua'i (https://pmrfkauai.com/), PMRF (https://cnrh.cnic.navy.mil/Installations/PMRF-Barking-Sands/), and EIS websites | Navy management of leasehold lands. | Integrated with ongoing activities and historic preservation program. | See SOPs from ICRMP in Table 2-7 of the 2025 Draft EIS. | PMRF staff will contact stakeholders from ICRMP via phone calls and email. | See SOPs from ICRMP in Table 2-7 of the Draft 2025 EIS. |

| *Enhanced Engagements* | *Resource* | *Description of Proposed Enhanced Engagements* | *Applicability in the Project Area* | *Frequency of Implementation* | *Site-Specific Conservation Goals* | *How and With Whom Engagement Will be Conducted* | *Goals* |
|---|---|---|---|---|---|---|---|
| | | (https://www.PMRF-KPGO-EIS.com). | | | | | |
| Enhanced Engagement-2 | Cultural Practices, Land Use and Access, Socioeconomics (Recreation) | Streamline access through development of a PMRF Access Management Plan that balances public access and PMRF's mission requirements. As part of the development of this Access Management Plan, the PMRF staff will meet with stakeholders to address improved process for access, including requests to use Kiko Road to access the Kekaha Game Management Area through the Mānā Tunnels hunter check-in station. After BLNR makes its decision and real estate agreements are issued, the Navy and NASA will develop their respective access management plans in consultation with DLNR, OHA, NHOs, and other stakeholders. | Access for Cultural Practices, Land Use and Access, and Socioeconomics (Recreation) in the Project Area. | Integrated with PMRF's responses to current access requests. | The Plan would also include community surveys which would serve as a feedback process to gauge whether the access program for cultural practitioners is sufficient to meet community needs and interests in accessing significant cultural sites within the PMRF footprint (both State and federal lands). | PMRF staff will contact stakeholders from ICRMP, NHOs, and from ongoing community coordination via phone calls and email. | Navy publication of the Access Management Plan on the PMRF website (https://cnrh.cnic.navy.mil/Installations/PMRF-Barking-Sands/). Update annually. |

| *Enhanced Engagements* | *Resource* | *Description of Proposed Enhanced Engagements* | *Applicability in the Project Area* | *Frequency of Implementation* | *Site-Specific Conservation Goals* | *How and With Whom Engagement Will be Conducted* | *Goals* |
|---|---|---|---|---|---|---|---|
| Enhanced Engagement-3 | Biological Resources | Provide the public with annual wildlife summaries, including status updates and data reports and research studies. This could increase public transparency of natural resource management activities at PMRF and KPGO. | Natural resource management activities on the leasehold/ easement and fee simple parcels. | Quarterly updates provided on the ʻOhana Kilo Hōkū and PMRF Kauaʻi websites (https://pmrfkauai.com/) and newsletters. | See 2023 PMRF INRMP (Appendix K of the 2025 Draft EIS), also see Table 2-7 of the 2025 Draft EIS. | PMRF staff will contact Sikes Act Partners including DOFAW from 2023 PMRF INRMP (Appendix K of the 2025 Draft EIS) via phone calls and email. | Projects from 2023 PMRF INRMP (Appendix K of the 2025 Draft EIS), pending funding and mission capability. |
| Enhanced Engagement-4 | Socioeconomics | Development and continuation of PMRF Kauaʻi to establish regular communication channels to strengthen relationships with the community, and other interested stakeholders. PMRF has a strong relationship with stakeholders and the community and is viewed as a good neighbor and community partner, and the Navy highly values the support of its host community. It is critical that these relationships are maintained and enhanced, stakeholders | The leasehold/ easement/fee simple parcels. | Ongoing. | N/A | Continue distributions of the Quarterly Newsletters and website updates to inform and communicate with stakeholders, including the public and regulatory agencies. Newsletter notifications will be distributed via email. | Consistent delivery of quarterly newsletters and website updates (https://pmrfkauai.com/). |

| *Enhanced Engagements* | *Resource* | *Description of Proposed Enhanced Engagements* | *Applicability in the Project Area* | *Frequency of Implementation* | *Site-Specific Conservation Goals* | *How and With Whom Engagement Will be Conducted* | *Goals* |
|---|---|---|---|---|---|---|---|
| | | and the community are kept informed of the actions being proposed at PMRF, and the Navy continues to be viewed as a good neighbor and strong community partner. PMRF Kaua'i will provide a means of providing a proactive method for two-way communication, promoting greater dialogue, working collaboratively toward common goals, and developing solutions. PMRF Kaua'i will include:<br>• PMRF Kaua'i Newsletter<br>• Open House Events<br>• Wide Area Gatherings<br>• Base Tours<br>• Within Range magazine – wider distribution<br>• PMRF Kaua'i Website (https://pmrfkauai.com/), including:<br>▪ Announcements | | | | | |

| *Enhanced Engagements* | *Resource* | *Description of Proposed Enhanced Engagements* | *Applicability in the Project Area* | *Frequency of Implementation* | *Site-Specific Conservation Goals* | *How and With Whom Engagement Will be Conducted* | *Goals* |
|---|---|---|---|---|---|---|---|
| | | ▪ Information about NEPA/HEPA analysis related to PMRF<br>▪ Calendar of events<br>▪ Historical, cultural, natural resources, REPI, and other resiliency protection efforts<br>▪ Marine resource mitigation and protective measures<br>▪ Marine research and monitoring projects at PMRF<br>▪ Pollution prevention actions (e.g., no plastic discharged at sea), cleanup events<br>▪ Tenants at PMRF (e.g., NASA, MDA) | | | | | |

| *Enhanced Engagements* | *Resource* | *Description of Proposed Enhanced Engagements* | *Applicability in the Project Area* | *Frequency of Implementation* | *Site-Specific Conservation Goals* | *How and With Whom Engagement Will be Conducted* | *Goals* |
|---|---|---|---|---|---|---|---|
| | | with hyperlinks to agency websites<br>▪ Partnerships with federal and State agencies, nongovernmental organizations, etc. | | | | | |
| Enhanced Engagement-5 | Management of Water Resources | Establish a Navy-DLNR-DHHL-KAA-ADC-Kaua'i County Working Group to collaboratively manage water resources in West Kaua'i. | Water resources in the leasehold easement/fee simple parcels. | Quarterly working group meetings. | To be developed as part of the working group. | PMRF staff will coordinate via phone calls and email with contacts at DLNR, DHHL, KAA, ADC, and Kaua'i County. | Navy to publish meeting minutes including action items quarterly on the PMRF Kaua'i website (https://pmrfkauai.com/). |

| *Enhanced Engagements* | *Resource* | *Description of Proposed Enhanced Engagements* | *Applicability in the Project Area* | *Frequency of Implementation* | *Site-Specific Conservation Goals* | *How and With Whom Engagement Will be Conducted* | *Goals* |
|---|---|---|---|---|---|---|---|
| Enhanced Engagement-6 | Public Health and Safety | Improve closure protocol and public notification of the activation of restrictive easements during launch activities at fee simple lands at Main Base and consider adding non-barbed wire fencing and signage on leasehold and easement lands to minimize encroachment and accidental or intentional trespass from adjacent land. | Main Base and Easement-1 GHA. | Notification on the ʻOhana Kilo Hōkū and PMRF Kauaʻi websites (https://pmrfkauai.com/) and newsletter; radio broadcasts to inform public of closures. | N/A | PMRF staff will coordinate with neighboring land owners via phone calls and email. | Navy to publish new protocol on PMRF website (https://cnrh.cnic.navy.mil/Installations/PMRF-Barking-Sands/), including quarterly updates. |
| Enhanced Engagement-7 | Water Resources, Biological Resources | Establish success criteria for ongoing erosion control management actions at Mākaha Ridge for habitat restoration and improved downslope water quality. | Water resources in the leasehold easement/fee simple parcels. | Integrated into current PMRF INRMP management actions and facility maintenance at Mākaha Ridge. | Control erosion | PMRF staff will coordinate with DLNR staff at OCCL, Land Division, and DOFAW, as well as other stakeholders identified via phone calls and email. | Quantify success of native plant outplanting through sapling percent survival rate, tracking number of ungulates removed, and subsequent vegetation recruitment in the area. |

| *Enhanced Engagements* | *Resource* | *Description of Proposed Enhanced Engagements* | *Applicability in the Project Area* | *Frequency of Implementation* | *Site-Specific Conservation Goals* | *How and With Whom Engagement Will be Conducted* | *Goals* |
|---|---|---|---|---|---|---|---|
| Enhanced Engagement-8 | Biological Resources | Establish success criteria for ongoing invasive species management actions at KPGO for habitat restoration. | Biological resources in the leasehold easement/fee simple parcels. | Integrated into current PMRF INRMP management actions and facility maintenance at KPGO. | Habitat restoration | NASA and PMRF staff will coordinate with DLNR staff at OCCL, Land Division, and DOFAW, as well as other stakeholders identified via phone calls and email. | Quantify success of invasive species removal and habitat restoration through special status and native flora percent survival rate and subsequent vegetation recruitment in the area. |

*Key:* ADC = Agribusiness Development Corporation; BLNR = Board of Land and Natural Resources; DHHL = Department of Hawaiian Home Lands; DLNR = Department of Land and Natural Resources; DOFAW = Division of Forestry and Wildlife; EIS = Environmental Impact Statement; GHA = Ground Hazard Area; ICRMP = Integrated Cultural Resources Management Plan; INRMP = Integrated Natural Resources Management Plan; KAA = Kekaha Agricultural Association; KPGO = Kōke'e Park Geophysical Observatory; MDA=Missile Defense Agency; N/A = Not Applicable; NASA = National Aeronautics and Space Administration; NHO = Native Hawaiian Organization; OCCL = Office of Conservation and Coastal Lands; OHA = Office of Hawaiian Affairs; PMRF = Pacific Missile Range Facility; REPI = Readiness and Environmental Protection Integration; SOP = Standard Operating Procedure.

# CZM Consistency Conditional Concurrence

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DTS 202605150903ME

Coastal Zone Management Program

Environmental Review Program

Land Use Commission

Land Use Division

Special Plans Branch

State Transit-Oriented Development

Statewide Geographic Information System

Statewide Sustainability Branch

June 29, 2026

Ms. Kerry K. Wells
Department of the Navy
400 Marshall Road
Pearl Harbor, Hawaiʻi 96860-3131
Email: Kerry.k.wells.civ@us.navy.mil

Dear Ms. Wells:

Subject: Hawaiʻi Coastal Zone Management Program Federal Consistency Review for Pacific Missile Range Facility and Kōkeʻe Park Geophysical Observatory Use Retention on Kauaʻi TMKs: 1-2-002-001 (por.), 1-2-001-006 (por.), 1-2-001-010, 1-2-002-024 (por.), 1-2-002-025, 1-2-002-026 (por.), 1-2-002-027, 1-2-002-028, 1-2-002-029, 1-4-001-002 (por.), 1-4-001-013 (por.), 1-4-001-014 (por.)

The Hawaiʻi Coastal Zone Management (CZM) Program has completed the federal consistency review that was accepted on May 8, 2026 for the retention of leasehold lands at Pacific Missile Range Facility (PMRF) and Kōkeʻe Park Geophysical Observatory (KPGO) on the island of Kauaʻi (proposed activity). The proposed activity is to retain the use of leasehold lands for continued federal operations at two facilities on Kauaʻi. Specifically, the Navy proposes to retain the use of 8,172 acres for continued military training, testing, and facility operations at PMRF, while National Aeronautics and Space Administration (NASA) proposes to use 23 acres to support continued operation of the KPGO.

Two alternatives were considered. Alternative 1 involves the Navy and NASA applying to the Board of Land and Natural Resources (BLNR) to secure new real estate agreements for a minimum term of 25 years, with a maximum duration to be negotiated with BLNR. The Navy's agreements would include 684 acres of land leased exclusively by the Navy and 7,488 acres of easement lands (for a total of 8,172 acres). NASA's agreements would include 16 acres of land leased exclusively by NASA and 7 acres of easements (for a total of 23 acres).

Alternative 2 involves the Navy and NASA pursuing fee simple acquisition at fair market value of up to 700 acres (684 for Navy use and 16 acres for NASA use) of leaseholds while otherwise obtaining use of the same easement lands as described under Alternative 1.

The Hawai'i CZM Program issued a public notice in the State Environmental Review Program publication, *The Environmental Notice*, on May 23, 2026. The public review and comment period closed on June 8, 2026. No public or agency comments were received during this period.

The Hawai'i CZM Program conditionally concurs with the determination by the Navy that the proposed activity will be undertaken in a manner that is consistent, to the maximum extent practicable, with the enforceable policies of the Hawai'i CZM Program. The following conditions shall apply to this concurrence:

1. The proposed activity shall be implemented as represented in the consistency determination and supporting documents. Any modifications to the activity must be submitted to the Hawai'i CZM Program for review and approval. Substantive changes may require an additional CZM federal consistency review, including public notice and an opportunity for public and agency comments.

   Applicable federally approved enforceable policy: Hawai'i Revised Statutes (HRS) Chapter 205A.

2. The proposed activity shall be in compliance with the requirements of the State Historic Preservation Division (SHPD) consultation under Section 106 of the State Historic Preservation Act and HRS Chapter 6E, Historic Preservation, including continuing to update the Integrated Cultural Resources Management Plan (ICRMP) to proactively identify, document, and analyze archaeological and cultural resources and implementing management practices to protect historic and cultural resources.

   Applicable federally approved enforceable policy: HRS Chapter 6E, Historic Preservation.

3. The proposed activity shall comply with the State of Hawai'i water quality standards and requirements, including obtaining a Clean Water Act (CWA) Section 401 Water Quality Certification, if required, pursuant to HRS Chapter 342D, Water Pollution; Hawai'i Administrative Rules (HAR) Chapter 11-53, Section 401 Water Quality Certification; HAR Chapter 11-54, Water Quality Standards; and HAR Chapter 11-55, Water Pollution Control.

   Applicable federally approved enforceable policies: HRS Chapter 342D and HAR Chapter 11-53, 11-54, and 11-55.

4. The proposed activity shall comply with applicable State of Hawai'i water pollution control requirements, including obtaining coverage under a National Pollutant Discharge Elimination System (NPDES) permit, if required, pursuant to HRS Chapter 342D, Water Pollution and HAR Chapter 11-55, Water Quality Pollution Control, including coordination for compliance with NPDES permit requirements at Kawai'ele

Outfall (where Kinikini Ditch connects to the open coastal waters abutting the PMRF) and Nohili Outfall.

Applicable federally approved enforceable policies: HRS Chapter 342D and HAR Chapter 11-55.

5. The best management practices and resource management strategies that were represented in the Consistency Determination and Draft EIS for PMRF and KPGO Real Estate, Kaua'i, Hawai'i (dated June 2025) relating to the protection of endangered and threatened terrestrial and marine species shall be fully implemented.

   Applicable federally approved enforceable policies: HRS Section 205A-2, HRS Chapter 195D, and HAR Chapter 13-124.

If the requirements for conditional concurrence under 15 CFR § 930.4(a)(1)-(3) are not met, all parties shall treat this conditional concurrence letter as an objection pursuant to 15 CFR Part 930, Subpart C. The U.S. Navy shall immediately notify the Hawai'i CZM Program if the conditions are not acceptable in accordance with 15 CFR § 930.4(a)(2). Otherwise, acceptance of the conditions shall be presumed at the end of the 90-day federal consistency notification period on August 5, 2026.

This CZM consistency conditional concurrence does not represent an endorsement of the proposed activity, nor does it relieve the applicant from complying with any other applicable federal, state, or county laws or regulations.

Thank you for your cooperation with the Hawai'i CZM Program. If you have any questions, please contact Debra Mendes of our CZM program at (808) 587-2840 or Debra.L.Mendes@hawaii.gov. If you respond to this comment letter, please include DTS 202605150903ME in the subject line.

Mahalo,

Mary Alice Evans

Mary Alice Evans
Director

c: County of Kaua'i, Planning Department
State Department of Health, Clean Water Branch
State Department of Land and Natural Resources, Engineering Division
Kerry Ling (info@pmrf-kpgo-eis.com)