Contents

FIGURES

3.17 INFRASTRUCTURE AND UTILITIES

This section describes existing and future infrastructure in the project area and assesses the potential for the Honoapi‘ilani Highway Improvements Project (the Project) to adversely affect these systems. Infrastructure that was evaluated includes water supply, sanitary sewage, stormwater systems, electric and telecommunications, and solid waste.

Following publication of the Draft Environmental Impact Statement (EIS), the public was afforded an opportunity to review and comment on the effects of the Project with respect to infrastructure and utilities. Based on those comments, or other information gathered after the publication of the Draft EIS, no revision to the analysis contained within this section was warranted and no further analysis is required as part of this Final EIS.

3.17.1 Regulatory Context

In Maui County, the Department of Water Supply manages public water systems. The Wastewater Reclamation Division of the County’s Environmental Management office manages public wastewater and recycled water collection systems. In addition, the State of Hawai‘i Public Utilities Commission (PUC) regulates private water systems while the Hawai‘i State Department of Health regulates sewage systems (primarily individual property septic or cesspool systems).

The Maui Electric Company (MECO), a subsidiary of Hawaiian Electric, is the sole public electric utility provider for the County of Maui and is regulated by the State of Hawai‘i PUC. Hawai‘i Gas is the sole public gas utility provider for the County of Maui and is also regulated by the State of Hawai‘i PUC; however, there are no gas lines within the project area. Several telecommunications providers are in Maui, including Hawaiian Telcom Communications Inc., Oceanic Time Warner Cable, and Verizon. The Solid Waste Division of the County’s Environmental Management office maintains solid waste and refuse collection.

3.17.2 Methodology

The study area for the assessment of utilities and infrastructure has the same boundaries as the project area (as defined in Chapter 1, Introduction, Purpose and Need), which encompasses the area around the existing Honoapi‘ilani Highway and the Build Alternatives. This assessment describes the following:

- The existing water and sewer infrastructure serving the project area as well as the planned infrastructure improvements in the project area
- The existing electric and telecommunications infrastructure serving the project area as well as any planned infrastructure improvements in the project area
- The existing and future solid waste disposal practices in the project area

3.17.3 Affected Environment

FIGURE 3.17-1 and FIGURE 3.17-2 provide an overview of the infrastructure systems serving Olowalu and Ukumehame, respectively, and each of the key systems is described in the following sections.

3.17.3.1 Potable Water Supply

The project area is within the Launiupoko, Olowalu, and Ukumehame surface and groundwater management areas of the Lāhainā Aquifer Sector Water Management Area, as designated by the Commission on Water Resource Management.[1] Withdrawal, diversion, impoundment, or consumptive use of surface or groundwater in these areas is prohibited without first obtaining a water use permit from the Commission on Water Resource Management.

No public water supply systems are in the project area. The closest system is in Lāhainā.

Potable water distribution in Olowalu is provided by the Olowalu Water Company Inc., a privately owned water system regulated by the State of Hawai‘i PUC. The system is served by two wells and a storage tank that are generally adjacent to and upland of the existing subdivision. As depicted in FIGURE 3.17-1, the potable water lines extend toward the Olowalu Subdivision and the Olowalu Village Center from the holding tank and well area within the street bed of Luawai Street for the upper reaches of the subdivision and along a right-of-way bringing the water main directly into Olowalu Center. At this point, the water main extends south along Olowalu Village Road serving the residential area (Kapāiki Place) to the last house and the site of the former Olowalu Lanakila Hawaiian Church. The water main crosses under the existing Honoapi‘ilani Highway and then extends to the north and south serving existing business and residences along the shoreline. At Olowalu Stream, this water main turns mauka and runs parallel to the stream to just below the area of the Olowalu Petroglyphs (serving undeveloped portions of the subdivision). In addition, North Street is a mapped subdivision roadway under construction and will be served by the Olowalu Water Company.

In Ukumehame, a privately owned water system serves the subdivision. As described in the Ukumehame Subdivision Final Environmental Assessment (FEA), the Lua Wai Water Company would operate domestic and irrigation water systems within the subdivision though it is not yet a system with reporting requirements based on the limited development to date.[2] Water lines (with fire hydrants) are within the rights-of-way on Ehehene Street north of the Ukumehame Stream, and Pōhaku ‘Aeko and Paeki‘i Streets south of the stream (FIGURE 3.17-2).

[1] https://dlnr.hawaii.gov/cwrm/groundwater/gwma/lahaina/.

[2] https://files.hawaii.gov/dbedt/erp/EA_EIS_Library/2005-05-23-MA-FEA-Ukumehame-Subdivision-Phase-1-and-2.pdf.

FIGURE 3.17-1. **Infrastructure Systems in Olowalu**

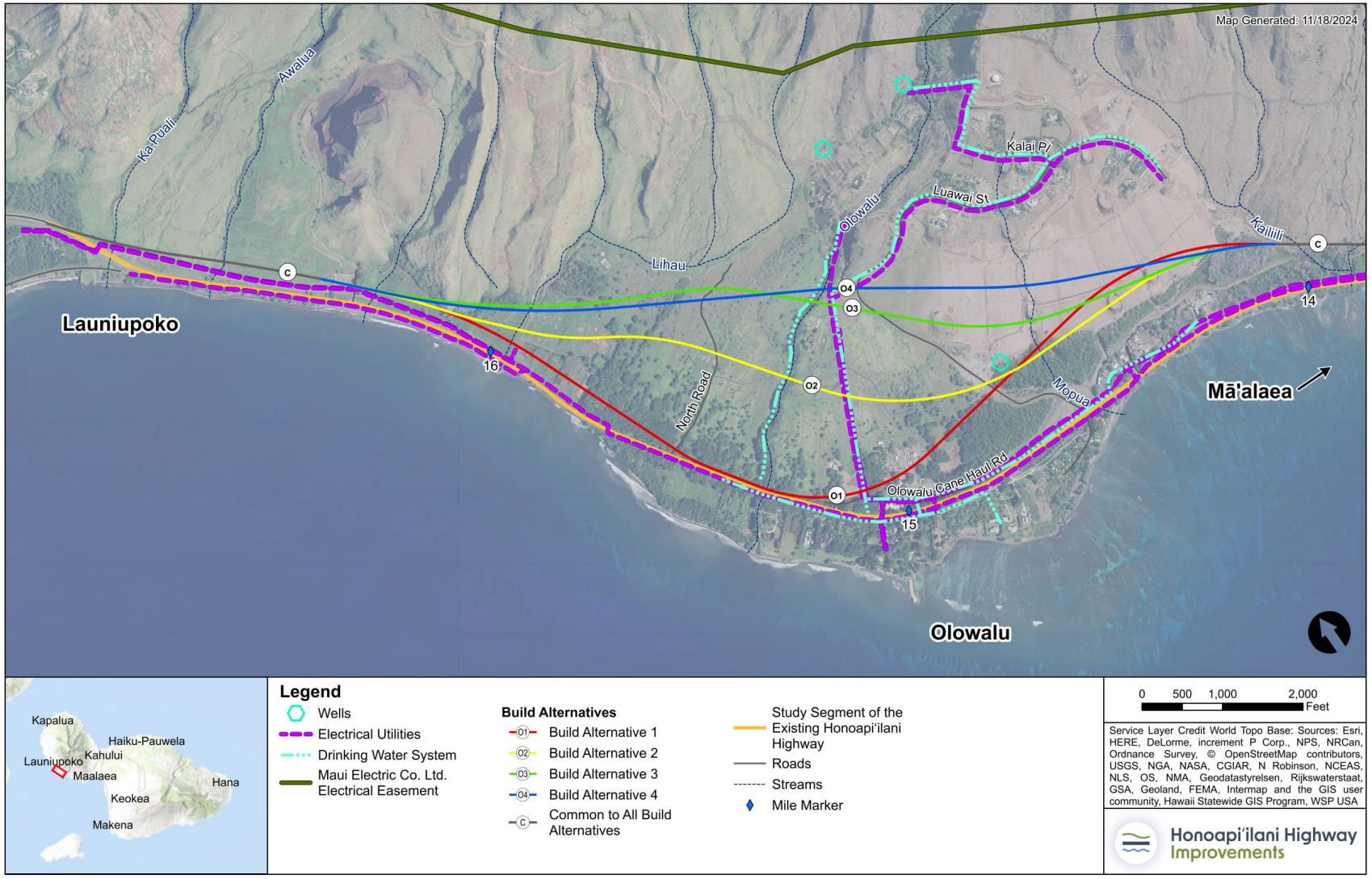
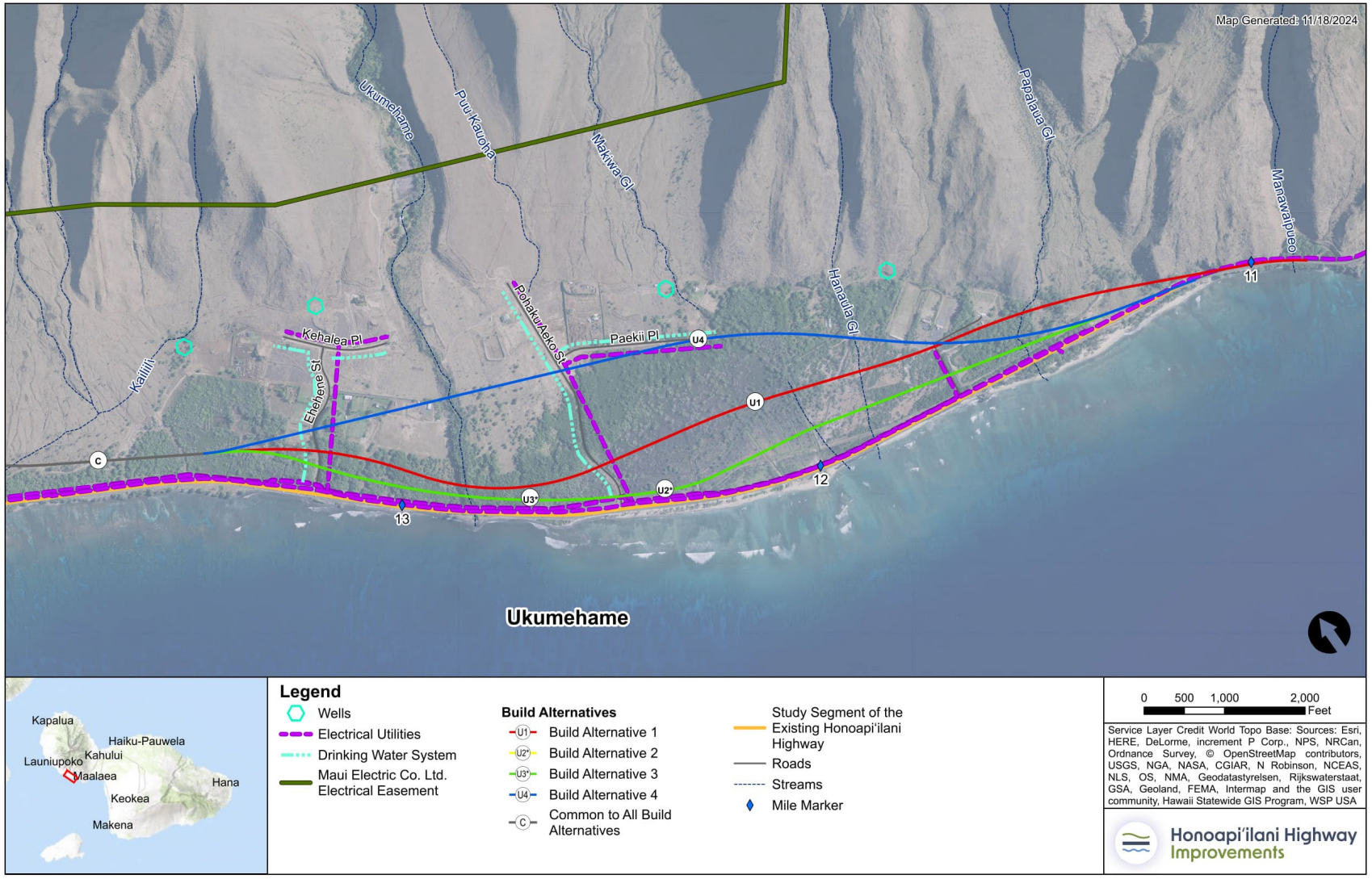


FIGURE 3.17-2. **Infrastructure Systems in Ukumehame**



3.17.3.2 Wastewater Treatment

There is no existing public wastewater infrastructure in the project area. Individual wastewater disposal needs in the project area are accommodated by septic tanks, leach fields, and cesspools. The closest public system is in Lāhainā, north of the project area.

3.17.3.3 Stormwater Systems

Most stormwater generated within the project area from impervious surfaces (that is, no water passes through) is uncontrolled and either collects in low-lying areas—where it evaporates or percolates into the ground—or drains to existing intermittent and perennial streams and existing culverts before discharging directly into the Pacific Ocean. Combined with storm flows from upland watersheds collecting in these same streams and culverts, the general lack of stormwater facilities and treatment of watershed runoff has led to an increase in sediment loading to the reef areas offshore of the project area.

As detailed in Section 3.9, Water Resources, Wetlands, and Floodplains, The Nature Conservancy is working with the Hawaiʻi Department of Transportation (HDOT) to address the erosion and sedimentation issues in this area with a feasibility study of effective and nature-based solutions. along the existing highway. In addition, the Mauna Kahālāwai Watershed Partnership (formerly the West Maui Mountains Watershed Partnership), manages 50,000 acres in the West Maui Mountains to protect forested watersheds, native ecosystems, and freshwater supply through collaborative forest management.

The existing Honoapiʻilani Highway and side streets in the project area do not have stormwater infrastructure in the form of catch basins, nor is stormwater conveyed to management basins. Existing culverts carry intermittent and perennial streams under the existing highway. In certain areas, there is some channelization of waterflows adjacent to the existing highway but there are no connected conveyance systems from the highway itself. HDOT manages one large stormwater detention basin of about 10 acres at the south end of the project area. This basin does not collect storm flows from the highway but is designed to impound runoff from an extensive upland watershed, which retains storm flows to allow sediments to settle before being discharged under the highway via a culvert and to the ocean. The detention basin was constructed in the 1970s, and HDOT periodically removes accumulated sediment.

3.17.3.4 Energy and Telecommunications

Electric and telecommunications utilities are within the project area and are generally aboveground on utility poles along Honoapiʻilani Highway. MECO, Verizon, and Oceanic Time Warner Cable provide electric and telecommunications service for the West Maui region. In addition to the existing infrastructure adjacent to Honoapiʻilani Highway, MECO holds two easements for electric transmission lines that run inland of Honoapiʻilani Highway at the base of the mountains. No natural gas lines serve the project area.

3.17.3.5 Solid Waste and Sanitation

The Olowalu Recycling and Refuse Convenience Center (often referred to as the Olowalu transfer station) accommodates solid waste and sanitation services in the project area. The Solid Waste Division of the County of Maui Environmental Management office operates the facility and provides

refuse drop-off for residents and recycling services. The facility is within the northern portion of the project area, just south of Lāhainā Bypass.

3.17.3.6 Planned Utility and Infrastructure Improvements

No changes to public potable water or sewer services are anticipated in the project area. To the north of the project area, specifically in Lāhainā, there are plans for system upgrades to allow for increased use of recycled wastewater.[3]

In October 2023, the State of Hawaiʻi Board of Land and Natural Resources granted a revocable permit to the County of Maui Department of Environmental Management, Solid Waste Division, for the use of an approximately 0.7-acre landfill parcel to support a Temporary Debris Staging and Reduction site in response to the Lāhainā wildfires. The parcel, roughly adjacent to the existing Olowalu Recycling and Refuse Convenience Center, contains a former scale and weigh station that the County of Maui would repurpose to support debris removal associated with the Lāhainā wildfire. Both the Temporary Debris Staging and Reduction site and the repurposed scale and weigh station are likely to be used for less than five years. Transporting the debris to the landfill was completed in January 2025, and all wildfire debris is now in the process of being relocated to the permanent disposal site in Central Maui, which is expected to be complete by November 2025.[4]

No other known improvements to utilities and infrastructure are anticipated in the project area.

3.17.4 Environmental Consequences

3.17.4.1 No Build Alternative

The No Build Alternative would maintain Honoapiʻilani Highway in its existing configuration with ongoing maintenance and repairs. Because no land use changes or new development are associated with the No Build Alternative, it would not increase demand or have an adverse effect on water supply, sanitary sewage, electric and telecommunications, stormwater runoff, and solid waste and sanitation services.

However, the reduced reliability of Honoapiʻilani Highway in the No Build Alternative would impede access to the Olowalu Recycling and Refuse Convenience Center because it is accessible only via the highway. This reduced reliability would also affect the maintenance and repair of electric and telecommunications infrastructure adjacent to Honoapiʻilani Highway.

3.17.4.2 Build Alternatives

For all Build Alternatives in both Olowalu and Ukumehame, no land use changes or new development associated with the Project would generate demand for water supply, sanitary sewage, electric and telecommunications, stormwater runoff, and solid waste and sanitation services.

[3] https://files.hawaii.gov/dbedt/erp/Doc_Library/2021-06-23-MA-FEA-West-Maui-Recycled-Water-System.pdf.

[4] https://www.mauirecovers.org/debris-containment (Date Accessed: July 2025)

Potable Water Supply

In Olowalu and Ukumehame, the Build Alternatives would require potable water lines to be maintained and appropriately protected—or rebuilt during construction—at every location where a new highway alignment crosses an existing water line.

Wastewater Treatment

Common to all Build Alternatives, there would be no change to the project area’s reliance on individual lot wastewater systems.

Stormwater Systems

The Build Alternatives would incorporate modern design standards, including those described in the Stormwater Post-Construction best management practices (BMPs) Manual, for managing stormwater runoff from the new roadway.[5] For all Build Alternatives, conceptual designs of permanent BMPs are identified in Chapter 2, Alternatives. Permanent BMPs would be designed to treat stormwater generated by the impervious area of the new roadway as it collects at natural low points along the roadway as defined by the final roadway profile. Final design during the design-build process would refine the location, size, and design of these faciliteis and incorporate Low Impact Development Stormwater BMPs such as vegetated swales in the median and on the outside edges of the pavement structure as practicable. The final selection of BMP devices will be done by the design-build contractor as they will be incorporated into the overall design of highway drainage systems.

Energy and Telecommunications

Because there would be no change in delivering electric and telecommunications (including broadband) utilities to local users it is unlikely that the location of the existing system would need to change. The overhead lines would continue to be on poles along Olowalu Village Road and Honoapi‘ilani Highway. Through ongoing coordination with utility providers, belowground conduits that serve the Olowalu and Ukumehame Subdivisions as they cross under the new highway alignment would be maintained or rebuilt. In addition, it is HDOT’s directive to install broadband conduit in all new roads and widened roadways so that resource is also available to providers into the future.

The Project’s final design could potentially accommodate a new utility corridor for MECO or other utility providers, which could create an opportunity to upgrade utility infrastructure and minimize wildfire risks associated with existing power lines and other electric transmission. This potential accommodation would be coordinated with the utility provider and all applicable rules and regulations would be followed. For cross street intersections, needed electrical connections would be pulled from the existing lines already along the cross streets in coordination with MECO including any new vaults or conduit required to serve the new intersection.

Solid Waste and Sanitation

There would be no change to the demand for new solid waste and sanitation services as a result of the Project.

[5] https://www.stormwaterhawaii.com/wp-content/uploads/2022/07/PC-BMP-Manual_220718-FULL.pdf.

All Build Alternatives would result in the displacement and relocation of the existing County of Maui recycling and tranfer station. The County has long considered relocation options for this facility to move it closer to the Lāhainā urban center, where most users originate. Implementation of the Project would accelerate the need for relocation. The temporary uses related to disposal of debris from the Lāhainā wildfire is expected to stop prior to the development of the Project. Therefore, any effects ~~affects~~ to this facility or conflicts with the Lāhainā wildfire debris removal are unlikely.

3.17.5 Construction Effects

As described above, potable water lines would be maintained and appropriately protected or rebuilt during construction of the Project. During construction, management of stormwater would be conducted consistent with HDOT’s Construction Site Runoff Control Program.[6] Construction BMPs would be implemented, and a *Stormwater Pollution Prevention Plan* would be developed.

3.17.6 Indirect Effects

The Project would not be anticipated to result in an increase in demand for or generation of water supply, sanitary sewage, electric and telecommunications, stormwater runoff, and solid waste and sanitation services. No land use changes or new development are associated with the Project, and it is unlikely to induce growth that would result in changes to land use, population density, or population growth. The zoning provisions described in Section 3.1, Land Use and Zoning, apply to the project area. Potential future development within the project area would be anticipated to abide by the density provisions of applicable zoning, which could be developed independent of the Project. Modifications to existing zoning would require approval and would be assessed separately prior to approval. Therefore, the Project would not result in indirect effects to infrastructure and utilities.

3.17.7 Mitigation

New roadway construction would require maintaining or relocating existing utility lines and accommodating belowground systems in Olowalu and Ukumehame. Electric, water, and other utility services would be maintained to existing users (other than potential short-term disruptions when service is changed over to a new service line). Overall, no adverse effects from any of the Build Alternatives are expected on infrastructure services and no additional mitigation would be required.

3.17.8 Build Alternatives Comparison Assessment

There is no variation of potential effects among the Build Alternatives. Build Alternative 1 could result in higher overall cost because it would likely require more coordination and reconstruction of water mains in Olowalu, which would likely require relocating or reconstructing water mains along both sides of Honoapi‘ilani Highway.

[6] https://www.stormwaterhawaii.com/wp-content/uploads/2022/02/Ch-4-Construction-Site-Runoff-Control-Program.pdf.