MARINE CORPS BASE HAWAII

COMPREHENSIVE PLAN

INSTALLATION MASTER PLAN

FINAL | SEPTEMBER 2017

FOR OFFICIAL USE ONLY

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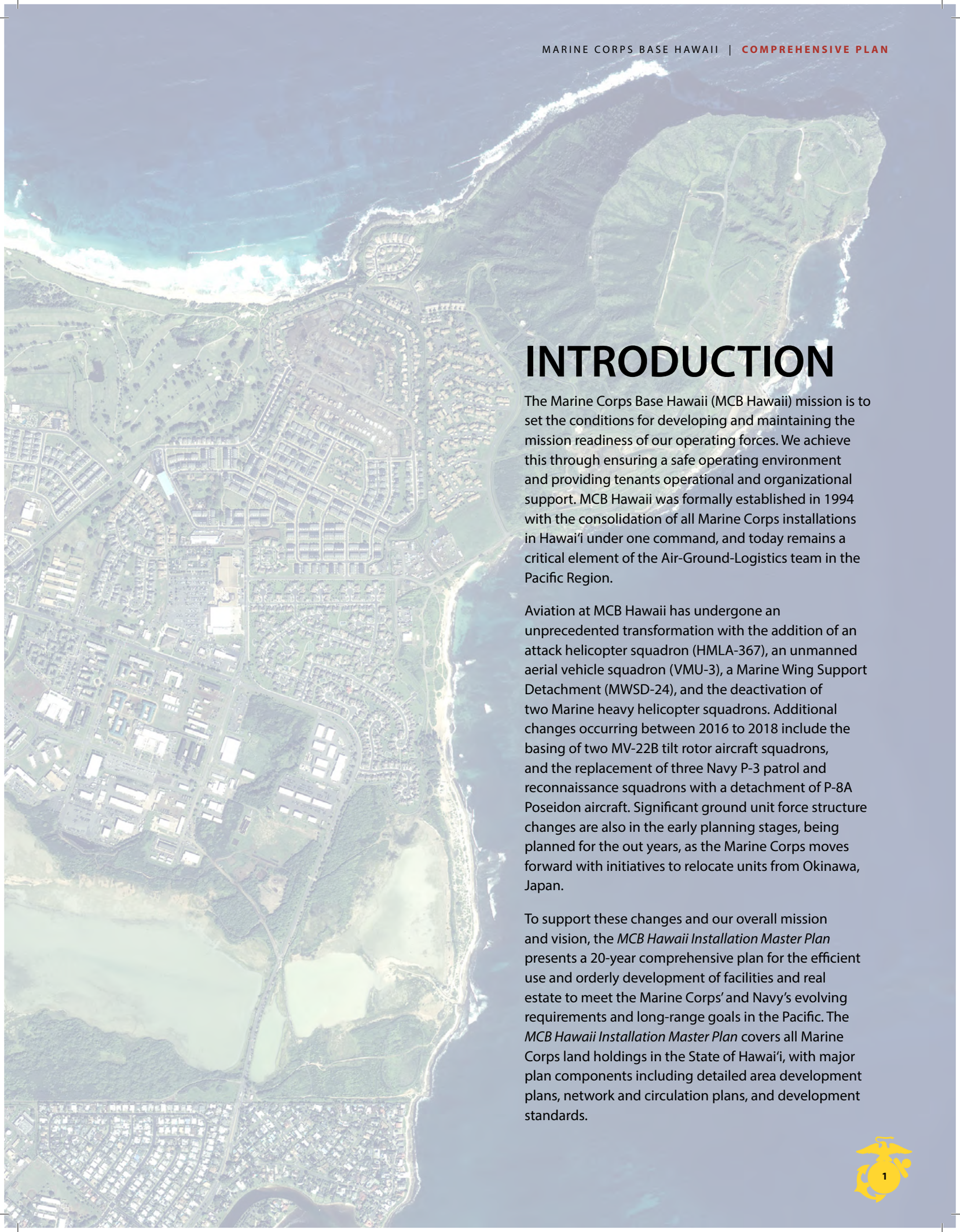


INTRODUCTION

The Marine Corps Base Hawaii (MCB Hawaii) mission is to set the conditions for developing and maintaining the mission readiness of our operating forces. We achieve this through ensuring a safe operating environment and providing tenants operational and organizational support. MCB Hawaii was formally established in 1994 with the consolidation of all Marine Corps installations in Hawai'i under one command, and today remains a critical element of the Air-Ground-Logistics team in the Pacific Region.

Aviation at MCB Hawaii has undergone an unprecedented transformation with the addition of an attack helicopter squadron (HMLA-367), an unmanned aerial vehicle squadron (VMU-3), a Marine Wing Support Detachment (MWSD-24), and the deactivation of two Marine heavy helicopter squadrons. Additional changes occurring between 2016 to 2018 include the basing of two MV-22B tilt rotor aircraft squadrons, and the replacement of three Navy P-3 patrol and reconnaissance squadrons with a detachment of P-8A Poseidon aircraft. Significant ground unit force structure changes are also in the early planning stages, being planned for the out years, as the Marine Corps moves forward with initiatives to relocate units from Okinawa, Japan.

To support these changes and our overall mission and vision, the *MCB Hawaii Installation Master Plan* presents a 20-year comprehensive plan for the efficient use and orderly development of facilities and real estate to meet the Marine Corps' and Navy's evolving requirements and long-range goals in the Pacific. The *MCB Hawaii Installation Master Plan* covers all Marine Corps land holdings in the State of Hawai'i, with major plan components including detailed area development plans, network and circulation plans, and development standards.

U.S. MARINE CORPS IN HAWAI'I

MCB Hawaii provides facilities and services to support the readiness and global projection of operating forces of the III Marine Expeditionary Force (III MEF) and other activities and units as designated by the Commandant of the Marine Corps. Major operational units located at MCB Hawaii include the 3d Marine Regiment, Marine Aircraft Group 24, Combat Logistics Battalion 3, and 3d Radio Battalion, plus various Navy aviation units.

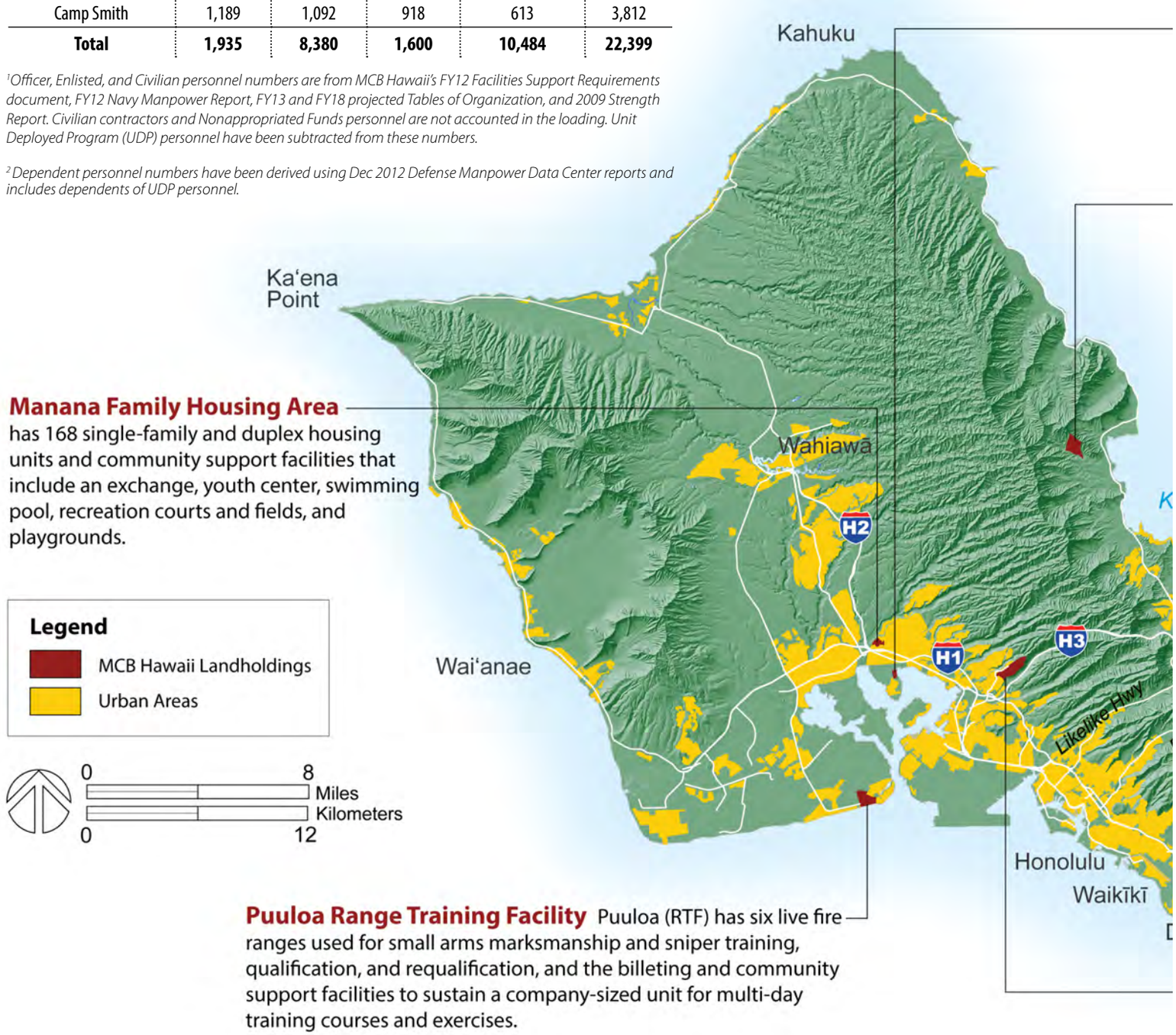
Spread over eight separate landholdings that cover 4,698 acres statewide, each MCB Hawaii installation has unique mission support capabilities. All of the installations require reliable, sustainable, and secure facilities and infrastructure.

PERSONNEL LOADING AT MCB HAWAII

	Officer[1]	Enlisted[1]	Civilian[1]	Dependent[2]	Total
MCB Hawaii Kaneohe Bay	746	7,288	682	9,871	18,587
Camp Smith	1,189	1,092	918	613	3,812
Total	**1,935**	**8,380**	**1,600**	**10,484**	**22,399**

[1]Officer, Enlisted, and Civilian personnel numbers are from MCB Hawaii's FY12 Facilities Support Requirements document, FY12 Navy Manpower Report, FY13 and FY18 projected Tables of Organization, and 2009 Strength Report. Civilian contractors and Nonappropriated Funds personnel are not accounted in the loading. Unit Deployed Program (UDP) personnel have been subtracted from these numbers.

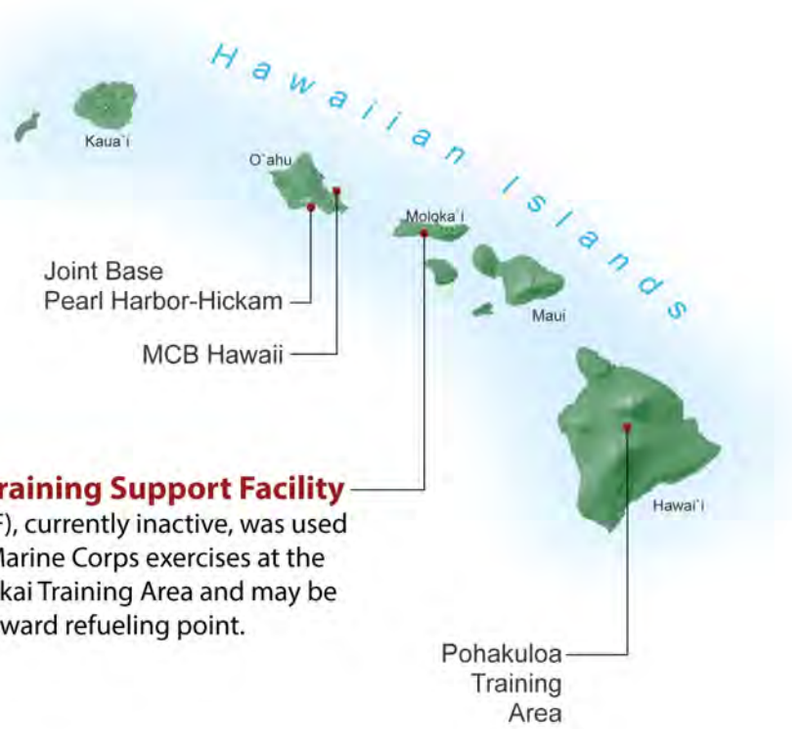
[2] Dependent personnel numbers have been derived using Dec 2012 Defense Manpower Data Center reports and includes dependents of UDP personnel.



Manana Family Housing Area has 168 single-family and duplex housing units and community support facilities that include an exchange, youth center, swimming pool, recreation courts and fields, and playgrounds.

Puuloa Range Training Facility Puuloa (RTF) has six live fire ranges used for small arms marksmanship and sniper training, qualification, and requalification, and the billeting and community support facilities to sustain a company-sized unit for multi-day training courses and exercises.

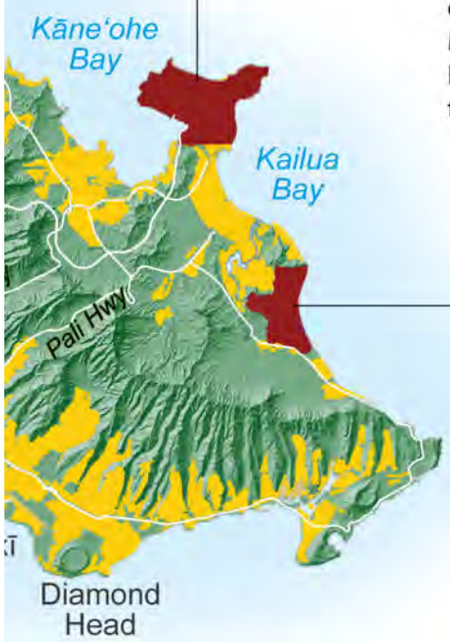
MARINE CORPS REAL ESTATE IN HAWAI'I	
MCB Hawaii Kaneohe Bay	2,951 ac
Camp H.M. Smith	220 ac
Marine Corps Training Area Bellows	1,074 ac
Puuloa Range Training Facility	165 ac
Pearl City Annex	27 ac
Manana Family Housing Area	62 ac
Waikane Valley Impact Area	187 ac
Molokai Training Support Facility	12 ac
Total	**4,698 ac**



Molokai Training Support Facility
Molokai (TSF), currently inactive, was used to support Marine Corps exercises at the former Molokai Training Area and may be used as a forward refueling point.

Pearl City Annex
(PCA) resides within the Pearl Harbor Naval Complex and is used as a warehouse complex by a variety of Marine Corps, Navy, and other DoD tenants.

Waikane Valley Impact Area (WVIA) is a portion of the larger and former Waikane Training Area used by the Army and Marine Corps until 1978. Access is currently restricted due to concerns over unexploded ordnance and the site is undergoing clean up operations under the Department of Defense's Military Munitions Response Program.



Marine Corps Base Hawaii Kaneohe Bay is the largest installation-approximately 2,950 acres—and provides the majority of operational, administrative, community support, and bachelor and family housing facilities for Marines in Hawai'i. Major operational facilities include the 7,770-foot runway at Marine Corps Air Station Kaneohe Bay, aircraft and ground vehicle maintenance shops and parking area, and training areas, including live fire ranges in Ulupau Crater.

Marine Corps Training Area Bellows (MCTAB) is a 1,074-acre non-live fire training and maneuver range with three Military Operations in Urban Terrain (MOUT) sites and four aircraft landing zones to support integrated air, land, and sea exercises and amphibious operations for company and battalion-sized units.

Camp H.M. Smith is headquarters for the U.S. Marine Corps Forces Pacific, the U.S. Pacific Command, and the Special Operations Command Pacific.

MCB HAWAII MASTER PLANNING

In September of 2014, MCB Hawaii stakeholders began a collaborative process of creating an overarching planning vision and goals to guide their master planning process. Design principles and objectives were also defined to ensure the future physical development of the base would adhere to the broader planning vision. As part of the visioning process, stakeholders created a Framework Plan based on characteristics such as geographic features, mission, land use, and circulation patterns that subdivided MCB Hawaii into seven Planning Districts.

In January of 2015, stakeholders reconvened for a four-day planning charrette to develop alternative plans for each district based on mission requirements and a thorough analysis of existing site conditions. These alternative district plans were refined—and eventually combined—through additional workshops, working groups, and meetings with base leadership into the Area Development Plans presented on the following pages.

The *MCB Hawaii Installation Master Plan* was developed following guidance outlined in the Unified Facilities Criteria (UFC) 2-100-01 *Installation Master Planning* (DoD 2012) and Marine Corps Order (MCO) 11000.12, *Real Property Facilities Manual, Facilities Planning and Programming* (USMC 2014). As stated in the UFC, "One of the primary purposes of the planning process is to apply comprehensive planning strategies through facility and infrastructure development, to include planning, programming, engineering and design, construction, reuse, real estate actions, public-private ventures, operations and maintenance, and disposal."

UNIFIED FACILITY CRITERIA MASTER PLANNING STRATEGIES

- Sustainable Planning
- Natural, Historic and Cultural Resource Management
- Healthy Community Planning
- Defensible Planning
- Capacity Planning
- Area Development Planning
- Network Planning
- Form-Based Planning
- Facility Standardization
- Plan-Based Programming

September 2014
- Data Gathering
- Site Investigation
- GIS Analysis

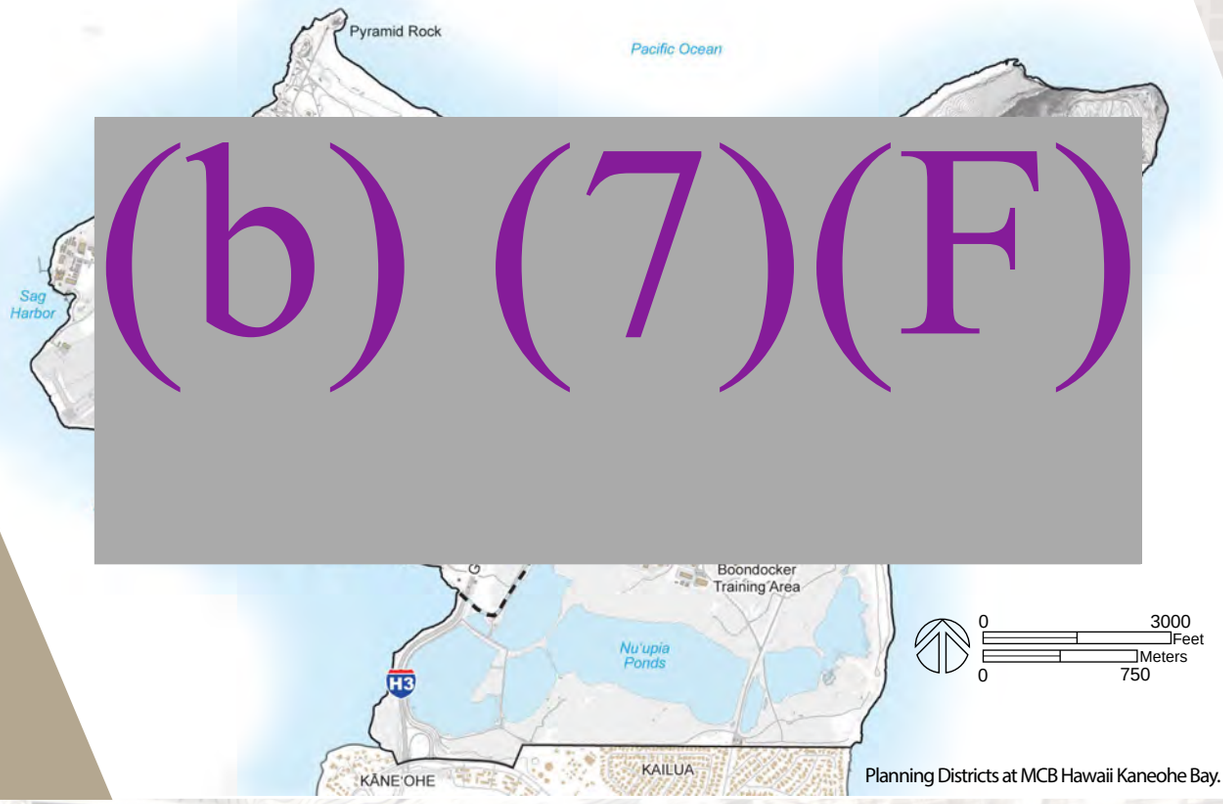
October 2014 - January 2015
- Additional Site Investigation
- Stakeholder Interviews
- GIS Analysis

February 2015 - June 2015
- Refine Planning Concepts
- Additional Interviews
- Development of Alternatives

PROJECT SCOPING | VISIONING PHASE | PLANNING & CONCEPT DEVELOPMENT

September 2014
- Kick-off Brief with Leadership
- Visioning Workshop (MCB Hawaii Vision Plan, April 2015)

January 2015 - March 2015
- Stakeholder Charrette Workshop
- 1st Community Open House Meeting



Planning Districts at MCB Hawaii Kaneohe Bay.

PHASE

REPORT PREPARATION PHASE

July 2015 - August 2015
- Planning Alternatives Evaluated at Concept Workshop
- 1st Working Group Meeting
- Present Final Concepts to Base Leadership

August 2015 - October 2015
- Prepare Draft Plans

October 2015 - December 2015
- Review and Comment Period for Draft Plans

January 2016 - March 2016
- 2nd Community Open House Meeting
- 2nd Working Group Meeting
- Prepare Pre-Final Plans

May 2016 - September 2017
- Prepare Final Plans
- Project Complete

PLANNING VISION, GOALS, & ANALYSIS

MCB Hawaii Master Planning Vision Statement:

MCB Hawaii is committed to meeting mission readiness goals and operational requirements by providing modern, efficient, and sustainable facilities. To achieve this, we will consolidate facilities and collocate command elements and we will retain and optimize training capabilities while creating safe campuses and neighborhoods connected by greenspace networks.

PLANNING GOALS

Modern, Efficient, and Sustainable Facilities: Vacate and demolish excess or inadequate facilities, modernize and sustain facilities that will be retained, and reuse existing facilities to maximize functional efficiencies. Incorporate sustainable practices by employing renewable energy and conservation technologies in new and existing facilities.

Consolidated Functions: Consolidate and collocate work and live functions into the same building or complex by command element to promote efficient use of time, resources, and manpower.

Optimize Training Capabilities: Develop and maintain state-of-the-art joint-use multi-purpose ranges and training areas that support tenant requirements. Use appropriate modeling and simulations to provide additional training capacity. Retain valuable range and training spaces by monitoring surrounding land-use and maintaining an active encroachment control program.

Safe Campuses and Neighborhoods: Improve entry control facilities and secure mission critical assets. Create safe campuses and neighborhoods by utilizing a town center concept with complete streets, wide and connected sidewalks, on-street parking, and bike friendly and connected communities.

Greenspace Networks: Incorporate recreation areas, parks, quads, and open greenspaces that are accessible for service members and their families. Incorporate pedestrian pathways and connected sidewalks. Incorporate landscape buffers and enhancements along walkways and roadways. Utilize native plants and trees in landscaping.

Data Gathering	SWOT Analysis	Interviews	Field Visits	Site Analysis
Reviewed and incorporated existing global, regional, and installation-level plans, policies, and initiatives to gain an understating of the current situation impacting MCB Hawaii. Collected and reviewed data on known projects, facility condition and requirements, mission, loading, and operations and environmental conditions.	An analysis of strengths, weaknesses, opportunities, and threats (SWOT) was conducted by stakeholders to identify the characteristics within and external to MCB Hawaii that may help or hinder achieving its objectives.	Stakeholder interviews were conducted with personnel from major departments and tenant commands to discuss current and future facility requirements and any issues of concern.	On site visits of all major facilities and special areas were combined with the stakeholder interviews, to validate existing maps, facility conditions, and to ascertain applicable physical space and infrastructure needs.	Physical and operational constraints were identified to determine areas of opportunity for future development or redevelopment.

STRENGTHS
- Livability
- Location
- Housing & Recreation

WEAKNESSES
- Poor Traffic, Parking, & Walkability
- Facility, Age, & Condition
- Operational Areas

O

OPPORTUNITIES
- Replace, Repair, & Reuse Facilities
- Improve Base Operations
- Improve Infrastructure

T

THREATS
- Environmental Threats
- Encroachment
- Funding

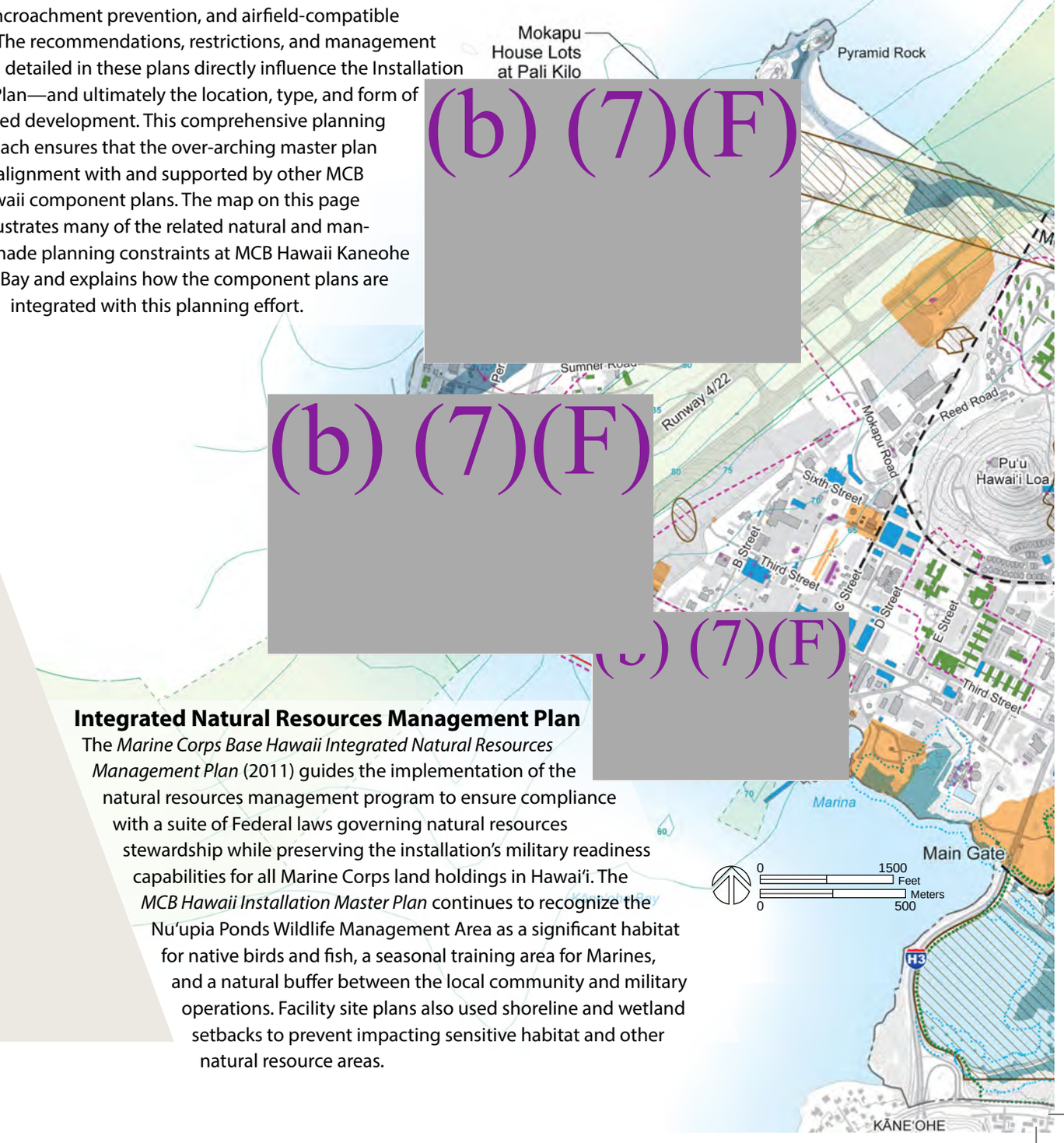
LEGEND

- Installation Boundary
- ADP Boundary
- Explosive Safety Quantity Distance Arc
- Object Calibration Pad Standoff
- Aircraft Accident Potential Zone
- Surface Danger Zone
- Day-Night Average Sound Level (DNL) 65
- Underground Storage Tank
- Environmental Remediation Site/ Installation Restoration Program
- Flood Zone AE, Base Floor Elevation (BFE) between 2–16 ft.
- Flood Zone VE, BFE between 5–16 ft.
- 10-year Flood Plain*
- 100-year Flood Plain*
- Wetland
- 100 ft. Wetland Buffer
- Wildlife Management Area
- National Historic Landmark Facility Listed on NRHP
- National Historic Landmark Boundary
- NRHP-Eligible Facility within Historic District
- NRHP-Eligible Facility
- NRHP-Eligible Historic District
- NRHP Proposed Historic District
- Archaeological Site

Source: MCB Hawaii GIS 2015

PLAN CROSSWALKS

MCB Hawaii has subject-specific planning documents focused on training, natural and cultural resource management, strategic planning, encroachment prevention, and airfield-compatible land uses. The recommendations, restrictions, and management strategies detailed in these plans directly influence the Installation Master Plan—and ultimately the location, type, and form of proposed development. This comprehensive planning approach ensures that the over-arching master plan is in alignment with and supported by other MCB Hawaii component plans. The map on this page illustrates many of the related natural and man-made planning constraints at MCB Hawaii Kaneohe Bay and explains how the component plans are integrated with this planning effort.



Integrated Natural Resources Management Plan

The *Marine Corps Base Hawaii Integrated Natural Resources Management Plan* (2011) guides the implementation of the natural resources management program to ensure compliance with a suite of Federal laws governing natural resources stewardship while preserving the installation's military readiness capabilities for all Marine Corps land holdings in Hawai'i. The *MCB Hawaii Installation Master Plan* continues to recognize the Nu'upia Ponds Wildlife Management Area as a significant habitat for native birds and fish, a seasonal training area for Marines, and a natural buffer between the local community and military operations. Facility site plans also used shoreline and wetland setbacks to prevent impacting sensitive habitat and other natural resource areas.

Air Installation Compatibility Use Zones

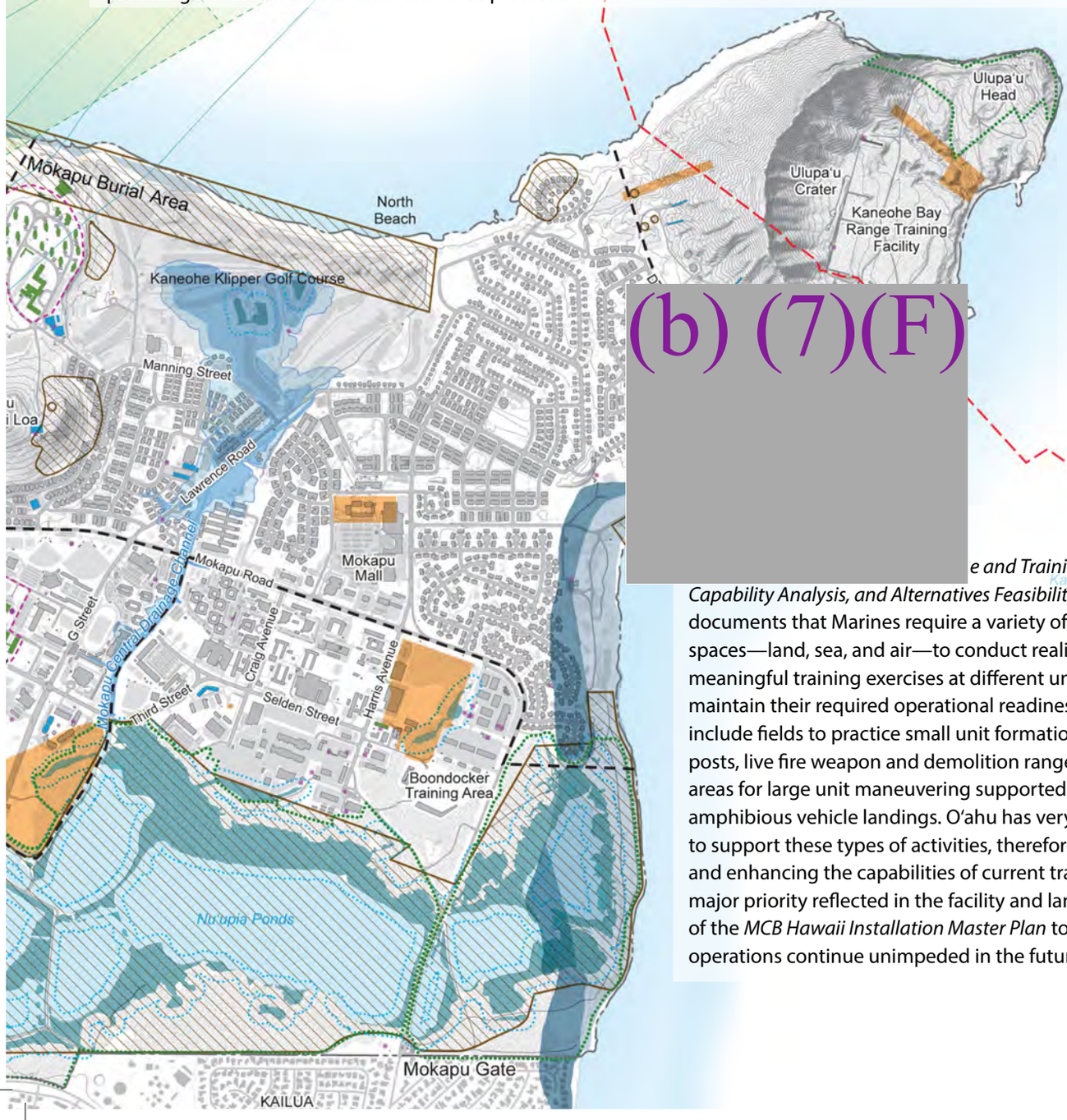
The *Air Installation Compatibility Use Zones (AICUZ) Study Update, Marine Corps Base Hawaii Kaneohe Bay* (2009) addresses land use compatibility around the airfield by establishing safety zones, height restrictions, and permitted noise exposure impacts to ensure the continued safety of both airfield operators and the surrounding military and civilian communities.

Strategic Plan

The *Marine Corps Base Hawaii Strategic Plan* (2015) outlines the mission, vision, priorities, guiding principles, and core competencies of MCB Hawaii. The *MCB Hawaii Installation Master Plan* supports the goals and priorities of the strategic plan through long-range land use planning that maximizes and preserves training capabilities, maintaining the future viability of the installation to meet operational requirements through facility recapitalization and site reservations, and providing for effective installation and force protection.

Integrated Cultural Resources Management Plan

MCB Hawaii's rich and diverse cultural history is encompassed in over 75 archaeological sites and complexes, hundreds of architectural properties, three proposed historic districts, and the Kaneohe Naval Air Station National Historic Landmark, which commemorated the December 7, 1941, Japanese attack on O'ahu. In support of USMC policy to responsibly manage and maintain these cultural resources on all Marine Corps lands in Hawai'i—as detailed in the Integrated Cultural Resources Management Plan, MCB Hawaii (2014)—the *MCB Hawaii Installation Master Plan* proposes the major renovation and reuse of select historic buildings, seeks to maintain the integrity of the proposed historic districts and view planes, and includes a reinterment site that resulted from a multi-year outreach effort with the Hawaiian community. No proposed development will impact known archaeological sites.



(b) (7)(F)

e and Training Requirements, Capability Analysis, and Alternatives Feasibility Study (2014) documents that Marines require a variety of physical spaces—land, sea, and air—to conduct realistic and meaningful training exercises at different unit levels to maintain their required operational readiness. These spaces include fields to practice small unit formations or command posts, live fire weapon and demolition ranges, and extensive areas for large unit maneuvering supported by aircraft and amphibious vehicle landings. O'ahu has very limited areas to support these types of activities, therefore maintaining and enhancing the capabilities of current training areas are a major priority reflected in the facility and land use planning of the *MCB Hawaii Installation Master Plan* to ensure that operations continue unimpeded in the future.

EXISTING LAND USE PLAN

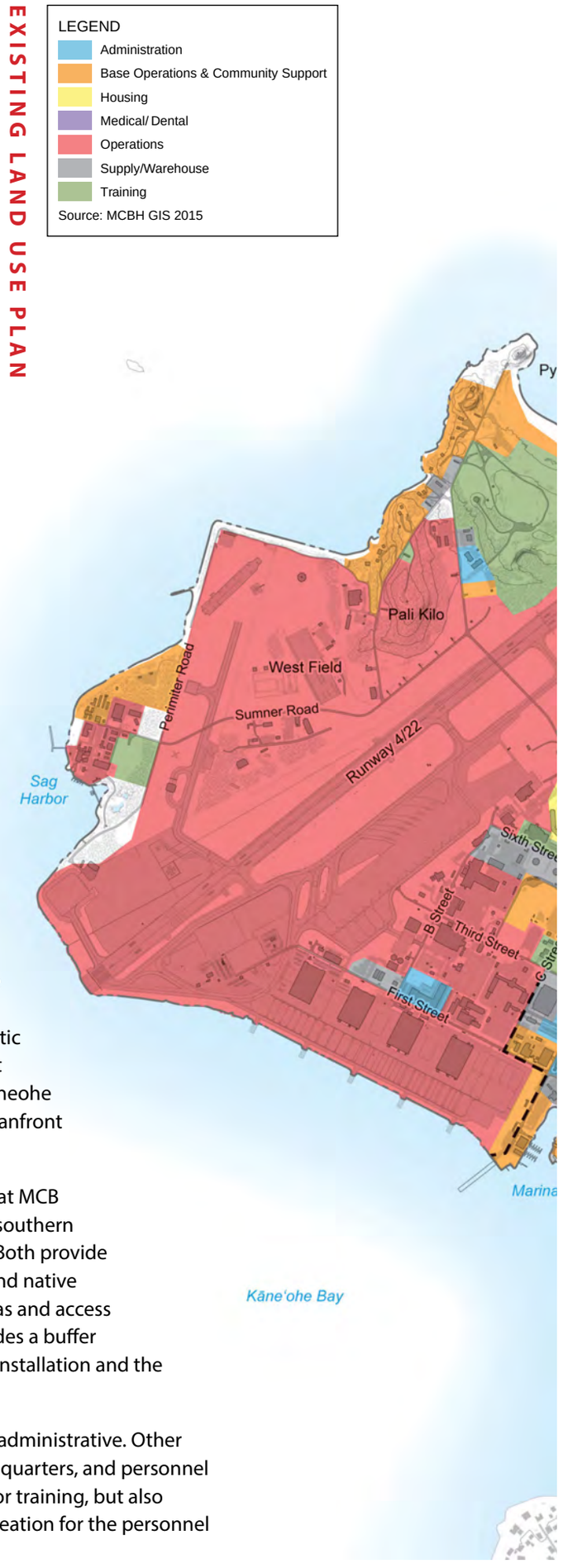
Excluding family housing units, MCB Hawaii Kaneohe Bay has over 900 buildings that total almost 6 million square feet of floor area.

(b) (7)(F) separating the predominately aviation, ground unit, and base support areas in the south from the family housing and community support areas in the north. Airfield-related uses dominate the western portion of the base. The eastern side primarily supports ground unit operations, maintenance, and training. Ulupa'u Crater in the northeastern corner of the peninsula is a secured training area with live-fire ranges. Other areas used for training include the Boondocker Training Area and West Field. In practice, most open areas around the base are used for some type of unit level training.

Mokapu Mall is the center of commercial activity, and is surrounded by other community support uses that include an elementary school, a child development center, and family housing. Major recreation areas include four athletic field complexes, Pyramid Rock beach, North Beach, Fort Hase beach, the Pali Kilo Cottages, and the 18-hole Kaneohe Klipper Golf Course, which occupies much of the oceanfront along the northern shoreline of the base.

There are two wildlife management areas (WMA) at MCB Hawaii Kaneohe Bay—Nu'upia Ponds along the southern boundary, and Ulupa'u Head to the northeast. Both provide habitat for endangered waterfowl, seabirds, and native fish. No development is allowed in these areas and access is restricted. The Nu'upia Ponds WMA provides a buffer between the operational activities on the installation and the adjacent civilian community of Kailua.

The primary land use at Camp Smith is administrative. Other uses include family housing, bachelor quarters, and personnel support. Puuloa RTF is largely used for training, but also provides bachelor housing and recreation for the personnel that work at the range.



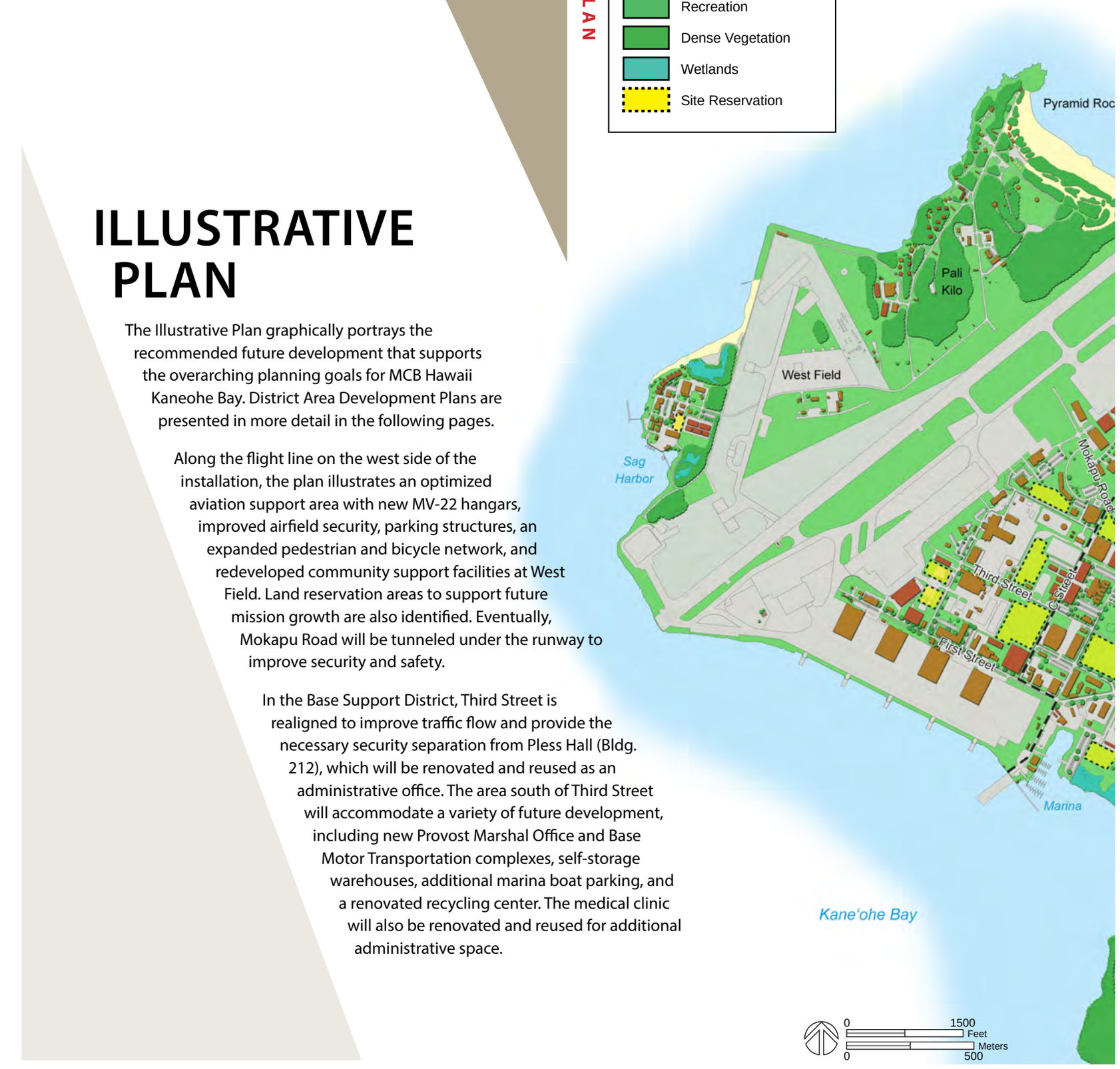
Pyramid Rock
Pacific Ocean
North Beach
Kaneohe Klipper Golf Course
Ulupa'u Head
Ulupa'u Crater
Kaneohe Bay Range Training Facility
Daly Road
Magazine Road
Middaugh Street
Fort Hase
Kailua Bay
Reed Road
Mokapu Road
Manning Street
Pu'u Hawai'i Loa
Lawrence Road
G Street
D Street
E Street
Third Street
Mokapu Central Drainage Channel
Mokapu Road
Mokapu Mall
Craig Avenue
Harris Avenue
Selden Street
Third Street
Boondocker Training Area
Main Gate
Nu'upia Ponds
H3
Mokapu Gate
KĀNE'OHE
KAILUA
0
1500
Feet
Meters
0
500

ILLUSTRATIVE PLAN

The Illustrative Plan graphically portrays the recommended future development that supports the overarching planning goals for MCB Hawaii Kaneohe Bay. District Area Development Plans are presented in more detail in the following pages.

Along the flight line on the west side of the installation, the plan illustrates an optimized aviation support area with new MV-22 hangars, improved airfield security, parking structures, an expanded pedestrian and bicycle network, and redeveloped community support facilities at West Field. Land reservation areas to support future mission growth are also identified. Eventually, Mokapu Road will be tunneled under the runway to improve security and safety.

In the Base Support District, Third Street is realigned to improve traffic flow and provide the necessary security separation from Pless Hall (Bldg. 212), which will be renovated and reused as an administrative office. The area south of Third Street will accommodate a variety of future development, including new Provost Marshal Office and Base Motor Transportation complexes, self-storage warehouses, additional marina boat parking, and a renovated recycling center. The medical clinic will also be renovated and reused for additional administrative space.

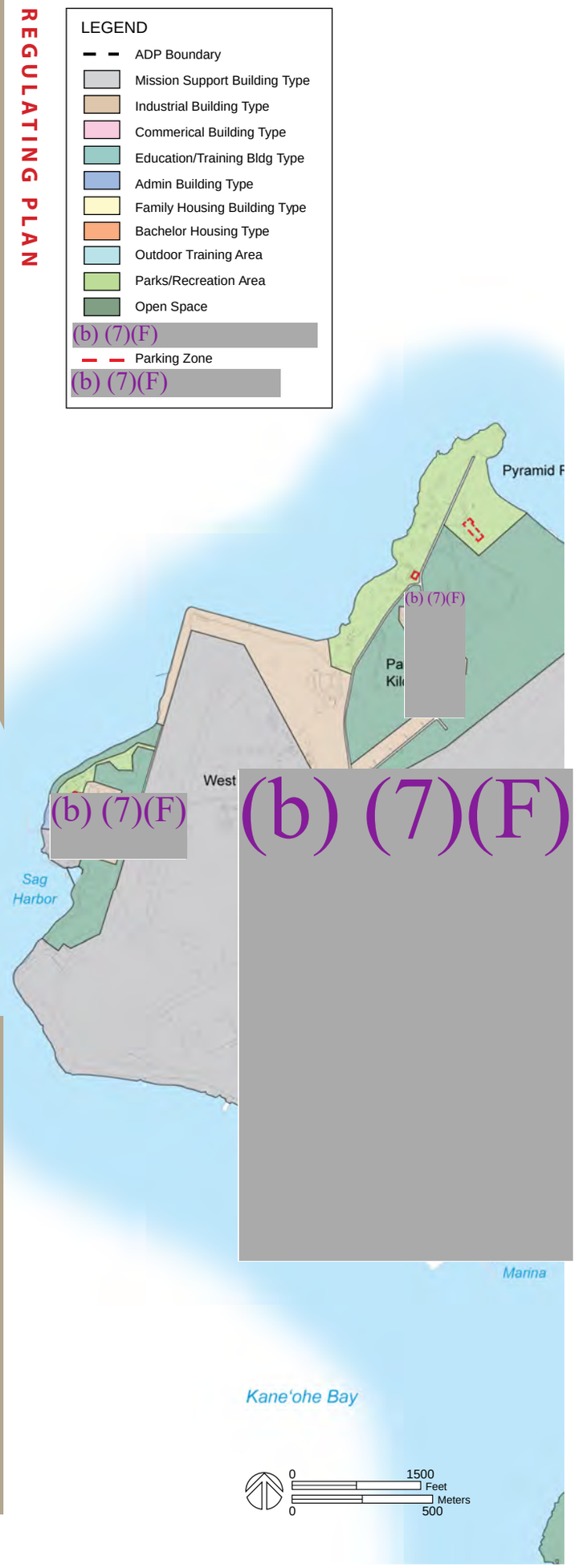


Significant new construction is proposed in the Ground Support District. The plan presents a strategy to increase density through the redevelopment of aging facilities while preserving training areas and maximizing the amount of future developable land in the district. Major new facilities include Regimental and Battalion headquarters, barracks and parking structure, a mess hall, a medical clinic, and a training complex. New and efficient warehouses will allow MCB Hawaii to relocate materials currently stored at Pearl City Annex.

Future improvements in the Community Support District include expansion of retail operations, the redevelopment of the elementary school, and construction of a library, movie theater, and parking structure. Live-fire training activities will continue with no major changes being proposed at Ulupau Crater.

REGULATING PLAN

The Regulating Plan provides information on the form and scale of buildings and includes guidance on required build-to lines, required entry locations, and acceptable uses and appropriate building types. It also prescribes minimum and maximum building heights (floors) to appropriately increase development density at MCBH Kaneohe Bay. The building height guidelines intend to maximize the development potential of the installation's limited land area while being sensitive towards potential visual impacts.



BUILDING TYPES

- **MISSION SUPPORT BUILDING TYPES:** airfield, flight line facilities, hangars, and armories
- **INDUSTRIAL BUILDING TYPES:** warehouses, maintenance facilities/shops, and motor pools
- **ADMINISTRATIVE BUILDING TYPES:** headquarters facilities and general offices
- **EDUCATIONAL AND TRAINING BUILDING TYPE:** classrooms and trainers
- **MEDICAL BUILDING TYPES:** medical centers and clinics
- **COMMERCIAL/COMMUNITY SUPPORT BUILDING TYPES:** retail stores, restaurants, religious buildings, recreation facilities, bowling alley and clubs
- **FAMILY HOUSING BUILDING TYPES:** single-family homes and row houses
- **UNACCOMPANIED PERSONNEL HOUSING BUILDING TYPES:** bachelor enlisted and officer quarters

Administrative Building Type

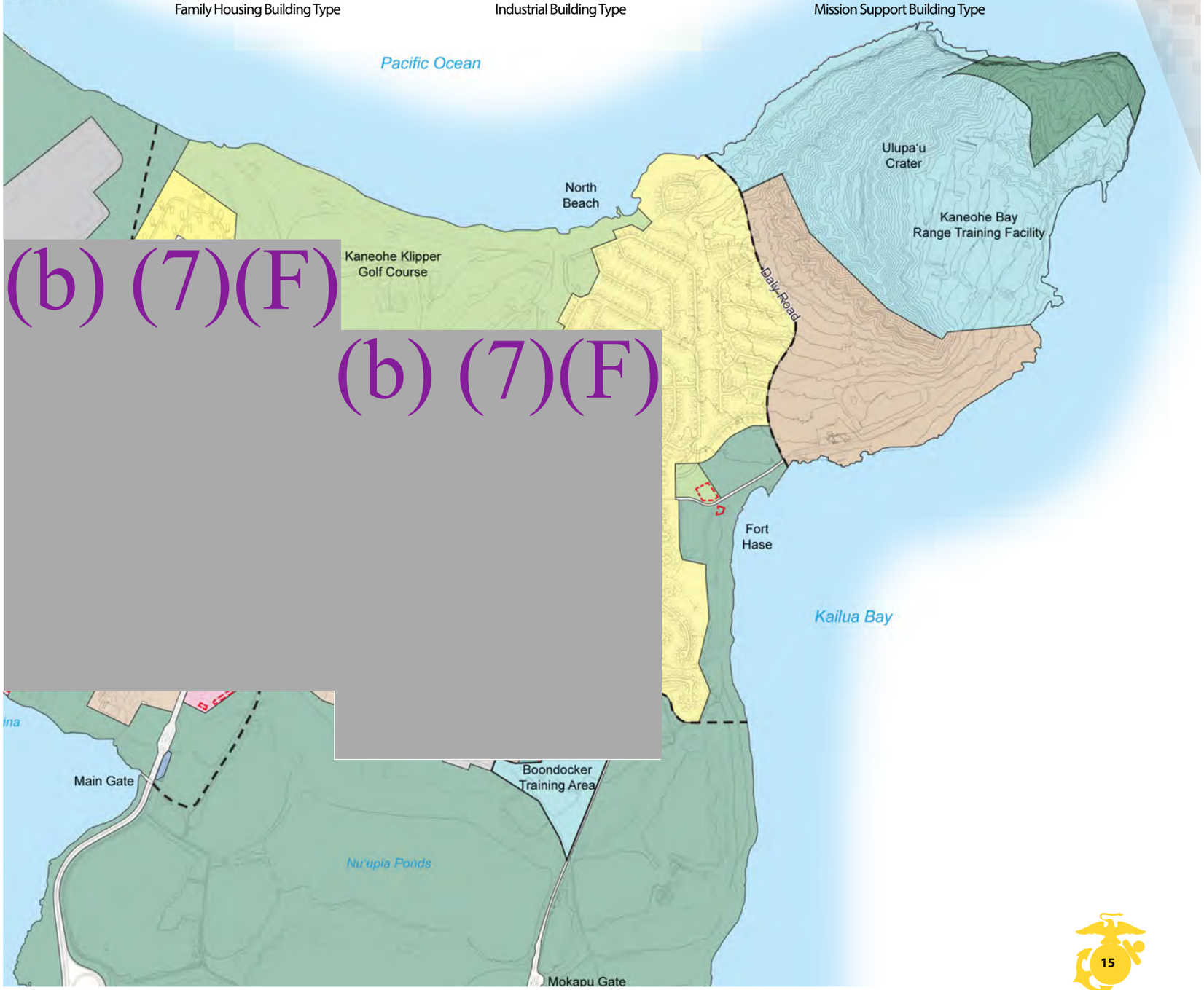
Bachelor Housing Type

Commercial Building Type

Family Housing Building Type

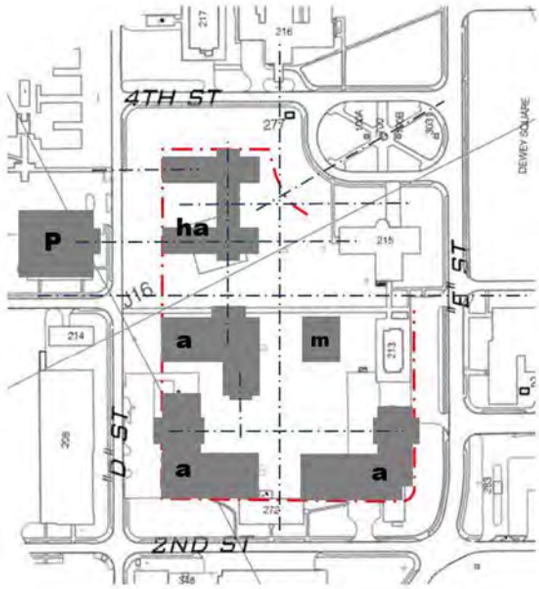
Industrial Building Type

Mission Support Building Type



INSTALLATION DEVELOPMENT STANDARDS

In conjunction with the Regulating Plan and previous MCB Hawaii studies and reports, the Installation Development Standards establish a holistic framework where design elements —functional use, form and style, location, circulation, and context—contribute to overall efficiency, functionality, and an improved quality of life for those who live and work at MCB Hawaii.



Proposed construction within historic district should align to existing buildings.

Siting/Placement

All new buildings shall be arranged in a formal linear or symmetrical pattern and consider the relationship to neighboring buildings. The alignment of building frontages, sides, entries, plazas and open spaces, and sidewalks and walkways should correspond to major roadways and the axes of these elements of adjacent buildings.

Massing

Massing is the perceived scale of a building based on its size, proportion, facade, composition, and volume. The mass of a building should relate to human scale and exterior spaces. Massing that is "broken up" to reduce bulkiness is preferred over larger, sprawling building footprints, which can appear oppressive or overly bulky as a single solid mass.

Form

Form is defined as a building's shape and volume. Building form should respond to the natural terrain and qualities of the site.

The Historic Administration District Buildings Dewey Square at MCB Hawaii Kaneohe Bay were placed in a formal linear alignment.

The Chapel uses a large monument at the entry to identify it as a significant place of gathering.

CROSSWALK WITH EXISTING PLANS

- **MARINE CORPS BASE HAWAII LANDSCAPE MANUAL, JULY 2014.** This manual provides guidelines and requirements for general landscape design at all MCB Hawaii installation areas. The manual provides both approved and prohibited plant lists, as well as detailed requirements on irrigation and maintenance.
- **REPAIR AND MAINTENANCE MANAGEMENT GUIDELINES, U.S. MARINE CORPS BASE HAWAII, MARCH 2015.** This guidelines provides direction for projects involving historic facility and structures.
- **MCB HAWAII KANEOHE BAY BASE EXTERIOR ARCHITECTURAL PLAN, DECEMBER 2013.** This document presents design requirements and guidelines on site planning, landscape design, roadway design, architecture, and signage.
- **BICYCLE ROUTE PLANNING STUDY FOR MCB HAWAII KANEOHE BAY, DECEMBER 2012.** This study provides recommendations for the implementation of a bikeway system across the base.
- **MCBH MASTER PLAN, FACILITY ENHANCEMENT PLAN, JUNE 1999.** This plan includes recommendations for various exterior elements that compose the base's outdoor environment including landscape and open space, exterior color, signage and graphics, and site furnishings.

Proportion

Proportion is the relationship of a building's parts to the whole which can provide a sense of order in a sequence of spaces. When designing a building, use a proportion compatible with that of surrounding structures. Use symmetry to balance similar building forms in relation to a central element; for example, a central lobby or plaza can help to balance building wings. Size and appropriately slope pitched roofs for the building's mass. The size of windows, fenestrations, bays, and exterior building elements must be in proportion to each other and the overall building.

Orientation

The orientation of a building's mass impacts the energy efficiency of the structure and the amount of solar gain the building receives. As feasible, situate buildings in an east–west orientation to minimize westerly sun exposure and maximize daylight along south and north elevations. Incorporate energy conservation methods such as natural lighting and ventilation utilizing tradewind direction and flows.

Scale

Scale is how we perceive the size of a building element or space relative to other forms. Scale can reflect the use of a building—grander scale is more appropriate for a headquarters facility or monumental structure, while a more modest scale is more appropriate for residential or administrative building.

The Air Terminal building is an example of building form with appropriate scale and variation in massing, texture, and rhythm.

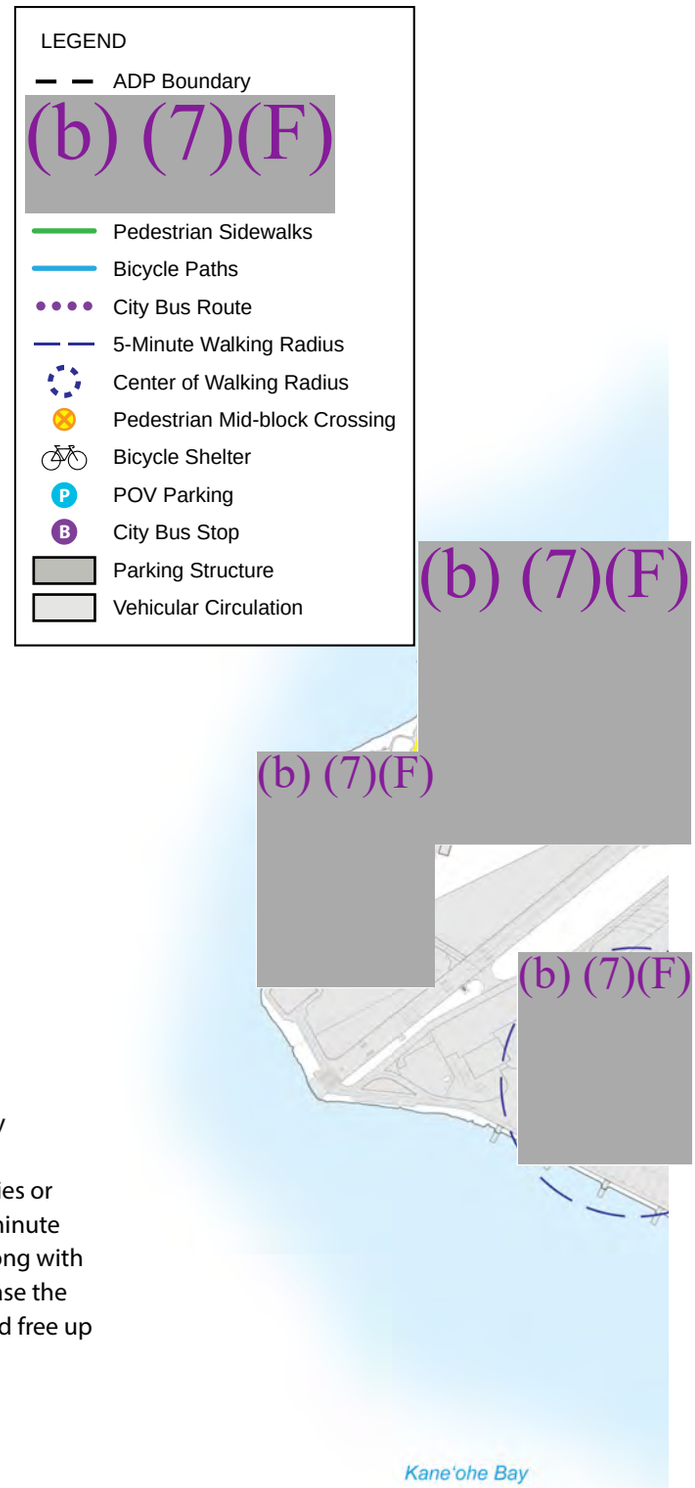
The division of bays, pattern of window placement, and scale of architectural elements of new barracks is an example of preferred form and proportion for this type of large, multi-story structure.

CIRCULATION PLAN

The Circulation Plan for MCB Hawaii Kaneohe Bay incorporates a variety of roadway types, public transit routes, and bicycle and pedestrian paths to provide an efficient, logical, and connected network. The network elements link existing and proposed parking lots and structures to primary live, work, and play areas throughout the base.

In order to increase walkability and bicycling, an east–west multipurpose pathway alignment has been identified. This corridor provides pedestrians and bicyclists a dedicated route from the Community Support District to work centers within the Base Support and Aviation Districts. Enclosed and secured bike storage lockers at housing areas and work centers will also promote bike usage for commuters.

In order to reduce the amount of surface parking, centrally located parking structures are proposed in each district. Parking structures will be shared among multiple facilities or buildings. Most work centers are located within a 10-minute walking radius from proposed parking structures. Along with a complete pedestrian network, this will help decrease the volume of vehicular trips across the installation, and free up needed land for future mission requirements.



Source: Bicycle Route Planning Study, Bart Collins Hawai'i LLC

Primary roadways (major and minor) carry the greatest volumes of traffic and provide the means by which most persons observe the visual environment of the installation. The proposed (b) (7)(F) street envelope includes bike lanes and canopy or accent trees.

Secondary roadways handle a lower volume of localized traffic. The existing streets located in the family housing area are designed for low vehicle speeds and on-street parking.

Street Envelope

A street's envelope is comprised of roadways, pedestrian pathways, bikeways, landscaping, and lighting. In some locations, it may also include a median, signage, or other site amenities like street furnishings. There are three main types of streets at MCB Hawaii based on the volume and type of traffic: primary roadways-major, primary roadways-minor, and secondary roadways. Each street type incorporates different treatments to provide a safe, multiuse environment of the right-of-way.

(b) (7)(F)

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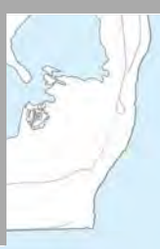
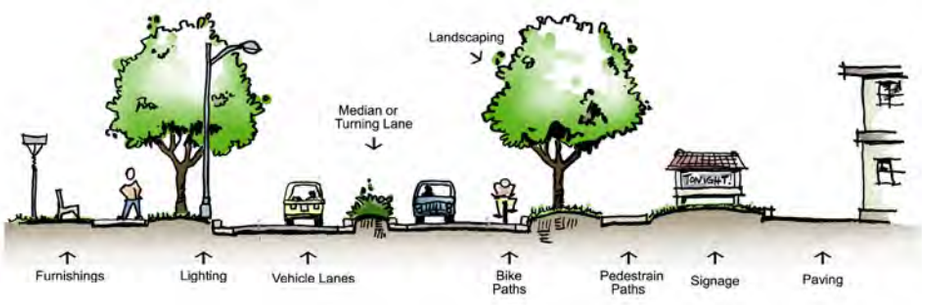




Typical street envelope design

GREEN INFRASTRUCTURE PLAN

The Green Infrastructure Plan depicts existing and proposed parks, open spaces, recreational areas, as well as significant bodies of water including wetlands and ponds. Many green, open spaces around the base provide critical areas for formal and informal unit training. They also provide physical and visual relief to the built environment, and a natural setting for recreation. The Nu'upia Ponds Complex, shoreline areas, and waterways provide wildlife habitat for waterfowl and migratory birds.

Nu'upia Ponds provides wetlands and habitat for waterfowl and migratory birds.

Mokapu Central Drainage Channel serves as a natural link between green spaces.

DISTRICT VISION

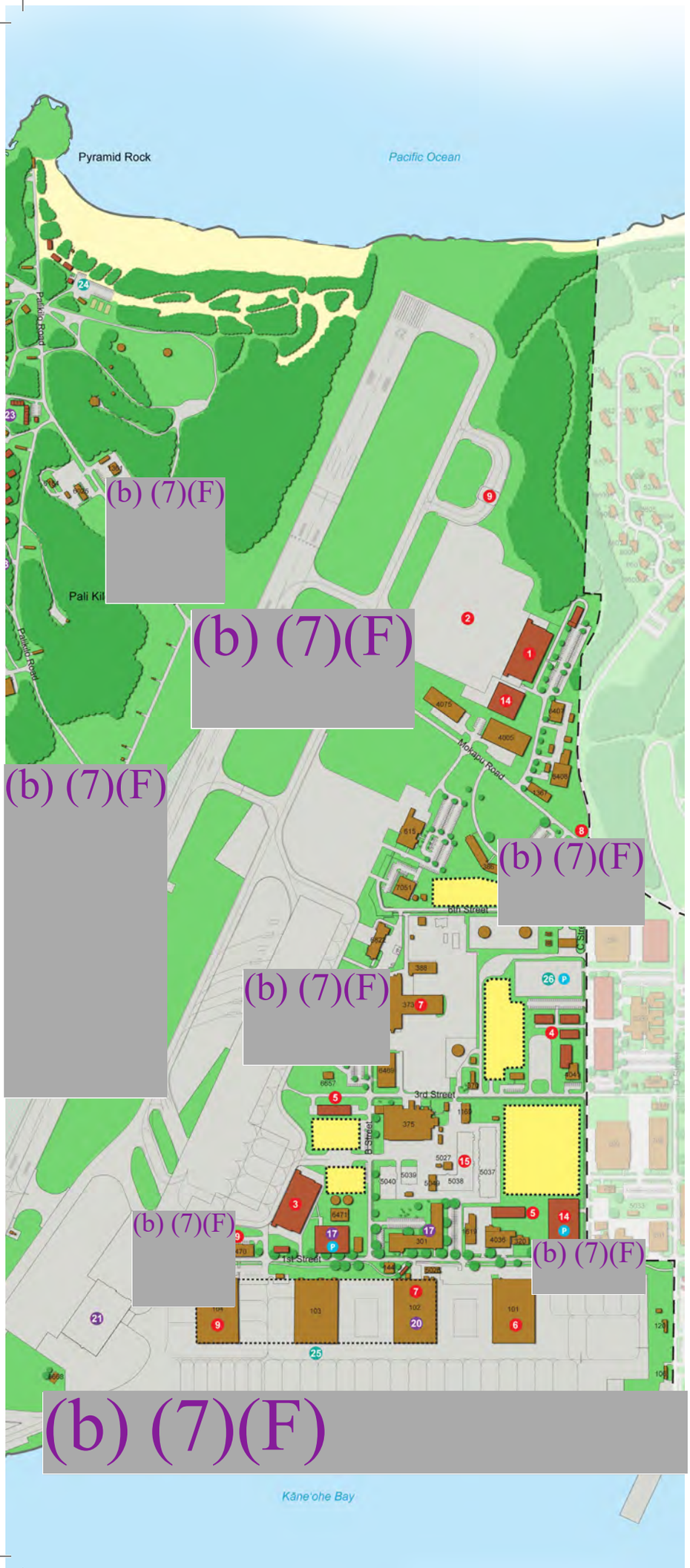
To enhance Marine Corps and partner services mission by providing 24/7 secure operations, training, and support while utilizing the natural Hawaiian landscape for Service members and their families.

AVIATION DISTRICT

The Aviation District is located on the western portion of MCB Hawaii Kaneohe Bay. The majority of facilities in the Aviation District directly support Marine Corps and Navy fixed-wing and helicopter operations. Direct support functions include air traffic control; aircraft crash, fire, and rescue; aircraft refueling; and transient logistics. Administrative and maintenance spaces are provided for base and tenant aviation units. The area west of the runway, known as West Field, includes facilities that support aviation training, ordnance handling, waterfront operations, Explosive Ordnance Disposal, Marine Corps Community Services (MCCS), the 4th Force Reconnaissance Company Detachment, and other small tenants.

DISTRICT PLANNING GOALS

- **IMPROVE LAND USE TO CREATE FUTURE DEVELOPMENT OPPORTUNITIES.** Functions that do not directly support aviation operations and can operate just as efficiently from another location should be relocated to support future aviation-related unit expansion.
- **IMPROVE VEHICULAR AND PEDESTRIAN NETWORK CONNECTIONS.** The District was developed in the 1940s with narrow streets and few connected sidewalks, requiring pedestrians to share roads with vehicles.
- **IMPROVE AIRFIELD SECURITY.** The Marine Corps Air Station airfield lacks a continuous perimeter fence, privately-owned vehicles (POV) park on active aprons to meet the daily parking demand, and POV cross an active runway to access West Field and Pyramid Rock beach.
- **REUSE EXISTING FACILITIES.** Modern and historic buildings can be reused to support administrative functions.
- **REPLACE AGING INFRASTRUCTURE.** Many of the buildings in the District were constructed in the 1940s and are deteriorating, inefficient, and should be recapitalized.
- **ENHANCE COMMUNITY SUPPORT FACILITIES.** The District includes desirable beaches and recreation areas but facilities and infrastructure are inadequate to meet the demand.



Installation Boundary

ADP Boundary

Site Reservation

Existing Building

New/Proposed Building

SHORT-RANGE DEVELOPMENT PROGRAM (1 TO 5 YEARS)

1	**P-904** MV-22 Hangar and Infrastructure
2	**P-905** MV-22 Aircraft Staging Area
3	**P-907/908** MV-22 Hangar
4	**P-884** Aviation Simulator Modernization
5	**P-864** MALS-24 Aircraft Maintenance Expansion
6	**P-863** HMLA Hangar Renovation
7	**P-861** VMU, MWSD and HMH Upgrades
8	**P-924** MV-22 EIS Traffic Improvements
9	**P-116** P-8A Detachment Support Facilities
10	**P-902** Airfield Lighting Improvements
11	**P-887** LHA Pad Conversion/MV-22 LZ
(b) (7)(F)	
13	**P-915** MCCS Self-Storage Facility
14	**P-946** Corrosion Control Hangar
15	**P-936** Van Pad Modernization

MID-RANGE DEVELOPMENT PROGRAM (5 TO 10 YEARS)

(b) (7)(F)	
20	**P-891** Hangar 102 Upgrades
21	**Proposed** Demolish Hangar 105
(b) (7)(F)	
23	**Proposed** Pali Kilo Cottage Expansion

LONG-RANGE DEVELOPMENT PROGRAM (15 TO 20 YEARS)

24	**Proposed** Pyramid Beach Improvements
25	**Proposed** Hangar Redevelopment
26	**Proposed** MWSD Organizational Parking
27	**Proposed** The Cabanas Redevelopment
(b) (7)(F)	

SUMMARY OF DEVELOPMENT

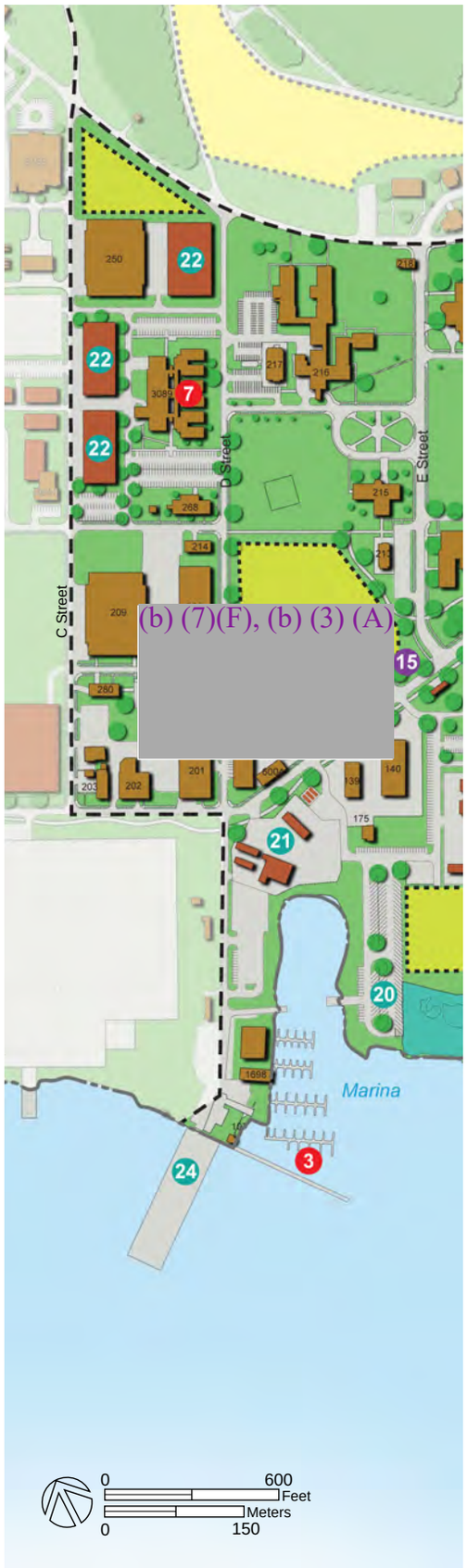
Site Reservation	**12.6 ac**
Building Renovation and Reuse	**251,770 sf**
Building Demolition	**136,580 sf**
New Building Construction	**342,390 sf**
Net Parking Stall Gain	**131 stalls**

DISTRICT VISION

To create a walkable community with multi-story and energy-efficient facilities, and a network of greenspaces, while preserving the district's historic fabric.

BASE SUPPORT DISTRICT

The Base Support District is located in the central portion of MCB Hawaii Kaneohe Bay. The district is bounded by C Street on the west, Mokapu Road on the north, the Mokapu Central Drainage Channel on the east, and Kāne'ohe Bay on the south. The majority of facilities and activities in this district are associated with administration, public works, and community support. Some of the major uses include headquarters buildings, public works (e.g., wastewater treatment plant, main substation, recycling), Provost Marshal Office, base supply, professional education, active duty and transient billeting, and MCCS support (e.g., Marine and family services, ball fields, and the marina).



DISTRICT PLANNING GOALS

- **REUSE EXISTING FACILITIES:** Consolidate administrative functions from across the installation, as appropriate, into modern and historic buildings to support broader land use planning goals.
- **REPLACE AGING INFRASTRUCTURE:** Many of the buildings in the district were constructed in the 1940s and are deteriorating, inefficient, and should be recapitalized. Non-historic and underutilized facilities should be vacated and demolished to reduce ongoing maintenance costs and provide space for future development, as appropriate.
- **IMPROVE VEHICULAR AND PEDESTRIAN NETWORK CONNECTIONS:** Modify the road infrastructure to alleviate key traffic concerns while improving antiterrorism/force protection measures. Provide pedestrian and bikeway connections to networks outside the district.
- **INCREASE DEVELOPMENT DENSITY:** The Base Support District is centrally located with direct access to other areas of the base. Planning should ensure that redevelopment maximizes these prime lands by increasing development density to ensure the highest and best land use over the long-term. Community support functions that would benefit by being in proximity to major billeting and family housing areas should be relocated over the long-term.
- **ENHANCE COMMUNITY SUPPORT FACILITIES:** The District includes unique recreational activities (boating, fitness center, bowling, sports fields and courts, skate park), but some facilities and infrastructure are inadequate to meet the demand.

LEGEND

- Installation Boundary
- ADP Boundary
- Site Reservation
- Existing Building
- New/Proposed Building

SHORT-RANGE DEVELOPMENT PROGRAM (1 TO 5 YEARS)

1	**P-924** MV-22 EIS Traffic Improvements
2	**P-910** Bachelor Enlisted Quarters
3	**N-248** Wave Attenuator and Finger Piers
4	**P-877** MCB Hawaii ECP Upgrades
5	**P-875** WRF Upgrades
6	**Proposed** Reinterment Site
7	**Proposed** Medical Clinic Conversion
(b) (7)(F), (b) (3) (A)	

MID-RANGE DEVELOPMENT PROGRAM (5 TO 10 YEARS)

9	**P-930** Fire Station
(b) (7)(F), (b) (3) (A)	
12	**Proposed** Fitness Center Expansion
13	**P-911** Bachelor Enlisted Quarters
14	**P-912** Bachelor Enlisted Quarters
15	**Proposed** Third Street Realignment
16	**Proposed** Pless Hall Renovation
(b) (7)(F), (b) (3) (A)	

LONG-RANGE DEVELOPMENT PROGRAM (15 TO 20 YEARS)

18	**Proposed** PMO Complex
19	**Proposed** Motor Transportation Complex
20	**Proposed** Boat Storage Facility
21	**Proposed** Recycling Center Renovation
22	**Proposed** Warehouse District Redevelopment
23	**Proposed** Enlisted Club Redevelopment
24	**Proposed** Fuel Pier Improvements
25	**Proposed** Recreation and Pedestrian Improvements

SUMMARY OF DEVELOPMENT

Site Reservation	**15.2 ac**
Building Renovation and Reuse	**136,970 sf**
Building Demolition	**279,920 sf**
New Building Construction	**448,330 sf**
Net Parking Stall Gain	**348 stalls**
Net Bed Space Gain	**384 beds**

GROUND SUPPORT DISTRICT

DISTRICT VISION

To create an environment that promotes unit cohesion and space efficiency. Marines will be housed near their work areas in facilities that promote walkability and consolidate unit functions onto contiguous real estate. The district will utilize mixed vertical and horizontal development to combine common functions into single building and maximize open greenspace for basic field training and physical fitness.

The Ground Support District is located on the south-eastern portion of MCB Hawaii Kaneohe Bay. The district is bounded by the Mokapu Central Drainage Channel on the west, Kailua Bay on the east, Mokapu Road on the north, and the 'Aikahi Park subdivision of Kailua on the south. The majority of facilities in the Ground Support District directly support Marine Corps ground and logistic unit operations and training. Direct support functions include headquarters administration, vehicle and heavy equipment maintenance and storage, weapon maintenance and storage, training, logistics and supply, garrison aid stations, and bachelor enlisted quarters and support facilities. The Boondocker Training Area, a training auditorium, and some MCCS retail shops are also located within the district. Over half of the land area in the district is wetland and a designated wildlife management area—Nu'upia Ponds Wildlife Management Area.

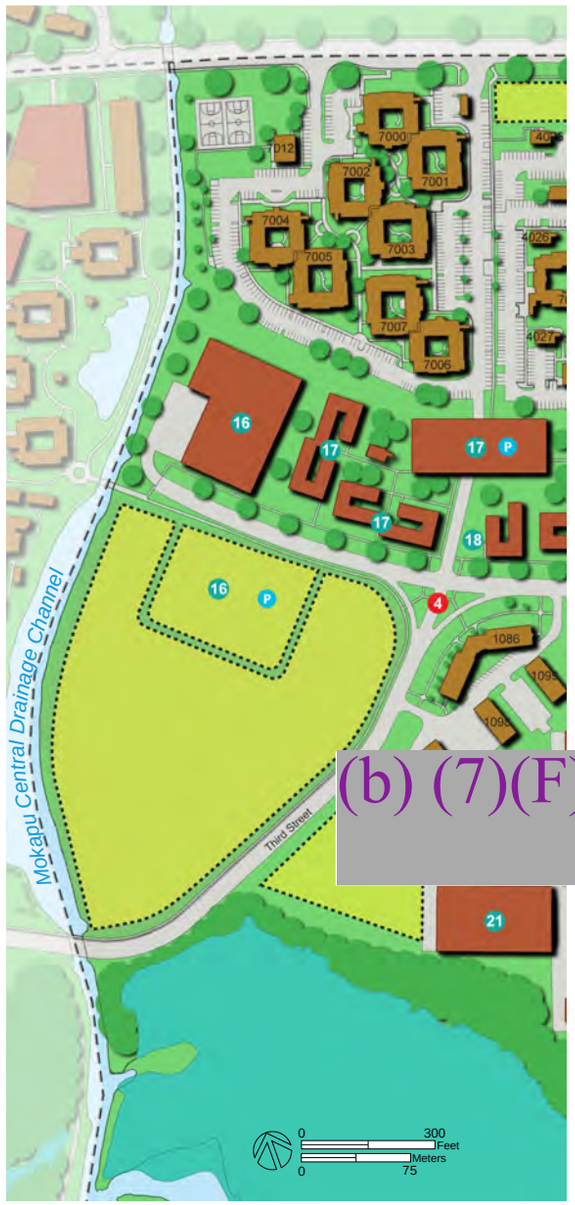
DISTRICT PLANNING GOALS

- **PRESERVE AND EXPAND TRAINING ASSETS:** Ensure there is no net loss of training facilities or open spaces used for unit formations and maneuver training.
- **REPLACE AGING INFRASTRUCTURE:** Many of the buildings in the district were constructed in the early 1950s and are deteriorating, or were not designed for current uses, and should be replaced. Underutilized facilities should be vacated and demolished to reduce ongoing maintenance costs and provide space for future development, as appropriate.
- **INCREASE DEVELOPMENT DENSITY:** To maximize use of the limited, available land in the district, dense, compact vertical redevelopment with limited surface parking should be pursued.
- **IMPROVE LAND USE TO CREATE FUTURE DEVELOPMENT OPPORTUNITIES:** Functions that do not directly support ground unit and supply operations and can operate just as efficiently from another location should be relocated to support future ground-related unit expansion.
- **UNIT CONSOLIDATION:** Consolidate ground and logistics unit functions into modern and efficient buildings.

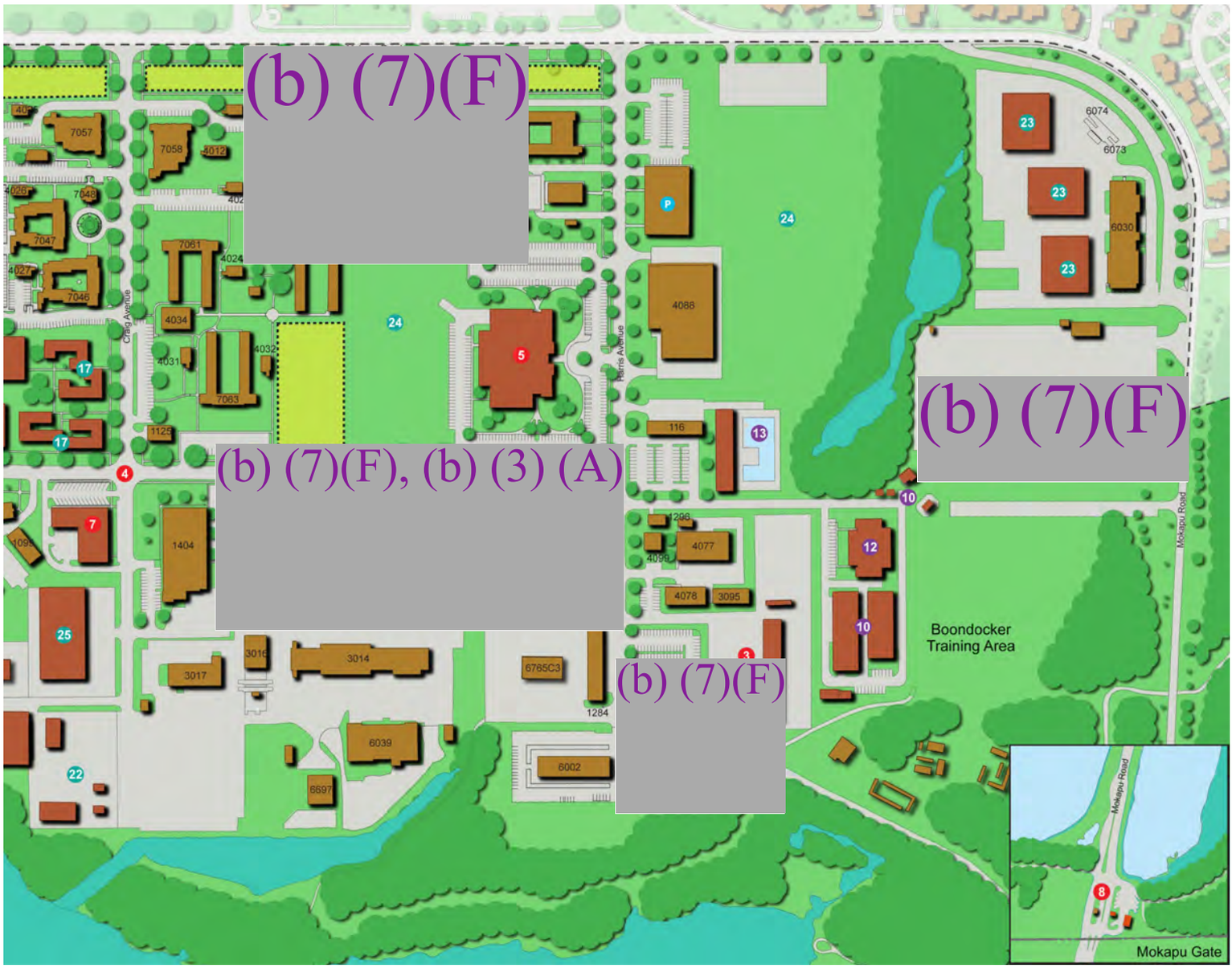
LEGEND

- Installation Boundary
- ADP Boundary
- Site Reservation
- Existing Building
- New/Proposed Building

GROUND SUPPORT DISTRICT AREA DEVELOPMENT PLAN



SHORT-RANGE DEVELOPMENT PROGRAM (1 TO 5 YEARS)	
(b) (7)(F)	
3	**P-861** VMU, MWSD and CH-53E Upgrades
4	**P-924** MV-22 EIS Traffic Improvements
5	**P-78150** Medical/Dental Clinic
(b) (7)(F), (b) (3) (A)	
7	**Proposed** Wiki Wiki Marine Mart
8	**P-877** MCB Hawaii ECP Upgrades
9	**P-373** AAV Maintenance Facility



MID-RANGE DEVELOPMENT PROGRAM (5 TO 10 YEARS)

10	**P-843** Multipurpose Training Complex
(b) (7)(F)	
12	**P-944** Consolidated Classroom Facility
13	**P-945** Combat Training Tank
(b) (7)(F)	

LONG-RANGE DEVELOPMENT PROGRAM (15 TO 20 YEARS)

16	**P-837** Enlisted Dining Facility
17	**Proposed** BEQ Redevelopment
18	**P-888** Wounded Warrior BEQ
(b) (7)(F)	
21	**Proposed** 3d Marines & 1/12 Warehouse
22	**Proposed** Engineering Services Company Complex
23	**Proposed** 3d Marines Vehicle Shelters
24	**Proposed** Training Open Space
25	**Proposed** MCCS Exchange Distribution Warehouse

SUMMARY OF DEVELOPMENT

Site Reservation	**17.2 ac**
Building Renovation & Reuse	**35,170 sf**
Building Demolition	**593,510 sf**
New Building Construction	**928,870 sf**
Net Parking Stall Gain	**233 stalls**
Net Bed Space Gain	**93 Beds**

COMMUNITY SUPPORT DISTRICT

DISTRICT VISION

To create safe, people-friendly neighborhoods connected by tree-lined streets, wide sidewalks, and great open spaces that link housing to services and amenities.

The Community Support District occupies the north and central portion of MCBH Kaneohe Bay. The ocean-front Kaneohe Klipper Golf Course occupies nearly one-third of the usable land within the district. Most of the remaining land surrounding the golf course is occupied by family housing units which are clustered in eight communities distinguishable by their period of construction, unit type, and architectural style. Other community support facilities include an elementary school, three child development centers, a chapel, a post office, a youth center, the Officer's Club, and temporary lodging.

Mokapu Mall, the major retail center on the installation, includes the commissary, exchange, retail stores, and a food court. Most community support facilities are located off of Mokapu Road, which forms the southern boundary of the district. A limited number of mission support facilities are in the district, including the 3d Marines Regiment Headquarters, an adjacent operational trainer facility, a telecommunications center, and airfield-related radar atop Pu'u Hawai'i Loa, also referred to as Kansas Tower.

DISTRICT PLANNING GOALS

- **CONSOLIDATE COMMUNITY SUPPORT AND MAJOR RETAIL FUNCTIONS:** Increase community support and retail activity in and around Mokapu Mall to expand the installation's core community support area, improve access to facilities, and provide a destination shopping experience.
- **REPLACE AGING INFRASTRUCTURE:** Facilities in the District that no longer adequately meet current requirements or are deteriorating should be demolished to reduce ongoing maintenance costs and provide space for redevelopment, as appropriate.
- **IMPROVE TRAFFIC CONGESTION:** Mokapu Road is one of the installation's primary thoroughfares and regularly experiences degraded quality of service, especially at peak times in the morning and afternoon.
- **IMPROVE ALTERNATIVE TRANSPORTATION NETWORKS:** Provide safe routes for students to walk and bike to school and for residents to access the community core as an alternative to driving.
- **ENHANCE RECREATION FACILITIES:** The District provides high quality beaches and recreation areas on the installation, but facilities and infrastructure are limited and do not meet the demand.

COMMUNITY SUPPORT DISTRICT AREA DEVELOPMENT PLAN

LEGEND

- Installation Boundary
- ADP Boundary
- Site Reservation
- Existing Building
- New/Proposed Building
- Parking

SHORT-RANGE DEVELOPMENT PROGRAM (1 TO 5 YEARS)

1	**P-884** Playing Field Replacement (Aviation Simulator Modernization)
2	**P-924** MV-22 EIS Traffic Improvements
3	**Proposed** PPV Phase 6 Family Housing

MID-RANGE DEVELOPMENT PROGRAM (5 TO 10 YEARS)

4	**P-930** Gym Replacement (Fire Station)
5	**Proposed** Mokapu Elementary School
6	**P-813** Klipper Villa Expansion

LONG-RANGE DEVELOPMENT PROGRAM (15 TO 20 YEARS)

7	**Proposed** MCX Exchange Expansion
8	**Proposed** Mokapu Mall Traffic Improvements
9	**Proposed** Golf Course Warehouse
10	**Proposed** Multiuse Path Extension
11	**Proposed** Community Library
12	**Proposed** Community Theater
13	**Proposed** Fort Hase Beach Improvements
14	**Proposed** North Beach Improvements

SUMMARY OF DEVELOPMENT

Site Reservation	**13.2 ac**
Building Renovation & Reuse	**79,540 sf**
Building Demolition	**568,610 sf**
New Building Construction	**715,730 sf**

DISTRICT VISION

In support of current and future missions, the planning vision for the Ulupau District is to provide remediated and sustainably secure training ranges and ammunition storage facilities.

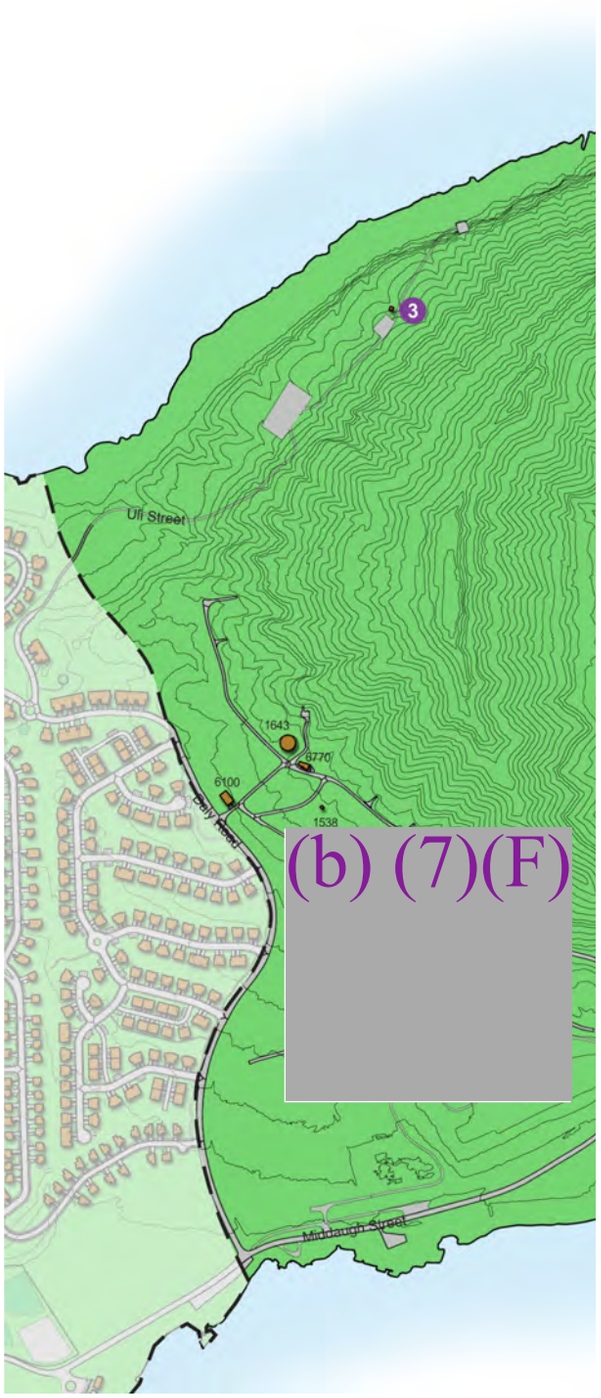
ULUPAU DISTRICT

The Ulupau District is located on the northeastern portion of MCB Hawaii Kaneohe Bay. Land in the district is largely used for the Kaneohe Bay Range Training Facility and located inside the remnants of Ulupa'u Crater. Outside the crater along its western slope are earth-covered magazines and the Ulupau Ammunition Supply Point. Facilities in the district directly support these operations. Due to explosives safety and surface danger zone restrictions, most of the land in the district is undeveloped and remains in a natural state. The base landfill is located in the southern portion of the district.

DISTRICT PLANNING GOALS

- **ENSURE ADEQUATE INFRASTRUCTURE:** Maintain and improve existing facilities for the continuation of safe and secure operations.
- **PREVENT ENCROACHMENT:** Safeguard existing operational areas from activities that would impact mission training and readiness.

(b) (6) left), a team leader with second platoon, Bravo Company, 3rd Reconnaissance Battalion, 3rd Marine Division, fires an M136 AT-4 rocket launcher after breaking away from the firing line as part of a weapons training package on the Kaneohe Bay Range Training Facility, March 4, 2014. (U.S. Marine Corps photo by (b) (6) Source: www.mcbhawaii.marines.mil



LEGEND

- Installation Boundary
- ADP Boundary
- Existing Building
- New/Proposed Building

SHORT-RANGE DEVELOPMENT PROGRAM (1 TO 5 YEARS)

(b) (7)(F)

2 **Proposed** Soil Stabilization

MID-RANGE DEVELOPMENT PROGRAM (5 TO 10 YEARS)

3 **Proposed** Explosives Training Range

Marines with Weapons Company, 2nd Battalion, 3rd Marine Regiment fire the M40 sniper rifle and M110 Semi-Automatic Sniper System at varying targets over 800 meters at Ulupau Crater April 2015. (U.S. Marine Corps photo by (b) (6) Released) Source: www.mcbhawaii.marines.mil

A Marine with Scout Sniper Platoon, Weapons Company, 2nd Battalion, 3rd Marine Regiment, shoots an M4 service rifle down range and Battery Bluff aboard Marine Corps Base Hawaii, March 2015. (U.S. Marine Corps photo by Released) Source: www.mcbhawaii.marines.mil

DISTRICT VISION

To create a 21st century, architecturally coherent, functionally efficient, walkable campus, encompassed by its unique natural setting.

CAMP H.M. SMITH

Camp Smith is located approximately 6 miles north-northwest of downtown Honolulu on the slopes above Pearl Harbor. Camp Smith houses the headquarters of Commander, U.S. Pacific Command, Special Operations Command Pacific, and Marine Forces Pacific. Although the primary function of the installation is an administrative headquarters, supporting uses include warehousing, maintenance, officer family housing, and bachelor housing. Community support facilities include a location exchange, a swimming pool, a fitness center, tennis courts, and an all hands club. The three primary roads, Elrod Road, Bailey Road, and Julian Road, provide access through the installation.

PLANNING GOALS

- **ARCHITECTURALLY COHERENT:** Promote a sense of importance that reflects the stature of the major commands. Maintain key historic buildings that define the character of the installation.
- **DESIGN EFFICIENT FACILITIES:** Modernize aging facilities and infrastructure to increase energy efficiency.
- **WALKABLE CAMPUS:** Design a campus environment that is safe, convenient, and comfortable. Interconnect buildings with well-connected pedestrian networks to enhance walkability and improve wayfinding. Provide adequate parking close to work centers.
- **NATURAL SETTING:** Redevelop on previously disturbed lands to preserve the forested gulches.

Artistic rendering of proposed MARFORPAC headquarters in historic Building 1.

MID-RANGE DEVELOPMENT PROGRAM (5 TO 10 YEARS)

(b) (7)(F)

3	**P-809** Camp Smith Parking Upgrades

LONG-RANGE DEVELOPMENT PROGRAM (15 TO 20 YEARS)

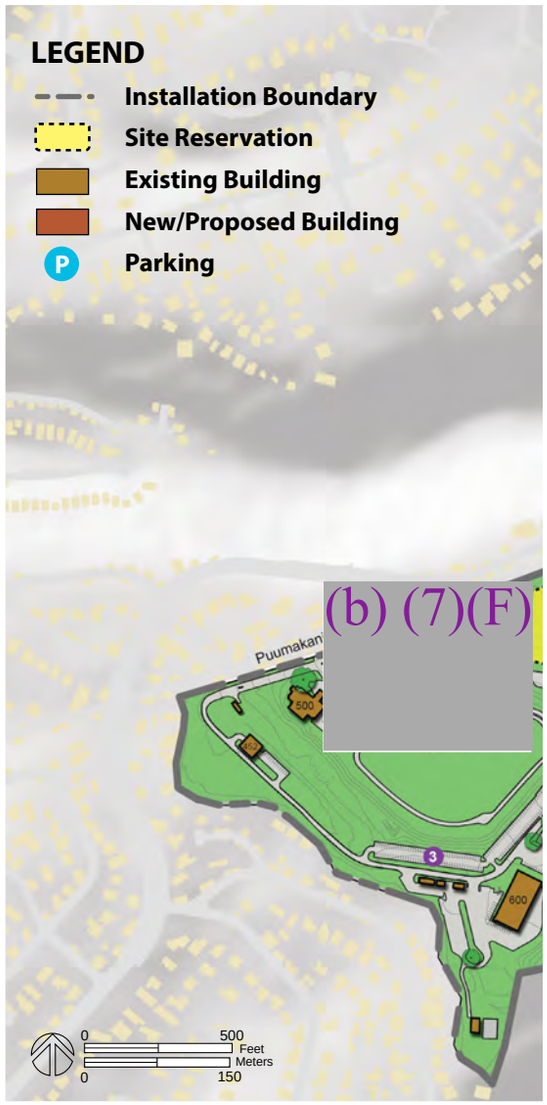
(b) (7)(F)

5	**Proposed** BEQ Replacement
6	**Proposed** Elrod Roadway Improvements

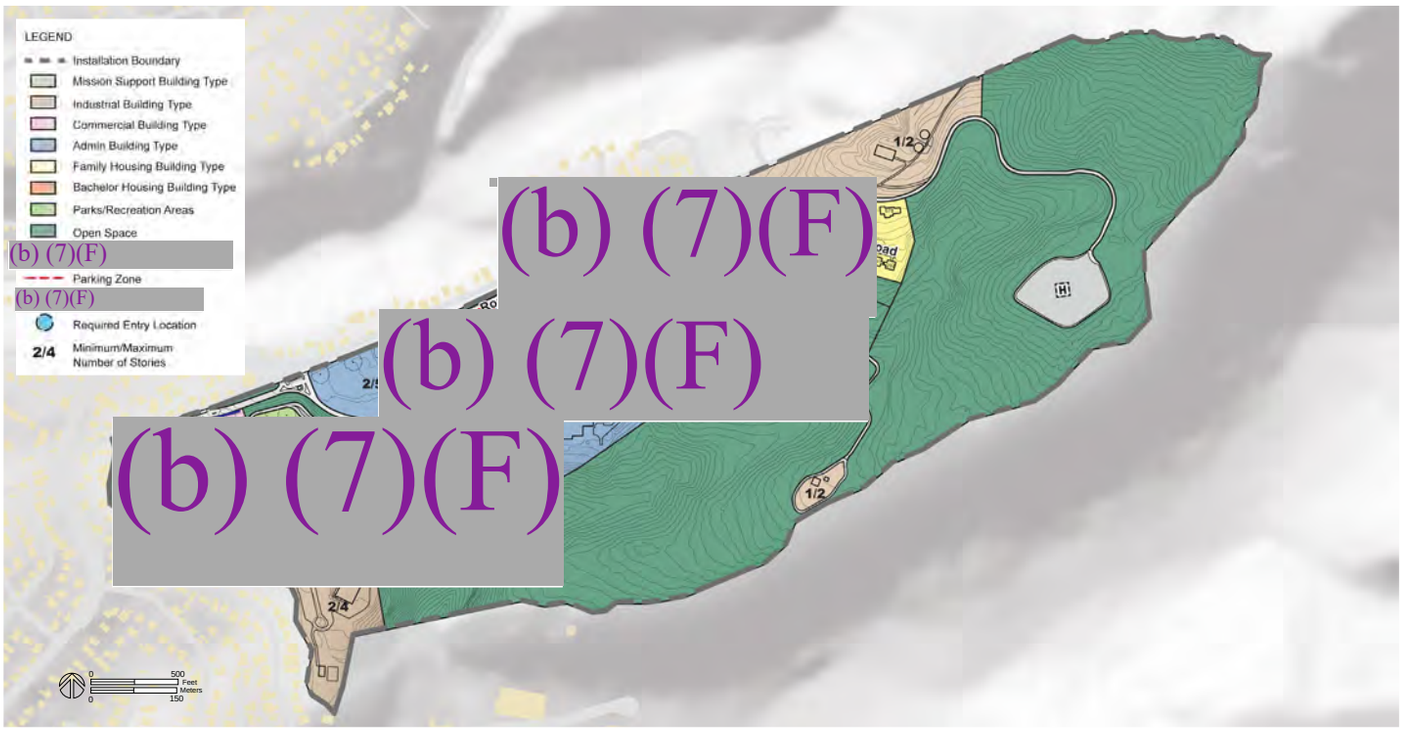
SUMMARY OF DEVELOPMENT

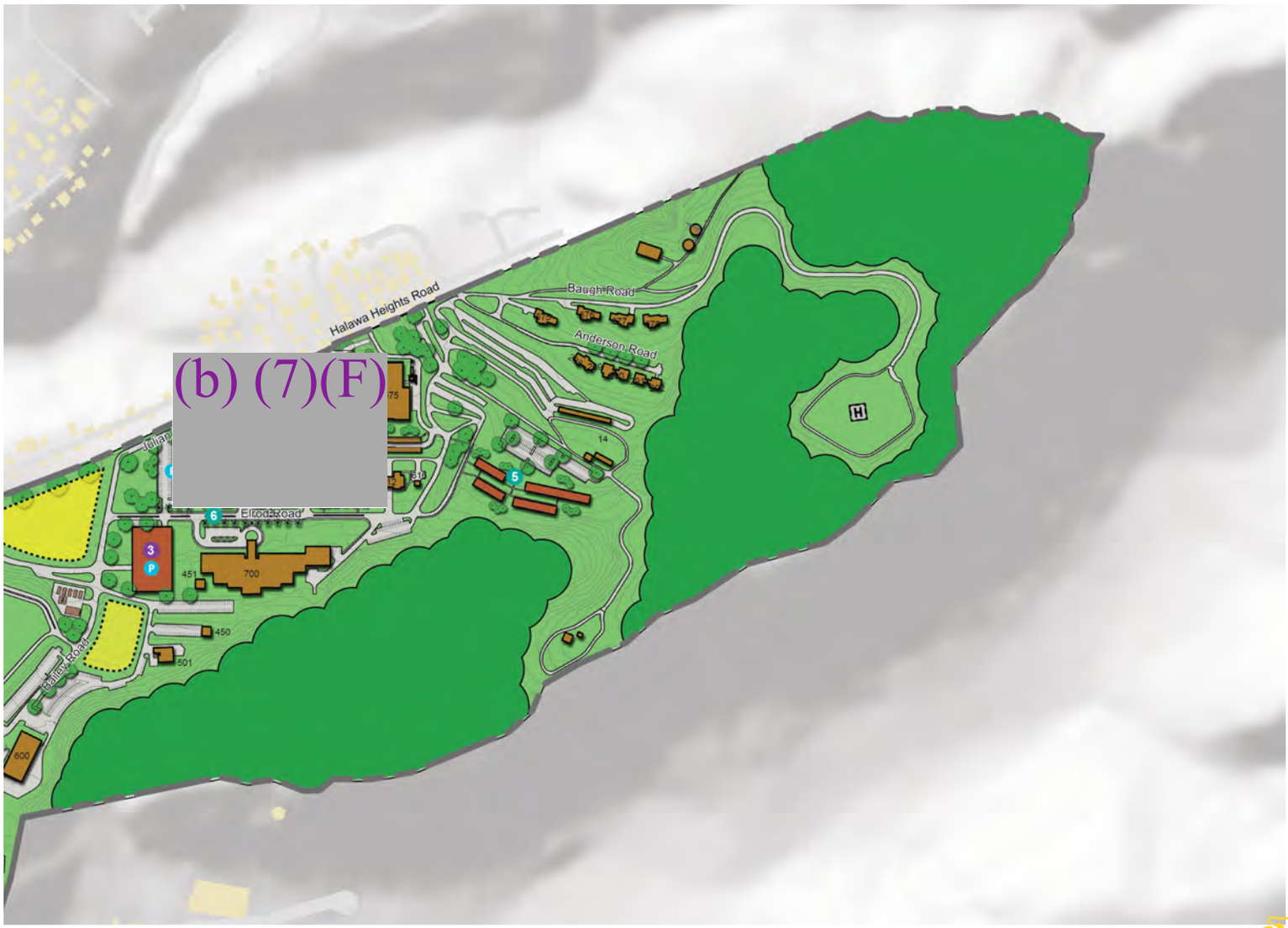
Site Reservation	**3.0 ac**
Building Renovation & Reuse	**181,410 sf**
Building Demolition	**154,440 sf**
New Building Construction	**308,650 sf**
Net Parking Stall Gain	**793 stalls**
Net Bed Space Gain	**30 beds**

CAMP SMITH ILLUSTRATIVE



CAMP SMITH REGULATING PLAN





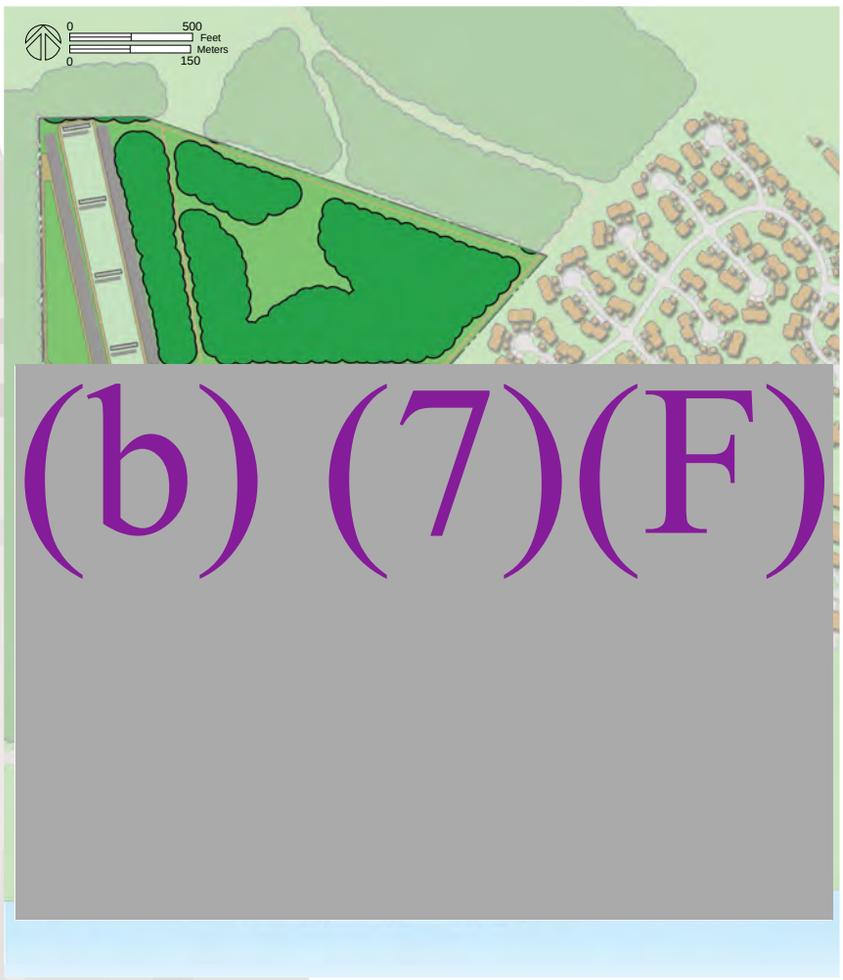
PUULOA RANGE TRAINING FACILITY

Puuloa RTF is a 137-acre U.S. Marine Corps-owned and operated small arms and rifle live-fire range facility on O'ahu's south coast near the entrance to Pearl Harbor. Puuloa RTF has six live fire ranges used for small arms marksmanship training, qualification, and requalification. The ranges are also periodically used by the Navy, the Army, Federal, State, and local law enforcement, and local gun clubs.

The primary planning goal for Puuloa RTF is to ensure that facilities and infrastructure are improved and maintained to ensure continuing safe and secure operation of the ranges.

DISTRICT VISION

To provide a state-of-the-art pistol and rifle range with flexible and modern training capabilities for the Marine Corps, sister services, and Federal and State organizations on O'ahu.



LEGEND

- **Installation Boundary**
- **ADP Boundary**
- **Existing Building**
- **New/Proposed Building**

SHORT-RANGE DEVELOPMENT PROGRAM (1 TO 5 YEARS)

(b) (7)(F)

MID-RANGE DEVELOPMENT PROGRAM (5 TO 10 YEARS)

2	**Proposed** Range Operations & Support Facility

LONG-RANGE DEVELOPMENT PROGRAM (15 TO 20 YEARS)

3	**Proposed** Puuloa Bachelor Enlisted Quarters
4	**Proposed** Roadway and Parking Improvements

SUMMARY OF DEVELOPMENT	
New Building Construction	**19,300 sf**
Net Parking Stall Gain	**57 stalls**

MARINE CORPS TRAINING AREA BELLOWS

MCTAB encompasses 1,074 acres along the Waimānalo Bay shoreline between the communities of Kailua and Waimānalo. MCTAB accommodates amphibious training; helicopter landing, flight training, and special patrol insertions/extractions; offensive and defensive tactics; land navigation and patrolling; non-firing artillery training; combat vehicle operator course training; and command post exercises.

The planning goal of MCTAB is to sustain a secure and multi-functional training area for forces based in Hawai'i.

DISTRICT VISION

In support of joint forces current and future missions, our planning vision is to create a secure, realistic, and functional training area.

LEGEND

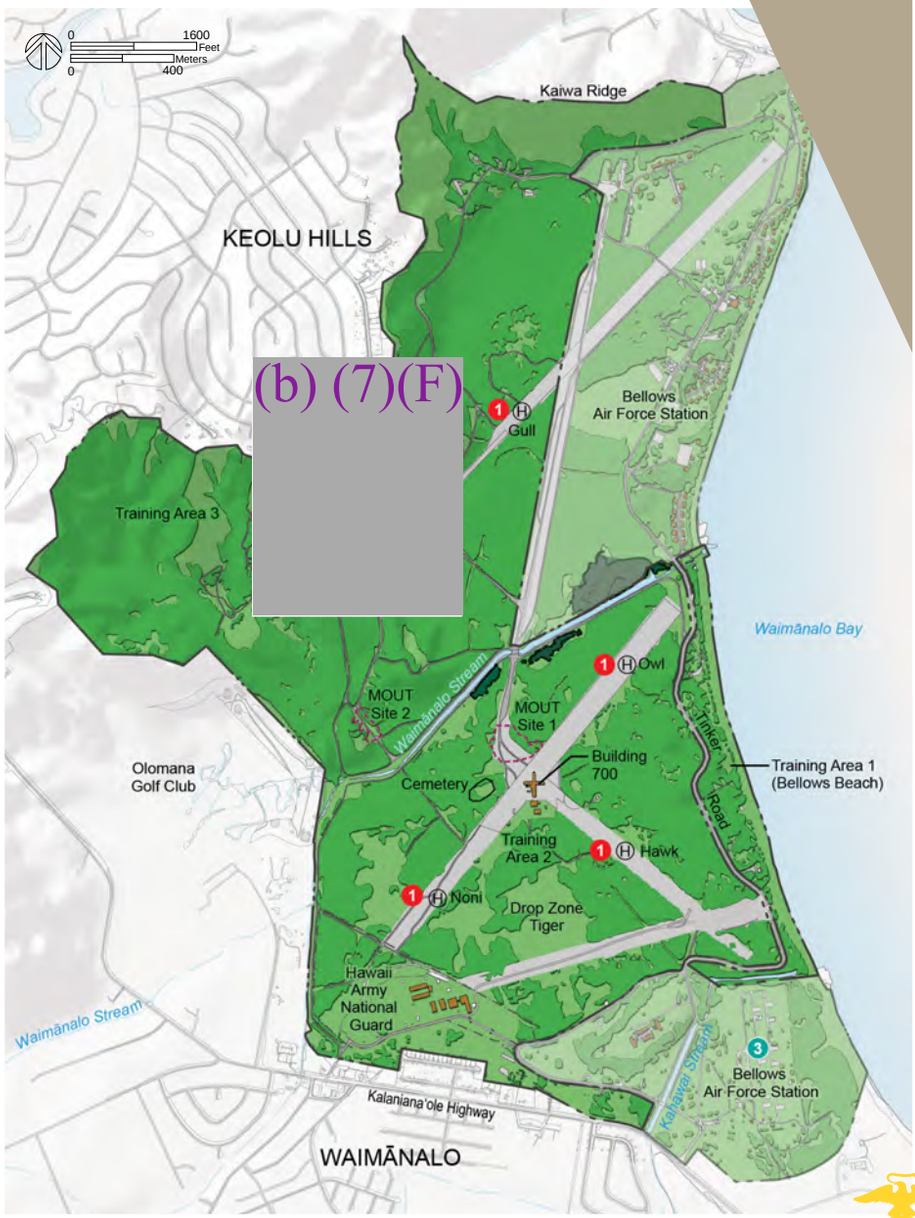
- **Installation Boundary**
- **Existing Building**

SHORT-RANGE DEVELOPMENT PROGRAM (1 TO 5 YEARS)

1. **P-887** MV-22 Landing Zones
(b) (7)(F)

LONG-RANGE DEVELOPMENT PROGRAM (15 TO 20 YEARS)

3. **Proposed** Transfer of Air Force Lands to the Marine Corps



PEARL CITY ANNEX

PCA encompasses 27 acres on the Pearl City Peninsula located approximately 22 miles from MCB Hawaii Kaneohe Bay. PCA is a warehouse complex used for storage by Marine units, Navy, and other military organizations.

DISTRICT VISION

In support of current and future missions, our planning vision is to create a secure, safe, and sustainable equipment and material storage complex and deployment lot.

LEGEND

- **Installation Boundary**
- **Existing Building**
- **New/Proposed Building**

LONG-RANGE DEVELOPMENT PROGRAM (15 TO 20 YEARS)	
1	**Proposed** Covered Deployment Lot
2	**Proposed** Renewable Energy Production

MANANA FAMILY HOUSING AREA

The Manana Family Housing Area encompasses 62.2 acres in the town of Pearl City. The Marine Corps family housing area includes a total of 168 single-family and duplex housing units with recreation fields and courts, swimming pool, and a small exchange and gas station.

DISTRICT VISION

To provide a safe, walkable community with attractive, energy-efficient homes that maximize views and connect to a variety of community support facilities and gathering spaces through a green space and complete street network.

WAIKANE VALLEY IMPACT AREA

The 187-acre WVIA is located in the center of Waikāne Valley at the northern end of Kāne'ohe Bay. As part of the Waikane Valley Training Area, WVIA was used as a live-fire training range and maneuver area. WVIA was acquired in 1989 through condemnation after it was declared unsafe for use due to unexploded ordnance on the site. Now closed, WVIA is part of the Military Munitions Range Program, which addresses munitions-related concerns including explosive safety, environmental, and health hazards from releases of unexploded ordnance, discarded military munitions, and munitions constituents found at non-operational range locations.

DISTRICT VISION

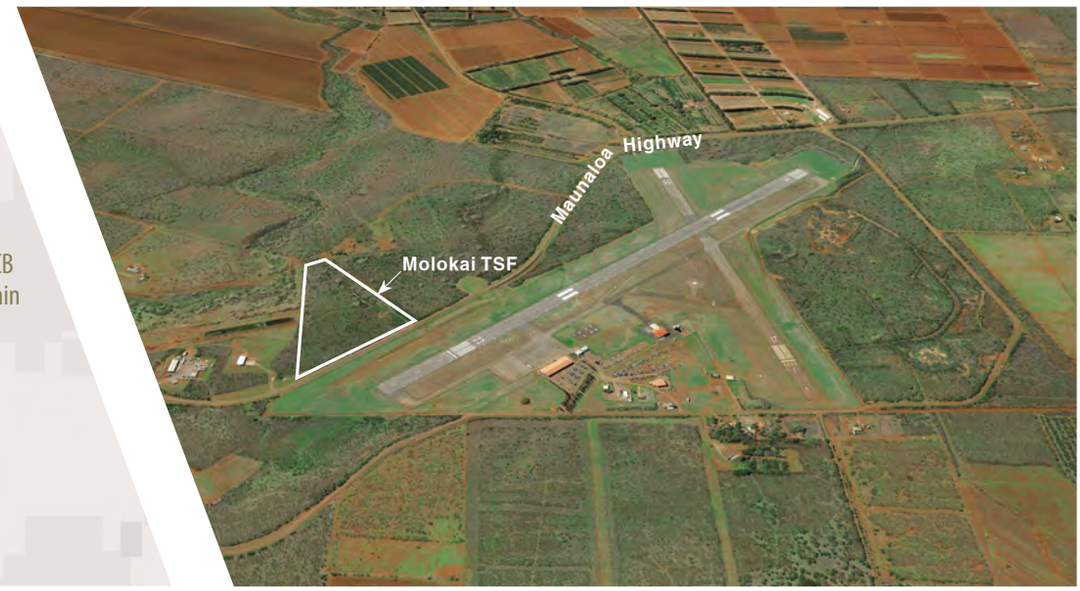
In support of current and future missions, our planning vision is to create a land reserve that supports community, cultural, and natural resource needs.

MOLOKAI TRAINING SUPPORT FACILITY

Molokai TSF encompasses 12 acres and is located across Maunaloa Highway from Moloka'i Airport. Now inactive, no range capabilities exist at Molokai TSF. Currently inactive, there are no structures or buildings on the property.

DISTRICT VISION

To provide an environmentally safe refueling and support area to accommodate military flights between MCB Hawaii and other areas within Hawai'i.



SUSTAINABILITY

Sustainable planning leads to lasting development by meeting present mission requirements without compromising the ability of future generations to meet currently undefined needs. MCB Hawaii is committed to sustainability by building healthy communities and buildings, reducing energy use, and increasing renewable and alternative energy sources.

Energy Initiatives

MCB Hawaii strives to meet DoD goals to reduce energy use and costs and increase use of renewable and alternative energy sources. Through the Family Housing Resident Energy Conservation Program, where residents receive rebates for consuming less or pay for excess consumption, MCB Hawaii has been able to reduce electrical consumption by 15 percent. Existing hangars and warehouses use daylight harvesting, such as skylights and solar tubes, and lighting controls to lessen the use of electricity to light large spaces. Environmental cooling systems, that automatically control the room temperature if the room is occupied, have been installed in lodging facilities and bachelor quarters. Through metering and monitoring, MCB Hawaii will continue to reduce its energy use.

MCB Hawaii currently uses photovoltaic and solar hot water systems–renewable energy sources that lessen the demand for electricity produced by fossil fuels. Other renewable energy systems being explored include wave energy technology and ocean thermal energy conversion.

MCB Hawaii plans to continue the use of alternative energy vehicles to lessen their use of gasoline driven cars. The installation uses a fleet of low-speed electric, hybrids, and hydrogen fuel cell vehicles. The Marine Corps, along with other branches of the military, is exploring the use of biofuels for tactical vehicles.

Healthy Communities and Buildings

Effective planning will create conditions that encourage physical activity, connect land uses and facilities, and provide safe, protected pathways for physical fitness activities for service members and their families. With an emphasis on compact building layouts, increased connectivity, and well-designed pedestrian and bicycle infrastructure, MCB Hawaii will decrease auto dependence and increase levels of walking, running, and cycling.

New buildings constructed at MCB Hawaii are required to meet LEED silver certification requirements. Through appropriate design–such as the elements presented in the Installation Development Standards–and consideration to building materials and systems, new construction will be able to save energy, water, resources, and money, while amplifying human health and well-being.

PLAN SUMMARY & IMPLEMENTATION

Over the next two decades, the *MCB Hawaii Installation Master Plan* proposes to build more than 2.77 million sf of new construction, the demolition of nearly 1.74 million sf of aging facilities, and the renovation or reuse of over 507,000 sf of existing buildings. Through the reutilization of land at higher densities, the plan identifies 61.2 ac of infill area, 1,588 net parking spaces and 523 net bed spaces to accommodate future mission.

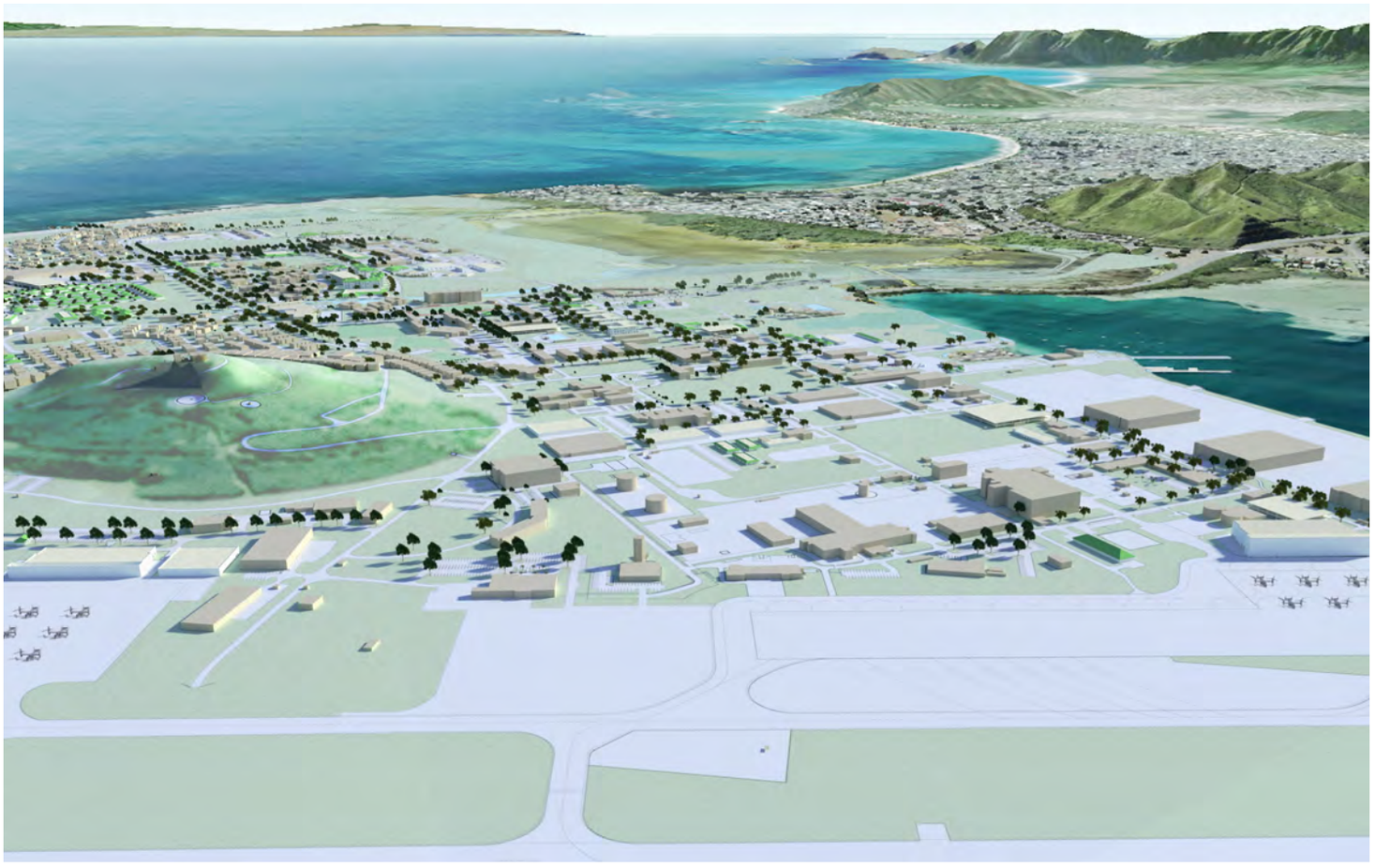
The Installation Planning Board is the action proponent of the master plan and is responsible for implementing the development plan in accordance with the Regulating Plan and Installation Development Standards. The Board is tasked with executing the base commander's highest priorities to address key program shortfalls that adversely affect the capability of the installation to accomplish its assigned missions. The *MCB Hawaii Installation Master Plan* will be updated on a five-year cycle to accommodate mission changes, emergent facility requirements, and the reprioritization of infrastructure needs.

ACRONYMS	
III MEF	III MARINE EXPEDITIONARY FORCE
AAV	ASSUALT AMPHIBIOUS VEHICLE
BEQ	BACHELOR ENLISTED QUARTERS
CLB	COMBAT LOGISTICS BATALLION
CISD	COMMUNICATIONS INFORMATION SYSTEMS DIRECTORATE
DoD	DEPARTMENT OF DEFENSE
HMLA	LIGHT ATTACK HELICOPTER SQUADRON
MALS	MARINE AVIATION LOGISTICS SQUADRON
MARFORPAC	MARINE FORCES PACIFIC
MCB HAWAII	MARINE CORPS BASE HAWAII
MCCS	MARINE CORPS COMMUNITY SERVICES
MCTAB	MARINE CORPS TRAINING AREA BELLOWS
MCX	MARINE CORPS EXCHANGE
MITSC	MAGTF INFORMATION TECHNOLOGY SUPPORT CENTER
MWSD	MARINE WING SUPPORT DETACHMENT
RTF	RANGE TRAINING FACILITY
PCA	PEARL CITY ANNEX
POV	PRIVATELY-OWNED VEHICLES
PPV	PUBLIC PRIVATE VENTURE
SF	SQUARE FEET
SWOT	STRENGTHS, WEAKNESSES, OPPORTUNITIES, & THREATS
TSF	TRAINING SUPPORT FACILITY
UDP	UNIT DEPLOYMENT PROGRAM
UFC	UNIFIED FACILITIES CRITERIA
USMC	U.S. MARINE CORPS
VMU	UNMANNED AERIAL VEHICLE SQUADRON
WVIA	WAIKANE VALLEY IMPACT AREA
WMA	WILDLIFE MANAGEMENT AREA

MCB HAWAII KANEOHE BAY RENDERINGS

View looking west over Third Street and G Street in the Base Support District

View looking south over Mokapu Road towards the Ground Support District



View from the airfield looking east

PREPARED FOR
Marine Corps Base Hawaii

PREPARED BY
HHF Planners

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