

SECTION 4 – PUBLIC SERVICES

4.1 *Traffic and Roadways*

4.1.1 Ahukini Road

Ahukini Road (Route 570) is a State east-west collector road that connects Kuhio Highway and Kapule Highway and extends makai to provide access to Lihue Airport and Ahukini Landing. Between Kuhio Highway and Kapule Highway, Ahukini Road is a two-lane roadway. Separate left turn, right turn and through lanes are provided in both directions on Ahukini at its signalized intersection with Kapule Highway. Within the Lihue Airport property east of Kapule Highway, Ahukini Road is a divided roadway that channelizes airport access traffic and then returns to a two-lane undivided highway down to Ahukini Landing (Kaua'i Long Range Transportation Plan).

4.1.2 Kapule Highway

Kapule Highway (Route 51) is a high-quality State arterial two-lane highway between Rice Street in Lihue and its intersection with Kuhio Highway on the north side of Hanama'ulu Town (Kaua'i Long-Range Transportation Plan). Kapule Highway is a two-way, two-lane arterial highway between Lihue and Hanama'ulu. North of Hanama'ulu, Kapule Highway continues as Kuhio Highway. Kapule Highway is signalized at its fully channelized intersection with Ahukini Road with separate left-turn, through, and right-turn lanes on all approaches. Kapule Highway is stop controlled at its channelized Tee-intersection with Rice Street.

4.1.3 'Umi Street

'Umi Street is a two-lane County street within a 60-foot right-of-way. It provides local north-south access between Rice Street and Hardy Street. It also provides connection between Ahukini Road and Hardy Street. This portion of 'Umi is a residential corridor and does not have sidewalks or gutters. Parallel parking is permitted on both sides of 'Umi but there are no sidewalks on the Civic Center side of 'Umi Street. There are sidewalks only on the eastern side of the road. Due to the bend in Hardy Street, the intersection of 'Umi Street and Hardy Street has wide distances between curbs. Bicycle and pedestrian access improvements are proposed for the entire length of 'Umi Street as part of the County's *Lihue Urban Design Guidelines* project and *Lihue Civic Center Master Plan* project. See Section 2.2.2.L for additional discussion.

4.1.4 Kā'ana Street

Ka'ana Street is a two-lane County road within a 60-foot right-of-way. It provides access through residential neighborhoods between Hardy Street and Unahe Street. After intersecting with Unahe Street, Ka'ana Street terminates at the edge of vacant, former agricultural lands

that are planned for development by Grove Farms Company based on the 1995 Lihue – Hanamaulu Master Plan. East of these lands, Ka’ana Street continues within a private road lot owned by Visionary, LLC (dba Lihue Land Company) that provides public access to the Police Headquarters and Emergency Operating Center, State Judiciary Building, and Vidinha Stadium from Kapule Highway. At its intersection with Kapule Highway, Ka’ana provides signalized right and left turn access into and out of the U.S. Post Office through airport property, and serves as an egress point for the airport terminal and rental car operations.

Based on the Lihue – Hanamaulu Master Plan, Ka’ana Street will be extended as a major collector street connecting Lihue town and Kapule Highway. The road alignment will abut commercial mixed-use and residential development. As currently entitled, Ka’ana Street will have a 60-foot right of way with four lanes of traffic. Each side of the right-of-way will have two 11-foot travel lanes, 4 feet for curb, gutter and planter strip, and a 4-foot sidewalk. During non-peak hours, the two outside lanes are to be used for on-street parking. During peak hours, all four lanes are to be used for motor vehicle traffic. See Section 2.2.2.L for additional discussion and Figure L2 for the approved Ka’ana Street cross-section.

4.1.5 Ho’olako Street

Ho’olako Street is a two-lane collector street, which provides access to the Vidinha Stadium Complex from Rice Street through the Lihue Industrial Park. Ho’olako Street continues around the existing soccer fields and between the State Judiciary Building and Kauai Police Headquarters to connect with Ka’ana Street.

Based on the Lihue – Hanamaulu Master Plan, Ho’olako Street will be straightened and extended as a major collector street with intersections at Ka’ana Street and Ahukini Road. The road will abut existing industrial uses, and existing and planned park and recreation facilities, commercial mixed-use and residential development. As currently entitled, Ho’olako Street will have a 60-foot right of way with four lanes of traffic. Each side of the right-of-way will have two 11-foot travel lanes, 4 feet for curb, gutter and planter strip, and a 4-foot sidewalk. During non-peak hours, the two outside lanes are to be used for on-street parking. During peak hours, all four lanes are to be used for motor vehicle traffic. See Section 2.2.2.L for additional discussion and Figure L1 for the approved Ho’olako Street cross-section.

4.1.6 Ho’olaule’a Way and Limo Road

Hoolaulea Way, also known as “Marriott Road” intersects with Rice Street and serves as the main entry road into and through Kauai Marriott Resort and Kauai Lagoons. The roadway is 22 feet wide and designated for automobile, golf cart, and pedestrian use by the resort. Limo Road provides access between Hoolaulea Way and Ninini Point Road at its intersection with Kapule Highway with continuation to the Lihue Airport via a private, paved road. Limo Road serves as

a direct transit route between the resort and airport for resort guests and residents. It currently functions as the back entrance to the resort, however it is planned to be improved as the primary entry drive serving Kauai Marriott and Kauai Lagoons.

4.1.7 Rice Street

Rice Street is a four-lane County road that serves as the main thoroughfare through Līhu'e Town connecting Kuhio Highway to Kapule Highway and on to Nāwiliwili Harbor. In Līhu'e town, street parking is permitted during off-peak traffic periods limiting Rice Street to two lanes, one lane in each direction. During peak traffic periods, from 7:00 to 9:00 A.M. and from 3:00 to 5:00 P.M traffic flows in all four lanes- two lanes of travel in each direction. South of Kapule Highway, Rice Street extends to Nāwiliwili Harbor as a two-lane road with limited paved shoulders.

4.1.8 Hardy Street

Hardy Street starts at Rice Street and continues around Wilcox Elementary until it intersects with 'Umi Street. It then proceeds west along the northern edge of the Lihue Civic Center and connects with Kuhio Highway. On-street parking is permitted on both sides of the street. There is a bus stop shelter on the Civic Center side of Hardy Street. Hardy Street has a sidewalk on the north side but none on the Civic Center side of the street. The street has no curbs and gutters.

4.1.9 Ninini Point Road

Ninini Point Road is a private roadway that provides access between Kapule Highway and Ninini Point. It is located on Kauai Lagoons property aligned adjacent to the boundary with Lihue Airport. The improved segment of the road ends at Kauai Lagoons Fashion Landing driveway. An unpaved, graded and graveled segment continues along the airport perimeter to access the lighthouse at Ninini Point. A public access easement exists over the road and continues past Ninini Point Lighthouse over a dirt road that provides access to the shoreline between the lighthouse and Ahukini Landing.

4.1.10 Wa'apā Road

Wa'apa Road connects Kānoa Street and Niumalu Road at Nāwiliwili Harbor. It is a State roadway facility approximately 4,000 feet long with two travel lanes, one in each direction. It has segments of paved and unpaved shoulders on both sides. It primarily serves maritime industrial traffic from the Harbor with access into the harbor cargo terminals. It is also the primary access into Niumalu Gardens subdivision, via Niumalu Road, and to the Nāwiliwili Small Boat Harbor.

4.1.11 Kānoa Street

Kānoa Street connects Wilcox Road and Wa'apā Road at Nāwiliwili Harbor. It is a State roadway facility approximately 500 feet long with two travel lanes, one in each direction, one sidewalk on the makai side, and a generous paved shoulder on the mauka side that is blocked by a concrete barrier and striped for angled parking. It primarily serves maritime industrial traffic from the Harbor.

4.1.12 Wilcox Road

Wilcox Road connects Nāwiliwili Road with Kānoa Street. It is a two-lane road, approximately 400 feet long with sidewalks on both sides. Another portion of road also called Wilcox Road exists approximately 150 feet northeast of the aforementioned Wilcox Road, also connected to Nāwiliwili Road by Ka'ilikea Street.

4.1.13 Nāwiliwili Road

Nāwiliwili Road (Route 58) is an improved State highway between Kaumualii Highway and Nāwiliwili Harbor. It is improved as a four-lane divided highway between Kaumualii Highway and Halehaka Road; and then continues southeastward as a two-lane highway to its point of connection with Rice Street near Wa'apa Road in Nāwiliwili.

Impacts and Mitigation:

Within the primary project corridor, there is potential for impacts to traffic from construction activities that will take place immediately adjacent to Ahukini Road, Ninini Point Road, Limo Road, Hoolaulea Way, Kalapaki Drive, and within Nāwiliwili Park. Within the secondary network corridors, construction on preferred path segments may result in impacts to traffic on Ahukini Road, Lihue Airport terminal roadways, Ka'ana Street, Ho'olako Street, Hardy Street, and Umi Street, Nāwiliwili Road, Kānoa Street, Wilcox Road, Wa'apā Road, and Niumalu Road.

Construction activities may result in temporary slow-downs for motor vehicle, bicycle, and pedestrian traffic due to construction detours and the presence of large, slow-moving vehicles and heavy equipment in the project area. A traffic control plan will be prepared for the project during the design phase and will be submitted to the County with the construction drawings for approval during plan review. Traffic control measures may include barricades, cones, signage, and lighting as necessary to alert drivers and delineate construction boundaries. Approach signs and a flag person will be positioned to direct traffic through temporary traffic control zones, and officers from the

Kauai Police Department (KPD) will be employed to direct traffic at road intersections as necessary. To minimize traffic impacts to the nearby residents, the contractors may be required to schedule heavy truck activity as much as possible between the hours of 9:00 a.m. and 3:00 p.m. on weekdays. The KPD will be notified prior to periods of heavy truck activity or during transport and operation of heavy equipment. All traffic control measures will be designed to minimize impacts on continued traffic flow. With traffic control measures in place, significant short-term adverse impacts to traffic are not anticipated.

The project will also result in a temporary increase in vehicle trips attributable to workers traveling to and from work sites, and the use of construction vehicles during the course of work. All construction-related traffic impacts are temporary, however, and will cease upon project completion.

In the long-term, creation of a separate and clearly delineated pedestrian/bicycle path will have a positive impact on traffic in general by enhancing the safety of pedestrians, bicyclists, and motor vehicle operators alike and improving connectivity between trip origins, such as residential areas, and destinations, such as employment centers and recreational facilities. Perceptions of safety and convenience are two of the key factors that influence an individual's choice of transportation mode. By enhancing both safety and convenience, the planned path facilities are expected to attract more people to consider bicycling as a viable form of transportation for commuting with a potential, corresponding reduction in motor vehicle congestion as a beneficial result.

4.2 Parks and Recreational Resources

Recreational resources in the project area include one state park recreational facility, four county parks, two eighteen hole golf courses (Kaua'i Lagoons' Mokiha and Kiele courses), and fishing areas along the coastline.

State facilities consist of:

- The State Department of Land and Natural Resource (DLNR), Division of State Parks (DSP) maintains Ahukini State Recreation Pier located at the end of Ahukini Road (Highway 570) at the northernmost limit of the project area. Activities are limited to ocean pier fishing and crab netting. A comfort station is planned at Ahukini Landing as part of the County's Lydgate to Ahukini bike path project.

The four County parks include:

- Līhu‘e County Park – A 3.28-acre neighborhood park located adjacent to Wilcox Elementary and the Convention Hall (White Dome Building), with little league and pony fields, tennis courts, soccer field, and comfort station.
- Vidinha Stadium – A 34.00-acre stadium and district park located mauka of Kapule Highway between Ahukini Road and Rice Street. Vidinha Stadium includes an athletic complex, baseball field, lighted football field, and track. A 10-acre parcel adjacent to Vidinha Stadium has been improved for use as soccer fields. The County Department of Parks and Recreation is currently developing a master plan to expand the facilities with a tennis court complex, comfort station, pavilion, gymnasium and parking.
- Nāwiliwili Beach Park - Nāwiliwili Park, 6.27 Acres –located along Rice Street past the Kaua‘i Marriot at the northern shore of Nāwiliwili Bay, beach park, playground, volleyball, picnic-comfort station, picnic
- Niūmalu Park - Niūmalu Park, 3.41 acres – located at the west end of Nāwiliwili Bay, along Hulē‘ia Stream on Wa‘apā Road, beach park with picnic areas, boat ramp, pavilion/restrooms, playground equipment

Shoreline Fishing:

- The coastal corridor that runs from Ahukini to Ninini Point is a popular shoreline fishing area. Access to the area is provided by an unimproved road within a public access easement. Kalapakī Beach, in front of the Kaua‘i Marriott, is a popular swimming and sunbathing beach. Nāwiliwili is also a popular surfing and fishing spot.

Impacts and Mitigation:

One of the primary project objectives is to improve connections to coastal recreational resources as part of the larger pathway system between Anahola and Līhu‘e. Nāwiliwili Beach Park will realize the most improvement from this project. At Nāwiliwili Beach Park the project will make needed improvements to existing facilities including paths, picnic tables, comfort station and informational and interpretive signage.

Access to coastal fishing areas will be preserved in perpetuity by development of the path. Motor vehicle access to fishing sites along the coastline between Ahukini and Ninini Point, which is currently enjoyed by many without restriction, will be limited by the project to designated access points across the shared-use path. Non-motor vehicle access to shoreline fishing sites will remain unimpeded.

No adverse impacts to recreational resources will result from this project.

4.3 Schools

Schools serving the project area are Wilcox Elementary (Kindergarten-Fifth Grade), Kamakahelei Middle School (Sixth Grade-Eighth Grade), and Kaua‘i High School (Ninth Grade-Twelfth Grad). Wilcox Elementary, located on Hardy Street in the mauka portion of the project area, is the only school adjacent to the project corridor. Kaua‘i High School, 3577 Lala Road, is in the project area, but is not located along the corridor. Kamakahelei located on 4431 Nuhou Street is not located in the project area.

Impacts and Mitigation:

The creation of the pathway will improve access to Wilcox Elementary. No other schools are directly affected and no adverse impacts are expected to area schools.

4.4 Fire, Police and Medical Services

The Līhu‘e Fire Station provides emergency service for Līhu‘e and surrounding areas. The Station has a maximum staff of eight personnel on duty 24 hours a day and is equipped with one pumper truck with 1,250-gallon per minute capability and a HAZMAT vehicle.

The Līhu‘e area is served by the Līhu‘e Police Station. The County Police Department is staffed with approximately 130 officers.

Medical service is available at Wilcox Hospital in Līhu‘e. The hospital has a 189-bed capacity and is equipped with a 24-hour emergency room. One private ambulance company operates in the Līhu‘e area.

Impacts and Mitigation:

The project is not expected to result in an increase in calls for emergency services. Development of a dedicated path is expected to improve bicycle and pedestrian safety by separating those activities from motor vehicle traffic. The bike path will also provide improved access for emergency response along shoreline. An emergency telephone at the proposed Ninini Point comfort station will further improve emergency service.

4.5 Water System

The County of Kaua‘i Department of Water (DOW) is a semi-autonomous agency responsible for the management, control and operation of the island’s municipal water system. DOW supplies water to the Līhu‘e area.

The project area is served by the Puhi-Līhu‘e-Hanamā‘ulu (PLH) Water System which draws approximately 4.5 million gallons a day (mgd) from the Hanamā‘ulu Aquifer System. The Hanamā‘ulu Aquifer has an estimated sustainable yield of 40 mgd and recharge of 79 mgd. The aquifer system is composed predominantly of high-level aquifers, which occur as bodies of water perched on beds of weathered soil, ash, and dense lavas, and as bodies of water constrained at high levels by the relatively low permeability of the aquifer. The aquifer system also consists of basal groundwater near the coast, contained deep below the surface in Koloa lava formations underlying the high-level aquifer.

Impacts and Mitigation

Project related water demands will be limited to construction of one new comfort stations and replacement of an existing comfort station. Water will also be required for landscape irrigation purposes around the comfort stations, and at amenities within Nāwiliwili Park. The path segment between Ahukini and Ninini Point will remain in its natural state and not be landscaped or irrigated. Water demands for the project are not expected to be significant. A water allocation for planned improvements will be sought from DOW during the design phase.

4.6 Wastewater

Wastewater treatment varies by community. Wastewater treatment is provided by the County, other community or larger developments with a private treatment system, or Individual Wastewater Systems (IWS) i.e. cesspools and septic tank systems. The Līhu‘e-Hanamā‘ulu area is served by one of the four County waste water systems. Capacity is operating at approximately at 50% of capacity. Capacity is being reserved for the Hanamā‘ulu Triangle, Molokoa residential subdivision, existing residential and industrial areas off lower Rice Street, and a second hotel at Kaua‘i Lagoons.

Impacts and Mitigation:

The comfort station at Nāwiliwili Park, where sewer service is available, will be connected to a sewer collection and treatment system. The proposed comfort station at Ninini Point will utilize septic tanks and leach field, or a septic aerobic unit for waste water treatment and disposal.

4.7 Electrical Demand

Kaua‘i Island Utility Co-op (KIUC) provides four levels of service: residential, commercial, large power, and street lighting. KIUC generates its own power from a 96-megawatt diesel-fired power plant located at Port Allen and purchases 14-megawatt of firm capacity from Līhu‘e Plantation. The Līhu‘e area is served by four transmission circuits from KIUC’s island-wide

transmission system. Although Līhu'e Plantation provides power to the system, the primary source of electricity is the Port Allen Generating Station.

Impacts and Mitigation:

The present electric system is adequate to meet the needs of the project in both the construction and maintenance phases. Short-term electrical power will be required during construction. Long-term electrical power will be required for limited lighting along the pathways and at comfort stations and the “bike depot” building. Power will also be required for irrigation controllers.

4.8 Communications (Cable, Internet, Telephone)

Local cable providers include Oceanic Time Warner Cable and Hawaiian Telcom.

Cellular phone service in a majority of the project area is covered by Verizon, Tmobile, AT&T, Sprint, and Nextel. Reception is generally good along the project corridor with the exception of the coastline between Ahukini and Ninini Point. Based on phone company coverage area maps, the coastline between Ahukini and Ninini Point is best served by AT&T and Sprint.

Internet service is provided by Clearwire, Island Internet, Oceanic Time Warner Cable, Hawaiian Telcom, Pacific LightNet Inc, and Seabrooks Inc.

Impacts and Mitigation:

No impacts to cable, television, or telephone infrastructure or services will result from planned project activities.

4.9 Airport Facilities

The primary project corridor follows an existing public access easement around the makai perimeter of the airport connecting with Ahukini Road on the north end and Ninini Point Road on the south end. Airport facilities within this corridor include:

- Airport Surveillance Radar (ASR) Site – located within the vacant lands makai of Runway 17-35, approximately 400 feet setback from the shoreline and aligned approximately with the mid-point of the runway. The facility includes an antennae tower, support buildings, and perimeter fence. A clear area extending in a 1,500 radius around the site must be maintained. All of the path alignments considered are aligned makai of the ASR site.
- Federal Aviation Administration (FAA) Middle Marker Navigational Aid – An FAA airport Middle Marker navigational aid is located near the site of the proposed comfort station at Ninini Point Lighthouse. The FAA requires an unobstructed setback of 300 feet around the Middle Marker. The comfort station will be located in compliance with FAA requirements.

- Airport Perimeter Road (exterior) – DOT-A is undertaking improvements to the existing exterior airport perimeter road and fencing to provide continuous vehicular access around the entire airport property for security and maintenance purposes. The perimeter road will have both paved and unpaved segments, with the option of complete paving in the future. Roadway construction includes culvert crossings for drainage and installation of an 8-foot tall chain link and barbed wire fence. The public access easement follows segments of the perimeter roadway around the northern end of Runways 3-21 and 17-35, and the southern end of Runway 17-35 before veering onto the makai dirt road that provides access to the shoreline. The perimeter road also shares a segment of the paved Ninini Point Road along the western edge of Runway 17-35 adjacent to Kauai Lagoons’ Mokihana and Kiele Golf Courses. The perimeter road will continue to provide public access over those segments. The preferred shared-use path alignment will utilize the public access segments of the airport perimeter road and Ninini Point Road.

Impacts and Mitigation:

The ASR site is located more than 100 feet mauka of the preferred path alignment and separated by intervening topography and vegetation. Path construction activities are not expected to adversely impact the site. Use of the path may result in increased awareness of the site, but does not facilitate access to the site that does not already exist via the public access dirt road. Signage positioned at the perimeter of the ASR site should be maintained to alert the public of the penalties of interfering with ASR facilities. No additional signage is recommended for the shared-use path.

The proposed comfort station and shared-use path at Ninini Point will be sited and designed in consultation with the FAA Hawaii District Office and in compliance with design requirements for the Middle Marker navigational aid. No improvements will be developed that will adversely impact the function of the Middle Marker. Signage positioned at the perimeter of the Middle Marker location should be maintained to alert the public of the penalties of interfering with ASR facilities. No additional signage is recommended for the shared-use path.

Where the shared-use path follows existing public access on the airport perimeter road alignment, it will be constructed as a separated, 10-foot wide concrete path on the outer perimeter of the motor-vehicle travelway. An intervening barrier, such as boulder bollards or guardrail, will be installed for safety purposes to prevent motor vehicles from accessing the pathway.

No adverse impacts to airport facilities are anticipated to result from development of the project as planned.

4.10 Harbor Facilities

The primary project corridor stops at Nāwiliwili Park. Proposed improvements to the park that could potentially impact harbor facilities include:

- Improved park driveway and parking area with access off of Kaʻilikea Street. Kaʻilikea Street serves as the primary access to the Nāwiliwili jetty and ferry berth, and to DOT-H maintenance and storage facilities.
- Construction of a 10-foot wide concrete path within the park adjacent to Kaʻilikea Street.

No other improvements within the primary project corridor directly impact harbor facilities. However, the secondary network corridor connecting Nāwiliwili Park and Niumalu Park follows Wilcox Road, Kānoa Street, Waʻapā Road and Niumalu Road which together serve as the primary accessway into and through the Nāwiliwili Harbor facilities, including the cruise terminal, cargo terminal, Matson Container Yard, Inter-island Barge Terminal, and fuel storage facilities. (Path Segment O and P). All of the affected roads are public rights-of-way under the authority of the State DOT-Harbors Division. See Section 2.2.4.O and 2.2.4.P for additional details.

Impacts and Mitigation:

Construction of a shared-use path along this travel corridor raises concerns about safety and liability for both the path users and for operators of motor vehicles and heavy equipment used in harbor operations. These roadways carry the maritime industrial area's high traffic movements of large container trucks, commercial vehicles, and other heavy equipment. The majority of the traffic activity occurs on the makai side of the roadway as it originates at the docks. Driveway entrances along this side of the street are particularly active and pose a hazard for crossing pedestrians and bicyclists. As a result, the preferred path alignment through this corridor is located on the mauka side of the street where the potential for conflict with maritime industrial vehicle use is reduced. Path improvements consist of a single, separated concrete pathway for two-way travel and installation of a protective concrete barrier (jersey barrier) between the path and the motor vehicle travelway for enhanced safety. Traffic control and safety signage is also proposed to alert path users and motor vehicle operators to traffic safety issues and right-of-way conditions. No other improvements are recommended.