GENERAL CONSTRUCTION NOTES:

- 1. The project includes grading, drainage improvements, guardrails, signs, striping, water line relocation, traffic control and detour plans, and other related repairs.
- 2. The Contractor's attention is directed to the following Sections of the Special Provisions: Subsection 104.11 Utilities and Services, Section 107 Legal Relations and Responsibility to Public, and Section 645 Work Zone Traffic Control.
- 3. The Contractor shall notify the State in writing, two (2) weeks prior to starting paving operations.
- 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 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 be held liable for any damages incurred to the existing facilities and/or improvements as a result of his operations.
- 6. The exact locations and limits or areas to be reconstructed and cold planed shall be determined in the field by the Engineer.
- 7. Preformed Pavement Marking Tape shall be removed prior to resurfacing. Removal shall be by scraping, grinding or other method approved by the Engineer. Payment shall be incidental to Item No. 401.0100 Hot Mix Asphalt Pavement, Mix No. IV.
- 8. The Contractor shall remove and dispose of all existing raised pavement markers prior to the overlaying of Asphalt Concrete. This work shall be considered incidental to Item No. 401.0100 Hot Mix Asphalt Pavement, Mix No. IV.
- 9. Smooth riding connections shall be constructed at all limits of resurfacing including the beginning and end of project, side streets and driveways as shown on the plans and/or as directed by the Engineer.
- 10. Existing drainage system will be functional at all times during construction. Contractor is to furnish materials, equipment, labor, tools and incidentals necessary to maintain flow. This work shall be considered incidental to the various contract items.
- 11. Contractor shall provide for access to and from existing side streets and driveways at all times.
- 12. All saw cutting work shall be considered incidental to Item No. 401.0100 Hot Mix Asphalt Pavement, Mix No. IV, and will not be paid for separately.
- 13. Initial preparation of shoulder areas shall be done by the Contractor. Shoulder preparation shall consist of clearing, grubbing, grading, reshaping and compacting the unpaved shoulders with suitable excavated material from roadway reconstruction and cold planing, as shown on the plans and/or as directed by the Engineer. Contractor shall also be responsible for finish rolling and maintaining the shoulders until project completion. This work shall be considered incidental to Item No. 401.0100 Hot Mix Asphalt Pavement, Mix No. IV.

- 14. Unprotected pavement dropoffs greater than 2" shall not be allowed during non-working hours, except where approved by the Engineer in writing.
- 15. Public Notice is required for lane closures. Contractor shall submit notice to the Engineer for approval a minimum of three weeks prior to publication. Pre-approval of notice, with dates left blank, is permissible.
- 16. Contractor shall maintain at least one paved shoulder free and clear of debris for pedestrian and bicycle traffic at the end of each work day.
- 17. The Contractor's attention is called to Section 407 Tack Coat of the Special Provisions.
- 18. Temporary striping on cold planed surfaces shall be with paint (tape will not be allowed). Temporary striping on final overlay shall be with temporary tape.
- 19. Paving shall not commence on the same day as the cold-planing.
- 20. The Contractor will be allowed to pave one lane of the roadway on a single day with the adjacent shoulder being paved the next day. The adjacent lane shall be paved no later than the third day.
- 21. Pavement striping shall be done with alkyd-based thermoplastic.
- 22. Lane closures or detours that slow down traffic shall not occur during peak hours (6:30 am to 8:30 am and 3:30 pm to 6:00 pm). Night work will be permitted. If the Contractor elects to perform work at night, a noise variance permit shall be obtained at his cost with no additional time.
- 23. Cold planing of adjacent travel ways shall be completed on the same day. Temporary pavement markings shall be installed prior to the end of each work day.
- 24. If night work is approved, the Contractor shall stop all work and contact the Fish and Wildlife Service (800 344-9453) if bats or birds are seen flying around the work area at night.
- 25. When trench excavation is adjacent to or under existing structures or facilities, the Contractor shall be responsible for properly sheeting and bracing the excavation and stabilizing the existing ground to render it safe and secure from possible slides, cave-ins and settlement and for properly supporting existing structures and facilities with beams, struts or under-pinning to fully protect them from damage.
- 26. All excavation work called for on the plans and not itemized in the proposal and all excavation work not called for but required for the construction of this project shall be considered incidental to unclassified trench excavation.
- 27. Verify and check all dimensions and details shown on the drawings prior to the start of construction. Any discrepancy shall be immediately brought to the attention of the Engineer for direction.
- 28. No Contractor shall perform any construction activity so as to cause falling rock, soil or debris in any form to fall, slide or flow onto

adjoining properties, streets or natural water courses. Should such violations occur, the costs incurred for any remedial action shall be payable by the Contractor.

FED. ROAD DIST. NO.

HAW.

- 29. 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. All damaged portions shall be replaced in accordance with the standards and specifications of the affected utility company and shall be the Contractor's responsibility. Personal injury resulting from contact with existing utilities shall be the Contractor's responsibility. 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 new lines.
- 30. The Contractor shall be responsible for conformance with the applicable provisions of Chapter 54, Water Quality Standards, and Chapter 55, Water Pollution Control, of Title 11, Administrative Rules of the State Department of Health.
- 31. Prior to the start of construction, the Contractor shall contact the Hawaii One Call Center to have respective utility companies have and mark where their underground facilities are located. The Contractor shall coordinate all work.
- 32. The Contractor shall restore to their original condition or better, all improvements damaged as a result of the construction, including pavements, embankments, curbs, signs, landscaping, structures, utilities, walls, fences, etc. unless provided for specifically in the proposal. Demolition and restoration of existing items shall be incidental and included within the amount paid for unclassified trench excavation.
- 33. If grading permit is required, the Contractor shall retain the services of a licensed Professional Engineer to be responsible during construction and prepare the certification and report after grading in accordance with Revised Ordinances of Honolulu 1990, Chapter 14, Article 14, Article 15 as amended.

LICENSED PROFESSIONAL ENGINEER

NO. 10330-C

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

CORCY UMENOKA SIGNATURE

A/30/12
EXPIRATION
DATE OF THE
LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GENERAL NOTES

FARRINGTON HIGHWAY DRAINAGE IMPROVEMENTS

Vicinity of Orange St.

Project No. 93B-01-11

Scale: N/A

SHEET No. 1 OF 2 SHEETS

Date: FEB 2012

FISCAL YEAR

2012 | 3

FED. AID PROJ. NO.

93B-01-11

GENERAL CONSTRUCTION NOTES (CONTINUED):

- 34. 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. Contractor shall be responsible for maintaining all temporary patches and to make repairs to unsatisfactory patches within 24 hours.
- 35. The Contractor shall exercise extreme caution to preserve centerline and reference survey monuments.
- 36. Monuments that are disturbed shall be restored under the licensed land surveyor's direction. Any new data such as elevations shall be certified by the surveyor, and submitted to the Engineer.
- 37. The Contractor shall be responsible for replacing/reconstructing all concrete curbs and gutters, concrete swales, driveways and sidewalks damaged during construction.
- 38. Where pedestrian walkways exist they shall be maintained in a safe and passable condition, or other facilities for pedestrians shall be provided. Passages between walkways at intersections shall likewise be provided.
- 39. All work called for on the plans and not itemized in the proposal and all work called for but required for the construction of this project, shall be considered incidental.
- 40. This project will affect bus routes, bus stops, and para-transit operations, therefore, the Contractor shall notify the Department of Transportation Services, Public Transit Division at 768-8396 and Oahu Transit Services, Inc. (bus operations: 848-4578 or 852-6016 and para-transit operations: 454-5041 or 454-5020) of the scope of work, location, proposed closure of any street, traffic lane, sidewalk, or bus stop and duration of project at least two weeks prior to construction.

GENERAL NOTES FOR TRAFFIC CONTROL PLAN

- 1. The permittee shall make minor adjustments at intersections, driveways, bridges, structures, etc., to fit field conditions.
- 2. Flaggers, Cones or delineators shall be extended to a point where they are visible to approaching traffic.
- 3. Traffic control devices shall be installed such that the sign or device farthest from the work area shall be placed first. The others shall then be placed progressively toward the work area.
- 4. Regulatory and warning signs within the construction zone that are in conflict with the traffic control plans shall be removed or covered. All signs shall be restored upon completion of work.
- 5. A minimum of one (1) special duty officer and two (2) qualified flaggers are required and incidental. Flaggers and/or police officers shall be in sight of each other or in direct communication at all times.
- 6. When required by the issuing office, the permittee shall install a flashing arrow signal as shown on the traffic control plans.
- 7. All traffic lanes shall be a minimum of 10 feet wide.
- 8. All construction warning signs shall be promptly removed or covered whenever the message is not applicable or not in use.

GENERAL NOTES FOR TRAFFIC CONTROL PLAN (CONTINUED):

- 9. The backs of all signs used for traffic control shall be appropriately covered to preclude the display of inapplicable sign messages (i.e., when signs have messages on both faces).
- 10. At the end of each day's work or as soon as the work is completed, the permittee shall remove all traffic control devices no longer needed to permit free and safe passage of public traffic. Removal shall be in the reverse order of installation. Replace existing, faded, or obliterated pavement markings that are necessary for safe traffic flow in the construction area with temporary or permanent markings before opening the roadway to public traffic each day.
- 11. Replace permanent pavement markings and traffic signs upon completion of each phase of work.
- 12. Sign spacings and taper lengths shall be as shown on the traffic control plans.
- 13. Traffic control plans are approved for work within state right-of-way only between the hours of 8:30 a.m. to 3:30 p.m.
- 14. Sign spacing (D), taper lengths (T), and spacings of cones or delineators shall be as shown in Table 645-1, unless otherwise noted on the traffic control plans.

	IADL	L 645-1	- FOR II	RAFFIC CON	II ROL	PLAN	
POSTED SPEED	SIGN SPACING	TAPER LENGTH (T) (FEET)		LONGITUDINAL BUFFER	SPACING OF CONES OR DELINEATORS (FEET)		
LIMIT (MPH)	(D) (FEET)	W=12' OR LESS*	W=GREATER THAN 12'*	SPACE (B) (FEET)	TAPER	TANGENT	WORK AREA
20	250	200	W X 17	35	20	20	10
25	250	200	W X 17	55	25	30	10
30	250	250	W X 20	85	30	30	10
35	250	250	W X 20	120	35	35	10
40	500	350	W X 30	170	40	40	10
45	500	550	W X 45	220	45	45	10
50	1000	600	W X 50	280	50	50	10
55	1000	700	W X 55	335	55	55	10

LICENSED PROFESSIONAL ENGINEER

NO. 10330-C

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

CORTY UMBOOKA

EXPIRATION
DATE OF THE
LICENSE

FED. ROAD DIST. NO.

HAWAII

HAW.

FISCAL SHEET YEAR NO.

2012

FED. AID PROJ. NO.

93B-01-11

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

<u>GENERAL NOTES</u>

FARRINGTON HIGHWAY DRAINAGE IMPROVEMENTS

Vicinity of Orange St.

 Project No. 93B-01-11

 Scale:
 Date: FEB 2012

SHEET No. 2 OF 2 SHEETS