Honoapi'ilani Highway Improvements Project
West Maui: Ukumehame to Launiupoko

Final Environmental Impact Statement

Submitted Pursuant to 42 U.S.C. 4332(2)(c) and 49 U.S. C. 303
Chapter 343, Hawaii Revised Statutes (HRS)

US Department of Transportation
Federal Highway Administration (FHWA)
Hawaii Department of Transportation (HDOT)

September 2025

Honoapi'ilani Highway
Improvements

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Submitted by:

U.S. Department of Transportation, Federal Highway Administration (FHWA)
and
Hawaiʻi Department of Transportation (HDOT)

In cooperation with:
National Marine Fisheries Service
U.S. Army Corps of Engineers
U.S. Environmental Protection Agency
U.S. Fish and Wildlife Service
Hawaii Department of Lands and Natural Resources
State Historic Preservation Division
Maui County Department of Planning and Permitting
Maui Planning Department of Parks and Recreation

APPROVALS

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9/8/2025
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09/08/2025
Date

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September 2025

This Final Environmental Impact Statement (Final EIS) and Final Section 4(f) Determination have been prepared for the Honoapi‘ilani Highway Improvements Project (the Project) in West Maui, Hawai‘i. The Project’s primary purpose is to provide a reliable transportation facility in West Maui and improve Honoapi‘ilani Highway’s resilience by reducing its vulnerability to coastal hazards. The Preferred Alternative identified in the Draft EIS was based on the assessment the No Build Alternative and four Build Alternatives within two distinct segments in Olowalu and Ukumehame. The potential effects of these alternatives on the natural and human environment resulted in the identification of the Preferred Alternative as a combination of Build Alternative 2 in Olowalu and Build Alternative 1 in Ukumehame along with additional refinements identified in this Final EIS. As presented in this Final EIS, FHWA and HDOT have established that the Preferred Alternative is the Selected Alternative for the Project which is reflected in this Final EIS and Record of Decision (ROD)

UPC: 111427
HDOT Project No.: RAEM-030-1(59)
FHWA Project No.: 0301059
FHWA-HI-EIS-23-01-D

FOREWORD

The Federal Highway Administration (FHWA) and the Hawai'i Department of Transportation (HDOT) have completed this Final Environmental Impact Statement (Final EIS) for the Honoapi'ilani Highway Improvements Project (the Project). The Project's Draft EIS was released on December 20, 2024, starting a public review period that extended to February 24, 2025. Two public hearings were held: the first on January 23, 2025, which was an in-person hearing, and the second on January 28, 2025, which was a virtual public hearing. There were a variety of methods available for individuals to submit comments on the Draft EIS: via email, via online webform, via physical comment form, and verbally at the public hearings. All substantive comments received on the Draft EIS have been summarized and responded to in this Final EIS.

In the Draft EIS, FHWA and HDOT identified the Preferred Alternative. In this Final EIS, and as jointly issued with the Record of Decision (ROD), FHWA and HDOT have selected the Preferred Alternative as the "Selected Alternative" for the Project which will be carried forward into the design build process. This determination is based on the impact assessment as presented in the Final EIS including consideration of public input and continued consultation with cooperating and participating agencies. Overall, there were few substantive changes or to the impact assessment as presented in the Draft EIS. The entirety of the Draft EIS is available on the www.honoapiilanihwyimprovements.com. For the Final EIS, new or revised text is double-underlined.

Substantive changes evaluated in this Final EIS are primarily based on design refinements to the Selected Alternative that include the following:

- Adding a shared-use pathway along the makai edge of the right-of-way
- Adding a second signalized intersection at Ehehene Street in Ukumehame
- Using a bridge crossing of the intermittent Awalua Stream rather than a culvert
- Modest shifts to the location or configuration of the alignment to optimize design and to avoid and minimize disturbance of archeological resources

This Final EIS includes supplemental assessments associated with information not presented in the Draft EIS (including based on public comments on the Draft EIS and continued coordination with consulting agencies). These additional analyses did not result in new or different adverse effects of the Preferred Alternative as defined in the Draft EIS or the Selected Alternative as defined in the Final EIS. The Final EIS also includes the documentation of the Section 106 process with an executed Programmatic Agreement; the final Section 4(f) determination of a *de minimis* effect on the Ukumehame Firing Range and potential expanded historic district; and completion of a Biological Opinion by the U.S. Fish and Wildlife Service (USFWS).

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Abbreviations and Acronyms

ABBREVIATION/ ACRONYM	DEFINITION
AADT	annual average daily traffic
AASHTO	American Association of State Highway and Transportation Officials
ACB	asphalt concrete base
ACHP	Advisory Council on Historic Preservation
ACS	American Community Survey
AIS	Archaeological Inventory Survey
ALISH	Agricultural Lands of Importance to the State of Hawai‘i
ANSI	American National Standard Institute
APE	Area of Potential Effects
AVE	Area of Visual Effect
BFE	base flood elevation
BGEPA	Bald and Golden Eagle Protection Act
BLNR	Board of Land and Natural Resources
BMP	best management practice
BSM	Blackburn’s sphinx moth
BWS	Board of Water Supply
CAAP	Hawai‘i Climate Adaption Action Plan
CAFE	Corporate Average Fuel Economy
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CGG	Coastal Geology Group
CIA	Cultural Impact Assessment
CRESI	Coastal Road Erosion Susceptibility Index
CRC	Cultural Resource Commission
CSH	Cultural Surveys Hawai‘i, Inc.
CSS	Context Sensitive Solutions
CWA	Clean Water Act
DAR	Division of Aquatic Resources
DART	Deep-ocean Assessment and Reporting of Tsunamis
dB	decibel
dBA	A-weighted decibels
DBEDT	Department of Business Economic Development and Tourism
DHHL	Department of Hawaiian Home Lands
DLNR	Department of Land and Natural Resources
DOFAW	Division of Forestry and Wildlife

ABBREVIATION/ ACRONYM	DEFINITION
DPR	Department of Parks and Recreation
EA	Environmental Assessment
EDR	Environmental Data Resources, Inc.
EFH	Essential Fish Habitat
EIS	Environmental Impact Statement (Draft EIS, Final EIS)
EISPN	Environmental Impact Statement Preparation Notice
EJ	environmental justice
ENSO	El Niño–Southern Oscillation
EO	Executive Order
ERP	Environmental Review Program
ESA	Endangered Species Act
ETC	Estimated Time of Completion
°F	degrees Fahrenheit
FAST Act	Fixing America's Surface Transportation Act
FEA	Final Environmental Assessment
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FPPA	Farmland Protection Policy Act
GHG	Greenhouse Gases
GIS	geographic information systems
GPS	Global Positioning System
HAR	Hawai'i Administrative Rules
HDOA	Hawai'i Department of Agriculture
HDOH	State of Hawai'i Department of Health
HDOT	State of Hawai'i Department of Transportation
HEPA	Hawai'i Environmental Policy Act
HEPA	Hawai'i Revised Statutes, Chapter 343
HRHP	Hawai'i Register of Historic Places
HRS	Hawai'i Revised Statutes
HUI	Hui O Ka Wai Ola
HVO	Hawaiian Volcano Observatory
IBC	International Building Code
IRC	International Residential Code
IIJA	Infrastructure Investment and Jobs Act
IPaC	Information, Planning and Consultation
KVP	key viewpoints
LCA	Land Commission Award
LEP	Limited English Proficiency

ABBREVIATION/ ACRONYM	DEFINITION
L_{eq}	the energy average noise level, in dBA, for a specific period
LOS	Level of Service
LRFI	Literature Review and Field Inspection
MBTA	Migratory Bird Treaty Act
MECO	Maui Electric Company
MEMA	Maui Emergency Management Agency
MHHW	Mean higher high water
MMPO	Maui Metropolitan Planning Organization
mm/year	millimeter per year
MOU	Memorandum of Understanding
mph	miles per hour
MPO	Metropolitan Planning Organization
MSAT	mobile source air toxics
NAAQS	National Ambient Air Quality Standards
NAC	Noise Abatement Criteria
NEPA	National Environmental Policy Act
NGPC	Notice of General Permit Coverage
NHC	National Hurricane Center
NHO	Native Hawaiian Organization
NHOPI	Native Hawaiian or Other Pacific Islander
NHPA	National Historic Preservation Act
NHTSA	National Highway Traffic Safety Administration
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NOI	Notice of Intent to Prepare an Environmental Impact Statement
NOx	Nitrogen Oxides
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NWI	National Wetlands Inventory
OHWM	ordinary high water mark
OPSD	Office of Planning and Sustainable Development
OSTP	Office of Science and Technology Policy
PA	Programmatic Agreement
PASH	Public Access Shoreline Highway
PCC	Portland Cement Concrete
PCB	polychlorinated biphenyl
PDO	Property Damage Only

ABBREVIATION/ ACRONYM	DEFINITION
PGA	peak ground acceleration
$PM_{2.5}$	particulate matter less than 2.5 microns in aerodynamic diameter
PM_{10}	particulate matter less than 10 microns in aerodynamic diameter
ppb	parts per billion
ppm	parts per million
Project	Honoapi'ilani Highway Improvements Project
PS&E	Plans, Specifications, and Estimate
PUC	Public Utilities Commission
RCNM	Roadway Construction Noise Model
RCRA	Resource Conservation and Recovery Act
RFP	Request for Proposal
RHA	Rivers and Harbors Act
ROD	Record of Decision
SAAQS	State Ambient Air Quality Standards
Sackett	*Sackett v. EPA*
SAFE	Safer Affordable Fuel-Efficient
SCHPR	Statewide Coastal Highway Program Report
SDC	seismic design category
SHPD	State Historic Preservation Division
SHPO	State Historic Preservation Officer
SIHP	State Inventory of Historic Places
SLOSH	Sea, Lake, and Overland Surges from Hurricanes
SLR-XA	Sea Level Rise Exposure Area
SMA	Special Management Area
SOEST	School of Ocean and Earth Science and Technology
SOI	Secretary of the Interior
STIP	Statewide Transportation Improvement Program
SWPPP	Storm Water Pollution Prevention Plan
Task Force	Sea Level Rise and Coastal Flood Hazard Scenarios and Tools Interagency Task Force
TAZ	traffic analysis zone
TDM	Transportation Demand Management
TDSR	Temporary Debris Staging and Reduction
TERC	Transportation Environmental Resource Council
TMDL	total maximum daily load
TMK	Tax Map Key
TNM	Traffic Noise Model
TSM	Transportation System Management
TSMO	Transportation System Management and Operations

ABBREVIATION/ ACRONYM	DEFINITION
TWSC	Two-way STOP-control
µg/m³	micrograms per cubic meter
Uniform Act	Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970
USACE	U.S. Army Corps of Engineers
U.S.C.	United States Code
USCG	U.S. Coast Guard
USDA	U.S. Department of Agriculture
USDOT	U.S. Department of Transportation
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
Viewer	State of Hawai'i Sea Level Rise Viewer
VMT	vehicle miles traveled
WUI	Wildland-Urban Interface

Hawaiian Terms

TERMS	DEFINITION
‘ili	a subdivision or a smaller area of land within an ahupua‘a
ahupua‘a	A traditional land district that typically extends from the top of the mountains to the sea and includes a watershed
hoa ‘āina	Hawaiian native land tenants
ka‘ao	myths
kahakō	A macron indicating a long vowel sound in Hawaiian language (ā, ē, ī, ō, ū)
kalo	Taro (Colocasia escuelenta), a native plant critical to agriculture and for which its cultivation is at the core of Native Hawaiian culture and identity.
kuleana claim	Maka’ainana (native Tenant) Mahele land claim. Carved out of claims already made by the government and chiefs
Koe na Kuleana o Kanaka	Reserving the Rights of Native Tenants
konohiki	ahupua‘a managers
Māhele/māhele	The Māhele was a historical event in Hawaiian history that began in 1845 with the establishment of a Board of Commissioners to Quiet Land Titles, also known as the Land Commission; māhele means a share, portion, land division
mauka/makai	inland/seaward, which correspond to generally easterly/westerly directions
Mele	songs and chants
moku	traditional district
mo‘olelo	stories and history
nēnē	Hawaiian goose
‘okina	Symbol representing the glottal stop in Hawaiian language; used only in front of vowels
‘Ōlelo Hawai‘i Terminology	The Hawaiian language, ‘Ōlelo Hawai‘i, is an important source of knowledge and reference in establishing historical context as well as current definitions of location, setting, and lineage. See mauka/makai
pali	cliff, steep hill, or slope; also refers to a specific place of steep topography south of the project area
wahi pana	storied places

S. Summary

The Federal Highway Administration (FHWA) and State of Hawai'i Department of Transportation (HDOT), have prepared this Final Environmental Impact Statement (Final EIS) and Record of Decision (ROD) for the Honoapiʻilani Highway Improvements Project (the Project) in accordance with the requirements of the National Environmental Policy Act (NEPA), 42 USC 4321 et seq. Consistent with Hawaii Revised Statutes (HRS) 343-5(h), whenever an action is subject to both NEPA and HRS 343, The State of Hawai'i, Office of Planning and Sustainable Development, Environmental Review Program and State agencies have cooperate with federal agencies as much as possible, although it is noted that separate HEPA and NEPA Final EIS documents have been prepared for the Project based on new federal requirements and existing state requirements.

In this Final EIS, and as jointly issued with the Record of Decision (ROD), FHWA and HDOT have selected the Preferred Alternative as the "Selected Alternative" for the Project which will be carried forward into the design build process. This summary provides information regarding the major conclusions and issues considered in the Final EIS. Specifically, this summary discusses the purpose and need for the Project, the alternatives considered to address the purpose and need, the costs of the proposed improvements, the potential environmental effects, agency coordination, public involvement, and next steps. This summary is presented in a question-and-answer format and includes commonly asked questions. These questions are generally presented in the order in which a discussion of each topic is introduced in this document.

WHAT IS AN EIS?

An EIS is a document required by NEPA for projects that are likely to significantly affect the environment. The EIS includes both a Draft EIS which was released for public review and commentary followed by this Final EIS which incorporates a summary and response to comments and any updated information or analysis including identification of the Selected Alternative. An EIS considers the environmental effects of federal and State agency actions—in this case, the action is to approve and fund the Project. The ROD memorializes the findings of the EIS, affirms the Selected Alternative, and delineates the environmental commitments and mitigation measures identified in the assessment.

What are the process milestones in creating an EIS?

Initiation and Scoping

After early project coordination with HDOT and FHWA, the environmental review process formally starts with publication of the NEPA Notice of Intent (NOI) and the HEPA EIS Preparation Notice, which provides an opportunity for the public and other agencies to review and provide comments on the Project and the federal and local actions necessary for implementation. Pursuant to NEPA regulations in effect at the time, the NOI was published in the *Federal Register* on November 23, 2022. In accordance with HEPA (HRS 343-5(a)(1) and HRS 343-5(b)), the environmental review process for the Project began with the publication of an EIS Preparation Notice, which was published in the Hawai'i Environmental

Review Program's *The Environmental Notice* on November 24, 2022. Three public scoping meetings (one in-person, two virtual) were held in December 2022, and a final Scoping Report was issued in May 2023.

Preparation and Release of the Draft EIS and Public Comment Period

The Draft EIS provides the core of the environmental impact assessment and is based on the information presented during Scoping and input from public or agencies regarding the scope of work, For this project, the Draft EIS was completed on December 20, 2024, and made available to the public through the website on that date along with publication of the Notice of Availability in the *Federal Register* and *The Environmental Notice* in January 2025. This initiated a 45-day public review period extending to February 24, 2025. Two public hearings were held: an in-person hearing on January 23, 2025, and a virtual public hearing on January 28, 2025.

Preparation of the Final EIS and Completion of the Record of Decision

All substantive comments received on the Draft EIS are summarized and responded to in the Final EIS. In addition, the Final EIS updates any new information or revised technical analyses based on public comment, updated site conditions, or ongoing consultation with regulatory agencies. Upon completion of the Final EIS, the NEPA lead agency memorializes its findings and decisions through the Record of Decision (ROD), FHWA is jointly issuing the Final EIS and ROD pursuant to 23 Code of Federal Regulations (CFR). 771.124,

Project documents, a calendar of hearings, and presentation materials are available on the Project's website at https://www.honoapiilanihwyimprovements.com/.

WHO IS LEADING THE EIS?

The FHWA is responsible for authorizing federal funds to implement the Project and is therefore identified as the lead federal agency for NEPA. HDOT is the lead State agency and is responsible for administering federal funds for highway improvements in Hawaii. HDOT is also the lead agency coordinating the HEPA review. For the Final EIS, there are separate NEPA and HEPA documents.

WHAT OTHER AGENCIES ARE INVOLVED IN THIS EIS?

Many local, state, and federal agencies participate and provide information and guidance as part of an EIS. For the Project, this includes two agencies within Maui County (e.g., Planning, Parks and Recreation), Hawai'i State agencies such as multiple divisions of the Department of Land and Natural Resources and the Department of Health, as well as key federal agencies with roles in the development of the EIS and the necessary permits required by the Project (the U.S. Environmental Protection Agency, the U.S. Army Corps of Engineers, the National Oceanic and Atmospheric Administration, and the U.S. Fish and Wildlife Service). Chapter 8, Public Involvement and Agency Coordination, summarizes this agency coordination and public participation efforts. This outreach from the FHWA and HDOT was guided by the detailed *Coordination Plan for Public and Agency Participation* (published in November 2022) and was developed in compliance with applicable legislation and policies that guide public involvement in project development.

The roles of agencies involved in project consultation are described in 23 Code of Federal Regulations (CFR) 771, including the roles of lead agencies, cooperating agencies, and participating agencies. "Cooperating agency" means any Federal State, Tribal, or local agency that has jurisdiction by law or special expertise with respect to any environmental impact involved in a proposal and has been designated as a cooperating agency by the lead agency. A participating agency is a Federal, State, local, or federally recognized Indian Tribal governmental unit with an interest in the proposed project and has accepted an invitation to be a participating agency.

TABLE S-1 identifies the federal, State of Hawaiʻi, and County of Maui agencies and their roles in implementing the Project. These agencies were contacted early in the NEPA process and accepted roles as cooperating and participating agencies (except the U.S. Coast Guard which determined there were no bridges with Coast Guard jurisdiction). Please note that the FHWA and HDOT will continue to consult with some agencies regardless of their status as a coordinating or participating agency.

TABLE S-1. **Anticipated Permits and Approvals and Cooperating Agencies**

PERMIT/APPROVAL	ISSUING/APPROVING AGENCY
FEDERAL	
National Environmental Policy Act	Federal Highway Administration (FHWA)
Department of Army Permit, Clean Water Act, Section 404	U.S. Army Corps of Engineers (USACE)
Department of Transportation Act of 1966, Section 4(f) Evaluation	FHWA
Endangered Species Act, Section 7 consultation	U.S. Fish and Wildlife Service; National Oceanic and Atmospheric Administration, National Marine Fisheries Service
Farmland and Conversion Impact Rating, pursuant to the Farmland Protection Policy Act	U.S. Department of Agriculture, Natural Resources Conservation Service
Magnuson-Stevens Fishery Conservation and Management Act, Essential Fish Habitat coordination	National Oceanic and Atmospheric Administration, National Marine Fisheries Service
National Historic Preservation Act Section 106 consultation	Advisory Council on Historic Preservation, State Historic Preservation Officer (SHPO)
Section 309 of the Clean Air Act	U.S. Environmental Protection Agency (USEPA)
Rivers and Harbors Act Section 10 Impacts to Navigable Waters (if applicable specific to tidal water influence)	USACE
Flood Map Change Request (if no-rise condition cannot be achieved)	Federal Emergency Management Agency (FEMA), County of Maui Emergency Management Agency
STATE OF HAWAIʻI	
Hawaiʻi Revised Statutes (HRS) Chapter 343, environmental review compliance	Governor, State of Hawaiʻi
Coastal Zone Management Act Consistency Determination	Department of Business, Economic Development and Tourism, Office of Planning and Sustainable Development, Coastal Zone Management Program (DBEDT-OPSD, CZM)

PERMIT/APPROVAL	ISSUING/APPROVING AGENCY
Clean Water Act, Section 401, Water Quality Certification	Department of Health (HDOH), Clean Water Branch
Clean Water Act, Section 402, National Pollutant Discharge Elimination System Permit	HDOH, Clean Water Branch
HRS Chapter 6E-8, State Historic Preservation review	Department of Land and Natural Resources (DLNR), State Historic Preservation Division (SHPD)
HRS Chapter 195D, Conservation of Aquatic Life, Wildlife, and Land Plants	DLNR, Division of Forestry and Wildlife and Division of Aquatic Resources
Stream Channel Alteration Permit	DLNR, Commission on Water Resource Management (CWRM)
Conservation District Use Permit	DLNR, Office of Conservation and Coastal Lands (OCCL)
Americans with Disabilities Act Accessibility Guidelines	HDOH, Disability and Communication Access Board (DCAB)
Community Noise Permit/Community Noise Variance	HDOH, Indoor and Radiological Health Branch
COUNTY OF MAUI	
Special Management Area Permit (modification for Olowalu subdivision existing permit; new permit for highway construction)	County of Maui Planning Department
Building and Grading Permits	County of Maui Planning Department
Maui County Ordinance 5421 Compliance (applicability to be determined in final design by design-build contractor and HDOT ROW in coordination with Maui County)	Maui County Council
Flood Map Change Request (if no-rise condition cannot be achieved)	County of Maui Emergency Management Agency, FEMA

WHERE IS THE PROJECT AREA?

As shown in FIGURE S-1, the Project is located in West Maui south of Lāhainā and generally within the ahupua‘a of Ukumehame and Olowalu. FIGURE S-2 provides a closer look at the project area between milepost 11 and milepost 17 on the existing Honoapi‘ilani Highway, which is from the point where the highway connects with the Pali portion of the existing highway towards Central Maui and where it reconnects with the existing Lāhainā Bypass to the north.

The proposed southern terminus of the Project at milepost 11 is in Ukumehame at the Pali connection and within the vicinity of Pāpalaua Wayside Park. The northern terminus of the Project is at milepost 17 in Launiupoko, where Honoapi‘ilani Highway intersects the southern terminus of Lāhainā Bypass.

FIGURE S-1. **Vicinity Map**

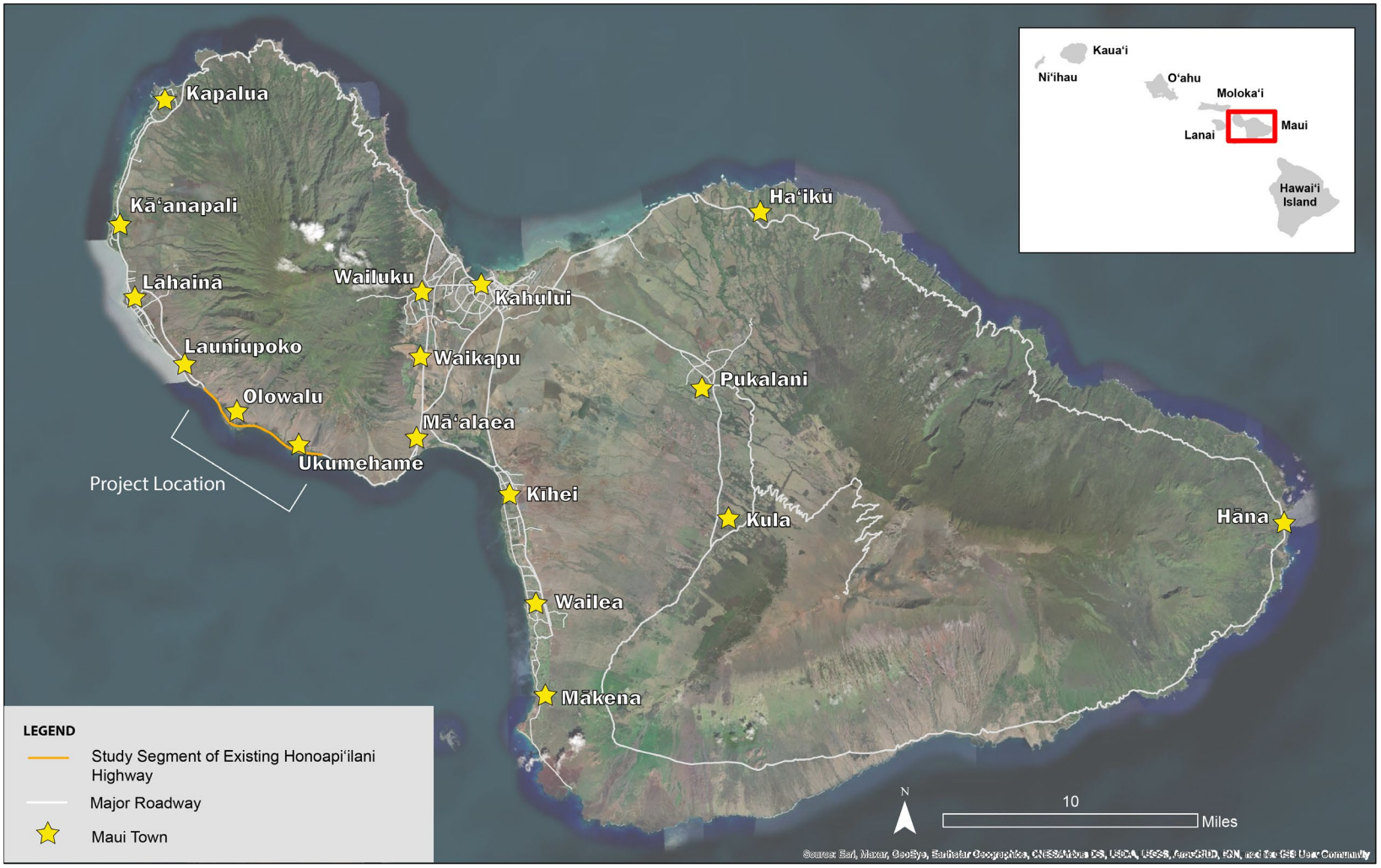
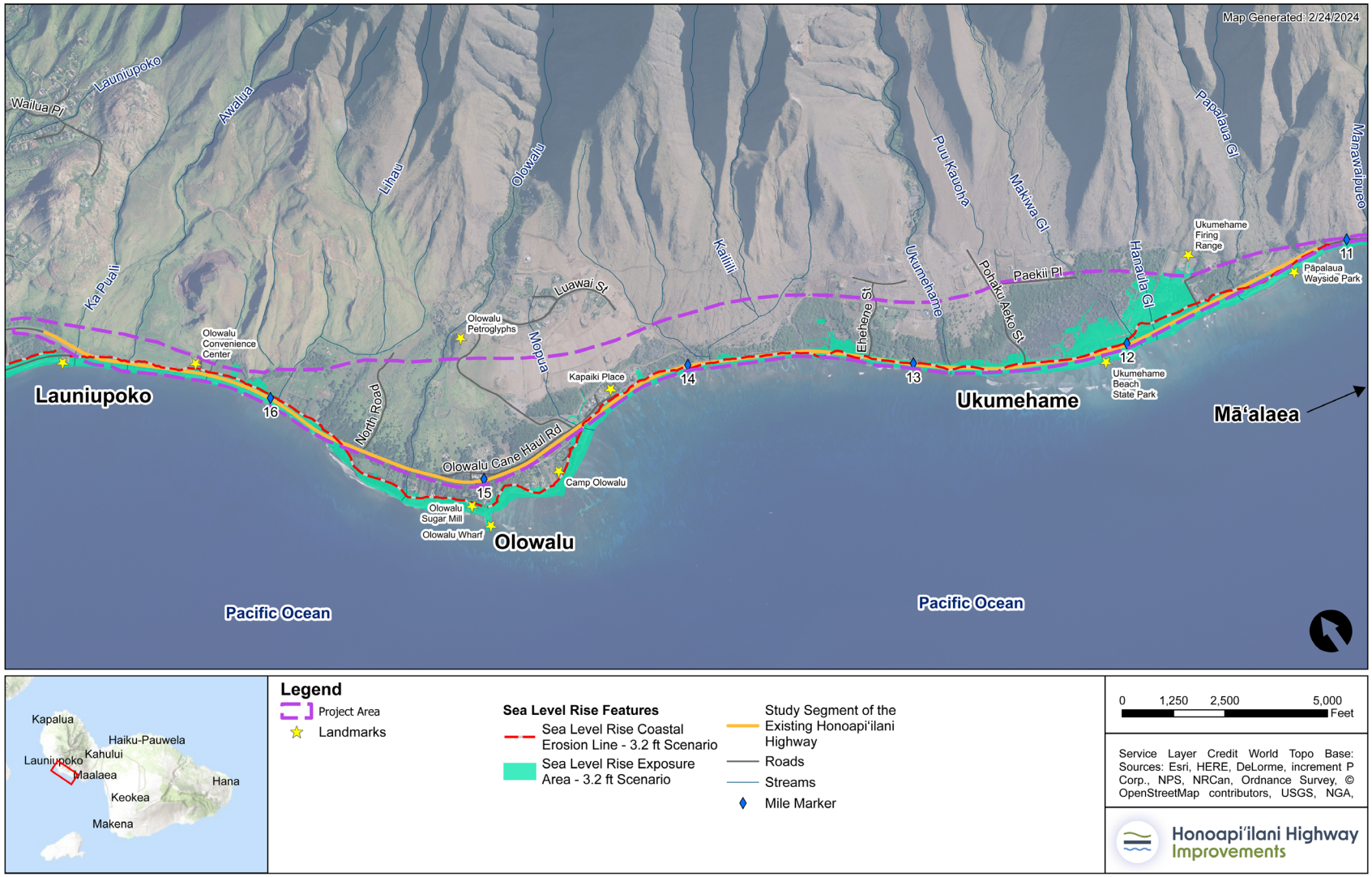


FIGURE S-2. **Project Area**



WHY IS THIS PROJECT IMPORTANT?

Honoapiʻilani Highway is the primary transportation route for people and goods between West Maui and the rest of the island. As part of Maui's Belt Road system, Honoapiʻilani Highway is a two-lane principal arterial highway that provides the main access between communities along Maui's west coast and the rest of the island. The highway connects West Maui to transportation hubs such as Kahului Airport and Kahului Harbor, hospital and medical services, and goods and services not readily available in West Maui. While its population is only about 15% of the island's total population, West Maui is the second largest employment center. West Maui is a hub of tourism and many workers in the tourist industry travel from outside of West Maui. As the main access to this part of the island, roadway closures and delays carry severe consequences to West Maui's economy and residents.

Over the past 10 years, Honoapiʻilani Highway has been repaired three times after storm and high-wave events undermined pavement sections and overtopped the highway, making the roadway impassable. These projects are short-term fixes because they address only the most severe locations where Honoapiʻilani Highway is already undermined. The need for the Project is directly tied with sea level rise and the harm it is already causing to the existing highway. The Sea Level Rise Exposure Area (SLR-XA) show that that road disruptions and emergency repairs will increase over time as a result of more frequent and severe flooding. The SLR-XA is a comprehensive model of the effects of sea level rise including passive flooding, coastal erosion, and high-wave flooding.

As presented in more detail in Chapters 1 and 2 of this Final EIS, HDOT commissioned the *Statewide Coastal Highway Program Report* in 2019. The report utilized a scientifically rigorous methodology to assess and rank the susceptibility of Hawaiʻi's coastal roads to erosion and structural degradation caused by multiple ocean hazards (for example, waves, currents, tides, and sea level rise). The report evaluated over 300 individual coastal highway segments statewide that are threatened by coastal hazards and then prioritized these segments using a new ranking system called the Coastal Road Erosion Susceptibility Index. The report ranked a segment of Honoapiʻilani Highway in Olowalu that is within the project area as second in priority statewide and recommended hardening or relocating the segment. Ukumehame is ranked 11th in priority with a recommendation to elevate or relocate this segment of Honoapiʻilani Highway.

WHAT IS THE PURPOSE AND NEED OF THE PROJECT?

The Purpose and Need Statement establishes why a public agency is proposing a project and serves as the primary criteria in the alternatives screening process. In other words, project alternatives (that is, different approaches to designing and building a proposed project) are screened based on whether they align with the Purpose and Need Statement. As detailed in Chapter 1, Introduction, Purpose and Need, the Project's purpose is to provide a reliable transportation facility in West Maui that can serve the community with increased reliability and safety to withstand coastal hazards.

Specifically, the Project is intended to address existing coastal erosion and flooding, as well as future coastal erosion and flooding caused by anticipated sea level rise. Much of existing Honoapiʻilani

Highway in the project area (51% in Olowalu and 73% in Ukumehame) is within the projected 3.2-foot SLR-XA as defined by the State of Hawai'i.

In short, the primary purpose of the Project is to reduce the highway's exposure to the SLR-XA, where feasible. Because there is no other route to central Maui, road closures, and even slowing traffic along this stretch can have significant effects on the movement of people and freight. Strengthening and reinforcing the highway's reliability would improve the efficiency of daily travel demands important not only to Maui residents, businesses, and visitors, but also to critical emergency response services as it would provide a more reliable evacuation route from wildfires and other disaster situations.

Two secondary objectives support the overall purpose and need for the Project:

- Provide regional transportation system linkages that support safe movement of people and goods
- Conform with regional land use and transportation plans

WHAT OPTIONS OR ALTERNATIVES WERE EVALUATED?

Federal and State environmental laws (that is, NEPA and HEPA) require the evaluation of reasonable build alternatives. As summarized in the Scoping Report issued in May 2023, the Draft EIS has considered a No Build Alternative as well as four Build Alternatives. The Build Alternatives are essentially different ways of routing the new highway alignments within the project area and were originally developed and refined based on prior planning studies by both the State of Hawai'i and Maui County (most notably the 2005 Maui County *Pali to Puamana Parkway Master Plan*) as well as early engagement with the community. Before the Draft EIS was started, the planning process identified additional alternatives and options to enhance the performance of the existing transportation network. But these alternatives were not considered further because they did not meet the Project's purpose and need.

Makai (toward the sea) and mauka (toward the mountains), Hawaiian terms that are typically used to define geographic orientation, are used extensively to define and describe conditions in this Final EIS. As described with more detail in Chapter 2, Alternatives, and as shown in FIGURE S-3, the Build Alternatives include highway alignments that reflect variations to provide makai, middle, and mauka options in order to evaluate the potential positive and negative environmental effects (typically referred to as beneficial or adverse effects). As shown in FIGURE S-4 and FIGURE S-5, during the development of the Draft EIS (and in response to public comments during scoping), the Build Alternatives were further refined to assess the best option in two distinct segments for Olowalu and Ukumehame. In certain areas at each end of the project area and in the middle, there is only one viable alignment option due to rugged terrain, feasibility/constructability, and significant adverse effects to both the natural and cultural environment.

FIGURE S-3. **Build Alternatives: Full Project Area**

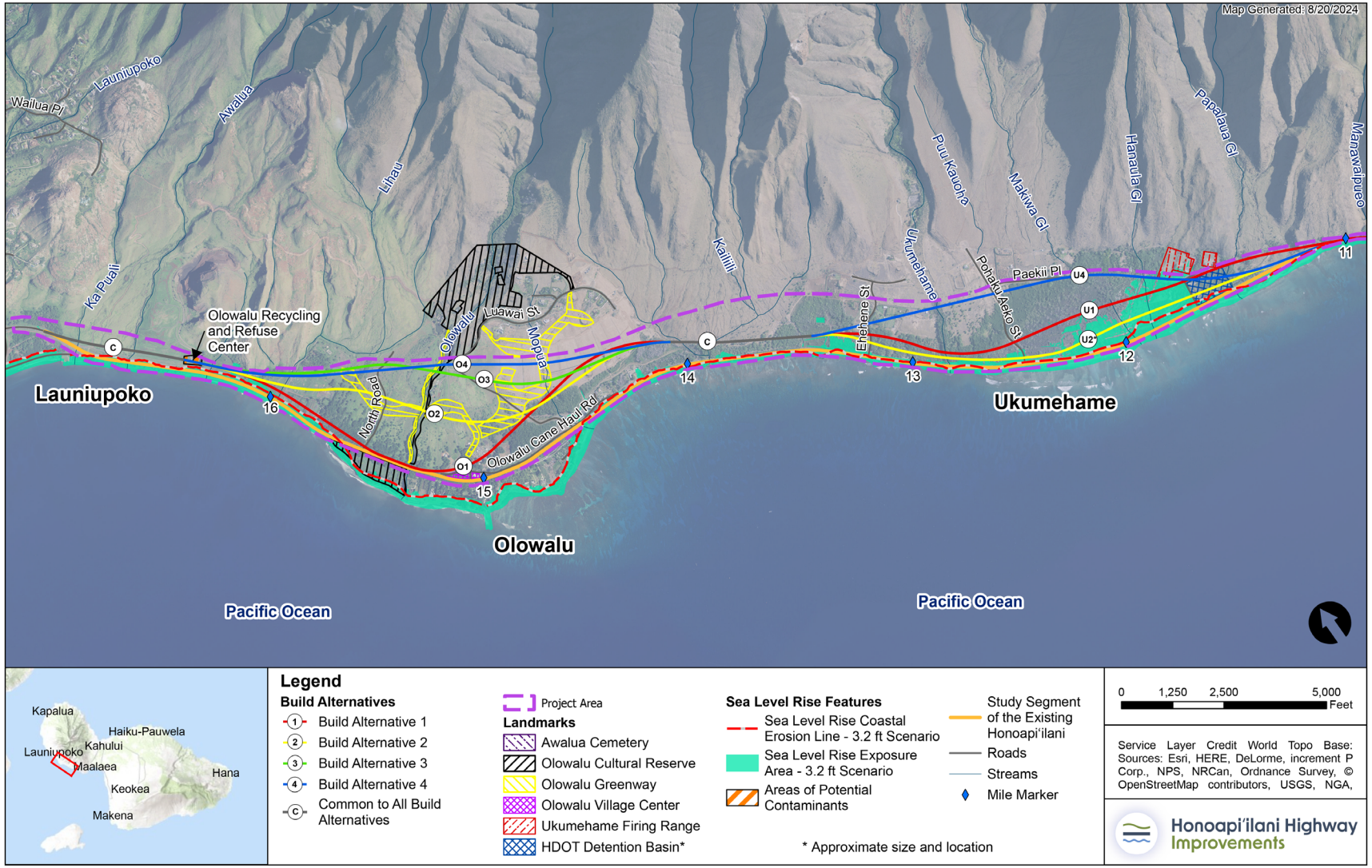


FIGURE S-4. **Build Alternatives: Olowalu**

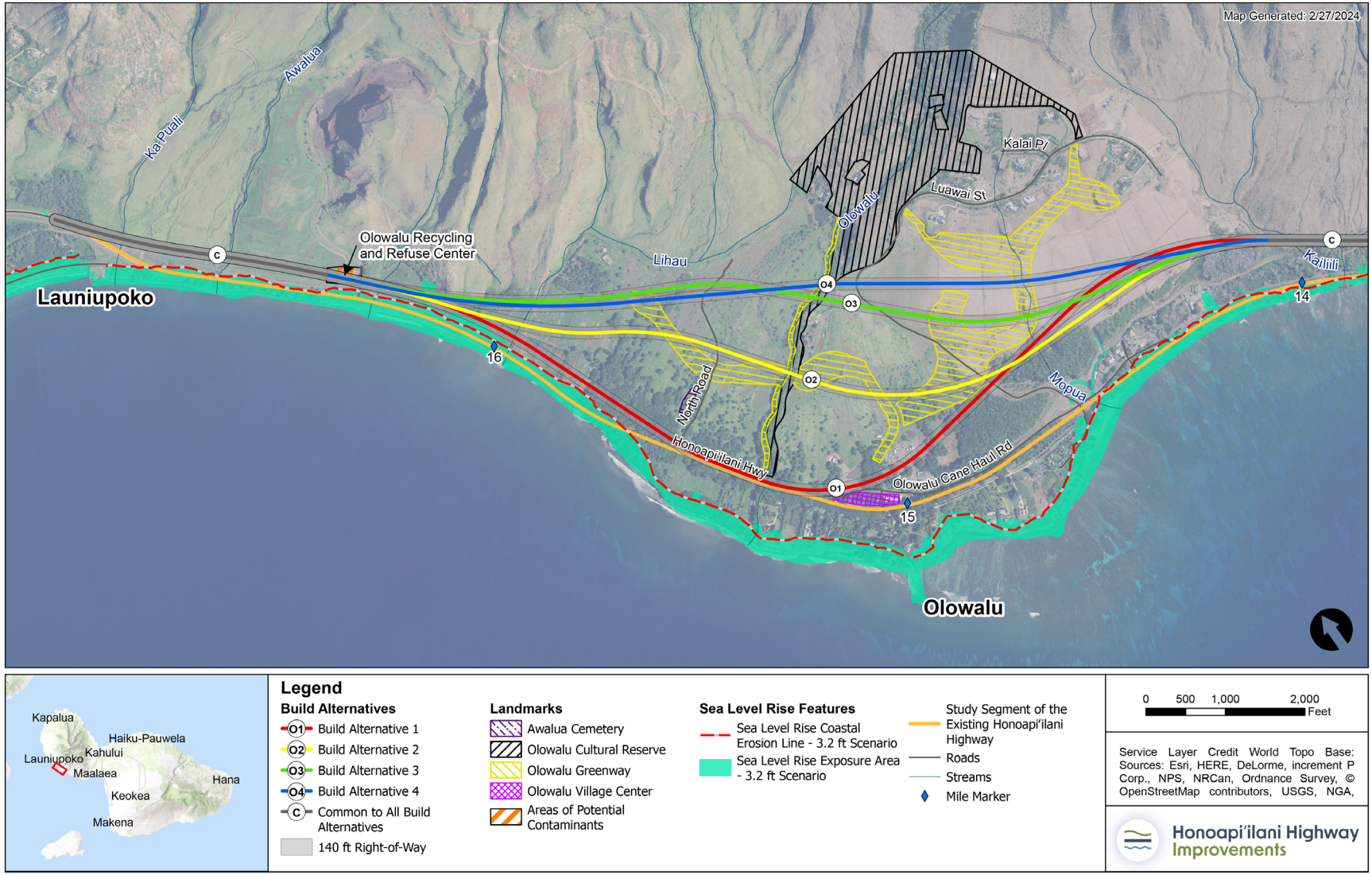
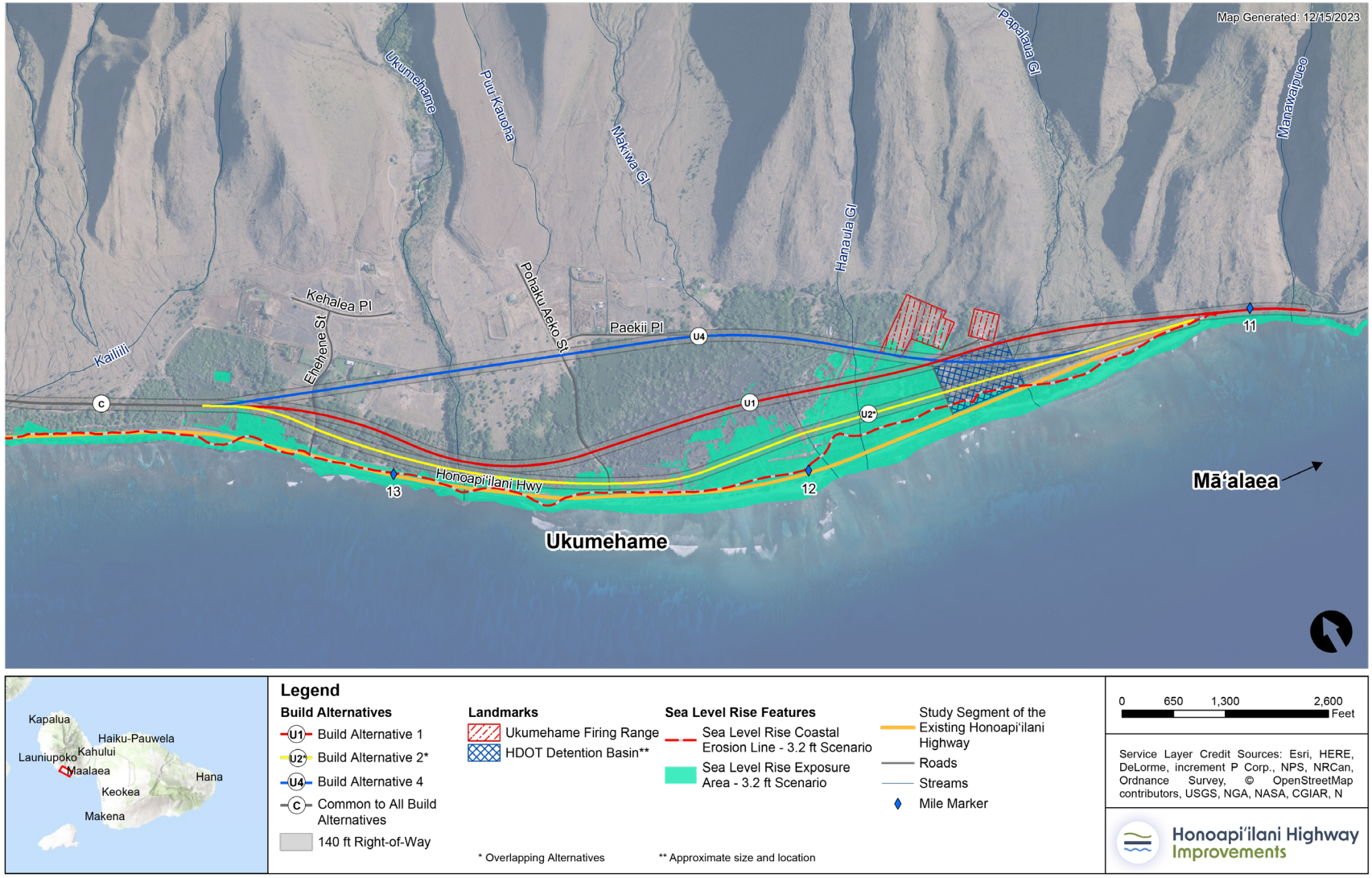


FIGURE S-5. **Build Alternatives: Ukumehame**



Over the last decade, the transportation network just north of the Project's limits has changed. HDOT constructed Lāhainā Bypass Phase 1A from the Keawe Street Extension to Lāhaināluna Road in 2012; Phase 1B-1 from Lāhaināluna Road to Hōkiokio Place was completed in 2013; and Phase 1B-2 from Hōkiokio Place to the southern terminus of the Lāhainā Bypass was completed in 2018. These improvements are currently functioning as a two-lane highway but grading, drainage, and structures were designed to be fully built out to four lanes (two travel lanes in each direction), if the need arises and funding is available.

To invest in a new highway alignment that is consistent with these recent highway improvements, the Build Alternatives would have an average right-of-way width of approximately 140 feet with additional area required for intersections and stormwater management infrastructure. The full right-of-way would be cleared and graded but only two lanes (one moving lane in each direction) would be constructed. Other than intersections with existing cross streets that in turn provide access to the existing Honoapi‘ilani Highway—which is proposed to become a local Maui County road to provide continued access to homes, business, parks, and a publicly accessible shoreline—the new highway would be limited-access with no driveways or access points to adjacent uses. Should HDOT pursue completion of a four-lane configuration in the future, a supplemental NEPA/HEPA environmental assessment would be undertaken.

For all Build Alternatives, permanent stormwater best management practice (permanent BMP) structures would include grassed swales located in the median and on the outside edges of the pavement structure as well as detention ponds situated at low points along the roadway profile that would collect and detain roadway stormwater. In addition, concept design includes the use of culverts, bridges, and viaducts (that is, longer multispan bridges) that allow for stream crossings or to avoid and minimize potential adverse effects with a Build Alternative.

All Build Alternatives in the Ukumehame segment would be on viaduct through environmentally sensitive areas. A roadway on embankment would harden the shoreline and not meet the Project's need to reduce roadway exposure to sea level rise. Viaduct would avoid new shoreline hardening and reduce effects to sensitive environmental areas. See Chapter 3, Affected Environment and Reasonably Foreseeable Effects, for details on environmental resources. And see Chapter 2, Alternatives, and Appendix 5.1 for more information on viaduct considerations.

WHAT ARE THE POTENTIAL IMPACTS OF THE PROJECT AND IS THERE A SELECTED ALTERNATIVE?

How are the alternatives evaluated?

Based on a comprehensive evaluation of the Project's Build Alternatives in the Draft EIS, the FHWA and HDOT identified a Preferred Alternative that comprises Build Alternative 2 in Olowalu and Build Alternative 1 in Ukumehame (FIGURE S-5). FHWA and HDOT have selected the Preferred Alternative (now the Selected Alternative) and, as presented in this Final EIS, have incorporated refinements that would avoid and minimize adverse effects (Chapter 5, Selected Alternative, provides a more detailed description).

The comprehensive assessment of the Build Alternatives is presented in Chapter 3, Affected Environment and Reasonably Foreseeable Effects. FIGURE S-6 identifies the Draft EIS determination of the Preferred Alternative. FIGURE S-7 presents the Selected Alternative for Olowalu and TABLE S-2 provides a summary of the environmental effects of the Build Alternatives and the Selected Alternative for Olowalu. FIGURE S-8 and TABLE S-3 provide the same information for Ukumehame. TABLE S-4 and TABLE S-5 provide a high-level characterization of the impact assessment leading to the identification of the Preferred Alternative for Olowalu and Ukumehame.

The Selected Alternative as presented in this Final EIS (FIGURE S-7 and FIGURE S-8) for Olowalu and Ukumehame, respectively) has been refined and adjusted in response to public comments, continued agency coordination and completion of concurrent required processes, most notably including:

- Design modifications including addition of a shared-use pathway within the new right-of-way, intersection refinements including a second signalized intersection, alignment design modifications at the Awalua Stream crossing and at Luawai Street and in Ukumehame near the Ukumehame Stream.

- Archaeological and architectural resource considerations in compliance with Section 106 of the National Historic Preservation Act including execution of a Programmatic Agreement that outlines additional assessment and mitigation commitments (see Chapter 3.6)

- Endangered Species Act Section 7 consultation resulting in a Biological Opinion issued by the U.S. Fish and Wildlife Service which summarizes the environmental commitments to avoid and minimize potential adverse effects on threatened and endangered species.

FIGURE S-6. **Preferred Alternative Selected from Draft EIS Alternatives**

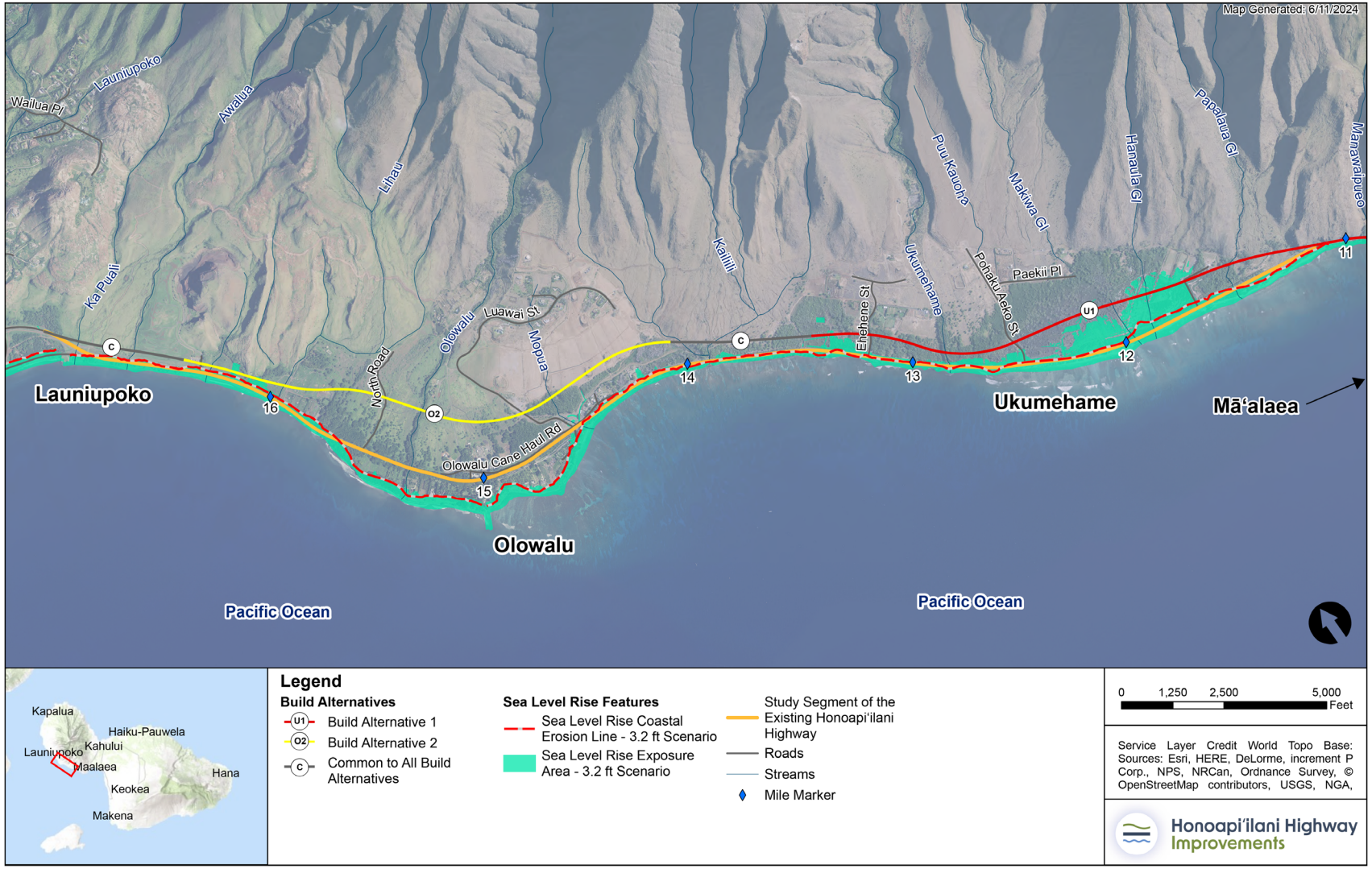


FIGURE S-7. **Selected Alternative – Olowalu**

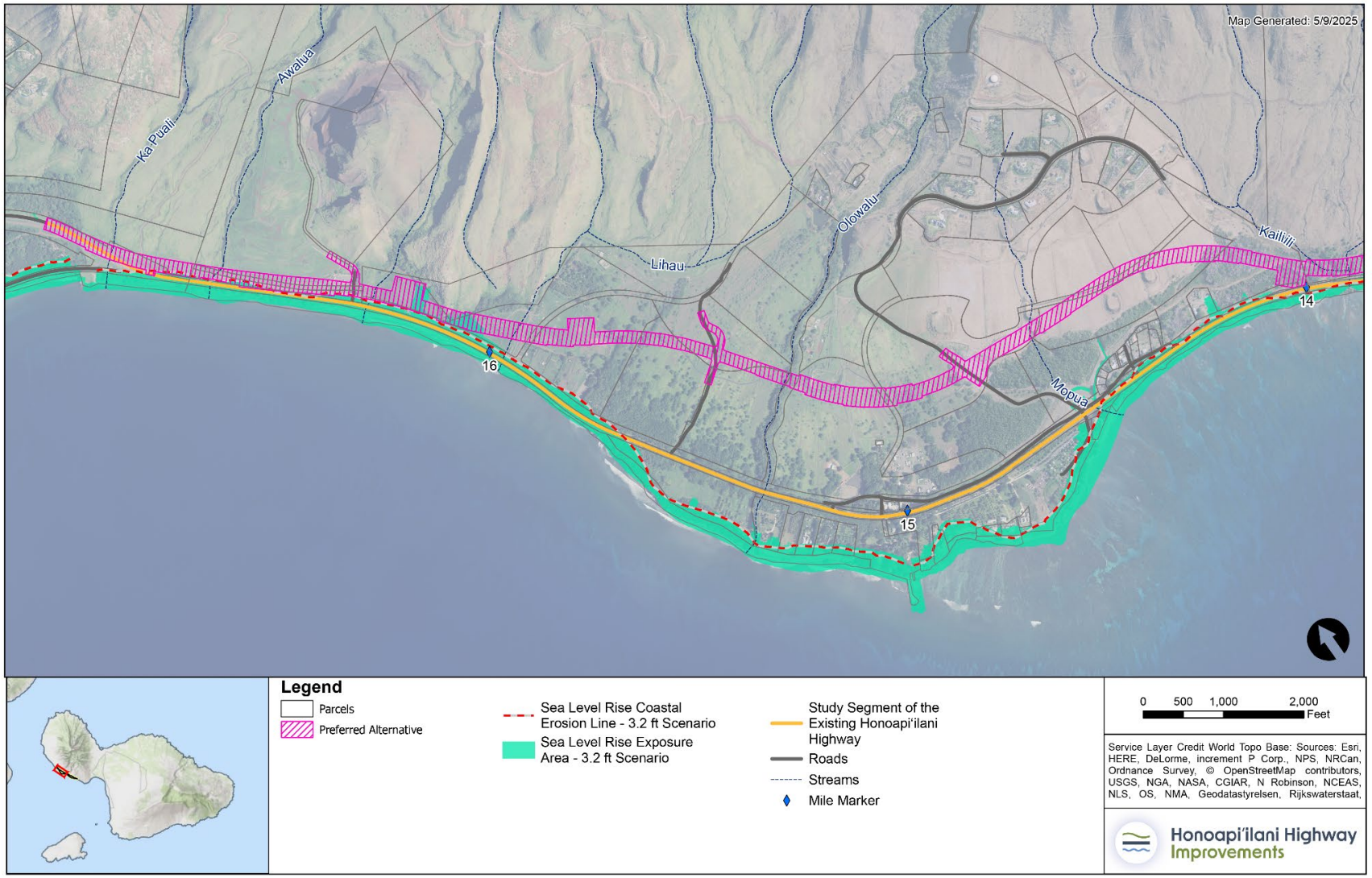


FIGURE S-8. **Selected Alternative – Ukumehame**

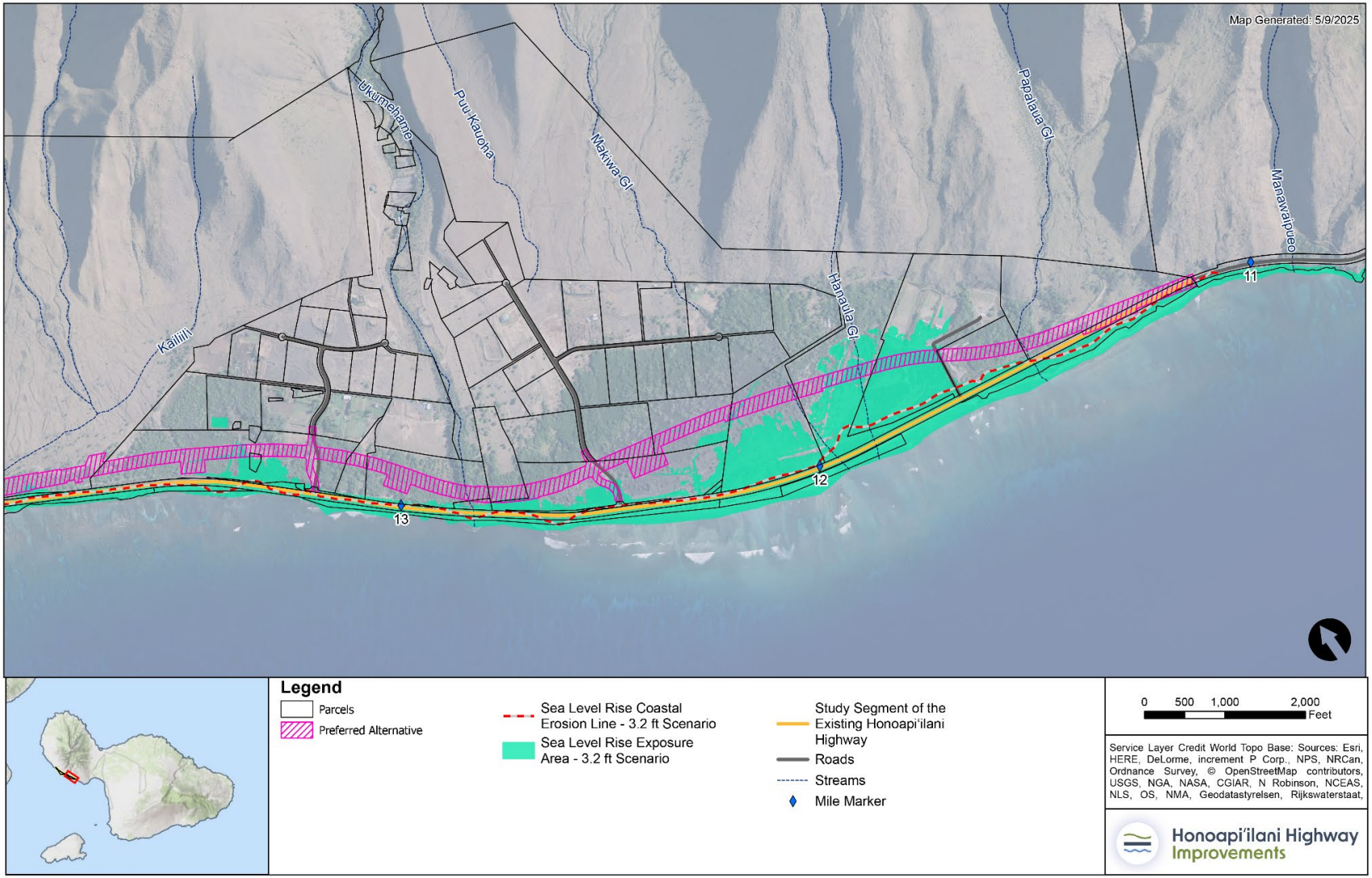


TABLE S-2. **Environmental Effects in Olowalu**

IMPACT ASSESSMENT	NO BUILD ALTERNATIVE	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	SELECTED ALTERNATIVE
Number of Private Tax Map Key Properties Affected	0	15	15	15	16	16
Number of Kuleana Properties Affected[1]	0	3	5	8	5	5
Potential Residential Relocation[2]	0	0	0	1	1	0
Potential Commercial/Agricultural Relocation	0	1	1	1	1	1
Community Facilities Relocation	0	0	0	0	0	0
Parks and Recreation Facilities Relocation	0	0	0	0	0	0
Historic Archaeological Resources (Adverse Effects)	0	2	2	2	2	2
Historic Architectural Resources (Adverse Effects)	0	0	0	0	0	0
Traffic Intersection Level of Service	F	A	A	A	A	A
Traffic Impacts	NA	0	0	0	0	0
Air Quality Impacts	0	0	0	0	0	0
Noise Impacts	0	0	0	0	1	0
Visual and Scenic Character Effects (High, Medium, Low)	Medium	Medium	Low	Medium	High	Low
Wetlands and Other Waters (acres)	0.0	0.7	0.5	0.5	0.6	0.6
Flora and Fauna, Endangered Species (High, Medium, Low)	Low	Low	Low	Low	Low	Low
Sea Level Rise Exposure (percent within SLR-XA)	51%	3%	2%	1%	1%	2%
Hazardous Materials Sites, Low Risk	0	2	1	1	1	1
Socioeconomic Adverse Effects	No	No	No	No	No	No

[1] Kuleana properties are Land Commission Awards rights granted by the Hawaiian monarchy in the 19th Century
[2] Overall property is affected by Build Alternative but may not require relocation of the residential use and would be determined during right-of-way acquisition negotiation

TABLE S-3. **Environmental Effects in Ukumehame**

IMPACT ASSESSMENT	NO BUILD ALTERNATIVE	BUILD ALTERNATIVE 1	BUILD ALTERNATIVES 2 AND 3	BUILD ALTERNATIVE 4	SELECTED ALTERNATIVE
Number of Private Tax Map Key Properties Affected	0	3	1	20	3
Number of Kuleana Properties Affected[1]	0	5	6	7	5
Potential Residential Relocation	0	0	0	2	0
Potential Commercial/Agricultural Relocation	0	1	0	2	1
Community Facilities Relocation	0	0	0	0	0
Parks and Recreation Facilities Relocation	0	0	0	0	0
Historic Archaeological Resources (Adverse Effects)	0	6	2	2	2
Historic Architectural Resources (Adverse Effects)	0	0	0	0	0
Traffic Intersection Level of Service	E	A	A	A	A
Traffic Impacts	NA	0	0	0	0
Air Quality Impacts	0	0	0	0	0
Noise Impacts	0	0	0	0	0
Visual and Scenic Character Effects (High, Medium, Low)	Medium	Low	Low	High	Low
Wetlands and Other Waters (acres)	0.0	6.4	15.9	2.0	5.1
Flora and Fauna, Endangered Species (High, Medium, Low)	Low	Low	Low	Low	Low
Sea Level Rise Exposure (percent within SLR-XA)	73%	12%	35%	8%	12%
Hazardous Materials Sites, Low Risk	0	1	0	1	1
Socioeconomic Adverse Effect	No	No	No	No	No

[1] Kuleana properties are Land Commission Awards rights granted by the Hawaiian monarchy in the 19th Century

TABLE S-4. **Evaluation of No Build Alternative and Build Alternatives in Olowalu**

TOPIC	NO BUILD ALTERNATIVE	BUILD ALTERNATIVE 1	BUILD ALTERNATIVE 2	BUILD ALTERNATIVE 3	BUILD ALTERNATIVE 4	SELECTED ALTERNATIVE
Preliminary Construction Cost Estimates	◕	◑	◑	◑	◑	◑
Land Use and Zoning	◑	◕	●	◕	◕	●
Agriculture and Farmlands	◕	◕	◕	◑	◑	◕
Community Services	◕	●	●	●	●	●
Land Acquisition, Displacement, and Relocation	●	◑	◑	◔	◔	◑
Parklands and Recreational Resources	●	◕	●	●	●	●
Archaeological and Architectural Historic Properties	●	◕	◕	◕	◔	●
Cultural Resources	●	◑	◕	◑	◔	●
Visual and Scenic Character	◑	◑	◕	◑	◔	◕
Water Resources, Wetlands, and Floodplains	○	◕	◕	◕	◕	◕
Flora and Fauna, Endangered Species	◑	◕	◕	◕	◕	◕
Geology, Soils, and Natural Hazards	◔	◕	●	●	●	●
Coastal Zone Management/Hawaiʻi Special Management Areas	○	◕	●	●	●	●
Sea Level Rise	○	●	●	●	●	●
Transportation	○	◕	●	●	●	●
Air Quality and Energy	◕	●	●	●	●	●
Noise	◑	●	●	●	◔	●
Infrastructure and Utilities	◕	●	●	●	●	●
Hazardous Materials	●	◕	●	●	●	●
Socioeconomic Conditions	◕	●	●	●	●	●
OLOWALU OVERALL ASSESSMENT	◔	◕	●	◕	◑	●

○ = Worst; ◔ = Poor; ◑ = Neutral; ◕ = Good; ● = Best

TABLE S-5. **Evaluation of No Build Alternative and Build Alternatives in Ukumehame**

TOPIC	NO BUILD ALTERNATIVE	BUILD ALTERNATIVE 1	BUILD ALTERNATIVES 2 AND 3	BUILD ALTERNATIVE 4	SELECTED ALTERNATIVE
Preliminary Construction Cost Estimates	◕	◑	◑	◑	◑
Land Use and Zoning	◑	●	●	◔	●
Agriculture and Farmlands	◕	◕	●	◔	◕
Community Services	◑	●	●	●	●
Land Acquisition, Displacement, and Relocation	●	◕	◕	○	◕
Parklands and Recreational Resources	◕	●	●	●	●
Archaeological and Architectural Historic Properties	●	◔	◑	◑	●
Cultural Resources	●	◔	◑	◑	●
Visual and Scenic Character	◑	◕	◕	◔	◕
Water Resources, Wetlands, and Floodplains	◔	◑	○	◕	◑
Flora and Fauna, Endangered Species	◕	●	●	●	●
Geology, Soils, and Natural Hazards	◔	◕	●	●	●
Coastal Zone Management/Hawai'i Special Management Areas	○	●	◕	●	●
Sea Level Rise	○	◕	◔	◕	◕
Transportation	○	●	●	●	●
Air Quality and Energy	◕	●	●	●	●
Noise	◕	●	●	◕	●
Infrastructure and Utilities	◕	●	●	●	●
Hazardous Materials	●	●	●	●	●
Socioeconomic Conditions	◑	●	●	●	●
UKUMEHAME OVERALL ASSESSMENT	◔	●	◕	◑	●

○ = Worst; ◔ = Poor; ◑ = Neutral; ◕ = Good; ● = Best

What is the design-build construction process?

Based on the Selected Alternative, HDOT uses a design-build construction process to implement major capital projects. With design-build, HDOT procures a contractor through a competitive review of proposals that are submitted in response to a public request for proposals (RFP). The RFP delineates the project area, provides a detailed conceptual engineering package for a Selected Alternative (as determined through the NEPA process and for this Project, identified in the ROD), and identifies the environmental commitments and mitigation that must be incorporated into the contractor's scope and bid. Finally, the private construction team completes final design and construction documents, obtains final approvals and permits, and builds the project for HDOT.

Contractors who submit proposals for a project may identify additional or alternative measures to meet the RFP design or environmental mitigation requirements—measures which may or may not match the completed environmental findings. Such measures may identify ways to complete the work more efficiently (affecting price and schedule) or to more effectively mitigate or meet environmental compliance requirements and reflect the contractor's past experience and approach to design, construction, and project management. These changes may require a new assessment to ensure that the Project remains in conformance with the environmental findings of the ROD. This may require the contractor to complete a NEPA or HEPA reevaluation of the environmental findings and commitments (once the new design is finalized and before construction can begin).

Overall, HDOT design-build projects have shown to be an effective way to procure large capital projects that can result in cost and time savings.

WHAT ARE THE PRELIMINARY COST ESTIMATES FOR THE SELECTED ALTERNATIVE?

The initial construction costs (exclusive of property acquisition and other non-construction costs) presented in the Draft EIS for the Preferred Alternative $160.8 million. In finalizing the Selected Alternative in the Final EIS, the current construction estimate is $298 million. This increase of $138 million is primarily to accommodate the addition of the shared-use path, the second signalized intersection at Ehehene Street, potential passing lanes between Ehehene and Luawai Streets, adding a culvert to maintain access to a kuleana parcel in Ukumehame, and, the switch from a culvert to a bridge across the Awalua Stream. In addition, continued refinement of the cost estimate has advanced other costs including mobilization, labor costs, materials (actual costs and transportation costs to import materials and equipment to Maui), as well as escalation and contingencies. Initial property acquisition for Right-of-Way is estimated at $18 million but would not be finalized until the final alignment is established during the design build process, overall project construction costs and other project costs such as right-of-way acquisition will be finalized.

WHEN WILL THE SELECTED ALTERNATIVE BE CONSTRUCTED?

As noted above, HDOT will commence a design-build contractor selection process in September 2025, that would allow for construction to start about a year later. In short, HDOT anticipates that project

construction would take approximately four years and the Project could potentially be complete and operational by 2030.

HOW HAS THE PUBLIC BEEN INVOLVED IN THE PROJECT?

The Project has offered the public ongoing opportunities to get involved and provide input on project planning and scoping. In 2022, the year prior to starting the EIS, a series of community meetings were held to inform the public about the Project and provide opportunities for early input. Three public scoping meetings (one in-person, two virtual) were held in December 2022, and a final Scoping Report was issued in May 2023.

With completion of the Draft EIS in December 20, 2024, a 45-day public review period (through February 24, 2025) was initiated which included two public hearings: an in-person hearing on January 23, 2025, and a virtual public hearing on January 28, 2025. There were a variety of methods available for individuals to submit comments on the Draft EIS: email, online form, printed form, and verbally at the public hearings.

Chapter 8, Public Involvement and Agency Coordination, summarizes the Project's agency coordination and public participation efforts. Chapter 9, Response to Comments provides a summary of public comments and lead agency responses to substantive comments.

Public comments and continued agency coordination were considered by FHWA in the evaluation, refinement, and decision to move forward with the Selected Alternative.

WILL THERE BE ADDITIONAL OPPORTUNITIES FOR PUBLIC PARTICIPATION?

As with all large-scale construction projects, as HDOT initiates the design-build contractor process and through project construction, there will a continued dialogue with the public and information will continue to be shared on the project website.

WHO CAN I CONTACT FOR FURTHER INFORMATION OR TO SUBMIT COMMENTS ON COMPLETION OF THE FINAL EIS AND RECORD OF DECISION?

For more information, please visit the Project's website at www.Honoapiilanihwyimprovements.com or contact:

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