

GENERAL NOTES:

GENERAL:

1. The scope of work for this project includes: demolition of existing drainage structure, cement rubble masonry wall, and metal guardrail; construction of grated drop inlets, drain manholes, concrete outlet structure, grouted rubble paving, and asphalt concrete pavement; installation of drainline, concrete ditch and guardrail; grading and grassing.
2. Construction and restoration of all existing highway facilities within State highway right-of-way shall be done in accordance with all applicable sections of the current "Standard Specifications For Road and Bridge Construction" and the Project Plans and Special Provisions.
3. 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 the work is possible. The Contractor shall make an independent check on the ground by probing and/or checking with the various utility companies or government agencies to verify the exact locations and depths of the existing utilities and obstructions. The Contractor shall exercise proper care in excavating in the area. Whenever connections of new 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 excavating. The Contractor shall be held liable for any damages incurred to the existing facilities and/or improvements as a result of his operations unless they are determined to be a differing site condition by the Engineer. The Engineer will solely determine if the damage is due to a differing site condition. All damaged portions shall be replaced or repaired and shall include all upgrades and betterments to the standards of the utility or agency.
4. Before any work is performed on the project, call Hawaii's One Call Center at 1-866-423-7287 or 811 to have the project toned for utilities. Comply with HRS 269E-12. Do not start any excavation until toning of the work area is completed. Verify the location of the utility by potholing the location using hand tools only. The Contractor shall independently verify the toned areas of excavation prior to excavation. Provide written notice of scheduled toning and specific locations to the Engineer at least one week ahead of toning. The Contractor shall obtain DOT as-builts at the DOT Kapolei Kakuhihewa Building to locate potential conflicts with utilities prior to excavation. If there is a potential conflict, Contractor shall inform DOT within 24 hours of discovery. Contractor shall probe around area and take precautions to not damage utilities.
5. Smooth riding connections shall be constructed at the limits of roadway resurfacing, 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.
6. All saw cutting work shall be considered incidental to Roadway Excavation. The Contractor shall clean up any cuttings and shall not wash down material into the storm drain or sewer systems.
7. All work specified in the contract but not listed separately in the proposal schedule shall be considered incidental to other various contract items and shall not be paid for separately.
8. All work to remove temporary facilities by the Contractor shall be considered incidental to the various contract items in the proposal.

9. In accordance with Hawaii Standard Specifications for Road and Bridge Construction, 2005, Subsection 107.02 - Permits and Licenses, the Contractor shall obtain all permits and licenses required to perform the work and the Contractor assumes exclusive responsibility for identifying, acquiring and paying for all permits and licenses required to perform the work.
10. The Contractor shall obtain a Permit to Perform Work Upon State Highway from the Oahu District Engineer, State Highways, at 727 Kakoi Street, prior to commencement of work within the State's highway right-of-way.

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.g., traffic congestion, failure to coordinate with other contractors working in the area, refusal to adjust traffic control when requested by the Engineer.
 - e. Failure to replace damaged pavement markings and signs.
 - f. For reasons determined by the Engineer to be of benefit to the State or Public or both.

Any revocation of the permit shall be at the Contractor's expense and no additional cost to the State and no additional contract time will be added.

11. All materials including but not limited to guardrail, rebar, and drainage assembly shall be brand new and free of defects, e.g., rust, damage, or corrosion. The contractor shall promptly replace any material exhibiting any of these characteristics at no additional cost or time to HDOT. No drainage assembly, or guardrail removed shall be reused.
12. The contractor shall allow HDOT personnel unlimited and unimpeded access to materials that will be used in the project at all times for inspection and/or testing (this includes but is not limited to access to contractor or subcontractor's base yards, manufacturer yard, production plant, separate storage areas). The Engineer reserves the right to reject any material from being used in the project that the contractor refuses to provide access to.

NOTIFICATION:

13. The Contractor shall notify the Engineer in writing, two (2) weeks prior to starting paving operations.
14. The Contractor shall notify the Honolulu Fire and Police Departments, Also, Emergency Medical Services, the Oahu Transit Services, Inc. (OTS), and Leeward Community College two (2) weeks prior to commencing any work. The Contractor shall inform the above agencies of the location and scope of work, proposed temporary relocation or closure of traffic lanes. Provide cotemporaneous updates of changes to the traffic control in the work zone.
15. The Contractor shall inform the Engineer at least two (2) working days prior to closing any lanes or performing any restoration work. This work shall include any backfilling and compacting of material, e.g., placing and compacting of base course material; and any paving operations. Any trench restoration work performed by the Contractor that has not been given the required advance notice of the work, thereby deny the State Representative an opportunity to observe the work may be required to be removed and restored with a State Representative present. All restoration work will be at the Contractor's expense.

16. In the event any artifacts or human remains are uncovered during construction operations, the Contractor shall immediately suspend work and notify the Honolulu Police Department, the State Department of Land and Natural Resources-Historic Preservation Division (808-692-8015), and the State's Engineer.
17. The Contractor shall place an advertisement in the newspaper for the temporary road closure. The "Notice to Motorist" shall be placed in the Honolulu Start Advertiser for three consecutive days within one week before the temporary lane closures. The "Notice to Motorist" shall be in accordance with the current Hawaii Standard Specifications for Road and Bridge Construction, 2005, Subsection 107.06 - Contractor Duty Regarding Public Convenience and Subsection 645.03(H) - Advertisement.
18. All public notices and advertisements shall be incidental to lump sum traffic control item 645.0100 - Traffic Control and shall not be paid for separately.

PRECAUTION:

19. The Contractor shall take proper precautions in accordance with the current Hawaii Standard Specifications for Road and Bridge Construction, 2005, Subsection 107.12 Protection of Persons and Property. The Contractor shall exercise care when performing work in or adjacent to the State highway right-of-way. Damages to the existing facilities shall be immediately reported to the respective utility company, private owner, and/or County/City/State agency. The repair work shall be done at the Contractor's expense.
20. The Contractor shall comply with utility coordination requirements per Hawaii Standard Specifications for Road and Bridge Construction, 2005, Subsection 104.11. As part of coordination requirements, the Contractor shall include the Engineer in all email correspondences with utilities.
21. HECO Notes
 - a. Location of HECO 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. The Contractor shall be responsible for any damages to Hawaiian Electric's facilities whether shown or not shown on the plans.
 - b. 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.
 - c. 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.

- d. Overhead Lines:
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 three (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 543-7070 for assistance in identifying and safeguarding overhead power lines.

- e. Damage to Hawaiian Electric Facilities:
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 hazardous conditions related to Hawaiian Electric's lines to Hawaiian Electric's Trouble Dispatcher at 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 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.

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	99D-01-17	2022	3	35

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



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

Russell M. Arakaki, APRIL 30, 2022
 P.Eng., Inc. LIC. EXP. DATE
 dba PARK ENGINEERING

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

GENERAL NOTES

FARRINGTON HIGHWAY
Drainage Improvements
Vicinity of Leeward Community College
PROJECT NO. 99D-01-17

Scale: None Date: June 2021

GENERAL NOTES (CONTINUED):

WORK EXECUTION:

- 22. Work may be performed only between the hours of 8:30 a.m. to 3:00 p.m., Monday through Friday, except holidays, unless otherwise permitted by the Engineer. During work hours, only one lane of traffic shall be closed, unless otherwise approved in writing by the Engineer.
- 23. 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.
- 24. The Contractor shall reference, to the satisfaction of the Engineer, all existing traffic signs, posts & pavement markings prior to the commencement of construction. The Contractor shall replace or repair all traffic signs, posts & pavement markings disturbed by his activities, at his expense, unless directed otherwise by the Engineer or his representative.
- 25. All regulatory, guide and construction signs and barricades shall have a high intensity reflective background. Portable concrete barriers shall be reflectorized in accordance with the "Standard Plans", State of Hawaii, Department of Transportation with the following exceptions: In addition to the steady burn amber lights, an amber RM-3 shall be placed on the barrier equal distant from the steady burn amber lights. A 4-inch retroreflective strip shall be placed on the barricade facing traffic for the entire length of the barrier. All end treatments shall be MASH TL-3 compliant not NCHRP 350 TL-3.
- 26. The Contractor shall submit 10 sets of FHWA approval letters certifying compliance with AASHTO Manual for Assessing Safety Hardware (MASH) for signs, sign supports, barricades, delineators, cones, vertical panels, and other traffic control devices. Use of signs, sign supports, barricades, delineators, cones, vertical panels, and other traffic control devices that are not certified to be MASH compliant will not be allowed.
- 27. Upon request of the Engineer, furnish self-certified MASH compliant letter from vendor for each type of Category I traffic control device, as defined in MASH, including but not limited to single-piece traffic cone, single-piece drum, tubular marker, and delineator.
- 28. All traffic control devices including signs, barricades, warning lights, arrow boards, changeable message signs, cones, delineators and markers, shall conform to the American Traffic Safety Services Association (ATSSA) Quality Standard for Work Zone Traffic Control Devices, and the MUTCD. Compliance with these requirements shall be as described in Section 645 - Work Zone Traffic Control.
- 29. All construction signs shall be left in place until all construction items have been completed unless they are occupying a lane or shoulder that is not permitting free and safe passage of traffic during non-working hours or otherwise directed by the Engineer. The Contractor shall obtain prior approval from the Engineer to remove construction signs.
- 30. In accordance with Hawaii Standard Specifications for Road and Bridge Construction, 2005, Subsection 105.10 - Construction Stakes, Lines and Grades, after the project is completed, the Contractor shall restore grades and ground cover within the project limits and surrounding areas affected by the project to a condition equal or better than the existing condition prior to construction.

- 31. Contractor shall submit requests for detours and lane closures in accordance with Hawaii Standard Specifications for Road and Bridge Construction, 2005, Subsection 645.03(F) - Lane Closures and shall follow the minimum time frames required for implementation. Once the request has been approved by HDOT, the Contractor shall provide a written Weekly Lane Closure Request to the HDOT Construction Field Office at least 1-week ahead of all upcoming work.
- 32. All public notices and advertisements shall be incidental to lump sum traffic control item 645.0100 - Traffic Control and shall not be paid for separately.
- 33. The Contractor shall furnish two (2) police officers for each location that requires work zone traffic control in accordance with Hawaii Standard Specifications for Road and Bridge Construction, 2005, Subsection 645.03 - Construction.
- 34. The Contractor shall submit a Daily Inspection Report signed by the Contractor's authorized representative daily to the Engineer and Inspector. Submittal frequency may be changed upon written request and approval from the Engineer.
- 35. The Contractor shall obtain a Community Noise Permit for all construction activities from the State Department of Health, Indoor and Radiological Health Branch, Noise Section.

ACCESS:

- 36. Existing pedestrian walkways 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 provided. All walkways shall conform to ADA requirements.
- 37. Driveways shall be kept open unless the owners of the properties using these rights-of-way are otherwise provided for satisfactorily.
- 38. The minimum clearance around fire hydrants, utility poles, light standard, or any other obstruction shall be 3'-0".
- 39. A minimum of 36" clear and 80" headroom clearance height shall be maintained along sidewalk and potential walkways.
- 40. The Contractor shall provide for access to and from all existing side streets, sidewalks, ADA access routes complying with ADAAG 4.3, driveways and adjacent properties at all times.
- 41. The Contractor shall take proper safety precautions and responsibility for damage to any property during the course of the work in accordance with Hawaii Standard Specifications for Road and Bridge Construction, 2005, Subsection 107.12 -Protection of Persons and Property.

TRENCHING:

- 42. The Contractor shall survey and stake out the work in accordance with Hawaii Standard Specifications for Road and Bridge Construction, 2005, Subsection 105.10 - Construction Stakes, Lines and Grades. The Contractor shall perform all earthwork in accordance with the recommendations stated in "Geotechnical Engineering Exploration - Farrington Highway Drainage Improvements" by Geolabs, Inc. dated February 11, 2019. The Contractor shall take a profile along the centerline of the proposed utility trench both before commencing trench excavation work and after trench has been repaved. Profiles shall be submitted to the District Engineer and shall be used to verify the roadway surface has been restored to its original condition or smoother.
- 43. Unless otherwise noted, no trench shall be opened more than 300 feet in advance of installed and tested pipeline and/or ductline.

- 44. The Contractor shall provide an adequate and safe non-skid bridging material, including shoring, over trenches in pavement areas. The bridging shall be able to support all types of vehicular traffic.
- 45. 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 that shall be maintained throughout the steel plate's use. The State may require the backfilling of patches of trenches due to the excessive usage of steel plates. Steel plates shall not be used in lane or shoulders where the existing posted speed is 35 MPH or greater.
- 46. Temporary cold mix trench patches will be permitted in any given area for a maximum duration of two weeks, and shall be a minimum of 2-inches thick. All temporary patches shall be placed over properly placed and compacted backfill and base course layers. The Contractor shall be responsible for maintaining all temporary patches and to make repairs to unsatisfactory patches within 24 hours.
- 47. At the end of each day's work, the Contractor shall remove all equipment and other obstructions to permit free and safe passage of traffic.
- 48. Existing drainage systems will be functional at all times during construction. The Contractor shall furnish materials, equipment, labor, tools and incidentals necessary to accomplish maintenance and control of flow. The cost shall be incidental to the various Contract Items.
- 49. When excavation is adjacent to or beneath existing utility structures or facilities, the Contractor shall protect existing structures and/or facilities with beams, struts, or underpinning while excavating beneath them to ensure no movement to utility structures or facilities.
- 50. The Contractor shall verify the presence of existing utilities which may conflict with activities and shall coordinate with the utility company for temporary relocation, as necessary. All costs associated with the temporary relocation shall be borne by the Contractor.

Hawaii One Call Center:

- 51. Before conducting any excavation in the public right-of-way or on private property, the Contractor shall call the Hawaii One Call Center at least five (5) working days before planning to dig. The Contractor shall provide the Hawaii One Call Center with the address and location of the nearest cross street(s) near where digging is planned.
Call 811 toll-free 24 hours a day.
For more information, go to www.callbeforeyoudig.org
- 52. The Hawaii One Call Center will contact all utility companies to tone, mark or identify the location of their underground utilities for free. The Contractor shall mark where he plans to excavate in white. All other utilities shall be labeled as shown in the following table.

Color	Utility
Red	Electric power lines, cables, or conduits, and lighting cables
Yellow	Gas, oil, steam, petroleum or other hazardous liquid or gaseous materials
Orange	Communications, cable TV, alarm or signal lines, cables, or conduits
Blue	Water, irrigation, and slurry lines
Green	Sewers, storm sewer facilities or other drain lines
White	Proposed excavation
Pink	Temporary survey markings
Purple	Reclaimed water, irrigation and slurry lines

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- 53. In accordance with Hawaii State Law Section 269E-7, the Hawaii One Call Center (HOCC) shall provide an inquiry identification number for each location request provided by the Contractor. The inquiry identification number and utility marks shall remain valid for not more than twenty-eight (28) calendar days from the date of issuance and after that date shall require the Contractor to submit a new request for HOCC revalidation. The Contractor shall provide all inquiry identification numbers for each location request to the Engineer.

DRAINAGE:

- 54. The Contractor shall verify the locations of all existing culverts and utilities in the field. Any existing culverts and utilities damaged during construction shall be repaired or replaced by the Contractor at his own expense.
- 55. Only non-pneumatic type of drill as approved by the Engineer will be permitted for drilling holes in concrete. Where indicated on Plans, the approximate diameter of drilled holes for installation of dowels shall be 7/8"Ø, and voids after installing dowels shall be filled with non-gaseous, non-shrink epoxy grout. Locate existing rebars before drilling and drill holes so they miss the existing rebars.
- 56. The existing drainage system and longitudinal drainage along the highway will be maintained and be 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.
- 57. The Contractor shall remove all silt and debris deposited in drainage facilities, on roadways and in other areas resulting from his work. The costs incurred for any necessary remedial action by the Engineer shall be payable by the Contractor.
- 58. The Contractor is reminded to comply with the maintenance of traffic requirements of Section 645 of the specification. The contractor should note that if a Traffic Control Plan (TCP) is included in the contract, these are minimum requirements and may not constitute a complete traffic control plan. The Contractor shall incorporate additional traffic control plans needed based on contractor's means and methods considering site conditions and construction sequence in accordance with the Contract Documents including applicable Manual Uniform Traffic Control Devices (MUTCD) requirements. All lane closures and traffic pattern changes (detours) not shown on the plans shall be submitted to the Engineer for approval in accordance with Specification Section 645 - Work Zone Traffic Control. For restrictions on lane closures, detours, construction work during peak hours, and other requirements regarding maintaining vehicular and pedestrian traffic, see Section 107.06 - Contractor Duty Regarding Public Convenience, and Section 645 - Work Zone Traffic Control. All traffic control related costs shall be included in lump sum Pay Item No. 645.0100 and shall not be paid for separately.

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



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.
Russell M. Arakaki
 APRIL 30, 2022
 dba PARK ENGINEERING LIC. EXP. DATE

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

GENERAL NOTES

FARRINGTON HIGHWAY
Drainage Improvements
Vicinity of Leeward Community College
PROJECT NO. 99D-01-17

Scale: None Date: June 2021

SHEET No. N2 OF N2 SHEETS