

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BR-0560(016)	2022	3	34

GENERAL NOTES:

- The scope of work for this project consists of repairing the existing Hanalei Bridge by replacing the timber decking, stringers, and wearing surface, replacing steel bolts, replacing corroded steel members, abrasive blasting and painting the entire structure, cleaning vegetation from the existing bridge structure, installation, maintenance, and removal of temporary erosion control measures, and work zone traffic control.
- Subsection 105.16(A) - Subcontract Requirements requires the Contractor to perform work amounting to not less than 30 percent of the total contract cost less deductible items.
- The Contractor's attention is directed to the following Sections of the Standard Specifications and the Special Provisions: Subsection 104.09 - Maintenance of Traffic; Subsection 105.09 - Coordination Between the Contractors; Subsection 107.06 - Contractor Duty Regarding Public Convenience; Subsection 107.12 - Protection of Persons and Property; and Section 645 - Work Zone Traffic Control.
- The existence and location of underground utilities, manholes, monuments and structures as shown on the plans are from the latest available data but the accuracy is not guaranteed. The encountering of other obstacles during the course of work is possible. The Contractor shall be held liable for any damages incurred to the existing facilities and/or improvements as a result of his operations.
- All existing utilities, whether or not shown on the plans, shall be protected at all times by the Contractor during construction unless specified on the plans to be abandoned. All existing utility/light poles, overhead utilities and guy poles/wires shall remain in place and operational. The Contractor shall be held liable for any damages incurred to the existing utilities as a result of his operations. All damaged portions shall be replaced in accordance with the standards and specifications of the affected utility company at no cost to the County. No delays or extensions of contract time will be allowed as a result of these required repairs.
- The Contractor shall indemnify and be solely responsible for the protection of adjacent properties, utilities, and existing structures from damages due to construction. Repairing any damage shall be at the Contractor's own expense, to the satisfaction of the Engineer.
- The existing drainage system shall be kept functional at all times during construction. Furnish materials, equipment, labor, tools and incidentals necessary to maintain flow. This work shall be considered incidental to the various contract items.
- No material or equipment shall be stockpiled or otherwise stored within State right-of-way except at locations shown on the plans or designated in writing and approved by the Engineer. The Contractor shall be responsible for obtaining additional staging area if required.
- When trench excavation is adjacent to existing structures or facilities, the Contractor is responsible for properly sheeting and bracing the excavation and stabilizing the existing ground to render it safe and secure from possible slides, cave-ins, and settlement. Provide beams, struts, or underpinning as necessary. This work shall be considered incidental to various contract items.

GENERAL NOTES, CONT:

- All graded areas and all grassed areas damaged by construction activities shall be planted in accordance with Specifications Section 641 - Hydro-Mulch Seeding. This work shall be considered incidental to the various contract items.
- Work required to complete the project but not itemized specifically in the proposal shall be considered incidental to the various contract items and shall not be paid for separately.
- The Contractor shall conduct his operations so as to offer the least possible obstructions and inconvenience to the public and he shall have under construction no greater length or amount of work that he can execute properly with due regard to the rights of the public.
- Guardrail Paint:
 - Contractor shall shop coat all members. Field coating shall consist of touch up only.
 - Color for top coat shall be gray color. Intermediate coat shall have a contrasting light color. Finish for top coat shall not be gloss or high gloss.
 - See special coating options in the schedule below.

ABBREVIATIONS:

Ⓔ	BASELINE	N	NORTH
BMP	BEST MANAGEMENT PRACTICES	NTS	NOT TO SCALE
		O/H.	OVERHEAD ELECTRICAL
BOT.	BOTTOM	o/s	OFFSET
CLR	CLEARANCE	PCCP	PORTLAND CEMENT CONCRETE PAVEMENT
CONC	CONCRETE	PVMT	PAVEMENT
D	DRAIN LINE	R	RADIUS
DI	DRAIN INLET	RD	ROAD
DIA.	DIAMETER	RT.	RIGHT
E/ELEC	ELECTRICAL	R/W	RIGHT-OF-WAY
ES	EDGE OF SHOULDER	S.E.	SUPERELEVATION
EP	EDGE OF PAVEMENT	SF	SQUARE FEET
ELEV	ELEVATION	SHT	SHEET
EMB	EMBANKMENT	ST	STREET
EXC	EXCAVATION	STA.	STATION
EXIST.	EXISTING	STD	STANDARD
FH	FIRE HYDRANT	T	TANGENT
GW	GUY WIRE	TYP.	TYPICAL
HMA	HOT MIX ASPHALT	U/G	UNDER GROUND
INV.	INVERT	UP	UTILITY POLE
LF	LINEAR FEET	VAR	VARIES
Lt.	LEFT	W	WATER
MB	METER BOX	WMH/WM	WATER MANHOLE
MIN.	MINIMUM	WV	WATER VALVE

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE

NOTE BOOK	DESIGNED BY	_____

No.	QUANTITIES BY	_____

CHECKED BY	_____	_____

GERALD D. ANDRADA

LICENSED PROFESSIONAL ENGINEER

No. 10377-C

HAWAII, U.S.A.

Signature

4/30/24

EXPIRATION DATE OF THE LICENSE

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GENERAL NOTES AND ABBREVIATIONS

KUHIO HIGHWAY
Hanalei Bridge Repair
FAP Proj. No. BR-0560(016)

Scale: None

Date: July 2022

SHEET No. N-2 OF 7 SHEETS

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FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BR-0560(016)	2022	4	34

NOTES FOR CONSTRUCTION WITHIN STATE RIGHT-OF-WAY:

- The Contractor shall obtain a permit to perform work upon State Highways from the State Highways' District Engineer, at 1720 Haleukana Street, Lihue, Hawaii, prior to commencement of work within the State's Highway Right-of-Way.
- Construction and restoration of all existing highway facilities within the State's Right-of-Way, including the legal relations and responsibility to the public, shall be in accordance with the current Standard Specifications for Road, Bridge and Public Works Construction, and the Specifications for Installation of Miscellaneous Improvements within State highways, of the State Highways Division.
- Work shall be performed only between the hours shown in Special Provisions 645, unless otherwise permitted by the District Engineer.
- The Contractor shall provide, install and maintain all necessary signs, lights, flares, barricades, markers, cones, and other protective facilities, and shall take all necessary precautions for the protection, convenience, and safety of public traffic. All such protective facilities and precautions to be taken shall conform with the "Administrative Rules of Hawaii Governing the Use of Traffic Control Devices at Work Sites on or Adjacent to Public Streets and Highways," adopted by the Director of Transportation, and the current U.S. Federal Highways Administration "Manual on Uniform Traffic Control Devices, Part VI - Standards and Guides for Traffic Controls for Street and Highway Construction, Maintenance, Utility and Incident Management Operations."
- Lane closures shall conform to the traffic control plans incorporated in these construction plans and must be approved by the Division prior to the issuance of the permit.
- No material and/or equipment shall be stockpiled or otherwise stored within the State's Highway Right-of-Way except at locations designated in writing and approved by the District Engineer.
- The Contractor shall exercise care to minimize damages to existing highway improvements. All damages shall be repaired by the Contractor, at his expense, to the satisfaction of the District Engineer.
- Approval of permit construction plans shall be valid for a period of one (1) year from the date of notification of approval to the applicant. In the event construction does not commence within this one-year period, the applicant will be required to resubmit the construction plans for the Division's review and reapproval.
- All regulatory, guide, and construction signs and barricades shall have a high-intensity reflective background.
- The Contractor shall inform the State Highways' Permit Office (241-3000) at least two (2) days prior to closing any lanes.

NOTES FOR CONSTRUCTION WITHIN STATE RIGHT-OF-WAY, CONT':

- Driveways shall be kept open unless the owners of the properties using these Rights-of-Way are otherwise provided for satisfactory.
- Where pedestrian walkways exist, they shall be maintained in a safe and passable condition, or other facilities for pedestrians shall be provided. Passages between walkways at intersections shall likewise be approved. All walkways shall conform to ADA requirements.
- The Contractor shall reference, to the satisfaction of the District Engineer, all existing traffic signs, posts and pavement markings prior to the commencement of construction. The contractor shall replace or repair all traffic signs, posts, and pavement markings disturbed by his activities, at his expense, unless directed otherwise by the District Engineer or his representative.
- The Contractor shall exercise care when performing work in, on or adjacent to the State's Highway Right-of-Way. Damages to existing facilities shall be immediately reported to the respective utility companies, and/or County or State agencies. The repair work shall be done at the Contractor's expense.
- The Contractor shall implement Best Management Practice (BMP) measures for all work within the State Highway.
- The Contractor shall notify the State Highways' Maintenance Engineer (241-3000), three (3) working days prior to commencing work.
- The permit to perform work upon State Highways may be revoked because of default in any of the following, but not limited to conditions:
 - Work performed before or after permitted hours
 - Failure to maintain roadway surfaces in a smooth and safe condition
 - Failure to clean up construction debris generated from project work
 - Failure to provide proper traffic control
 - Failure to replace damaged pavement markings and signs
- The Contractor shall notify the State Highways Permit Office (241-3000) at least two days prior to performing any trench restoration work. This work shall include any backfilling and compacting of trench material; any placing and compacting of base course material; and paving operations. Any trench restoration work performed by the Contractor that is not witnessed by a State representative will be required to be removed and restored with a State representative present. All restoration work will be done at the Contractor's expense.
- The Contractor will make every effort to minimize the use and the duration of use of steel plates. All steel plates shall have a non-skid surface. The State may require the backfilling and patching of trenches due to the excessive usage of steel plates.
- After completion of the project, the Owner and/or Contractor, shall submit one complete set of "as-built" plans to the Highways Division.


PUBLIC HEALTH, SAFETY, AND CONVENIENCE NOTES:

- The Contractor shall observe and comply with all Federal, State, and Local laws required for the protection of public health and safety and environmental quality.
- The Contractor, at his own expense, shall keep the project and its surrounding areas free from dust nuisance. The work shall be in conformance with the air pollution standards and regulations of the State Department of Health. The County may require supplementary measures as necessary.
- The Contractor's attention is directed to Chapter 448, Public Health Regulations, Department of Health, State of Hawaii, "Community Noise Control for Oahu" in which maximum allowable noise levels have been set. If the construction activities for this project will exceed the allowable noise levels, the Contractor will be required to obtain a permit from the Director of the Department of Health. The Contractor shall obtain a copy of Chapter 448 and become familiar with the noise level restrictions and the procedures for obtaining a Permit for construction activities.
- The Contractor is to comply with the directions of the State of Hawaii Occupation Safety and Health Law (DOSH).

HISTORICAL PRESERVATION NOTES:

- Should historic remains such as artifacts, burials, concentrations of shell or charcoal be encountered during construction activities, work shall cease immediately in the immediate vicinity of the find, and the find shall be protected from further damage. The Contractor shall cordon off the area and immediately notify the Planning Department at (808) 241-4050 and the State Historic Preservation Division at (808) 692-8015, which will assess the significance of the find and recommend the appropriate mitigation measures, if necessary. In addition, if human burial are found, the Contractor shall immediately notify the County of Kauai Police Department.

ORIGINAL PLAN	No.	SURVEY PLOTTED BY	DATE
		DRAWN BY	
		DESIGNED BY	
		QUANTITIES BY	
NOTE BOOK		CHECKED BY	

 SIGNATURE THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION	STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION GENERAL NOTES KUHIO HIGHWAY Hanalei Bridge Repair FAP Proj. No. BR-0560(016) Scale: None Date: July 2022
	EXPIRATION DATE OF THE LICENSE 4/30/24

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BR-0560(016)	2022	5	34

NOTES FOR PROTECTED SPECIES:

1. HAWAIIAN SEABIRDS

- Hawaiian petrel or ‘ua‘u (*Pterodroma sandwichensis*)
- Newell’s shearwater or ‘a’o (*Puffinus auricularis newelli*)
- Hawai’i distinct population segment (DPS) of band-rumped storm petrel or ‘akē‘akē (*Oceanodroma castro*)

Construction activity shall be restricted to daylight hours during the seabird peak fallout period (September 15-December 15) to avoid the use of nighttime lighting that could attract seabirds. The limited temporary night time work outside of the peak seabird fallout period shall be shielded to prevent upward radiation and directed away from any nearby beach habitats.

All outdoor lights shall be shielded to prevent upward radiation. A selection of acceptable seabird-friendly lights can be found online at the Kaua’i Seabird Habitat Conservation website (2013).

2. HAWAIIAN HOARY BAT OR ‘ŌPE‘APE‘A (*LASIURUS CINEREUS SEMOTUS*)

Any fences that are erected as part of the project shall have barbless wire to prevent entanglements of the Hawaiian hoary bat on barbed wire.

No trees taller than 15 feet (4.6 m) shall be trimmed or removed as a result of this project between June 1 and September 15, when juvenile bats that are not yet capable of flying may be roosting in the trees.

3. HAWAIIAN GOOSE OR NĒNĒ (*BRANTA SANDVICENSIS*)

Do not approach, feed, or disturb the Hawaiian goose.

A qualified biologist shall survey the area for nesting nēnē before construction (in coordination with the waterbird surveys), and after any subsequent delay in work of 3 or more days (during which birds may attempt nesting). The results of the pre-construction survey would be submitted to the Engineer.

If Hawaiian goose are loafing, foraging, or otherwise present within the project area during the breeding season, which extends from September through April, have a trained biologist survey the area near the project prior to work each day. Survey biologists should be familiar with the nesting behavior of the Hawaiian goose, nest identification, and identification of young.

- Surveys should be repeated if there is a delay in work of three days or more (during which the birds may attempt to nest).
- If nests or vulnerable young are observed within 150 feet of the project work, immediately cease all work and contact the Service for further guidance.

If during the biologist’s survey, the Hawaiian geese are loafing, foraging, or otherwise present within the project area, the USFWS will be contacted for further guidance to consider implementing reduced speed limits when the work is near the active roadway, and inform project personnel and contractors about the presence of this threatened species on-site. Speed limits will be reduced during work in active construction areas.

All regular on-site staff shall be trained to identify nēnē and shall know the appropriate steps to take if nēnē are present on-site. Training would not be necessary if a biological monitor is present for the duration of the construction.

4. HAWAIIAN WATERBIRDS

- Hawaiian stilt or ae’o (*Himantopus mexicanus knudseni*)
- Hawaiian coot or ‘alae ke’o ke’o (*Fulica americana alai*)
- Hawaiian gallinule or ‘alae ‘ula (*Gallinula galeata sandvicensis*)
- Hawaiian duck or koloa (*Anas wyvilliana*)

In areas where vegetated streambanks would be disturbed, waterbird nest searches shall be conducted by a qualified biologist before any work is conducted and after any subsequent delay in work of 3 or more days (during which birds may attempt nesting). The results of the pre-construction survey shall be submitted to the Engineer.

If a waterbird nest with eggs or chicks/ducklings is discovered in the construction limits, work within 100 ft of nests or active broods would cease until the young have fledged and left the area.

Waterbird nests, chicks, or broods found before or during construction shall be reported to the USFWS within 48 hours of discovery for further guidance.

All regular on-site construction staff would be trained to identify waterbirds and take appropriate conservation measures when the waterbirds are present, including within equipment staging areas.

5. SEA TURTLES

- Hawksbill sea turtle or ‘ea (*Eretmochelys imbricata*)
- Central North Pacific distinct population segment of the green sea turtle or honu (*Chelonia mydas*)

All regular on-site staff shall be trained to identify sea turtles and trained on appropriate steps to take if these species are present on-site.

Construction activities shall not take place if a sea turtle is within 150 feet (46 m) of the construction area. Construction can only begin after the animal voluntarily leaves the area. If a sea turtle is noticed after work has already begun, that work may continue only if, in the best judgment of the biological monitor, that there is no way for the activity to adversely affect the animal(s).

Any construction-related debris that may pose an entanglement threat to sea turtles shall be removed from the construction area at the end of each day and at the conclusion of the construction project.

Workers shall not attempt to feed, touch, ride, or otherwise intentionally interact with any listed species.

To avoid and minimize project impacts to sea turtles from lighting, the project will minimize the use of lighting on or near beaches and shield project related lights, so the light is not visible from any beach. If lights cannot be fully shielded or if headlights must be used, the light source will be fully enclosed with light filtering tape or filters.

In-water work at night shall be avoided, unless emergency maintenance and repair of erosion and sediment controls are necessary to meet permit conditions.

6. NEWCOMB’S TREE SNAIL (*ERINNA NEWCOMBI*)


In the event that ‘Ōhi’a is found in the project area where clearing will occur, a trained biologist will survey the area for tree snails using USFWS methodology described in “Interim Guidelines for Conducting Tree Snail Surveys in the Mariana Islands” (methods also apply throughout the Hawaiian Archipelago for other listed tree snail species).

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE

NOTE BOOK	DRAWN BY	_____

No. _____	DESIGNED BY	_____

	QUANTITIES BY	_____
	CHECKED BY	_____



SIGNATURE

Gerald D. Andrade

EXPIRATION DATE OF THE LICENSE

4/30/24

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GENERAL NOTES

KUHIO HIGHWAY
Hanalei Bridge Repair
FAP Proj. No. BR-0560(016)

Scale: NoneDate: July 2022

SHEET No. N-4 OF 7 SHEETS

NOTES FOR PROTECTED SPECIES (CON'T):

7. WATER QUALITY BMPS, AS APPLICABLE

Turbidity and siltation from project-related work shall be minimized and contained through the appropriate use of erosion control practices, effective silt containment devices, and the curtailment of work during adverse weather and tidal/flow conditions.

Erosion and sediment control measures shall be in place before initiating earth-moving activities. Functionality shall be maintained throughout the construction period. For earth-moving activities initiated to address imminent health and safety concerns, erosion and sediment control measures shall be in place as soon as practicable.

When it is not possible to avoid times of the year when high rainfall is expected, enhancing the capacity of existing controls, adding additional control measures, or installing contingency measures shall be implemented.

Inspection shall be documented, and records for all inspections and repairs shall be maintained on-site. When a device proves inadequate, it shall be immediately redesigned or replaced until it is effective.

Control measures (i.e., silt fences, sand bag barriers, sediment traps, geotextile mats, and other measures intended for soil/sediment trapping) shall be inspected and repaired as needed within 24 hours after a rainfall event of 0.25 inch or greater over a 24-hour period. During periods of prolonged rainfall, a daily inspection shall occur, unless extended heavy rainfall makes access impossible or hazardous.

Construction shall be sequenced to minimize the exposure time of the cleared surface area.

The Contractor shall be required to prepare a spill prevention, control and countermeasure (SPCC) plan before beginning work or as soon as practicable. The SPCC shall describe preventative measures including the location of refueling and storage facilities and the handling of hazardous material. The SPCC shall describe actions to be taken in case of a spill. Hazardous materials shall be properly stored and managed in accordance with local, State, and Federal regulations.

Appropriate materials to contain and clean potential spills shall be stored at the work site and be readily available. Spill kits shall be available on-site at locations where hazardous materials are used. Spill kits shall be inspected regularly and supplies replaced as needed. Staff shall be trained on spill prevention and cleanup.

Absorbent pads shall be stored on-site to facilitate the cleanup of petroleum spills. At fueling sites, containment booms and skimmers shall be stored, in addition to absorbent pads.

Return flow or run-off from material stored at inland dewatering or storage sites shall be prevented.

All project-related materials and equipment placed in the water shall be free of pollutants.

The project manager or heavy equipment operators shall perform daily pre-work equipment inspections for cleanliness and leaks. All heavy equipment operations shall be postponed or halted should a leak be detected, and they shall not proceed until the leak is repaired and the equipment is cleaned.

Fueling of land-based vehicles and equipment shall take place at least 50 feet (15.24 m) away from the water, preferably over an impervious surface. Fueling of vessels shall be done at approved fueling facilities.

Portable toilets for sanitary waste management shall be serviced regularly.

A plan shall be developed to prevent debris and other wastes from entering or remaining in the marine environment during the project.

No contamination (trash or debris disposal, invasive species introductions, attraction of non-native pests, etc.) of adjacent habitats (reef flats, channels, open ocean, stream channels, wetlands, beaches, forests, etc.) shall result from project-related activities.

Any soil exposed near water as part of the project shall be protected from erosion (with plastic sheeting, filter fabric etc.) after exposure and stabilized as soon as practicable (with native or non-invasive vegetation matting, hydroseeding, etc.).

All debris removed from the marine/aquatic environment shall be disposed of at an approved site. Solid waste and construction and demolition debris would be properly managed.

Clearing and grubbing would be held to the minimum necessary for grading, access, and equipment operation.

Revegetation success shall be monitored by Contractor to ensure sufficient vegetation cover has established. Relevant erosion and sediment control BMPs shall not be removed until sufficient vegetative cover is re-established or hillside stabilization measures (i.e., soil nails) are deemed sufficiently in place. If vegetation fails to establish, corrective actions shall be taken where necessary.

Do not stockpile or store project-related materials or equipment near the water (i.e., intertidal zones, reef flats, stream channels, etc.)

Soil stockpiles shall be located away at least 50 feet from concentrated runoff and water features, covered with plastic or other waterproof material when practicable, and surrounded by silt fences or other erosion control BMPs.

Concrete wash-outs shall be located 50 feet from storm drain inlets, open drainage areas, and waterbodies, and shall be maintained as needed.

8. BMPS TO PREVENT THE INTRODUCTION AND SPREAD OF INVASIVE SPECIES

See Special Provision Section 621 - Invasive Species Management for additional requirements.

The area beyond the construction limits shall not be disturbed. Trees, shrubs or vegetated areas temporarily damaged by construction operations shall be re-vegetated.

Temporarily disturbed areas shall be revegetated with non-invasive plant species appropriate for the project area.

Invasive species controls shall be maintained to ensure that all materials transported from off-site are free of such species.

To avoid the unintentional introduction or transport of new terrestrial invasive species, all construction equipment and vehicles arriving from outside Kaua'i shall be washed and inspected before entering the project area. In addition, construction materials arriving from outside Kaua'i shall be washed and/or visually inspected (as appropriate) for excessive debris, plant materials, and invasive or harmful non-native species (plants, amphibians, reptiles, and insects). When possible, raw materials (gravel, rock, and soil) shall be purchased from a local supplier on Kaua'i to avoid introducing non-native species not present on the island. Inspection and cleaning activities shall be conducted at a designated location.

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HAWAII	HAW.	BR-0560(016)	2022	6	34

ORIGINAL PLAN NOTE BOOK No. _____	SURVEY PLOTTED BY _____	DATE _____
	DRAWN BY _____	_____
	DESIGNED BY _____	_____
	QUANTITIES BY _____	_____
	CHECKED BY _____	_____

<div><div><div>GERALD D. ANDRADO</div><div>LICENSED PROFESSIONAL ENGINEER</div><div>No. 10377-C</div><div>HAWAII, U.S.A.</div></div><div><div>SIGNATURE</div><div><i>Gerald D. Andrado</i></div></div><div><div>EXPIRATION DATE OF THE LICENSE</div><div>4/30/24</div></div><div><div>THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION</div></div></div>	<div>STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION</div> <div><u>GENERAL NOTES</u></div> <div><u>KUHIO HIGHWAY</u> <u>Hanalei Bridge Repair</u> <u>FAP Proj. No. BR-0560(016)</u></div> <div>Scale: None</div> <div>Date: July 2022</div>
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FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
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UTILITY NOTES FOR HAWAIIAN TELCOM

- All work on utility facilities shall be in strict accordance with specifications and requirements of Hawaiian Telcom for the facilities within their jurisdiction.
- The Contractor shall closely coordinate all work with Hawaiian Telcom. The Contractor shall notify Hawaiian Telcom's Jimmy Sone at 808-241-5052 or Duke Sardinha at 808-371-2962, or their designated Representative, at least four weeks in advance of any work involving the Hawaiian Telcom facilities.
- Unless otherwise indicated, all conduits, sweeps, couplings, adapters and bell ends shall be Schedule 40 PVC if direct buried. If concrete encased, conduits may be GT42 2" or 4" PVC meeting GTE Specification GTS-8342. Two inch bends are available with a 24" or 36" radius. Four inch bends are available with a 36" or 48" radius. Refer to HTCO Standard Drawing 34028 for installation.
- All conduits shall be cleaned and be free from objectionable materials with its ends adequately covered until Hawaiian Telcom installs its cable facilities.
- Contractor shall maintain 6" minimum separation between water pipe and direct buried utility ducts at intersection of water pipe and direct buried utility ducts. When utility ducts are concrete encased at intersections of water pipe and utility ducts, a 3" minimum separation between water pipe and concrete encasement shall be maintained. Stones, Rocks, etc. shall not be used with backfill material, only select materials shall be used as a backfill material.
- A 4" wide warning tape orange in color with a black imprinted message "Warning - Stop Digging - Call Hawaiian Telcom, Communications Cable Buried Below, Failure to Comply Could Result in Legal Action" shall be placed 12" below the surface over the duct or concrete jacket for the entire length of duct installations. See HTCO Standard Drawing 34028. Recommended tape is manufactured by Thor Enterprises, Inc. Sun Prairie, WI 53590 (1-800-827-8467) Part Numbers DTOGTE-41 (1000') and DTOGTE-46 (6000'). Equivalent tapes are acceptable.
- After the ducts are installed a mandrel not less than 12" long and having a diameter of 1/4" less than the inside diameter of the duct, shall be pulled through each duct after which a brush with stiff bristles shall be pulled through to make certain that no particles of earth, sand or gravel have been left in the line. Main duct runs except riser ducts and cross-connect pedestal ducts should be constructed with long smooth riding sweeps. Offsets and elevation changes shall be constructed with not less than 20 foot radius Telcom Inspector. Approved duct runs with less than 20 foot radius shall utilize a flexible mandrel followed by a stiff bristle brush. A flexible mandrel having a diameter of 1/4" less than the inside diameter will be utilized on 2" duct runs after which a brush with stiff bristles shall be pulled through.

- Install Neptco WP1800P Muletape in all new ducts after testing. The Neptco Muletape is available in 3,000', 6,500' and 10,000' reels. The Neptco Muletape is prelubricated and printed with sequential footage marking. Using the Neptco Muletape, The Contractor shall measure at least one duct of a common duct run. The distance shall be marked on the record prints and submitted to the Hawaiian Telcom Inspector for record keeping.
- All conduits shall enter boxes at a 90 degree angle and be flush to the wall with flared or junior end bells to prevent cable damage.
- The Contractor shall furnish and install a No. 4 bare copper ground wire (direct buried) from all transformer pad ground rods to the nearest Hawaiian Telcom pullbox, as specified in HTCO Standard Drawing 34045. Install one 5/8" x 8' ground rod in all other Hawaiian Telcom 435T, 435TB6 and 4' x 6' Type 1 boxes, except in the Type 436T meter boxes (12" x 20"). Ground rods are to extend 4" above the finished pullbox/handhole floor (grade) and be located 4" from the pullbox corner.

UTILITY NOTES FOR SPECTRUM

- The Contractor shall take necessary precaution not to damage existing cables. Any work involving existing cables shall be done in the presence of Spectrum's Inspector or his representative.
- Any work required to relocate CATV facilities shall be done by Spectrum and the Contractor shall be responsible for all coordination requirements and associated costs.
- Any damage to Spectrum's facilities shall be reported to Spectrum's Repair Dispatch Department at 625-8437 or 625-8666.
- All Construction must be inspected and approved by Spectrum prior to the installation of any of its facilities and the energizing of its system.
- Contractor and/or Customer shall provide Spectrum with sufficient installation time in their occupancy time table.

UTILITY NOTES FOR SANDWICH ISLES COMMUNICATIONS

- The Contractor shall take necessary precaution not to damage existing cables. Any work involving existing cables shall be done in the presence of SIC's Inspector or his representative.
- The Contractor shall notify SIC's project manager, Lily Duran at 808-284-3683 or 808-540-5772, or their designated representative, at least four weeks in advance of any work involving the SIC facilities.

ORIGINAL PLAN NOTE BOOK No. _____	SURVEY PLOTTED BY _____	DATE _____
	DRAWN BY _____	
	DESIGNED BY _____	
	QUANTITIES BY _____	
	CHECKED BY _____	

GERALD D. ANDRADA

LICENSED PROFESSIONAL ENGINEER

No. 10377-C

HAWAII, U.S.A.

Signature

4/30/24

EXPIRATION DATE OF THE LICENSE

4/30/24

SIGNATURE

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

UTILITY NOTES

KUHIO HIGHWAY
Hanalei Bridge Repair
FAP Proj. No. BR-0560(016)

Scale: None Date: July 2022

SHEET No. N-7 OF 7 SHEETS

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