GENERAL NOTES:

- 1. The scope of work for this project includes intersection improvements at Kula Highway and Omaopio Road; Work includes erosion control, traffic control, embankment widening, grade adjustment wall construction, traffic signal system installation, street light installation, electrical service connection installation, AC pavement reconstruction, signing and pavement marking, and guardrail installation.
- 2. The Contractor is reminded of the requirements of Subsection 105.16 Subcontracts which requires him to perform work amounting to not less than 30 percent of the total contract cost less deductible items. Non-Compliance with this Subsection may be grounds for rejection of bid.
- 3. 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 104.11 Utilities and Services; 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.
- 4. 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 tone for the exact locations and depths of all underground facilities, either shown on or omitted from the plans, in areas where work, such as the placement of sign posts, traffic signal conduits, etc. may affect these properties. Toning shall be considered incidental to the various contract items and will not be paid for separately. The Contractor shall be held liable for any damages incurred to the existing facilities and/or improvements as a result of his operations.
- At the end of each day's work, the Contractor shall remove all equipment and other obstructions to permit free and safe passage of public traffic.
- 6. 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 State. No delays or extensions of contract time will be allowed as a result of these required repairs.
- 7. 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.
- 8. Existing drainage system shall be kept functional at all times during construction. The Contractor shall furnish materials, equipment, labor, tools and incidentals necessary to maintain flow. This work shall be considered incidental to the various contract items.
- 9. Existing facilities and/or pavement to remain which has been damaged by the Contractor shall be restored to its original condition at no cost to the State.
- 10. 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 is considered incidental to the various contract items.
- 11. Contractor shall use Hawaii-licensed Surveyors to stake right-of-way boundaries. Use survey monuments, stake boundary corners and every 500 feet of boundary. Engineer will not pay separately for surveying and will consider the cost as incidental in the contract cost for the various contract pay items.
- 12. Prior to beginning work on the project, the Contractor shall request toning of utilities from One Call Center, Phone 811 or 1-866-423-7287

GENERAL NOTES, CON'T:

- 13. Smooth riding connections shall be constructed at all limits of project or where work has occurred or both, including the beginning and end of project, connecting approaches, side streets, and driveways as shown on the plans and/or as directed by the Engineer. Walkways and driveways shall comply with Americans With Disabilities Act Accessibility Guidelines (ADAAG) and shall not have a difference in elevation between two adjoining surfaces of more than 0.25 inch. All of this work shall be considered incidental to HMA Pavement Mix No. IV or other items of work and will not be paid for separately.
- 14. All saw cutting work shall be considered incidental to Roadway Excavation or HMA Pavement, Mix No. IV or various contract items or their respective bid items and will not be paid for separately.
- 15. The Contractor shall remove and dispose of all existing raised pavement markers, thermoplastic line markings, traffic tape, and epoxy adhesives prior to the overlaying of Asphalt Concrete. This work shall be considered incidental to HMA Pavement, Mix No. IV and will not be paid for separately.
- 16. No material and/or equipment shall be stockpiled or otherwise stored within the State right-of-way except at locations designated in writing and approved by the Engineer. If use of location is approved by the Engineer, the Contractor shall obtain a permit to use the property within the State right-of-way from the State Highways Division at telephone no. 808-873-3535.
- 17. Trimming and dressing of shoulder shall consist of clearing, grubbing, grading, reshaping and compacting the unpaved shoulders with suitable material as shown on the plans and/or as directed by the Engineer. Suitable materials shall include materials from roadway excavation, including topsoil and base material therefrom, and if necessary, additional materials from borrow outside the limits of the right of way. Asphalt Concrete removed from cold planing, reconstruction and roadway excavation shall not be used for dressing of shoulder. This work shall be considered incidental to the various contract items.
- 18. Any work specified in the contract documents, but not listed separately in the Proposal Schedule, shall be considered incidental to the various contract items and shall not be paid for separately.
- 19. The contractor shall verify the location of all existing utilities, whether shown on the plans or not, and shall be responsible for the repair or replacement of the same in the event of damages due to his construction practices.
- 20. All dimensions and details shown on the drawings shall be checked and verified prior to the start of construction, and any discrepancies shall be immediately brought to the attention of the Engineer for clarification.
- 21. At the end of each day's work, the contractor shall remove all equipment and other obstructions to permit free and safe passages of public traffic.
- 22. Contractor shall exercise extreme caution to preserve BENCHMARKS (Survey Monuments). Whenever the center of a Survey Monument is less than three (3) feet from the edge of construction, the contractor shall retain a Licensed Land Surveyor to reference the location of said Survey Monument.
- 23. Benchmarks that are disturbed or destroyed shall be restored under a Licensed Land Surveyor's direction. Copies of field notes, descriptions and new values of the new benchmark shall be sent to the Department of Transportation, Highways Division, Cadastral Engineering Section, for review and approval prior to construction.
- 24. All new reference survey monuments shall be set under a licensed land surveyor's direction. Copies of field notes, descriptions and values of the new survey monuments shall be sent to the Department of Transportation, Highways Division, Cadastral Engineering Section, for review and approval prior to construction.

GENERAL NOTES, CON'T:

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	37C-02-23	2024	3	115

- 25. The Contractor shall clean and remove any accumulation of aggregates along the roadway within 10 feet of the edge of pavement. This work shall be considered incidental to bulk of work or the various contract items and will not be paid for separately.
- 26. Prior to placement of new aggregate subbase course, the existing subbase shall be compacted to a relative compaction greater than or equal to 95%.
- 27. Provide and maintain in or near the work zone a temporary pedestrian-safe and easily accessible route or detour or both with barricades placed in accordance with the MUTCD. The temporary route or detour shall be smooth, solid, non-slip and ADAAG compliant which includes accommodations for people with vision disabilities. The temporary route or detour shall be paved with at least an inch of Hot Mix Asphalt (HMA) Pavement, Mix No. V or other non-slip material acceptable to the Engineer, e.g., steel plates or wood planks or combination of both. (The HMA paving or installation of other non-slip material is only applicable if the temporary route's or defour's existing surface is dirt or if the existing surface is non-ADA compliant.) Restore the temporary route or detour surface to pre-construction condition when no longer needed for the project's work.
- 28. Removal and disposal of existing asphalt concrete pavement, and any debris shall be considered incidental to their respective bid items.

ABBREVIATIONS:

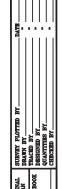
1	4 <i>C</i>	Asphalt Concrete	M.L.	Matchline
1	4 <i>z</i>	Azimuth	O.C.	on center
4	₿	Baseline	0/H	Overhead
L	BVC	Begin Vertical Curve	0/5	Offset
L	BMP	Best Management Practices	OHWM	Ordinary High Water mark
(2	Chord	PC	Point of Curvature
(CD	Conduit	PCC	Point of Compound Curvature
(CRM	Cement Rubble Masonry	PIVC	Point of Intersection Vertical
(1	existing drainline		Curve
L	Elev.	Elevation	PT	Point of Tangency
L	<u>EP</u>	New Edge of Pavement	R	Radius
6	ер	Existing Edge of Pavement	Rt.	Right of ₺
L	ES	New Edge of Shoulder	R/W	Right-of-Way
6	9 <i>S</i>	Existing Edge of Shoulder	S	Slope
L	EVC	End Vertical Curve	SL	Street Light
L	Exist.	Existing	Sta.	Station along 🕏
(<i>G</i>	Ground	T	Tangent
(GRP	Grouted Rubble Paving	TW	Top Wall Elevation
1	ЧМА	Hot Mix Asphalt	UP	Utility Pole
L	Lc	Length of Curve	V.C.	Vertical Curve
L	<u>_</u> †.	Left of ₿		





SHEET No. N-2 OF 14 SHEETS

3



GENERAL NOTES, CON'T:

- 29. Provide and maintain in or near the work zone a temporary pedestrian-safe and easily accessible route or detour or both with barricades placed in accordance with the MUTCD. The temporary route or detour shall be smooth, solid, non-slip and ADAAG compliant which includes accommodations for people with vision disabilities. The temporary route or detour shall be paved with at least an inch of Hot Mix Asphalt (HMA) Pavement, Mix No. V or other non-slip material acceptable to the Engineer, e.g., steel plates or wood planks or combination of both. (The HMA paving or installation of other non-slip material is only applicable if the temporary route's or defour's existing surface is dirt or if the existing surface is non-ADA compliant.) Restore the temporary route or detour surface to pre-construction condition when no longer needed for the project's work.
- 30. Except during actual working hours, all signs which do not pertain to the construction activity, such as "MEN WORKING" and "FLAGMEN AHEAD" shall be covered or laid down. However, all signs necessary for safety of the public shall be maintained.
- 31. The Contractor shall make his own arrangements for, and pay for all temporary utilities required for his work.
- 32. The Contractor shall procure and pay for all licenses and permits and shall give all notices necessary and incidental to the due and lawful prosecution of the work.
- 33. The Contractor shall remove and dispose all silt and debris deposited in drainage facilities, roadways and other areas resulting from his work. The cost incurred for any necessary remedial action resulting from his work.
- 34. The Contractor shall not damage any roots of the protected trees during roadway excavation.
- 35. All workers within the State Right-Of-Way who are exposed to either vehicles using the roadway or to construction equipment shall wear high-visibility safety apparel that meets the requirements of ANSI/ISEA 107-2015, Type R or P, Performance Class 2 or 3. "Workers" is defined as people on foot whose duties place them within the State Right-Of-Way, such as, but is not limited to construction and maintenance forces, equipment operator, survey crews, utility crews, responders to incidents (e.g., EMT and firemen), and law enforcement personnel directing traffic, investigating accidents, handling lane closures and obstructed roadways.

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 650 Palapala Drive, Kahului, Hawaii, prior to commencement of work within the State's Highway Right-of-Way.
- Work may be performed only between the hours of 8:30 a.m. and 3:00 p.m., Monday through Friday, except holidays, unless when otherwise approved in writing by the District Engineer.

During work hours, only one lane of traffic shall be closed, unless otherwise approved in writing by the District Engineer. All lane closures must be approved by HDOT one (1) week in advance.

At certain locations, "No Lane Closure" will be allowed during the "Back to School Jam", Thanksgiving weekend, Christmas/New Year period and at other times as directed by the Highways Division.

NOTES FOR CONSTRUCTION WITHIN STATE RIGHT-OF-WAY, CON'T:

- 3. The contractor shall perform all applicable construction and restoration work, including the legal relations and responsibility to the public, in accordance with the current "Department of Transportation, Highways Division, Standard Plans", as amended and "Hawaii Standard Specifications for Road and Bridge Construction dated 2005, as amended and the "Specifications for Installation of Miscellaneous Improvements within State Highways, of the State Highways Division".
- 4. 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 Highway Administration "Manual on Uniform Traffic Control Devices for Streets and Highways Part IV Traffic Controls for Street and Highway Construction and Maintenance". A Traffic Control Plan shall be incorporated into the construction plans and must be approved by the Division prior to the issuance of the permit.
- 5. Lane closures shall conform to the traffic control plans incorporated in Section 645 and these construction plans and must be approved by the Division prior to the issuance of the permit.
- 6. No material and/or equipment shall be stockpiled or otherwise stored within the Highway Right-of-Way except at locations designated in writing and approved by the Engineer. If use of location is approved by the Engineer, the contractor shall obtain a permit to use the property within the Highway Right-of-Way from the Maui District office.
- 7. Compaction tests shall be taken in accordance with the "Specifications for Installation of Miscellaneous Improvements within State Highways, as follows:
- A. Subbase: 1 compaction test per lift for each 300 lineal feet or fraction thereof or minimum 1 test per day.
- B. Base Course: 1 compaction test per lift for each 200 lineal feet of fraction there of or minimum 1 test per day
- C. One compaction test per lift for each 300 lineal feet of trench or faction thereof. A copy of the results shall be submitted to the District Engineer.
- 8. Longitudinal drainage along the highway shall be maintained.
- 9. 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.
- 10. Approval of the 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.
- 11. All regulatory, guide, and construction signs and barricades shall have a high-intensity reflective sheeting.
- 12. The Contractor shall inform the State Highways' Permit Office (808-873-3535) at least two (2) days prior to closing any lanes.
- 13. The Contractor shall provide and maintain for access to and from all existing driveways, sidewalks, and ADA access routes, and side streets and cross streets at all times. Driveways shall be kept open unless the owners of the properties using these rights-of-way are otherwise provided for satisfactory. This work shall be considered incidental to curb ramps, or sidewalk, or the various contract items and will not be paid for separately.

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NOTES FOR CONSTRUCTION WITHIN STATE RIGHT-OF-WAY, CON'T:

- 14. Where pedestrian walkways exist, they shall be maintained in passable and accessible condition. Any detour or rerouting of pedestrian traffic shall comply with ADAAG 4.3 as required by ADAAG 4.1.1(4) and the MUTCD. Walkways at intersections shall be likewise provided.
- 15. The Contractor shall reference, to the satisfaction of the District Engineer, all existing traffic signs, posts and pavement markings prior to 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.
- 16. The Contractor shall exercise care when excavating in this area. 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.
- 17. The Contractor shall implement Best Management Practices (BMP) measures for all work within the State Highway.
- 18. The Contractor shall notify the State Highway's Maintenance Engineer (808 873-3535), three (3) working days prior to commencing work.
- 19. The permit to perform work upon State Highways may be revoked because of default in any of the following, but not limited to conditions:
 - a. Work performed before or after permitted hours.
 - b. Failure to maintain roadway surfaces in a smooth and safe condition.
 - c. Failure to clean up construction debris generated from project work.
 - d. Failure to provide proper traffic control.
 - e. failure to replace damaged pavement markings and signs.
- 20. After completion of the project, the Owner and/or Contractor, shall submit the complete set of "as-built" plans to the Highways Division.
- 21. The Contractor shall be required to provide adequate, safe, non-skid bridging material over the trench, including shoring, when trenching in pavement areas, to handle all types of vehicular traffic. Vehicles crossing the bridging material shall make no noise louder than a vehicle would driving on an adjacent un-bridged, untouched road. All bridging shall be at a minimum meet or exceed being Traffic-Rated and meet or exceed the requirements of HL-93.
- 22. Pavement striping shall be done by the Contractor. Pavement marking and striping shall be thermoplastic Extrusion.
- 23. The Contractor shall notify the Highway Lighting and Traffic Signal Supervisor, Department of Transportation (State) three (3) working days prior to commencing work in this area (phone no. (808) 837-3535).



STATE OF HAWAI'I DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION

<u>GENERAL NOTES-2</u>

<u>KULA HIGHWAY,</u>

INTERSECTION IMPROVEMENTS

AT OMAOPIO ROAD

Scale: None

Project No. 37C-02-23

Date: April 2024

SHEET No. N-3 OF 14 SHEETS



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NOTES FOR CONSTRUCTION WITHIN STATE RIGHT-OF-WAY, CON'T:

24. Plastic marking tape: Provide plastic marking tape that is acid and alkali resistant polyethylene film 6 inches wide with minimum thickness of 0.004 inch. Provided tape with minimum strength of 1750 psi crosswise. Manufacture tape with integral wires, foil, backing or other means to enable detection by metal detector when the tape is buried up to 3 feet deep. Manufacture tape specifically for marking and locating underground utilities. Provide the metallic core of the tape encased in a protective jacket or provided with other means to protect it from corrosion. Conform to the following tape color and bear a continuous printed inscription describing the specific utility.

Red: Electric

Yellow: Gas, Oil, Dangerous Materials

Orange: Teléphone, Telegraph, Police, Fire and Communications

Blue: Water Systems
Green: Sewer Systems

TRAFFIC NOTES FOR TRAFFIC CONTROL PLAN FOR CONSTRUCTION WITHIN COUNTY RIGHT OF WAY

- 1. "No Parking" signs shall be posted at a minimum of every 100ft within any work area and for the buffer and taper areas approaching to work area.
- 2. Six (6) weeks minimum prior to start of work operations, submit for engineer's review and acceptance detailed site-specific traffic control plans for each intersection covering all phases of work such as painting of mast arms, and replacing controller. traffic control devices, signs and flagger positions shall be shown construction work shall not proceed until the traffic control plans have been accepted by the engineer.
- 3. The Contractor shall be responsible for obtaining permission from the County of Maui and/or, obtaining a road permit for all work within the County R/W. The contractor shall inform private property owners of the purpose and need of the project, and the specific work to take place onsite prior to work start, as applicable. This coordination work and obtaining permission and permit fee shall be considered incidental to the various contract items.

PUBLIC HEALTH, SAFETY AND CONVENIENCE NOTES:

- 1. The Contractor shall observe and comply with all Federal, State, and Local laws required for the protection of public health and safety and environmental qualify.
- 2. The Contractor, at his own expense, shall keep the project and its surrounding areas free from dust nuisance. The work shall be in accordance with the air pollution standards and regulations of the State Department of Health. The County of Maui shall require supplemental measures as necessary.
- 3. The Contractor shall be responsible for the cleaning and removal of all silt and debris deposited and accumulated within downstream waterways, ditches and drain pipes and on public and private roadways generated by his work. The Contractor agrees to reimburse the County of Maui for all costs expended in performance of the above work if required for public health and safety, or made necessary by non-performance by the contractor.
- 4. Temporary pedestrian routes shall be maintained in safe, passable and accessible condition complying with ADAAG 402.1.

HISTORICAL PRESERVATION NOTES:

1. Should historic sites such as walls, platforms, pavements, and mounds, or remains such as artifacts, burials, concentration of charcoal or shells be encountered during construction work, work shall cease in the immediate vicinity of the find and the find shall be protected form further damage. The contractor shall immediately contact the State Historic Preservation Division ((808) 243-5169), which will assess the significance of the find and recommend an appropriate mitigation measure, if necessary. A minimum 3-meter/10-foot wide buffer zone exists around all sites in preserved sites remain undisturbed.

US FISH AND WILDLIFE GENERAL NOTES

The contractor shall comply to the following measures to avoid or minimize project impacts to threatened and endangered animals, including bats, birds, turtles, and invertebrates, in Hawaii and the Pacific Islands as described below.

HAWAIIAN HOARY BAT

- 1. Do not disturb, remove, or trim woody plants greater than 15 feet tall during the bat birthing and pup rearing season (June 1 through September 15).
- 2. Do not use barbed wire for fencing.

HAWAIIAN SEABIRDS

- 1. Fully shield all outdoor lights so the bulb can only be seen from below bulb height and only use when necessary.
- Install automatic motion sensor switches and timer controls on all outdoor lights or turn off lights when human activity is not occurring in the lighted area.
- 3. Avoid nighttime construction during the seabird fledging period, September 15 through December 15.

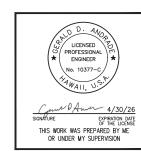
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HAWAII	HAW.	37C-02-23	2024	5	115

HAWAIIAN GOOSE OR NENE

- 1. Do not approach, feed, or disturb Hawaiian Geese.
- 2. If Hawaiian geese are observed loafing or foraging within the project area during the breeding season (September through April), halt work and have a biologist familiar with the nesting behavior of Hawaiian geese survey for nests in and around the project area prior to the resumption of any work. Repeat surveys after any subsequent delay of work of 3 or more days (during which the birds may attempt to nest).
- Cease all work immediately and contact the USFWS Pacific Island Fish and Wildlife Office for further guidance if a nest is discovered within a radius of 150 ft of proposed work, or a previously undiscovered nest if found within said radius after work begins.

In areas where Hawaiian geese are known to be present, post and implement reduced speed limits, and inform project personnel and contractors about

- 4. the presence of endangered species on-site.
 - Have a biological monitor that is familiar with the species' biology present on the project site during all construction or Earth moving activities until
- 5. the chicks/ducklings fledge to ensure that Hawaiian waterbirds and nests are not adversely impacted.



STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

<u>GENERAL NOTES-3</u>

<u>KULA HIGHWAY,</u>

<u>INTERSECTION IMPROVEMENTS</u>

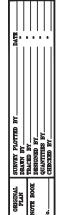
<u>AT OMAOPIO ROAD</u>

Project No. 37C-02-23

Scale: None

Date: April 2024

SHEET No. N-4 OF 14 SHEETS

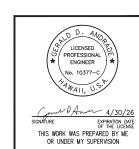


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HAWAII	HAW.	37C-02-23	2024	6	115

HAWAIIAN TELCOM NOTES:

- 1. The Contractor shall procure and pay for all licenses and permits and shall give all notices necessary and incident to the due and lawful prosecution of the work.
- 2. The Contractor shall obtain an excavation permit and toning request from Hawaiian Telcom's Excavation Permit Section, located at 1177 Bishop Street, two weeks prior to the start of construction. Hours of business are 8:00 a.m. to 11:00 a.m. and 12:00 noon to 3:00 p.m. Monday through Friday, except holidays.
- 3. Prior to the excavation of the ductline, the Contractor shall request Hawaiian Telcom to locate existing ductline wherever required. For underground cable locating and marking, five (5) working days advance notice is required. Three (3) working days advance notice is required for any inspection by a designated representative.
- 4. The locations of existing utilities are approximate only. The Contractor shall exercise extreme caution and shall maintain proper clearances whenever construction crosses or is in close proximity of Hawaiian Telcom facilities. The Contractor shall verify their locations and shall be liable for any damages to Hawaiian Telcom facilities. Any damages shall be reported immediately to Hawaiian Telcom's Repair Section at #611 (24 hours) or to the Excavation Permit Section at 546-7746 (normal working hours, Monday through Friday, except holidays). As a result of his operations, adjustments to the new ductline alignment, if required, shall be made to provide the required clearances.
- 5. The Contractor shall take necessary precaution not to damage existing cables or ducts. A Hawaiian Telcom inspector or designated representative is required to be at any job site whenever there will be a breakage into or entry into any structure that contain Hawaiian Telcom facilities. Temporary cable and duct supports shall be provided wherever necessary.
- 6. The Contractor shall notify Hawaiian Telcom's inspector or designated representative a minimum of 72 hours prior to excavation, bracing, or backfilling of Hawaiian Telcom's structures or facilities.
- 7. All applicable construction work shall be done in accordance with the "Hawaiian Telcom Standard Specifications for Placing Telephone Systems" dated January 2007. All subsequent amendments and additions, and all other pertinent standards for telephone construction. Contractor shall familiarize his personnel by obtaining applicable specifications.
- 8. When excavation is adjacent to or beneath Hawaiian Telcom's existing structures or facilities, the Contractor shall:
 - a) Sheet and/or brace the excavation to prevent slides, cave-ins, or settlements to ensure no movement to Hawaiian Telcom's structures or facilities.
 - b) Protect existing structures and/or facilities with beams, struts, or underpinning while excavating beneath them to ensure no movement to Hawaiian Telcom's structures or facilities.
- 9. The Contractor shall brace all poles or light standards near the new ductline, manhole, or handhole during his operations.

- 10. The Contractor shall saw-cut A.C. pavement and concrete gutter wherever new manholes, handholes, or ductlines are to be placed and shall restore to existing condition or better.
- 11. The Contractor shall repair sidewalks in accordance with these contract documents and State Standard Plan D-15.
- 12. The underground pipes, cables, or ductlines known to exist by the Engineer from his search of records are indicated on the plans. The Contractor shall verify the locations and depths of the facilities and exercise proper care in excavating in the area. Wherever connections of new utilities to existing utilities are shown on the plans, the Contractor shall expose the existing lines at the proposed connections to verify their locations and depths prior to excavation for the new lines.
- 13. Wherever connections to existing utilities are shown on the plans, the Contractor shall expose the existing lines prior to excavation of the main trenches to verify their locations and depths.
- 14. The Contractor, at his own expense, shall keep the project and surrounding area free from dust nuisance. The cost for supplementary measures, which will be required by the City and County, shall be borne by the Contractor.
- 15. The Contractor shall pump all manholes dry during final inspection.
- 16. The Contractor shall notify Hawaiian Telcom inspector 24 hours prior to the pouring of concrete or backfilling.
- 17. When connecting to manhole walls, all existing reinforcing bars shall be left intact. Ducts shall be adjusted in the field in order to clear reinforcing.
- 18. The Contractor shall be responsible for laying out all required lines and grades and shall preserve all benchmarks and working points necessary to lay out the work correctly. The new ductline shall be adjusted by the Contractor to suit the existing conditions and the details as described in the plans.
- 19. Minimum concrete strength shall be:
 For ductline 2500 psi at 28 days
 For manhole 3000 psi at 28 days or as specified in design notes
- 20. Bends in the duct alignment, due to changes in grade shall have a minimum radius of 25 feet. All 90 degree C-bends at a pole or at the building floor slab penetration shall have a bend radius of ten times the diameter of the duct or greater.
- 21. After ductline has been completed, a mandrel with a square front not less than 12" long and having a diameter of ½" 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 inside. Ducts shall be completely dry and clean.
- 22. All ducts and conduits shall have an 1800# polyester mule-tape (NEPTCO, WP1800P, Hawaiian Telcom Material Code No. 571154) installed throughout its entire length. All ducts shall be capped to prevent entry of foreign material during construction and at the completion of installation.



STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

HAWAIIAN TELCOM NOTES

KULA HIGHWAY,

INTERSECTION IMPROVEMENTS

AT OMAOPIO ROAD

Project No. 37C-02-23

Scale: None Date: April 2024

SHEET No. N-5 OF 14 SHEETS



HAWAIIAN ELECTRIC COMPANY NOTES (Rev 12/04/19):

1. Location of Hawaiian Electric Facilities:

The location of Hawaiian Electric's overhead and underground facilities shown on the plans are from existing records with varying degrees of accuracy and are not guaranteed as shown. The Contractor shall verify in the field the locations of the facilities and shall exercise proper care in excavating and working in the area. Wherever connections of new utilities to existing utilities and utility crossings are shown, the Contractor shall expose the existing lines at the proposed connections and crossings to verify the depths prior to excavation for the new lines. The Contractor shall be responsible for any damages to Hawaiian Electric's facilities whether shown or not shown on the plans.

2. Compliance with Hawaii Occupational Safety and Health Laws:

The Contractor shall comply with the State of Hawaii's Occupational Safety and Health Laws and Regulations, including without limitation, those related to working on or near exposed or energized electrical lines and equipment.

3. Excavation Clearance:

The Contractor shall obtain an excavation clearance from Hawaiian Electric's Planning and Design Section of the Customer Installations Division (808-543-5654) located at 820 Ward Avenue, 4th floor, a minimum of ten (10) working days prior to starting construction.

4. Caution!!! Electrical Hazard!!!

Existing Hawaiian Electric overhead and underground lines are energized and will remain energized during construction unless prior special arrangements have been made with Hawaiian Electric. Only Hawaiian Electric personnel are to handle these energized lines and erect temporary guards to protect these lines from damage. The Contractor shall work cautiously at all times to avoid accidents and damage to existing Hawaiian Electric facilities, which can result in electrocution.

5. <u>Overhead lines:</u>

State law (OSHA) requires that a worker and the longest object he or she may contact cannot come closer than a specified minimum radial clearance when working close to or under any overhead lines. It is the Contractor's responsibility to be informed of and comply with the law.

At any time should the Contractor anticipate that his work will result in the need to encroach within the minimum required clearance as stated in the law, the Contractor shall notify Hawaiian Electric at least four (3) months prior to the planned encroachment so that, if feasible, the necessary protections (e.g. relocate or de-energize Hawaiian Electric lines) can be investigated. Hawaiian Electric may also be able to blanket its distribution (12kV and below) lines to provide a visual aid in preventing accidental contact. Hawaiian Electric's cost of safeguarding or identifying its lines will be charged to the Contractor.

Contact Hawaiian Electric's Customer Installations Division at 808-543-7070 for assistance in identifying and safeguarding overhead power lines.

6. Pole Bracing:

Contractor shall not excavate within 10 feet from Hawaiian Electric's utility poles or any anchor system supporting the utility pole. If Contractor must excavate closer than 10 feet from a utility pole or its anchor system, Contractor will be responsible for protecting, supporting, securing and taking all precautions to prevent damage to or leaning of existing poles. Before commencing such excavation, Contractor must submit its bracing calculations and drawings, prepared and stamped by a Licensed Structural Engineer, to Hawaiian Electric's Customer Installations Division (808-543-7070) for review. Hawaiian Electric requires a minimum of ten (10) working days to conduct the review of

Contractor's submittal. Contractor shall be responsible for the design, installation, and

removal of the temporary pole bracing system, as well as all costs incurred by Hawaiian Electric to review Contractor's drawings and to repair or straighten poles impacted by Contractor's activities, including response and restoration costs incurred by Hawaiian Electric arising out of or related to outages caused by Contractor's failure to meet the foregoing requirements. Hawaiian Electric's review and approval of any Contractor submittals including its work procedure shall not relieve Contractor from any liability resulting from Contractor's excavation near or around Hawaiian Electric's utility poles.

7. Underground Lines:

The Contractor shall exercise extreme caution whenever construction crosses or is in close proximity of underground lines. Hawaiian Electric's existing electrical cables are energized and will remain energized during construction. Only Hawaiian Electric personnel are to break into existing Hawaiian Electric facilities, handle these cables, and erect temporary guards to protect these cables from damage. The cost of Hawaiian Electric's assistance in providing proper support and protection of its underground lines will be charged to the Contractor. For assistance/coordination in providing proper support and protection of these lines, the Contractor shall call Hawaiian Electric's Customer Installations Division at 808-543-7070 a minimum of ten (10) working days in advance.

Special precautions are required when excavating near Hawaiian Electric's 138kV or 46kV underground lines (See Hawaiian Electric instructions to Consultants/Contractors on "Excavation near Hawaiian Electric's underground 138kV and/or 46kV lines" for detailed requirements).

For verification of underground lines, the Contractor shall call the Hawaii One Call Center at 866-423-7287 minimum of five (5) working days in advance.

8. <u>Underground Fuel Pipelines:</u>

The Contractor shall exercise extreme caution whenever construction crosses or is in close proximity of Hawaiian Electric's underground fuel oil pipelines. Special precautions are required when excavating near Hawaiian Electric's underground fuel oil pipelines (See Hawaiian Electric's specific Fuel Pipeline "Guidelines" to Consultants/Contractors on Excavation near Hawaiian Electric's Underground Fuel Pipelines for detailed requirements).

9. Excavations:

When trench excavation is adjacent to or beneath Hawaiian Electric's existing structures or facilities, the Contractor is responsible for:

- a. Arranging for Hawaiian Electric Standby Personnel to observe work at Contractor's cost.
- b. Sheeting, bracing, or otherwise supporting the excavation and stabilizing the existing ground to render it safe and secure and to prevent possible slides, cave-ins, and settlements.
- c. Properly supporting existing structures or facilities with beams, struts, under-pinnings, or other necessary methods to fully protect it from damage.
- d. Backfilling with proper backfill material including special thermal backfill where existing (refer to Engineering Division for thermal backfill specifications).

10 Relocation of HECO Facilities:

Any work required to relocate or modify Hawaiian Electric facilities shall be done by Hawaiian Electric, or by the Contractor under Hawaiian

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Electric's supervision. The Contractor shall be responsible for all coordination, and shall provide necessary support for Hawaiian Electric's work, which may include, but not be limited to, staking of pole/anchor locations, identifying right of way and property lines, excavation and backfill, permits and traffic control, barricading, and restoration of pavement, sidewalks, and other facilities.

All costs associated with any relocation or modification (either temporary or permanent) for the convenience of the Contractor, or to enable the Contractor to perform his work in a safe and expeditious manner in fulfilling his contract obligations shall be borne by the Contractor.

11. Conflicts:

Any redesign or relocation of Hawaiian Electric's facilities not shown on the plans may be cause for lengthy delays. The Contractor acknowledges that Hawaiian Electric is not responsible for any delay or damage that may arise as a result of any conflicts discovered or identified with respect to the location or construction of Hawaiian Electric's electrical facilities in the field, regardless of whether the Contractor has met the requested minimum advance notices. In order to minimize any delay or impact arising from such conflicts, Hawaiian Electric should be notified immediately upon discovery or identification of such conflict.

12. <u>Damage to Hawaiian Electric Facilities:</u>

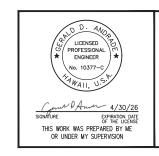
The Contractor shall be responsible for the protection of all Hawaiian Electric surface and subsurface utilities and shall be responsible for any damages to Hawaiian Electric's facilities as a result of his operations. The Contractor shall immediately report such damages or any hazardous conditions related to Hawaiian Electric's lines to Hawaiian Electric's Trouble Dispatcher at 808-548-7961. Repair work shall be done by Hawaiian Electric or by the Contractor under Hawaiian Electric's supervision. Costs for damages to Hawaiian Electric's facilities shall be borne by the Contractor.

In case of damage or suspected damage to Hawaiian Electric's fuel pipeline, the Contractor shall immediately notify Hawaiian Electric's Security Command Center at 808-543-7685 (a 24-hour number) so Hawaiian Electric personnel can secure the damaged section and report any oil spills to the proper authorities. All costs associated with the damage, repair, and oil spill cleanup shall be borne by the Contractor.

13. Hawaiian Electric Stand-by Personnel:

The Contractor may request Hawaiian Electric to provide an inspector to stand-by during construction near Hawaiian Electric's facilities. The cost of such inspection will be charged to the Contractor.

The Contractor shall call Hawaiian Electric's Customer Installations Division at 808-543-7070 a minimum of three (3) months in advance to arrange for Hawaiian Electric Stand-by Personnel.



STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

HAWAIIAN ELECTRIC NOTES

KULA HIGHWAY,
INTERSECTION IMPROVEMENTS
AT OMAOPIO ROAD
Project No. 37C-02-23

Scale: None Date: April 2024

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HAWAIIAN ELECTRIC COMPANY NOTES (Cont.):

14. Clearances:

The following clearances shall be maintained between Hawaiian Electric's ductline and all adjacent structures (charted and uncharted) in the

GUIDELINES FOR MINIMUM HORIZONTAL (PARALLEL) CLEARANCES BETWEEN HAWAIIAN ELECTRIC AND OTHER UNDERGROUND UTILITIES							
Underground Utility	Hawaiian Electric Direct Buried Cable		Concrete	Applicable Notes:			
HECO DB Conduits	12"	3"	0"				
HECO 3" Encasement	0"	0"	0"				
Telephone/CATV DB	12"	12"	6"				
Telephone/CATV DB Ducts	12"	12"	6"				
Telephone/CATV 3" Encasement	0"	0"	0"	5			
Traffic Signal	12"	12"	12"				
Water DB (BWS Owned)	36"	36"	36"	1, 4			
Customer Owned Water Service Laterals	12"	12"	12"				
Water (Concrete Jacketed) (BWS Owned)	36"	36"	36"	1, 4			
Gas DB	12"	12"	12"	1			
Gas (Concrete Jacketed)	12"	12"	12"	1			
Sewer DB	36"	36"	36"	1, 2			
Sewer (Concrete Jacketed)	36"	36"	36"	1, 2			
Drain	12"	12"	12"	1			
Fuel Pipelines				3			
Notes:							

- 1. Where space is available, parallel clearance to other utilities, or foreign structures other than communication or traffic signal shall be 36".
- 2: If 36" clearance cannot be met:
 - If clearance is less than 12", jacket sewer line with reinforced concrete (per Hawaiian Electric's std. 30-1030) for a distance of 5' plus pipe diameter.
 - If clearance is between 12" and 36", jacket sewer line with plain concrete.
- 3. All Fuel Pipeline crossings shall be reviewed and approved by the company that owns and maintains it.
- 4. 5 feet clear to water mains 16" and larger.
- 5. For situations with 0" minimum separation, a 6" separation is recommended.
- 6. Clearances measured from outer edges or diameters of utilities. Whenever concrete jackets are involved, clearances shall be total clear distance between the concrete jacket and utility concerned.

Underground	AND OTH Hawaiian		Hawaiian	Applicabl
Utility	Electric		Electric	Notes:
- · · · · · · · · ·		Direct Buried	3" (Min.)	
	Buried			
	Cable	(no concrete encasement)	<i>Encasement</i>	
Hawaiian Electric DB Conduits	6"	3"	0"	
Hawaiian Electric 3" Encasement	0"	0"	0"	
Telephone/CATV DB	12"	12"	6"	
Telephone/CATV DB Ducts	12"	12"	6"	
Telephone/CATV 3" Encasement	0"	0"	0"	3
Traffic Signal	12"	12"	6"	
Water DB (BWS Owned)	12"	12"	12"	5
Customer Owned Water Service Laterals	6"	6"	6"	
Water (Concrete Jacketed) (BWS Owned)	12"	12"	12"	5
Gas DB	12"	12"	12"	
Gas (Concrete Jacketed)	12"	12"	12"	
Sewer DB	24"	24"	24"	1
Sewer (Concrete Jacketed)	24"	24"	24"	1
Drain	12"	12"	6"	
Fuel Pipelines				2

Notes:

- If clearance cannot be met:
 - If clearance is less than 12", jacket sewer line with reinforced concrete (per Hawaiian Electric's std. 30-1030) for a distance of 5' plus pipe diameter.
 - If clearance is between 12" and 24", jacket sewer line with plain concrete.
- 2. All Fuel Pipeline crossings shall be reviewed and approved by the company that owns and maintains it.
- 3. For situations with 0" minimum separation, a 6" separation is recommended.
- Clearances measured from outer edges or diameters of utilities. Whenever concrete jackets are involved, clearances shall be total clear distance between the concrete jacket and utility concerned.
- 36" clearance is required for trenchless installation work.

The Contractor shall notify the construction manager \$\phi\$ Hawaiian Electric of any heat sources (power cable duct bank, steamline, etc.) encountered that are not properly identified on the drawing.

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15. <u>Indemnity:</u>

The Contractor shall indemnify, defend and hold harmless Hawaiian Electric from and against all losses, damages, claims, and actions, including but not limited to reasonable attorney's fees and costs based upon or arising out of damage to property or injuries to persons, or other tortious acts caused or contributed to by Contractor or anyone acting under its direction or control or on its behalf; provided Contractor's indemnity shall not be applicable to any liability based upon the sole negligence of Hawaiian Electric.

Additional Notes When Work Involves Construction of Hawaiian Electric Facilities

16. Schedule

Contractor shall furnish thier construction schedule six (6) months prior to starting work on Hawaiian Electric Facilities. Contractor shall give Hawaiian Electric, in writing, three (3) months Notice to Proceed with Hawaiian Electric's portion of the work.

17. Authority

All construction, restoration work and inspection shall be subject to whichever Governmental Agency has authority over the work.

18. Specifications

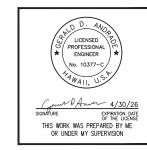
Construction of Hawaiian Electric's underground Facilities shall be constructed in accordance with the latest revisions of Hawaiian Electric Specifications CS7001, CS7003, CS7202, CS9301, and CS9401 and applicable Hawaiian Electric Standards.

19. Construction

Contractor shall furnish all labor, materials, equipment, and services to properly perform and fully complete al work shown on the Contract, Drawings, and Specifications. All materials shall be new and manufactured in the United States of America. All manhole, handhole, and ductline installtions shall be inspected and approved by Hawaiian electric prior to excavation and prior toplacing concrete. Contractor shall notify Hawaiian Electric's Inspection Group at 808-543-4325 at least five (5) working days prior to intalling facilities or placing concrete.

Contractor to coordinate work to break into Hawaiian Electric's existing electrical facilties with Hawaiian Electric's Inspection Group at 808-543-4325 at least ten (10) working days in advance.

Scale: None



STATE OF HAWAI'I DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION

HAWAIIAN ELECTRIC NOTES

KULA HIGHWAY, INTERSECTION IMPROVEMENTS AT OMAOPIO ROAD Project No. 37C-02-23

SHEET No. N-7 OF 14 SHEETS



Date: April 2024

HAWAIIAN ELECTRIC COMPANY NOTES (Cont.):

20. Stakeout:

The Contractor shall arrange for toneouts of all underground facilities and shall stakeout all proposed Hawaiian Electric Facilities within the project area so as not to conflict with any existing utility (existing or proposed) and any proposed proposed construction or improvement work for verification by Hawaiian electric before proceeding with Hawaiian Electric work.

21. Ductlines:

All ductline installations shall be pvc schedule 40 encased in concrete, unless otherwise noted. All completed ductlines shall be mandrel tested by the Contractor in the presence of Hawaiian Electric's Inspector using Hawaiian Electric's Standard Practice. the Contractor shall install 1800# tensile strength muletape pull line in all completed ductline after mandrel testing.

22. Joint Pole Removal:

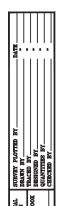
The last joint pole occupant off the poles shall remove the poles.

23. As-Built Plans:

The Contractor shall provide Hawaiian Electric with a set of electronic and hard copy plans of each sheet showing the offsets, stationing, and vertical elevation of the duct line(s) constructed.

GENERAL CONSTRUCTION NOTES

- 1. Trenching to be by hand digging near and/or across exsiting utility lines.
- 2. Unless otherwise requested by Department of Water Supply, Minimum clearance between waterlines and conduits shall be:
 Horizontal 3 feet
 Vertical = 6 Inches
- 3. Adjust new conduit alignment, if required to provide clearances. If conduit cannot be realigned, adjustments to existing water system shall be performed to existing water system shall be performed with standards of the Department of Water Supply.
- 4. Where necessary, reconstruction of sidewalk, gutter, and driveway areas shall conform to the standard details of the govenrment agency having jurisdiction over the work.





STATE OF HAWAI'I
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HIGHWAYS DIVISION

HAWAIIAN ELECTRIC NOTES

KULA HIGHWAY,

INTERSECTION IMPROVEMENTS

AT OMAOPIO ROAD

Project No. 37C-02-23

Scale: None Date: April 2024

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SPECTRUM NOTES:

- 1. The locations of existing utilities are approximate only. The Contractor shall verify their locations and shall be responsible for any damages to these utilities as a result of his operations. Adjustments to the new ductline alignment, if required, shall be made to provide the required clearances.
- 2. The underground pipes, cables, or ductlines known to exist by the Engineer from his search of records are indicated on the plans. The Contractor shall verify the locations and depths of the facilities and execise proper care in excavating in the areas. Wherever connections of new utilities to existing utilities are shown on the plans, the Contractor shall expose the existing lines at the proposed connections to verify their locations and depths prior to excavation for the new lines.
- 3. Prior to the excavation of the ductline, the Contractor shall request that Spectrum to locate existing ductline wherever required.
- 4. The Contractor shall take necessary precaution not to damage existing cables or ducts. Any work involving existing cables or ducts shall be done in the presence of the Spectrum Inspector or his representative.
- 5. The Contractor shall notify the Spectrum Inspector 48 hours prior to the start of work on CATV infrastructure, pouring of concrete or backfilling. Spectrum's Inspector, Moki Place, can be reached at 808-625-8378.
- 6. Wherever connections to existing utilities are shown on the plans, the Contractor shall expose the existing lines prior to excavation of the main trenches to verify their locations and depths.
- 7. The location of CATV facilities shown on plans are from existing records with varying degrees or accuracy as to its actual fixed location. The Contractor shall use extreme caution when working in close proximity of CATV facilities.
- 8. The Contractor shall obtain excavation permit clearance from Spectrum's Engineering Section located at 200 Akamainui St., Mililani Tech Park.
- 9. For any field assistance or verification of CATV facilities, the Contractor shall call the Technical Operatons Center at 808-625-8378.
- 10. 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.
- 11. Any damage to Spectrum's facilities shall be reported to Spectrum's repair dispatch department at 808-625-8437 or 808-625-8666.
- 12. All existing improvements that are disturbed during the construction phase shall be restored to its original or better condition.
- 13. The Contractor shall take all necessary precaution not to damage the existing cables in the pullbox. All damages to existing cables shall be repaired by Spectrum and paid for by the Contractor.
- Coordinate all penetration of telephone pullboxes with Hawaiian Telcom Inspector.
- 15. Smooth finish inside wall of existing pullboxes and handholes to its original condition or better. All entrances into the pullbox shall be grouted around conduits.

- 16. For 3" conduits or larger, the Contractor shall install Neptco WP1800 MULETAPE or approved equal in all ductlines. Leave MULETAPE in place for future use as a pull or fish line, unless otherwise noted. Reference Verizon Material Code No. 571154. All ducts shall be capped to prevent entry of foreign material during construction and at completion of installation. Endbells are required for conduits 2" and larger.
- 17. For conduits less than 3", the Contractor shall place poly cord through out project, and secure in manholes, handholes, and pullboxes.
- 18. Penetration into pullboxes if necessary to be from factory installed opening or from bricks position. Penetration from pullbox walls is not acceptable. All conduits shall enter through the end of the pullbox at 90 degrees.
- 19. A minimum of (2) precast sections must be used on all 2x4 or 2x6 pullboxes.
- 20. Two minimum layers of bricks to be used shall always be at least one layer lower than the lowest duct entering the pullbox. At no time however, shall there be less then two layers of bricks on each installation.
- 21. At no time shall cement mortar, wood, or any other material be used between precast sections. Leveling or raising of boxes to grade must be done at brickwork section using cement mortar. The permanent installation of wooded wedges to accomplish this purpose will not be accepted.
- 22. Concrete precast base may be used as an alternative to bricks.
- 23. Trenching to be by hand digging near and across existing utility lines.
- 24. Minimum clearance between street light stand and fire hydrants shall be three feet.
- 25. Underground utilities shown hereon is for information only. No guarantee is made on the accuracy or completeness of said installation.
- 26. For underground cable location and marking, five working days advance notice is required. Three working days advance notice is required for any inspection by a designated representative. Contractor shall take necessary precaution not to damage any existing cables or ducts. Spectrum's Inspector or designated reprsentative is required to be at any job site whenever there will be a breakage into or entry into any structure that contain Spectrum's facilities.
- 27. Concrete strength shall be 3000 psi in 28 days.
- 28. Bends in the duct alignment, due to changes in grade shall have a minimum radius of 20-feet. All 90-degree C-bends at a pole or at the building floor slab penetration, shall have a bend radius of ten times the diameter of the duct or greater.
- 29. After ductline has been completed, a mandrel with a square front not less than 12-inch long and having a diameter of 1/4-inch less than the inside diameter of 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 inside. Ducts shall be completely dry and clean.

- 30. All construction must be inspected and approved by Spectrum prior to the installation of any of its facilities and the energizing of its system.
- 31. Contractor and/or customer shall provide Spectrum with sufficient installation time in their occupancy time table.
- 32. Install 4-mil thick orange color warning tape 3-inch wide, entire length of trench when placing CATV conduits. Tape should read "CAUTION BURIED CABLE LINE BELOW". Manufactured by Harris Industries, Inc., catalog number UT-43 or equivalent tape. Tape to be installed 12-inches below grade.



STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

SPECTRUM NOTES

KULA HIGHWAY,

INTERSECTION IMPROVEMENTS

AT OMAOPIO ROAD

Project No. 37C-02-23

Scale: None

Date: April 2024

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