### GENERAL NOTES

- 1. The scope of work for this project consists of reconstructing weakened pavement areas; cold-planing; resurfacing; replacing concrete curbs, gutters, sidewalks and drainage inlets; upgrading quardrails; adjusting utility boxes and manholes; and installing pavement markings and traffic signs.
- 2. The Contractor is reminded of the requirements of Subsection 105.16 - Subcontracts.
- 3. The Contractor's attention is directed to the following Sections: Subsection 104.11 - Utilities and Services; Subsection 107.06 -Contractor Duty Regarding Public Convenience; and Section 645 -Work Zone Traffic Control.
- 4. 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.
- 5. The location and existence of underground utilities, manholes, monuments and other 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 make an independent check on the ground by probing and/or checking with the various utility companies and government agencies to verify the exact locations and depths of the existing utilities and obstructions. The Contractor shall exercise proper care in excavating and cold planing 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 new lines. The Contractor shall be held liable for any damages incurred to the existing facilities and/or improvements as a result of his operations. All damaged portions shall be replaced or repaired in accordance with the standards and specifications of the affected utility company at the Contractor's expense.
- 6. The Contractor shall notify in writing, the Oahu Transit Services, Inc. (Tel. No. 848-4571) two (2) weeks prior to construction, informing them of location, scope of work, closure of the name of the highway and/or traffic lanes, and dates of closure.
- 7. The Contractor shall notify the Engineer in writing, two (2) weeks prior to starting construction operations.
- 8. 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 damages shall be at the Contractor's own expense, to the satisfaction of the Engineer.
- 9. Existing drainage system shall 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.
- 10. Earth swale shall be graded to drain. This work shall be considered incidental to the various contract items.
- 11. Smooth riding connections shall be constructed at all limits of project, including the beginning and end of project, connecting approaches, side streets, walkways and driveways as shown on the plans and/or as directed by the Engineer. This work shall be considered incidental to the various contract items.
- 12. All saw cutting and safety edge work shall be considered incidental to Hot Mix Asphalt Pavement, Mix No. IV.
- 13. Dressing of shoulder, sidewalk and bus turnout 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. This Work shall be considered incidental to the various contract items.

- 14. The Contractor shall provide and maintain for access to and from all existing driveways, sidewalks, ADA access routes, side streets and cross streets at all times. This work shall be considered incidental to the various contract items.
- 15. The Contractor shall remove and dispose of all existing raised pavement markers, thermoplastic line markings, traffic tapes, and epoxy adhesives prior to the overlaying of asphalt concrete. This work shall be considered incidental to Hot Mix Asphalt Pavement, Mix No. IV.
- 16. 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 Oahu District Office at telephone no. 831-6712.
- 17. The exact locations and limits of areas to be filled with leveling course, cold-planed, reconstructed, or excavated shall be determined in the field by the Contractor. The Contractor shall provide drawings showing the location and outlines of the proposed repair areas. The total area of repairs shall be calculated and provided to the Engineer with the drawings. The Contractor shall not begin any work until the Engineer verifies and accepts the location and size of the repair area.
- 18. All holes, depressions and wheel ruts shall be filled and compacted with Hot Mix Asphalt Pavement, Mix No. V prior to resurfacing. This work shall be considered incidental to the various contract items.
- 19. Prior to his paving operations, the Contractor shall be responsible for locating, preserving and marking all utility and highway facilities that will require adjustments to the new finished grade. The Contractor shall submit to the Engineer a list of all items, including water, drainage, sewer, gas, electrical, telephone and cable utilities, etc. to be adjusted to the new finished grade.
- 20. After completion of resurfacing, the Contractor and the Engineer will test for and determine ponding areas (i.e. low spots within the resurfaced area). It shall be the responsibility of the Contractor to correct and resurface and/or repair all such ponding areas at no cost to the State.
- 21. The Contractor shall verify the presence of existing aerial and underground utilities which may conflict with construction 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.
- 22. The Contractor shall obtain all necessary permits prior to start of work at his own cost.
- 23. The exact locations and limits of guardrail improvements shall be determined in the field by the Contractor. The Contractor shall not begin work until the guardrail limits are verified and accepted by the Engineer. Removal of existing guardrail shall be considered incidental to the various guardrail items.
- 24. The Contractor shall submit maintenance plans and schedules, including traffic detours, road or lane closures, lane switches, and the placement of temporary traffic control devices, to the Engineer for acceptance prior to construction.
- 25. No section where guardrails have been removed shall be left unshielded at the end of each work day. Open sections shall be shielded by portable physical barriers. Furnishing, installing and maintaining physical barriers shall be considered incidental to the various contract items.
- 26. All work specified in the contract but not listed separately in the proposal schedule shall be considered incidental to the various contract items.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-063-1(023)	2015	3	111

- 27. Azimuths and distances are referred to Origin of Azimuths: "Mokauea", Bench Mark Datum: USC &GS Bench Mark "BM" (Top of brass pin of C&C Mon. at the Intersection of School Street and Makuahine Street), Elev. = 89.44 Mean Sea Level.
- 28. The Contractor shall be responsible for preserving all survey monuments on State property. All survey monuments disturbed or destroyed by the Contractor shall be reinstalled at no cost to the State. Only licensed State of Hawaii Land Surveyors shall reinstall monuments. The Contractor shall coordinate with the State Construction Surveyor prior to construction.
  - Adjusted and/or reset monuments shall comply with Standard Plan D-07 or D-08, where applicable.
- 29. Contractor Shall reference, adjust and/or reset all existing street monuments under the direct supervision of a licensed State of Hawaii Land Surveyor. Following the completion of the monuments, their locations shall be checked. The monuments must check within a tolerance of the smaller of an error ratio of 1:20,000 for distance and alignment or a maximum positional error of 0.03 feet. Failure to meet the tolerance will require the Contractor to reset the monuments.
- 30. The Pali Highway Resurfacing, Waokanaka Street to Kamehameha Highway and Lighting Replacement, Vineyard Boulevard to Kamehameha Highway project is estimated to start construction in January 2017. To minimize lane closures, all paving work shall be completed before any other work. All lane closures shall be coordinated with the above Pali Highway project and approved by the Engineer.

STATE OF HAWAII **DEPARTMENT OF TRANSPORTATION** HIGHWAYS DIVISION

# GENERAL NOTES AND LEGEND

LIKELIKE HIGHWAY RESURFACING School Street to Emmeline Place Federal Aid Project No. NH-063-1(023) Date: Sept., 2015

SHEET No. 1 OF 2 SHEETS

# PAVING AROUND MANHOLES

- 1. The Contractor shall first lower manholes more than 4" prior to cold planing. The work shall be considered incidental to the various paving contract items. Upon final paving, the manhole shall be raised and paid under the various contract items pertaining to manhole adjustments.
- 2. The Contractor shall place hot asphalt concrete around manholes and compact properly with a vibrating plate compactor.
- 3. If a plate compactor is not used, the Contractor shall use a pneumatic roller to roll the area around the manhole.
- 4. The Contractor shall fog seal or brush emulsion seal on the material placed as backfill on the area around the manhole that was not compacted by the roller. Black sand shall be used to blot out the area if the fog is too heavy.

### HAWAII ONE CALL CENTER

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 digging. Be sure to give the address and location of the nearest cross street(s) near the digging site.

Call 811 toll-free 24 hours a day. For more information, go to www.callbeforeyoudig.org

2. The Hawaii One Call Center will contact all utility companies to tone, mark, or identify the location of their underground utilities for free. Mark the area to excavate in White and label all of the other utilities as listed below.

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.

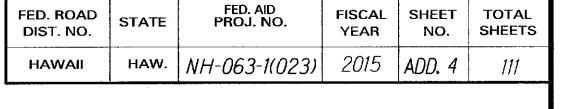
Water, irrigation, and slurry lines.

GREEN Sewers, storm sewer facilities or other

drain lines.

WHITE Proposed excavation

PINK Temporary survey markings.
PURPLE Reclaimed water, irrigation and slurry lines.



#### LEGEND

	Concrete Areas	—	Existing Sewer Line		
	11" Reconstruction Areas	_			
		° smh	Existing Sewer Manhole		
	9½" Reconstruction Areas	SMH	Adjusted Sewer MH Frame/Cover		
27///	11½" Reconstruction Areas	•SMH	New Sewer Manhole		
72 \(\mu_2\)	w/Paving Grid	o .	<b>J</b>		
	15½" Reconstruction Areas	—G—6—	New 6" Gas Line		
	w/Paving Grid	°gv	Existing Gas Valve Box		
	5½" Reconstruction Areas	GV	Adjusted Gas Valve Box		
^	w/Paving Grid	°gmh	Existing Gas Manhole		
2	25½" Reconstruction Areas	GMH	Adjusted Gas MH Frame/Cover		
^	w/Paving Grid	©mon.	Existing Monument		
2	29½" Reconstruction Areas	<sup>∞</sup> MON.	Adjusted Monument		
^	4 (		Existing 24" Drain Line		
2	19½" Reconstruction Areas w/Paving Grid		New 24 " RCP Drain Line		
	w/ raving Grid		Existing Storm Drain Manhole		
	Resurfacing Limits	°SDMH	Adjusted Storm Drain MH		
—-e—	Existing Electrical Line		Frame/Cover		
——E——	_ , , , , , , , , , , , , , , , , , , ,	SDMH	New Storm Drain Manhole		
jp	Existing Joint Pole	∃gdi	Existing Grated Drop Inlet		
°pp	Existing Power Pole	Cb 	Existing Catch Basin		
V 4	Existing Flectric Manhole		Existing Traffic Sign		
EMH	Adjusted Elec. MH Frame/Cover	O			
EMTI Ebox	Existing Electric Box	Tol	Existing Highway Lighting Standard		
	Existing Telephone Line	SLPU	Existing Highway Lighting Pullbox		
—— <i>T</i> ——	New Telephone Line	o <sub>top</sub>	Existing Traffic Signal Pole		
$^{\circ}t_{P}$	Existing Telephone Pole	Ü	Existing Traffic Signal		
$^{\circ}$ tm $h$	Existing Telephone Manhole	U	New Traffic Signal Pole		
<b>⊕</b> TMH	Adjusted Tele. MH Frame/Cover	, -	Existing Traffic Signal Pullbox		
	Existing Signal Corps Line	U	Existing Traffic Signal Pullbox		
	New Signal Corps Line		Adjusted Traffic Signal Pullbox		
°scmh	Existing Signal Corps Manhole		New Traffic Signal Pullbox		
	Existing TV Cable		Existing Metal Guardrail		
	New TV Cable		New Metal Guardrail		
—— D. İ.C. ——	Existing Sandwich Isles Communication Line		Existing Chain Link Fence		
<del></del> 1/ <i></i> 12	Existing 12" Water Line	• •	New Chain Link Fence		
	Existing Water Manhole	wm <sup>-</sup>	Existing Water Meter		
<b><sup>™</sup>WMH</b>	Adjusted Water MH Frame/Cove		Adjusted Water Meter		
o <sub>av</sub>	Existing Water Air Valve	VV IVI	Existing Fire Hydrant		
AV	Adjusted Water Air Valve	fh -6-	Existing Fire Hydrain		
•AV	New Water Air Valve				
$\circ_{wv}$	Existing Water Valve Box		STATE OF HAWAII DEPARTMENT OF TRANSPORTATION		
• <sub>WV</sub>	Adjusted Water Valve Box		HIGHWAYS DIVISION		
GENERAL NOTES AND LEGI					

11/3/15 | Revised Reconstruction Areas. DATE REVISION

Date: Sept., 2015 SHEET No. 2 OF 2 SHEETS

LIKELIKE HIGHWAY RESURFACING

School Street to Emmeline Place

Federal Aid Project No. NH-063-1(023)