



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

SPECIAL PROVISIONS PROPOSAL CONTRACT AND BOND

FOR

**SIDEWALK, CURB AND GUTTER, CONCRETE
MEDIAN BARRIER REPAIRS
AT VARIOUS LOCATIONS**

PROJECT NO. HWY-OM-2027-38

ISLAND OF OAHU

FY 2027

NOTICE TO BIDDERS
Hawaii Revised Statutes (HRS),
Chapter 103D

The receiving of bids for **SIDEWALK, CURB AND GUTTER, CONCRETE MEDIAN BARRIER REPAIRS AT VARIOUS LOCATIONS, ISLAND OF OAHU, PROJECT NO. HWY-OM-2027-38**, will begin as of the HiePRO Release Date. Bidders shall register and submit complete bids through HiePRO only. Refer to the following HiePRO link for important information on Vendor Registration: <https://hiepro.hawaii.gov/welcome.html>.

The solicitation specifications, proposal, and additional documents designated or incorporated by reference shall be available in HiePRO.

HiePRO OFFER DUE DATE AND TIME is September 25, 2026, at 2:00 p.m., Hawaii Standard Time (HST). **Bidders shall submit and upload the complete proposal to HiePRO prior to the offer due date and time. Proposals received after said due date and time shall not be considered. Any additional support documents explicitly designated as confidential and/or proprietary shall be uploaded as a separate file to HiePRO. Bidders shall not include confidential and/or proprietary documents as part of their proposal. The record of each bidder and their respective proposal shall be open to public inspection. FAILURE TO UPLOAD THE PROPOSAL TO HiePRO SHALL BE GROUNDS FOR REJECTION.**

The scope of work consists of furnishing all labor, necessary equipment, materials and traffic control, to repair severely cracked, popped up and depressed reinforced Portland cement concrete (PCC) sidewalks, curb and/or gutters, and severely damaged concrete median barriers on the Island of Oahu on an open end, “as needed” basis.

To be eligible for award, bidders must possess a valid State of Hawaii General Engineering "A" or General Building "B" or Specialty Contractors "C-31" or "C-31a" license **at the time of bidding**.

A virtual pre-bid conference is scheduled for September 8, 2026, at 10:00 a.m., HST. Interested bidders shall contact Jillian Chen, Project Manager, directly at jillian.m.chen@hawaii.gov, no later than one working day prior to the scheduled pre-bid conference to receive the meeting invitation. All prospective bidders and/or their respective representatives are encouraged to attend, however, attendance is not mandatory. All information presented at the pre-bid conference shall be provided for clarification and information only. Any amendments to the solicitation shall be made by formal addendum and posted in HlePRO.

All Request for Information (RFI) questions and Substitution Requests shall be submitted in HlePRO **no later than September 11, 2026, at 2:00 p.m., HST**. RFI questions received after the stated deadline shall not be addressed. Substitution Requests received after the stated deadline shall not be considered. Verbal RFI(s) shall not receive a response. All responses to RFI questions shall be provided for clarification and information only and issued by formal addendum. Any amendments to the solicitation shall be made by formal addendum and posted in HlePRO.

If there is a conflict between the solicitation and information stated in the pre-bid conference, the meeting minutes, and/or the responses to RFI questions, the solicitation shall govern and control, unless as amended by formal addendum.

Apprenticeship Preference. A five percent bid adjustment for bidders that are party to apprenticeship agreements pursuant to HRS Section 103-55.6 is applicable to this project.

Employment of State Residents on Construction Procurement Contracts. Compliance with HRS Section 103B-3 is a requirement for this project whereby a minimum of 80 percent of the bidder's work force on this project shall consist of Hawaii residents.

Campaign contributions by State and County Contractors. Contractors are hereby notified of the applicability of HRS Section 11-355 which states that campaign contributions are prohibited from specified State or county government contractors during the term of the contract if the contractors are paid with funds appropriated by a legislative body. For more information, contact the Campaign Spending Commission at (808) 586-0285.

Protests. Any protest of this solicitation shall be submitted in writing to the Director of Transportation, in accordance with HRS Section 103D-701 and Hawaii Administrative Rules Section 3-126.

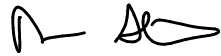
The U.S. Department of Transportation Regulation entitled "Nondiscrimination in Federally Assisted Programs of the U.S. Department of Transportation," Title 49, Code of Federal Regulations (CFR), Part 21, is applicable to this project. Bidders are hereby notified that the Department of Transportation shall affirmatively ensure that the contract entered into pursuant to this advertisement shall be awarded to the lowest responsible bidder without discrimination on the grounds of race, color, national origin or sex (as directed by 23 CFR Part 200).

Driving While Impaired (DWI) Education. The Hawaii Department of Transportation (HDOT) encourages all organizations contracted with HDOT to have an employee education program preventing DWI. DWI is defined as operating a motor vehicle while impaired by alcohol or other legal or illegal substances. HDOT promotes this type of program to accomplish our mission to provide a safe environment for motorists, bicyclists and

pedestrians utilizing our State highways, and expects its contractors to do so as well.

For additional information, contact Jillian Chen, Project Manager, by phone at (808) 692-8439 or by email at jillian.m.chen@hawaii.gov.

The State reserves the right to reject any or all proposals and to waive any defects in said proposals in the best interest of the public.



ROBIN K. SHISHIDO
Deputy Director of Transportation for Highways

HlePRO RELEASE DATE: August 28, 2026

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INSTRUCTIONS FOR CONTRACTOR'S LICENSING

"A" general engineering contractors and "B" general building contractors are reminded that due to the Hawaii Supreme Court's January 28, 2002 decision in Okada Trucking Co., Ltd. v. Board of Water Supply, et al., 97 Haw. 450 (2002), they are prohibited from undertaking any work, solely or as part of a larger project, which would require the general contractor to act as a specialty contractor in any area where the general contractor has no license. Although the "A" and "B" contractor may still bid on and act as the "prime" contractor on an "A" or "B" project (*See, HRS § 444-7 for the definitions of an "A" and "B" project.*), respectively, the "A" and "B" contractor may only perform work in the areas in which they have the appropriate contractor's license (*An "A" or "B" contractor obtains "C" specialty contractor's licenses either on its own, or automatically under HAR § 16-77-32.*). The remaining work must be performed by appropriately licensed entities. It is the sole responsibility of the contractor to review the requirements of this project and determine the appropriate licenses that are required to complete the project.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
HONOLULU, HAWAII

SPECIAL PROVISIONS

These Special Provisions shall supplement and/or amend the applicable provisions of the Hawaii Standard Specifications for Road and Bridge Construction, 2005, hereinafter referred to as the "Standard Specifications".

Amend **Section 101 - TERMS, ABBREVIATIONS, AND DEFINITIONS** to read as follows:

“DIVISION 100 - GENERAL PROVISIONS

SECTION 101 - TERMS, ABBREVIATIONS, AND DEFINITIONS

101.01 Meaning of Terms. The specifications are generally written in the imperative mood. In sentences using the imperative mood, the subject, “the Contractor shall”, is implied. In the material specifications, the subject may also be the supplier, fabricator, or manufacturer supplying material, products, or equipment for use on the project. The word “will” generally pertains to decisions or actions of the State.

When a publication is specified, it refers to the most recent date of issue, including interim publications, before the bid opening date for the project, unless a specific date or year of issue is provided.

101.02 Abbreviations. Meanings of abbreviations used in the specifications, on the plans, or in other contract documents are as follows:

AAN	American Association of Nurserymen
AASHTO	American Association of State Highway and Transportation Officials
ACI	American Concrete Institute
ADA	Americans with Disabilities Act
ADAAG	Americans with Disabilities Act Accessibility Guidelines
AGC	Associated General Contractors of America
AIA	American Institute of Architects
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
ANSI	American National Standards Institute
APA	American Plywood Association

46	ARA	American Railway Association
47		
48	AREA	American Railway Engineering Association
49		
50	ASA	American Standards Association
51		
52	ASCE	American Society of Civil Engineers
53		
54	ASLA	American Society of Landscape Architects
55		
56	ASTM	American Society for Testing and Materials
57		
58	AWG	American Wire Gauge
59		
60	AWPA	American Wood Preserver's Association
61		
62	AWS	American Welding Society
63		
64	AWWA	American Water Works Association
65		
66	BMP	Best Management Practice
67		
68	CCO	Contract Change Order
69		
70	CFR	Code of Federal Regulations
71		
72	CRSI	Concrete Reinforcing Steel Institute
73		
74	DCAB	Disability and Communication Access Board, Department of
75		Health, State of Hawaii
76		
77	DOTAX	Department of Taxation, State of Hawaii
78		
79	EPA	U.S. Environmental Protection Agency
80		
81	FHWA	Federal Highway Administration,
82		U.S. Department of Transportation
83		
84	FSS	Federal Specifications and Standards,
85		General Services Administration, U.S. Department of Defense
86		
87	HAR	Hawaii Administrative Rules
88		
89	HDOT	Department of Transportation, State of Hawaii
90		

91	HIOSH	Occupational Safety and Health, Department of Labor and
92		Industrial Relations, State of Hawaii
93		
94	HMA	Hot Mix Asphalt
95		
96	HRS	Hawaii Revised Statutes
97		
98	ICEA	Insulated Cable Engineers Association (formerly IPCEA)
99		
100	IMSA	International Municipal Signal Association
101		
102	IRS	Internal Revenue Service
103		
104	ITE	Institute of Transportation Engineers
105		
106	MUTCD	Manual on Uniform Traffic Control Devices for Streets and
107		Highways, FHWA, U.S. Department of Transportation
108		
109	NCHRP	National Cooperative Highway Research Program
110		
111	NEC	National Electric Code
112		
113	NEMA	National Electrical Manufacturers Association
114		
115	NFPA	National Forest Products Association
116		
117	NPDES	National Pollutant Discharge Elimination System
118		
119	OSHA	Occupational Safety and Health Administration/Act,
120		U.S. Department of Labor
121		
122	SAE	Society of Automotive Engineers
123		
124	SI	International Systems of Units
125		
126	UFAS	Uniform Federal Accessibility Standards
127		
128	UL	Underwriter's Laboratory
129		
130	USGS	U.S. Geological Survey
131		
132	VECP	Value Engineering Cost Proposal
133		
134		

101.03 Definitions. Whenever the following words, terms, or pronouns are used in the contract documents, unless otherwise prescribed therein and without regards to the use or omission of uppercase letters, the intent and meaning shall be interpreted as follows:

Addendum (plural - Addenda) - A written or graphic document, including drawings and specifications, issued by the Director during the bidding period. This document modifies or interprets the bidding documents by additions, deletions, clarifications or corrections.

Addition (to the contract sum) - Amount added to the contract sum by change order.

Advertisement - A public announcement inviting bids for work to be performed or materials to be furnished.

Amendment - A written document issued to amend the existing contract between the State and Contractor and properly executed by the Contractor and Director.

Award - Written notification to the bidder that the bidder has been awarded a contract.

Bad Weather Day (or Unworkable Day) - A day when weather or other conditions prevent a minimum of four hours of work with the Contractor's normal work force on critical path activities at the site.

Bag - 94 pounds of cement.

Barrel - 376 pounds of cement.

Base Course - The layer or layers of specified material or selected material of a designed thickness placed on a subbase or subgrade to support a surface course.

Basement Material - The material in excavation or embankments underlying the lowest layer of subbase, base, pavement, surfacing or other specified layer.

Bid - See Proposal.

Bidder - An individual, partnership, corporation, joint venture or other legal entity submitting, directly or through a duly authorized representative or agent, a proposal for the work or construction contemplated.

Bidding Documents (or Solicitation Documents) - The published solicitation notice, bid requirements, bid forms and the proposed contract documents including all addenda and clarifications issued prior to receipt of the bid.

Bid Security - The security furnished by the bidder from which the State may recover its damages in the event the bidder breaches its promise to enter into a contract with the State, or fails to execute the required bonds covering the work contemplated, if its proposal is accepted.

Blue Book - EquipmentWatch Cost Recovery (formerly known as EquipmentWatch Rental Rate Blue Book), available from EquipmentWatch, a division of Penton, Inc.

Calendar Day - See Day.

Change Order (or Contract Change Order) - A written order signed by the Engineer issued with or without the consent of the Contractor directing changes in the work, contract time or contract price. The purposes of a change order include, but are not limited to (1) establishing a price or time adjustment for changes in the work; (2) establishing full payment for direct, indirect, and consequential costs, including costs of delay; (3) establishing price adjustment or time adjustment for work covered and affected by one or more field orders; or (4) settling Contractor's claims for direct, indirect, and consequential costs, or for additional contract time, in whole or in part.

Completion - See Substantial Completion and Final Completion.

Completion Date - The date specified by the contract for the completion of all work on the project or of a designated portion of the project.

Comptroller - the Comptroller of the State of Hawaii, Department of Accounting and General Services.

Contract - The written agreement between the Contractor and the State, by which the Contractor shall provide all labor, equipment, and materials and perform the specified work within the contract time stipulated, and by which the State of Hawaii is obligated to compensate the Contractor at the prices set forth in the contract documents.

Contract Certification Date - The Date on which the Deputy Comptroller for the State of Hawaii (or authorized representative) signs the Contract Certification.

Contract Completion Date - The calendar day on which all work on the project, required by the contract, must be completed. See CONTRACT TIME.

Contract Documents - The contract, solicitation, addenda, notice to bidders, Contractor's bid proposal (including wage schedule, list of subcontractors and other documentations accompanying the bid), notice to proceed, bonds, general provisions, special provisions, specifications, drawings, all modifications, all written amendments, change orders, field orders, orders for minor changes in the work, the Engineer's written interpretations and clarifications issued on or after the effective date of the contract.

Contract Item (Pay Item) - A specific unit of work for which there is a price in the contract.

Contract Modification (Modification) - A change order that is mutually agreed to and signed by the parties to the contract.

Contract Price - The amount designated on the face of the contract for the performance of work.

Contract Time (or Contract Duration) - The number of calendar or working days provided for completion of the contract, inclusive of authorized time extensions. Contract time shall commence on the Start Work Date and end on the Substantial Completion Date. If in lieu of providing a number of calendar or working days, the contract requires completion by a certain date, the work shall be completed by that date.

Contracting Officer - See Engineer.

Contractor - Any individual, partnership, firm, corporation, joint venture, or other legal entity undertaking the execution of the work under the terms of the contract with the State.

Critical Path - Longest logical sequence of activities that must be completed on schedule for the entire project to be completed on schedule.

Day - Any day shown on the calendar, beginning at midnight and proceeding up to, but not including, midnight the following day. If no designation of calendar or working day is made, "day" shall mean calendar day.

Department - The Department of Transportation of the State of Hawaii (abbreviated HDOT).

Director - The Director of the HDOT acting directly or through duly authorized representatives.

Plans (or Drawings) - The contract drawings in graphic or pictorial form including the notes, tables and other notations thereon indicating the design, location, character, dimensions, and details of the work.

Engineer - The Highway Administrator, Highways Division, HDOT, or the authorized person delegated to act on the Administrator's behalf.

Equipment - All machinery, tools, and apparatus needed to complete the contract.

Field Order - A written order issued by the Engineer or the Engineer's authorized representative to the Contractor requiring a change or changes to the contract work. A field order may (1) establish a price adjustment or time adjustment; or (2) may declare that no adjustment will be made to contract price or contract time; or (3) may request the Contractor to submit a proposal for an adjustment to the contract price or contract time.

Final Acceptance - The Status of the project when the Engineer finds that the Contractor has satisfactorily completed all contract work in compliance with the contract including all plant establishment requirements, and all the materials have been accepted by the State.

Final Completion - The date set by the Director that all work required by the contract has been completed in full compliance with the contract documents.

Final Inspection - Inspection where all contract items (with the exception of Planting Period and Plant Establishment Period) are accepted by the Engineer. Substantial Completion will be issued by the Engineer based on the satisfactory results of the Final Inspection.

Float - The amount of time between when an activity can start and when an activity must start, i.e., the time available to complete non-critical activities required for the performance of the work without affecting the critical path.

Guarantee - Legally enforceable assurance of the duration of satisfactory performance of quality of a product or work.

Hawaii Administrative Rules - Rules adopted by the State in accordance with Chapter 91 of the Hawaii Revised Statutes, as amended.

Hawaii eProcurement System (HlePRO) - The State of Hawaii eProcurement System for issuing solicitations, receiving proposals and responses, and issuing notices of award.

Highway (Street, Road, or Roadway) - A public way within a right-of-way designed, intended, and set aside for use by vehicles, bicyclists, or pedestrians.

Highways Division - The Highways Division of the Hawaii Department of Transportation constituted under the laws of Hawaii for the administration of highway work.

Holidays - The days of each year which are set apart and established as State holidays pursuant to Chapter 8 of the Hawaii Revised Statutes, as amended.

Inspector - The Engineer's authorized representative assigned to make detailed inspections of contract performance, prescribed work, and materials supplied.

Laboratory - The testing laboratory of the Highways Division or other testing laboratories that may be designated by the Engineer.

Laws - All Federal, State, and local laws, executive orders and regulations having the force of law.

Leveling Course - An aggregate mixture course of variable thickness used to restore horizontal and vertical uniformity to existing pavements or shoulders.

Liquidated Damages - The amount prescribed in Subsection 108.08 - Liquidated Damages for Failure to Complete the Work or Portions of the Work on Time, to be paid to the State or to be deducted from any payments payable to or, which may become payable to the Contractor.

Lump Sum (LS) - When used as a payment method means complete payment for the item of work described in the contract documents.

Material - Any natural or manmade substance or item specified in the contract to be incorporated in the work.

Notice to Bidders - The advertisement for proposals for all work or materials on which bids are required. Such advertisement will indicate the location of the work to be done or the character of the material to be furnished and the time and place for the opening of proposals.

Notice to Proceed - Written notice from the Engineer to the Contractor identifying the date on which the Contractor is to begin procuring materials and required permits and adjusting work forces, equipment, schedules, etc. prior to beginning physical work.

Pavement - The uppermost layer of material placed on the traveled way or shoulders or both. Pavement and surfacing may be interchangeable.

Pavement Structure - The combination of subbase, base, pavement, surfacing or other specified layer of a roadway constructed on a subgrade to support the traffic load.

Payment Bond - The security executed by the Contractor and surety or sureties furnished to the Department to guarantee payment by the Contractor to laborers, material suppliers and subcontractors in accordance with the terms of the contract.

Physical Work - Physical construction activities on the project site or at appurtenant facilities including staging areas. It includes; (i) building or installing any structures or facilities including, but not limited to sign erection; BMP installation; field office site grading and building; (ii) removal, adjustment, or demolition of physical obstructions on site; (iii) any ground breaking activities; and (iv) any utility work. It does not include pre-construction environmental testing (such as water quality baseline measurements) that may be required as part of contract.

Pre-Final Inspection - Inspection scheduled when Contractor notifies Engineer that all physical work on the project, with the exception of planting period and plant establishment period, has been completed. Notice from Contractor of substantial completion will suspend contract time until Contractor receives punchlist from Engineer.

Profile Grade - The elevation or gradient of a vertical plane intersecting the top surface of the proposed pavement.

Project Acceptance Date - The calendar day on which the Engineer accepts the project as completed. See Final Completion.

Proposal (Bid) - The executed document submitted by a Bidder in response to a solicitation request, to perform the work required by the proposed contract documents, for the price quoted and within the time allotted.

Public Traffic - Vehicular or pedestrian movement on a public way.

Punchlist - A list compiled by the Engineer specifying work yet to be completed or corrected by the Contractor in order to substantially complete the contract.

Questionnaire - The specified forms on which the bidder shall furnish required information as to its ability to perform and finance the work.

Request for Change Proposal - A written notice from the Engineer to the Contractor requesting that the Contractor provide a price and/or time proposal for contemplated changes preparatory to the issuance of a field order or change order.

Right-of-Way - Land, property, or property interests acquired by a government agency for, or devoted to transportation purposes.

Roadbed - The graded portion of a highway within top and side slopes, prepared as a foundation for the pavement structure and shoulders.

Roadside - The area between the outside edges of the shoulders and the right-of-way boundaries. Unpaved median areas between inside shoulders of divided highways and infield areas of interchanges are included.

Section and Subsection - Section or subsection shall be understood to refer to these specifications unless otherwise specified.

Shop Drawings - All drawings, diagrams, illustrations, schedules and other data or information which are specifically prepared or assembled by or for the Contractor and submitted by the Contractor to illustrate some portion of the work.

Shoulder - The portion of the roadway next to the traveled way for: accommodation of stopped vehicles, placement of underground facilities, emergency use, and lateral support of base and surface courses.

Sidewalk - That portion of the roadway primarily constructed for use by pedestrians.

Solicitation - An invitation to bid or request for proposals or any other document issued by the Department to solicit bids or offers to perform a contract. The solicitation may indicate the time and place to receive the bids or offers and the location, nature and character of the work, construction or materials to be provided.

Specifications - Compilation of provisions and requirements to perform prescribed work.

(A) **Standard Specifications.** Specifications by the State intended for general application and repetitive use.

(B) **Special Provisions.** Revisions and additions to the standard specifications applicable to an individual project.

Standard Plans - Drawings provided by the State for specific items of work approved for repetitive use.

State - The State of Hawaii, its Departments and agencies, acting through its authorized representative(s).

State Waters – All waters, fresh, brackish, or salt, around and within the State, including, but not limited to, coastal waters, streams, rivers, drainage ditches, ponds, reservoirs, canals, ground waters, and lakes; provided that drainage ditches, ponds, and reservoirs required as a part of a water pollution control system are excluded.

Start Work Date - Date on which Contractor begins physical work on the contract. This date shall also be the beginning of Contract Time.

Structures - Bridges, culverts, catch basins, drop inlets, retaining walls, cribbing, manholes, endwalls, buildings, sewers, service pipes, underdrains, foundation drains, and other such features that may be encountered in the work.

Subbase - A layer of specified material of specified thickness between the subgrade and a base.

Subcontract - Any written agreement between the Contractor and its subcontractors which contains the conditions under which the subcontractor is to perform a portion of the work for the Contractor.

Subcontractor - An individual, partnership, firm, corporation, joint venture or other legal entity, as licensed or required to be licensed under Chapter 444, Hawaii Revised Statutes, as amended, which enters into an agreement with the Contractor to perform a portion of the work.

Subgrade - The top surface of completed earthwork on which subbase, base, surfacing, pavement, or a course of other material is to be placed.

Substantial Completion - The Status of the project when the Contractor has completed the work, except for the planting period and plant establishment period, and each of the following requirements are met:

- (1) All traffic lanes (including shoulders, ramps, sidewalks and bike paths) are in their final configuration as designed and the final wearing surface has been installed;
- (2) All operational and safety devices have been installed in accordance with the contract documents including guardrails, end treatments, traffic barriers, required signs and pavement markings, drainage, parapet, and bridge and pavement structures;
- (3) All required illumination and lighting for normal and safe use and operation is installed and functional in accordance with the contract documents;
- (4) All utilities and services are connected and working;
- (5) The need for temporary traffic controls or lane closures at any time has ceased, except for lane closures required for routine maintenance;
- (6) The building, structure, improvement or facility can be used for its intended purpose.

Substantial Completion Date - The date the Substantial Completion is granted by the Engineer in Writing and Contract Time stops.

Superintendent - The employee of the Contractor who is responsible for all the work and is a Contractor's agent for communications to and from the State.

Surety - The qualified individual, firm or corporation other than the Contractor, which executes a bond with and for the Contractor to insure its acceptable performance of the contract.

Surfacing - The uppermost layer of material placed on the traveled way or shoulders. This term is used interchangeably with pavement.

Traveled Way - The portion of the roadway for the movement of vehicles, exclusive of shoulders.

Unsuitable Material - Materials that contain organic matter, muck, humus, peat, sticks, debris, chemicals, toxic matter, or other deleterious materials not suitable for use in earthwork.

Utility - A line, facility, or system for producing, transmitting, or distributing communications, power, electricity, heat, gas, oil, water, steam, waste, or storm water.

Utility Owner - The entity, whether private or owned by a State, Federal, or County governmental body, that has the power and responsibility to grant approval for, or undertake construction work involving a particular utility.

Water Pollutant - Dredged spoil, solid refuse, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical waste, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, soil, sediment, cellar dirt and industrial, municipal, and agricultural waste.

Water Pollution - (1) Such contamination or other alteration of the physical, chemical, or biological properties of any state waters, including change in temperature, taste, color, turbidity, or odor of the waters, or (2) Such discharge of any liquid, gaseous, solid, radioactive, or other substances into any state waters, as will or is likely to create a nuisance or render such waters unreasonably harmful, detrimental, or injurious to public health, safety, or welfare, including harm, detriment, or injury to public water supplies, fish and aquatic life and wildlife, recreational purposes and agricultural and industrial research and scientific uses of such waters or as will or is likely to violate any water quality standards, effluent standards, treatment and pretreatment standards, or standards of performance for new sources adopted by the Department of Health.

Work - The furnishing of all labor, material, equipment, and other incidentals necessary or convenient for the successful execution of all the duties and obligations imposed by the contract.

Working Day - A calendar day in which a Contractor is capable of working four or more hours with its normal work force, exclusive of:

548 **(1)** Saturdays, Sundays, and recognized legal State holidays and such
549 other days specified by the contract documents as non-working days,
550

551 **(2)** Day in which the Engineer suspends work for four or more hours
552 through no fault of the Contractor.”
553

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555

556

557

END OF SECTION 101

1 Make this section a part of the Standard Specifications:

2
3 **"SECTION 102 - BIDDING REQUIREMENTS AND CONDITIONS**

4
5
6 **102.01 Prequalification of Bidders.** Prospective bidders shall be capable of
7 performing the work for which they are bidding.
8

9 In accordance with HRS Chapter 103D-310, the Department may require
10 any prospective bidder to submit answers to questions contained in the 'Standard
11 Qualification Questionnaire For Prospective Bidders On Public Works Contracts'
12 furnished by the Department, properly executed and notarized, setting forth a
13 complete statement of the experience of such prospective bidder and its
14 organization in performing similar work and a statement of the equipment
15 proposed to be used, together with adequate proof of the availability of such
16 equipment. Whenever it appears to the Department, from answers to the
17 questionnaire or otherwise, that the prospective bidder is not fully qualified and
18 able to perform the intended work, the Department will, after affording the
19 prospective bidder an opportunity to be heard and if still of the opinion that the
20 bidder is not fully qualified to perform the work, refuse to receive or consider any
21 bid offered by the prospective bidder. All information contained in the answers to
22 the questionnaire shall be kept confidential. Questionnaire so submitted shall be
23 returned to the bidders after serving their purpose.
24

25 No person, firm or corporation may bid where (1) the person, firm, or
26 corporation, or (2) a corporation owned substantially by the person, firm, or
27 corporation, or (3) a substantial stockholder or an officer of the corporation, or (4)
28 a partner or substantial investor in the firm is in arrears in payments owed to the
29 State or its political subdivisions or is in default as a surety or failure to do
30 faithfully and diligently previous contracts with the State.
31

32 **102.02 Contents of Proposal Forms.** The Department will furnish
33 prospective bidders with proposal forms posted in HlePRO stating:
34

- 35 (1) The location,
36
37 (2) Description of the proposed work,
38
39 (3) The approximate quantities,
40
41 (4) Items of work to be done or materials to be furnished,
42
43 (5) A schedule of items, and
44
45 (6) The time in which the work shall be completed.
46

Papers bound with or attached to the proposal form are part of the proposal. The bidder shall not detach or alter the papers bound with or attached to the proposal when the bidder submits its proposal through HlePRO.

Also, the bidder shall consider other documents including the plans and specifications a part of the proposal form whether attached or not.

102.03 (Unassigned)

102.04 Estimated Quantities. The quantities shown in the contract are approximate and are for the comparison of bids only. The actual quantity of work may not correspond with the quantities shown in the contract. The Department will make payment to the Contractor for unit price items in accordance with the contract for only the following:

(1) Actual quantities of work done and accepted, not the estimated quantities; or

(2) Actual quantities of materials furnished, not the estimated quantities.

The Department may increase, decrease, or omit each scheduled quantities of work to be done and materials to be furnished. When the Department increases or decreases the estimated quantity of a contract item by more than 15% the Department will make payment for such items in accordance with Subsection 104.06 - Methods of Price Adjustment.

102.05 Examination of Contract and Site of Work. The bidder shall examine carefully the site of the proposed work and contract before submitting a proposal.

By the act of submitting a bid for the proposed contract, the bidder warrants that:

(1) The bidder and its Subcontractors have reviewed the contract documents and found them free from ambiguities and sufficient for the purpose intended;

(2) The bidder and its workers, employees and subcontractors have the skills and experience in the type of work required by the contract documents bid upon;

(3) Neither the bidder nor its employees, agents, suppliers or subcontractors have relied upon verbal representations from the Department, its employees or agents, including architects, engineers or consultants, in assembling the bid figure; and

(4) The basis for the bid figure is solely on the construction contract documents.

Also, the bidder warrants that the bidder has examined the site of the work. From its investigations, the bidder acknowledges satisfaction on:

- (1) The nature and location of the work;
- (2) The character, quality, and quantity of materials;
- (3) The difficulties to be encountered; and
- (4) The kind and amount of equipment and other facilities needed.

Subsurface information or hydrographic survey data furnished are for the bidders' convenience only. The data and information furnished are the product of the Department's interpretation gathered in investigations made at the specific locations. These conditions may not be typical of conditions at other locations within the project area or that such conditions remain unchanged. Also, conditions found at the time of the subsurface explorations may not be the same conditions when work starts. The bidder shall be solely responsible for assumptions, deductions, or conclusions the bidder may derive from the subsurface information or data furnished.

If the Engineer determines that the natural conditions differ from that originally anticipated or contemplated by the Contractor in the items of excavation, the State may treat the difference in natural conditions, as falling within the meaning of Subsection 104.02 – Changes.

102.06 Preparation of Proposal. The submittal of its proposal shall be on forms furnished by the Department. The bidder shall specify in words or figures:

- (1) A unit price for each pay item with a quantity given;
- (2) The products of the respective unit prices and quantities;
- (3) The lump sum amount; and
- (4) The total amount of the proposal obtained by adding the amounts of the several items.

The words and figures shall be in ink or typed. If a discrepancy occurs between the prices written in words and those written in figures, the prices written in words shall govern.

138 When an item in the proposal contains an option to be made, the bidder
139 shall choose in accordance with the contract for that particular item.
140 Determination of an option will not permit the Contractor to choose again.

141
142 The bidder shall sign the proposal properly in ink. A duly authorized
143 representatives of the bidder or by an agent of the bidder legally qualified and
144 acceptable to the Department shall sign, including one or more partners of the
145 bidder and one or more representatives of each entity comprising a joint venture.

146
147 When an agent, other than the officer(s) of a corporation authorized to
148 sign contracts for the corporation or a partner of a partnership, signs the
149 proposals, a 'Power of Attorney' shall be on file with the Department or submitted
150 with the proposal. Otherwise, the Department will reject the proposal as irregular
151 and unauthorized.

152
153 The bidder shall submit acceptable evidence of the authority of the
154 partner, member(s) or officer(s) to sign for the partnership, joint venture, or
155 corporation respectively with the proposal. Otherwise, the Department will reject
156 the proposal as irregular and unauthorized.

157
158 **102.07 Irregular Proposals.** The Department may consider proposals
159 irregular and may reject the proposals for the following reasons:

160
161 (1) The proposal is a form not furnished by the Department, altered, or
162 detached;

163
164 (2) The proposal contains unauthorized additions, conditions, or
165 alternates. Also, the proposal contains irregularities that may tend to
166 make the proposal incomplete, indefinite, or ambiguous to its meaning;

167
168 (3) The bidder adds provisions reserving the right to accept or reject an
169 award. Also, the bidder adds provisions into a contract before an award;

170
171 (4) The proposal does not contain a unit price for each pay item listed
172 except authorized optional pay items; and

173
174 (5) Prices for some items are out of proportion to the prices for other
175 items.

176
177 (6) If in the opinion of the Director, the bidder and its listed
178 subcontractors do not have the Contractor's licenses or combination of
179 Contractor's licenses necessary to complete the work.
180

Where the prospective bidder is bidding on multiple projects simultaneously and the proposal limits the maximum gross amount of awards that the bidder can accept at one bid letting, the proposal is not irregular if the limit on the gross amount of awards is clear, and the Department selects the awards that can be given.

102.08 Proposal Guaranty. The Department will not consider a proposal of \$25,000 or more unless accompanied by:

- (1) A deposit of legal tender; or
- (2) A valid surety bid bond, underwritten by a company licensed to issue bonds in the State of Hawaii, in the form and composed, substantially, with the same language as provided herewith and signed by both parties; or
- (3) A certificate of deposit, share certificate, cashier's check, treasurer's check, teller's check, or official check drawn by, or a certified check accepted by and payable on demand to the State by a bank, savings institution, or credit union insured by the Federal Deposit Insurance Corporation (FDIC) or the National Credit Union Administration (NCUA).
 - (a) The bidder may use these instruments only to a maximum of \$100,000.
 - (b) If the required security or bond amount totals over \$100,000 more than one instrument not exceeding \$100,000 each and issued by different financial institutions shall be acceptable.
 - (c) The instrument shall be made payable at sight to the Department.
 - (d) If bidder elects options (1) or (3) above for its bid security, said bid security shall be in its original form and shall be submitted before the bid deadline to the Contract Office, Department of Transportation, Aliiimoku Hale, 869 Punchbowl Street, Room 103, Honolulu, Hawaii 96813. Original surety bid bonds do not need to be submitted to the Contracts Office. Bidders are reminded that a copy of its surety bid bond shall be included with its bid submitted and uploaded to HlePRO.

In accordance with HRS Chapter 103D-323, the above shall be in a sum not less than 5% of the total amount bid per area.

102.09 Delivery of Proposal. Bidders shall submit and upload the complete proposal in HlePRO prior to the bid opening date and time. Proposals received after said due date and time shall not be considered. Any additional support documents explicitly designated as confidential and/or proprietary shall be uploaded as a separate file to HlePRO. Bidders shall not include confidential and/or proprietary documents with the proposal. The record of each bidder and respective bid shall be open to public inspection. Original (wet ink, hard copy) proposal documents are not required to be submitted. **Contract award shall be based on evaluation of proposals submitted and uploaded to HlePRO.**

FAILURE TO UPLOAD THE COMPLETE PROPOSAL TO HlePRO SHALL BE GROUNDS FOR REJECTION OF THE BID.

If there is a conflict between the specification document and the HlePRO solicitation, the specifications shall govern and control, unless otherwise specified.

102.10 Withdrawal or Revision of Proposals. A bid may be modified or withdrawn prior to the bid opening date and time. Withdrawal or revision of proposal shall be completed, submitted and uploaded to HlePRO prior to the bid opening date and time.

102.11 Public Opening of Proposals. Not applicable.

102.12 Disqualification of Bidders. The Department may disqualify a bidder and reject its proposal for the following reasons:

- (1) Submittal of more than one proposal whether under the same or different name.
- (2) Evidence of collusion among bidders. The Department will not recognize participants in collusion as bidders for any future work of the Department until such participants are reinstated as qualified bidders.
- (3) Lack of proposal guaranty.
- (4) Submittal of an unsigned or improperly signed proposal.
- (5) Submittal of a proposal without a listing of subcontractors or containing only a partial or incomplete listing of subcontractors.
- (6) Submittal of an irregular proposal in accordance with Subsection 102.07 - Irregular Proposals.

(7) Evidence of assistance from a person who has been an employee of the agency within the preceding two years and who participated while in State office or employment in the matter with which the contract is directly concerned, pursuant to HRS Chapter 84-15.

(8) Suspended or debarred in accordance with HRS Chapter 104-25.

(9) Failure to complete the prequalification questionnaire, if applicable.

(10) Failure to attend the mandatory pre-bid meeting, if applicable.

102.13 Material Guaranty. The successful bidder may be required to furnish a statement of the composition, origin, manufacture of materials, and samples.

102.14 Substitution of Materials and Equipment Before Bid Opening. See Subsection 106.13 for Substitution of Materials and Equipment After Bid Opening.

(A) General. When brand names of materials or equipment are specified in the contract documents, they are to indicate a quality, style, appearance, or performance and not to limit competition. The bidder shall base its bid on one of the specified brand names unless alternate brands are qualified as equal or better in an addendum. As specified in the Notice to Bidders, all requests shall be posted as a question in HlePRO under the "Question and Answer" tab.

Supporting documents for specific request shall be emailed to the Project Manager specified in the Notice to Bidders. Request must be posted in HlePRO and supporting documents received by the Project Manager no later than fourteen (14) calendar days before the bid opening date.

An addendum will be issued to inform all prospective bidders of any accepted substitution in accordance with Subsection 102.17 – Addenda.

(B) Statement of Variances. The statement of variances must list all features of the proposed substitution that differ from the contract documents and must further certify that the substitution has no other variant features. The brochure and information submitted shall be clearly marked showing make, model, size, options, and any other features requested by the Engineer and must include sufficient evidence to evaluate each feature listed as a variance. A request will be denied if submitted without sufficient evidence. If after installing the substituted product, an unlisted variance is discovered, the Contractor shall immediately replace the product with a specified product at no increase in contract price and contract time.

317 **(C) Substitution Denial.** Any substitution request not complying with
318 the above requirements will be denied.

319
320 **102.15 Preferences.**

321
322 **(A) Preference for Hawaii Products.** In accordance with ACT 174,
323 SLH 2022, effective June 27, 2022, Hawaii Products Preference shall not
324 apply to solicitations for public works construction. Therefore, the Hawaii
325 Products Preference shall not apply to this project.

326
327 **(B) Preferences for Apprenticeship Programs.** In accordance with
328 ACT 17, SLH 2009 – Apprenticeship Program, a 5% bid adjustment for
329 bidders that are parties to apprenticeship agreements pursuant to Hawaii
330 Revised Statutes (HRS) Section 103-55.6 may be applied to the bidder's
331 price for evaluation purposes. These procedures apply to public works
332 projects with estimated cost of \$250,000 or more and entered into under
333 the provisions of HRS Chapter 103.

334
335 The following provisions apply to this Apprenticeship Program.

336
337 **(1) Definitions**

338
339 **(a)** “Apprenticeable trade”, HRS Section 103-55.6 (c),
340 shall have the same meaning as ‘apprenticeable occupation’
341 pursuant to Hawaii Administrative Rules (HAR) Section 30-1-
342 5.

343
344 **(b)** “Department” means the department of labor and
345 industrial relations.

346
347 **(c)** “Director” means the director of labor and industrial
348 relations.

349
350 **(d)** “Employ” means the employment of a person in an
351 employer-employee relations.

352
353 **(e)** “Governmental body” means as defined in HRS
354 Section 103D-104.

355
356 **(f)** “Party to an apprenticeship agreement” means party
357 to a registered apprenticeship program with the department
358 of labor and industrial relations.

359
360 **(g)** “Preference” means the 5% by which the qualified
361 bidder's offer amount would be decreased for evaluation
362 purposes.

363
364 (h) "Public work" shall be as defined in HRS Section 104-
365 2 and HAR Section 12-22-1.

366
367 (i) "Registered apprenticeship program" means a
368 construction trade program approved by the department
369 pursuant to HAR Section 12-30-1 and Section 12-30-4.

370
371 (j) "Sponsor" means an operator of an apprenticeship
372 program and in whose name the program is approved and
373 registered with the department of labor and industrial
374 relations pursuant to HAR Section 12-30-1.

375
376 (k) Offeror – Entity/bidder submitting a proposal to
377 undertake a project.

378
379 (l) Procurement Officer – Director of Transportation or
380 his authorized representative.

381
382 (2) Qualification Procedures

383
384 (a) Any bidder seeking the preference must be a party to
385 an apprenticeship agreement registered with the department
386 at the time the offer is made for each apprenticeable trade
387 the bidder will employ to construct the public works projects
388 for which the offer is being made.

389
390 1. The apprenticeship agreement shall be
391 registered and conform to the requirements of HRS
392 Chapter 372.

393
394 2. Subcontractors do not have to be a party to an
395 apprenticeship agreement for the bidder to obtain the
396 preference.

397
398 3. The bidder is not required to have apprentices in
399 its employ at the time of submittal of an offer to qualify
400 for the preference.

401
402 (b) The department shall:

403
404 1. Develop and maintain a list of construction
405 trades in registered apprenticeship programs which
406 conform to HRS Chapter 372; and

407
408 2. Electronically post the list, including any

amendments, on the department website
(<http://labor.hawaii.gov>).

(c) Bidder is responsible to comply with all submission requirements for registration of its apprenticeship program before requesting a preference.

(d) Bidder shall provide a certification by the sponsor of the respective registered apprenticeship programs covering the relevant trade(s) for the public works project.

(e) *Certification Form 1* issued by the department shall include:

1. Contractor information;
2. Solicitation reference;
3. Trade(s);
4. Date and name of apprenticeship program;
5. Signature of authorized training coordinator or training trust fund administrator certifying that the contractor is a participant in the program, and that the program is registered with the department;
6. Contract information for sponsor's authorized representative signing the form;
7. Number of apprentices enrolled in the program, number who successfully completed the apprenticeship program in the past 12 months, including whether the contractor is signatory to a collective bargaining agreement for that trade, or if not, provide for attachment of a copy of the agreement between the contractor and the program.

(3) Solicitation Procedures.

(a) If the NTB indicates that this project is covered by this preference, and the offer is less than \$250,000 this preference will still be applicable in determining the lowest bidder.

(b) A claim for this preference must include the following:

1. Allow bidder seeking to claim the preference to state the trades the bidder will employ to perform the work;

2. For each trade to be employed to perform the work, the bidder shall submit a completed signed original *Certification Form 1* verifying participation in an apprenticeship program registered with the department;

3. The *Certification Form 1* shall be authorized by an apprenticeship sponsor of the department's list of registered apprenticeship programs. The authorization shall be an original signature by an authorized official of the apprenticeship sponsor; and

4. The completed *Certification Form 1* for each trade must be submitted by the bidder with the offer. Previous certifications shall not apply unless allowed by the solicitation.

(c) Upon receiving *Certification Form 1*, the procurement officer will verify with the department that the apprenticeship program is on the list of apprenticeship programs registered with the department. If the programs are not confirmed by the department, the bidder will not qualify for the preference.

(4) Evaluation and Contract Award

(a) If the bidder certifies participation in an apprenticeship program for each trade which will be employed by the bidder for the project, the procurement officer shall apply the preference and decrease the bidder's total bid amount by five per cent (5%) for evaluation purposes.

(b) Should the bidder qualify for other statutory preferences, all applicable preferences shall be applied to the bidder's price.

(c) The contract amount shall be the original offer amount, exclusive of any preference; the preference is only for evaluation purposes.

(d) Any claims challenging a bidder's representation that the bidder is a participant in an apprenticeship program(s) as claimed, shall be submitted to the procurement officer. The

procurement officer will refer the challenge to the department of labor and industrial relations who shall investigate any such claims and shall make a determination.

(5) Contract Administration

(a) For the duration of a contract awarded utilizing the apprenticeship preference, the contractor shall certify each month that work is being conducted on the project, that it continues to be a participant in the relevant apprenticeship program for each trade it employs.

(b) Monthly certification shall be made on *Monthly Certification Form 2* prepared and made available by the department, be a signed original by the respective apprenticeship program sponsors authorized official, and submitted by the contractor with its monthly payment requests.

(c) Should the contractor fail or refuse to submit its monthly certification forms, or at any time during the construction of the project, cease to be a part to a registered apprenticeship agreement for each apprenticeable trades the contractor employs, or will employ, the contractor will be subject to the following sanctions:

1. Withholding of the requested payment until the required form(s) are submitted;
2. Temporary or permanent cessation of work on the project, without recourse to breach of contract claims by the contractor; provided the agency shall be entitled to restitution for nonperformance or liquidated damages claims; or
3. Proceed to debar or suspend pursuant to HRS Section 103D-702.

(d) If events such as “acts of God,” acts of a public enemy, acts of the State or any other governmental body in its sovereign or contractual capacity, fires, floods, epidemics, freight embargoes, unusually severe weather, or strikes or other labor disputes prevent the contractor from submitting the certification forms, the contractor shall not be penalized as provided herein, provided the contractor completely and expeditiously complies with the certification process when

the event is over.

This subsection shall not apply when its application will disqualify the State from receiving federal funds or aid.

(C) Preference for Recycled Products. Recycled Products shall not apply to this project.

(D) Preference to Hawaii Bidder(s)/Offeror(s). In accordance with HRS §103D-302, the Hawaii bidder preference is applicable to this solicitation, for evaluation purposes only. Bidders (or offerors) desiring to qualify for the five percent (5%) preference shall submit a completed Hawaii Bidder/Offeror Preference Certification Form (Form SPO-081) with each bid at or before the time set for receipt of bids. Certifications submitted for previous or other solicitations will not be accepted.

(E) Evaluation Procedures and Contract Award. For bid evaluation, the Engineer will evaluate the bids by applying the applicable preferences selected by the bidders according to the contract. The Engineer will base the calculations for adjustments upon the original bid prices offered. If more than one preference applies, the evaluated bid price shall be the sum of the original bid price plus applicable preference adjustments.

The Engineer will award the contract to the responsible bidder submitting the responsive bid with the lowest evaluated bid price. The contract amount of the contract awarded shall be the original bid price offered exclusive of any preference.

102.16 Certification for Safety and Health Program for Bids in excess of \$100,000. In accordance with HRS Chapter 396-18, the bidder or offeror, by signing and submitting this proposal, certifies that a written safety and health plan for this project will be available and implemented by the notice to proceed date for this project. Details of the requirements of this plan may be obtained from the State Department of Labor and Industrial Relations, Occupational Safety and Health Division (HIOSH).

102.17 Addenda. Addenda issued shall become part of the contract documents. Addenda to the bid documents will be provided to all prospective bidders via HlePRO. Each addendum shall be an addition to the contract documents. The terms and requirements of the bid documents (i.e., drawings, specifications and other bid and contract documents) cannot be changed prior to the bid opening except by a duly issued addendum."

END OF SECTION 102

1 Make this section a part of the Standard Specifications:

2
3 **“SECTION 103 - AWARD AND EXECUTION OF CONTRACT**

4
5
6 **103.01 Consideration of Proposals.** The Department will compare the
7 proposals in terms of the summation of the products of the approximate quantities
8 and the unit bid prices after the submittal date and time established in HlePRO.
9 If a discrepancy occurs between the unit bid price and the bid price, the unit bid
10 price shall govern.

11
12 The Department reserves the right to reject proposals, waive technicalities
13 or advertise for new proposals, if the rejection, waiver, or new advertisement
14 favors the Department.

15
16 **103.02 Award of Contract.** The award of contract, if it be awarded, will be
17 made within 60 calendar days after the opening of bids, to the lowest responsible
18 and responsive bidder whose proposal complies with all the prescribed
19 requirements. The Department may request the bidders to allow the Department
20 to consider the bids for the issuance of an award beyond the 60-calendar day
21 period. Agreement to such an extension must be made by a bidder in writing. Only
22 bidders who have agreed to such an extension will be eligible for the award. No
23 response to request shall mean the bidder shall no longer be eligible for award.

24
25 **(1) Requirement for Award.** The Bidder, as proof of compliance
26 with the requirements of Section 103D-310(c), HRS, upon award of
27 a contract made pursuant to Section 103D-302, HRS, shall provide
28 the documents listed below. The documents shall be submitted
29 promptly to the Department. If a valid certificate/clearance is not
30 submitted on a timely basis upon award, the Bidder may be deemed
31 non-responsible. See also Subsection 108.03 – Preconstruction
32 Data Submittal.

33
34 **(A) Tax Clearance.** Pursuant to Sections 103D-310(c), 103-53 and
35 103D-328, HRS, the bidder shall submit a tax clearance certificate State of
36 Hawaii Department of Taxation (DOTAX) and the Internal Revenue Service
37 (IRS), subject to Section 103D-328, HRS, current within six (6) months of
38 issuance date.

39
40 FORM A6, TAX CLEARANCE CERTIFICATE, is available at
41 the following website:

42
43 <https://tax.hawaii.gov/>

44
45 To receive DOTAX Forms by fax or mail, phone
46 (808) 587-4242 or 1-800-222-3229.

The application for the Tax Clearance Certificate is the responsibility of the bidder. Bidder shall submit directly to the DOTAX or IRS. The approved certificate may then be submitted to the Department.

(B) DLIR Certificate of Compliance. Pursuant to Section 103D-310(c), HRS, the bidder shall submit a certificate of compliance for Hawaii Employment Security Law (Chapter 383, HRS), Workers' Compensation Law (Chapter 386, HRS), Temporary Disability Insurance (Chapter 392, HRS), and Prepaid Health Care Act (Chapter 393, HRS), from the State of Hawaii Department of Labor and Industrial Relations (DLIR), current within six (6) months from the issuance date.

FORM LIR#27, APPLICATION FOR CERTIFICATE OF COMPLIANCE WITH SECTION 3-122-112, HAR, is available at the following website:

<http://labor.hawaii.gov/>

Contact the DLIR Unemployment Insurance Division at (808) 586-8926 for additional information.

Inquiries regarding the status of a LIR#27 Form may be made by calling the DLIR Disability Compensation Division at (808) 586-9200.

The application for the Certificate of Compliance is the responsibility of the bidder and must be submitted directly to the DLIR. The approved certificate may then be submitted to the Department.

(C) DCCA Certificate of Good Standing. Pursuant to Section 103D-310(c), HRS, the bidder shall submit a Certificate of Good Standing from the Business Registration Division (BREG) of the State of Hawaii Department of Commerce and Consumer Affairs (DCCA), current within six (6) months of issuance date, to demonstrate that it is either:

(1) Incorporated or organized under the laws of the State; or

(2) Registered to do business in the State as a separate branch or division that is capable of fully performing under the contract.

A Hawaii business that is a sole proprietorship is not required to register with the BREG, and therefore not required to submit a Certificate of Good Standing. Bidders are advised that there are costs associated with registering and obtaining a Certificate of Good Standing from the DCCA.

To purchase a CERTIFICATE OF GOOD STANDING, go to On-Line Services at the following website:

<http://cca.hawaii.gov/>

The application for the Certificate of Good Standing is the responsibility of the bidder. Bidder shall submit directly to the DCCA. The approved certificate may then be submitted to the Department.

(D) Hawaii Compliance Express (HCE). In lieu of the certificates referenced in subsection A, B, and C, the bidder may make available proof of compliance through a state procurement officer designated certification process.

This contract, to be awarded, is considered a requirement contract, as the Portland cement concrete (PCC) sidewalk, curb and/or gutter and concrete median barrier repairs by the Contractor will be made on an "as-needed" basis during the 24-month contract period. The State gives no assurance as to the number of services it will purchase.

The bidder must maintain an office on the Island of Oahu to be awarded the contract.

103.03 Cancellation of Award. The Department reserves the right to cancel the award of contracts before the execution of said contract by the parties. There will be no liability to the awardee and to other bidders.

103.04 Return of Proposal Guaranty. The Department will return the proposal guaranties, except those of the three lowest bidders, after the Department checks the proposals. The Department will return the proposal guaranties of the remaining two lowest bidders not awarded the contract within five working days following the execution of the contract. The Department will return the successful bidder's proposal guaranty after the successful bidder furnishes a bond and executes the contract.

103.05 Requirement of Contract Bond. At the time of execution of the contract, the successful bidder shall file a good and sufficient performance bond and a payment bond on the forms furnished by the Department conditioned for the full and faithful performance of the contract in accordance with the terms and intent thereof and for the prompt payment to all others for all labor and material furnished by them to the bidder and used in the prosecution of the work provided for in the contract.

The bidder shall limit the acceptable performance and payment bonds to the following:

(a) Legal tender;

(b) Surety bond underwritten by a company licensed to issue bonds in the State of Hawaii; or

(c) A certificate of deposit; share certificate; cashier's check; treasurer's check, teller's check drawn by, or a certified check accepted by and payable on demand to the State by a bank savings institution or credit union insured by the Federal Deposit Insurance Corporation (FDIC) or the National Credit Union Administration (NCUA).

1. The bidder may use these instruments only to a maximum of \$100,000.

2. If the required security or bond amount totals over \$100,000 more than one instrument not exceeding \$100,000 each and issued by different financial institutions shall be acceptable.

Such bonds shall also by the terms inure to the benefit of any and all persons entitled to file claims for labor done or material furnished in the work so as to give them a right of action as contemplated by Section 103D-324, HRS.

In as much as the contract to be executed is a price-term, open end, or requirements contract under which the contract price, or total amount to be paid the Contractor cannot be determined at the time the contract is executed, the performance and payment bond amounts required for the work at each Area shall be as follows:

<u>Proposal</u>	<u>Security Amount</u>
A – Area 1	\$121,200.00
B – Area 2	\$121,200.00
C – Area 3	\$121,200.00
D – Area 4	\$121,200.00

The above amounts represent the performance and payment bond amounts required for the initial term of the contract. If work orders issued during the initial contract term exceed the original bond requirements, the procurement officer shall require additional performance and payment bonds to cover said work orders.

The contract bond required shall be furnished by the Contractor for the term of the contract. The bond of the contract shall be submitted to the State, or such additional time as may be granted by the State.

If the contract is extended beyond the initial term, the State shall require new bonds for each subsequent term. Such performance and payment bonds for

each subsequent term may be extensions of the original bond(s) by endorsements thereto, provided that, as to any claims which may have arisen or may arise while said bonds were in effect, said bonds shall remain in full force and effect.

103.06 Execution of the Contract. The contract bond and Chapter 104, HRS - Compliance Certificate, similar to a copy of the same annexed hereto, shall be executed by the successful bidder and returned within ten days after the award of the contract or within such further time as the Director may allow after the bidder has received the contract for execution.

The contract shall not bind the Department unless said parties execute the contract and the Director of Finance endorses the bidder's certificate in accordance with Section 103-39, HRS.

103.07 Failure to Execute Contract. Failure to execute the contract and file acceptable bonds shall be cause for the cancellation of the award in accordance with Subsection 103.06 - Execution of the Contract. Also, the Contractor forfeits the proposal guaranty which becomes the property of the Department. This is not a penalty, but liquidated damages sustained by the State. The Department may then make award to the next lowest responsible and responsive bidder, or the Department may readvertise and construct the work under contract."

END OF SECTION 103

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(I) Amend Subsection 104.01 - Intent of Contract, Duty of Contractor by adding the following after line 10:

The Contractor will be required to respond to a sidewalk, curb and/or gutter or concrete median barrier work request within 48 hours after notification.

The Contractor shall repair damaged sidewalks, curbs and/or gutters and concrete median barriers as requested by the Department from time to time during the term of the contract. Payment will be made for the actual work completed as provided for in the contract documents.

(II) Amend **Section 104.06 - Methods of Price Adjustment** as follows:

(1) By written agreement on a fixed price adjustment before commencement of the pertinent performance.

(2) By unit prices or other price adjustments specified in the contract or subsequently agreed upon before commencement of the pertinent performance.

(3) The Engineer may base the adjustment for a lump sum item on a calculated proportionate unit price. The Engineer will calculate the proportionate unit price by dividing the original contract lump sum price by

the actual or original estimated quantity established by the contract documents.

(4) In any other lawful manner as the parties may mutually agree upon before commencement of the pertinent performance.

(5) At the sole option of the Engineer, work may be paid for on a force account basis in accordance with Subsection 109.06 - Force Account Provisions and Compensation.

(6) By the cost variations attributable to the events or situations with adjustment of profit and fee, all as specified in the contract or subsequently agreed upon before commencement of the pertinent performance.

(7) In the absence of agreement by the parties:

(a) For change orders with value not exceeding \$50,000 by documented actual costs of the work, allowing for overhead and profit as set forth in Section 109.05 - Allowances for Overhead and Profit. A change order shall be issued within fifteen days of submission by the Contractor of proper documentation of completed force account work, whether periodic (conforming to the applicable billing cycle) or final. The Engineer shall return any documentation that is defective, to the Contractor within fifteen days after receipt, with a statement identifying the defect; or

(b) For change orders with value exceeding \$50,000 by a unilateral determination by the Engineer of the costs attributable to the events or situations with adjustment of profit and fee, all as computed by the Engineer in accordance with applicable sections of HAR Chapters 3-123 and 3-126, and Section 109.05 - Allowances for Overhead and Profit. When a unilateral determination has been made, a unilateral change order shall be issued within ten days. Upon receipt of the unilateral change order, if the Contractor does not agree with any of the terms or conditions, or the adjustment or non-adjustment of the contract time or contract price, the Contractor shall file a notice of intent to claim within thirty days after the receipt of the written unilateral change order. Failure to file a protest within the time specified shall constitute agreement on the part of the Contractor with the terms, conditions, amounts, and adjustment or non-adjustment of the contract time or the contract price set forth in the unilateral change order.

A Contractor shall be required to submit cost or pricing data if any adjustment in contract price is subject to the provisions of HAR Chapter 3-122, Subchapter 15. A fully executed change order or other document permitting

94 billing for the adjustment in price under any method listed in Subsections 104.06(1)
95 through 104.06(7) shall be issued within ten days after agreement on the method
96 of adjustment."
97

98 **(III) Amend Section 104.11(B) Contractor's Duty to Locate and Protect**
99 **Utility** by adding the following after line 291:

100
101 **"(4)** The Contractor shall contact the Hawaii One Call Center at 811 prior
102 to any excavation in a public right of way or on private property."
103

104 **(IV) Amend Subsection 104 - Scope of Work** by adding the following after line
105 318:
106

107 **"104.13 Performance of Work.** The Contractor shall perform work satisfactorily
108 in the judgment of the Engineer during the contract period. If it appears at any time
109 that the work contracted to be performed is not satisfactory, the Engineer may
110 require the Contractor to furnish and place in operation such additional force and
111 equipment as the Engineer shall deem necessary to bring the work up to
112 satisfactory status. In case the Contractor fails to comply after five working days
113 from the date of receipt of such a written order from the Engineer, the Engineer
114 may employ a working force and equipment and charge the Contractor for the
115 reasonable cost thereof including depreciation for equipment or he may terminate
116 the contract.
117

118 **104.14 Contract to be Open-Ended.** The requirement for service to be
119 furnished by the Contractor will be on an "as-needed" basis as called for in these
120 specifications at the applicable unit price bid during the term of this contract and in
121 such numbers as may be required by the State. The unit price bid indicated by the
122 Contractor shall be applicable and binding under the terms of this contract.
123

124 Payment for services will be made by purchase order."
125
126
127
128

129
END OF SECTION 104

1 **SECTION 105 – CONTROL OF WORK**

2
3 Make the following amendments to said Section:

4
5
6 **(I) Amend 105.01 – Authority to read as follows:**

7
8 **“105.01 Authority.**

9
10 **(A) Authority of the Engineer.** The Engineer is the representative of
11 the Director and has all the authority of the Director with respect to the
12 contract. The Engineer will make decisions on all questions that may arise
13 regarding the contract, such as, but not limited to:

14
15 **(1)** Interpretation of the contract documents.

16
17 **(2)** Acceptability of the materials furnished, and work performed.

18
19 **(3)** Manner of performance and rate of progress of the work.

20
21 **(4)** Acceptable fulfillment of the contract on the part of the
22 Contractor.

23
24 **(5)** Compensation under the contract.

25
26 The Engineer’s decisions on questions, claims, and disputes will be
27 final and conclusive subject to Subsection 107.15 – Disputes and Claims.

28
29 The Engineer may delegate specific authority to act for the Engineer
30 to a specific person or persons. Such delegation of authority shall be
31 established in writing and shall become effective upon delivery to the
32 Contractor.

33
34 **(B) Authority of the Inspectors.** Inspectors, as a representative of the
35 Engineer or other agencies, will inspect the work done and materials
36 furnished. Such inspection may extend to the preparation, fabrication, or
37 manufacture of the materials to be used. The Inspector does not have
38 authority vested in the Engineer unless specifically delegated in writing.
39 The Inspector may not alter or waive the provisions of the contract, issue
40 instructions contrary to the contract, or act as agent or representative of the
41 Contractor.

42
43 Failure of an Inspector at any time to reject non-conforming work
44 shall not be considered a waiver of the State’s right to require work in strict
45 conformity with the contract documents as a condition of final acceptance.

47 **(C) Authority of the Consultant and Construction Management.** The
48 State may engage consultants and construction managements to perform
49 duties in connection with the work. Unless otherwise specified in writing to
50 the Contractor, such retained consultants and construction managements
51 shall have no greater authority than an Inspector.”
52

53 **(II) Amend Subsection 105.02 - Submittals** by revising the first paragraph
54 from lines 52 to 61 to read as follows:
55

56 **“105.02 Submittals.** The contract contains the description of various items that
57 the Contractor must submit to the Engineer for review and acceptance. The
58 Contractor shall review all submittals for correctness, conformance with the
59 requirements of the contract documents and completeness before submitting them
60 to the Engineer. The submittal shall indicate the contract items and specifications
61 subsections for which the submittal is provided. The submittal shall be legible and
62 clearly indicate what portion of the submittal is being submitted for review. The
63 Contractor shall provide six copies of the required submissions at the earliest
64 possible date.”
65

66 **(III) Amend Subsection 105.08 (A) - Furnishing Drawings and Special**
67 **Provisions** to read as follows:
68

69 **“(A) Furnishing Drawings and Special Provisions.** The State will
70 furnish the Contractor an electronic set of the special provisions and plans.”
71

72 **(IV) Amend 105.11 – Inspection of the Work and Materials** by adding the
73 following paragraph after line 366:
74

75 All materials generated within the project site are considered solid
76 waste. Solid waste shall be disposed of in accordance with Hawaii State
77 Law HAR 11-58.1 and HRS Section 342H to the facility listed on the Solid
78 Waste Disclosure Form. The contractor shall request and receive written
79 approval from the Engineer before reusing any material in any other way
80 than disposal.
81

82 **(V) Amend Subsection 105.14(D) – No Designated Storage Area** from lines
83 421 to 432 to read as follows:
84

85 **“(D) No Designated Storage Area.** If no storage area is designated
86 within the contract documents, materials and equipment may be stored
87 anywhere within the State highway right-of-way, provided such storage and
88 access to and from such site, within the sole discretion of the Engineer,
89 does not create a public or traffic hazard or an impediment to the movement
90 of traffic.”
91

92 **(VI)** Amend **Subsection 105.16(B) – Substituting Subcontractors** from line
93 487 to line 494 to read:

94
95 **(B) Substituting Subcontractors.** Under HRS Chapter 103D-302, the
96 Contractor is required to list the names of persons or firms to be engaged
97 by the Contractor as a subcontractor or joint contractor in the performance
98 of the contract. No subcontractor may be added or deleted, unless
99 authorized by the Engineer. Substitutions will be allowed only if the
100 subcontractor:

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103
104
105 **END OF SECTION 105**

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(I) Amend **106.04 – Material Sample** by revising lines 87 and 88 to read as follows:

(II) Amend **106.05(B) – Deviation** by revising the third sentence from line 106 to 108 to read as follows:

(III) Amend **106.11 Steel and Iron Construction Material** from line 238 to line 277 to read as follows

HWY-OM-2027-38
106-1a

8/6/26

SAMPLING AND TESTING GUIDE FOR ACCEPTANCE AND VERIFICATION - Bituminous (HWY-LB)

MATERIALS/TESTS	SPECIFICATION NO. (See Note 1)	ACCEPTANCE SAMPLING & TESTING	SAMPLING & TESTING FOR SMALL QUANTITIES	VERIFICATION SAMPLING & TESTING (ONLY if specified in contract, See Note 2)	SAMPLE LOCATION	SAMPLE SIZE	REMARKS
01. ASPHALT CONCRETE	301, 401						
A. Asphalt Binder	702.01	1 every 6 months for each source/ asphalt plant	If less than 250 tons of asphalt concrete mix per project, Certificate of Compliance with test results	QC every 3 months, verification every 6 months	Plant line	2 qts.	
B. Aggregate	703.09						
(1) Gradation		1 per approximately every 1,000 tons of asphalt concrete mix	If less than 150 tons per project, visual inspection	1 to 1 for first 5 acceptance tests, 1 per 10 thereafter	Plant conveyor belt, stockpile, or ignition oven	Approximately 10 lbs.	
(2) Sand Equivalent		1 per approximately every 2,500 tons of asphalt concrete mix	If less than 150 tons per project, none	1 to 1 for first 5 acceptance tests, 1 per 10 thereafter	Plant conveyor belt or stockpile	Approximately 10 lbs.	
(3) Los Angeles Abrasion, Flat & Elongated Pieces, Absorption		1 per year per source, minimum	N/A	1 per year per source	Plant conveyor belt or stockpile	Approximately 30 lbs.	
(4) Complete Aggregate Test		When new source is proposed for use or when aggregate changed	N/A	When new source is proposed for use or when aggregate changed	Plant conveyor belt/ stockpile	Approximately 200 lbs.	
C. Uncompacted AC Mixture For Specific Gravity	301, 401	1 per approximately every 500 tons of asphalt concrete mix, minimum 1 per day	If less than 150 tons per project, none.	1 to 1 for first 5 acceptance tests, 1 per 10 thereafter	From jobsite roadway or off truck bed	Approximately 7 lbs.	
D. Uncompacted AC Mixture For Asphalt Content & Design Check	401	1 per approximately every 7,500 tons of asphalt concrete mix	If less than 150 tons per project, none	1 per project minimum	Plant - Off truck bed	Approximately 40 lbs.	
E. Compacted AC Cores (Mat)	301, 401	1 per approximately every 250 tons of asphalt concrete mix, minimum 3 per day	If less than 150 tons per project, none.	1 to 1 for first 5 acceptance tests, 1 per 10 thereafter	Jobsite - Pavement	4 in. diameter cores	
F. Compacted AC Cores (Joint)	401	1 per approximately every 1,500 lineal feet of paving on the second side of joint, minimum 1 per day	If less than 150 tons per project, none.	1 to 1 for first 5 acceptance tests, 1 per 10 thereafter	Jobsite - Pavement	6 in. diameter cores	
G. Joint Adhesive	401	Certificate of Compliance with test results, 1 per manufacturer batch, approximately every 6 months, min 1 per project	If less than 250 tons of asphalt concrete mix per project, Certificate of Compliance with test results	1 per project minimum	Jobsite - From application wand	1 qt.	
02. TACK COAT	407 702.04	1 per source, approximately every 3 months	If less than 250 tons of asphalt concrete mix per project, Certificate of Compliance with test results	1 per project minimum	Supplier's Plant - Storage tank before dilution	1 gal.	

Attachment 1

MATERIALS/TESTS	SPECIFICATION NO. (See Note 1)	ACCEPTANCE SAMPLING & TESTING	SAMPLING & TESTING FOR SMALL QUANTITIES	VERIFICATION SAMPLING & TESTING (ONLY if specified in contract, See Note 2)	SAMPLE LOCATION	SAMPLE SIZE	REMARKS
03. SLURRY SEAL	404						
A. Asphalt Emulsion	702.04	1 per project	If less than 500 gals. per project, Certificate of Compliance with test results	1 per project minimum	Storage tank at jobsite	2 gals	
B. Aggregate	703.11						
(1) Gradation		1 per approximately every 20,000 yd ² slurry seal	If less than 2,500 yd ² per project, visual inspection.	1 per project minimum	Jobsite	Approximately 10 lbs.	
(2) Sand Equivalent		1 per approximately every 50,000 yd ² slurry seal	If less than 2,500 yd ² per project, none	1 per project minimum	Jobsite	Approximately 5 lbs.	
04. UNTREATED PERMEABLE BASE	306						
A. Primer For Permeable Base Course	420 702.04	1 per source, approximately every 3 months (See Note 3)	If less than 500 gals. per project, Certificate of Compliance with test results	1 per project minimum	Storage tank before dilution	1 gal.	
05. PAVING FABRIC	412						
A. Asphalt Binder	702.01	Certificate of Compliance with test results (See Note 3)	N/A	N/A			
06. WATERPROOFING ASPHALT	503 705.06	Certificate of Compliance with test results	N/A	N/A			
07. WATERPROOFING PRIMER	503 705.06	Certificate of Compliance with test results	N/A	N/A			
08. ASPHALT SATURATED FABRIC	503 705.06	Certificate of Compliance with test results	N/A	N/A			
09. TRAFFIC PAINT	629 755.01	Certificate of Compliance with test results	N/A	N/A			
10. PAVEMENT MARKER BITUMINOUS ADHESIVE	629 755.03	Certificate of Compliance with test results, 1 per lot of markers	If less than 100 markers per project, Certificate of Compliance with test results	1 per project minimum		1/2 box per lot	
11. THERMOPLASTIC	629 755.05	Certificate of Compliance with test results	N/A	N/A			
12. PAVEMENT MARKING TAPE	629 755.04	Certificate of Compliance with test results	N/A	N/A			

MATERIALS/TESTS	SPECIFICATION NO. (See Note 1)	ACCEPTANCE SAMPLING & TESTING	SAMPLING & TESTING FOR SMALL QUANTITIES	VERIFICATION SAMPLING & TESTING (ONLY if specified in contract, See Note 2)	SAMPLE LOCATION	SAMPLE SIZE	REMARKS
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SAMPLING AND TESTING GUIDE FOR ACCEPTANCE AND VERIFICATION - Geotechnical (HWY-LG)

MATERIALS/TESTS	SPECIFICATION NO. (See Note 1)	ACCEPTANCE SAMPLING & TESTING	SAMPLING & TESTING FOR SMALL QUANTITIES	VERIFICATION SAMPLING & TESTING (ONLY if specified in contract, See Note 2)	SAMPLE LOCATION	SAMPLE SIZE	REMARKS
13. CUT SUBGRADE	203						
A. Gradation, Sand Equivalent, Proctor	203	1 per soil type	If less than 2500 ft ² per project, visual inspection,	1 per project	Jobsite - On roadbed	220 lbs.	
B. Compaction (See Note 6G)		Visual inspection and/or probe rod to determine stiffness of subgrade. Minimum of 1 field density compaction test per soil type, if determined necessary by the Engineer (HDOT).	If less than 2500 ft ² per project, visual inspection,	1 to 1 for first 5 acceptance tests, 1 per 10 thereafter	Jobsite - On roadbed	N/A	
14. EMBANKMENT FILLS & IMPORT BORROW	203						
A. Gradation, Sand Equivalent, Proctor	203	1 per soil type, approximately every 1,500 yd ³	N/A	1 per project	Jobsite - On roadbed	220 lbs.	
B. Compaction (See Note 6G)		1 every other lift per 10,000 yd ²	N/A	1 to 1 for first 5 acceptance tests, 1 per 10 thereafter	Jobsite - On roadbed	N/A	
15. STRUCTURAL BACKFILL	206						
A. Gradation, Proctor	703.20	1 per approximately every 1,500 yd ³ per type, per project	N/A	1 to 1 for first 5 acceptance tests, 1 per 10 thereafter	Jobsite - On roadbed	220 lbs.	
B. Sand Equivalent	703.20	1 per source per year	N/A	1 to 1 for first 5 acceptance tests, 1 per 10 thereafter	Jobsite - On roadbed	50 lbs.	
C. Compaction (See Note 6G)	206	1 every other lift per 1,000 ft ²	N/A	1 to 1 for first 5 acceptance tests, 1 per 10 thereafter	Jobsite - On roadbed	N/A	
16. TRENCH BACKFILL AND BED COURSE	206						
A. BED COURSE Gradation	703.17	1 per approximately every 1,500 yd ³ (or 2,000 tons), but not less than 1 per project	N/A	1 to 1 for first 5 acceptance tests, 1 per 10 thereafter	Jobsite - On roadbed	220 lbs.	
B. BED COURSE L.A. Abrasion	703.17	1 per material source per year	N/A	1 to 1 for first 5 acceptance tests, 1 per 10 thereafter	Jobsite - On roadbed	50 lbs.	
A. TRENCH BACKFILL Gradation, Proctor; Resistivity & pH as Required	703.21	1 per approximately every 1,500 yd ³ per type, per project	N/A	1 to 1 for first 5 acceptance tests, 1 per 10 thereafter	Jobsite - On roadbed	220 lbs.	
B. TRENCH BACKFILL Sand Equivalent	703.21	1 per material source per year	N/A	1 to 1 for first 5 acceptance tests, 1 per 10 thereafter	Jobsite - On roadbed	50 lbs.	

Attachment 1

MATERIALS/TESTS	SPECIFICATION NO. (See Note 1)	ACCEPTANCE SAMPLING & TESTING	SAMPLING & TESTING FOR SMALL QUANTITIES	VERIFICATION SAMPLING & TESTING (ONLY if specified in contract, See Note 2)	SAMPLE LOCATION	SAMPLE SIZE	REMARKS
C. TRENCH BACKFILL Compaction (See Note 6G)	206	1 every other lift per 300 lin. ft	N/A	1 to 1 for first 5 acceptance tests, 1 per 10 thereafter	Jobsite - On roadbed	N/A	
17. AGGREGATE BASE COURSE	304						
A. Gradation, Plasticity Index, Proctor	703.06	1 per approximately every 1,500 yd ³ (or 2,000 tons) per material source but not less than 1 per project	N/A	1 to 1 for first 5 acceptance tests, 1 per 10 thereafter	Jobsite - On roadbed	220 lbs.	
B. Sand Equivalent, L.A. Abrasion, Flat & Elongated Pieces, Crushed Particles	703.06	1 per material source per year	N/A	1 per material source	Jobsite - On roadbed	100 lbs.	
C. Compaction (See Note 6G)	304	1 every other lift per 1,000 ft ²	N/A	1 to 1 for first 5 acceptance tests, 1 per 10 thereafter	Jobsite - On roadbed	N/A	
18. AGGREGATE SUBBASE	305						
A. Gradation, Plasticity Index, Proctor	703.17	1 per approximately every 1,500 yd ³ (or 2,000 tons), but not less than 1	N/A	1 to 1 for first 5 acceptance tests, 1 per 10 thereafter	Jobsite - On roadbed	220 lbs.	
B. Sand Equivalent	703.17	1 per material source per year	N/A	1 to 1 for first 5 acceptance tests, 1 per 10 thereafter	Jobsite - On roadbed	50 lbs.	
C. Compaction (See Note 6G)	305	1 every other lift per 1,000 ft ²	N/A	1 to 1 for first 5 acceptance tests, 1 per 10 thereafter	Jobsite - On roadbed	N/A	
19. UNTREATED PERMEABLE BASE	306						
B. Coarse Aggregate and Filler	703.04						
(1) Gradation		1 per approximately every 2,500 yd ³ (or 3,000 tons) per material source per project	N/A	1 to 1 for first 5 acceptance tests, 1 per 10 thereafter	Jobsite - On roadbed	220 lbs.	
(2) L.A. Abrasion, Flat & Elongated Pieces		1 per material source per year	N/A	1 per material source	Jobsite - On roadbed	220 lbs.	
20. PAVING FABRIC	412						
A. Paving Fabric	716.04	Certificate of Compliance and Certified test results	N/A	N/A			
21. UNDERDRAINS	605						
A. Perforated/Unperforated Pipe	706.12	Certificate of Compliance	N/A	N/A			
B. Permeable Separator	716.03	Certificate of Compliance	N/A	N/A			
C. Crushed Rock							
(1) Gradation, L.A. Abrasion	605 703.04	1 per 3,000 tons	If less than 500 tons per project, Certificate of Compliance	1 per project	Jobsite - On roadbed	150 lbs.	
22. GEOSYNTHETICS	412, 605 648, 716	Certificate of Compliance	N/A				

Attachment 1

MATERIALS/TESTS	SPECIFICATION NO. (See Note 1)	ACCEPTANCE SAMPLING & TESTING	SAMPLING & TESTING FOR SMALL QUANTITIES	VERIFICATION SAMPLING & TESTING (ONLY if specified in contract, See Note 2)	SAMPLE LOCATION	SAMPLE SIZE	REMARKS
23. PLANTING SOIL	617						
A. Designation (USDA Classification)		1 per source of planting soil	N/A	N/A	Jobsite	50 lbs.	

SAMPLING AND TESTING GUIDE FOR ACCEPTANCE AND VERIFICATION - Structural (HWY-LS)

MATERIALS/TESTS	SPECIFICATION NO. (See Note 1)	ACCEPTANCE SAMPLING & TESTING	SAMPLING & TESTING FOR SMALL QUANTITIES	VERIFICATION SAMPLING & TESTING (ONLY if specified in contract, See Note 2)	SAMPLE LOCATION	SAMPLE SIZE	REMARKS
24. CONCRETE (PAVEMENT, STRUCTURAL AND MISCELLANEOUS)							
A. Cement (See Note 3)	701	Certificate of Compliance. Check samples of 1 for approximately every 5,000 yd ³ of concrete placed or as required for control	If concrete is used for incidental construction, Certificate of Compliance	N/A	Weigh hopper or in the feed line immediately in advance of the hopper or as determined by Central Laboratory	Approximately 30 lbs.	
B. Aggregate (See Note 3)	703.01						
(1) Fine & Coarse Aggregate	703.02						
(a) Gradation		1 for approximately every month or 1,000 yd ³ of concrete placed or as required for control	(See Note 4S)	1 to 1 for first 5 acceptance tests, 1 per 10 thereafter	Stockpile/(See Note 5S)	Approximately 50 lbs. (C.A.) (1 ea. 1/2 bag) 10 lbs. (F.A.) (1 ea. 1/5 bag)	
(b) Specific Gravity		When aggregate changed or as required for source information	N/A	N/A	Stockpile/(See Note 5S)	Approximately 10 lbs. (C.A.) (1 ea. 1/5 bag) 5 lbs. (F.A.) (1 ea. 1/5 bag)	
(c) Moisture		As required for information	N/A	N/A	Stockpile/(See Note 5S)	5 lbs. (C.A.) (1 ea. 1/5 bag)	
(2) Coarse Aggregate							
(a) Clay Lumps and Friable Particles; L.A. Abrasion; and Flat and Elongated Pieces		When aggregate changed or approximately once a year	N/A	N/A	Stockpile/(See Note 5S)	Approximately 200 lbs. (4 ea. 1/2 bag)	
(3) Fine Aggregate							
(a) Sand Equivalent		If required, 1 for approximately every month or 3,000 yd ³ of concrete placed or as required for control	(See Note 4S)	When required, 1 per 5,000 yd ³	Stockpile/(See Note 5S)	Approximately 5 lbs. (1 ea. 1/5 bag)	
(b) Clay Lumps and Friable Particles; Organic Impurities; and L.A. Abrasion on Parent Material for Manufactured Fines Only		When aggregate changed or approximately once a year	N/A	N/A	Stockpile/(See Note 5S)	Approximately 50 lbs. (1 ea. 1/2 bag)	

Attachment 1

MATERIALS/TESTS	SPECIFICATION NO. (See Note 1)	ACCEPTANCE SAMPLING & TESTING	SAMPLING & TESTING FOR SMALL QUANTITIES	VERIFICATION SAMPLING & TESTING (ONLY if specified in contract, See Note 2)	SAMPLE LOCATION	SAMPLE SIZE	REMARKS
(4) Complete		When new source is proposed for use or when aggregate changed	N/A	N/A	Stockpile / (See Note 5S)	Annual or Start of a Project. Approximately 200 lbs. (C.A.) (4 ea. 1/2 bag) 100 lbs. (F.A.) (2 ea. 1/2 bag)	
C. Water (See Note 3)	712.01	1 per source. (Obviously suitable source as drinking water requires no sampling)	N/A	N/A	At point of use	Approximately 3 gals. - Use glass or plastic jugs w/ lined sealed lids	
D. Admixture	711	When admixture is initially used in state work, Certificate of Compliance with test results	If previously used in other state work, Certificate of Compliance	N/A			Current Certificate of Compliance with test results dated within 1-year from the date of the approved concrete design.
25. CONCRETE (PAVEMENT, STRUCTURAL AND MISCELLANEOUS) CONT'D							
E. Concrete Mixture - Pavements	411						
(1) Compressive Strength (14-days)	601	1 set per half day or as required for control	1 set per half day of pour or as required for control.	1 per project	At point concrete deposited in the work	1 set of 3 - 4"x8" cylinders	
(2) Flexural Strength (14-days) and as required by Central Laboratory		1 set per half day or as required for control	1 set per half day of pour or as required for control. Cylinder samples only If less than 50 yd ³ total per project (approximately 2 buspads.)	1 per project.	At point concrete deposited in the work	1 set of 2 - 6"x6"x 21" beams (4"x8" cylinders per design mix after sampling beams on 3 consecutive pour dates and satisfactory flexural strength.) See Remarks.	Sample cylinders and beams for 3 consecutive pour days. Correlate compressive to flexural strength. Subsequent sampling with cylinders only unless otherwise specified.
(3) Yield, Cement Factor, and Unit Weight (See Note 3)		As necessary to assure accuracy of mix design or as necessary for control. When yield test used for payment, 1 per project		When yield test used for payment, 1 per project	At point concrete deposited in the work		
(4) Slump Test		When test specimen are fabricated or when consistency or uniformity is questionable	When test specimen are fabricated or when consistency or uniformity is questionable	1 per project (Observation)	At point concrete deposited in the work		
(5) Entrained Air		When entrained air is specified, 1 approximately every 300 yd ³ or as necessary for control or as required for control.	N/A	When entrained air is specified, 1 per project	At point concrete deposited in the work		

Attachment 1

MATERIALS/TESTS	SPECIFICATION NO. (See Note 1)	ACCEPTANCE SAMPLING & TESTING	SAMPLING & TESTING FOR SMALL QUANTITIES	VERIFICATION SAMPLING & TESTING (ONLY if specified in contract, See Note 2)	SAMPLE LOCATION	SAMPLE SIZE	REMARKS
F. Concrete Mixture - Bridges & Major Structures (R.C.B., P.C.C., Arch Culverts, & Retaining Walls)	503 504 507 508 511 601						
(1) Compressive Strength (28 days)		1 set for approximately 300 yd ³ of concrete placed for concrete specified by class (< 4000 psi); 1 set for each 150 yd ³ and fractional thereof placed on any day or as required for acceptance for concrete specified by strength (≥ 4000 psi)	1 set per day of pour	1 per project	At point concrete deposited in the work	1 set of 3 - 4"x8" cylinders	
(2) Yield, Cement Factor, and Unit Weight (See Note 3)		As necessary to assure accuracy of mix design or as necessary for control. When yield test used for payment, 1 per project	N/A	When yield test used for payment, 1 per project	At point concrete deposited in the work		
(3) Slump Test		When test specimen fabricated or when consistency or uniformity is questionable	When test specimen are fabricated or when consistency or uniformity is questionable	1 per project (Observation)	At point concrete deposited in the work		
(4) Entrained Air		If entrained air is specified, 1 approximately every 300 yd ³ or as necessary for control or as required for control	N/A	When entrained air is specified, 1 per project	At point concrete deposited in the work.		
G. Concrete Mixture - Miscellaneous Concrete (Concrete for Incidental Construction including Controlled Low Strength Material (CLSM), Non-Shrink Grout and Mortars).	314 601 604 607						
(1) Compressive Strength (28 days)	608 609 610 621 622 623 640 649 712.04	1 set for each day when volume exceeds 25 yd ³ or as required for acceptance for concrete and grout specified by strength (> 4000 psi)	Concrete - Sample not required if total volume is less than 25 yd ³ in one day. For pour on separate days, sample per accumulative 100 yd ³ Grout -- No sample if total volume is less than 1 yd ³ in one day. Contact the Central Lab for accumulated volumes > 1 yd ³ .	1 per project. When total days run less than 25 yd ³ , none	At point concrete deposited in the work	Concrete - 1 set of 3 - 4"x8" cylinders. CLSM - 1 set of 2 - 6"x12" cylinders. Grout - 1 set of 3 - 2"x2" cubes.	CLSM - Store 6"x12" cylinders on site for 4-days. Deliver to the Lab in molds and Do not strip. (ASTM D4832 and D5971). Grout - Follow ASTM C109 or C1107 or Contact Central Lab for sampling method.
(2) Yield, Cement Factor, and Unit Weight (See Note 3)		As necessary to assure accuracy of mix design or as necessary for control	N/A	If yield test used for payment, one (1) per project	At point concrete deposited in the work		
(3) Slump Test		When test specimen are fabricated or when consistency or uniformity is questionable	N/A	1 per project (Observation)	At point concrete deposited in the work		

Attachment 1

MATERIALS/TESTS	SPECIFICATION NO. (See Note 1)	ACCEPTANCE SAMPLING & TESTING	SAMPLING & TESTING FOR SMALL QUANTITIES	VERIFICATION SAMPLING & TESTING (ONLY if specified in contract, See Note 2)	SAMPLE LOCATION	SAMPLE SIZE	REMARKS
(4) Entrained Air		When entrained air is specified, 1 approximately every 300 yd ³ or as required for control	N/A	When entrained air is specified, 1 per project	At point concrete deposited in the work		
26. CEMENT TREATED PERMEABLE BASE	309						
A. Cement (See Note 3)	701	Accepted by manufacturer's or supplier's Certificate of Compliance supplemented with check testing. Check sample for approximately every 5,000 yd ³ of concrete placed or as required for control	N/A	N/A	Weigh hopper or in the feed line immediately in advance of the hopper or as determined by Central Laboratory	Approximately 30 lbs.	
B. Aggregate (See Note 3)	703.02	1 per day or as required for control	N/A	1 to 1 for first 5 acceptance tests, 1 per 10 thereafter	(See Note 5S)	Approximately 250 lbs.	
27. CURING COMPOUND	411, 503 711.01	Certificate of Compliance	N/A	N/A			
28. JOINT FILLER	411, 503 705.01	Certificate of Compliance	N/A				
29. JOINT SEALER	411, 503 705.04	Certificate of Compliance	N/A	N/A			
30. RUBBER STOP	503 705.07	Certificate of Compliance	N/A	N/A			
31. METAL GUARDRAIL	606 710.04	Certificate of Compliance and Certified test results	N/A	N/A			
32. GUARDRAIL HARDWARE	710.08	Certificate of Compliance and Certified test results	N/A	N/A			
33. BRIDGE RAILINGS AND POST	507 710.09, 710.10	Certificate of Compliance and Certified test results	N/A	N/A			
34. NEOPRENE BEARING PAD	503 712.09	Certificate of Compliance and Certified test results	N/A	N/A			
35. VITRIFIED CLAY PIPE	625 706.08	Certificate of Compliance	N/A	N/A			
36. REINFORCED CONCRETE GUARDRAIL POST	606 710.06	Certificate of Compliance and Certified test results	N/A	N/A			
37. PAVEMENT MARKERS	629 755.02	Certificate of Compliance with Certified test results and 1 sample per batch. For Reflective Markers which conforms to ASTM D4280 Certificate of Compliance with Certified test results.	If less than 100 markers per project, Certificate of Compliance with Certified test results	1 for every 25,000 or less or 1 per batch	Jobsite or source	10 for non-reflective markers and 6 for reflective markers	
38. PAVEMENT MARKERS EPOXY	629 755.03	Certificate of Compliance	NA	NA			
39. PLASTIC (PVC) PIPE	625 706.09	Certificate of Compliance and Certified test results	N/A	N/A		PVC Pipe for sewer system. See Item 53 for Conduit, Electrical	

Attachment 1

MATERIALS/TESTS	SPECIFICATION NO. (See Note 1)	ACCEPTANCE SAMPLING & TESTING	SAMPLING & TESTING FOR SMALL QUANTITIES	VERIFICATION SAMPLING & TESTING (ONLY if specified in contract, See Note 2)	SAMPLE LOCATION	SAMPLE SIZE	REMARKS
40. WOVEN FENCE	607 710.02	Certificate of Compliance and Certified test results	N/A	N/A			
41. CONCRETE PIPE	603 706.02 706.17	Certificate of Compliance. 1 joint length for approximately every 50 joint lengths for 3 edge bearing load test. Inspected at plant and released by Central laboratory	If less than 100 lin. ft. per project, Certificate of Compliance		Strength tests usually performed at plant		
42. CORRUGATED METAL PIPE	603 707.02 707.03	Visual, accepted by manufacturer's or supplier's Certificate of Compliance. Inspected at plant and released by Central Laboratory		N/A	At fabrication point or at time of use		
43. REINFORCING STEEL	504 602 610 709.01	Sample each size up to Bar Size #8 for each brand and additional samples as necessary. Approved together with fabricator's certified analysis. Bar Sizes #9 and larger are approved by fabricator's certified analysis (Certification of Compliance).	If less than 200 lbs. per project, Certificate of Compliance		Jobsite or source	3 specimen 36" long	Manufacturer's imprinted markings on samples must match certificate of compliance or fabricator's certified analysis
44. WIRE MESH REINFORCEMENT	602 709.01	Certificate of Compliance with Certified test results and 1 sample per type per lot	If less than 200 lbs. per project, Certificate of Compliance		Jobsite	3 feet x 3 feet from flat sheet	Flat sheet is required 709.01(C)
45. WIRE ROPE OR CABLE	709.02	Certificate of Compliance with Certified test results and 1 sample per type per lot	1 set per project	1 set per project	Jobsite	2 strands 4 ft. long	
46. STRUCTURAL PLATE ARCHES	707.08	Certificate of Compliance		N/A			
47. PRE-STRESSED STRANDS	504 709.03	Certificate of Compliance with Certified test results and 1 sample per type per lot	1 set per project	1 set per project	Jobsite	2 strands 4 ft. long	
48. STEEL PRODUCTS	602.02	Certificate of Compliance and Certified test results	N/A	N/A			
49. BARB WIRE	607 710.01	Certificate of Compliance	N/A	N/A			
50. BOLTS & HARDWARE	713.01 713.03 713.04	Certificate of Compliance and Certified test results	N/A	N/A			
51. BRICK	704	Certificate of Compliance	N/A	N/A			

Attachment 1

MATERIALS/TESTS	SPECIFICATION NO. (See Note 1)	ACCEPTANCE SAMPLING & TESTING	SAMPLING & TESTING FOR SMALL QUANTITIES	VERIFICATION SAMPLING & TESTING (ONLY if specified in contract, See Note 2)	SAMPLE LOCATION	SAMPLE SIZE	REMARKS
52. CHAIN LINK FENCE	607						
A. Fabric	722	Certificate of Compliance and 1 sample per lot or per project	If less than 200 ft ² per project, Certificate of Compliance	1 sample per project or 1 sample per lot	Jobsite	3 ft. length, full height	
B. Posts		Certificate of Compliance and 1 sample per lot or per project	If less than 30 lin. ft. per project, Certificate of Compliance	1 sample per project or 1 sample per lot	Jobsite	12 inch length section taken from each end of one full length post. Total of 2 sections per post	
C. Tension Wire		Certificate of Compliance and 1 sample per lot or per project	If less than 100 lin. ft. per project, Certificate of Compliance	1 per sample per project or 1 sample per lot	Jobsite	3 ft. length	
D. Tie Wire		Certificate of Compliance and 1 sample per lot or per project	If less than 25 lbs. per project, Certificate of Compliance	1 sample per project or 1 sample per lot	Jobsite	3 ft. length	
E. Fittings		Certificate of Compliance	N/A	N/A			

SAMPLING AND TESTING GUIDE FOR ACCEPTANCE AND VERIFICATION - HWY-LR

MATERIALS/TESTS	SPECIFICATION NO. (See Note 1)	ACCEPTANCE SAMPLING & TESTING	SAMPLING & TESTING FOR SMALL QUANTITIES	VERIFICATION SAMPLING & TESTING (ONLY if specified in contract, See Note 2)	SAMPLE LOCATION	SAMPLE SIZE	REMARKS
53. CONDUITS	616.02, 622, 623, 712.27						
A. Steel Conduit		Certificate of Compliance and Certified test results	N/A	N/A			
B. Plastic Conduit		Certificate of Compliance	N/A	N/A			
C. Liquid-tight Flexible Metal Conduit and Fittings		Certificate of Compliance	N/A	N/A			
D. Rigid Steel Conduit PVC Coated		Certificate of Compliance	N/A	N/A			
54. ELECTRICAL CONDUCTOR WIRES AND CABLES	616.02, 622, 623, 760.04, 770.06	Certificate of Compliance and manufacturer's specifications	N/A	N/A			
55. PLANTING, SEED	619, 641	Certificate of Compliance, seed specifications, and Certified test results	N/A	N/A			
56. PRESERVATIVES FOR TIMBER	502 714.02	Certificate of Compliance and manufacturer's specifications	N/A	N/A			

Attachment 1

MATERIALS/TESTS	SPECIFICATION NO. (See Note 1)	ACCEPTANCE SAMPLING & TESTING	SAMPLING & TESTING FOR SMALL QUANTITIES	VERIFICATION SAMPLING & TESTING (ONLY if specified in contract, See Note 2)	SAMPLE LOCATION	SAMPLE SIZE	REMARKS
57. SIGN POSTS - SQUARE TUBE, CHANNEL, SQUARE TUBE	630, 631, 632, 645, 750.02	Certificate of Compliance and Certified test results	N/A	N/A			Added for additional review documents when required document(s) can't be produced/submitted.
58. SIGN AND ROUTE MARKER FASTENERS	630, 631, 632, 645, 750.03	Certificate of Compliance and Certified test results	N/A	N/A			Added for additional review documents when required document(s) can't be produced/submitted.
59. SHEET ALUMINUM BACKING	630, 631, 632, 645, 750.01	Certificate of Compliance and Certified test results	N/A	N/A			Added for additional review documents when required document(s) can't be produced/submitted.
60. RETROREFLECTIVE SHEETING AND REFLECTIVE MARKERS	630, 631, 632, 645, 750.01, 750.07	Certificate of Compliance and manufacturer's specifications/ designer's approval	N/A	N/A			Added for additional review documents when required document(s) can't be produced/submitted.
61. LIGHT POLES	622, 760.01						
A. Aluminum poles with anchor base and bolts	622, 718.01, 760.01	Designer's Approval, Certificate of Compliance, manufacturer's specifications	N/A	N/A			Added for additional review documents when required document(s) can't be produced/submitted.
B. Wood Poles	622, 714.02, 760.01	Designer's Approval, Certificate of Compliance, manufacturer's specifications	N/A	N/A			Added for additional review documents when required document(s) can't be produced/submitted.
62. LUMINAIRE MAST ARM	622, 760.02	Designer's Approval, Certificate of Compliance, manufacturer's specifications	N/A	N/A			Added for additional review documents when required document(s) can't be produced/submitted.
63. LUMINAIRES FOR ROADWAY, UNDERPASS, SIGN, AND PEDESTRIAN STAIRWAY LIGHTING	622, 760.03	Designer's Approval, Certificate of Compliance, manufacturer's specifications	N/A	N/A			Added for additional review documents when required document(s) can't be produced/submitted.
64. PHOTOELECTRIC CONTROL UNIT FOR ROADWAY LIGHTING SYSTEMS	622, 760.07	Designer's Approval, Certificate of Compliance, manufacturer's specifications	N/A	N/A			Added for additional review documents when required document(s) can't be produced/submitted.

Attachment 1

MATERIALS/TESTS	SPECIFICATION NO. (See Note 1)	ACCEPTANCE SAMPLING & TESTING	SAMPLING & TESTING FOR SMALL QUANTITIES	VERIFICATION SAMPLING & TESTING (ONLY if specified in contract, See Note 2)	SAMPLE LOCATION	SAMPLE SIZE	REMARKS
65. TRAFFIC SIGNAL STANDARDS	623, 770.01						
A. Type I: Shaft, anchor base and bolts	623, 718.01, 770.01	Designer's Approval, Certificate of Compliance, manufacturer's specifications	N/A	N/A			Added for additional review documents when required document(s) can't be produced/submitted.
B. Type II: Mast arm, shaft, anchor base and bolts	623, 718.01, 760.03	Designer Approval, Certificate of Compliance	N/A	N/A			Added for additional review documents when required document(s) can't be produced/submitted.
66. TRAFFIC SIGNAL HEADS	623, 770.02	Designer's Approval, Certificate of Compliance, manufacturer's specifications,	N/A	N/A			Added for additional review documents when required document(s) can't be produced/submitted.
67. CONTROLLER EQUIPMENT	623, 770.05	Designer's Approval, Certificate of Compliance, manufacturer's specifications	N/A	N/A			Added for additional review documents when required document(s) can't be produced/submitted.
68. FIBER OPTIC CABLE	647.02	Certificate of Compliance /Designer Approval	N/A	N/A			Added for additional review documents when required document(s) can't be produced/submitted.
68. DETECTABLE WARNINGS	650.03	Certificate of Compliance, manufacturer's specifications, and designer's approval	N/A	N/A			Added for additional review documents when required document(s) can't be produced/submitted.

- Note 1. Specification Nos. shown are the common references encountered in most construction projects. For non-standard items, consult the Materials Testing & Research Branch.
- Note 2. Sampling and testing performed by the State or County to validate contractor test data when Contractor Quality Control sampling and testing are used in the Materials Acceptance Program. This is allowed only when specified in the contract documents and approved by FHWA for federal aid projects. When the Contractor Quality Control (QC) test data is utilized by HDOT or its designated agent in the acceptance determination, HDOT or its designated agent shall perform verification sampling and testing. The Contractor's QC sampling and testing frequency shall not be less than the acceptance sampling and testing frequency. The verification testing by HDOT or its agent should be performed at a frequency of 1 to 1 for the first 5 QC tests, and not less than 10 percent of the acceptance frequency in the quality assurance plan thereafter. If statistical comparisons of the QC test data against HDOT or its agent's test data indicates dissimilarity, the verification sampling and testing frequency should revert back to 1 to 1.
- Note 3. Not required if the same source is being used on other projects and test is being made. Not necessary to duplicate the test for the sake of the record. The actual test results may be used anywhere they are applicable. (Established Source with Acceptable Quality Control/System Basis)
- Note 4S. When gradation is being determined by a qualified plant technician at the plant, the guide schedule for gradation and sand equivalent as sampled by the plant inspector may be reduced to approximately 1/5. However, the schedule should be supplemented with the contractor's quality control results.
- Note 5S. One of the following locations listed in order of preference: (a) Belt from weigh hopper to central or transit mixer; (b) Belt which feeds batch plant bins immediately preceding the weigh hopper, (c) Discharge gate of weigh hopper, (d) Discharge gates of bins feeding the weigh hopper at the batch plant. The location and method of sampling are to be determined and agreed upon by the Engineer and the Contractor. Once selected, the location and method of sampling are not to be changed during the life of the project, or so long as there is no change in Plant's configuration or operation.
- Note 6G. The field compaction testing frequency for soils and aggregate materials is provided as a preliminary guide and should be project specific, finalized and documented by the Project Engineer. If necessary, consult the HDOT project Geotechnical Engineer or Materials Testing and Research Branch for the recommended testing frequency.

Compact each lift to approximately 6 inches thick. Perform density test every other lift. For every fifty (50) field compaction tests, performed by nuclear gauge method or e-gauge method OR every 6 months, whichever comes first, perform one sand cone test (in accordance with HDOT TM 1-00 and TM 3-00) side by side testing with e-gauge or nuclear gauge. Test result should be within 3% compaction.

If there is uncertainty of testing frequency, perform compaction test every other lift per 300 lineal ft or 1,000 ft²

Submit a sample card of compaction testing monthly and at the end of the project. The following shall be provided in each sample card:

1. pdf file of compaction summary of the month for record,
2. Excel file of compaction summary of the month for data consolidation. All numbering shall be sequential and cumulative throughout the project.
3. Sand cone test results.
4. If e-gauge or nuclear gauge is used, include additional information as indicated in HWY-L website and/or e-gauge or nuclear gauge guide.
5. All maximum density test results used in the sample card from Laboratory Proctor Tests.

1 **SECTION 107 - LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC**

2
3 Make the following amendments to said Section:

4
5 **(I)** Amend **Section 107.01 Insurance Requirements** from lines 5 to 81 to
6 read as follows:

7
8 **“(A) Obligation of Contractor.** Contractor shall not commence any
9 work until it obtains, at its own expense, all required insurance described
10 herein. Such insurance shall be provided by an insurance company
11 authorized by the laws of the State to issue such insurance in the State of
12 Hawaii. Coverage by a “Non-Admitted” carrier is permissible provided the
13 carrier has a Best’s Rating of “A-VII” or better. The Contractor shall
14 maintain and ensure all insurance policies are current for the full period of
15 the contract until final acceptance of the work by the State.

16
17 The Certificate of Insurance shall contain: a clause that it is agreed
18 that any insurance maintained by the State of Hawaii will apply in excess
19 of, and not contribute with, insurance provided by this policy; and shall be
20 accompanied by endorsement form CG2010 or equivalent naming the
21 State as an additional insured to the policy which status shall be
22 maintained for the full period of the contract until final acceptance of the
23 work by State.

24
25 The Contractor shall obtain all required insurance as part of the
26 contract price. Where there is a requirement for the State of Hawaii and
27 its officers and employees to be named as additional insureds under any
28 Contractor’s insurance policy, before the State of Hawaii issues the Notice
29 to Proceed, the Contractor shall obtain and submit to the Engineer a
30 Certificate of Insurance and a written policy endorsement that confirms the
31 State of Hawaii and its officers and employees are additional insureds for
32 the specific State project number and project title under such insurance
33 policies. The written policy endorsement must be issued by the insurance
34 company insuring the Contractor for the specified policy type or by an
35 agent of such insurance company who is vested with the authority to issue
36 a written policy endorsement. The insurer’s agent shall also submit
37 written confirmation of such authority to bind the insurer. Any delays in
38 the issuance of the Notice to Proceed attributed to the failure to obtain the
39 proof of the State of Hawaii and its officers and employees’ additional
40 insured status shall be charged to the Contractor.

41
42 A mere Certificate of Insurance issued by a broker who represents
43 the Contractor (but not the Contractor’s insurer), or by any other party who
44 is not authorized to contractually name the State as an additional insured
45 under the Contractor’s insurance policy, is not sufficient to meet the
46 Contractor’s insurance obligations.

Certificates shall contain a provision that coverages being certified will not be cancelled or materially changed without giving the Engineer at least thirty (30) days prior written notice. Contractor will immediately provide written notice to the Director should any of the insurance policies evidenced on its Certificate of Insurance form be cancelled, reduced in scope or coverage, or not renewed upon expiration. Should any policy be canceled before final acceptance of the work by the State, and the Contractor fails to immediately procure replacement insurance as specified, the State, in addition to all other remedies it may have for such breach, reserves the right to procure such insurance and deduct the cost thereof from any money due or to become due to the Contractor.

Nothing contained in these insurance requirements is to be construed as limiting the extent of Contractor's responsibility for payment of damages resulting from its operations under this contract, including the Contractor's obligation to pay liquidated damages, nor shall it affect the Contractor's separate and independent duty to defend, indemnify and hold the State harmless pursuant to other provisions of this contract. In no instance will the State's exercise of an option to occupy and use completed portions of the work relieve the Contractor of its obligation to maintain the required insurance until the date of final acceptance of the work.

All insurance described herein shall be primary and cover the insured for all work to be performed under the contract, all work performed incidental thereto or directly or indirectly connected therewith, including but not limited to traffic detour work, barricades, warnings, diversions, lane closures, and other work performed outside the work area and all change order work.

The Contractor shall, from time to time, furnish the Engineer, when requested, satisfactory proof of coverage of each type of insurance required covering the work. Failure to comply with the Engineer's request may result in suspension of the work, and shall be sufficient grounds to withhold future payments due the Contractor and to terminate the contract for Contractor's default.

(B) Types of Insurance. Contractor shall purchase and maintain insurance described below which shall provide coverage against claims arising out of the Contractor's operations under the contract, whether such operations be by the Contractor itself or by any subcontractor or by anyone directly or indirectly employed by any of them or by anyone for whose acts any of them may be liable.

92 **(1) Workers' Compensation.** The Contractor shall obtain
93 worker's compensation insurance for all persons whom they
94 employ in carrying out the work under this contract. This insurance
95 shall be in strict conformity with the requirements of the most
96 current and applicable State of Hawaii Worker's Compensation
97 Insurance laws in effect on the date of the execution of this contract
98 and as modified during the duration of the contract.
99

100 **(2) Auto Liability.** The Contractor shall obtain Auto Liability
101 Insurance covering all owned, non-owned and hired autos with a
102 Combined single Limit of not less than \$1,000,000 per occurrence
103 for bodily injury and property damage with the State of Hawaii
104 named as additional insured.
105

106 **(3) General Liability.** The Contractor shall obtain General
107 Liability insurance with a limit of not less than \$2,000,000 per
108 occurrence and in the Aggregates for each of the following:
109

110 **(a)** Products - Completed/Operations Aggregate,
111

112 **(b)** Personal & Advertising Injury, and
113

114 **(c)** Bodily Injury & Property Damage
115

116 The General Liability insurance shall include the State as an
117 Additional Insured. The required limit of insurance may be provided
118 by a single policy or with a combination of primary and excess
119 policies.
120

121 **(4) Builders Risk For All Work.** The Contractor shall take out
122 a policy of builder's risk insurance for the full replacement value of
123 the project work; from a company licensed or otherwise authorized
124 to do business in the State of Hawaii; naming the State as an
125 additional insured under each policy; and covering all work, labor,
126 and materials furnished by such Contractor and all its
127 subcontractors against loss by fire, windstorm, tsunamis,
128 earthquakes, lightning, explosion, other perils covered by the
129 standard Extended Coverage Endorsement, vandalism, and
130 malicious mischief."
131

132 **(II)** Add **Section 107.18 Citizen and Residential Labor Force** after line 745
133 to read as follows:
134

135 **"107.18 Citizen and Residential Labor Force.**
136

137 **(A) Citizen Labor.** No person shall be employed as a laborer or
138 mechanic unless such person is a citizen of the United States or eligible to
139 become one; provided that persons without such qualifications may be
140 employed with the approval of the Governor until persons who are citizens
141 and are competent for such services are available for hire.

142
143 **(B) Residential Labor Force.** In accordance with Act 192; SLH 2011,
144 no less than eighty (80) percent of the bidder's labor force working on the
145 contract shall be provided by Hawaii residents. This act applies to all
146 construction procurements under HRS Chapter 103D; however this act
147 does not apply to procurements for professional services under Section
148 103D-304 and small purchases under Section 103D-305. This act is also
149 applicable to any subcontract of \$50,000.00 or more in connection with
150 this contract.

151
152 Resident means a person who is physically present in the State of
153 Hawaii at the time the person claims to have established the person's
154 domicile in the State of Hawaii and shows the person's intent is to make
155 Hawaii the person's primary residence.

156
157 **(C)** Percentage of workforce shall be determined by dividing the labor
158 hours (including subcontractors) provided by residents working on the
159 project divided by the total number of hours worked by all employees of
160 the contractor in the performance of the contract. Hours worked by
161 employees within shortage trades as determined by the Department of
162 Labor and Industrial Relations shall not be included in the calculation of
163 this percentage.

164
165 **(D)** Certification of compliance with the forgoing provisions shall be
166 made by the contractor in the form of a written oath submitted to the
167 Procurement Officer on a monthly basis for the duration of the contract.

168
169 **(E)** Sanctions for non-compliance with these provisions are as follows:

170
171 **(1)** With respect to the General Contractor, withholding of
172 payment on the contract until the Contractor or its Subcontractor
173 complies with HRS Chapter 103B as amended by Act 192, SLH
174 2011.

175
176 **(2)** Proceedings for debarment or suspension of the Contractor
177 or Subcontractor under Hawaii Revised Statutes § 103D-702.

178
179 This Section shall not apply when its application will disqualify the State
180 from receiving federal funds or aid."

181
182 **END OF SECTION 107**

1 Amend **Section 108 – PROSECUTION AND PROGRESS** to read as follows:

2
3 **“SECTION 108 – PROSECUTION AND PROGRESS**

4
5
6 **108.01 Notice to Proceed (NTP).** A Notice To Proceed for the contract will be
7 issued to the Contractor not more than 30 calendar days after the contract
8 certification date.

9
10 Separate Start Work Dates will be issued to the Contractor for each work
11 order created. The Start Work Date issued for the work order will begin charging
12 of time specified to complete the work order. Time specified to complete the work
13 order will be followed in accordance with Subsection 108.05 – Contract Time.
14 Liquidated damages for each work order will be enforced in accordance with
15 Subsection 108.08 – Liquidated Damages for Failure to Complete the Work or
16 Portions of the Work on Time.

17
18 In the event that the Contractor fails to start physical work within the time
19 specified, the Engineer may terminate the contract in accordance with Subsection
20 108.11 – Termination of Contract for Cause.

21
22 During the period between the issuance of a work order and the Start Work
23 Date the Contractor should adjust work forces, equipment, schedules, and procure
24 materials and required permits, prior to beginning physical work.

25
26 Any physical work done prior to the Start Work Date will be considered
27 unauthorized work. If the Engineer does not direct that the unauthorized work be
28 removed, it shall be paid for after the Start Work Date and only if it is acceptable.

29
30 The Contractor shall notify the Engineer at least 24 hours before restarting
31 physical work after a suspension of work pursuant to Subsection 108.10 –
32 Suspension of Work.

33
34 Once physical work has begun, the Contractor shall work expeditiously and
35 pursue the work diligently to completion with the contract time. If a portion of the
36 work is to be done in stages, the Contractor shall leave the area safe and usable
37 for the user agency and the public at the end of each stage.

38
39 **108.02 Prosecution of Work.** Unless otherwise permitted by the Engineer, in
40 writing, the Contractor shall not commence with physical construction unless
41 sufficient materials and equipment are available for either continuous construction
42 or completion of a specified portion of the work.

43
44 **108.03 Preconstruction Submittals.** The awardee shall submit to the
45 Engineer for information and review the pre-construction submittals within 21
46 calendar days from award. Until the items listed below are received and found

acceptable by the Engineer, the Contractor shall not start physical work unless otherwise authorized to do so in writing and subject to such conditions set by the Engineer. Charging of Contract Time will not be delayed, and additional contract time will not be granted due to Contractor delay in submitting acceptable preconstruction submittals. No progress payment will be made to the Contractor until the Engineer acknowledges, in writing, receipt of the following preconstruction submittals acceptable to the Engineer:

- (1) List of the Superintendent and other Supervisory Personnel, and their contact information.
- (2) Name of person(s) authorized to sign for the Contractor.
- (3) Work Schedule including hours of operation.
- (4) Initial Progress Schedule (See Subsection 108.06 – Progress Schedule).
- (5) Water Pollution and Siltation Control Submittals, including Site-Specific Best Management Practice Plan.
- (6) Solid Waste Disposal form.
- (7) Tax Rates.
- (8) Insurance Rates.
- (9) Certificate of Insurance, satisfactory to the Engineer, indicating that the Contractor has in place all insurance coverage required by the contract documents.
- (10) Schedule of agreed prices.
- (11) List of suppliers.
- (12) Traffic Control Plan, if applicable.

108.04 Character and Proficiency of Workers. The Contractor shall at all times provide adequate supervision and sufficient labor and equipment for prosecuting the work to full completion in the manner and within the time required by the contract. The superintendent and all other representatives of the Contractor shall act in a civil and honest manner in all dealings with the Engineer, all other State officials and representatives, and the public, in connection with the work.

90 All workers shall possess the proper license, certification, job classification,
91 skill, training, and experience necessary to properly perform the work assigned to
92 them.

93
94 The Engineer may direct the removal of any worker(s) who does not carry
95 out the assigned work in a proper and skillful manner or who is disrespectful,
96 intemperate, violent, or disorderly. The worker shall be removed forthwith by the
97 Contractor and will not work again without the written permission of the Engineer.

98 99 **108.05 Contract Time.**

100
101 **(A) Calculation of Contract Time.** When the contract time is on a
102 working day basis, the total contract time allowed for the performance of the
103 work will be the number of working days shown in the contract plus any
104 additional working days authorized in writing as provided hereinafter. The
105 count of elapsed working days to be charged against contract time, will
106 begin from the Start Work Date and will continue consecutively to the date
107 of Substantial Completion. When multiple shifts are used to perform the
108 work, the State will not consider the hours worked over the normal eight
109 working hours per day or night as an additional working day.

110
111 When the contract is on a calendar day basis, the total contract time
112 allowed for the performance of the work will be the number of days shown
113 in the contract plus any additional days authorized in writing as provided
114 hereinafter. The count of elapsed days to be charged against contract time
115 will begin from the Start Work Date and will continue consecutively to the
116 date of Substantial Completion. The Engineer will exclude days elapsing
117 between the orders of the Engineer to suspend work and resume work for
118 suspensions not the fault of the Contractor.

119
120 **(B) Modifications of Contract Time.** Whenever the Contractor
121 believes that an extension of contract time is justified, the Contractor shall
122 serve written notice on the Engineer not more than five working days after
123 the occurrence of the event that causes a delay or justifies a contract time
124 extension. Contract time may be adjusted for the following reasons or
125 events, but only if and to the extent the critical path has been affected:

126
127 **(1) Changes in the Work, Additional Work, and Delays**
128 **Caused by the State.** If the Contractor believes that an extension
129 of time is justified on account of any act or omission by the State and
130 is not adequately provided for in a field order or change order, it must
131 request the additional time as provided above. At the request of the
132 Engineer, the Contractor must show how the critical path will be
133 affected and must also support the time extension request with
134 schedules, as well as statements from its subcontractors, suppliers,
135 or manufacturers, as necessary. Claims for compensation for any

altered or additional work will be determined pursuant to Subsection 104.02 – Changes.

Additional time to perform the extra work will be added to the time allowed in the contract without regard to the date the change directive was issued, even if the contract completion date has passed. A change requiring time issued after contract time has expired will not constitute an excusal or waiver of pre-existing Contractor delay.

(2) Delay for Permits. For delays in the routine application and processing time required to obtain necessary permits, including permits to be obtained from State agencies, the Engineer may grant an extension provided that the permit takes longer than 30 days to acquire and the delay is not caused by the Contractor, and provided that as soon as the delay occurs, the Contractor notifies the Engineer in writing that the permits are not available. Permits required by the contract that take less than 30 days to acquire from the time which the appropriate documents are granted shall be acquired between Notice to Proceed and Start Work Date or accounted for in the contractor's progress schedule. Time extensions will be the exclusive relief granted on account of such delays.

(3) Delays Beyond Contractor's Control. For delays caused by acts of God, a public enemy, fire, inclement weather days or adverse conditions resulting therefrom, earthquakes, floods, epidemics, quarantine restrictions, labor disputes impacting the Contractor or the State, freight embargoes and other reasons beyond the Contractor's control, the Contractor may be granted an extension of time provided that:

(a) In the written notice of delay to the Engineer, the Contractor describes possible effects on the completion date of the contract. The description of delays shall:

1. State specifically the reason or reasons for the delay and fully explain in a detailed chronology how the delay affects the critical path.
2. Include copies of pertinent documentation to support the time extension request.
3. Cite the anticipated period of delay and the time extension requested.

181 4. State either that the above circumstances have
182 been cleared and normal working conditions restored
183 as of a certain day or that the above circumstances will
184 continue to prevent completion of the project.
185

186 (b) The Contractor shall notify the Engineer in writing when
187 the delay ends. Time extensions will be the exclusive relief
188 granted and no additional compensation will be paid the
189 Contractor for such delays.
190

191 **(4) Delays in Delivery of Materials or Equipment.** For delays
192 in delivery of materials or equipment, which occur as a result of
193 unforeseeable causes beyond the control and without fault of the
194 Contractor, its subcontractor(s) or supplier(s), time extensions shall
195 be the exclusive relief granted and no additional compensation will
196 be paid the Contractor on account of such delay. The delay shall not
197 exceed the difference between the originally scheduled delivery date
198 and the actual delivery date. The Contractor may be granted an
199 extension of time provided that it complies with the following
200 procedures:
201

202 (a) The Contractor's written notice to the Engineer must
203 describe the delays and state the effect such delays may have
204 on the critical path.
205

206 (b) The Contractor, if requested, must submit to the
207 Engineer within five days after a firm delivery date for the
208 material and equipment is established, a written statement
209 regarding the delay. The Contractor must justify the delay as
210 follows:
211

212 1. State specifically all reasons for the delay.
213 Explain in a detailed chronology the effect of the delay
214 on the critical path.
215

216 2. Submit copies of purchase order(s), factory
217 invoice(s), bill(s) of lading, shipping manifest(s),
218 delivery tag(s), and any other documents to support the
219 time extension request.
220

221 3. Cite the start and end date of the delay and the
222 time extension requested.
223

224 **(5) Delays for Suspension of Work.** When the performance of
225 the work is totally suspended for one or more days (calendar or
226 working days, as appropriate) by order of the Engineer in accordance

with Subsections 108.10(A)(1), 108.10(A)(2), or 108.10(A)(5) the number of days from the effective date of the Engineer's order to suspend operations to the effective date of the Engineer's order to resume operations shall not be counted as contract time and the contract completion date will be adjusted. During periods of partial suspensions of the work, the Contractor will be granted a time extension only if the partial suspension affects the critical path. If the Contractor believes that an extension of time is justified for a partial suspension of work, it must request the extension in writing at least five working days before the partial suspension will affect the critical operation(s) in progress. The Contractor must show how the critical path was increased based on the status of the work and must also support its claim if requested, with statements from its subcontractors. A suspension of work will not constitute a waiver of pre-existing Contractor delay.

(6) Contractor Caused Delays. No time extension will be granted under the following circumstances:

(a) Delays within the Contractor's control in performing the work caused by the Contractor, subcontractor, supplier, or any combination thereof.

(b) Delays within the Contractor's control in arrival of materials and equipment caused by the Contractor, subcontractor, supplier, or any combination thereof, in ordering, fabricating, and delivery.

(c) Delays requested for changes which do not affect the critical path.

(d) Delays caused by the failure of the Contractor to make submittals in a timely manner for review and acceptance by the Engineer, such as but not limited to shop drawings, descriptive sheets, material samples, and color samples except as covered in Subsection 108.05(B)(3) – Delays Beyond Contractor's Control and 108.05(B)(4) – Delays in Delivery of Materials or Equipment.

(e) Delays caused by the failure to submit sufficient information and data in a timely manner in the proper form in order to obtain necessary permits related to the work.

(f) Failure to follow the procedure within the time allowed by contract to request a time extension.

(g) Failure of the Contractor to provide evidence sufficient to support the time extension request.

(7) **Reduction in Time.** If the State deletes or modifies any portion of the work, an appropriate reduction of contract time may be made in accordance with Subsection 104.02 - Changes.

108.06 Progress Schedules.

(A) **Forms of Schedule.** All schedules shall be submitted using the specific computer program designated in the bid documents. If no such scheduling software program is designated, then all schedules shall be submitted using the latest version of Microsoft Project by Microsoft or approved equivalent software program.

Schedule submittals shall be as follows:

(1) **For Contracts \$2,000,000 or less or For Contract Time 100 Working Days or 140 Calendar Days or Less.** For contracts of \$2,000,000 or less or for contract time of 100 working days or 140 calendar days or less, the progress schedule will be a Time Scaled Logic Diagram (TSLD). The Contractor shall submit a TSLD submittal package meeting the following requirements and having these essential and distinctive elements:

(a) The major features of work, such as but not limited to BMP installation, grubbing, roadway excavation, structure excavation, structure construction, shown in the chronological order in which the Contractor proposes to work that feature or work and its location on the project. The schedule shall account for normal inclement weather, unusual soil or other conditions that may influence the progress of the work, schedules, and coordination required by any utility, off or on-site fabrications, and other pertinent factors that relate to progress;

(b) All features listed or not listed in the contract documents that the Contractor considers a controlling factor for the timely completion of the contract work.

(c) The time span and sequence of the activities or events for each feature, and its interrelationship and interdependencies in time and logic to other features in order to complete the project.

(d) The total anticipated time necessary to complete work required by the contract.

(e) A chronological listing of critical intermediate dates or time periods for features or milestones or phases that can affect timely completion of the project.

(f) Major activities related to the location on the project.

(g) Non-construction activities, such as submittal and acceptance periods for shop drawings and material, procurement, testing, fabrication, mobilization, and demobilization or order dates of long lead material.

(h) Set schedule logic for out of sequence activities to retain logic. In addition, open ends shall be non-critical.

(i) Show target bars for all activities.

(j) Vertical and horizontal sight lines both major and minor shall be used as well as a separator line between groups. The Engineer will determine frequency and style.

(k) The file name, print date, revision number, data and project title and number shall be included in the title block.

(l) Have columns with the appropriate data in them for activity ID, description, original duration, remaining duration, early start, early finish, total float, percent complete, resources. The resource column shall list who is responsible for the work to be done in the activity. These columns shall be to the left of the bar chart.

(2) For Contracts Which Have A Contract Amount More Than \$2,000,000 Or Having A Contract Time Of More Than 100 Working Days Or 140 Calendar Days. For contracts which have a contract amount more than \$2,000,000 or contract time of more than 100 working days or 140 calendar days, the Contractor shall submit a Timed-Scaled Logic Diagram (TSLD) meeting the following requirements and having these essential and distinctive elements:

(a) The information and requirements listed in Subsection 108.06(A)(1) – For Contracts \$2,000,000 or Less or For Contract Time 100 Working Days or 140 Calendar Days or Less.

(b) Additional reports and graphics available from the software as requested by the Engineer.

(c) Sufficient detail to allow at least weekly monitoring of the Contractor and subcontractor's operations.

(d) The time scaled schematic shall be on a calendar or working days basis. What will be used shall be determined by how the contract keeps track of time. It will be the same. Plot the critical calendar dates anticipated.

(e) Breakdown of activity, such as forming, placing reinforcing steel, concrete pouring and curing, and stripping in concrete construction. Indicate location of work to be done in such detail that it would be easily determined where work would be occurring within approximately 200 feet.

(f) Latest start and finish dates for critical path activities.

(g) Identify responsible subcontractor, supplier, and others for their respective activity.

(h) No individual activity shall have duration of more than 20 calendar days unless requested and approved by the Engineer.

(i) All activities shall have work breakdown structure codes and activity codes. The activity codes shall have coding that incorporates information for phase, location, who is responsible for doing work and type of operation and activity description.

(j) Incorporate all physical access and availability restraints.

(B) Inspection and Testing. All schedules shall provide reasonable time and opportunity for the Engineer to inspect and test each work activity.

(C) Engineer's Acceptance of Progress Schedule. The submittal of, and the Engineer's receipt of any progress schedule, shall not be deemed an agreement to modify any terms or conditions of the contract. Any modifications to the contract terms and conditions that appear in or may be inferred from an acceptable schedule will not be valid or enforceable unless and until the Engineer exercises discretion to issue an appropriate change order. Nor shall any submittal or receipt imply the Engineer's approval of the schedule's breakdown, its individual elements, any critical path that may

be shown, nor shall it obligate the State to make its personnel available outside normal working hours or the working hours established by the Contract in order to accommodate such schedule. The Contractor has the risk of all elements (whether or not shown) of the schedule and its execution. No claim for additional compensation, time, or both, shall be made by the Contractor or recognized by the Engineer for delays during any period for which an acceptable progress schedule or an updated progress schedule as required by Subsection 108.06(E) – Contractor’s Continuing Schedule Submittal Requirements had not been submitted. Any acceptance or approval of the schedule shall be for general format only and shall not be deemed an agreement by the State that the construction means, methods, and resources shown on the schedule will result in work that conforms to the contract requirements or that the sequences or durations indicated are feasible.

(D) Initial Progress Schedule. The Contractor shall submit an initial progress schedule. The initial progress schedule shall consist of the following:

- (1)** Four sets of the TSLD schedule.
- (2)** All the software files and data to re-create the TSLD in a computerized software format as specified by the Engineer.
- (3)** A listing of equipment that is anticipated to be used on the project. Including the type, size, make, year of manufacture, and all information necessary to identify the equipment in the Rental Rate Blue Book for Construction Equipment.
- (4)** An anticipated manpower requirement graph plotting contract time and total manpower requirement. This may be superimposed over the payment graph.
- (5)** A Method Statement that is a detailed narrative describing the work to be done and the method by which the work shall be accomplished for each major activity. A major activity is an activity that:
 - (a)** Has a duration longer than five days.
 - (b)** Is a milestone activity.
 - (c)** Is a contract item that exceeds \$10,000 on the contract cost proposal.
 - (d)** Is a critical path activity.

456
457 (e) Is an activity designated as such by the Engineer.
458

459 Each Method Statement shall include the following items
460 needed to fulfill the schedule:
461

462 (a) Quantity, type, make, and model of equipment.
463

464 (b) The manpower to do the work, specifying worker
465 classification.
466

467 (c) The production rate per eight-hour day, or the working
468 hours established by the contract documents needed to meet
469 the time indicated on the schedule. If the production rate is
470 not for eight hours, the number of working hours shall be
471 indicated.
472

473 (6) Two sets of color time-scaled project evaluation and review
474 technique charts ("PERT") using the activity box template of Logic –
475 Early Start or such other template designated by the Engineer.
476

477 If the contract documents establish a sequence or order for the work,
478 the initial progress schedule shall conform to such sequence or order.
479

480 **(E) Contractor's Continuing Schedule Submittal Requirements.**

481 After the acceptance of the initial TSLD and when construction starts, the
482 Contractor shall submit four plotted progress schedules, two PERT charts,
483 and reports on all construction activities every two weeks (bi-weekly). This
484 scheduled bi-weekly submittal shall also include an updated version of the
485 project schedule in a computerized software format as specified by the
486 Engineer. The submittal shall have all the information needed to re-create
487 that time period's TSLD plot and reports. The bi-weekly submittal shall
488 include, but not limited to, an update of activities based on actual durations,
489 all new activities and any changes in duration or start or finish dates of any
490 activity.
491

492 The Contractor shall submit with every update, in report form
493 acceptable to the Engineer, a list of changes to the progress schedule since
494 the previous schedule submittal. The Engineer may change the frequency
495 of the submittal requirements but may not require a submittal of the
496 schedule to be more than once a week. The Engineer may decrease the
497 frequency of the submittal of the bi-weekly schedule.
498

499 The Contractor shall submit updates of the anticipated work
500 completion graph, equipment listing, manpower requirement graph or
501 method statement when requested by the Engineer. The Contractor shall

submit such updates within 4 calendar days from the date of the request by the Engineer.

The Engineer may withhold progress payment until the Contractor is in compliance with all schedule update requirements.

(F) Float. All float appearing on a schedule is a shared commodity. Float does not belong to or exist for the exclusive use or benefit of either the State or the Contractor. The State or the Contractor has the opportunity to use available float until it is depleted. Float has no monetary value.

(G) Scheduled Meetings. The Contractor shall meet on a bi-weekly basis with the Engineer to review the progress schedule. The Contractor shall have someone attending the meeting that can answer all questions on the TSLD and other schedule related submittals.

(H) Accelerated Schedule; Early Completion. If the Contractor submits an accelerated schedule (shorter than the contract time), the Engineer's review and acceptance of an accelerated schedule does not constitute an agreement or obligation by the State to modify the contract time or completion date. The Contractor is solely responsible for and shall accept all risks and any delays, other than those that can be directly and solely attributable to the State, that may occur during the work, until the contract completion date. The contract time or completion date is established for the benefit of the State and cannot be changed without an appropriate change order or Substantial Completion granted by the State. The State may accept the work before the completion date is established, but is not obligated to do so.

If the TSLD indicates an early completion of the project, the Contractor shall, upon submittal of the schedule, cooperate with the Engineer in explaining how it will be achieved. In addition, the Contractor shall submit the above explanation in writing which shall include the State's part, if any, in achieving the early completion date. Early completion of the project shall not rely on changes to the Contract Documents unless approved by the Engineer.

(I) Contractor Responsibilities. The Contractor shall promptly respond to any inquiries from the Engineer regarding any schedule submission. The Contractor shall adjust the schedule to address directives from the Engineer and shall resubmit the TSLD package to the Engineer until the Engineer finds it acceptable.

The Contractor shall perform the work in accordance with the submitted TSLD. The Engineer may require the Contractor to provide additional work forces and equipment to bring the progress of the work into

conformance with the TSLD at no increase in contract price or contract time whenever the Engineer determines that the progress of the work does not insure completion within the specified contract time.

108.07 Weekly Meeting. In addition to the bi-weekly schedule meetings, the Contractor shall be available to meet once a week with the Engineer at the time and place as determined by the Engineer to discuss the work and its progress including but not limited to, the progress of the project, potential problems, coordination of work, submittals, erosion control reports, etc. The Contractor's personnel attending shall have the authority to make decisions and answer questions.

The Contractor shall bring to weekly meetings a detailed work schedule showing the next three weeks' work. Number of copies of the detailed work schedule to be submitted will be determined by the Engineer. The three-week schedule is in addition to the TSLD and shall in no way be considered as a substitute for the TSLD or vice versa. The three-week schedule shall show:

- (a) All construction events, traffic control and BMP related activities in such detail that the Engineer will be able to determine at what location and type of work will be done for any day for the next three weeks. This is for the State to use to plan its manpower requirements for that time period.
- (b) The duration of all events and delays.
- (c) The critical path clearly marked in red or marked in a manner that makes it clearly distinguishable from other paths and is acceptable to the Engineer.
- (d) Critical submittals and requests for information (RFI's).
- (e) The project title, project number, date created, period the schedule covers, Contractor's name and creator of the schedule on each page.

Two days prior to each weekly meeting, the Contractor shall submit a list of outstanding submittals, RFIs and issues that require discussion.

108.08 Liquidated Damages for Failure to Complete the Work or Portions of the Work on Time. The actual amount of damages resulting from the Contractor's failure to complete the contract in a timely manner is difficult to accurately determine. Therefore, the amount of such damages shall be liquidated damages as set forth herein and in the special provisions. The State may, at its discretion, deduct the amount from monies due or that may become due under the contract.

When the Contractor fails to reach substantial completion of the work for which liquidated damages are specified, within the time or times fixed in the contract or any extension thereof, in addition to all other remedies for breach that may be available to the State, the Contractor shall pay liquidated damages to the State, in the amount of \$1,000 per working day.

(A) Liquidated Damages Upon Termination. If the State terminates on account of Contractor's default, liquidated damages may be charged against the defaulting Contractor and its surety until final completion of work.

(B) Liquidated Damages for Failure to Complete the Punchlist. The Contractor shall complete the work on any punchlist created after the pre-final inspection, within the contract time or any extension thereof.

When the Contractor fails to complete the work on such punchlist within the contract time or any extension thereof, the Contractor shall pay liquidated damages to the State of 20 percent of the amount of liquidated damages established for failure to substantially complete the work within contract time. Liquidated damages shall not be assessed for the period between:

(1) Notice from the Contractor that the project is substantially complete and the time the punchlist is delivered to the Contractor.

(2) The date of the completion of punchlist as determined by the Engineer and the date of the successful final inspection, and

(3) The date of the Final Inspection that results in Substantial Completion and the receipt by the Contractor of the written notice of Substantial Completion.

(C) Actual Damages Recoverable If Liquidated Damages Deemed Unenforceable. In the event a court of competent jurisdiction holds that any liquidated damages assessed pursuant to this contract are unenforceable, the State will be entitled to recover its actual damages for Contractor's failure to complete the work, or any designated portion of the work within the time set by the contract.

108.09 Rental Fees for Unauthorized Lane Closure or Occupancy. In addition to all other remedies available to the State for Contractor's breach of the terms of the contract, the Engineer will assess the rental fees in the amount of \$1,500 for every one- to fifteen-minute increment for each roadway lane closed to public use or occupied beyond the time periods authorized in the contract or by the Engineer. The State may, at its discretion, deduct the amount from monies due or that may become due under the contract. The rental fee may be waived in whole

or part if the Engineer determines that the unauthorized period of lane closure or occupancy was due to factors beyond the control of the Contractor. Equipment breakdown is not a cause to waive liquidated damages.

108.10 Suspension of Work.

(A) Suspension of Work. The Engineer may, by written order, suspend the performance of the work, either in whole or in part, for such periods as the Engineer may deem necessary, for any cause, including but not limited to:

(1) Weather or soil conditions considered unsuitable for prosecution of the work.

(2) Whenever a redesign that may affect the work is deemed necessary by the Engineer.

(3) Unacceptable noise or dust arising from the construction even if it does not violate any law or regulation.

(4) Failure on the part of the Contractor to:

(a) Correct conditions unsafe for the general public or for the workers.

(b) Carry out orders given by the Engineer.

(c) Perform the work in strict compliance with the provisions of the contract.

(d) Provide adequate supervision on the jobsite.

(5) The convenience of the State.

(B) Partial and Total Suspension. Suspension of work on some but not all items of work shall be considered a "partial suspension". Suspension of work on all items shall be considered "total suspension". The period of suspension shall be computed from the date set out in the written order for work to cease until the date of the order for work to resume.

(C) Reimbursement to Contractor. In the event that the Contractor is ordered by the Engineer in writing as provided herein to suspend all work under the contract for the reasons specified in Subsections 108.10(A)(2), 108.10(A)(3), or 108.10(A)(5) of the "Suspension of Work" paragraph, the Contractor may be reimbursed for actual direct costs incurred on work at the jobsite, as authorized in writing by the Engineer, including costs

expended for the protection of the work. An allowance of 5 percent for indirect categories of delay costs will be paid on any reimbursed direct costs, including extended branch and home-office overhead and delay impact costs. No allowance will be made for anticipated profits. Payment for equipment which is ordered to standby during such suspension of work shall be made as described in Subsection 109.06(H) - Idle and Standby Equipment.

(D) Cost Adjustment. If the performance of all or part of the work is suspended for reasons beyond the control of the Contractor except an adjustment shall be made for any increase in cost of performance of this contract (excluding profit) necessarily caused by such suspension, and the contract modified in writing accordingly.

However, no adjustment to the contract price shall be made for any suspension, delay, or interruption:

(1) For weather related conditions.

(2) To the extent that performance would have been so suspended, delayed, or interrupted by any other cause, including the fault or negligence of the Contractor.

(3) Or, for which an adjustment is provided for or excluded under any other provision of this Contract.

(E) Claims for Adjustment. Any adjustment in contract price made shall be determined in accordance with Subsections 104.02 – Changes and 104.06 – Methods of Price Adjustment.

Any claims for such compensation shall be filed in writing with the Engineer within 30 days after the date of the order to resume work or the claim will not be considered. The claim shall conform to the requirements of Subsection 107.15(D) – Making of a Claim. The Engineer will take the claim under consideration, may make such investigations as are deemed necessary and will be the sole judge as to the equitability of the claim. The Engineer's decision will be final.

(F) No Adjustment. No provision of this clause shall entitle the Contractor to any adjustments for delays due to failure of its surety, the cancellation or expiration of any insurance coverage required by the contract documents, for suspensions made at the request of the Contractor, for any delay required under the contract, for suspensions, either partial or whole, made by the Engineer under Subsection 108.10(A)(4) of the "Suspension of work" paragraph.

731 **108.11 Termination of Contract for Cause.**

732
733 **(A) Default.** If the Contractor refuses or fails to perform the work, or any
734 separable part thereof, with such diligence as will assure its completion
735 within the time specified in this contract, or any extension thereof, or
736 commits any other material breach of this contract, and further fails within
737 seven days after receipt of written notice from the Engineer to commence
738 and continue correction of the refusal or failure with diligence and
739 promptness, the Engineer may, by written notice to the Contractor, declare
740 the Contractor in breach and terminate the Contractor's right to proceed
741 with the work or the part of the work as to which there has been delay or
742 other breach of contract. In such event, the State may take over the work,
743 perform the same to completion, by contract or otherwise, and may take
744 possession of, and utilize in completing the work, the materials, appliances,
745 and plants as may be on the site of the work and necessary, therefore.
746 Whether or not the Contractor's right to proceed with the work is terminated,
747 the Contractor and the Contractor's sureties shall be liable for any damage
748 to the State resulting from the Contractor's refusal or failure to complete the
749 work within the specified time.

750
751 **(B) Additional Rights and Remedies.** The rights and remedies of the
752 State provided in this contract are in addition to any other rights and
753 remedies provided by law.

754
755 **(C) Costs and Charges.** All costs and charges incurred by the State,
756 together with the cost of completing the work under contract, will be
757 deducted from any monies due or which would or might have become due
758 to the Contractor had it been allowed to complete the work under the
759 contract. If such expense exceeds the sum which would have been payable
760 under the contract, then the Contractor and the surety shall be liable and
761 shall pay the State the amount of the excess.

762
763 In case of termination, the Engineer will limit any payment to the
764 Contractor to the part of the contract satisfactorily completed at the time of
765 termination. Payment will not be made until the work has satisfactorily been
766 completed and all required documents, including the tax clearance required
767 by Subsection 109.11 – Final Payment are submitted by the Contractor.
768 Termination shall not relieve the Contractor or Surety from liability for
769 liquidated damages.

770
771 **(D) Erroneous Termination for Cause.** If, after notice of termination of
772 the Contractor's right to proceed under this section, it is determined for any
773 reason that good cause did not exist to allow the State to terminate as
774 provided herein, the rights and obligations of the parties shall be the same
775 as, and the relief afforded the Contractor shall be limited to, the provisions
776 contained in Subsection 108.12 – Termination for Convenience.

777 **108.12 Termination For Convenience.**

778
779 **(A) Terminations.** The Director may, when the interests of the State so
780 require, terminate this contract in whole or in part, for the convenience of
781 the State. The Director will give written notice of the termination to the
782 Contractor specifying the part of the contract terminated and when
783 termination becomes effective.

784
785 **(B) Contractor's Obligations.** The Contractor shall incur no further
786 obligations in connection with the terminated work and on the date set in
787 the notice of termination the Contractor shall stop work to the extent
788 specified. The Contractor shall also terminate outstanding orders and
789 subcontracts as they relate to the terminated work. The Contractor shall
790 settle the liabilities and claims arising out of the termination of subcontracts
791 and orders connected with the terminated work subject to the State's
792 approval. The Engineer may direct the Contractor to assign the Contractor's
793 right, title, and interest under terminated orders or subcontracts to the State.
794 The Contractor must still complete the work not terminated by the notice of
795 termination and may incur obligations as necessary to do so.

796
797 **(C) Right to Construction and Goods.** The Engineer may require the
798 Contractor to transfer title and to deliver to the State in the manner and to
799 the extent directed by the Engineer, the following:

800
801 **(1)** Any completed work.

802
803 **(2)** Any partially completed construction, goods, materials, parts,
804 tools, dies, jigs, fixtures, drawings, information, and contract rights
805 (hereinafter called "construction material") that the Contractor has
806 specifically produced or specially acquired for the performance of the
807 terminated part of this contract.

808
809 **(3)** The Contractor shall protect and preserve all property in the
810 possession of the Contractor in which the State has an interest. If
811 the Engineer does not elect to retain any such property, the
812 Contractor shall use its best efforts to sell such property and
813 construction materials for the State's account in accordance with the
814 standards of HRS Chapter 490:2-706.

815
816 **(D) Compensation.**

817
818 **(1)** The Contractor shall submit a termination claim specifying the
819 amounts due because of the termination for convenience together
820 with cost or pricing data, submitted to the extent required by HAR
821 Subchapter 15, Chapter 3-122. If the Contractor fails to file a
822 termination claim within one year from the effective date of

823 termination, the Engineer may pay the Contractor, if at all, an amount
824 set in accordance with Subsection 108.12(D)(3).

825
826 **(2)** The Engineer and the Contractor may agree to a settlement
827 provided the Contractor has filed a termination claim supported by
828 cost or pricing data submitted as required and that the settlement
829 does not exceed the total contract price plus settlement costs
830 reduced by payments previously made by the State, the proceeds of
831 any sales of construction, supplies, and construction materials under
832 Subsection 108.12(C)(3), and the proportionate contract price of the
833 work not terminated.

834
835 **(3)** Absent complete agreement, the Engineer will pay the
836 Contractor the following amounts less any payments previously
837 made under the contract:

838
839 **(a)** The cost of all contract work performed prior to the
840 effective date of the notice of termination work plus a 5
841 percent markup on the actual direct costs, including amounts
842 paid to subcontractor, less amounts paid or to be paid for
843 completed portions of such work; provided, however, that if it
844 appears that the Contractor would have sustained a loss if the
845 entire contract would have been completed, no markup shall
846 be allowed or included and the amount of compensation shall
847 be reduced to reflect the anticipated rate of loss. No
848 anticipated profit or consequential damage will be due or paid.

849
850 **(b)** Subcontractors shall be paid a markup of 10 percent
851 on their direct job costs incurred to the date of termination. No
852 anticipated profit or consequential damage will be due or paid
853 to any subcontractor. These costs must not include payments
854 made to the Contractor for subcontract work during the
855 contract period.

856
857 **(c)** The total sum to be paid the Contractor shall not
858 exceed the total contract price reduced by the amount of any
859 sales of construction supplies, and construction materials.

860
861 **(4)** Cost claimed, agreed to, or established by the State shall be
862 in accordance with HAR Chapter 3-123.

863
864 **108.13 Pre-Final and Final Inspections.**

865
866 **(A) Inspection Requirements.** Before the Engineer undertakes a final
867 inspection of any work, a pre-final inspection must first be conducted. The

Contractor shall notify the Engineer that the work has reached substantial completion and is ready for pre-final inspection.

(B) Pre-Final Inspection. Before notifying the Engineer that the work has reached substantial completion, the Contractor shall inspect the project and test all installed items with all of its subcontractors as appropriate. The Contractor shall also submit the following documents as applicable to the work:

- (1) All written guarantees required by the contract.
- (2) Two accepted final field-posted drawings as specified in Section 648 – Field-Posted Drawings;
- (3) Complete weekly certified payroll records for the Contractor and Subcontractors.
- (4) Certificate of Plumbing and Electrical Inspection.
- (5) Certificate of building occupancy as required.
- (6) Certificate of Soil and Wood Treatments.
- (7) Certificate of Water System Chlorination.
- (8) Certificate of Elevator Inspection, Boiler and Pressure Pipe Inspection.
- (9) Maintenance Service Contract and two copies of a list of all equipment installed.
- (10) Current Tax clearance. The contractor will be required to submit an additional tax clearance certificate when the final payment is made.
- (11) And any other final items and submittals required by the contract documents.

(C) Procedure. When in compliance with the above requirements, the Contractor shall notify the Engineer in writing that the project has reached substantial completion and is ready for pre-final inspection.

The Engineer will then make a preliminary determination as to whether or not the project is substantially complete and ready for pre-final inspection. The Engineer may, in writing, postpone until after the pre-final inspection the Contractor's submittal of any of the items listed in Subsection

108.13(B) – Pre-Final Inspection, herein, if in the Engineer’s discretion it is in the interest of the State to do so.

If, in the opinion of the Engineer, the project is not substantially complete, the Engineer will provide the Contractor a punchlist of specific deficiencies in writing which must be corrected or finished before the work will be ready for a pre-final inspection. The Engineer may add to or otherwise modify this punchlist from time to time. The Contractor shall take immediate action to correct the deficiencies and must repeat all steps described above including written notification that the work is ready for pre-final inspection.

After the Engineer is satisfied that the project appears substantially complete a final inspection shall be scheduled within ten working days after receipt of the Contractor’s latest letter of notification that the project is ready for final inspection.

If, as a result of the pre-final inspection, the Engineer determines the work is not substantially complete, the Engineer will inform the Contractor in writing as to specific deficiencies which must be corrected before the work will be ready for another pre-final inspection. If the Engineer finds the work is substantially complete but finds deficiencies that must be corrected before the work is ready for final inspection, the Engineer will prepare in writing and deliver to the Contractor a punchlist describing such deficiencies.

At any time before final acceptance, the Engineer may revoke the determination of substantial completion if the Engineer finds that it was not warranted and will notify the Contractor in writing the reasons therefore together with a description of the deficiencies negating the declaration.

When the date of substantial completion has been determined by the State, liquidated damages for the failure to complete the punchlist, if due to the State will be assessed in pursuant to Subsection 108.08(B) - Liquidated Damages for Failure to Complete the Punchlist.

(D) Punchlist; Clean Up and Final Inspection. Upon receiving a punchlist after pre-final inspection, the Contractor shall promptly devote all required time, labor, equipment, materials and incidentals to correct and remedy all punchlist deficiencies. The Engineer may add to or otherwise modify this punchlist until substantial completion of the project.

Before final inspection of the work, the Contractor shall clean all ground occupied by the Contractor in connection with the work of all rubbish, excess materials temporary structures and equipment, shall remove all graffiti and defacement of the work and all parts of the work and

the worksite must be left in a neat and presentable condition to the satisfaction of the Engineer.

Final inspection will occur within ten working days after the Contractor notifies the Engineer in writing that all punchlist deficiencies remaining after the pre-final inspection have been completed and the Engineer concurs. If the Engineer determines that deficiencies still remain at the final inspection, the work will not be accepted and the Engineer will notify the Contractor, in writing, of the deficiencies which shall be corrected and the steps above repeated.

If the Contractor fails to correct the deficiencies and complete the work by the established or agreed date, the State may correct the deficiencies by whatever method it deems appropriate and deduct the cost from any payments due the Contractor.

108.14 Substantial Completion and Final Acceptance.

(A) Substantial Completion. When the Engineer finds that the Contractor has satisfactorily completed all work for the project in compliance with the contract, with the exception of the planting period and the plant establishment period, the Engineer will notify the Contractor, in writing, of the project's substantial completion, effective as of the date of the final inspection. The substantial completion date shall determine end of contract time and relieve contractor of any additional accumulation of liquidated damages for failure to complete the punchlist.

(B) Final Acceptance. When the Engineer finds that the Contractor has satisfactorily completed all contract work in compliance with the contract including all plant establishment requirements, and all the materials have been accepted by the State, the Engineer will issue a Final Acceptance Letter. The Final Acceptance date shall determine the commencement of all guaranty periods subject to Subsection 108.16 – Contractor's Responsibility for Work; Risk of Loss or Damage.

108.15 Use of Structure or Improvement. The State has the right to use the structure, equipment, improvement, or any part thereof, at any time after it is considered by the Engineer as available. In the event that the structure, equipment or any part thereof is used by the State before final acceptance, the Contractor is not relieved of its responsibility to protect and preserve all the work until final acceptance.

108.16 Contractor's Responsibility for Work; Risk of Loss or Damage. Until the written notice of final acceptance has been received, the Contractor shall take every precaution against loss or damage to any part of the work by the action of the elements or from any other cause whatsoever, whether arising from the

performance or from the non-performance of the work. The Contractor shall rebuild, repair, restore and make good all loss or damage to any portion of the work resulting from any cause before its receipt of the written notice of final acceptance and shall bear the risk and expense thereof.

The risk of loss or damage to the work from any hazard or occurrence that may or may not be covered by a builder's risk policy is that of the Contractor and Surety, unless such risk of loss is placed elsewhere by express language in the contract documents.

108.17 Guarantee of Work.

(1) Regardless of, and in addition to, any manufacturers' warranties, all work and equipment shall be guaranteed by the Contractor against defects in materials, equipment or workmanship for one year from the date of final acceptance or as otherwise specified in the contract documents.

(2) When the Engineer determines that repairs or replacements of any guaranteed work and equipment is necessary due to materials, equipment, or workmanship which are inferior, defective, or not in accordance with the terms of the contract, the Contractor shall, at no increase in contract price or contract time, and within five working days of receipt of written notice from the State, commence to all of the following:

(a) Correct all noted defects and make replacements, as directed by the Engineer, in the equipment and work.

(b) Repair or replace to new or pre-existing condition any damages resulting from such defective materials, equipment or installation thereof.

(3) The State will be entitled to the benefit of all manufacturers and installers warranties that extend beyond the terms of the Contractor's guaranty regardless of whether or not such extended warranty is required by the contract documents. The Contractor shall prepare and submit all documents required by the providers of such warranties to make them effective, and submit copies of such documents to the Engineer. If an available extended warranty cannot be transferred or assigned to the State as the ultimate user, the Contractor shall notify the Engineer who may direct that the warranted items be acquired in the name of the State as purchaser.

(4) If a defect is discovered during a guarantee period, all repairs and corrections to the defective items when corrected shall be guaranteed for a new duration equal to the original full guarantee period. The running of the guarantee period shall be suspended for all other work affected by any

defect. The guarantee period for all other work affected by any such defect shall restart for its remaining duration upon confirmation by the Engineer that the deficiencies have been repaired or remedied.

(5) Nothing in this section is intended to limit or affect the State's rights and remedies arising from the discovery of latent defects in the work after the expiration of any guarantee period.

108.18 No Waiver of Legal Rights. The following will not operate or be considered as a waiver of any portion of the contract, or any power herein reserved, or any right to damages provided herein or by law:

(1) Any payment for, or acceptance of, the whole or any part of the work.

(2) Any extension of time.

(3) Any possession taken by the Engineer.

A waiver of any notice requirement or of any noncompliance with the contract will not be held to be a waiver of any other notice requirement or any other noncompliance with the contract.

108.19 Final Settlement of Contract.

(A) **Closing Requirements.** The contract will be considered settled after the project acceptance date and when the following items have been satisfactorily submitted, where applicable:

(1) All written guarantees required by the contract.

(2) Complete and certified weekly payrolls for the Contractor and its subcontractor's.

(3) Certificate of plumbing and electrical inspection.

(4) Certificate of building occupancy.

(5) Certificate for soil treatment and wood treatment.

(6) Certificate of water system chlorination.

(7) Certificate of elevator inspection, boiler and pressure pipe installation.

(8) Tax clearance.

1098 (9) All other documents required by the Contract or by law.
1099
1100 **(B) Failure to Meet Closing Requirements.** The Contractor shall meet
1101 the applicable closing requirements within 60 days from the date of Project
1102 Acceptance or the agreed to Punchlist complete date. Should the
1103 Contractor fail to comply with these requirements, the Engineer may
1104 terminate the contract for cause.”

1105
1106
1107
1108
1109

END OF SECTION 108

1 **SECTION 109 - MEASUREMENT AND PAYMENT**

2
3 Make the following amendment to said Section:

4
5 **(I) Amend Subsection 109.05 Allowances for Overhead and Profit** by
6 revising lines 101 to 110 to read as follows:

7
8 **“(1) 20 percent of the direct cost for any work performed by the**
9 **Contractor’s own labor force.**

10
11 **(2) 20 percent of the direct cost for any work performed by each**
12 **subcontractor’s own labor force.**

13
14 **(3) For the Contractor or any subcontractor for work performed**
15 **by their respective subcontractor or tier subcontractor, 10 percent**
16 **of the amount due to the performing subcontractor or tier**
17 **subcontractor.”**

18
19 **(II) Amend 109.08(A) Monthly Payment** by adding the following after line
20 411:

21
22 **“(1) Retainage.** If the Engineer finds that the Contractor is
23 progressing satisfactorily in completing the project work and:

24
25 **a.** Less than 50% of the whole contract cost is complete,
26 the Engineer shall retain 5% of the value of the work done
27 until the Engineer makes final payment.

28
29 **b.** More than 50% of the whole contract cost is
30 complete, the Engineer may make the remaining progress
31 payments in full.

32
33 **c.** After satisfactory completion of work other than
34 landscaping items, the Engineer may adjust the amount of
35 retainage to 15% of the landscaping items or 2½% of the
36 total contract amount whichever is less. Do not use this
37 subsection if the contract is only landscaping.”

38
39 **(III) Amend Subsection 109.08(B) Payment for Material On Hand** by
40 revising lines 421 to 423 to read as follows:

41
42 **“(2) The materials shall be stored and handled in accordance**
43 **with Subsection 105.14 – Storage and Handling of Materials and**
44 **Equipment.”**

47 **(IV)** Amend **Subsection 109.11 Final Payment** by revising lines 568 to 580
48 to read as follows:

49
50 **“(3)** A current “Certificate of Vendor Compliance” issued by the
51 Hawaii Compliance Express (HCE). The Certificate of Vendor
52 Compliance is used to certify the Contractor’s compliance with

53
54 **(a)** Section 103D-328, HRS (for all contracts \$25,000 or
55 more) which requires a current tax clearance certificate
56 issued by the Hawaii State Department of Taxation and the
57 Internal Revenue Service.

58
59 **(b)** Chapters 383, 386, 392, and 393, HRS; and

60
61 **(c)** Subsection 103D-310(c), HRS. The State reserves
62 the right to verify that compliance is current prior to the
63 issuance of final payment. Contractors are advised that non-
64 compliance status will result in final payment being withheld
65 until compliance is attained.

66
67 Sums necessary to meet the claims of any governmental agencies
68 may be withheld from the sums due the Contractor until said
69 claims have been fully and completely discharged or otherwise
70 satisfied.”

71
72
73 **END OF SECTION 109**

1 Make this section a part of the Standard Specifications:

2
3 **“SECTION 110 - PORTLAND CEMENT CONCRETE SIDEWALK, CURB AND**
4 **GUTTER, CONCRETE MEDIAN BARRIER REPAIRS AT VARIOUS**
5 **LOCATIONS**
6

7 **110.01 Scope of Work.** The work shall consist of furnishing all labor, necessary
8 equipment, materials and traffic control, to repair severely cracked, faulted, popped
9 up and depressed Portland cement concrete (PCC) sidewalks, curb and/or gutters
10 and severely damaged concrete median barriers on the Island of Oahu as
11 requested.
12

13 All work shall be performed in a professional manner in accordance with
14 current industry practices and this document. All PCC or concrete median barrier
15 repair related debris shall be removed daily at all locations. See Subsection 110.03
16 – Area of Coverage.
17

18 The Contractor shall work as directed by the Highways Oahu District
19 Maintenance Engineer (Engineer). The Contractor, as per Subsection 110.04 –
20 Safety and Convenience, shall provide traffic control and its cost shall be inclusive
21 of PCC sidewalk, curb and/or gutter repair and concrete median barrier repair work
22 cost.
23

24 The Contractor shall possess a General Engineering “A” or General Building
25 “B” or Specialty Contractor’s “C-31” or “C-31a” license at the time of bidding, and
26 shall have possessed the license and have performed similar work for at least two
27 years prior to the bid date. Failure to meet this requirement shall be cause of
28 disqualification.
29

30 **110.02 Contract Period and Option to Extend.** The period of the contract
31 shall be for 24 months commencing from the date indicated in the “Notice to
32 Proceed” from the Department. There is an option to extend for three additional
33 12-month periods, without re-bidding, upon mutual agreement in writing prior to
34 the contract expiration date. The maximum contract period is 60 months.
35

36 Failure by the Contractor to execute the amendment to extend the contract
37 within the number of days specified under Section 103.07 - Failure to Execute
38 Contract may be cause for cancellation of the written agreement to extend the
39 contract and may be subject to disqualification from bidding future projects for a
40 two-year period in accordance with Section 102.12 - Disqualification of Bidders.
41

42 To compensate for escalation during the maximum contract period, the
43 Department will adjust the Unit Prices of all items on the Proposal Schedule by 2%
44 on the start date of an extension period. The price adjustment shall not be applied
45 to contract change orders issued within the current contract year or work orders
46 that have already been issued to the contractor.
47

110.03 Area of Coverage. The project requires the Contractor to repair existing PCC sidewalks, curbs and/or gutters and concrete median barriers at various locations on the Island of Oahu as requested. Work shall be grouped into four areas along with the corresponding routes as shown on the attached map of the island of Oahu (Figure 5). Note: There are numerous side streets with or without route numbers along State highways where State Jurisdiction extends various distances into side streets. The four areas are:

(A) Area 1:

Route 64, Sand Island Access Road and Sand Island Parkway
Nimitz Highway (92) to Sand Island Park Entrance
Route 78, Moanalua Freeway
Kamehameha Highway (99) On-Ramp to Moanalua Freeway to
Moanalua Freeway Overpass (Structure over H-1)
Route 92, Kam-Nimitz Highway
Main Gates at Pearl Harbor and Hickam AFB to Kalihi Stream Bridge
Route 92, Nimitz Highway
Kalihi Stream Bridge to Richards Street
Route 92, Ala Moana Boulevard
Richards Street to 135 feet South of Kalakaua Avenue
Route 99, Kamehameha Highway
Waiawa Interchange to Pearl Harbor Interchange
Route 99, Farrington Highway
Waiawa Interchange
Route 7239, Ulune Street and Halawa Valley Road
North East of Kahuapaani Street to Iwaiwa Street
Route 7241, Kahuapaani Street
Salt Lake Boulevard to Halawa Heights Road
Route 7241, Halawa Heights Road
Kikania Street to Fernridge Place
Route 7310, Puuloa Road
Kam-Nimitz Highway (92) to Mahiole Street
Route 7345, Jarrette White Road
Mahiole Street to Tripler Hospital Gate
Route 7350, Bougainville Drive
Radford Drive (7351) to Salt Lake Boulevard
Route 7351, Radford Drive
Kamehameha Highway (99) to Bougainville Drive (7350)
Route 7401, Kamehameha Highway
Middle Street to Kalihi Stream Bridge
Route 7413, Liliha Street
North King Street to School Street
Route 7415, Middle Street
Kamehameha Highway (99) to Mauka of H-1 Freeway
*Route H-1, Waiawa Interchange to Kahauiki Interchange
Pearl City/ Waipahu to Middle Street
Route H-3, Halawa Interchange to Halawa Portal of Harano
Tunnel
Route H201, Moanalua Freeway
Moanalua Freeway Overpass (Structure over H-1) to Kahauiki Interchange

98 Ala Ike Street (Leeward Community College)
 99 Kaua Street
 100 Middle Street (7415) to Pineapple Place
 101 Lagoon Drive
 102 Nimitz Highway (92) to Koapaka Street
 103 Moanalua Road (Waiau Interchange)
 104 Ewa of Kaulike Drive to Kokohead of Hoomalu Stree
 105 North King Street
 106 Middle Street (7415) to Ola Lane Overpass
 107 Pacific Street
 108 425 feet West of Nimitz Highway Outbound Centerline and Inbound lanes in
 109 Iwilei
 110 Salt Lake Boulevard
 111 Kahuapaani Street (7241) to Luapele Drive
 112 Sumner Street
 113 Between Nimitz Highway (92) Outbound and Inbound lanes in Iwilei
 114 Waiawa Road (Near Leeward Community College)
 115 Farrington Highway (99) to Ala Ike Street
 116
 117 **(B) Area 2:**
 118 Route 76, Fort Weaver Road
 119 Navy Reservation Gate to Interstate Route H-1
 120 Route 93, Farrington Highway
 121 Palailai Interchange to Kaena Point State Park
 122 Route 93, Farrington Highway (Makakilo Interchange)
 123 Intersection of Fort Barrette Road (901) and Makakilo Drive, 500 feet on both
 124 sides of Intersection
 125 Route 95, Kalaeloa Boulevard and Malakole Street
 126 Palailai Interchange to Vicinity of Kaiholo Street
 127 Route 750, Kunia Road
 128 Interstate Route H-1 to Wilikina Drive (99)
 129 Route 901, Fort Barrette Road
 130 Barbers Point Naval Reservation to Makakilo Drive Overpass
 131 Route 7101, Farrington Highway
 132 Fort Weaver Road (76) to Waiawa Interchange
 133 Route 7110, Farrington Highway
 134 Fort Weaver Road (76) to Old Fort Weaver Road
 135 Route 7141, Iroquois Road
 136 Fort Weaver Road (76) to West Loch Ammunition Depot
 137 Route 7142, Waipahu Street
 138 Kamehameha Highway (99) to Makai End of H-1 Overpass
 139 Route H-1, Kalaeloa Boulevard to Waiawa Interchange
 140
 141 **(C) Area 3:**
 142 Route 80, Kamehameha Highway
 143 Wilikina Drive (99) to Kamananui Road (99)
 144 Route 83, Joseph P. Leong Highway
 145 Kamehameha Highway (99) to Kamehameha Highway (83)
 146 Route 83, Kamehameha Highway
 147 Kahalewai Place to Kahaluu Bridge
 148 Route 83, Kahekili Highway

149 Kahaluu Bridge to Intersection of Kahekili Highway (83) and Likelike Highway
 150 (63)
 151 Route 83, Likelike Highway
 152 Intersection of Likelike Hwy (63) and Kamehameha Hwy (83) to Kaneohe Bay
 153 Drive (65)
 154 Route 83, Kamehameha Highway
 155 Intersection of Likelike Hwy (63) & Kaneohe Bay Drive (65) to Pali Hwy (61)
 156 Route 99, Kamehameha Highway
 157 Weed Junction (Haleiwa) to Kamananui Road (99)
 158 Route 99, Kamananui Road
 159 Kamehameha Highway (99) to Wilikina Drive (99)
 160 Route 99, Wilikina Drive
 161 Kamananui Road (99) to Kamehameha Hwy (99) at Wahiawa Interchange
 162 Route 99, Kamehameha Highway
 163 Wahiawa Interchange to Waiawa Interchange
 164 Route 930, Farrington Highway
 165 Dillingham Airfield to Kaukonahua Road at Thompson Corner
 166 Route 930, Kaukonahua Road
 167 Kaukonahua Road at Thompson Corner to South of Paukauila Stream
 168 Route 7012, Whitmore Avenue
 169 Kamehameha Highway (80) to Helemano Naval Reservation
 170 Route 7013, Meheula Parkway (Mililani Interchange)
 171 Beginning of Northbound On-Ramp to End of Southbound Off-Ramp
 172 Route 7160, Ka Uka Boulevard (Waipio Interchange)
 173 Moaniani Street to the beginning of Mililani Memorial Park Road
 174 Route H-2, Wahiawa Interchange to Waiawa Interchange
 175 Leilehua Golf Course Road (Leilehua Interchange)
 176 Kamehameha Highway (99) to Northbound Off-Ramp (H-2)
 177

(D) Area 4:

178
 179 Route 61, Pali Highway
 180 Vineyard Boulevard (98) to Castle Junction
 181 Route 61, Kalanianaʻole Highway
 182 Castle Junction to Waimanalo Junction
 183 Route 61, Kailua Road
 184 Waimanalo Junction to Kawainui Bridge
 185 Route 63, Kalihi Street
 186 Nimitz Highway (92) to School Street
 187 Route 63, Likelike Highway
 188 School Street to Intersection of Kahekili Hwy (83) & Likelike Hwy (83)
 189 Route 65, Kaneohe Bay Drive
 190 Kamehameha Highway (83) to Vicinity of Kaimalu Place
 191 Route 65, Kaneohe Bay Drive
 192 Malae Place to Kailua Interchange (H-3)
 193 Route 65, Mokapu Saddle Road
 194 Kaneohe Bay Drive (65) to Ilipilo Street
 195 Route 65, Mokapu Boulevard
 196 Ilipilo Street to North Kalaheo Avenue
 197 Route 72, Kalanianaʻole Highway
 198 Waimanalo Junction to Ainakoa Avenue
 199 Route 98, Vineyard Boulevard

H-1 Off-Ramp & Olomea Street to H-1 On-Ramp (Pedestrian Overpass)
 Route 98, Halona Street
 Houghtailing Street to Palama Street
 Route 98, Olomea Street
 Houghtailing Street to Palama Street
 Route 7601, Old Waialae Road (Kapiolani Interchange)
 Kapiolani Boulevard to North King Street
 Route 7801, Waialae Avenue
 17th Avenue to Kilauea Avenue
 *Route H-1, Middle Street (7415) to Ainakoa Avenue
 Route H-3, Haiku Portal of Harano Tunnel to Kaneohe Marine Corp Base
 Bingham Street
 Punahou Street to Vicinity of Isenberg Street
 Funchal Street
 Pauoa Road to Pali Highway (61)
 Kapahulu Avenue
 Harding Avenue to Kapiolani Boulevard
 Keeaumoku Street
 Kinau Street to Kaihee Street
 Kokohead Avenue
 Harding Avenue to Pahoa Avenue
 Lunalilo Street
 Ernest Street to Keeaumoku Street
 McCully Street
 Beretania Street to Dole Street
 Metcalf Street
 Dole Street to Alexander Street
 Papaku Place
 Near Piikoi/H-1 On-Ramp (East)
 South King/ Harding Avenue
 Waialae Avenue (near Humane Society) to Second Avenue
 Waiaka Road
 Waiaka Place to Kapiolani Boulevard
 Waokanaka Street

*Note: Night work is required. Refer to Section 110.04 – Safety and
 Convenience

110.04 Safety and Convenience. The Contractor shall at all times conduct his
 work to assure the least possible obstruction to public traffic. The safety and
 convenience of the general public and the protection of persons and property is of
 utmost importance, and the Contractor shall provide appropriate traffic control and
 safety measures. The Contractor and his employees shall treat members of the
 public in a fair and polite manner. Workers shall present a professional
 appearance and conduct themselves in a professional manner at all times.

All Traffic control and safety measures shall be done in conformance 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 (MUTCD) for Streets and Highways”, 2023 Edition with latest Revision. Costs for traffic control shall include set-up and removal of all signs, cones, delineators, barricades, flag persons, police officers, arrow boards, etc., and shall be included in the PCC sidewalk, curb and/or gutter and concrete median barrier repair proposal price. See Section 645 – Work Zone Traffic Control.

Do not close traffic lanes or slow down traffic during the following peak hours:

Morning Peak Hours	6:00 A.M. to 8:30 A.M.
Afternoon Peak Hours	3:00 P.M. to 6:00 P.M.

Morning Peak Hours from 6:00 A.M. to 9:00 A.M. shall be observed for Likelike and Pali Highways, Nimitz Highway/Ala Moana Boulevard, and Fort Weaver Road.

Above peak hours are daily except Saturdays, Sundays and holidays.

Night work is required for Interstate Routes H-1, H-201, H-2, and H-3. Night work may be required for other routes depending on the location. The night work hours are from 10:00 P.M. to 4:30 A.M. All areas are affected.

The Contractor must notify all private property owners in the vicinity where PCC sidewalk, curb and/or gutter repairs are performed in the event that the work may hinder access to their property. The Contractor must also secure permission prior to entering private property to do sidewalk, curb and/or gutter repair work, if any.

The Contractor shall remove debris daily and shall leave the work site in a condition equal to or cleaner than prior to commencing work. The Contractor shall be responsible for all hauling and lawful disposal of debris. Any unauthorized or illegal disposal is grounds for termination of the contract. No section of incomplete sidewalk, curb and/or gutter and concrete median barrier shall be left unshielded at the end of each work day.

110.05 Hours of Operation. The Contractor shall be available to provide the specified services during normal working hours and complete the services within the period specified in the work order. Normal working days and hours for the project are defined as Monday through Friday, 8:30 A.M. to 3:00 P.M., except for State holidays. Refer to Section 645 – Work Zone Traffic Control. Authorized Highways personnel will contact the Contractor to schedule work, as needed. All services requested after normal work hours may be charged in accordance with Subsection 107.04 – Overtime and Night Work.

295 **110.06 Disposal of Debris.** The Contractor shall be responsible for all hauling
296 and dump fees and shall include the cost of these items in his bid. Any
297 unauthorized or illegal disposal is grounds for termination of the contract.
298

299 **110.07 Work Orders.** Prepare a work order (Figure 6) for each PCC sidewalk,
300 curb and/or gutter or concrete median barrier repair or group of sidewalk, curb
301 and/or gutter or concrete median barrier repairs in the same location. The work
302 order shall also include the construction schedule, supervisory staff, equipment
303 list, and material to be used. At certain work sites, erosion control plans or BMP
304 plans will be requested by the Engineer. Submit the work order for approval to the
305 Highways Oahu District Maintenance Superintendent at the Oahu District Office,
306 727 Kakoi Street, Honolulu, Hawaii 96819. Work shall not be performed unless
307 the Contractor receives an approved work order. The Engineer or his
308 representative shall authorize any increases in total price.
309

310 **110.08 Basis of Payment.** Payment shall be made by purchase order. The
311 Contractor shall submit monthly invoices to the Oahu District Office, 727 Kakoi
312 Street, Honolulu, Hawaii 96819, if services are rendered. See Subsection 109.08
313 - Progress Payments.”
314
315

316 **END OF SECTION 110**

1 Amend **Section 209 - TEMPORARY WATER POLLUTION, DUST, AND**
2 **EROSION CONTROL** to read as follows:

3
4
5 **“SECTION 209 - TEMPORARY WATER POLLUTION, DUST, AND EROSION**
6 **CONTROL**

7
8
9 **209.01 Description.** This section describes the following:

10
11 **(A)** Including detailed plans, diagrams, and written Site-Specific Best
12 Management Practices (BMP); constructing, maintaining, and repairing
13 temporary water pollution, dust, and erosion control measures at the project
14 site, including local material sources, work areas and haul roads; removing
15 and disposing hazardous wastes; control of fugitive dust (defined as
16 uncontrolled emission of solid airborne particulate matter from any source
17 other than combustion); and complying with applicable State and Federal
18 permit conditions.

19
20 **(B)** Work associated with construction stormwater, dewatering, and
21 hydrotesting activities and complying with conditions of the National
22 Pollutant Discharge Elimination System (NPDES) permit(s) authorizing
23 discharges associated with construction stormwater, dewatering, and
24 hydrotesting activities.

25
26 **(C)** Potential pollutant identification and mitigation measures are listed in
27 Appendix A for use in the development of the Contractor’s Site-Specific
28 BMP.

29
30 Requirements of this section also apply to construction support
31 activities including concrete or asphalt batch plants, rock crushing plants,
32 equipment staging yards/areas, material storage areas, excavated material
33 disposal areas, and borrow areas located outside the State Right-of-Way.
34 For areas serving multiple construction projects, or operating beyond the
35 completion of the construction project in which it supports, the Contractor
36 shall be responsible for securing the necessary permits, clearances, and
37 documents, and following the conditions of the permits and clearances, at
38 no cost to the State.

39
40 **209.02 Materials.** Comply with applicable materials described in Chapters 2
41 and 3 of the current HDOT “Construction Best Management Practices Field
42 Manual”. In addition, the materials shall comply with the following:

43
44 **(A) Grass.** Grass shall be a quick growing species such as rye grass,
45 Italian rye grass, or cereal grasses. Grass shall be suitable to the area and
46 provide a temporary cover that will not compete later with permanent cover.

Alternative grasses are allowable if acceptable to the Engineer.

(B) Fertilizer and Soil Conditioners. Fertilizer and soil conditioners shall be a standard commercial grade acceptable to the Engineer. Fertilizer shall conform to Subsection 619.02(H)(1) - Commercial Fertilizer.

(C) Hydro-mulching. Hydro-mulching used as a temporary vegetative stabilization measure shall consist of materials in Subsections 209.02(A) - Grass, and 209.02(B) – Fertilizer and Soil Conditioners. Mulches shall be recycled materials including bagasse, hay, straw, wood cellulose bark, wood chips, or other material acceptable to the Engineer. Mulches shall be clean and free of noxious weeds and deleterious materials. Potable water shall meet the requirements of Subsection 712.01 - Water. Submit alternate sources of irrigation water for the Engineer's acceptance if deviating from 712.01 - Water. Installation and other requirements shall be in accordance with portions of Section 641- Hydro-Mulch Seeding including 641.02(D) - Soil and Mulch Tackifier, 641.03(A) – Seeding, and 641.03(B) - Planting Period. Install non-vegetative controls including mulch or rolled erosion control products while the vegetation is being established. Water and fertilize grass. Apply fertilizer as recommended by the manufacturer. Replace grass the Engineer considers unsuitable or sick. Remove and dispose of trash and debris. Remove invasive species. Mow as needed to prevent site or signage obstructions, fire hazard, or nuisance to the public. Do not remove down stream sediment control measures until the vegetation is uniformly established, including no large bare areas, and provides 70 percent of the density of pre-disturbance vegetation. Temporary vegetative stabilization shall not be used longer than one year.

(D) Silt Fences. Comply with ASTM D6462, Standard Practice for Silt Fence Installation.

Alternative materials or methods to control, prevent, remove and dispose pollution are allowable if acceptable to the Engineer.

209.03 Construction.

(A) Preconstruction Requirements.

(1) Water Pollution, Dust, and Erosion Control Meeting. Schedule a water pollution, dust, and erosion control meeting with the Engineer after Site-Specific BMP is accepted in writing by the Engineer. Meeting shall be scheduled a minimum of 7 calendar days prior to the Start Work Date. Discuss sequence of work, plans and proposals for water pollution, dust, and erosion control.

91 **(2) Water Pollution, Dust, and Erosion Control Submittals.**

92 Submit a Site-Specific BMP Plan within 21 calendar days of date of
93 award. Submission of complete and acceptable Site-Specific BMP
94 Plan is the sole responsibility of the Contractor and additional
95 contract time will not be issued for delays due to incompleteness.
96 Include the following:
97

98 **(a)** Written description of activities to minimize water
99 pollution and soil erosion into State waters, drainage or sewer
100 systems. BMP shall include the following:
101

102 **1.** An identification of potential pollutants and their
103 sources.
104

105 **2.** A list of all materials and heavy equipment to be
106 used during construction.
107

108 **3.** Descriptions of the methods and devices used
109 to minimize the discharge of pollutants into State
110 waters, drainage or sewer systems.
111

112 **4.** Details of the procedures used for the
113 maintenance and subsequent removal of any erosion
114 or siltation control devices.
115

116 **5.** Methods of removing and disposing hazardous
117 wastes encountered or generated during construction.
118

119 **6.** Methods of removing and disposing concrete
120 and asphalt pavement cutting slurry, concrete curing
121 water, and hydrodemolition water.
122

123 **7.** Spill Control and Prevention and Emergency
124 Spill Response Plan.
125

126 **8.** Fugitive dust control, including dust from
127 grinding, sweeping, or brooming off operations or
128 combination thereof.
129

130 **9.** Methods of storing and handling of oils, paints
131 and other products used for the project.
132

133 **10.** Material storage and handling areas, and other
134 staging areas.
135

136 **11.** Concrete truck washouts.

- 137 **12.** Concrete waste control.
- 138
- 139 **13.** Fueling and maintenance of vehicles and other
- 140 equipment.
- 141
- 142 **14.** Tracking of sediment offsite from project entries
- 143 and exits.
- 144
- 145 **15.** Litter management.
- 146
- 147 **16.** Toilet facilities.
- 148
- 149 **17.** Other factors that may cause water pollution,
- 150 dust and erosion control.
- 151

152 **(b)** Provide plans indicating location of water pollution,

153 dust and erosion control devices; provide plans and details of

154 BMPs to be installed or utilized; show areas of soil disturbance

155 in cut and fill, indicate areas used for construction staging and

156 storage including items (1) through (17) above, storage of

157 aggregate (indicate type of aggregate), asphalt cold mix, soil

158 or solid waste, equipment and vehicle parking, and show

159 areas where vegetative practices are to be implemented.

160 Indicate intended drainage pattern on plans. Include flow

161 arrows. Include separate drawing for each phase of

162 construction that alters drainage patterns. Indicate

163 approximate date when device will be installed and removed.

164

165 **(c)** Construction schedule.

166

167 **(d)** Name(s) of specific individual(s) designated

168 responsible for water pollution, dust, and erosion controls on

169 the project site. Include home, cellular, and business

170 telephone numbers, fax numbers, and e-mail addresses.

171

172 **(e)** Description of fill material to be used.

173

174 **(f)** For projects with an NPDES Permit for Construction

175 Activities, submit information to address all sections in the

176 Storm Water Pollution Prevention Plan (SWPPP).

177

178 **(g)** For projects with an NPDES Permit, information

179 required for compliance with the conditions of the Notice of

180 General Permit Coverage (NGPC)/NPDES Permit.

181

182 (h) Site-Specific BMP Review Checklist. The checklist
183 may be downloaded from HDOT's Stormwater Management
184 website at <http://stormwaterhawaii.com>.
185

186 Date and sign Site-Specific BMP Plan. Keep accepted
187 copy on site or at an accessible location so that it can be made
188 available at the time of an on-site inspection or upon request
189 by the Engineer, HDOT Third-Party Inspector, and/or
190 DOH/EPA Representative. Amendments to the Site-Specific
191 BMP Plan shall be included with original Site-Specific BMP
192 Plan. Modify SWPPP if necessary to conform to revisions.
193 Include date of installation and removal of Site-Specific BMP
194 measures. Obtain written acceptance by the Engineer before
195 implementing revised Site-Specific BMPs in the field.
196

197 Follow the guidelines in the current HDOT
198 "Construction Best Management Practices Field Manual", in
199 developing, installing, and maintaining Site-Specific BMPs for
200 all projects. For any conflicting requirements between the
201 Manual and applicable bid documents, the applicable bid
202 documents will govern. Should a requirement not be clearly
203 described within the applicable bid documents, notify the
204 Engineer immediately for interpretation. For the purposes of
205 clarification "applicable bid documents" include the
206 construction plans, standard specifications, special
207 provisions, Permits, and the SWPPP when applicable.
208

209 Follow Honolulu's City and County "Rules for Soil
210 Erosion Standards and Guidelines" for all projects on Oahu.
211 Use respective Soil Erosion Guidelines for Maui, Kauai and
212 Hawaii projects.
213

214 **(B) Construction Requirements.** Do not begin work until submittals
215 detailed in Subsection 209.03(A)(2) - Water Pollution, Dust, and Erosion
216 Control Submittals are completed and accepted in writing by the Engineer.
217

218 Install, maintain, monitor, repair and replace site-specific BMP
219 measures, such as for water pollution, dust and erosion control; installation,
220 monitoring, and operation of hydrotesting activities; removal and disposal
221 of hazardous waste indicated on plans, concrete cutting slurry, concrete
222 curing water; or hydrodemolition water. Site-Specific BMP measures shall
223 be in place, functional and accepted by HDOT personnel prior to initiating
224 any ground disturbing activities.
225

If necessary, furnish and install rain gage in a secure location prior to field work including installation of site-specific BMP. Provide rain gage with a tolerance of at least 0.05 inches of rainfall. Install rain gage on project site in an area that will not deter rainfall from entering the gate opening. Do not install in a location where rain water may splash into rain gage. The rain gage installation shall be stable and plumbed. Maintain rain gage and replace rain gage that is stolen, does not function properly or accurately, is worn out, or needs to be relocated. Do not begin field work until rain gage is installed and Site-Specific BMPs are in place. Rain gage data logs shall be readily available. Submit rain gage data logs weekly to the Engineer.

Address all comments received from the Engineer.

Modify and resubmit plans and construction schedules to correct conditions that develop during construction which were unforeseen during the design and pre-construction stages.

Coordinate temporary control provisions with permanent control features throughout the construction and post-construction period.

Limit maximum surface area of earth material exposed at any time to 300,000 square feet. Do not expose or disturb surface area of earth material (including clearing and grubbing) until BMP measures are installed and accepted in writing by the Engineer. Protect temporarily or permanently disturbed soil surface from rainfall impact, runoff and wind before end of the work day.

Immediately initiate stabilizing exposed soil areas upon completion of earth disturbing activities for areas permanently or temporarily ceased on any portion of the site. Earth-disturbing activities have permanently ceased when clearing and excavation within any area of the construction site that will not include permanent structures has been completed. Earth-disturbing activities have temporarily ceased when clearing, grading, and excavation within any area of the site that will not include permanent structures will not resume for a period of 14 or more calendar days, but such activities will resume in the future. The term "immediately" is used in this section to define the deadline for initiating stabilization measures. "Immediately" means as soon as practicable, but no later than the end of the next work day, following the day when the earth-disturbing activities have temporarily or permanently ceased.

For projects with an NPDES Permit for Construction activities:

(1) For construction areas discharging into waters not impaired for nutrients or sediments, complete initial stabilization within 14 calendar days after the temporary or permanent cessation of earth-disturbing activities.

(2) For construction areas discharging into nutrient or sediment impaired waters, complete initial stabilization within 7 calendar days after the temporary or permanent cessation of earth-disturbing activities.

For projects without an NPDES Permit for Construction activities, complete initial stabilization within 14 calendar days after the temporary or permanent cessation of earth-disturbing activities.

Any of the following types of activities constitutes initiation of stabilization:

(1) Prepping the soil for vegetative or non-vegetative stabilization;

(2) Applying mulch or other non-vegetative product to the exposed area;

(3) Seeding or planting the exposed area;

(4) Starting any of the activities in items (1) – (3) above on a portion of the area to be stabilized, but not on the entire area; and

(5) Finalizing arrangements to have stabilization product fully installed in compliance with the deadline for completing initial stabilization activities.

Any of the following types of activities constitutes completion of initial stabilization activities:

(1) For vegetative stabilization, all activities necessary to initially seed or plant the area to be stabilized; and/or

(2) For non-vegetative stabilization, the installation or application of all such non-vegetative measures.

If the Contractor is unable to meet the deadlines above due to circumstances beyond the Contractor's control, and the Contractor is using vegetative cover for temporary or permanent stabilization, the Contractor may comply with the following stabilization deadlines instead as agreed to by the Engineer:

(1) Immediately initiate, and complete within the timeframe shown above, the installation of temporary non-vegetative stabilization measures to prevent erosion;

(2) Complete all soil conditioning, seeding, watering or irrigation installation, mulching, and other required activities related to the planting and initial establishment of vegetation as soon as conditions or circumstances allow it on the site; and

(3) Notify and provide documentation to the Engineer the circumstances that prevent the Contractor from meeting the deadlines above for stabilization and the schedule the Contractor will follow for initiating and completing initial stabilization and as agreed to by the Engineer.

Follow the applicable requirements of the specifications and special provisions including Section 619 Planting and Section 641 Hydro-Mulch Seeding.

Immediately after seeding or planting the area to be vegetatively stabilized, to the extent necessary to prevent erosion on the seeded or planted area, select, design, and install non-vegetative erosion controls that provide cover (e.g., mulch, rolled erosion control products) to the area while vegetation is becoming established.

Protect exposed or disturbed surface area with mulches, grass seeds or hydromulch. Spray mulches at a rate of 2,000 pounds per acre. Add tackifier to mix at a rate of 85 pounds per acre. Apply grass seeds at a rate of 125 pounds per acre. For hydromulch, use the ingredients and rates required for mulches and grass seeds. Submit recommendations from a licensed Landscape Architect when deviating from the application rates above.

Apply fertilizer to mulches, grass seed or hydromulch per manufacturer's recommendations. Submit recommendations from a licensed Landscape Architect when deviating from the manufacturer's recommendations.

Install velocity dissipation measures when exposing erodible surfaces greater than 15 feet in height.

BMP measures shall be in place and operational at the end of work day or as required by Section 209.03(B) Construction Requirements.

Install and maintain either or both stabilized construction entrances and wheel washes to minimize tracking of dirt and mud onto roadways. Restrict traffic to stabilized construction areas only. Clean dirt, mud, or other material tracked onto the road, sidewalk, or other paved area by the end of the same day in which the track-out occurs. Modify stabilized construction entrances to prevent mud from being tracked onto road. Stabilize entire access roads if necessary.

Chemicals may be used as soil stabilizers for either or both erosion and dust control if acceptable to the Engineer.

Provide temporary slope drains of rigid or flexible conduits to carry runoff from cuts and embankments. Provide portable flume at the entrance. Shorten or extend temporary slope drains to ensure proper function.

Protect ditches, channels, and other drainageways leading away from cuts and fills at all times by either:

- (1) Hydro-mulching the lower region of embankments in the immediate area.
- (2) Installing check dams and siltation control devices.
- (3) Other methods acceptable to the Engineer.

Provide for controlled discharge of waters impounded, directed, or controlled by project activities or erosion control measures.

Cover exposed surface of materials completely with tarpaulin or similar device when transporting aggregate, soil, excavated material or material that may be source of fugitive dust.

Cleanup and remove any pollutant that can be attributed to the Contractor.

Install or modify Site-Specific BMP measures due to change in the Contractor's means and methods, or for omitted condition that should have been allowed for in the accepted Site-Specific BMP or a Site-Specific BMP that replaces an accepted Site-Specific BMP that is not satisfactorily performing. Modifications to Site-Specific BMP measures shall be accepted in writing by the Engineer prior to implementation.

Properly maintain all Site-Specific BMP measures.

For projects with an NPDES Permit for Construction Activities:

(1) For construction areas discharging into nutrient or sediment impaired waters, inspect, prepare a written report, and make repairs to BMP measures at the following intervals:

(a) Weekly.

(b) Within 24 hours of any rainfall of 0.25 inch or greater which occurs in a 24-hour period.

(c) When existing erosion control measures are damaged or not operating properly as required by Site-Specific BMP.

(2) For construction areas discharging to waters not impaired for nutrients or sediments, inspect, prepare a written report, and make repairs to BMP measures at the following intervals:

(a) Weekly.

(b) When existing erosion control measures are damaged or not operating properly as required by Site-Specific BMP.

For projects without an NPDES Permit for Construction activities, inspect, prepare a written report, and make repairs to BMP measures at the following intervals:

(a) Weekly.

(b) When existing erosion control measures are damaged or not operating properly as required by Site-Specific BMP.

Temporarily remove, replace or relocate any Site-Specific BMP that must be removed, replaced or relocated due to potential or actual flooding, or potential danger or damage to project or public.

Maintain records of inspections of Site-Specific BMP work. Keep continuous records for duration of the project. Submit copy of Inspection Report to the Engineer within 24 hours after each inspection.

The Contractor's designated representative specified in Subsection 209.03(A)(2)(d) shall address any Site-Specific BMP deficiencies brought up by the Engineer immediately, including weekends and holidays, and complete work to fix the deficiencies by the close of the next work day if the problem does not require significant repair or replacement, or if the problem can be corrected through routine maintenance. Address any Site-Specific BMP deficiencies brought up by the State's Third-Party Inspector in the timeframe above or as specified in the Consent Decree or MS4 NPDES

Permit, whichever is more stringent. The Consent Decree timeframe requirement applies statewide. The MS4 NPDES Permit only applies to Oahu. In this section, "immediately" means the Contractor shall take all reasonable measures to minimize or prevent discharge of pollutants until a permanent solution is installed and made operational. If a problem is identified at a time in the day in which it is too late to initiate repair, initiation of repair shall begin on the following work day. When installation of a new pollution prevention control or a significant repair is needed, complete installation or repair no later than 7 calendar days from the time of notification/Contractor discovery. Notify the Engineer and document why it is infeasible to complete the installation or repair within 7 calendar days and complete the work as soon as practicable and as agreed to by the Engineer. Address Site-Specific BMP deficiencies discovered by the Contractor within the timeframe above. The Contractor's failure to satisfactorily address these Site-Specific BMP deficiencies, the Engineer reserves the right to employ outside assistance or use the Engineer's own labor forces to provide necessary corrective measures. The Engineer will charge the Contractor such incurred costs plus any associated project engineering costs. The Engineer will make appropriate deductions from the Contractor's monthly progress estimate. Failure to apply Site-Specific BMP measures may result in one or more of the following: assessment of liquidated damages, suspension, or cancellation of Contract with the Contractor being fully responsible for all additional costs incurred by the State.

(C) Discharges of Storm Water Associated with Construction Activities. If work includes disturbance of one acre or more, an NPDES Permit authorizing Discharges of Storm Water Associated with Construction Activity (CWB-NOI Form C) or Individual Permit authorizing storm water discharges associated with construction activity is required from the Department of Health Clean Water Branch (DOH-CWB).

Do not begin construction activities until all required conditions of the permit are met and submittals detailed in Subsection 209.03(A)(2) – Water Pollution, Dust, and Erosion Control Submittals are completed and accepted in writing by the Engineer.

(D) Discharges Associated with Hydrotesting Activities. If hydrotesting activities require effluent discharge into State waters or drainage systems, an NPDES Hydrotesting Waters Permit (CWB-NOI Form F) or Individual Permit authorizing discharges associated with hydrotesting from DOH-CWB is required from the DOH-CWB.

Do not begin hydrotesting activities until the DOH-CWB has issued an Individual NPDES Permit or Notice of General Permit Coverage (NGPC). Conduct Hydrotesting operations in accordance with the conditions of the permit or NGPC.

(E) Discharges Associated with Dewatering Activities. If dewatering activities require effluent discharge into State waters or drainage systems, an NPDES Dewatering Permit (CWB-NOI Form G) or Individual Permit authorizing discharges associated with dewatering from DOH-CWB is required from the DOH-CWB.

Do not begin dewatering activities until the DOH-CWB has issued an Individual NPDES Permit or Notice of General Permit Coverage (NGPC). Conduct dewatering operations in accordance with the conditions of the permit or NGPC.

(F) Solid Waste. Submit the Solid Waste Disclosure Form for Construction Sites to the Engineer within 21 calendar days of date of award. Provide a copy of all the disposal receipts from the facility permitted by the Department of Health to receive solid waste to the Engineer monthly. This should also include documentation from any intermediary facility where solid waste is handled or processed, or as directed by the Engineer.

(G) Construction BMP Training. The Contractor's representative responsible for development of the Site-Specific BMP Plan and implementation of Site-Specific BMPs in the field shall attend the State's Construction Best Management Practices Training. The Contractor shall keep training logs updated and readily available.

209.04 Measurement. Installation, maintenance, monitoring, and removal of BMP will be paid on a force account basis in accordance with Subsection 109.06 – Force Account Provisions and Compensation.

209.05 Payment. The Engineer will pay for the accepted pay item listed below at contract price per pay unit, as shown in the proposal schedule. Payment will be full compensation for work prescribed in this section and contract documents.

The Engineer will pay for the following pay item when included in proposal schedule:

Pay Item	Pay Unit
Installation, Maintenance, Monitoring, and Removal of BMP	Force Account

538 An estimated amount for force account is allocated in proposal schedule
539 under 'Installation, Maintenance, Monitoring and Removal of BMP', but actual
540 amount to be paid will be the sum shown on accepted force account records,
541 whether this sum be more or less than estimated amount allocated in proposal
542 schedule. The Engineer will pay for BMP measures requested by the Engineer
543 that are beyond scope of accepted Site-Specific BMP on a force account basis.
544

545 No progress payment will be authorized until the Engineer accepts in writing
546 Site-Specific BMP or when the Contractor fails to maintain project site in
547 accordance with accepted BMP.
548

549 For all citations or fines received by the Department for non-compliance,
550 including compliance with NPDES Permit conditions, the Contractor shall
551 reimburse State within 30 calendar days for full amount of outstanding cost State
552 has incurred, or the Engineer will deduct cost from progress payment.
553

554 The Engineer will assess liquidated damages up to \$27,500 per day for non-
555 compliance of each BMP requirement and all other requirements in this section.
556

Appendix A

The following list identifies potential pollutant sources and corresponding BMPs used to mitigate the pollutants. Each BMP is referenced to the corresponding section of the current HDOT Construction Best Management Practices Field Manual or appropriate Supplemental Sheets. The Manual may be obtained from the HDOT Statewide Stormwater Management Program Website at <http://www.stormwaterhawaii.com/resources/contractors-and-consultants/> under Construction Best Management Practices Field Manual. Supplemental BMP sheets are located at <http://www.stormwaterhawaii.com/resources/contractors-and-consultants/storm-water-pollution-prevention-plan-swpppp/> under Concrete Curing and Irrigation Water.

Pollutant Source	Appropriate Site-Specific BMP to be Implemented	BMP Requirements
Construction debris, green waste, general litter	• Separate contaminated clean up materials from construction and demolition (C&D) wastes. • Provide waste containers (e.g., dumpster or trash receptacle) of sufficient size and number to contain construction and domestic wastes. • Inspect construction waste and recycling areas regularly. • Schedule solid waste collection regularly. • Schedule recycling activities based on construction/demolition phases. • Empty waste containers weekly or when they are two-thirds full, whichever is sooner. • Do not allow containers to overflow. Clean up immediately if they do. • On work days, clean up and dispose of waste in designated waste containers. • See Solid Waste Management Section SM-6 for additional requirements. • Provide Storm Drain Inlet Protection and/or Perimeter Sediment Controls as applicable. • Collect and dispose of all waste materials in trash dumpsters. Place dumpsters, with secure watertight lids, away from storm water conveyances and drains, in a covered materials storage area. • Dispose of construction and non- construction solid waste in accordance with State DOH regs. • Load removed non- recyclable vegetation directly onto trucks; cover and transport to a licensed facility	See Solid Waste Management Section SM-6. Storm Drain Inlet Protection SC-1, and Perimeter Sediment Controls where applicable.

Pollutant Source	Appropriate Site-Specific BMP to be Implemented	BMP Requirements
Materials associated with the operation and maintenance of equipment, such as oil, fuel, and hydraulic fluid leakage	• Use off-site wash racks, repair and maintenance facilities, and fueling sites when practical. • Designate bermed wash area if cleaning on site is necessary. • Place drip pans or drop cloths under vehicles and equipment to absorb spills or leaks. • Provide an ample supply of readily available spill cleanup materials. • Clean up spills immediately, using dry clean-up methods where possible, and dispose of used materials properly. • Do not clean surfaces or spills by hosing the area down. • Eliminate the source of the spill to prevent a discharge or a continuation of an ongoing discharge. • Inspect on-site vehicles and equipment regularly and immediately repair leaks. • Regularly inspect fueling areas and storage tanks. • Train employees on proper maintenance and spill practices and procedures and fueling and cleanup procedures. • Store diesel fuel, oil, hydraulic fluid, or other petroleum products or other chemicals in water-tight containers and provide cover or secondary containment. • Do not remove original product labels and comply with manufacturer's labels for proper disposal. • Dispose of containers only after all the product has been used. • Dispose of or recycle oil or oily wastes according to Federal, State, and Local requirements. • Store soaps, detergents, or solvents under cover or other means to prevent contact with rainwater. • See Vehicle and Equipment Cleaning, Maintenance, and Refueling, Sections SM-11, SM-12, and SM-13 and Material Storage and Handling Section SM-2 for additional requirements.	See Vehicle and Equipment Cleaning, Maintenance, and Refueling, Sections SM-11, SM-12, and SM-13, and Material Storage and Handling, Section SM-2, and Spill Prevention and Control SM-10.

Pollutant Source	Appropriate Site-Specific BMP to be Implemented	BMP Requirements
Soil erosion from the disturbed areas	• Provide Soil Stabilization, Slope Protection, Storm Drain Inlet Protection SC-1, Perimeter Controls and Sediment Barriers, Sediment Basins and Detention Ponds, Check Dams SC-3 ,Level Spreader EC-6, Paving Operations SM-20, Construction Roads and Parking Area Stabilization SC-10, Controlling Storm Water Flowing Onto and Through the Project, Post-Construction BMPs, and Non-Structural BMPs (Construction BMP Training SM-1, Scheduling SM-14, Location of Potential Sources of Sediment SM-15, Preservation of Existing Vegetation SM-17). • Delineate, and clearly mark off, with flags, tape, or other similar marking device all natural buffer areas defined in the SWPPP. • Preserve native topsoil where practicable. • In areas where vegetative stabilization will occur, restrict vehicle/equipment use in areas to avoid soil compaction or condition soil to promote vegetative growth. • For Storm Drain Inlet Protection, clean, or remove and replace, the protection measures as sediment accumulates, the filter becomes clogged, and/or performance is compromised. • Where there is evidence of sediment accumulation adjacent to the inlet protection measure, remove the deposited sediment by the end of the same day in which it is found or by the end of the following work day if removal by the same day is not feasible. • Sediment basins shall be designed and maintained in accordance with HAR Chapter 11-55. • Minimize disturbance on steep slopes (Greater than 15% in grade). • If disturbance of steep slopes are unavoidable, phase disturbances and use stabilization techniques designed for steep grades. • For temporary drains and swales use velocity dissipation devices within and at the outlet to minimize erosive flow velocities.	Soil Stabilization 1. SM-22 Topsoil Management 2. EC-12 Seeding and Planting 3. EC-14 Mulching 4. EC-11 Geotextiles and Mats Slope Protection 1. EC-12 Seeding and Planting 2. EC-14 Mulching 3. EC-11 Geotextiles and Mats 4. EC-4 Slope Roughening, Terracing, and Rounding 5. EC-7 Slope Drains and Subsurface Drains 6. EC-9 Slope Interceptor or Diversion Ditches/Berms SC-1 Storm Drain Inlet Protection

<i>Pollutant Source</i>	<i>Appropriate Site-Specific BMP to be Implemented</i>	<i>BMP Requirements</i>
		<i>Perimeter Controls and Sediment Barriers</i> <i>1. SC-7 Silt Fence or Filter Fabric Fence</i> <i>2. SC-2 Vegetated Filter Strips and Buffers</i> <i>3. SC-6 Compost Filter Berm/Sock</i> <i>4. SC-8 Sandbag Barrier</i> <i>5. SC-9 Brush or Rock Filter</i> <i>Sediment Basins and Detention Ponds</i> <i>1. SC-4 Sediment Trap</i> <i>2. SC-5 Sediment Basin</i> <i>SC-3 Check Dams</i> <i>EC-6 Level Spreader</i> <i>SM-20 Paving Operations</i> <i>SC-10 Construction Roads and Parking Area Stabilization</i>

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<i>Pollutant Source</i>	<i>Appropriate Site-Specific BMP to be Implemented</i>	<i>BMP Requirements</i>
		<i>Controlling Storm Water Flowing onto and Through the Project</i> <i>1. EC-3 Run-On Diversion</i> <i>2. EC-5 Earth Dike, Swales and Ditches</i> <i>Post Construction BMPs</i> <i>1. EC-2 Flared Culvert End Sections</i> <i>2. EC-10 Rip-Rap and Gabion Inflow Protection</i> <i>3. EC-8 Outlet Protection and Velocity Dissipation Devices</i> <i>4. SM-22 Topsoil Management</i> <i>Non-Structural BMPs</i> <i>1. SM-1 Construction BMP Training</i> <i>2. SM-14 Scheduling</i> <i>3. SM-15 Location of Potential Sources of Sediment</i> <i>4. SM-17 Preservation of Existing Vegetation</i>

Pollutant Source	Appropriate Site-Specific BMP to be Implemented	BMP Requirements
<i>Sediment from soil stockpiles</i>	• <i>Locate stockpiles a minimum of 50 feet or as far as practicable from concentrated runoff or outside of any natural buffers identified on the SWPPP.</i> • <i>Place bagged materials on pallets and under cover.</i> • <i>Provide physical diversion to protect stockpiles from concentrated runoff.</i> • <i>Cover stockpiles with plastic or comparable material when practicable.</i> • <i>Place silt fence, fiber filtration tubes, or straw wattles around stockpiles.</i> • <i>Do not hose down or sweep soil or sediment accumulated on pavement or other impervious surfaces into any storm water conveyance (unless connected to a sediment basin, sediment trap, or similarly effective control), storm drain inlet, or state water.</i> • <i>Unless infeasible, contain and securely protect stockpiles from the wind.</i> • <i>Provide Storm Drain Inlet Protection and/or Perimeter Sediment Controls as applicable. See Stockpile Management Section SM-3 for additional requirements.</i>	<i>See Stockpile Management Section SM-3. Storm Drain Inlet Protection SC-1, and Perimeter Sediment Controls where applicable.</i>
<i>Emulsified asphalt or prime/tack coat</i>	• <i>Provide training for employees and contractors on proper material delivery and storage practices and procedures.</i> • <i>Restrict paving operations during wet weather to prevent paving materials from being discharged.</i> • <i>Use asphalt emulsions such as prime coat when possible.</i> • <i>Protect drain inlet structures and manholes during application of tack coat, seal coat, slurry seal, and fog seal.</i> • <i>Keep ample supplies of drip pans and absorbent materials on site.</i> • <i>Inspect inlet protection devices.</i> • <i>See Material Storage and Handling Section SM-2 and Paving Operations Section SM-20 for additional requirements.</i> • <i>Provide Storm Drain Inlet Protection and/or Perimeter Sediment Controls as applicable.</i>	<i>See Material Storage and Handling Section SM-2, and Stockpile Management Section SM-3, Paving Operations Section SM-20, Storm Drain Inlet Protection SC-1, and Perimeter Sediment Controls where applicable.</i>

Pollutant Source	Appropriate Site-Specific BMP to be Implemented	BMP Requirements
Materials associated with painting, such as paint and paint wash solvent	• Hazardous chemicals shall be well-labeled and stored in original containers. • Keep ample supply of cleanup materials on site. • Dispose container only after all of the product has been used. • Remove as much paint from brushes on painted surface. • Rinse from water-based paints shall be discharged into the sanitary sewer system where possible. If not, direct all washwater into a leak-proof container or leak-proof pit. The container or pit must be designed so that no overflows can occur due to inadequate sizing or precipitation. • Locate on-site wash area a minimum of 50 feet away or as far as practicable from storm drain inlets, open drainage facilities, or water bodies. • Do not dump liquid wastes into the storm drainage system. • Filter and re-use solvents and thinners. • Dispose of oil-based paints and residue as a hazardous waste. • Ensure collection, removal, and disposal of hazardous waste complies with regulations. • Immediately clean up spills and leaks. • Properly store paints, solvents, and epoxy compounds. • Properly store and dispose waste materials generated from painting and structure repair and construction activities. • Mix paints in a covered and contained area, when possible, to minimize adverse impacts from spills. • Do not apply traffic paint or thermoplastic if rain is forecasted. • See Material Storage and Handling Use SM-2, Hazardous Materials and Waste Management Section SM-9, Spill Prevention and Control Section SM-10, and Structure Construction and Painting Section SM-21 for additional requirements. Provide Storm Drain Inlet Protection and/or Perimeter Sediment Controls as applicable.	See Material Storage and Handling Use Section SM-2, Stockpile Management Section SM-3, Hazardous Materials and Waste Management Section SM-9, Waste Management, Spill Prevention and Control Section SM-10, and Structure Construction and Painting Section SM-21, Storm Drain Inlet Protection SC-1, and Perimeter Sediment Controls where applicable.

Pollutant Source	Appropriate Site-Specific BMP to be Implemented	BMP Requirements
<i>Industrial chemicals, fertilizers, and/or pesticides</i>	• <i>Hazardous chemicals shall be well-labeled and stored in original containers.</i> • <i>Keep ample supply of cleanup materials on site.</i> • <i>Clean up spills immediately, using dry clean-up methods where possible, and dispose of used materials properly.</i> • <i>Do not clean surfaces or spills by hosing the area down.</i> • <i>Eliminate the source of the spill to prevent a discharge or a furtherance of an ongoing discharge.</i> • <i>Dispose container only after all of the product has been used.</i> • <i>Retain a complete set of safety data sheets (formerly MSDS) on site.</i> • <i>Store industrial chemicals in water-tight containers and provide either cover or secondary containment.</i> • <i>Provide cover when storing fertilizers or pesticides to prevent these chemicals from coming into contact with rainwater.</i> • <i>Restrict amount of pesticide prepared to quantity necessary for the current application.</i> • <i>Do not apply fertilizers or pesticides during or just before a rain event.</i> • <i>Do not apply to stormwater conveyance channels with flowing water.</i> • <i>Comply with fertilizer and pesticide manufacturer's recommended usage and disposal instructions. Document departures from manufacturer's specifications in Attachment J.</i> • <i>Apply fertilizers at the appropriate time of year for the location, and preferably timed to coincide as closely as possible to the period of maximum vegetation uptake and growth.</i> • <i>Follow federal, state, and local laws regarding fertilizer application.</i> • <i>Do not dispose of toxic liquid wastes (solvents, used oils, and paints) or chemicals (additives, acids, and curing compounds) in dumpsters allocated for construction debris.</i>	<i>See Material Storage and Handling Use Section SM-2, Stockpile Management Section SM-3, and Hazardous Materials and Waste Management Section SM-9, and Spill Prevention and Control SM-10</i>

Pollutant Source	Appropriate Site-Specific BMP to be Implemented	BMP Requirements
	• Ensure collection, removal, and disposal of hazardous waste complies with regulations. Hazardous waste that cannot be reused or recycled shall be disposed of by a licensed hazardous waste hauler. See Material Storage and Handling Use SM-2, and Hazardous Materials and Waste Management Section SM-9 for additional requirements.	
Hazardous waste (Batteries, Solvents, Treated Lumber, etc.)	• Do not dispose of toxic materials in dumpsters allocated for construction debris. • Ensure collection, removal, and disposal of hazardous waste complies with regulations. • Hazardous waste that cannot be reused or recycled shall be disposed of by a licensed hazardous waste hauler. • Segregate and recycle wastes from vehicle/equipment maintenance activities such as used oil or oil filters, greases, cleaning solutions, antifreeze, automotive batteries, and hydraulic and transmission fluids. • Store waste in sealed containers, which are constructed of suitable materials to prevent leakage and corrosion, and which are labeled in accordance with applicable Resource Conservation and Recovery Act (RCRA) requirements and all other applicable federal, state, and local requirements. • All containers stored outside shall be kept away from surface waters and within appropriately sized secondary containment (e.g., spill berms, decks, spill containment pallets). Provide cover if possible. • Clean up spills immediately, using dry clean-up methods where possible, and dispose of used materials properly. • Do not clean surfaces or spills by hosing the area down. • Eliminate the source of the spill to prevent a discharge or a continuation of an ongoing discharge.	See Hazardous Materials and Waste Management Section SM-9 and Vehicle and Equipment Maintenance SM-12

Pollutant Source	Appropriate Site-Specific BMP to be Implemented	BMP Requirements
	• Ensure collection, removal, and disposal of hazardous waste complies with manufacturer's recommendations and is in compliance with federal, state, and local requirements. • See Hazardous Materials and Waste Management Section SM-9 and Vehicle and Equipment Management, Vehicle and Equipment Maintenance SM-12 for additional requirements.	
Metals and Building Materials	• Inspect construction waste and recycling areas regularly. • Schedule solid waste collection regularly. • If building materials or metals are stored on site (such as rebar or galvanized poles) store under cover under tarps or in containers. • Minimize the amount of material stored on site. • Do not stockpile uncovered metals or other building materials in close proximity to discharge points. • See Solid Waste Management Section SM-6 for additional requirements.	See Solid Waste Management Section SM-6
Contaminated Soil	• See Waste Management, Contaminated Soil Management Section SM-8 and/or Hazardous Materials and Waste Management Section SM-9 for additional requirements. • At minimum contain contaminated material soil by surrounding with impermeable lined berms or cover exposed contaminated material with plastic sheets.	See Waste Management, Contaminated Soil Management Section SM-8 and/or Hazardous Materials and Waste Management Section SM-9

Pollutant Source	Appropriate Site-Specific BMP to be Implemented	BMP Requirements
<i>Fugitive Dust Control and Dust Control Water</i>	• Do not over spray water for dust control purposes which will result in runoff from the area. • Apply water as conditions require. • Washing down of debris or dirt into drainage, sewage systems, or State waters is not allowed. • Minimize exposed areas through the schedule of construction activities. • Utilize vegetation, mulching, sprinkling, and stone/gravel layering to quickly stabilize exposed soil. • Direct construction vehicle traffic to stabilized roadways. • Cover dump trucks hauling material from the site with a tarpaulin. See Dust Control Section SM-19 for additional requirements.	See Dust Control Section SM-19
<i>Concrete Truck Wash Water</i>	• Disposal of concrete truck wash water via percolation is prohibited. • Wash concrete-coated vehicles or equipment off-site or in the designated wash area. • Locate on-site wash area a minimum of 50 feet away or as far as practicable from storm drain inlets, open drainage facilities, or water bodies. • Runoff from the on-site concrete wash area shall be contained in a temporary pit or level bermed area where the concrete can set. • Design the area so that no overflow can occur due to inadequate wash area sizing or precipitation. • The temporary pit shall be lined with plastic to prevent seepage of wash water into the ground. • Allow wash water to evaporate or collect wash water and all concrete debris in a concrete washout system bin. • Do not dump liquid wastes into storm drainage system. • Dispose of liquid and solid concrete wastes in compliance with federal, state, and local standards. • See Waste Management, Concrete Wash and Waste Management Section SM-4 for additional requirements.	See Waste Management, Concrete Wash and Waste Management Section SM-4

Pollutant Source	Appropriate Site-Specific BMP to be Implemented	BMP Requirements
<i>Sediment Track-Out</i>	• <i>Include Stabilized Construction Entrance at all points that exit onto paved roads.</i> • <i>A sediment trapping device is required if a wash rack is used in conjunction with the stabilized construction entrance/exit.</i> • <i>The pavement shall not be cleaned by washing down the street.</i> • <i>If sweeping is ineffective or it is necessary to wash the streets, wash water must be contained either by construction of a sump, diverting the water to an acceptable disposal area, or vacuuming the wash water.</i> • <i>Use BMPs for adjacent drainage structures.</i> • <i>Remove sediment tracked onto the street by the end of the day in which the track-out occurs.</i> • <i>Restrict vehicle use to properly designated exit points.</i> • <i>Include additional BMPs that remove sediment prior to exit when minimum dimensions cannot be met.</i> <i>See Stabilized Construction Entrance/Exit Section SC-11 for additional requirements.</i>	<i>See Stabilized Construction Entrance/Exit Section SC-11</i>
<i>Irrigation Water</i>	• <i>Consider irrigation requirements.</i> • <i>Where possible, avoid species which require irrigation.</i> • <i>Design, timing and application methods of irrigation water to eliminate the runoff of excess irrigation water into the storm water drainage system.</i> <i>See Seeding and Planting Section EC-12 and California Stormwater BMP Handbook SD-12 Efficient Irrigation included in SWPPP Attachment A for additional requirements.</i>	<i>See Seeding and Planting Section EC-12 and California Stormwater BMP Handbook SD-12 Efficient Irrigation</i>
<i>Hydrotesting Effluent</i>	• <i>If work includes removing, relocation or installing waterlines, and Contractor elects to flush waterline or discharge hydrotesting effluent into State waters or drainage systems, the Contractor shall prepare and obtain HDOT acceptance of a NOI/NPDES Permit Form F application for HDOT submittal to DOH CWB at least 30 calendar days prior to the start of Hydrotesting Activities if necessary. Site specific BMPs will be included in the NOI/NPDES Permit Form F submittal.</i>	<i>Site specific BMPs will be included in the NOI/NPDES Permit Form F submittal.</i>

Pollutant Source	Appropriate Site-Specific BMP to be Implemented	BMP Requirements
<i>Dewatering Effluent</i>	<i>If excavation or backfilling operations require dewatering, and Contractor elects to discharge dewatering effluent into State waters or existing drainage systems, Contractor shall prepare and obtain HDOT acceptance of a NOI/NPDES Permit Form G application for HDOT submittal to DOH CWB at least 30 calendar days prior to the start of Dewatering Activities if necessary. See Site Planning and General Practices, Dewatering Operations Section SM-18 for additional requirements.</i>	<i>See Dewatering Operations SM-18. Site specific BMPs will be included in the NOI/NPDES Permit Form G submittal.</i>
<i>Saw-cutting Slurry</i>	• <i>Saw cut slurry shall be removed from the site by vacuuming.</i> • <i>Provide storm drain protection during saw cutting. See Paving Operations Section SM-20 for additional requirements.</i> <i>Provide Storm Drain Inlet Protection and/or Perimeter Sediment Controls as applicable.</i>	<i>See Paving Operations Section SM-20, Storm Drain Inlet Protection SC-1, Perimeter sediment controls where applicable</i>
<i>Concrete Curing Water</i>	• <i>Avoid overspraying of curing compounds.</i> • <i>Apply an amount of compound that covers the surface, but does not allow any runoff of the compound.</i> <i>See California Stormwater BMP Handbook NS-12 Concrete Curing included in SWPPP Attachment A for additional requirements.</i>	<i>See California Stormwater BMP Handbook NS-12 Concrete Curing</i>

Pollutant Source	Appropriate Site-Specific BMP to be Implemented	BMP Requirements
<i>Plaster Waste Water</i>	• <i>Direct all washwater into a leak-proof container or leak-proof pit. The container or pit must be designed so that no overflows can occur due to inadequate sizing or precipitation.</i> • <i>Locate on-site wash area a minimum of 50 feet away or as far as practicable from storm drain inlets, open drainage facilities, or water bodies.</i> • <i>Any significant residual materials remaining on the ground after the completion of construction shall be removed and properly disposed. If the residual materials contaminate the soil, then the contaminated soil shall also be removed and properly disposed of.</i> • <i>Plaster waste water shall not be allowed to flow into drainage structures or State waters. See Material, Storage and Handling Use SM-2, Stockpile Management Use Section SM-3, and Hazardous Materials and Waste Management Section SM-9 for additional requirements.</i>	<i>See Material, Storage and Handling Use Section SM-2, Stockpile Management Use Section SM-3, and Hazardous Materials and Waste Management Section SM-9</i>
<i>Water-Jet Wash Water</i>	• <i>For Water-Jet Wash Water used to clean vehicles, use off site wash racks or commercial washing facilities when practical.</i> • <i>See Vehicle and Equipment Cleaning Section SM-11 for additional information.</i> • <i>For Water-Jet Wash Water used to clean impervious surfaces, the runoff shall not be allowed to flow into drainage structures or State Waters.</i>	<i>See Vehicle and Equipment Cleaning Section SM-11</i>
<i>Sanitary/Septic Waste</i>	• <i>Locate Sanitary facilities in a convenient place away from drainage facilities.</i> • <i>Position sanitary facilities so they are secure and will not be tipped over or knocked down.</i> • <i>Wastewater shall not be discharged to the ground or buried.</i> • <i>A licensed service provider shall maintain sanitary/septic facilities in good working order.</i> • <i>Schedule regular waste collection by a licensed transporter.</i> • <i>See Sanitary Waste Section SM-7 for additional requirements.</i>	<i>See Sanitary Waste Section SM-7.</i>

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END OF SECTION 209

1 **DIVISION 600 - MISCELLANEOUS CONSTRUCTION**

2
3 Amend **Section 601 - STRUCTURAL CONCRETE** to read as follows:

4
5 **SECTION 601 - STRUCTURAL CONCRETE**

6
7
8 **601.01 Description.** This section describes structural concrete consisting of
9 Portland Cement, fine aggregate, coarse aggregate, and water. This will include
10 adding admixtures for the purpose of entraining air, retarding or accelerating set,
11 tinting, and other purposes as required or permitted. To reduce the embodied
12 carbon footprint of concrete, concrete design on the island of Oahu shall include the
13 use of carbon dioxide mineralization or equivalent technology. Other methods to
14 reduce the cement content such as use of supplementary cementitious materials
15 (SCMs) or admixtures such as C-S-H nanoparticle-based strength-enhancing
16 admixture (CSH-SEA) or equivalent may also be used to reduce the embodied
17 carbon footprint including the combination thereof the previously mentioned
18 methods.

19
20 **601.02 Materials.**

21

22 Portland Cement	701.01
23	
24 Fine Aggregate for Concrete	703.01
25	
26 Coarse Aggregate for Portland Cement Concrete	703.02
27	
28 Admixtures	711.03
29	
30 Water	712.01
31	
32 MacroSynthetic Fibers for Concrete Reinforcement	719

33
34 Use coarse aggregate for lightweight concrete conforming to ASTM C330
35 except Sections 5, 7 and 9.

36
37 **601.03 Construction.**

38
39 **(A) Quality Control.** Portland Cement concrete production requires
40 Contractor responsibility for quality control of materials during handling,
41 blending, mixing, curing, and placement operations.
42

Sample, test, and inspect concrete to ensure quality control of the components, materials, and concrete. Sampling and testing for quality control must be performed by certified ACI Concrete Field Technician Grade I who must follow the requirements of the standard test methods. Perform quality control tests for slump, air content, temperature, unit weight, a Box Test for slip form concrete, or other required properties during the production of structural concrete other than concrete for incidental construction. Submit quality control test results.

(B) Design and Designation of Concrete. Design concrete mixture for concrete work specified. Submit mix design using State Highways Division form DOT 4-151 or an Engineer accepted equivalent form. Do not start work until the Engineer accepts mix design. The Engineer will accept concrete mix design using information given in Table 601.03-1 - Design of Concrete, and other pertinent requirements.

Whenever 28-day compressive strength, f'_c , is 4,000 psi or greater, designate concrete by required minimum 28-day compressive strength.

The 28-day compressive strength, f'_c , less than 4,000 psi listed in Table 601.03-1 – Design of Concrete, is for design information and designation of class only.

Proportion concrete designated by compressive strength such that concrete conforms to required strength.

Design concrete placed in bridge decks and pavements exposed to traffic wear, with air content of 3 percent, including entrapped and entrained air. Maintain air content for plastic concrete within tolerance of 1 percent air content, plus or minus, during the work.

Use Class BD concrete in bridge deck unless concrete is designated by compressive strength. Incorporate anti-corrosion and shrinkage reduction, water-reducing and set-retarding admixture into concrete mix design, with capability of varying degree of retardation without adversely affecting other characteristics of concrete. Submit design admixture dosage.

Class A concrete shall be used when type of concrete is not indicated in the contract documents.

Design concrete as specified in Table 601.03-1 – Design of Concrete.

TABLE 601.03-1 - DESIGN OF CONCRETE (800 Maximum Cement Content lbs./c.y.)					
Class of Concrete	28-Day Strength f'_c, psi.	Minimum Cement Content lbs./c.y.	Maximum Water-Cement Ratio, lb./lb.	Minimum Cement Content with Mineralized CO₂ lbs./c.y.	Maximum Water-Cement Ratio with Mineralized CO₂ lb./lb.
A	3000	532	0.59	504	0.62
B	2500	475	0.66	450	0.70
C	2000	418	0.75	396	0.79
D	1500	380	0.85	360	0.87
BD	3750	610	0.49	NA	NA
SEAL	3000	610	0.55	NA	NA
Designated by Strength f'_c or $*f'_r$	As Specified	610	0.49	NA	NA
$*f'_r$ = Specified Modulus of Rupture					

Concrete Design – Projects on Oahu will utilize CO₂ Mineralization technology or equivalent. Supplementary cementitious materials (SCMs), CSH-SEA or equivalent or combination thereof the previously mentioned methods may also be used. Concrete design shall allow a reduction of portland cement content while maintaining the concrete design strength, durability and other requirements. See Table 601.03-1 Design of Concrete specified limits for adjusted minimum cement content and water cement ratio when using CO₂ mineralization. Material certifications for the above shall include a list of at least 3 projects that used the technology, SCMs, admixtures or combination thereof.

Use the absolute volume method to proportion concrete materials in accordance with requirements of concrete designated by class, cement content in pounds per cubic yards, or specified 28-day compressive strength. Use absolute volumetric proportioning methods as outlined in the American Concrete Institute (ACI) Standard 211.1, "Recommended Practices for Selecting Proportions for Normal and Heavyweight Concrete."

Use coarse aggregate size No. 57 (one inch to No. 4) or No. 67 (3/4 inch to No. 4) for concrete. For concrete placed in bottom slabs and stems of box girders, use No. 67 size aggregate. Smaller size aggregates may be permitted when encountering limited space between forms and reinforcement or between reinforcement when accepted by the Engineer in writing. Maximum aggregate size shall not be greater than 1/3 of the space between reinforcing steel bars or reinforcing steel and the form.

Use the following standard methods in Table 601.03-2 – Standard Methods for determining compliance with requirements indicated in this subsection:

TABLE 601.03-2 – STANDARD METHODS	
Sampling Fresh Mixed Concrete	AASHTO T 141
Mass Per Cubic Meter (Cubic Foot) Yield and Air Content (Gravimetric) of Concrete	AASHTO T 121
Slump of Hydraulic Cement Concrete	AASHTO T 119
Air Content of Freshly Mixed Concrete by the Pressure Method	AASHTO T 152
Specific Gravity and Absorption of Fine Aggregate	AASHTO T 84
Specific Gravity and Absorption of Coarse Aggregate	AASHTO T 85
Temperature of Freshly Mixed Portland Cement Concrete	ASTM C1064
Making and Curing Concrete Test Specimens in the Field	AASHTO T 23
Compressive Strength of Molded Concrete Cylindrical Specimens	AASHTO T 22 (4 inch by 8 inch or 6 inch by 12 inch cylinders)
Flexural Strength of Concrete (Using Simple Beam with Third-Point Loading)	AASHTO T 97

When concrete is designated by compressive strength, f'_c , or flexural strength, f'_r , or includes CO₂ Mineralization technology, CSH-SEA or SCMs, the Engineer will require prequalification of materials and mix proportions proposed for use before placing such concrete. The Engineer will prequalify concrete based on past performance records using statistical computations of population sizes and (n-1) weighting, or trial batch test reports in compliance with computed minimum average strength for material and mix proportions. The Engineer will determine minimum average strength on probability of not more than one in 20 tests falling below specified strength for the following conditions:

(1) When past performance records are available, furnish the following documented performance records:

(a) Minimum of 15 consecutive 28-day strength tests from projects having same materials and mix proportions.

(b) Two groups totaling 30 or more test results representing similar materials in which mix proportion strengths are within 20 percent of specified strength, from data obtained within one year of proposed use.

The Engineer will analyze performance records to establish standard deviation.

(2) When sufficient past performance records are not provided, the Engineer will assume current standard deviation to be 500 psi for compressive strength, f'_c , and 50 psi for flexural strength, f'_r .

Unless sufficient performance records are available from other projects at DOT Materials Testing and Research Branch, submit test performance records or trial test reports for prequalifications, based on data of most recent tests made on concrete of proposed mix design, and data obtained within one year of proposed use.

When shrinkage reducing admixtures are used, submit test results showing compliance to the Contract Documents' requirements.

Include the following information in test data and trial batch test reports: date of mixing; mixing equipment and procedures used; size of batch in cubic yards and weight, type, and source of ingredients used; slump of concrete; air content of concrete when using air entraining agent; age at time of testing; and strength of concrete cylinders tested.

168 Show that concrete strength tests equal or exceed minimum average
169 strength in trial test reports. Test is average 28-day test results of five
170 consecutive concrete cylinders or concrete beams taken from single batch.
171 No cylinder or beam shall have strength less than 85 percent of minimum
172 average strength.

173
174 Submit test data and trial test reports signed by official of firm that
175 performed tests.

176
177 The Engineer reserves the right to stop work when a series of low
178 strength tests occur. Do not continue concrete work until cause is
179 established and the Engineer is informed of and accepts, necessary
180 corrective action to be taken.

181
182 **(C) Batching.** Measure and batch materials in accordance with the
183 following provisions:

184
185 **(1) Portland Cement.** Either sacked or bulk cement may be used.
186 Do not use fraction of sack of cement in concrete batch unless cement
187 is weighed.

188
189 Weigh bulk cement on weighing device accepted by the Engineer.
190 Seal and vent bulk cement-weighing hopper properly to preclude
191 dusting during operation. Do not suspend discharge chute from
192 weighing hopper. Arrange discharge chute so that cement will not
193 lodge in hopper or leak from hopper.

194
195 Batching accuracy shall be within 1 percent, plus or minus, of
196 required weight.

197
198 **(2) Water.** Measure water by volume or by weight. Use readily
199 adjustable device for measurement of water, with accuracy within 1
200 percent, plus or minus, of quantity of water required for batch. Arrange
201 device so that variable pressure in water supply line does not affect
202 measurements. Equip measuring tanks with outside taps and valves
203 or other accepted means to allow for checking calibration.

204
205 **(3) Aggregates.** When storing and stockpiling aggregates, avoid
206 separation of coarse and fine particles within each size, and do not
207 intermix various sizes before proportioning. Protect stored or
208 stockpiled aggregates from dust or other foreign matter. Do not
209 stockpile together, aggregates from different sources and of different
210 gradations.

When transporting aggregates from stockpiles or other sources to batching plant, ensure uniform grading of material is maintained. Do not use aggregates that have become segregated or mixed with earth or foreign matter. Stockpile or bin aggregates at least 12 hours before batching. Produce or handle aggregates by hydraulic methods and wash and drain aggregates. If aggregates exhibit high or non-uniform moisture content, the Engineer will order storage or stockpiling for more than 12 hours.

Proportion aggregates by weight, with the exception that aggregates in concrete for minor structures, curbs, and sidewalks may be proportioned by either volume or weight. For volumetric proportioning, use measuring boxes of known capacity to measure quantity of each aggregate size.

Use batch weight based on dry materials plus total weight of moisture (both absorbed and surface) contained in aggregate. Measure individual aggregates to within 2 percent, plus or minus, of required weight, and total weight of aggregates to within 1 percent, plus or minus, of required weight.

(4) Admixtures. Store, proportion, and dispense admixtures in accordance with the following provisions:

(a) Liquid Admixtures. Dispense chemical admixtures, air entraining admixtures, and corrosion inhibiting admixtures in liquid form. Use mechanical dispensers for liquid admixtures with sufficient capacity to measure prescribed quantity for each batch of concrete. Include graduated measuring unit in each dispenser to measure liquid admixtures to within 5 percent, plus or minus, of prescribed quantity for each batch. Read graduations accurately from point of measuring unit, and control proportioning operations to permit visual check of batch accuracy before discharging. Mark each measuring unit clearly for type and quantity of admixture.

Arrange with supplier to provide sampling device consisting of valve located in safe and accessible location for sampling admixtures.

When using more than one liquid admixture for concrete mix, use separate measuring unit for each liquid admixture and dispense separately to avoid interaction that may interfere with admixture efficiency and adversely affect concrete. Dispense liquid admixture by injecting so as not to mix admixture at high concentrations.

When using liquid admixtures in concrete that is completely mixed in paving or continuous mixers, operate dispensers automatically with batching control equipment. Equip such dispensers with automatic warning system that shall provide visible or audible signals at points where proportioning operations are controlled, when the following occurs:

- a. Quantity of admixture measured for each batch of concrete varies from pre-selected dosage by more than 5 percent; or
- b. Entire contents of measuring unit from dispenser is not emptied into each batch of concrete.

Unless liquid admixtures are added to batch with pre-measured water, discharge liquid admixtures into stream of water that disperses admixtures uniformly throughout batch. An exception is that air-entraining admixtures may be dispensed directly into moist sand in batching bins, provided adequate control of concrete air content can be maintained.

Measure and disperse special admixtures, as recommended by admixture manufacturer, and as accepted by the Engineer. Special admixtures include high-range water reducers requiring dosages greater than capacity of conventional dispensing equipment. For site-added, high-range water reducers, use calibrated, portable dispenser supplied by manufacturer.

(b) Mineral Admixtures. Protect mineral admixtures from exposure to moisture until used. Pile sacked material of each shipment to permit access for tally, inspection, and identification.

Provide adequate facilities to ensure that mineral admixtures meeting specified requirements are kept separate from other mineral admixtures and that only specified mineral admixtures are allowed to enter into the work. Provide safe and suitable facilities for sampling mineral admixtures at weigh hopper or in feed line immediately in advance of hopper.

Incorporate mineral admixtures into concrete using equipment conforming requirements for Portland Cement weigh hoppers and charging and discharging mechanisms specified in ASTM C94 and Subsection 601.03(C) - Batching.

When concrete is completely mixed in stationary paving or continuous mixers, weigh mineral admixture in separate weigh hopper. Introduce mineral admixture and cement simultaneously into mixer, proportionately with aggregate.

When interlocks are required for cement-charging mechanisms, and cement and mineral admixtures are weighed cumulatively, interlock their charging mechanisms to prevent introduction of mineral admixture until mass of cement in weigh hopper is within tolerances specified in Subsection 601.03(C)(1) - Portland Cement.

In determining maximum quantity of free water that may be used in concrete, consider mineral admixture and supplementary cementitious materials (SCMs) to be cement.

(5) Bins and Scales. At batching plant, use individual bins, hoppers, and scale for each aggregate size. Include separate bin, hopper, and scale for bulk cement and fly ash.

Except when proportioning bulk cement for pavement or structures, cement weigh hopper may be attached to separate scale for individual weighing or to aggregate scale for cumulative weighing. If cement is weighed cumulatively, weigh cement before other ingredients.

When proportioning for pavement or structures, keep bulk cement scale and weigh hopper separate and distinct from aggregate weighing equipment.

Use springless-dial or beam-type batching scales. When using beam-type scales, make provisions to show operator that required load in weighing hopper is approaching. Use devices that show condition within last 200 pounds of load and within 50 pounds of overload.

Maintain scale accuracy to 0.5 percent throughout range of use. Design poises to lock to prevent unauthorized change of position. Use scales inspected by the State Measurement Standards Branch of the Department of Agriculture to ensure their continued accuracy. Provide not less than ten 50-pound weights for testing scales.

Batching plants may be equipped to proportion aggregates and bulk cement by automatic weighing devices.

(6) Batching and Hauling. When mixing is to be performed at work site, transport aggregates from batching plant to mixer in batch boxes, vehicle bodies, or other containers of adequate capacity and construction. Use partitions to separate batches and prevent spilling from one compartment to another while in transit or during dumping.

Transport bulk cement to mixer in tight compartments carrying full quantity of cement required for batch. Once cement is placed in contact with aggregates, batches shall be mixed and placed within 1-1/2 hours of contact. Cement in original shipping packages may be transported on top of aggregates. Ensure that each batch contains number of sacks required by job mix.

Deliver batches to mixer intact. Charge each batch into mixer without loss of cement. When carrying more than one batch on truck, charge batch into mixer without spilling material from one batch compartment into another.

(D) Mixing. Mix concrete in mechanically operated mixers.

Use stationary or truck mixers that distribute materials thoroughly and produce concrete uniform in color and appearance. When there is variation in mixed concrete attributable to worn pickup or throw-over blades, the Engineer will inspect mixer. If inspection reveals that blades are worn more than one inch below original height of manufacturer's design, repair or replace blades. Upon request, make copy of manufacturer's design, showing dimensions and arrangement of blades.

Charge batches into central or truck mixers so that portion of mixing water enters ahead of cement and aggregates. Deliver uniform flow of water. Place entire amount of batch water in mixer by end of first quarter of mixing period. When mixers with multiple compartment drums are used, time required to transfer material between compartments will be included as mixing time. Use drum rotation speed as designated by manufacturer. If mixing does not produce concrete of uniform and smooth texture, provide additional revolutions at same speed until thorough mixing of each concrete batch is attained. Begin measuring mixing time from time cement, aggregates, and 60 percent of water are in drum. Do not exceed manufacturer's rated capacity for volume of concrete mixed in each batch.

Equip central or truck mixers with attachment for automatically timing mixing of each concrete batch. Timing device shall include automatic feature for locking discharge chute and device for warning operator when required mixing duration has been met. If timing or locking device fails to operate, immediately furnish clock or watch that indicates seconds, to mixer operator. If timing device is not repaired within three days after becoming inoperative, shut down batching operation until timing device is repaired.

For stationary mixers, use mixing time between 50 seconds and 5 minutes. Select mixing time, as necessary, to produce concrete that meets uniformity criteria when tested in accordance with Section 11.3.3 of ASTM C94. The Contractor may designate mixing time for which uniformity tests are to be performed, provided mixing time is not less than 50 seconds or more than 5 minutes. Before using concrete for pavements or structures, mix concrete to meet specified uniformity requirements. The Contractor shall furnish labor, sampling equipment, and materials required for conducting uniformity tests of concrete mixture. The Engineer will furnish required testing equipment, including scales, cubic measure, and air meter; and will perform tests. The Engineer will not pay separately for labor, equipment, materials, or testing, but will consider the costs incidental to concrete. After batching and mixing operational procedures are established, the Engineer will not allow changes in procedures without the Contractor re-establishing procedures by conducting uniformity tests. Repeat mixer performance tests whenever appearance of concrete or coarse aggregate content of samples is not conforming to requirements of ASTM C94. For truck mixers, add four seconds to specified mixing time if timing starts as soon as skip reaches its maximum raised position.

Unless otherwise indicated in the contract documents or accepted by the Engineer, concrete shall be mixed at proportioning plant. Operate mixer at agitating speed while in transit. Concrete may be truck-mixed only when cement or cement and mixing water are added at point of delivery. Begin mixing truck-mixed concrete immediately after introduction of mixing water to cement and aggregates, or introduction of cement to aggregates.

Inclined-axis, revolving drum truck mixers shall conform to Truck Mixer, Agitator and Front Discharge Concrete Carrier Standards TMMB 100-01, 15th Revision, published by Truck Mixer Manufacturers Bureau. Truck mixers shall produce thoroughly mixed and uniform mass of concrete and shall discharge concrete without segregation.

Manufacturer's standard metal rating plate shall be attached to each truck mixer, stating maximum rating capacity in terms of volume of mixed concrete for various uses and maximum and minimum mixing speeds. When using truck mixers for mixing, adhere to maximum capacity shown on metal rating plate for volume of concrete in each batch.

Operate truck mixers at mixing speed designated by manufacturer, but at not less than 6 or more than 18 revolutions per minute. Mix truck-mixed concrete initially between 70 and 100 revolutions at manufacturer-designated mixing speed, after ingredients, including water, are in mixer. Water may be added to mixture not more than two times after initial mixing is completed. Each time that water is added, turn drum an additional 30 revolutions or more at mixing speed until concrete is mixed uniformly.

When furnishing shrink-mixed concrete, transfer partially mixed concrete at central plant to truck mixer. Apply requirements for truck-mixed concrete. The Engineer will not credit number of revolutions at mixing speed for partial mixing in central plant.

When accepted by the Engineer, hand mixing may be allowed. The entire concrete placement at one location shall not exceed 1/3 cubic yard. It shall be hand mixed on a watertight, level platform. Use no aluminum to construct platform. Measure proper amount of coarse aggregate in measuring boxes and spread on platform. Spread fine aggregate on that coarse aggregate layer. Limit coarse and fine aggregate layers to total depth of one foot. Spread dry cement on this mixture. Turn whole mass not less than two times dry. Add sufficient clean water, distributed evenly. Turn whole mass again, not less than three times, not including placing in carriers or forms.

(E) Transporting Mixed Concrete. Transport central-mixed concrete to delivery point in truck agitators or truck mixers operating at speed designated by equipment manufacturer as agitating speed; or in non-agitating hauling equipment, provided consistency and workability of mixed concrete upon discharge at delivery point is suitable for placement and consolidation in place; and provided mixed concrete after hauling to delivery point conforms to uniformity criteria when tested as specified in Section 12.5 of ASTM C94.

For revolving drum truck mixers transporting central-mixed concrete, limit concrete volume to manufacturer's rated capacity for agitator operation. Maintain agitating speed for both revolving drum mixers and revolving blade type agitators as designated on manufacturer's data plate. Equip truck mixers or truck agitators with electrically or mechanically actuated counters. Actuate counters after introducing cement to aggregates.

Bodies of non-agitating hauling equipment shall be smooth, watertight, metal containers equipped with gates to permit control of concrete discharge. Protect open-topped haul vehicle against weather with cover accepted by the Engineer.

When hauling concrete in non-agitating trucks, complete discharge within 30 minutes after introducing mixing water to cement and aggregates.

When truck mixer or agitator is used for transporting central-mixed concrete to delivery point, complete discharge within 1-1/2 hours, or before 250 revolutions of drum or blades, whichever comes first after introduction of mixing water to cement and aggregates, or cement to aggregates. For truck-mixed concrete, complete concrete discharge within 1-1/2 hours, or before 300 revolutions of drum or blades, whichever comes first. These limitations are permitted to waived if concrete is of such slump after the 1-1/2 hour time or 300-revolution limit has been reached, that it can be placed, without addition of water to the batch.

Submit delivery tickets from manufacturers of truck-mixed concrete and central-mixed concrete with each truckload of concrete before unloading at jobsite. Printed, stamped, or written delivery ticket shall include the following information:

- (1) Name of concrete plants.
- (2) Serial number of ticket.
- (3) Date and truck number.
- (4) Name of Contractor.
- (5) Specific project, route, or designation of job (name and location), and truck overweight permit number when required.
- (6) Specific class or designation of concrete in accordance with contract documents.
- (7) Quantity of concrete in cubic yards.
- (8) Time of loading batch or mixing of cement and aggregates.
- (9) Water added by receiver of concrete and receiver's initials.
- (10) Information necessary to calculate total mixing water added by producer. Total mixing water includes free water on aggregates, water, and water added by truck operator from mixer tank.
- (11) Readings of non-resettable revolution counters of truck mixers after introduction of cement to aggregates, or introduction of mixing water to cement aggregates.
- (12) Supplier's mix number or code.

Furnish additional information designated by the Engineer and required by job specifications upon request.

(F) Consistency. Regulate quantity of water used in concrete mixes so that concrete consistency, as determined by AASHTO T 119 test method, is within nominal slump range specified in Table 601.03-3 - Slump for Concrete or as stated on the accepted concrete mix design. If concrete slump exceeds nominal slump, adjust mixture of subsequent batches. If slump exceeds maximum slump, the Engineer will reject concrete unless deemed satisfactory for its use.

The Engineer will also reject harsh or unworkable concrete that cannot be properly placed. Remove rejected concrete at no increase in contract price or contract time.

Slump for concrete shall be as specified in Table 601.03-3 – Slump for Concrete.

TABLE 601.03-3 - SLUMP FOR CONCRETE		
Type of Work	Nominal Slump Inches	Maximum Slump Inches
Concrete Pavements	0 – 3	3-1/2
Reinforced Concrete Structures:		
Sections Over 12 Inches	0 – 4	5
Sections 12 Inches Thick or Less	2 – 5	6
Non-Reinforced Concrete Facilities	1 – 3	4
Concrete Placed Underwater	6 – 8	9
Bridge Decks	0 – 3	3-1/2

In adverse or difficult conditions that may affect placement of concrete, the above slump limitations may be exceeded for placement workability, with the addition of admixture conforming to Subsection 711.03 - Admixtures, if accepted by the Engineer in writing and provided water-cement ratio is maintained. Provide additional cement and water, or admixture at no increase in contract price or contract time.

(G) Forms. Construct forms in accordance with applicable sections.

(H) Placing Concrete. Place concrete in accordance with applicable sections.

(I) Finishing Concrete Surfaces. Finish concrete surfaces in accordance with applicable sections.

560 **(J) Curing Concrete.** Cure concrete in accordance with applicable
561 sections.

562
563 **601.04 Measurement.** The Engineer will measure concrete in accordance with
564 the applicable sections.

565
566 **601.05 Payment.** The Engineer will pay for the accepted concrete under the
567 applicable sections.

568
569
570
571
572 **END OF SECTION 601**

SECTION 602 – Reinforcing Steel

Make the following amendments to said Section:

(I) Amend **602.04 – Measurement** by revising lines 803 to 808 to read as follows:

“602.04 Measurement. Reinforcing steel will be measured by the pound, based on the theoretical number of pounds complete in place as shown on the plans or placed as ordered as specified in the proposal.

The Engineer will base the weights calculated upon Table 602.04-1 – Bar Designation, Weight and Area.

TABLE 602.04-1 – BAR DESIGNATION, WEIGHT AND AREA		
Bar No.	Weight Per Linear Foot (Pounds)	Area (Square Inches)
3	0.376	0.11
4	0.668	0.20
5	1.043	0.31
6	1.502	0.44
7	2.044	0.60
8	2.670	0.79
9	3.400	1.00
10	4.303	1.27
11	5.313	1.56
14	7.650	2.25
18	13.600	4.00

The Engineer will not make allowance for clips, wire or other material used for fastening reinforcement in place. The cost is for the work prescribed in this section and the contract documents.”

(II) Amend **602.05 – Payment** by revising lines 810 to 830 to read as follows:

“602.05 Payment. The Engineer will pay for the accepted reinforcing steel at the contract unit price per pound for the contract items specified in the

proposal. Payment for reinforcing steel includes, but is not limited to, steel order lists and bending diagrams, bar supports and ties, splices and splice hardware, welder qualifications, job control splice tests, and nondestructive splice tests in the field.

The Engineer will pay for the following pay item when included in the proposal schedule:

Pay Item	Pay Unit
Reinforcing Steel for _____	Pound"

END OF SECTION 602

1 Make the following section a part of the Standard Specifications:
2

3 **SECTION 621 – INVASIVE SPECIES MANAGEMENT** 4 5

6 **621.01 Description.** This section describes the best management practices for
7 the prevention, identification, control, eradication, and reporting of invasive plant
8 and animal species (collectively, invasive species). Invasive species impacts can
9 include damage to infrastructure, public health and safety issues, reduction of
10 biodiversity, and reduced cover of desirable native and/or nonnative species. The
11 material found in Section 621 – Invasive Species Management shall be applied to
12 the following sections, as appropriate: Section 201 – Clearing and Grubbing,
13 Sections 202 – Removal of Structures and Obstructions, 203 – Excavation and
14 Embankment, 204 –Excavation and Backfill for Miscellaneous Facilities, 205 –
15 Excavation and Backfill for Bridge and Retaining Structures, and 206 –Excavation
16 and Backfill for Drainage Facilities, which cover various excavations; Section 209
17 – Temporary Water Pollution, Dust, and Erosion Control; Section 619 – Planting;
18 Section 641 – Hydro-Mulch Seeding; Section 642 – Landscape Maintenance; and
19 Section 643 – Maintenance of Existing Landscape Areas.
20

21 **(A) Definitions.** Whenever the following words, terms, or pronouns are
22 used in contract documents, unless otherwise prescribed therein and
23 without regard to the use or omission of uppercase letters, the intent and
24 meaning shall be interpreted as follows:
25

26 **(1) Alien Species.** Any species, including its seeds, eggs,
27 spores, or other biological material capable of propagating that
28 species, that is not native to that ecosystem.
29

30 **(2) Botanist/Arborist.** A person with a minimum of 5 years of
31 experience in the botanical field, including the identification,
32 eradication, control, and reporting of invasive plant species. The
33 CONTRACTOR's selected botanist/arborist shall be approved by the
34 Engineer.
35

36 **(3) Hawaii Invasive Species Council (HISC).** Inter-
37 departmental collaboration comprised of the Departments of Land &
38 Natural Resources (DLNR), Agriculture (DOA), Health (DOH),
39 Transportation (DOT), Business, Economic Development & Tourism
40 (DBEDT), and the University of Hawaii (UH). The HISC was
41 established in 2003 for the special purpose of providing policy level
42 direction, coordination, and planning among state departments,
43 federal agencies, and international and local initiatives for the control
44 and eradication of harmful invasive species infestations throughout
45 the State and for preventing the introduction of other invasive species
46 that may be potentially harmful.

47 **(4) Invasive Species.** An alien species whose introduction does,
48 or is likely to, cause economic or environmental harm or harm to
49 human health.
50

51 **(5) Invasive Species Committee (ISC).** Committees located in
52 Hawai'i that are island-based partnerships of government agencies,
53 nongovernmental organizations, and private businesses protecting
54 each island from the most threatening invasive weeds and pests.
55

56 **(6) Noxious Weed.** Any plant species that is, or that may be
57 likely to become, injurious, harmful, or deleterious to the agricultural,
58 horticultural, aquacultural, or livestock industry of the state and to
59 forest and recreational areas and conservation districts of the state,
60 as regulated by the Secretary of Agriculture and the federal land
61 management agencies and the State of Hawai'i Department of
62 Agriculture (HDOA) Hawai'i Revised Statutes (HRS) Chapter 152.
63 The HDOA Noxious Weed List can be found in HRS 4:6:68 (Noxious
64 Weed Rules).
65

66 **(7) Pest.** Any insect, rodent, nematode, fungus, weed, or any
67 other form of terrestrial or aquatic plant or animal life or virus,
68 bacteria, or other microorganism (except viruses, bacteria, or other
69 microorganisms on or in living humans or other living animals) that
70 the Engineer declares to be a pest (Federal Insecticide, Fungicide,
71 and Rodenticide Act, Section 2(t)).
72

73 **(8) Physical Construction.** Activities associated with clearing,
74 grubbing, grading, excavating, filling of land, or other similar site work
75 activities and that cause ground disturbance and/or site disturbance.
76

77 **(9) Propagule.** A vegetative structure that can become detached
78 from a plant and give rise to a new plant, e.g., a bud, sucker, or spore.
79

80 **(10) Priority Invasive Plants for the State of Hawai'i**
81 **Department of Transportation Construction Projects.**
82

83 **(a)** Plants and weeds identified in State of Hawai'i
84 Department of Transportation (HDOT) contract specifications.
85

86 **(b)** Plants on the U.S. Department of Agriculture Federal
87 Noxious Weed List and in HRS 4:6:68 (Noxious Weed Rules)
88 *provided that* the HDOA and/or the ISC also recommend that
89 weed as a target.
90

(c) Species identified as targets for the early detection, eradication, or containment and control by the local island ISC in each county, found at the following websites:

1. Hawai'i Island: <https://www.biisc.org/>
2. Kaua'i: <https://www.kauaiisc.org/>
3. Maui: <https://mauiinvasive.org/>
4. O'ahu: <https://www.oahuisc.org/>

(d) Species determined by HDOT to impact roadside maintenance operations, infrastructure, or health and safety of the public (as determined by the Engineer). These species can be found in Chapter 2 of the HDOT Invasive Species Project Prioritization Plan.

(e) Species that are actively controlled by neighboring landowners and agreed upon by the Engineer, as identified during pre-construction consultation with landowners (as applicable).

(11) Priority Pests for the State of Hawai'i Department of Transportation.

(a) Animals and pathogens designated as high-priority invasive species for early detection, eradication, or containment by the ISCs or HDOA in each county.

(b) Animals and pathogens known to impact roadside maintenance operations, infrastructure, or public safety, as determined by HDOT.

(c) Animals and pathogens that are of concern to neighboring landowners and the Engineer agrees should be targets for HDOT.

(12) Weed. Any plant growing where it is not wanted, as determined by the Engineer.

(13) Wildlife Biologist. A person with a minimum of 5 years of experience in the wildlife field, including identification, eradication, control, and reporting of invasive animal species. The CONTRACTOR's selected Wildlife Biologist shall be approved by the Engineer.

137 **621.02 Materials.**

138
139 **(A) Free from Invasive Plants or Pests.** All material, including plant
140 material, gravel, sand, and soil, provided for the project shall be free of
141 invasive plants or pests. Such action is to prevent the introduction of
142 invasive species onto the project site.

143
144 **(B) Plant Material Sources.**

145
146 **(1)** The CONTRACTOR shall buy plants propagated on the island
147 where the plants will be planted. The CONTRACTOR shall provide
148 the Engineer with the names of the nursery or nurseries they will use
149 to provide landscaping plants in accordance with Section 619 –
150 Planting. A Botanist/Arborist and a Wildlife Biologist (collectively,
151 Biologists) shall inspect the nursery for the presence of invasive
152 species on the property and in planting materials destined for the
153 project site within 90 days of planting. Inspection results shall be
154 provided to the Engineer in a report.

155
156 **(2)** Should plants not be available on-island, imported plants from
157 off-island may be used but shall not be brought directly to the project
158 site. State of Hawai'i Plant Quarantine Branch–certified nurseries
159 should be given priority when selecting off-island plant imports (State
160 of Hawai'i Plant Industry Division 2020, available at:
161 <https://hdoa.hawaii.gov/1pi/pq/certified-nurseries/>). These plants
162 shall not be mixed with locally grown plants and shall be first
163 quarantined in a location away from the project site for a period not
164 less than 30 days in an area approved by the Engineer. Biologists
165 shall inspect all plants imported from off-island to ensure that they
166 are free from invasive species, such as coqui frogs
167 (*Eleutherodactylus coqui*), fire ants (*Wasmannia auropunctata* and
168 *Solenopsis geminata*), and weed seedlings, that could arrive
169 inadvertently. The Biologists shall screen out any priority invasive
170 plants or other potentially invasive plants or organisms, including
171 imported plants that appear to be sick or carrying disease. Any plant
172 that appears to be diseased shall be submitted to the University of
173 Hawai'i College of Tropical Agriculture and Human Resources
174 extension agents for positive identification of the disease. The
175 Biologists may also seek assistance from other organizations,
176 including the State of Hawai'i Department of Land and Natural
177 Resources (DLNR), HDOA, and the local island ISC in the
178 identification or detection of non-plant invasive species. Imported
179 plants shall be planted out only after they have been determined to
180 be free of unwanted weeds or animal pests at the quarantine location
181 determined by the Engineer. All pests or invasive species shall be
182 reported by calling the Hawai'i Invasive Species Council at

808-643-PEST (7378) to determine appropriate treatment.

(3) In conjunction with Section 641 – Hydro-Mulch Seeding, a botanist/arborist shall inspect seeded areas a minimum of 45 days after hydroseed is applied.

(C) Construction Material.

(1) The Contractor shall make sure all material stockpile sites are free of invasive plants (including seeds and propagules) and animals. Stockpile site surveys shall be included in the Biologists' inventory report.

(2) All imported materials, including gravel, soil, rock, and sand shall be free of invasive species.

(3) All materials shall be stockpiled at a designated staging area to prevent contamination. If possible, permanent containment areas shall be constructed for long-term projects.

(4) Stockpiles of materials such as gravel, soil, rock, and sand shall be inspected every 6 months by the Biologists to ensure that they are not encroached upon by invasive plants or animals (a buffer of 30 feet shall be maintained).

(5) If invasive species are present, the CONTRACTOR shall either chemically or mechanically remove them, as determined by the Engineer.

621.03 Construction.

(A) Responsibility.

(1) Any priority invasive plants and priority pests that establish after notice to proceed and prior to final acceptance by the Engineer that were not present before construction shall be the sole responsibility of the CONTRACTOR to remove or control. Acceptable removal is dependent on the type of species and shall be approved by the Engineer.

(2) The CONTRACTOR shall be responsible for the control or eradication of priority invasive plants and/or priority pests that are already established at a project site before construction begins. CONTRACTOR responsibility is determined by the Engineer. Removal of already established species shall be paid from the force account; see Payment section below.

229
230 (3) The CONTRACTOR shall ensure that weed and/or pest
231 removal is carried out in a legal manner, including obtaining all
232 necessary training, licenses, and permits from applicable regulatory
233 agencies for the specific methods proposed for removal and disposal
234 of invasive species.
235

236 **(B) Inventory of Invasive Species before Physical Construction.**
237

238 (1) A full list of plant and animal species present at the site
239 (botanical inventory and faunal inventory, respectively) is required for
240 projects that have more than 1 acre or 43,560 square feet of roadside
241 soil or vegetation and which will remain as soil or vegetation at the
242 end of the construction project. The botanical and faunal inventory
243 can either be combined into one report or the floral and faunal
244 inventories can be reported on separately. Biologists shall provide
245 one electronic copy of each inventory report to the Engineer.
246 Botanical and faunal inventories shall be undertaken within 30 days
247 before physical construction activities (e.g., site work, clearing,
248 grubbing, ground disturbance, and/or any other site disturbance) are
249 initiated. The postconstruction botanical and faunal inventories shall
250 be undertaken during the Plant Establishment Period, which extends
251 9 months from the accepted completion date of the Planting Period.
252 See Section 619 – Planting for definitions on the Planting Period and
253 the Plant Establishment Period. The botanical and faunal inventory
254 of the right-of-way shall be done by Biologists hired by the
255 CONTRACTOR. The botanical inventory report shall include
256 scientific names of plant species and their abundance (area covered
257 and/or number of plants, as appropriate, depending on growth form).
258 For priority invasive plants, the inventory shall provide details on
259 GPS location (NAD 83) and reproductive status: mature
260 (reproductive parts present) or immature. For priority invasive
261 animals, the inventory shall include scientific names of faunal
262 species and shall provide details on GPS location (NAD 83) and
263 individual(s) detected.
264

265 (2) The Biologists shall inventory and report any priority invasive
266 plants and/or priority invasive pests within 30 feet of any proposed
267 on-site stockpiles for gravel, sand, and soil that may be sourced for
268 the construction project.
269

270 **(C) Invasive Species Removal Plan.**
271

272 (1) If invasive species are found before physical construction,
273 including within 30 feet of material stockpile locations, the
274 CONTRACTOR shall submit an invasive species removal plan for

approval by the Engineer. This plan shall include specific removal methods for all priority invasive species identified by the Engineer, such as physical removal and/or chemical treatments, and a detailed post-removal monitoring plan. The plan should address how to prevent the spread of the invasive species if not removed. A cost to remove and a cost to prevent the spread shall be submitted by the CONTRACTOR. Preparation of the removal plan will be paid for from the force account.

(2) If the invasive species is/are not removed prior to physical construction, the CONTRACTOR shall surround areas of all invasive plants with a protective 4-foot-high, orange plastic mesh or equivalent fence accepted by the Engineer, supported on a minimum 6-foot-long steel T-post. The CONTRACTOR shall provide signage on the fence that states "not to disturb or work within the fenced area." Fences shall be erected before removal work begins and shall not be removed until removal work is completed. For trees or shrubs, flagging tape can be used to mark plants. The CONTRACTOR shall contact the local island ISC to determine the best method to contain invasive animals.

(D) Removal of Priority Invasive Species Found before Physical Construction.

(1) The CONTRACTOR shall be required to remove invasive plants and/or priority pests present at the site after approval of the removal plan or implement mitigation measures to prevent their spread. Removal of invasive species present prior to construction will be paid from the force account. Removal shall be completed prior to any physical construction at the project site.

(2) The CONTRACTOR shall be responsible for ensuring the plant and animal removal is carried out in a legal manner, including obtaining all necessary training, licenses, and permits from applicable regulatory agencies for the specific methods proposed for clearing and removing invasive species.

(3) If pesticides are proposed for use in the removal plan, the CONTRACTOR shall ensure that their application is supervised by a licensed commercial applicator. The labels for pesticides being used must be in the applicator's possession; the applicator shall have proper safety equipment and be prepared to handle chemical spills before they occur. The CONTRACTOR shall use the least toxic chemical that shall achieve the desired results. If a chemical spill occurs, the Engineer must be notified, and the proper authorities shall be notified in accordance with the pesticide label requirements.

A record of chemical applications shall be kept by the commercial applicator and submitted to the Engineer.

(4) Green waste resulting from invasive species removal shall be disposed in a manner that will prevent spread by seeds or regrowth from plant fragments. Material contaminated with invasive species shall be covered and secured during transport to prevent other areas from becoming contaminated. In addition, seeds and fruit shall be placed and secured in bags by the CONTRACTOR. As determined by the Engineer, plant material shall be incinerated or buried in a landfill.

(E) Post-removal Monitoring and Inspection. A Biologist shall carry out post-removal monitoring at least every 6 months to confirm that the removal plan was successfully implemented. The post-removal monitoring is intended to ensure that the treated areas remain free of invasive species during the construction. Before handing the site over to the Engineer, the CONTRACTOR shall perform an inspection of the entire construction site. The Engineer shall determine whether the CONTRACTOR has met the responsibilities for invasive species removal based on the post-removal inspection report.

(F) Decontaminating Equipment, Machinery, and Vehicles.

(1) Clean Equipment.

(a) All CONTRACTOR equipment and vehicles shall arrive at the work site clean and visibly free of any soil, plants, or plant parts (e.g., seeds); insects and insect eggs; reptiles and amphibians and their eggs; or any other invasive species. Routine clean-down procedures shall be implemented to prevent contaminants from building up using visible inspection and power washing equipment. All equipment cleaning and sanitation shall be incidental to the lump-sum pay items.

(b) The CONTRACTOR shall certify that equipment is arriving free of soil and debris capable of transporting viable invasive plant parts, seeds, or propagules, or invasive animals. The CONTRACTOR shall provide the Engineer with sequentially numbered decals and an accompanying spreadsheet with the decal numbers indicated in one column and subsequent column headings for the date of inspection and license plate number. Decals shall include the contract number and be consistent with the format supplied by the Engineer. The CONTRACTOR shall place the decal on construction project machinery and vehicles, and the

Engineer will initial and date the decal after an inspection determines that the vehicles are acceptably clean. After initialing the decal on the vehicle/ machinery, the Engineer will use the submitted spreadsheet to record the date of inspection and license plate number. The CONTRACTOR shall remove the decal after project completion.

(c) Vehicles or equipment that are off-site for 1 or more working days shall be cleaned and inspected at least once prior to their arrival at site. For other vehicles left on-site, the CONTRACTOR shall attempt to maintain reasonable standards of vehicle hygiene, and frequency of inspection will be determined by the Engineer.

(d) All vehicles and equipment brought in for construction work from off-island are required to be thoroughly washed at the port of export before they arrive at the project site. If invasive species are found at the project site, all vehicles that are deemed to be contaminated by the Engineer must be washed before leaving the project site and being returned to its island of origin, or if not feasible or appropriate at the project site, then at an approved alternative site.

(e) Cleaning Stations.

1. The Engineer will designate a cleaning station for the project site. The location of cleaning stations shall be recorded using a GPS unit and provided to the Engineer. The Engineer will consider the following when selecting and approving a cleaning station at the project site:

a. The cleaning stations shall not contribute to further contamination of machinery. To prevent this, gravel or other appropriate material shall be used to minimize contact with mud or dirt, which may contain invasive plant seeds.

b. Cleaning stations shall be located in low-value areas (e.g., away from native vegetation) or off-site.

c. The designated cleaning area must provide an environment for operators to safely undertake clean-down procedures (i.e., is safe for road traffic and personnel).

d. Cleaning station locations must be clearly posted with signs that say: "Cleaning Station."

2. The CONTRACTOR shall only use designated cleaning stations at the project site to decontaminate equipment, machinery, and vehicles. All earthwork equipment shall be cleaned and be completely free of soil, seeds, vegetative matter, or other debris that could contain plant seeds or propagules prior to arrival and/or before leaving the project site. Manual clean-down procedures consist of using hand tools such as brushes, brooms, air compressors, vacuums, and/or high-pressure water guns. If using high-pressure water, apply only as much water as needed to avoid unnecessary run-off. As part of the cleaning, the CONTRACTOR must pay particular attention to key areas such as the chassis and wheels. A clean-down checklist for vehicles shall include the following:

a. Underside: wheels, rollers, tracks, wheel arches, wheel trim, bumpers, mud flaps, tire rims, axle, differentials, and spare tire

b. Digging apparatus, blades, and buckets

c. Interior: foot wells, carpets, and under mats

d. Engine bay: radiator, air filters, grille, recess under windscreen wipers, and transmission gearbox

e. Tray and trunk (for soil, seed, and plant material)

3. The CONTRACTOR shall clean and inspect equipment before it arrives at the project site. Equipment shall be considered free of soil, seeds, and other such debris after a visual inspection confirms it. Visual inspection shall include the complete exterior, including undercarriages, tires, wheel wells, and grille. Disassembly of equipment components or specialized inspection tools are not required. The Engineer will maintain a log of vehicle inspections. Earthwork

equipment shall not be allowed to operate within the state right-of-way until approved by the Engineer.

4. Priority pests found hitchhiking on equipment shall be reported to HDOA by calling 808-643-PEST (7378).

5. Equipment shall not be sprayed with pesticides as a preventative measure. Spraying equipment with pesticides is not consistent with label specifications. Additionally, many pesticides target a wide range of vegetation and invertebrates and using pesticides in this way may harm nontarget vegetation and invertebrates.

6. The CONTRACTOR shall thoroughly inspect seeding equipment prior to conducting seeding activities to ensure they are free of invasive plant propagules.

(G) Ensuring No Invasive Species Become Established during Construction.

(1) The CONTRACTOR is responsible for keeping the construction site free of invasive species. Monitoring shall be carried out by the CONTRACTOR after removal of invasive species found prior to construction, every 6 months during construction, after physical construction, and after the Plant Establishment Period, before handing the site over to the State. This monitoring shall be undertaken by a Botanist/Arborist for invasive plants and a Wildlife Biologist for invasive animals who shall provide an inventory report which will include scientific names of plant and animal species and their abundance (e.g., area covered and/or number of plants, as appropriate, depending on growth form; and number of individual animals detected). The invasive species inventory report can either report on invasive plants and animals separately or joined as a single document. The report for priority invasive plants shall provide GPS (NAD 83) locations and reproductive status, and the report for priority invasive pests shall provide GPS (NAD 83) locations and the number of individuals detected. Each Biologist shall provide one electronic copy of each inventory report to the Engineer.

(2) Invasive Species Information Signage at the Project Site. Invasive species and noxious weed signage shall be prominently posted at the CONTRACTOR's workplace and at the project site. Signage shall include one laminated 8.5 × 11-inch color page for

each HDOT priority invasive species relevant to the project site. The CONTRACTOR may obtain free digital files with invasive species photographs that shall be printed and laminated for use on the project site; these are available at: <http://www.hawaiiinvasivespecies.org>. All signage shall include "Call 808-643-PEST (7378)."

(3) Training. HDOT and the CONTRACTOR's field staff shall attend a mandatory training by biologists knowledgeable about invasive plants and animals about on-site decontamination protocols, identification of priority invasive species and pests, and reporting procedures, once annually (or prior to any physical construction). The local island ISC should be contacted for training information. Trainers shall record the name and date of training for those individuals that complete the training, which shall be provided to the Engineer upon request.

(4) Unannounced Inspections. The CONTRACTOR shall provide unfettered access to the state right-of-way to any ISC staff, HDOA staff, or anyone else acting for the Engineer for the purpose of detecting or monitoring invasive species.

(H) Post-Physical Construction Prior to Returning the Site to the State—Post-Construction Inventory. The CONTRACTOR shall conduct a post-construction invasive species inventory to verify and confirm that the CONTRACTOR maintained the site in the original condition after the initial removal of invasive species was conducted. If additional invasive species are found, the CONTRACTOR would be responsible to develop a removal plan, remove the invasive species found, and conduct post-removal monitoring at their own expense. The removal plan shall be subject to Engineer approval.

621.04 Measurement. The Engineer will measure the work required for the management of invasive species on a force account basis in accordance with Subsection 109.06 – Force Account Provisions and Compensation and as ordered by the Engineer.

621.05 Payment. The Engineer will pay for the accepted invasive species management on a force account basis in accordance with Subsection 109.06 – Force Account Provisions and Compensation. Payment will be full compensation for the work prescribed in this section and the contract documents.

The Engineer will pay for the following pay item when included in the proposal schedule:

551	Pay Item	Pay Unit
552		
553	Invasive Species Management	Force Account
554		
555	An estimated amount for the force account is allocated in the proposal	
556	schedule under “Invasive Species Management”, but the actual amount to be paid	
557	will be the sum shown on accepted force account records, whether this sum is	
558	more or less than the estimated amount allocated in the proposal schedule.”	
559		
560		
561		
562		
563		
564		
565	END OF SECTION 621	

Amend “Section 634 – PORTLAND CEMENT CONCRETE SIDEWALKS” to read as follows:

“SECTION 634 – PORTLAND CEMENT CONCRETE SIDEWALKS

634.01 Description. This section describes constructing Portland cement concrete sidewalks.

634.02 Materials.

Structural Concrete	601
Aggregate for Untreated Base	703.06
Joint Filler	705.01
Welded Wire Fabric Reinforcement	709.01(C)

634.03 Construction.

- (A) Excavating.** Excavate to a required depth, remove unsuitable material, and compact subgrade to firm, even surface in accordance with Subsection 203.03(A)(4) – Sub excavation.
- (B) Forms.** Use full-depth of wood or metal forms that are straight, free of warp and sufficient strength to resist pressure of concrete without springing. Brace and stake forms to remain in both horizontal and vertical alignment until removal.
- (C) Bed Course.** Use aggregate for untreated base conforming to Subsection 703.06 – Aggregate for Untreated Base, as bed course material. Place the bed course material a minimum of 4 inches in depth. Compact with three passes of lightweight mechanical tamper, roller, or vibratory system.
- (D) Reinforcement.** Provide welded wire reinforcement, in accordance with Section 602 – Reinforcing Steel.
- (E) Placing Concrete.** Moisten aggregate and forms to saturated, surface-dry condition immediately before placing concrete. Place concrete sidewalk 4 inches thick according to Section 503 – Concrete Structures.
- (F) Finishing.** Finish the concrete in accordance with Subsection 503.03(M)(3)(b) – Sidewalks and Median Strips. Do not plaster surface. Use edging tool with 1/4-inch radius to finish outside edges of sidewalk. Finish sidewalk as plane surface with 2 percent

(allowable construction tolerance of plus or minus 0.4 percent maximum) cross slope towards roadway. Test surface of concrete sidewalk with 10-foot straightedge. Correct any deviation in excess of 1/4-inch. Optional shorter straightedge of less than 10 feet may be required, i.e. 5-foot straightedge with max deviation of 1/8-inch. The surface finishes of the new sidewalk match the existing finishes.

(G) Joints. Match joints with curb or pavement joints.

(1) Expansion Joints. Use 1/2-inch thick preformed expansion joint filler at fixed structures, such as buildings, bridges, or walls, and at curb ramps. Extend preformed expansion joint filler from bottom of sidewalk to approximately 1/4-inch below top of sidewalk.

(2) Weakened-Plane Joints. Divide sidewalk between expansion or construction joints into sections approximately 5 feet in length by providing transverse, weakened-plane joints. Provide transverse, weakened-plane joints when time period between consecutive concrete placements is more than 45 minutes.

Where sidewalks are more than 7 feet in width, provide longitudinal, weakened-plane joints to obtain secure uniform blocks that are approximately square.

Provide weakened-plane joints where corners of drop inlets project into sidewalk. Form weakened-plane joints to 1-inch minimum depth and approximately 1/8-inch width using scoring tool, saw, or other means acceptable to the Engineer.

(3) Construction Joints. Form construction joints around appurtenances such as manholes and utility poles extending through entire sidewalk. Provide 1/4-inch thick preformed expansion joint filler for full depth of joints.

(H) Curing. Cure concrete for at least 72 hours in accordance with Subsection 503.03(L) – Curing Methods. Protect concrete from pedestrian traffic for 72 hours and from vehicular traffic for 7 days.

(I) Backfilling or Dressing. After sidewalk has set, fill or dress remaining excavated areas with material acceptable to the Engineer. Place and tamp fill in lifts up to 6 inches in depth.

(J) Transitions. The Portland Cement Concrete sidewalk shall be longitudinally transitioned no less than 6 feet to existing utility boxes

that are not adjusted. The 6 foot longitudinal transition shall also apply when the new sidewalk is higher or lower than the existing sidewalk and when tying into existing sidewalks within the State Highway right-of-way.

(K) Miscellaneous. The Contractor shall hire the services of a current International Society of Arboriculture (ISA) Certified Arborist when there are tree roots within the sidewalk. The Arborist shall have a minimum of 3 years ISA certification.

Cut the tree roots within the sidewalk limits and treat the cut roots as recommended by the arborist.

634.04 Measurement. Portland cement concrete sidewalks will be measured per square yard complete in place.

The Engineer will measure the removal and disposal of existing Portland cement concrete sidewalks per square yard in accordance with the contract documents.

The Engineer will not measure excavation of unsuitable material and backfill or dress with acceptable material for payment.

634.05 Payment. The Engineer will pay for the accepted quantities of Portland cement concrete sidewalk at the contract unit price per square yard complete in place. The cost of removing existing Portland cement concrete sidewalks shall not be included in the cost of Portland cement concrete sidewalks, and shall not exceed 10 percent of the cost of Portland cement concrete sidewalks. A premium of 25% will be added to the pay items listed below when the Contractor is ordered by the State to perform night work or work beyond specified normal working hours.

Payment will be full compensation for work prescribed in this section and contract documents.

The Engineer will pay for following pay item when included in proposal schedule:

Pay Item	Pay Unit
4-Inch Portland Cement Concrete Sidewalk	Square Yard
Removing Existing PCC Sidewalk	Square Yard

END OF SECTION 634

**HWY-OM-2027-38
634-3a**

2/9/2022

1 **SECTION 638 – PORTLAND CEMENT CONCRETE CURB AND GUTTER**

2
3 Make the following amendments to said Section:

4
5 **(I)** Amend **638.04 – Measurement** by revising lines 130 to 131 to read as
6 follows:

7
8 **“638.04 Measurement.** The Engineer will measure curb and/or gutter, both
9 new and reset, by the linear foot. The Engineer will measure along the front face
10 of the curb at the finished grade elevation. If the Engineer measures gutter
11 separately, the Engineer will measure gutter along the front face of the gutter.
12 The Engineer will not make deduction in gutter length for drainage
13 appurtenances installed such as catch basins and drop inlets.

14
15 The Engineer will measure the removal and disposal of the existing
16 Portland cement concrete curbs and gutters per linear foot in accordance with
17 the contract documents.

18
19 The Engineer will measure curb and/or gutter transition for payment as
20 follows:

21

From	To	Measurement for Payment
Cast-in-place Curb or Precast Curb	Cast-in-place Curb and Gutter	Cast-in-place Curb and Gutter
Cast-in-place Curb and Gutter	Precast Curb and Cast-in-place Gutter	Cast-in-place Curb and Gutter
Cast-in-place Curb and Gutter Type _____	Cast-in-place Curb and Gutter Type _____	Cast-in-place Curb and Gutter 1/2 of Transition to each type
Cast-in-place Curb Type _____	Cast-in-place Curb Type _____	Cast-in-place Curb 1/2 of Transition to each type

22
23 The Engineer will measure precast concrete drop curb and driveway curb
24 or cast-in-place integral driveway curb and gutter under the adjacent normal curb
25 and/or gutter.”
26

(II) Amend **638.05 – Payment** by revising lines 133 to 148 to read as follows:

“638.05 Payment. The Engineer will pay for the accepted quantities of curb and/or gutter at the contract unit price per linear foot for each type of curb and/or gutter specified.

Payment will be full compensation for work prescribed in this section and contract documents.

The Engineer will pay for each of the following pay items when included in proposal schedule:

Pay Item	Pay Unit
Curb, Type 2D	Linear Foot
Curb and Gutter, Type 2DG	Linear Foot
Removing Existing _____	Linear Foot”

END OF SECTION 638

Amend “Section 645 – WORK ZONE TRAFFIC CONTROL” to read as follows:

“SECTION 645 - WORK ZONE TRAFFIC CONTROL

645.01 Description. This section describes the following:

(A) Furnishing, installing, maintaining, and subsequently removing work zone traffic control devices, and personnel. Work zone traffic control shall include providing flaggers and police officers.

(B) Keeping roads for public traffic open and in passable condition; providing and maintaining temporary access crossings for trails, businesses, parking lots, garages, residences, farms, parks, and other driveways; taking necessary work precautions for the protection, safety, and convenience of the public; should pedestrian facilities exist, taking necessary measures for safe and accessible passage, with route information and ADAAG compliance, for pedestrians traveling through or near work zone; taking necessary precautions to protect work zone workers from situations that place workers at increased risk from motorized traffic.

(C) Taking safety and precautionary measures, such as illuminating roadway obstructions during hours of darkness, in accordance with Chapter 286, HRS; Title 19, Subtitle 5, Chapters 127, 128, and 129, HAR; and *MUTCD*.

645.02 Materials.

Signs	750.01
Sign Posts	750.02
Fasteners for Signs and Route Markers	750.03
Reflector Marker	750.07
Flexible Delineator Posts and Reflectors	750.08
Traffic Delineators	750.09
Preformed Pavement Marking Tape	755.04

Submit electronic crashworthy documentation, including but not limited to, drawings in pdf and CADD, crash test reports, and FHWA eligibility letters certifying compliance with MASH 2016, for signs, sign supports, barricades, tubular markers, cones, vertical panels, and other traffic control devices. Only devices that are deemed crashworthy will be allowed.

47
48 Upon request of the Engineer, furnish self-certified MASH 2016 compliant
49 letter from vendor(s) for each type of Category 1 traffic control device, as defined by
50 FHWA and/or AASHTO, including single-piece traffic cone, single-piece drum, and
51 tubular marker.

52
53 Traffic control devices, including signs, barricades, warning lights, arrow
54 boards, portable changeable message signs, cones, tubular markers, and temporary
55 concrete barriers shall conform to the American Traffic Safety Services Association
56 (ATSSA), *Quality Guidelines for Temporary Traffic Control Devices and Features*
57 and the *MUTCD*.

58
59 Protective devices including barricades, warning signs, lights, and temporary
60 signals shall conform to Title 19, Subtitle 5, Chapters 127, 128, and 129, HAR.
61 Retroreflectorization for protective devices such as barricades, tubular markers, and
62 warning signs shall conform to Subsection 750.01 – Signs.

63
64 **645.03 Construction.** Furnish, install, and maintain barricades, signs, cones,
65 tubular markers, lights, flashing signals, and other traffic control devices.

66
67 Furnish two police officers for each location that requires work zone traffic
68 control. If the Traffic Control Plan (TCP) is included in the contract documents,
69 furnish number of police officers indicated in the TCP, whichever is greater.

70
71 When directing traffic, flaggers, or police officers, or both shall be in direct
72 communication with each other.

73
74 Furnish two Electronic Message Boards or the amount requested by the
75 Engineer for each work site that requires work zone traffic control on a daily basis.

76
77 TCP for lane closure on two-lane road will consider intersections and
78 driveway access. Maximum length of a lane closure on a two-lane road is 1,000
79 feet.

80
81 Submit TCP and schedule at least 15 working days before work starts.
82 Submit modifications and deviations from accepted TCP and schedule at least 15
83 working days before start of work requiring modification or deviation. Illegible TCP
84 will not be accepted.

85
86 Include the following in TCP and schedule:

- 87
88 **(1)** Signs (type, size, designation, and placement).
89
90 **(2)** Traffic movements shown by arrows.
91
92 **(3)** Positions of flaggers and police officers.

(4) Barricades, cones, tubular markers, and additional traffic control devices and measures necessary for protection of work and public safety; and placement, spacing, distances, and reference points for traffic control devices.

(5) Layout, drawn to scale, of traffic control devices, including information needed to layout TCP.

(6) Brief description of work.

(7) Dates of work.

(8) Times of day affected.

(9) Proposed public information sign.

(10) Proposed news release.

Place sign or device situated farthest upstream from work zone first. Then place others progressively downstream toward work zone.

Extend cones or tubular markers to point where cones or tubular markers are visible to approaching traffic.

For signs with messages on both faces, cover inapplicable message before placement.

Keep barricades, construction and warning signs, and other traffic control devices in good condition. Repair, clean, or replace barricades, signs, or other devices as required to maintain effectiveness and appearance. The Engineer alone will decide suitable condition of each barricade, sign, or other traffic control device.

Remove or cover regulatory and warning signs that conflict with TCP. Restore signs upon completion of work or as ordered by the Engineer. Affix object markers to post(s) of covered sign.

Promptly remove or cover construction and warning signs that are not applicable or not in use.

For sign covers, fully covers signs as indicated in the Acceptable category of the ATSSA Quality Guidelines for Temporary Traffic Control Devices and Features. Covers that are deemed to be in the Marginal or Unacceptable categories will not be accepted. Covers that are fabricated from rigid materials will also not be accepted unless it is certified to be MASH 2016 compliant.

Promptly remove traffic control devices that are no longer needed.

Remove traffic control devices in reverse order of installation, starting closest to work zone and continuing away from work zone.

Maintain abutting owners' existing access until replacement access is usable. Obtain permission from abutting owners, including conditions for closing existing access. Submit copy of agreement with abutting owners before beginning work in the affected area.

When working on existing facility that will be kept open to traffic, provide smooth and even surface for public traffic use. Only work on a portion of roadway at one time, and stage construction from one side to other while routing traffic over opposite side.

During subgrade and paving operations, paved shoulders may be used for public traffic.

Do not store material or equipment where it will interfere with public traffic. Remove equipment and other obstructions out of right-of-way or clear zone to permit free and safe passage of public traffic during non-working hours or suspension of work. For storage of materials and equipment, see Subsection 105.14 – Storage and Handling of Materials and Equipment.

Notify Fire Department, in writing, at least 24 hours before blocking or closing road access. Keep fire hydrants accessible to Fire Department by not placing material or other obstructions within five feet of fire hydrant or closer than permitted by applicable ordinances, rules, and regulations.

Notify the Engineer and County, including Bus Systems Division, Police Department, Fire Department, Emergency Medical Services, and Department of Health in writing at least five days before start of construction.

(A) Signs. Install signs sufficiently ahead of location where operations may interfere with use of road by traffic and at intermediate points where new work crosses or coincides with existing road.

Place signs in accordance with TCP as accepted by the Engineer.

(B) Work Zone Signs. Erect work zone signs at the beginning of project and at the end of project at the location indicated by the Engineer. These signs shall remain for the duration of the highway project. Maintain these signs. Place these signs besides the required traffic control signs called for herein.

The work zone signs shall be new and become the property of the Contractor.

(C) **Barricades.**

(1) **General.** Provide, erect, and maintain necessary barricades suitable for protection of work and safety of the public.

Barricades shall be in good condition. Barricade application and installation shall be in accordance with accepted TCP.

Provide sand bags if required or ordered by the Engineer. Sand bags and installation method shall comply with *MUTCD* and be accepted by the Engineer prior to use. Do not place sand bags on striped barricade rail.

During hours of darkness, install steady burn or flashing lamps on barricades selected by the Engineer. Attach lamps on barricade ends closest to traveled way and visible to oncoming traffic.

Do not install signs on barricades unless signs and barricades have been crash tested as a unit and accepted under NCHRP Report 350.

(2) **Retroreflectorization.** Retroreflectorize barricade rails and attachment with retroreflective sheeting in accordance with Subsection 750.01(C)(4) - Type III or IV Retroreflective Sheeting (High Intensity) or Subsection 750.01(C)(5) - Hardened Aluminum-Backed Retroreflective Sheeting.

Retroreflectorize both vertical faces of each barricade rail.

(3) **Color.** Provide white colored rails, frames, and braces with front and back rail faces having 6-inch-wide alternating orange or red and white stripes sloping downward toward traveled way at angle of 45 degrees from vertical. Use stripe colors in accordance with the following:

(a) Use orange and white stripes for the following conditions:

1. Construction work.
2. Detours.
3. Maintenance work.

(b) Use red and white stripes for the following conditions:

1. On roadways with no outlet, such as dead-ends and cul-de-sacs.

2. Ramps or lanes closed for operational purposes.

3. Permanent or semi-permanent closure or termination of roadway.

(4) Maintenance. Keep barricades in good condition. Repair, repaint, clean, or replace barricades to maintain effectiveness and appearance. Immediately replace missing or damaged barricades, lamps, sandbags, and other accepted weights.

Clean and repair barricades before relocating to other locations.

(D) Traffic Delineators. Install traffic delineators in accordance with accepted TCP.

Maintain traffic delineators in good condition. Immediately replace missing or damaged tubular markers.

Clean delineators prior to relocating to new location.

(E) Cones. Install traffic cones in accordance with accepted TCP.

Maintain traffic cones. Keep traffic cones clean and in good repair. Immediately replace lost, stolen, or damaged traffic cones.

Clean cones prior to relocating to new location.

(F) Lane Closures. Lane closures will be allowed only from 8:30 a.m. to 3:00 p.m., Monday through Friday. Exceptions to lane closure hours specified require written acceptance by the Engineer. Placement and removal of all work zone devices within the travel lanes, such as arrow boards, cones, etc., are restricted to allowable closure times. No increase in contract price or contract time will be given for lane closure restrictions specified.

For island of Oahu, no lane closures will be allowed during 24-hour periods as follows:

(1) Day preceding holiday (3:00 p.m. to Midnight), except as otherwise specified.

(2) Holidays (Midnight to Midnight).

(3) Day before and day after Thanksgiving Day (Midnight to Midnight).

(4) Three-week holiday period for Christmas and New Years (Midnight to Midnight).

(5) Three-week "Beat-the-School-Jam" period, to be determined, (Midnight to Midnight) beginning approximately third week of August.

(6) Other dates of events indicated in the contract documents.

No time extension will be given for the above restrictions. The contract time for the project has accounted for any loss of time due to the above restrictions.

Closure of only one lane of traffic will be allowed during lane-closure hours. Keep lanes open to traffic and allow flow at posted speed limit during non-lane closure hours.

If applicable, coordinate lane closures with adjacent project(s) at no increase in contract price or contract time.

Rental fees will be assessed in accordance with Subsection 108.10 – Rental Fees for Unauthorized Lane Closure or Occupancy, for failure to open lanes to traffic during peak hours. Morning and afternoon peak hours shall be from 5:30 a.m. to 8:30 a.m. and 3:00 p.m. to 6:00 p.m., respectively, Monday through Friday.

Before scheduling work, submit requests for detours and lane closures as follows:

(1) Detours - 8 weeks before implementing detours.

(2) Lane closures - 6 weeks before implementing lane closures.

Include the following with detour and lane closure requests:

(1) Explanation of proposed changes to existing traffic pattern.

(2) Installation schedule for informational and traffic control signs.

(3) Publication schedule for legal notices.

(4) Plan showing proposed informational signs.

(5) Plan showing lane changes or detours in accordance with accepted TCP, including details at beginning of multi-lane highway lane changes and detours.

Detours or lane closures will not be allowed before the Engineer accepts detour or lane closure request.

TABLE 645-I - FOR TRAFFIC CONTROL PLAN							
POSTED SPEED LIMIT (M.P.H.)	SIGN SPACING (D) (FEET)	TAPER LENGTH (T) (FEET)		LONGI- TUDINAL BUFFER SPACE (B) (FEET)	SPACING OF CONES OR TUBULAR MARKERS (FEET)		
		W = 12' OR LESS	W = GREATER THAN 12' *		TAPER	TANGENT	WORK AREA
20	250	200	W x 17	35	20	20	10
25	250	200	W x 17	55	25	25	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
* W = width of lane or shoulder							

(G) **Advisory Signs.** Submit advisory sign shop drawings. Construct, install, maintain, and remove two advisory signs as ordered by the Engineer. Place signs at locations designated by the Engineer. Provide signs, minimum 8 feet wide by 4 feet high, with black letters on orange background, and with three 4.00 pounds/foot flanged channel posts for each sign.

Include starting date and hours of construction in sign message. Use letter heights of 8 inches, Series D. The Engineer will review and accept advisory signs' wording before fabrication. Install advisory signs two weeks before start of construction. Remove advisory signs immediately after construction has been completed or as ordered by the Engineer.

(H) **Advertisement.** Place advertisement in newspaper, as ordered by the Engineer, for the following traffic pattern changes or night work:

- (1) Detours.
- (2) Lane closure.

(3) Permanent road closure.

(4) Permanent new route that changes previous route.

Include the following information:

(1) Map of traffic pattern change limits.

(2) Map showing lane(s) closure and detour pattern.

(3) Notice of starting and ending dates and duration.

(4) Explanation of lane(s) closure or detours in "Notice To Motorist".

Quality of map shall conform to the following requirements:

(1) No freehand printing or penciling.

(2) Highlight important features by darkening, cross-hatching, crossing-out, or coloring important words, as necessary.

(3) Provide maps with minimum size of five columns wide and four columns deep. Lesser width columns may be considered to balance against size of drawing.

(4) Text specifications.

(a) Work being featured - 3/16-inch text.

(b) Major roads and features - 1/8-inch text.

(c) Other roads and features- first letter of sentence upper case.

(d) "NOTICE TO MOTORIST" in upper case.

(e) Message - first letter of sentence upper case.

(5) Line Thickness.

(a) Important feature being advertised - line thicker than rest of map.

(b) Directional arrow - bolder than rest of lines shown on map, when important, to show route traffic should use.

(6) Show reference direction such as "TO HONOLULU" with arrow
Submit the following:

(a) "Notice to Motorists" before placement in newspaper, six weeks before start of work.

(b) Actual size of notice to be published in newspaper. The Engineer will not allow size reduction of notices once accepted. Submit final, camera-ready "Notice to Motorists" advertisement.

Place advertisement for three consecutive days and within one week before traffic pattern changes, in publication as ordered by the Engineer.

645.04 Measurement. Traffic control as specified in Subsection 645.03 – Construction will be measured per lane mile in accordance with the contract documents.

The Engineer will measure Electronic Message Boards per each on a daily basis in accordance with the contract documents.

645.05 Payment. The Engineer will pay for the accepted traffic control, additional police officers, additional traffic control devices, and advertisement at the contract price per pay unit, as shown in the proposal schedule. Payment will be full compensation for the work prescribed in this section and the contract documents.

The Engineer will pay for the accepted Electronic Message Boards at the contract price per each on a daily basis. The price includes full compensation for renting/furnishing, installing, setting up, maintaining and removing one electronic message board for a 24-hour period and furnishing labor, materials, tools, equipment, and incidentals necessary to operate the Electronic Message Boards.

Costs associated with the provision of uniformed law enforcement to maintain safe and efficient travel through highway work zones and their payment terms are explained in more detail in Section III. D. of HDOT's WORK ZONE SAFETY MANAGEMENT GUIDELINES.

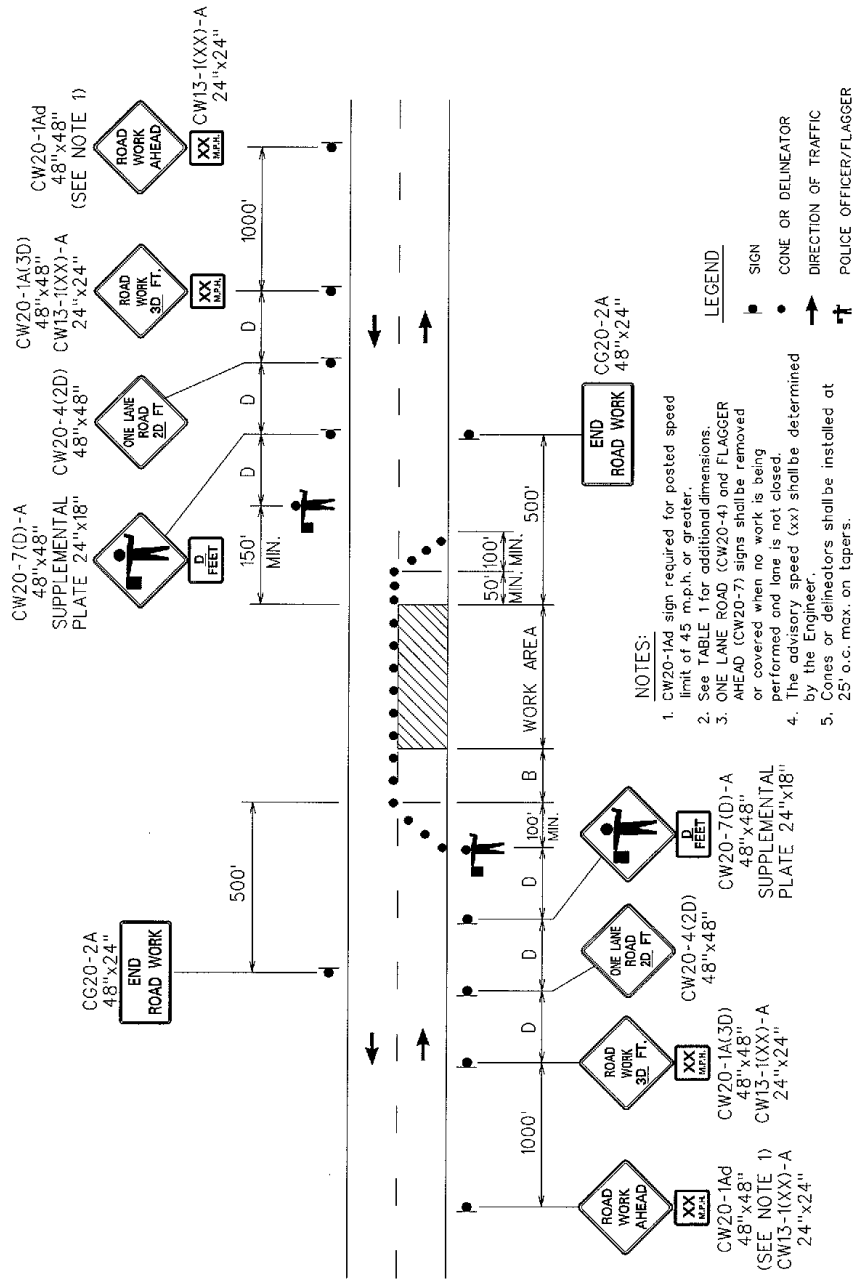
The Engineer will pay for the following pay items when included in the proposal schedule:

Pay Item	Pay Unit
Traffic Control (Interstate Freeway)	Lane Mile
Traffic Control (State Highway)	Lane Mile
Electronic Message Board (per day)	Each

441

442 The Engineer will not pay for request submittals. The Engineer will not
443 consider claims for additional compensation of late submittals or requests by
444 Contractor.

445



TWO-LANE HIGHWAY - ONE LANE CLOSED
FIGURE 1 - TRAFFIC CONTROL PLAN

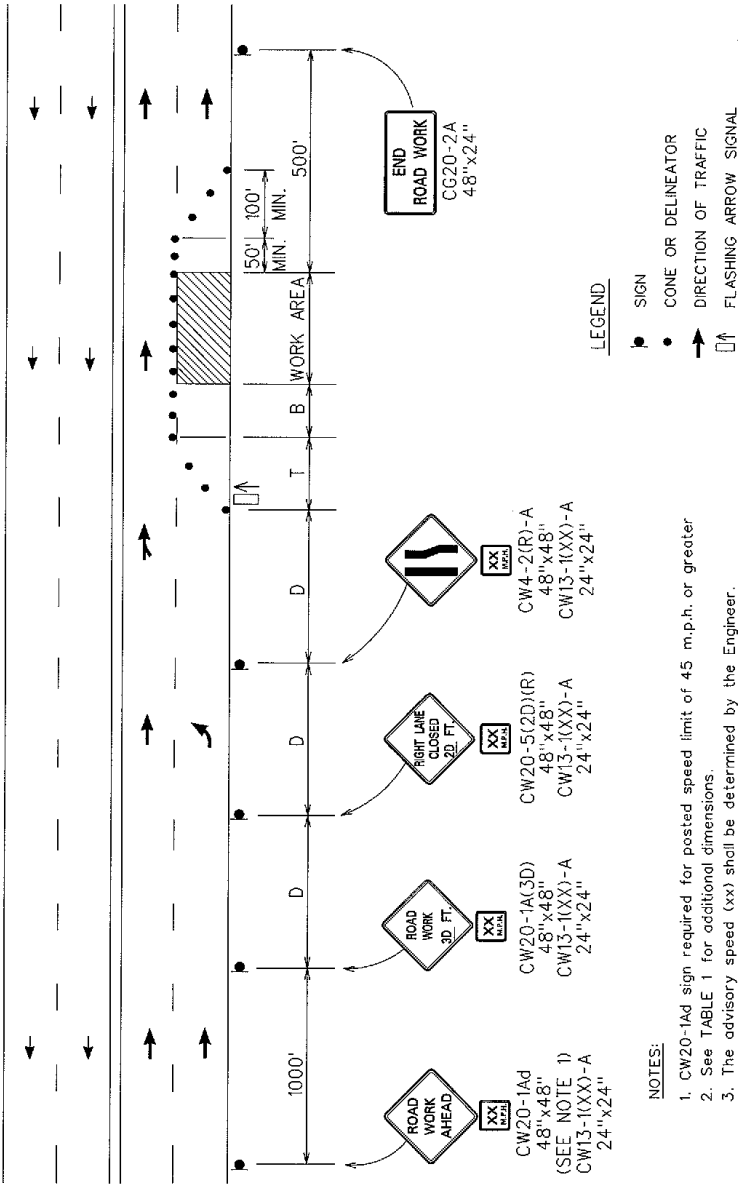
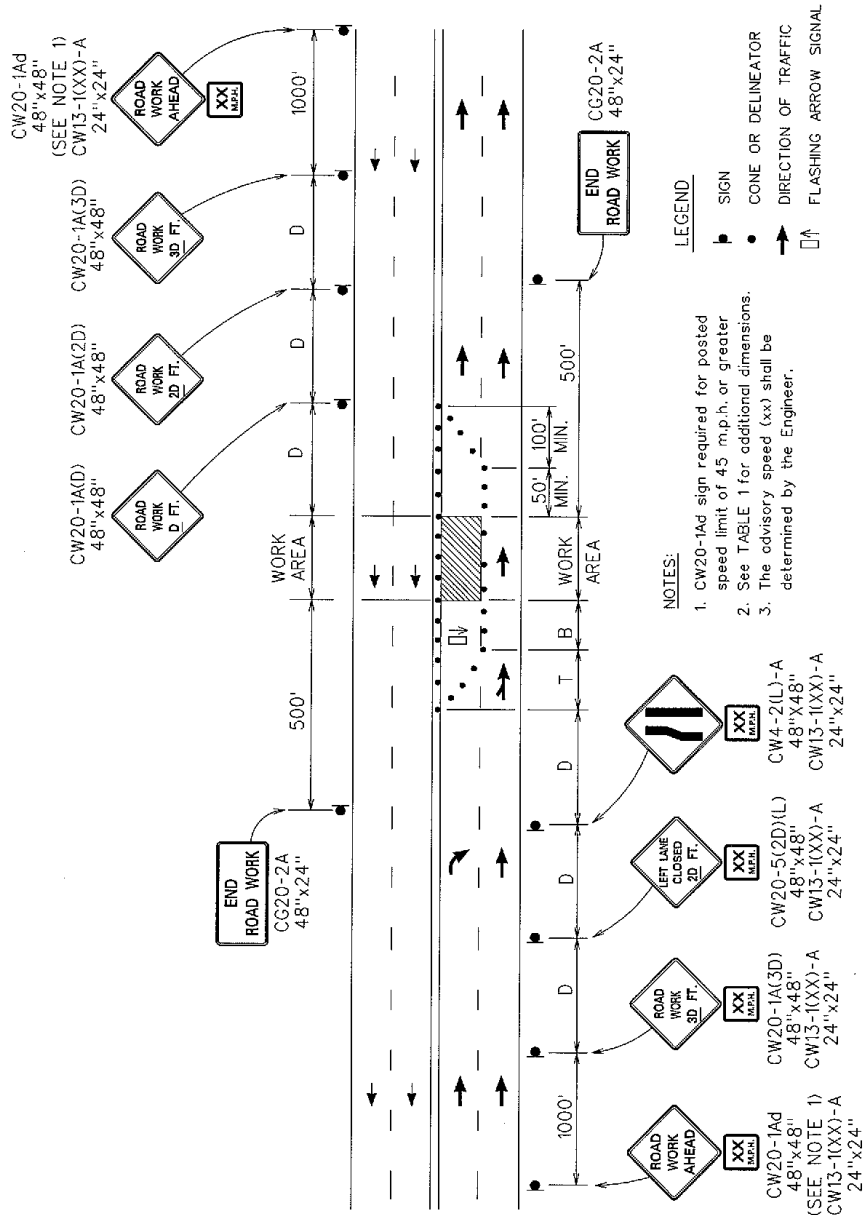
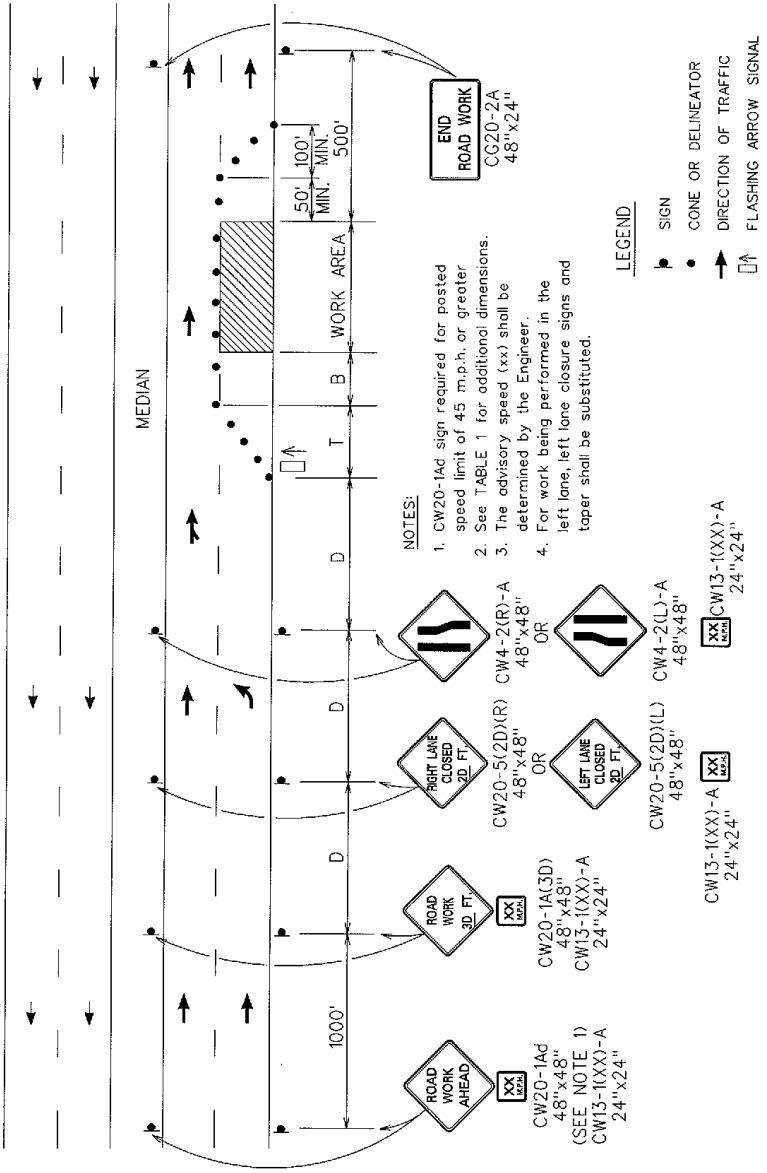


FIGURE 2 - TRAFFIC CONTROL PLAN

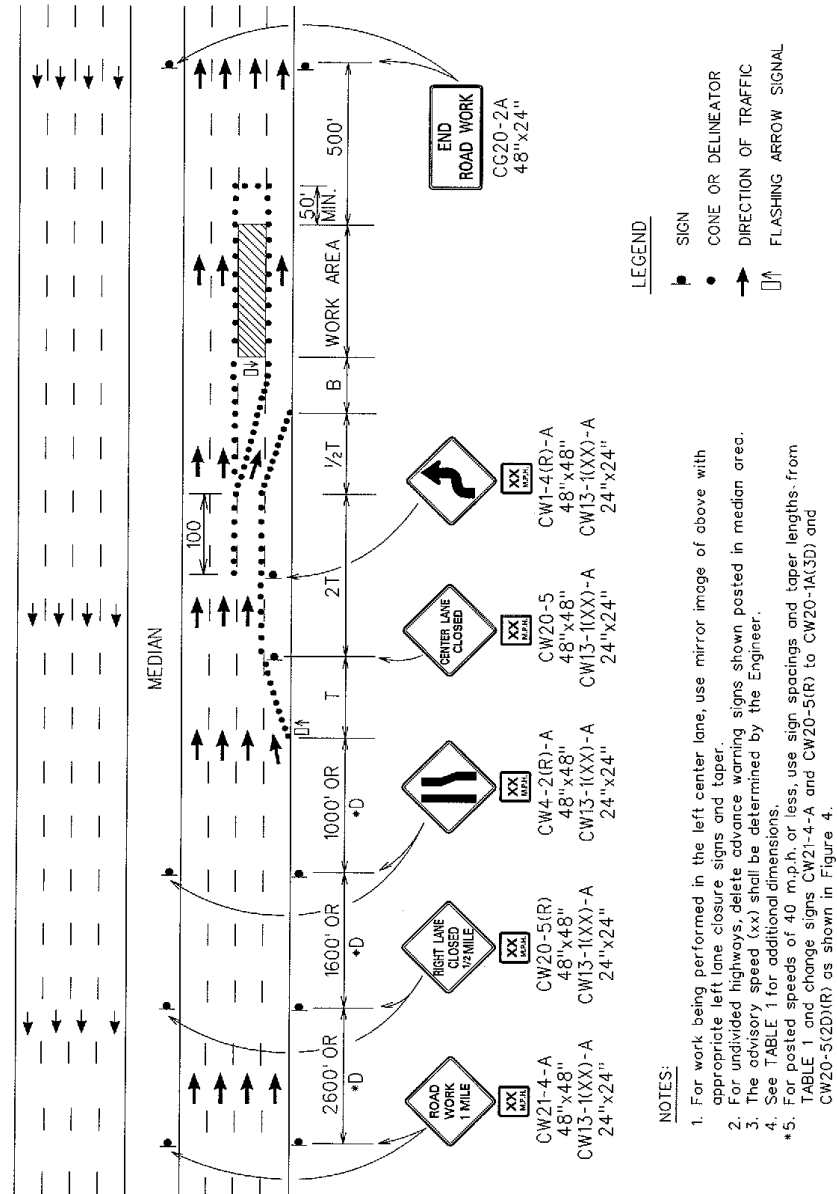


MULTILANE UNDIVIDED HIGHWAY - LEFT LANE CLOSED

FIGURE 3 - TRAFFIC CONTROL PLAN

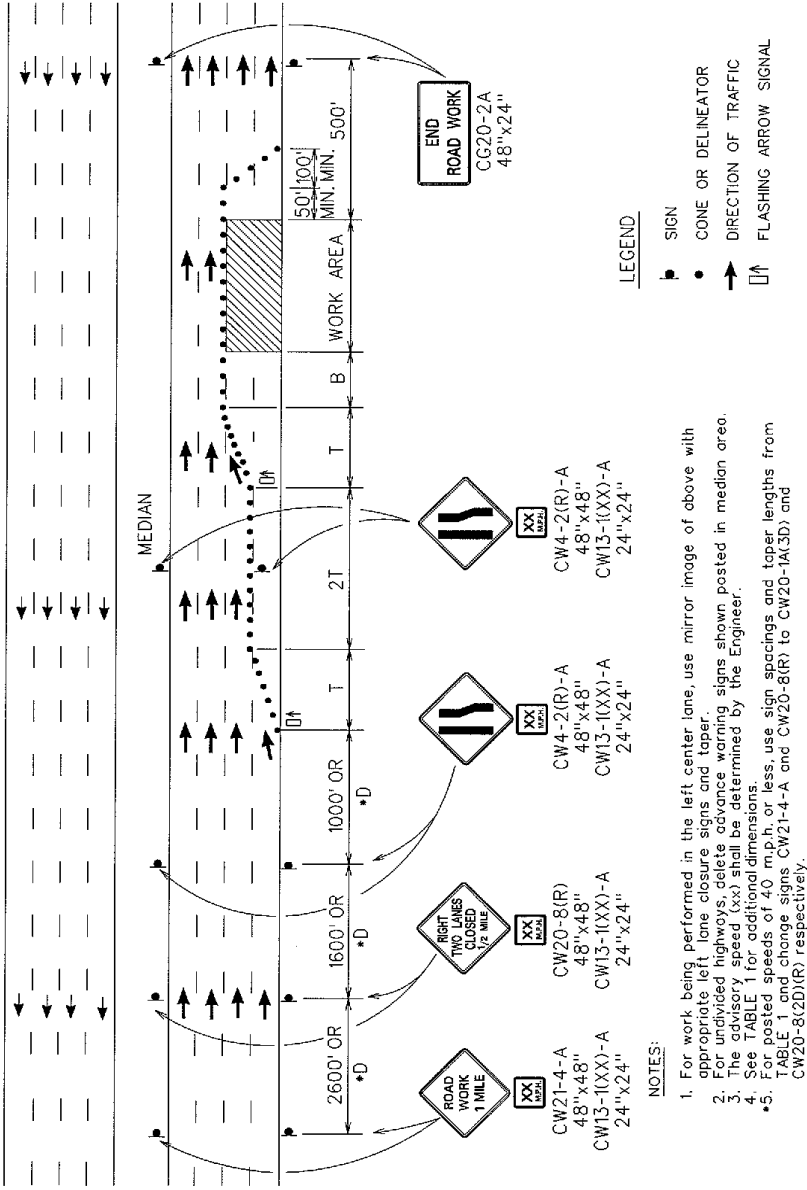


MULTILANE DIVIDED HIGHWAY - ONE LANE CLOSED
FIGURE 4 - TRAFFIC CONTROL PLAN



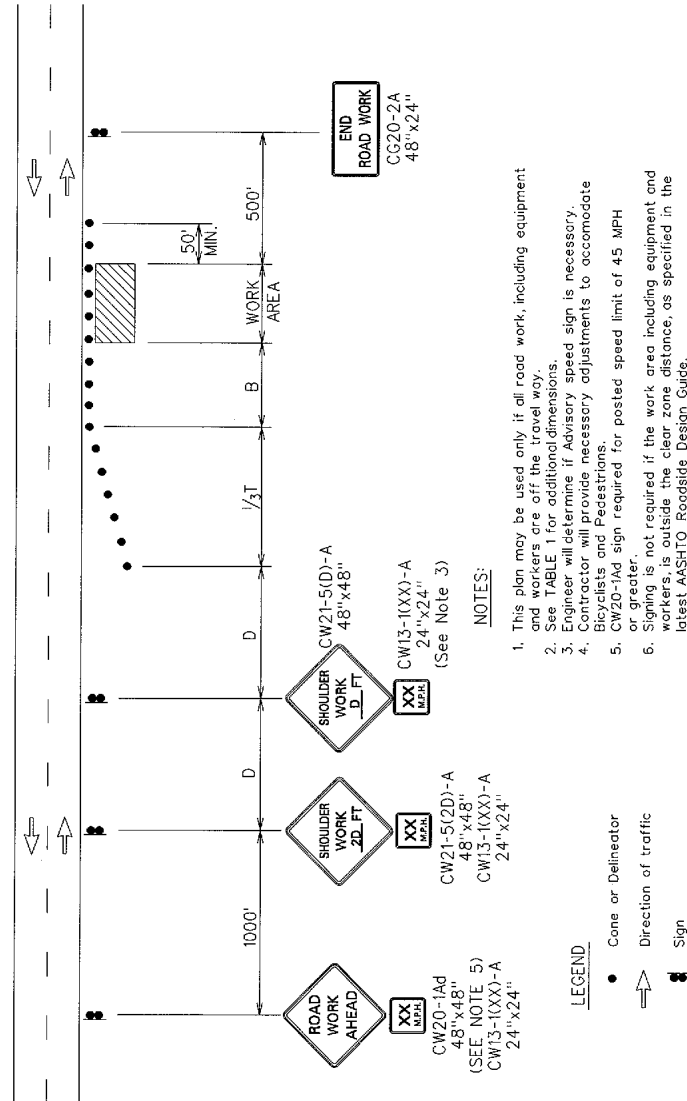
MULTILANE HIGHWAY - CENTER LANE CLOSED

FIGURE 5 - TRAFFIC CONTROL PLAN



MULTILANE HIGHWAY - MULTIPLE LANE CLOSED

FIGURE 6 - TRAFFIC CONTROL PLAN



R10/96

WORKING ON SHOULDER OR ROADSIDE
FIGURE 7 - TRAFFIC CONTROL PLAN

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(I) Amend 650.04 – Measurement by revising lines 41 to 42 to read as follows:

(II) Amend **650.05 – Payment** by revising lines 45 to 51 to read as follows:

The Engineer will pay for the following pay item when included in the proposal schedule:

Pay Item	Pay Unit
Curb Ramp, Type _____	Each
Detectable Warning Mat	Each"

HWY-OM-2027-38
650-1a

7/1/18

1 Make the following section a part of the Standard Specifications:

2
3 **“SECTION 671 – PROTECTION OF ENDANGERED SPECIES**

4
5 **671.01 Description.** The Endangered Species Act (ESA) listed species
6 Hawaiian hoary bat (*Lasiurus cinereus semotus*), Hawaiian petrel (*Pterodroma*
7 *sandwichensis*), Newell’s shearwater (*Puffinus newelli*), band-rumped storm petrel
8 (*Hydrobates castro*), Hawaiian stilt (*Himantopus mexicanus knudseni*), Hawaiian
9 coot (*Fulica alai*), Hawaiian common gallinule (*Gallinula galeata sandvicensis*),
10 Hawaiian duck (*Anas wyvilliana*), green sea turtle (*Chelonia mydas*), and hawksbill
11 sea turtle (*Eretmochelys imbricata*) may be in or transit through the general vicinity
12 of the proposed project. The contractor shall protect these terrestrial protected
13 species throughout the construction duration.

14
15 **671.02 Materials.** None

16
17 **671.03 Construction.**

18
19 **(A) Pre-Construction and Construction Requirements.** Comply with
20 the following conditions:

21
22 **(1) General Lighting Requirements:**

23 Nightwork is authorized by the Regulatory Permits, however
24 from May through December all lights must be downward
25 facing and fully shielded so bulbs can only be seen from
26 below. All lights will be illuminated only when necessary and
27 will be turned off when human activity is not occurring in the
28 lighted area. Additionally, all construction lights will be lower
29 in height than the existing streetlight and not placed on the
30 beach. Lighting should also face mauka along roadway where
31 work is occurring and not outwards toward the ocean.

32
33 **(2) Hawaiian Hoary Bats:** No disturbance, removal, or trimming of
34 woody plants taller than 15 feet (4.6 meters) during the
35 birthing and pup rearing season (June 1 through September
36 15). Additionally, barbed wire will not be used.

37
38 **(3) Hawaiian seabirds** (Newell’s shearwater, Hawaiian petrel and
39 band-rumped storm-petrel) may traverse the project area at
40 night. Nighttime construction is permitted year-round.
41 However, the following measures must be implemented
42 during seabird fledging season (September 15 through
43 December 15):

44
45 **(a)** Monitoring for downed seabirds during night work
46 will be conducted by a qualified biologist

47 experienced and knowledgeable in Hawaiian
48 seabird biology and identification. Monitoring will be
49 conducted at the places and during the hours that
50 construction night lighting is in use, and at dawn.
51 Surveys for seabirds will be conducted regardless
52 of weather conditions unless the weather is
53 dangerous to the observer and/or nightwork is
54 cancelled.

- 55
- 56 (b) Seabird monitors will be hired, trained, and geared
57 up with surveying and downed seabird rescue
58 equipment and supplies prior to September 15.
- 59
- 60 (c) At least one seabird monitor will be present every
61 night when there are work activities using nighttime
62 lighting during this three-month period.
- 63
- 64 (d) The seabird monitor will observe the nighttime
65 lighting with the unaided eye and use of binoculars
66 to observe if a seabird is circling lights or has fallen
67 to the ground. If a circling bird is observed to fall to
68 the ground, the seabird monitor will immediately
69 rescue the downed seabird if it has come down in
70 an accessible location. For personnel safety,
71 seabird monitors will have radio or cell phone
72 contact with the construction work crew supervisor
73 in the field who is overseeing nighttime work. For
74 the rescue to be done safely, the construction
75 supervisor will notify workers in the immediate area
76 of the downed seabird to stop work activities while
77 the bird is picked up.
- 78
- 79 (e) Construction workers will be briefed prior to the first
80 nighttime monitoring session during each seabird
81 fallout season of the presence of a seabird monitor
82 at the construction site, possible downed seabirds,
83 and the potential for brief work interruption (no more
84 than 5-10 minutes) for the seabird monitor to rescue
85 a downed seabird. The seabird monitor will conduct
86 a search targeted specifically at finding grounded
87 seabirds one hour prior to sunrise. The progressive,
88 seasonal change in sunrise will be adjusted for this
89 survey start time. Because all construction activities
90 will begin well after sunset, there is no need to
91 conduct sunset ground searches.
- 92

- (f) If work personnel see a downed seabird, they will stop working immediately in the downed seabird area and report their observation to the construction supervisor, who will notify the seabird monitor. The seabird monitor will go to the location with rescue supplies.
- (g) All downed seabirds collected, identified, and recorded will be taken to Feather and Fur in Kailua immediately or no more than 7–8 hours after grounding (i.e., if a bird is picked up early in the evening of monitoring). Care must be taken in handling any dead or injured specimens of ESA-listed species to preserve biological material in the best possible state. In conjunction with the preservation of any dead specimens, the finder has the responsibility to ensure that evidence intrinsic to determining the cause of death of the specimen is not unnecessarily disturbed.
- (h) The seabird monitor will photo document and record location of the downed seabird using smartphone technology. The seabird monitor will follow up with Feather and Fur regarding the final species identification and disposition of the bird within 48 hours of drop off of the bird.
- (i) The Department of Land and Natural Resources (DLNR), Division of Forestry and Wildlife (DOFAW) will be notified by telephone at (808) 973-9778 or (808) 587-0400 within 24 hours upon the discovery of an injured or dead ESA-listed seabird within the project area.
- (j) If take of listed species occurs and the carcass is recovered, the DOFAW may request that the carcass be necropsied. Otherwise, the depository designated to receive specimens that are found is the B.P. Bishop Museum, 1525 Bernice Street, Honolulu, HI, 96817 (telephone: (808) 847-3511). If the B.P. Bishop Museum does not wish to accession the carcass, contact the Service's Division of Law Enforcement in Honolulu, HI (telephone: (808) 861-8525; fax: (808) 861-8515) for instructions on disposition.

- 139 (4) Hawaiian Waterbirds (gallinule, coot, duck, stilt) – Best
140 Management Practices (BMPs) will be implemented to avoid
141 the accumulation of standing and open water within and
142 immediately adjacent to project elements, including in and
143 around work areas and staging areas to avoid attracting
144 waterbirds to the project area. If there are areas of the road
145 where waterbirds are known to cross, reduced speed limits
146 will be posted and enforced. In addition, construction
147 personnel and contractors will be informed about the
148 presence of endangered species on-site.
149

150 A biologist that is familiar with Hawaiian waterbird biology and
151 identification will conduct Hawaiian waterbird nest surveys
152 where potential habitat occurs within the vicinity of the
153 proposed project area, prior to initiation of construction. These
154 surveys will be repeated within three days of construction
155 restarting and after any subsequent work delay of three or
156 more days (during which time the birds may attempt to nest).
157 If a nest or active brood of a listed waterbird is found during
158 these surveys, the DLNR will be contacted within 48 hours for
159 further guidance to determine an appropriate buffer radius
160 around the nest. The approved buffer will be established and
161 maintained around any active nests and/or broods until the
162 chicks/ducklings have fledged. No potentially disruptive
163 activities or habitat alterations may occur within the buffer.
164

- 165 (5) Hawaiian sea turtles – the following measures must be
166 adhered to year-round:
167

168 (a) Applicable BMPs for work in and around the aquatic
169 environments will be incorporated into the
170 construction plans.
171

172 (b) Modification of beaches and dune environments will
173 not occur, and vehicles will not be used on the
174 beach.
175

176 (c) Native dune vegetation will not be removed.
177

178 (d) No project activities will occur on the beach.
179

180 (e) Applicable BMPs for work in and around the aquatic
181 environments will be incorporated into the
182 construction plans.
183

184 (f) Visual monitoring of sea turtles within 100 feet of

work activities is required at least hourly. This could be conducted by individuals identified by the contractor working on the project, who will be provided with on-site training by a biologist. The biologist must be knowledgeable on Hawaiian sea turtle nesting behavior. The visual survey would be conducted from a vantage point above the beach.

(g) If a basking sea turtle is found within or near the Project Area, all mechanical or construction activities will cease within 100 ft of the animal until it voluntarily leaves the area or is assessed by a qualified biologist and DLNR is contacted to determine next steps.

(h) All project-related debris, trash, and equipment will be prevented from entering the beach or dune area. Project-related materials will not be stockpiled in the intertidal zone, on reef flats, on sandy beaches, or within stream channels.

From May 1 through December the following will be adhered to:

(i) A biologist with experience identifying sea turtle nests will survey the beach each morning at dawn. If a nest is detected, the DLNR will be contacted within 24 hours for additional guidance and protective measures.

(j) If a nest is detected during construction and if hatchlings are observed emerging at night, lights would be turned off and night work would be paused until no hatchlings are observed on the beach or in the water.

(B) Compliance Requirements. The Contractor shall protect Hawaiian hoary bats, Hawaiian seabirds, Hawaiian waterbirds, and Hawaiian sea turtles for the duration of construction. Failure to comply with the construction requirements, causing or inflicting harm or taking of an individual during the construction duration shall be enforceable by the DLNR as set forth by the Hawaii Revised Statutes Chapter 195D. Resultant penalties and/or fines shall be at the Contractor's expense without cost or liability to the State.

671.04 Measurement. The Engineer will measure the work required for the

protection of endangered species on a force account basis in accordance with Subsection 109.06 – Force Account Provisions and Compensation and as ordered by the Engineer.

671.05 Payment. The Engineer will pay for the accepted protection of endangered species on a force account basis in accordance with Subsection 109.06 – Force Account Provisions and Compensation. Payment will be full compensation for the work prescribed in this section, by the Engineer, and in the contract documents.

The Engineer will pay for the following pay item when included in the proposal schedule:

Pay Item	Pay Unit
Protection of Endangered Species	Force Account

An estimated amount may be allocated in the proposal schedule under ‘Protection of Endangered Species’, but the actual amount to be paid will be the sum shown on the accepted force account records, whether this sum be more or less than the estimated amount allocated in the proposal schedule.”

END OF SECTION 671

1 Make this section a part of the Standard Specifications:

2
3 **“SECTION 680 – DEFECTIVE CONCRETE REPAIRS**

4
5 **680.01 Description.** This section is for the repair of all concrete spalls,
6 delaminations, honeycombing, and other defective concrete. This section applies
7 to the locations identified by the State but not occurring over streams, tidal waters, or
8 drainage channels.

9
10 **680.02 Materials.** The Contractor shall use a polymer modified repair mortar
11 which shall herein be referred to as the “repair material.”

12
13 **(A) Polymer Modified Repair Mortar:**

14
15 **(1)** A factory blended cementitious patching material (containing no
16 gypsum) combined with a polymer type admixture, water, and a
17 penetrating corrosion inhibitor. The 7-day and 28-day compressive
18 strength shall be at least 4,000 psi and 6,000 psi respectively. The 28-
19 day permeability shall be <1,000 Coulombs per ASTM C1202, and the
20 28-day bond strength shall be at least 2,000 psi per ASTM C882. The
21 polymer type admixture shall be added to the mixing water. The ratio of
22 polymer solids to cement weight shall not be less than 10 percent.

23
24 **(2) Acceptable Materials:**

25
26 Duraltop Gel, The Euclid Chemical Company

27
28 EucoRepair SCC Fast, The Euclid Chemical Company

29
30 SikaTop 123 PLUS, Sika Corp.

31
32 Sikacrete-211 SCC Plus, Sika Corp.

33
34 **(B) Bonding Agent.**

35
36 **(1)** A three component, preproportioned, water based epoxy
37 modified Portland cement bonding agent and anti-corrosion coating
38 designed to bond fresh concrete to existing concrete. ASTM C882
39 Bond strength shall exceed 2400 psi at 14 days.

40
41 **(2) Acceptable Materials:**

42
43 Duraltop AC, The Euclid Chemical Company

44
45 Sika Armatec 110 EpoCem, Sika Corp.

47 **(C) Water.** Potable.

48
49 **(D) Curing Compound.** For curing of polymer modified repair concrete
50 and mortars, apply Sinak Lithium Cure 1000 curing compound at a coverage
51 rate of no more than 200 square feet per gallon. For curing concrete that will
52 receive surface sealers, apply impervious sheeting, ASTM C171, or check with
53 the manufacturer of the surface treatments on the recommended method of
54 curing.

55
56 **(E) Other Materials:** All other materials, not specifically described but
57 required for the successful completion and installation of the work, including
58 the addition of coarse aggregate as permitted by the manufacturer, shall be as
59 selected by the Contractor, subject to the acceptance of the Engineer.

60
61 **(F) Substitution of Materials.**

62
63 **(1)** Use only materials specified herein. Other materials of the same
64 manufacturer or of other manufacturers may not be substituted for
65 those specified without written approval of the Engineer. This is not to
66 be construed as to limit competition but to establish a standard of
67 quality. Other manufacturers of equal or better system of products may
68 be considered as a substitution to the system of products specified
69 herein, however, complete documentation proving that the substituted
70 product meets or exceeds the performance of the specified product
71 shall be provided in order to provide a basis for evaluation and
72 comparison. Submission of incomplete, inadequate, incongruous,
73 vague material and installation data will be grounds for disapproval
74 without review.

75
76 **(2)** Substantiation: For substitution requests, submit documentation
77 from the manufacturer's home office since claims by field sales and
78 products representatives are not recognized by the parent company
79 should a claim be inaccurate.

80
81 **680.03 Construction.**

82
83 **(A) Submittals.**

84
85 **(1)** Material Safety Data Sheets: Furnish the manufacturer's Material
86 Safety Data Sheets for each of the materials present at any time on the
87 job site.

88
89 **(2)** Manufacturer's data sheets and certificates of compliance signed
90 by the manufacturer for the following:

91
92 **(a)** Bonding agent and anti-corrosion coating for reinforcing

93 steel bars.

94
95 (b) Pre-packaged polymer modified repair mortar which
96 contains a penetrating corrosion inhibitor.

97
98 (c) Materials for curing repair concrete and mortars.

99
100 (d) Equipment: Submit descriptive literature describing the
101 kinds, types, model numbers and operational features of the
102 mixing and application equipment proposed for use on this
103 project.

104
105 (3) Three specimen per test age shall be prepared and tested in
106 accordance with ASTM C109. These test ages are 7-days and 28-
107 days.

108
109 **(B) Quality Assurance.**

110
111 (1) The Contractor shall be experienced (5 years or more) and have
112 expertise in the field of spall repairs of reinforced concrete structures,
113 proper application of migrating corrosion inhibiting admixtures and
114 protective coatings, and be familiar with the materials, repair and
115 protection systems specified for this project. The manufacturers of the
116 repair and protection systems shall be members in good standing of the
117 International Concrete Repair Institute (ICRI). The Contractor will
118 employ and provide a full-time supervisor to be on site at all times
119 during the duration of the work covered in this Section. This person will
120 work very closely with the manufacturer of the repair systems, the
121 Engineer and the State's representative.

122
123 (2) Codes and Standards: Comply with all locally applicable codes,
124 regulations and requirements pertaining to this work.

125
126 (3) Rejection of Installed Work: The Engineer shall have the right to
127 reject all work which is not in compliance with the requirements of the
128 drawings and specifications.

129
130 (a) Indication of lack of skill on the part of installation and
131 application personnel shall be sufficient grounds for the
132 Engineer to reject applied products and to require its immediate
133 removal and complete reinstallation and application at no
134 additional cost to the State. Personnel lacking the appropriate
135 level of skill shall be replaced.

136
137 (b) Replacement of rejected work may require that the
138 materials in places be stripped back to solid substrate and that

special additional surface preparation and a change of surface preparation or primer materials may be required. The Contractor shall research and define these procedures and complete the additional surface preparation and reapplication of the repair materials at no extra cost to the State.

(C) Delivery, Handling, and Storage.

(1) Delivery of Materials: Deliver all materials in original tightly sealed containers or unopened packages, clearly labeled and containing manufacturer's name, labels, date of manufacture, lot number, product identification, manufacturer's instructions for mixing, and warning for handling and toxicity.

(2) Storage: Store materials at the Contractor's place of business in cool, dry and safe location out of weather in original containers or unopened packages as recommended by the manufacturer. Temperature and humidity requirements of the manufacturer are to be adhered to at all times.

(3) Handling: Handle all materials in a safe manner and in a way to avoid breaking container seals.

(4) Environmental Requirements: Container shall comply with manufacturer's recommendations as to environmental conditions under which the materials may be applied.

(D) Job Conditions.

(1) Adhere to the manufacturer's printed instructions regarding weather and climate condition restrictions on the use of all materials supplied in this section.

(2) Do not apply the materials if it is raining or if rain is imminent. Take proper precautions to protect newly placed and completed repairs from weather conditions such as strong wind or rain.

(3) Do not man scaffolds or lift equipment in strong wind or rain conditions that makes working dangerous.

(4) Protection: Precautions shall be taken to avoid damage to any surface near the work area due to spillage.

(5) Barricades: Erect temporary barricades and railings, to prevent people from entering the project area. Coordinate with the State's representative on final location and placement. The extent of barricade

and railings may be adjusted by HIOSHA requirements at no extra cost to the State.

(E) Protection of the Work. Use all means necessary to protect the materials of this section before, during and after installation and to protect this work and the work of all other trades (prior to final approval by the State). In the event of damage, immediately make repairs and replacements necessary, subject to the approval of the State's representative at no additional cost to the State.

(F) Executions.

(1) All repairs shall be made in accordance with the appropriate repair application procedures (RAP) publications by the American Concrete Institute (ACI).

(2) The Contractor shall inspect all concrete surfaces around the indicated area for spalling and/or other deterioration by hammer sounding and exploratory removal methods. Areas identified for repair shall be marked on the surface and measured. All areas shall be verified by the Engineer for approval prior to removal.

(3) Defective Concrete Removal:

(a) General: Execute all work in an orderly and careful manner. Protect all surfaces and items to remain. The Contractor is responsible for any and all damages, repairs or replacement of existing surfaces and items to remain. Carefully cut and remove defective materials indicated or found in accordance with the contract documents. Collect all concrete chips and other debris for proper disposal offsite.

(b) Where concrete work is to be repaired, make a 1/2 – inch deep square saw cut along straight lines at 90 degree angles, 1 inch minimum beyond the edge of the damaged area or spall into sound concrete, unless noted otherwise. Use a chipping gun to produce the remainder of the 1- inch deep square cut. When a saw-cut edge cannot be achieved because of tool interferences, face of the top edge of the patch shall be chipped out to provide a vertical face a minimum of 1/2-inch to 3/4-inch depth, unless shown otherwise. The remainder of the defective concrete shall be chipped out with a chipping gun to solid sound concrete. Adjust saw-cut depth so as not to cut existing concealed reinforcing bars. Do not extend saw-cut beyond the limits of removal work.

(c) Spalled and Loose Surfaces: Remove all loose concrete and check all spalled areas that are indicated or are obvious upon visual examination.

(d) Sounding: Inspect the remaining exterior concrete surfaces around the repair area for any other defective concrete by tapping with a hammer throughout the exterior surface of the area around the repair and listening for dull or hollow sounds. In areas where tapping does not produce a solid tone, remove loose and spalled concrete until testing produces a solid tone. Use a high frequency chipping hammer to deepen cavity.

(e) Partially exposed reinforcing bar(s) exposed when prying and chipping off concrete shall be fully exposed throughout its length, within the patch area. There shall be a minimum of 1-inch of clear space between the reinforcing bars and the remaining concrete. Any damaged or severely corroded reinforcing bars shall be removed, and new reinforcing bars installed, in accordance with the contract documents. Where less than 1-1/2" clear cover was provided to the reinforcing bar, remove enough concrete to force reinforcing bar back away from the finished exterior face of the structure to meet the minimum 1-1/2" clearance.

(f) All concrete surfaces to receive repair material shall be roughened to obtain a concrete surface profile equal to CSP 6-8 in accordance with International Concrete Repair Institute (ICRI) guidelines 310.2 to ensure proper adhesion with repair material.

(4) Surface Preparation:

(a) Cleaning: After removal of all defective concrete, remaining concrete surfaces to be patched shall be structurally sound, clean, free of dirt, powdered concrete, loose mortar particles, paint, film, protective coatings, efflorescence, laitance, and other matter detrimental to proper adhesion of the new patch materials. Work surfaces must be free of ridges, fins or sharp projections. All reinforcing bars in the repair area shall be needle gunned to remove all scale and loose rust. Any areas not patched within 48 hours after needle gunning shall be recleaned. Contractor shall inform Engineer if more than 25% of the area of the reinforcing steel has been lost due to corrosion.

(i) Immediately prior to placement of bonding agent and repair material, the repair area shall be cleaned of all dust and debris with high-pressure, oil free compressed

air at a minimum of 100 psi. Patch area shall be washed with clean water so that exposed concrete surface is saturated, but with no water accumulation on the surface.

(ii) Prior to applying repair material, follow manufacturer's recommendations for preparation, bonding and application.

(5) Application of Bonding Agent:

(a) All exposed steel and concrete shall be coated with bonding agent. The coating shall be complete with no skips, pin holes or holidays around the entire surface of the exposed steel and concrete. Apply the appropriate number of coats as recommended by the manufacturer. Adhere to manufacturer's requirements for drying time and open time when applying subsequent coats and repair material.

(6) Application of Repair Materials:

(a) Repair material manufacturer's representative shall be present for initial repair to ensure proper preparation and application techniques are being utilized.

(b) Mix repair material and apply in strict conformance with the manufacturer's published instructions or job specific written instructions. If patch exceeds maximum lift thickness, extend with aggregate as recommended by manufacturer.

(c) Make batches small enough to assure placement before binder sets.

(d) For all hand, trowel placed vertical and overhead repair areas, apply repair material in layers as recommended by the manufacturer not exceeding maximum lift thickness. Work and press mortar onto the prepared substrate surfaces to ensure bond. For repair areas that require multiple lifts, the top surface of each lift must be roughened to create a mechanical bond for the following layer of repair material. All layers for each patch shall be placed on the same day. There shall be no cold joints in the field of the repair. Use vibratory floats, plates, or hand tampers to consolidate the patching material layers. Level each layer and screed the final surface unless a built-up section is required to maintain 1 inch minimum concrete cover. Remove excess patching material on the adjacent surfaces before it hardens.

(e) Where formwork is used, the requirements of ACI 347R and Section 503 – Concrete Structures shall apply. Formwork shall be constructed true to existing lines with the repair material matching the finish lines of adjacent concrete surfaces. Repair material shall be pumped into the form in accordance with the manufacturer's recommendations. Any surface defects found after form removal shall be repaired by the Contractor at no additional cost to the State to the satisfaction of the Engineer.

(f) Curing:

(i) Immediately after the final layer of repair material has been placed and finished, curing shall begin.

(ii) Cure according to subsection 680.02(D) – Curing Compound.

(7) Field Quality Control:

(a) Sampling: As soon as the repair materials are batched, sample each batch for testing by an independent testing laboratory. Clearly identify each sample by description of patch material, batch number, intended repair location and quantity batched.

(b) Testing: Perform compressive strength tests on samples by an independent testing laboratory. If the compressive strength test results fail to meet the specified requirements after two tests, the repairs made using the batched material represented by the samples tested shall be rejected. Areas of rejected repairs shall be removed, replaced and re-tested until acceptable at no additional cost to the State. Submit a copy of the test results to the State's representative.

(c) Special Inspection:

(i) The State's representative will verify the damaged areas marked by the Contractor and the proposed sawcut perimeters prior to starting the demo work.

(ii) The State's representative will examine the repair materials at the job site to verify that the materials used at the jobsite are the selected and approved materials referenced in the test results of design mixes or certificates of compliance.

(iii) The State's representative will examine the surface preparations, mixing, application and curing procedures of the repair materials to determine conformance with the requirements specified.

(d) In-Place Test of Repairs:

(i) The State's representative, utilizing a 2-pound hammer, will test all completed concrete spall repairs to locate hollow or ringing sounding areas. A hollow sound generally will indicate that either the repair material has not completely filled the space from which the damaged concrete was removed or that it has not adequately bonded to the concrete substrate.

(ii) The Contractor shall remove the repair material from those hollow or ringing sounding areas, prepare the surfaces of the exposed reinforcing bars and the sound concrete substrate, if necessary form and then place, cure and finish the new repair materials at no additional cost to the State. Upon completion, the repairs will be retested by the State's representative.

(8) Cleaning:

(a) Surfaces Not Involved in the Repairs: Adjacent surfaces damaged by staining left by concrete work, or other concrete materials shall be completely restored to original condition with respect to color and texture to the acceptance by the State's representative.

(b) Uncured polymer-modified repair mortar can be cleaned from tools with water. Cured polymer- modified repair mortar can only be removed mechanically.

(c) Removal:

(i) Remove debris and rubbish from the site daily. Prevent debris and rubbish from entering the Stream. Debris and rubbish shall not be allowed to accumulate on the site. Debris shall be removed and transported in a manner that will prevent spillage into the open channel, onto the adjacent ground and streets.

(ii) Upon completion of the work, remove all materials,

tools, forming materials, catchments, work platforms, refuse and debris generated by the work specified in this section.

680.04 Measurement. The Engineer will measure the concrete barrier repairs per cubic foot of repaired and accepted section.

680.05 Payment. The Engineer will pay for the accepted quantities of concrete barrier repairs at the contract unit price per cubic foot, complete in place.

The payment will be full compensation for chipping, removing and disposing of defective concrete found within the limits of the spall and patch repair work; locating existing reinforcing steel bars, extending the probing to beyond the end of corrosion and removing concrete around the corroded reinforcing steel; cleaning and preparing concrete surfaces; removing corrosion damage from reinforcing steel; coating the reinforcing steel and prepared concrete surfaces with a corrosion inhibitor epoxy bonding agent; providing forms and falsework; placing, finishing and curing repair materials; repairing defects; sampling and testing repair materials, and for clean-up; and for furnishing equipment, tools, labor, materials and other incidentals necessary to complete the work. Replacement of reinforcing steel shall be paid under Section 602 – Reinforcing Steel.

Pay Item	Pay Unit
Concrete Barrier Repairs _____	Cubic Feet"

END OF SECTION 680

1 Amend “**Section 701 – HYDRAULIC CEMENT**” to read as follows:

2
3 **“SECTION 701 - HYDRAULIC CEMENT**

4
5 **701.01 Portland Cement.** Portland cement shall consist of Type I or Type II
6 portland cement, Type IL portland-limestone cement, or Type IP portland-pozzolan
7 cement.

8
9 Type I and Type II portland cement shall conform to AASHTO M 85 and the
10 28-day compressive strength requirement cited in AASHTO M 85, Table 4.

11
12 Type IL portland-limestone cement and Type IP portland-pozzolan cement
13 shall conform to AASHTO M 240.

14
15 Mineral admixtures may be used to replace a portion of the required
16 portland cement in accordance with Subsection 711.03 - Admixtures.

17
18 Safe and suitable facilities for sampling cement shall be provided at the
19 weigh hopper or in the feedline immediately in advance of the hopper. Cement
20 shall be stored in a weathertight building that will protect cement from dampness
21 and minimize warehouse set, and stored in such a manner to permit easy access
22 for proper inspection and identification of each shipment.

23
24 Cement which for any reason has become partially set or which contains
25 caked lumps shall not be used.

26
27 Different types of cement shall not be mixed or used in the same unit of
28 construction. Cement used in the manufacture of cast-in-place concrete for
29 exposed surfaces of like elements of a structure shall be from the same mill.

30
31 Certificate of compliance that complies with Subsection 106.07 – Certificate
32 of Compliance shall be submitted to the Engineer before using any cement.
33 Certificate of compliance shall include pertinent information as to the type of
34 cement; and applicable chemical and physical test results from samples taken at
35 local distribution sites or concrete batch plants.

36
37 Once certificate of compliance has been accepted, the Engineer may permit
38 use of cement before release by the laboratory. Cement furnished without an
39 accepted certificate of compliance shall not be used until the Engineer has had
40 sufficient time to make appropriate tests and has accepted cement for use.

41
42 If cement does not conform to requirements of the contract documents, as
43 determined by laboratory test samples, use of cement from the same source shall
44 be delayed until the Engineer can make tests on each cement lot delivered.”

45
46 **END OF SECTION 701**

1 Make the following Section a part of the Standard Specifications:
2

3 **"SECTION 719 – MACRO-SYNTHETIC FIBERS FOR CONCRETE**
4 **REINFORCEMENT**
5

6 **719.01 Macro-Synthetic Fibers for Concrete Reinforcement.** Macro-Synthetic
7 Fibers for Concrete Reinforcement shall conform to the following requirements:
8

9 (A) Macro-synthetic fibers shall be manufactured from virgin polyolefins
10 (polypropylene and polyethylene) and comply with ASTM C 1116.4.1.3.
11 Fibers manufactured from materials other than polyolefins must show
12 documentary evidence confirming their long term resistance to deterioration
13 when in contact with moisture and alkalies present in cement paste and/or
14 the substances present in air-entraining and chemical admixtures.
15

16 (B) The minimum fiber length shall be 1.50 inches.
17

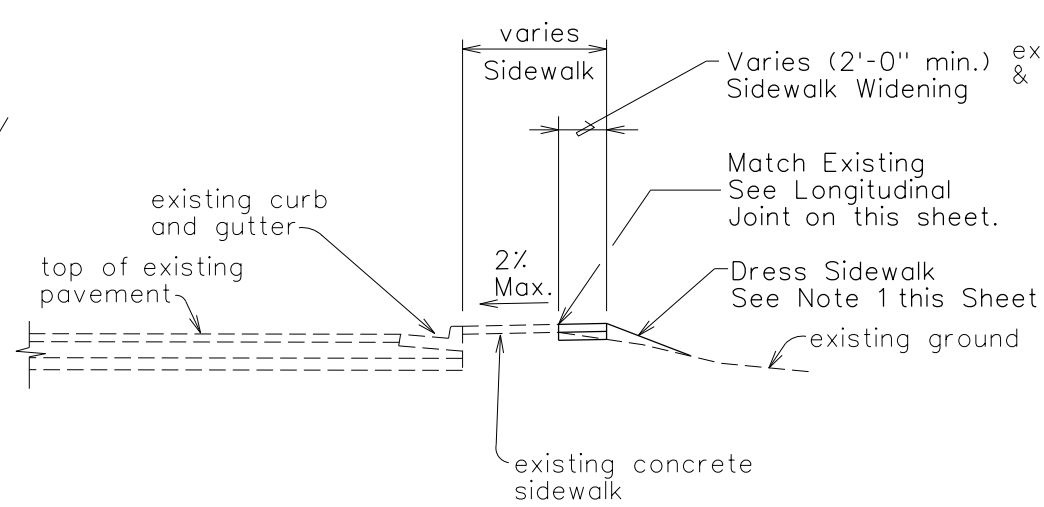
18 (C) Macro-synthetic fibers shall have an aspect ratio (length divided by the
19 equivalent diameter of the fiber) between 45 and 150.
20

21 (D) Macro-synthetic fibers shall have a minimum tensile strength of 40 ksi
22 when tested in accordance with ASTM D 3822.
23

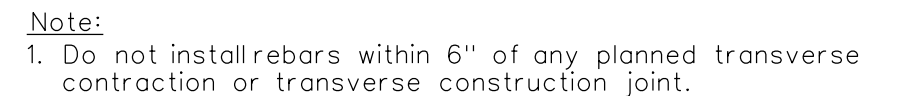
24 (E) Minimum dosage rate in pounds of fibers per cubic yard of concrete
25 shall be established by determining a minimum average residual strength of
26 no less than 150 psi when tested in accordance with ASTM C 1399. The
27 minimum fiber dosage rate shall be 3 lbs/cubic yard.
28

29 (F) Macro-synthetic fibers shall have a minimum modulus of elasticity of 400
30 ksi when tested in accordance with ASTM D 3822."
31

32 **END OF SECTION 719**
33



- ### 1 SIDEWALK CONTRACTION JOINT DETAIL



LONGITUDINAL JOINT
AT EXISTING SIDEWALK

1. Dressing of sidewalk shall consist of clearing, grubbing, grading, reshaping and compacting the area adjacent to the improvement with suitable material as shown on the plans and/or as directed by the Engineer. If existing ground is asphalt or concrete surface, dress sidewalk with A.C. pavement, Mix No. V. This work shall be considered incidental to the new sidewalk.
2. Transverse and longitudinal weakened plane joints for sidewalk shall be considered incidental to the new sidewalk.
3. Installation of dowels and tie bars, including drilling and epoxy grout, shall be incidental to Sidewalk.
4. Concrete shall be Class "A".
5. Only flat sheets of welded wire fabric reinforcement shall be used. No rolled welded wire fabric reinforcement will be allowed.

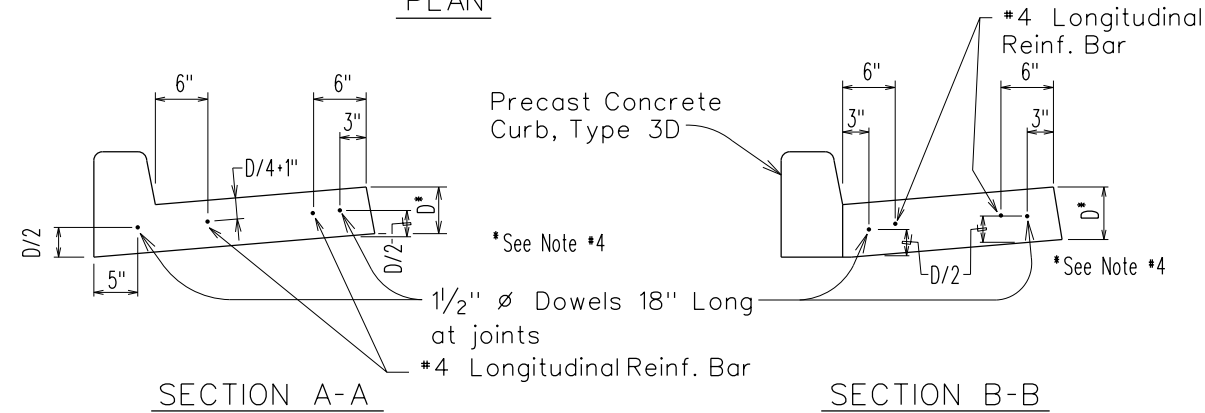
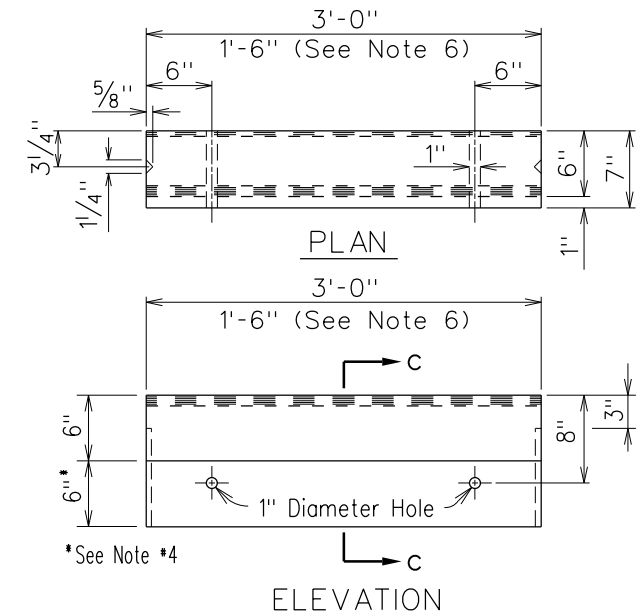
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD PLAN D-15

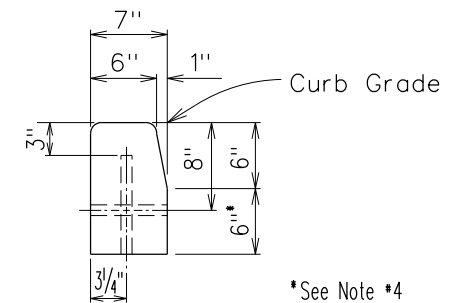
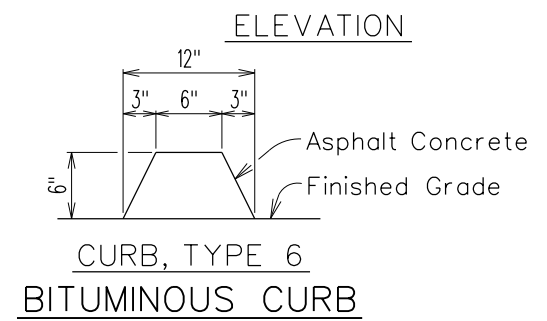
CONCRETE SIDEWALK

HWY-OM-2027-38

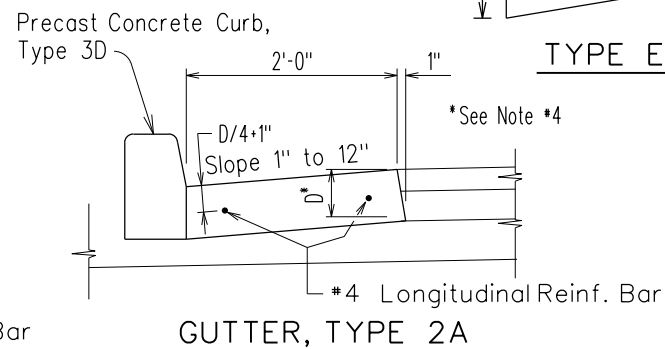
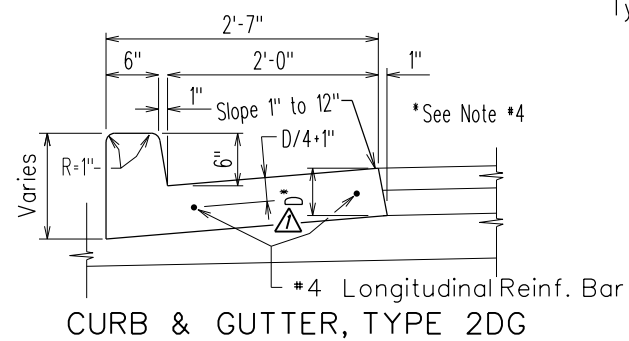
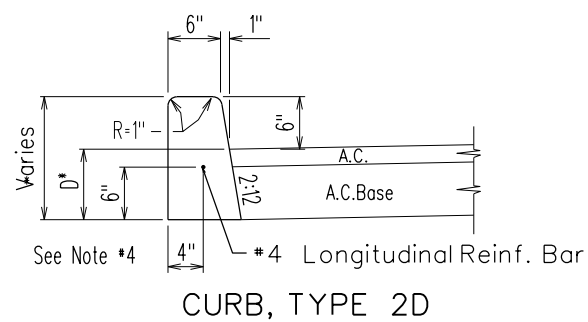
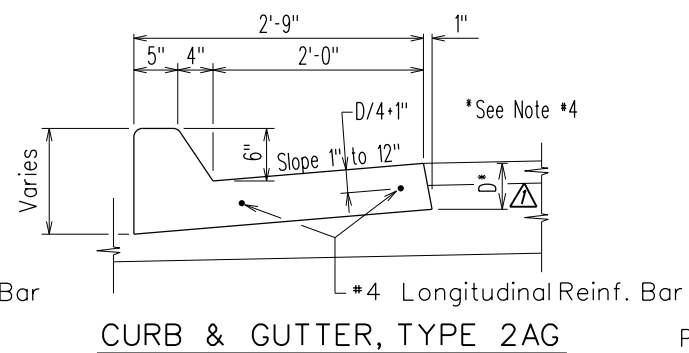
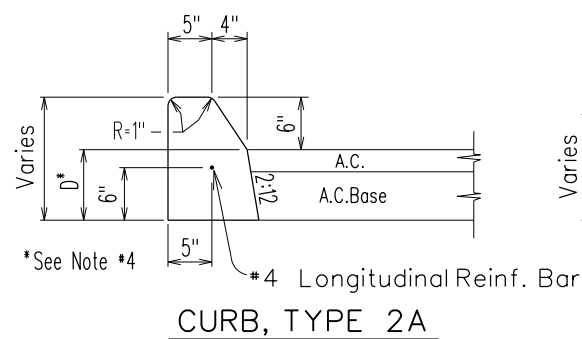
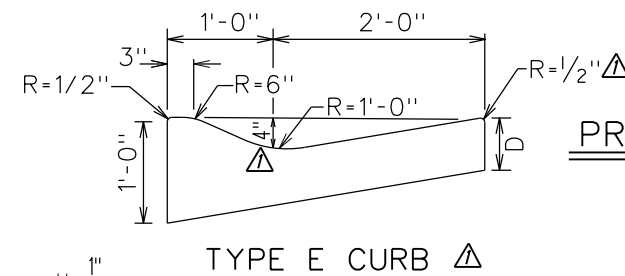
FIGURE 1



1. Cast-In-Place P.C.C. Gutters shall be longitudinal broom finished.
2. Curb, Type 2A, Curb & Gutter, Type 2AG, are to be used only for constructing short segments of existing curbs and/or gutters of the same type.
3. The top of all types of concrete curbs, including driveway curbs shall be longitudinally broom finished.
4. For A.C. pavement areas, D equals to thickness of A.C.+A.C.Base but not less than 10". For P.C.C. pavement areas, D equals to thickness of P.C.C. pavement. (For P.C.C. pavement, see also D-22)
5. Concrete shall be Class A..
6. For curb returns use 1'-6" pre-cast concrete curbs.
7. Drawings are not to scale.
8. Expansion joints shall be installed prior to concrete placement and at a maximum spacing of 50.0'.



SECTION C-C
CURB, TYPE 3D
PRE-CAST CONC. CURB



	01/27/17	Add Note 8.	
		Replace 6" Gutter Height with D. Added Type E Curb.	
	DATE	REVISION	APP'D.

CAST-IN-PLACE CONCRETE CURBS AND/OR GUTTERS

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD PLAN D-05

TYPICAL DETAILS OF
CURBS AND/OR GUTTERS

HWY-OM-2027-38
FIGURE 2

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-OM-2027-38	2023	1	9

CURB RAMP AND SIDEWALK NOTES:

1. These typical details are intended as curb ramp guidelines for design and construction. These guidelines shall not replace site specific curb ramp plans.
2. A 2% maximum cross slope shall be maintained in the direction of pedestrian traffic.
3. Subject to field conditions, the Engineer shall determine the final location of curb ramps.
4. All pullboxes shall be installed away from the curb ramp and within the sidewalk/unpaved area to the maximum extent feasible.
5. Where necessary, existing pullboxes, handholes, manholes, etc. shall be adjusted to match curb ramp grade. Adjustments shall not be paid for separately but shall be considered incidental to the various curb ramp items unless indicated otherwise.
6. Transitions from ramps to gutters and roadways shall be flush.
7. Curb ramps and sidewalks shall be constructed to eliminate ponding to the maximum extent feasible.
8. The pedestrian push button shall meet operational and reach requirements of the American with Disabilities Act Accessibility Guidelines (ADAAG):
 - a) Forward Reach. The maximum height for forward reach shall be 48".
 - b) Side Reach. The maximum height for side reach shall be 48".
 - c) Operation. Controls and operating mechanisms shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist. The force required to activate controls shall be no greater than 5 lbf.
9. The maximum slopes of adjoining gutters or road surface immediately fronting the curb ramp shall not exceed 5%.
10. There shall be a 30"x48" level ground surface (2% max. cross slope, both directions) for a forward or side approach, as appropriate, to a pedestrian push button.
11. Construction joints are required to join curb ramps with sidewalks.
12. Unless otherwise noted, new gutters are required as shown.
13. All curb ramps shall be reinforced with 6x6 W1.4/W1.4 welded wire fabric.
14. Surface of sidewalks and curb ramps shall be firm, stable, and slip-resistant. This includes the surfaces of pullboxes, valve covers, manhole covers, etc.
15. Bed course material is required for curb ramps, sidewalks, and gutters.
16. All sidewalks shall provide a minimum clear width of 3'-0" (excluding curb) for pedestrian circulation. If this cannot be met, a minimum 32-inch clear width is allowed for a distance of 24-inches.
17. Passing spaces along new sidewalks with 5' clear width or less shall be provided at maximum 200' intervals as required by ADA guidelines. The passing area shall be a minimum 5' wide by 5' long as feasible.
18. If possible, install utility poles, fire hydrants, light poles, sign posts, pullboxes, etc. off of sidewalk but within the right-of-way.

19. Objects protruding from utility poles and walls adjacent to the sidewalks (i.e. wall mounted fire hydrants, telephones, meters on poles, etc.) shall be mounted to meet the current American with Disabilities Act Accessibility Guidelines (ADAAG) and will be subject to Engineer's approval.
20. If a curb ramp is not constructed according to the plans, the Contractor shall reconstruct the curb ramp at no cost to the State. Construction tolerance for Portland Cement Concrete shall be based on 1/4 inch per 10 ft. (±0.2%). Remedial measures will not be accepted.

CURBLESS CROSSWALK NOTES:

1. If conditions are encountered on site at crosswalks that do not have curb ramps and sidewalks, the Contractor shall inform the Engineer of these specific conditions and their locations. HDOT will submit construction plans for these specific conditions to the Disability and Communications Access Board (DCAB), indicating paved clear floor spaces with maximum 2% slopes or a Technical Infeasiblity Statement pending DCAB approval.

FIGURE 3.1

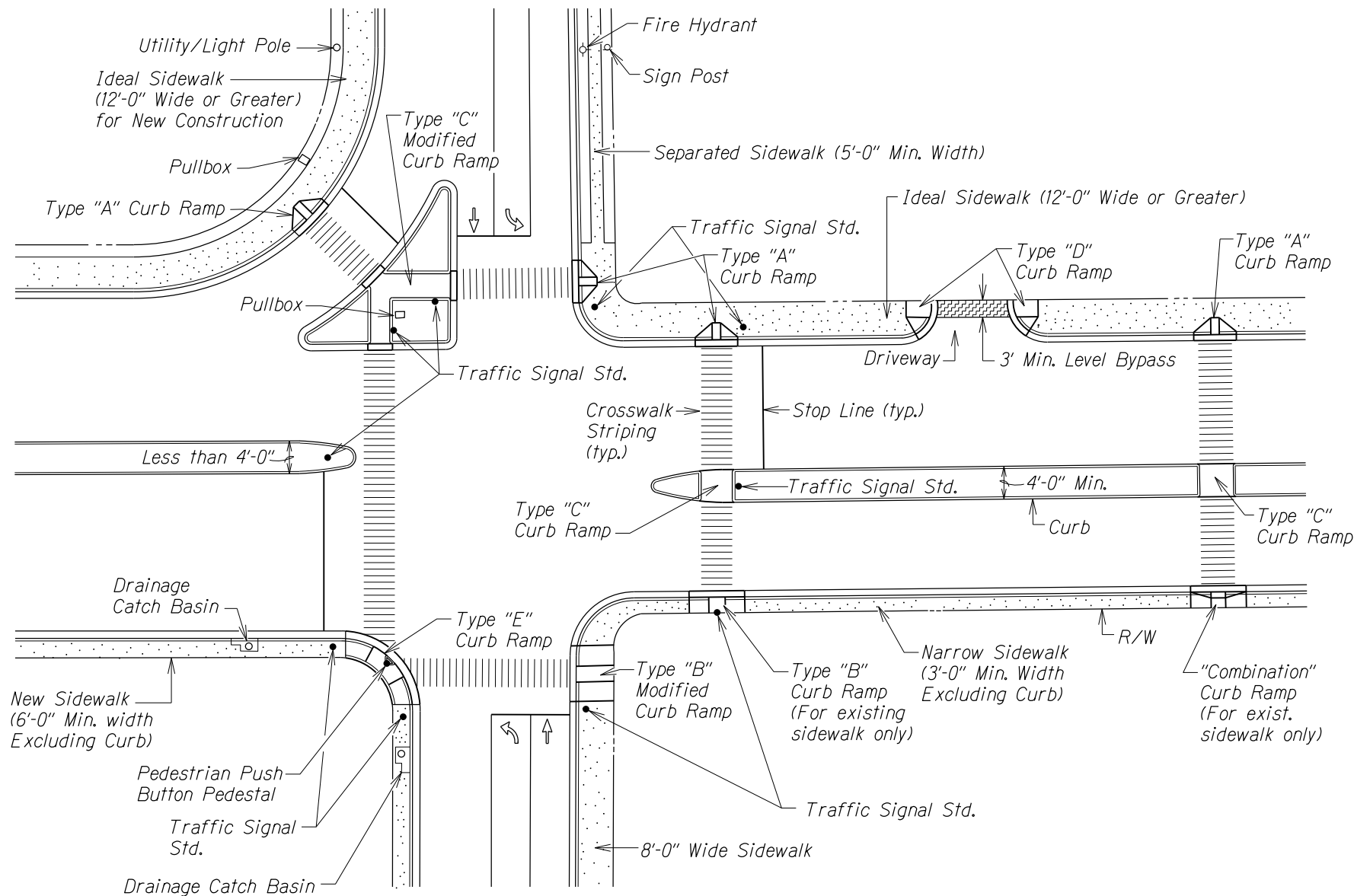
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CURB RAMP AND SIDEWALK NOTES
SIDEWALK, CURB AND GUTTER, CONCRETE
MEDIAN BARRIER REPAIRS AT VARIOUS LOCATIONS
ISLAND OF OAHU
PROJECT NO. HWY-OM-2027-38
Date: June, 2022

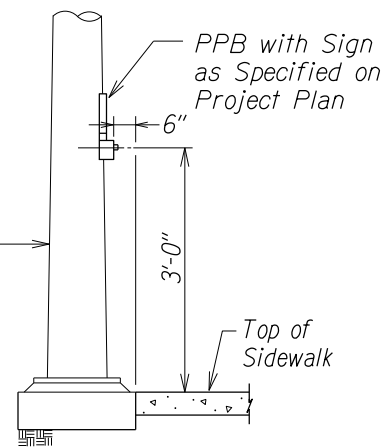
SHEET No. 1 OF 9 SHEETS

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	DRAWN BY	
	DESIGNED BY	
	CHECKED BY	
NOTE BOOK		
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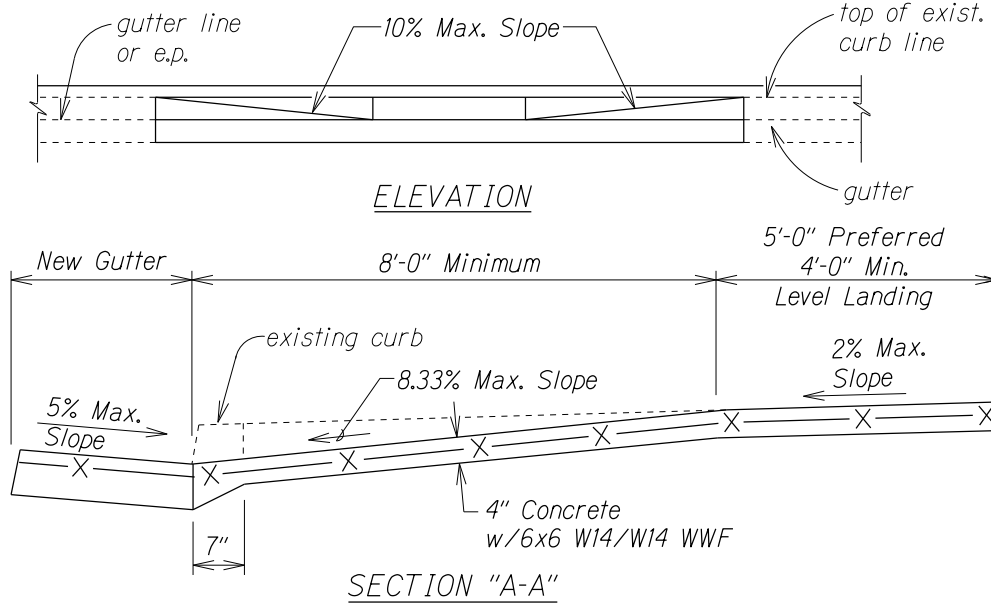
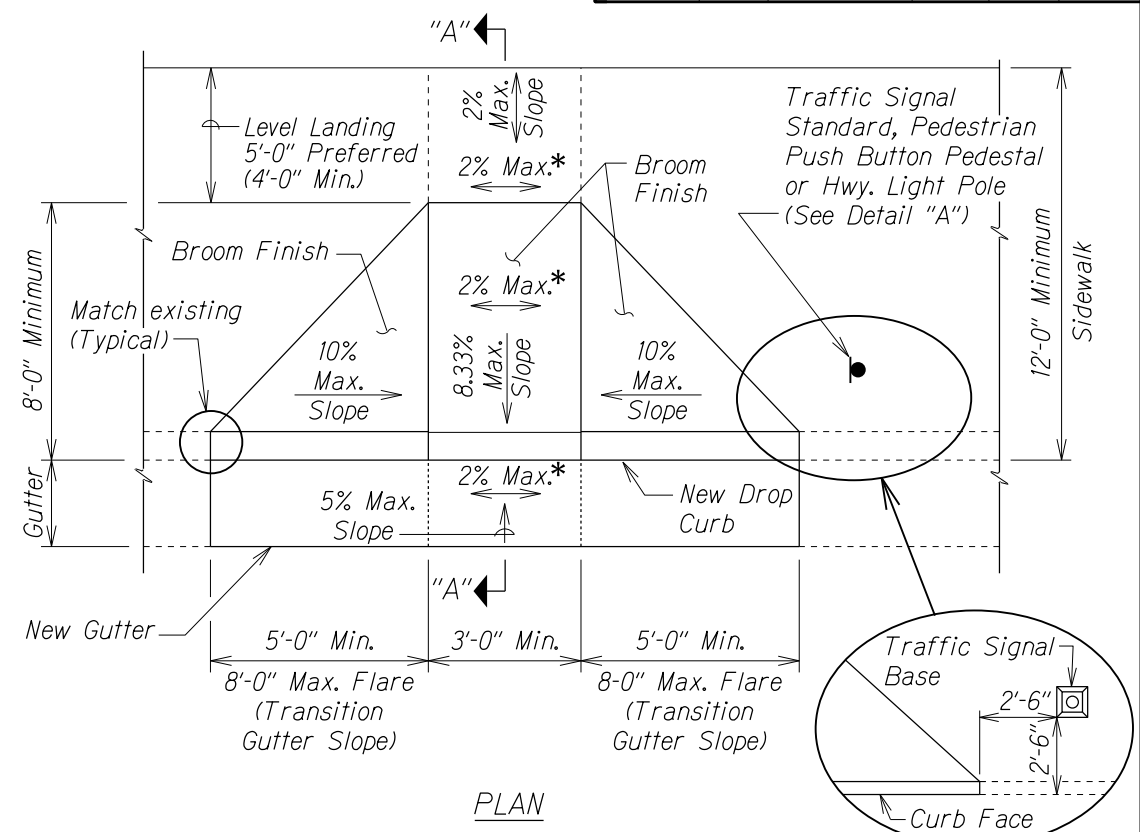
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-OM-2027-38	2023	2	9



TYPICAL CURB RAMPS



Type I, II, III TSS,
Pedestrian Push Button
Pedestal or Hwy. Light Pole



CURB RAMP - TYPE "A"
SIDEWALK WIDTH 12'-0" OR GREATER

* If Roadway Slope >2% Conform to Roadway Slope and File Technical Infeasibility (TI) Statement

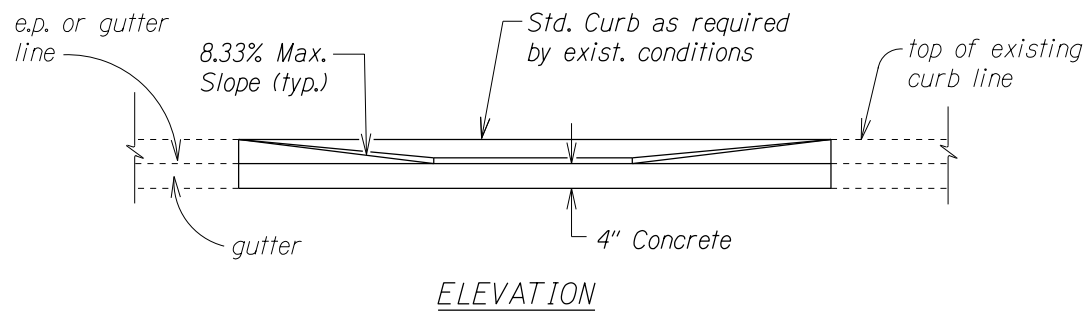
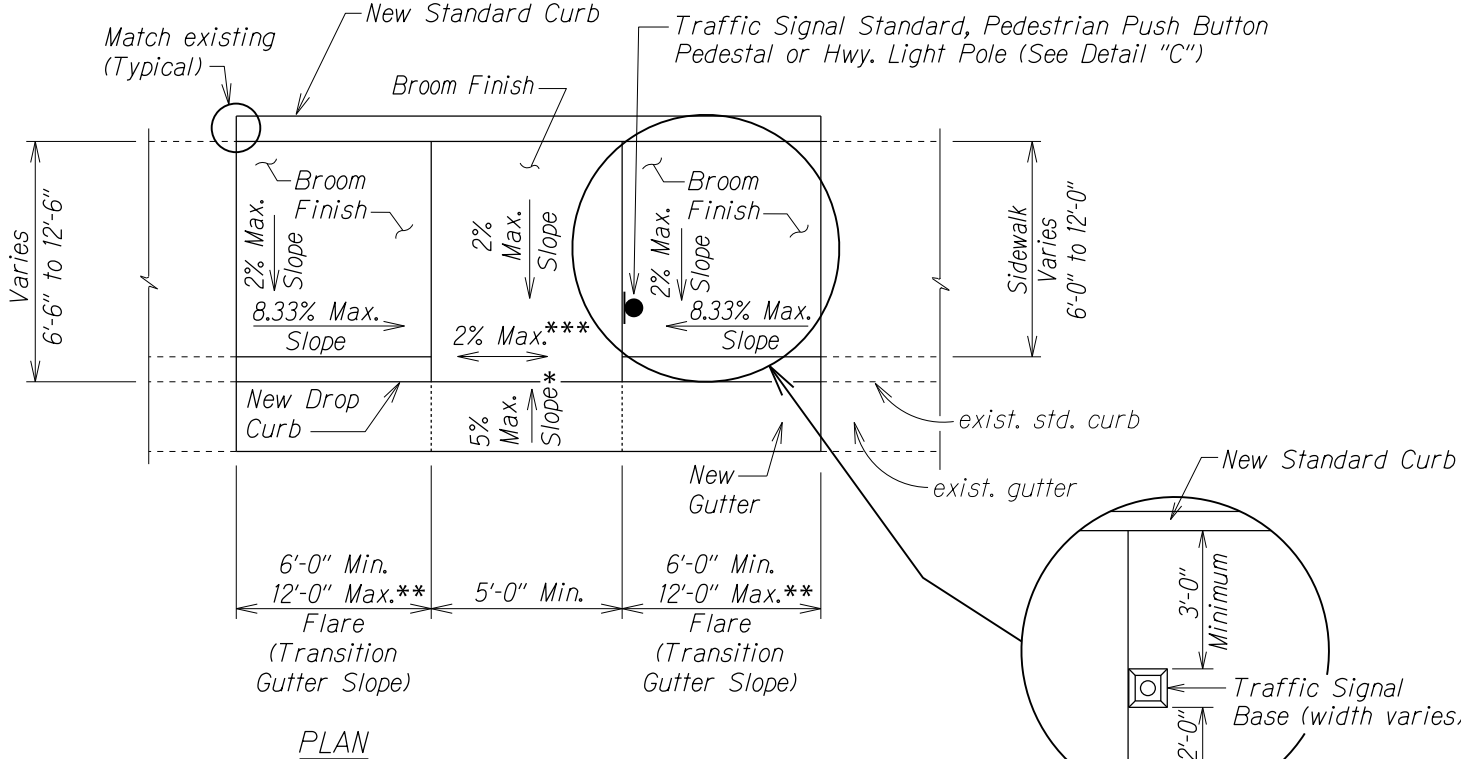
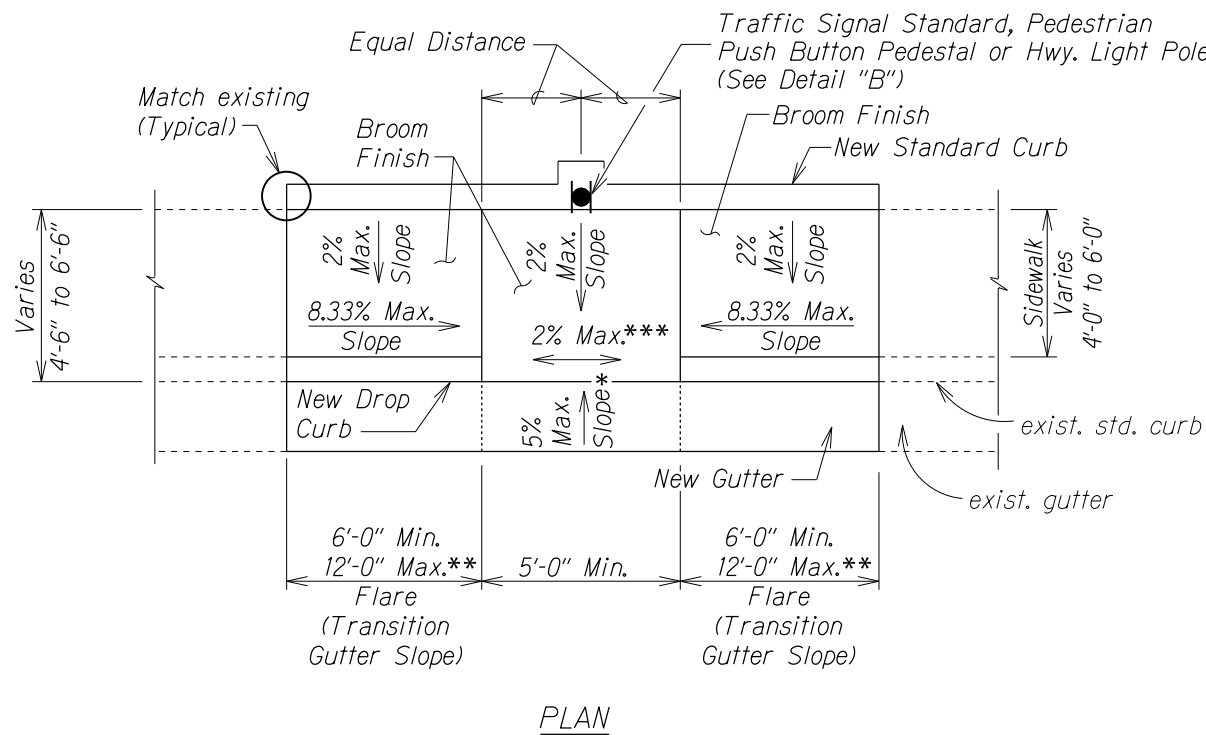
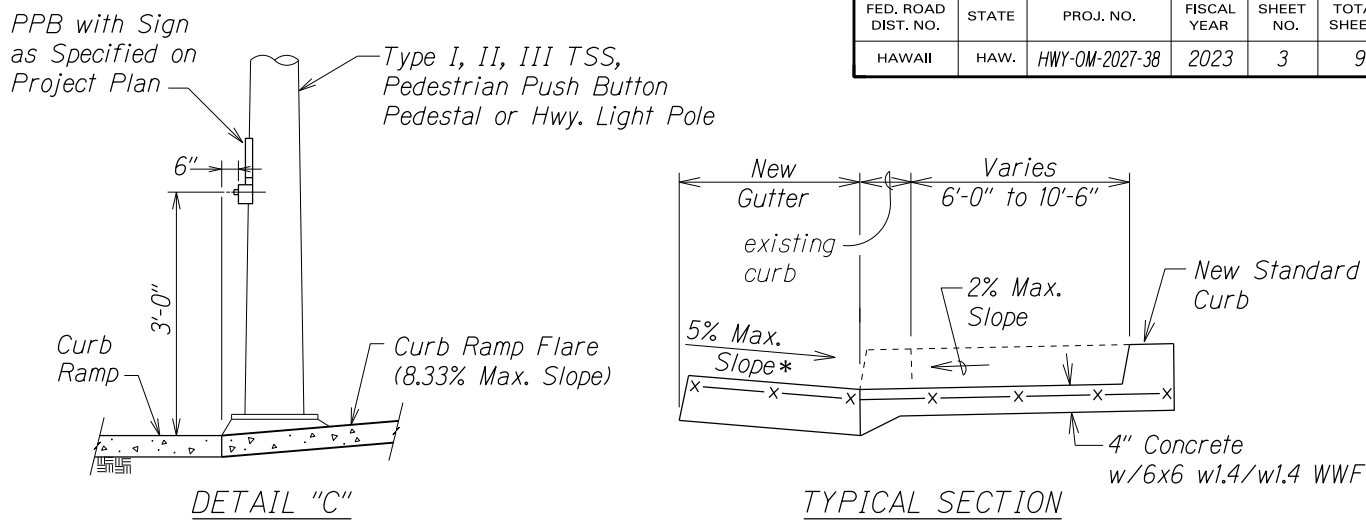
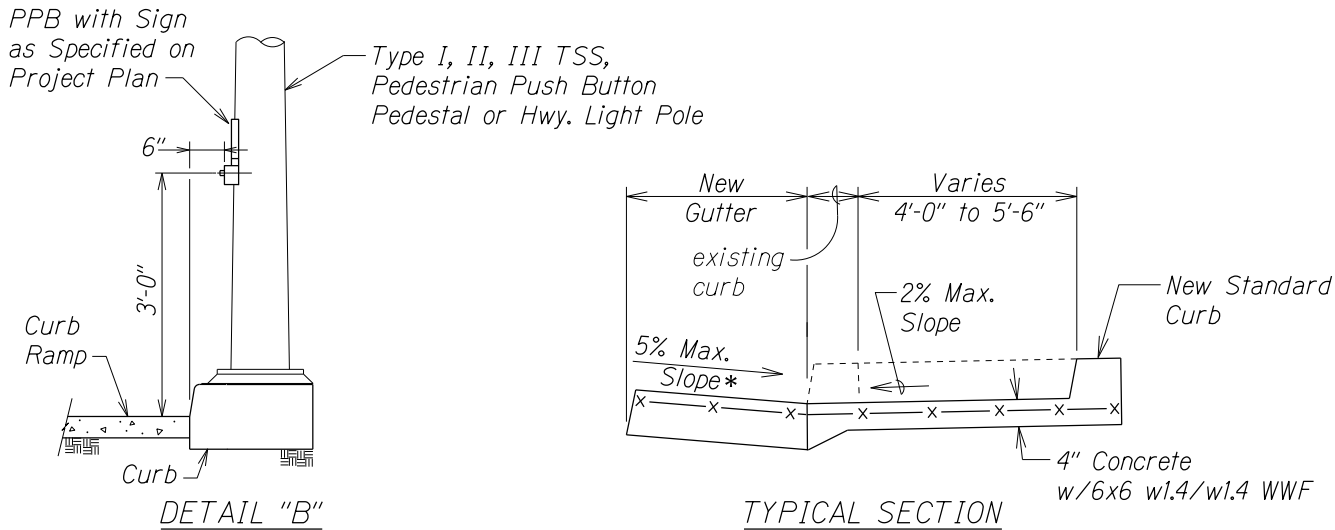
FIGURE 3.2

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CURB RAMP DETAILS
SIDEWALK, CURB AND GUTTER, CONCRETE
MEDIAN BARRIER REPAIRS AT VARIOUS LOCATIONS
ISLAND OF OAHU
PROJECT NO. HWY-OM-2027-38
Not to Scale Date: June, 2022

SHEET No. 2 OF 9 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-OM-2027-38	2023	3	9



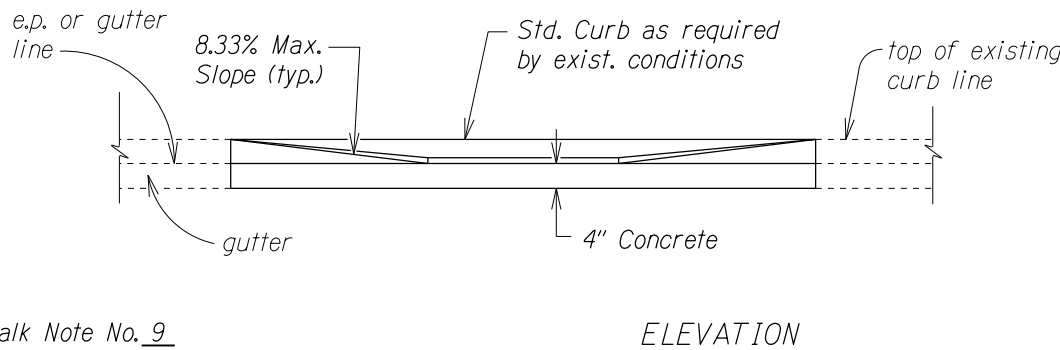
CURB RAMP - TYPE "B"

SIDEWALK WIDTH 4'-0" OR GREATER
BUT LESS THAN 6'-0" WIDTH

* See Curb Ramp and Sidewalk Note No. 9

** The slope of the ramp shall take precedence over the length of the ramp. If the maximum slope of a ramp cannot be met within a length of 12 feet, then the slope of the ramp shall be set when the length of the ramp is set at the maximum of 12 feet.

*** If Roadway Slope >2% Conform to Roadway Slope and File Technical Infeasibility (TI) Statement



CURB RAMP - TYPE "B" MODIFIED

SIDEWALK WIDTH 6'-0" OR GREATER
BUT LESS THAN 12'-0" WIDTH

FIGURE 3.3

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CURB RAMP DETAILS

SIDEWALK, CURB AND GUTTER, CONCRETE

MEDIAN BARRIER REPAIRS AT VARIOUS LOCATIONS

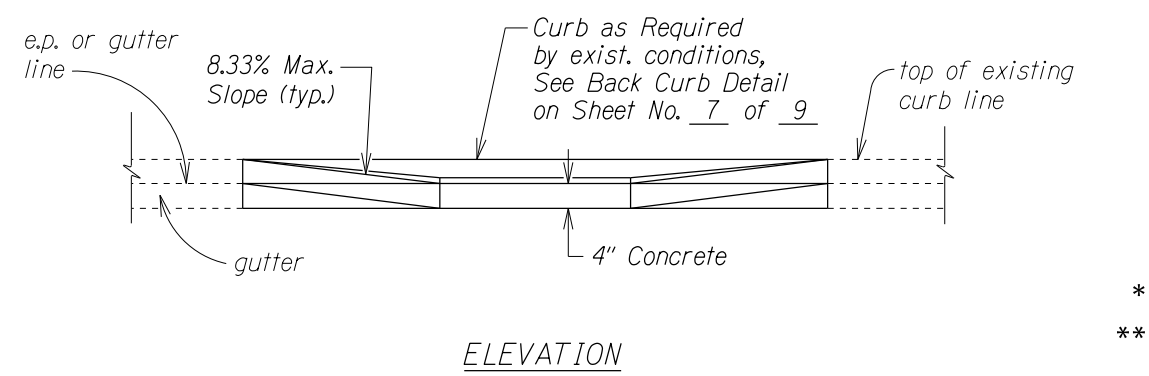
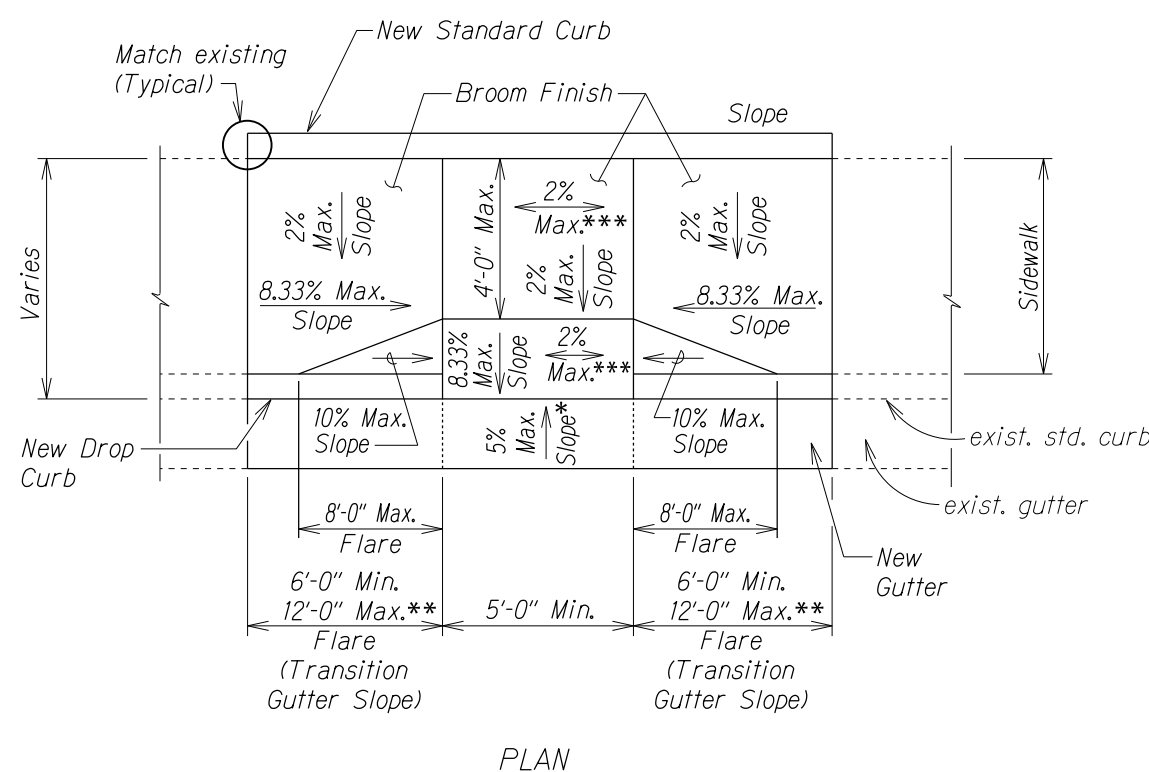
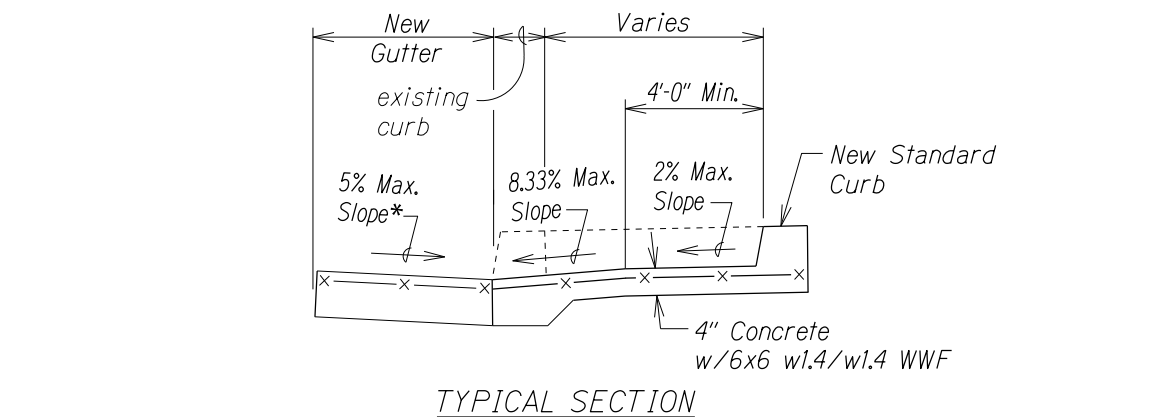
ISLAND OF OAHU

PROJECT NO. HWY-OM-2027-38

Not to Scale Date: June, 2022

SHEET No. 3 OF 9 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-OM-2027-38	2023	4	9



CURB RAMP - COMBINATION

- * See Curb Ramp and Sidewalk Note No. 9.
- ** The slope of the ramp shall take precedence over the length of the ramp. If the maximum slope of a ramp cannot be met within a length of 12 feet, then the slope of the ramp shall be set when the length of the ramp is set at the maximum of 12 feet.
- *** If Roadway Slope >2% Conform to Roadway Slope and File a Technical Infeasibility (TI) Statement

FIGURE 3.4

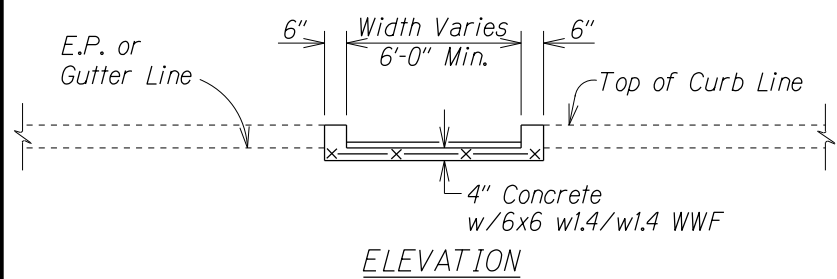
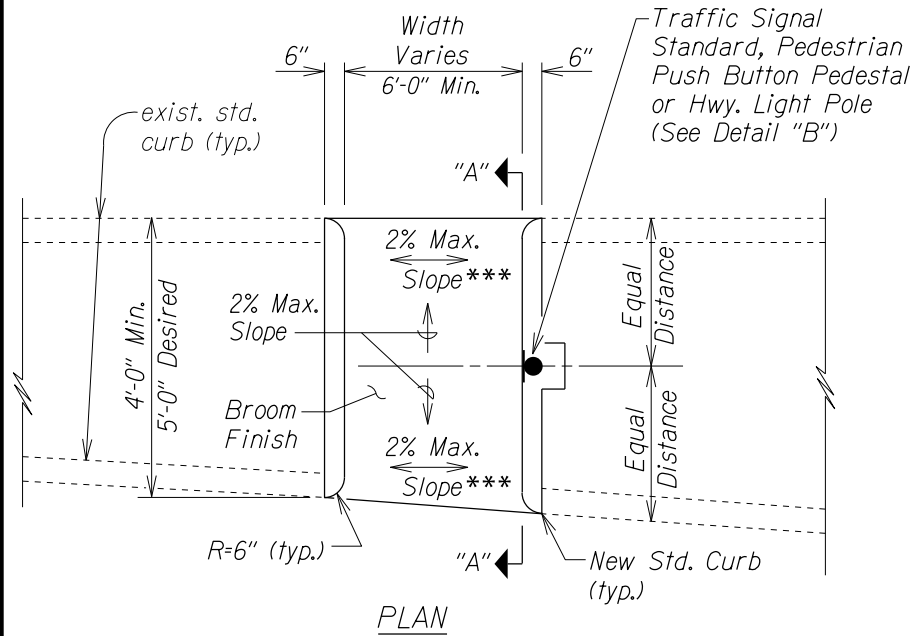
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CURB RAMP DETAILS
SIDEWALK, CURB AND GUTTER, CONCRETE
MEDIAN BARRIER REPAIRS AT VARIOUS LOCATIONS
ISLAND OF OAHU
PROJECT NO. HWY-OM-2027-38
Not to Scale Date: June, 2022

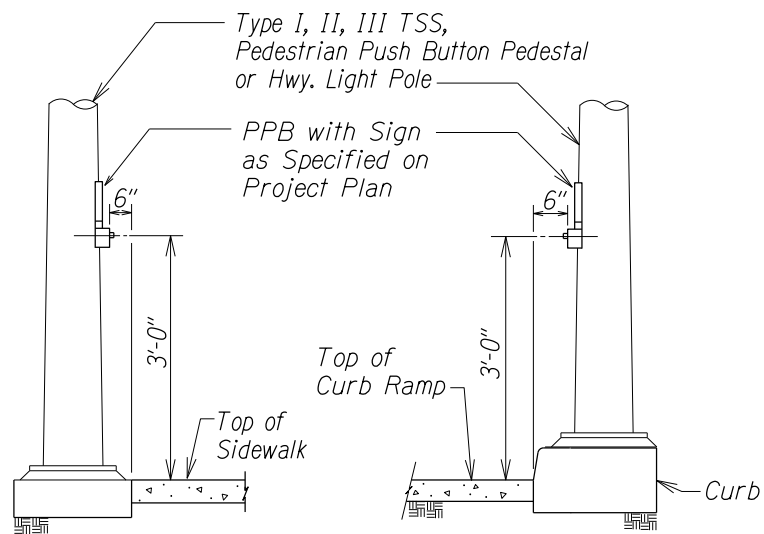
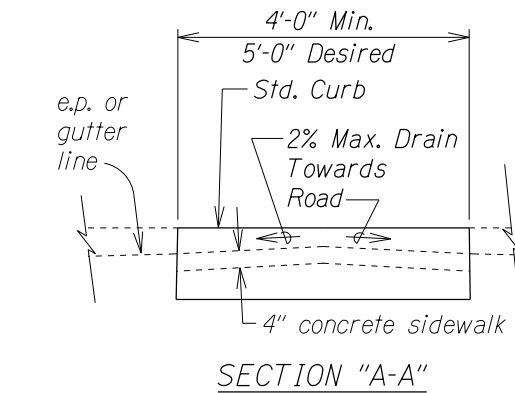
SHEET No. 4 OF 9 SHEETS

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

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-OM-2027-38	2023	5	9

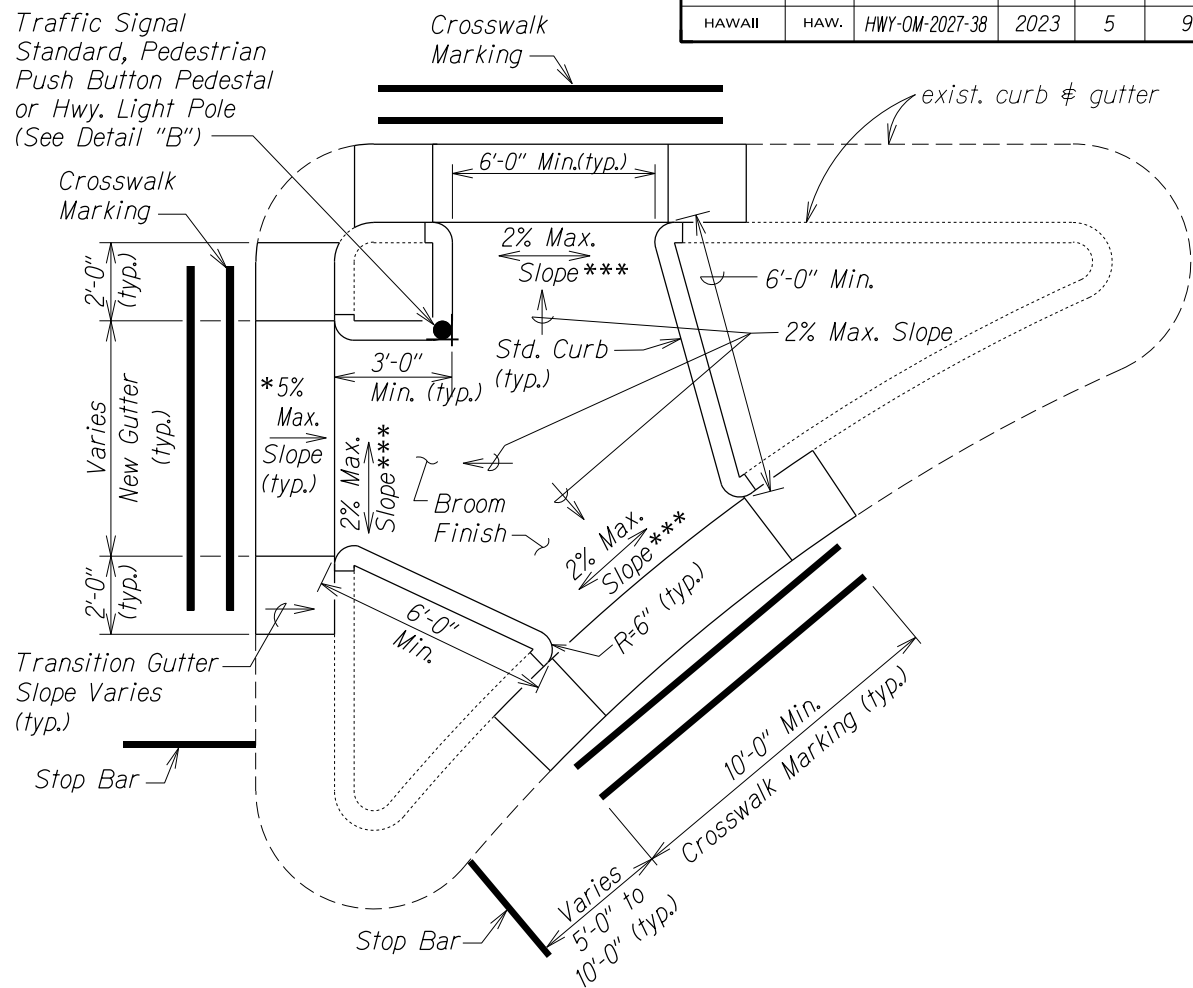


CURB RAMP - TYPE "C"
USE AT MEDIAN CROSSINGS, ISLANDS

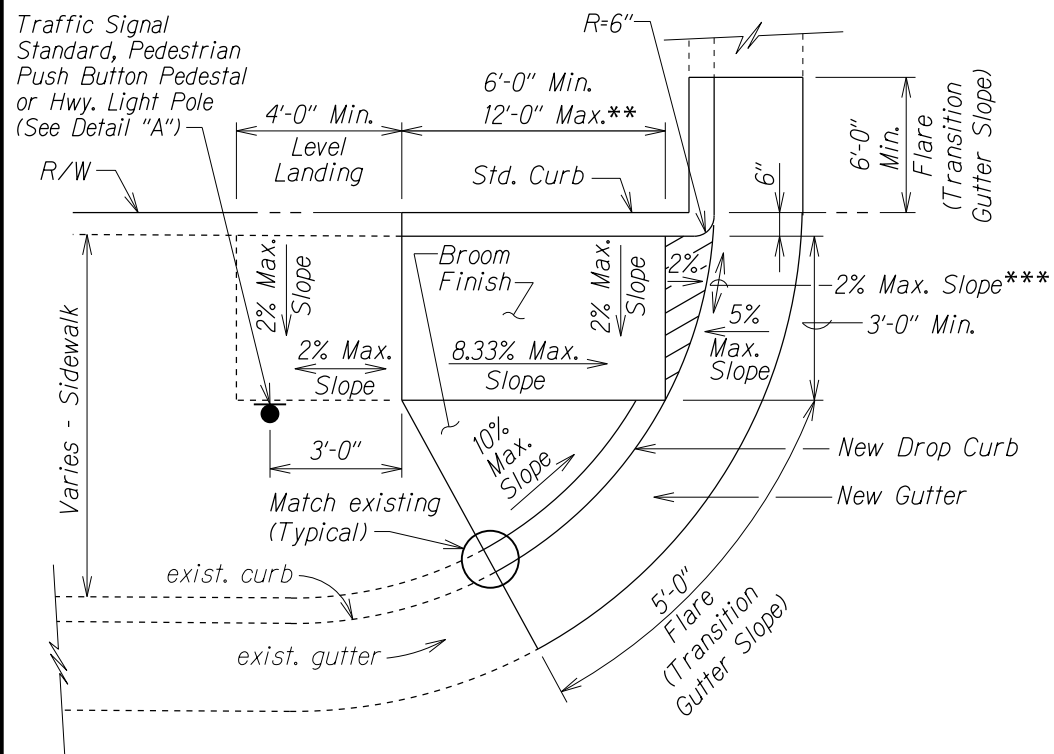


DETAIL "A"

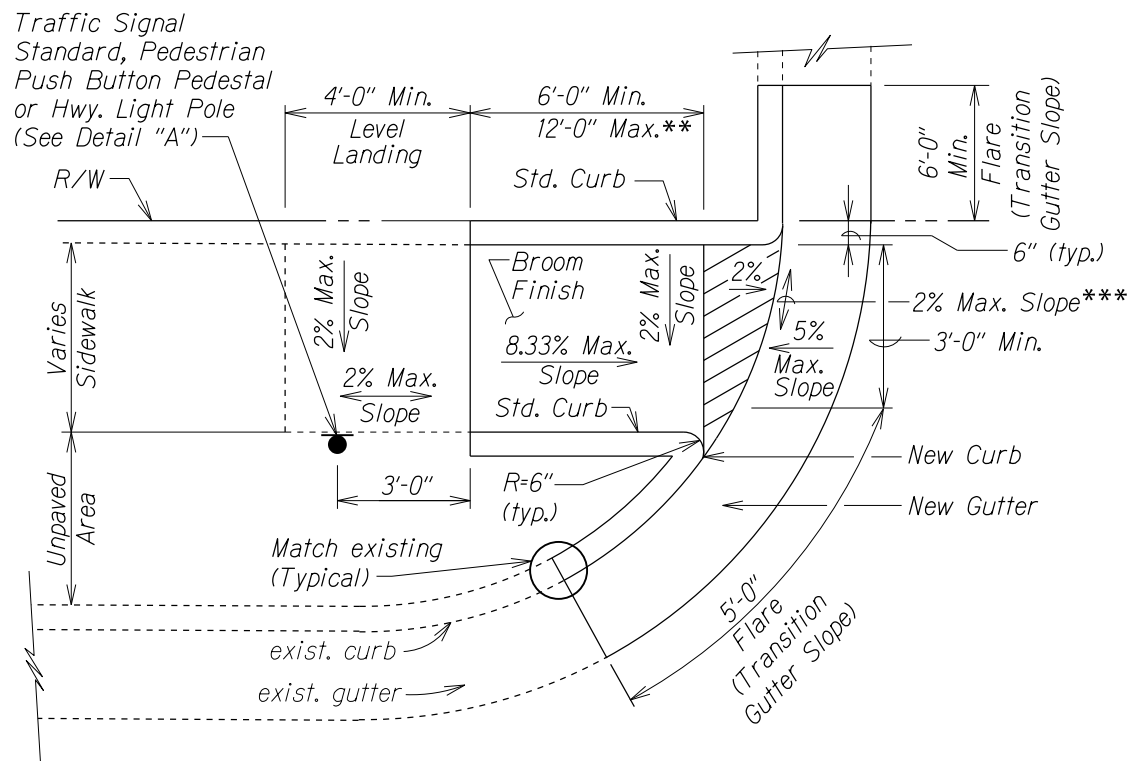
DETAIL "B"



CURB RAMP - TYPE "C" MODIFIED



CURB RAMP - TYPE "D"



CURB RAMP - TYPE "D" MODIFIED

- * See Curb Ramp and Sidewalk Note No. 9.
- ** The slope of the ramp shall take precedence over the length of the ramp. If the maximum slope of a ramp cannot be met within a length of 12 feet, then the slope of the ramp shall be set when the length of the ramp is set at the maximum of 12 feet.
- *** If Roadway Slope >2% Conform to Roadway Slope and File a Technical Infeasibility (TI) Statement

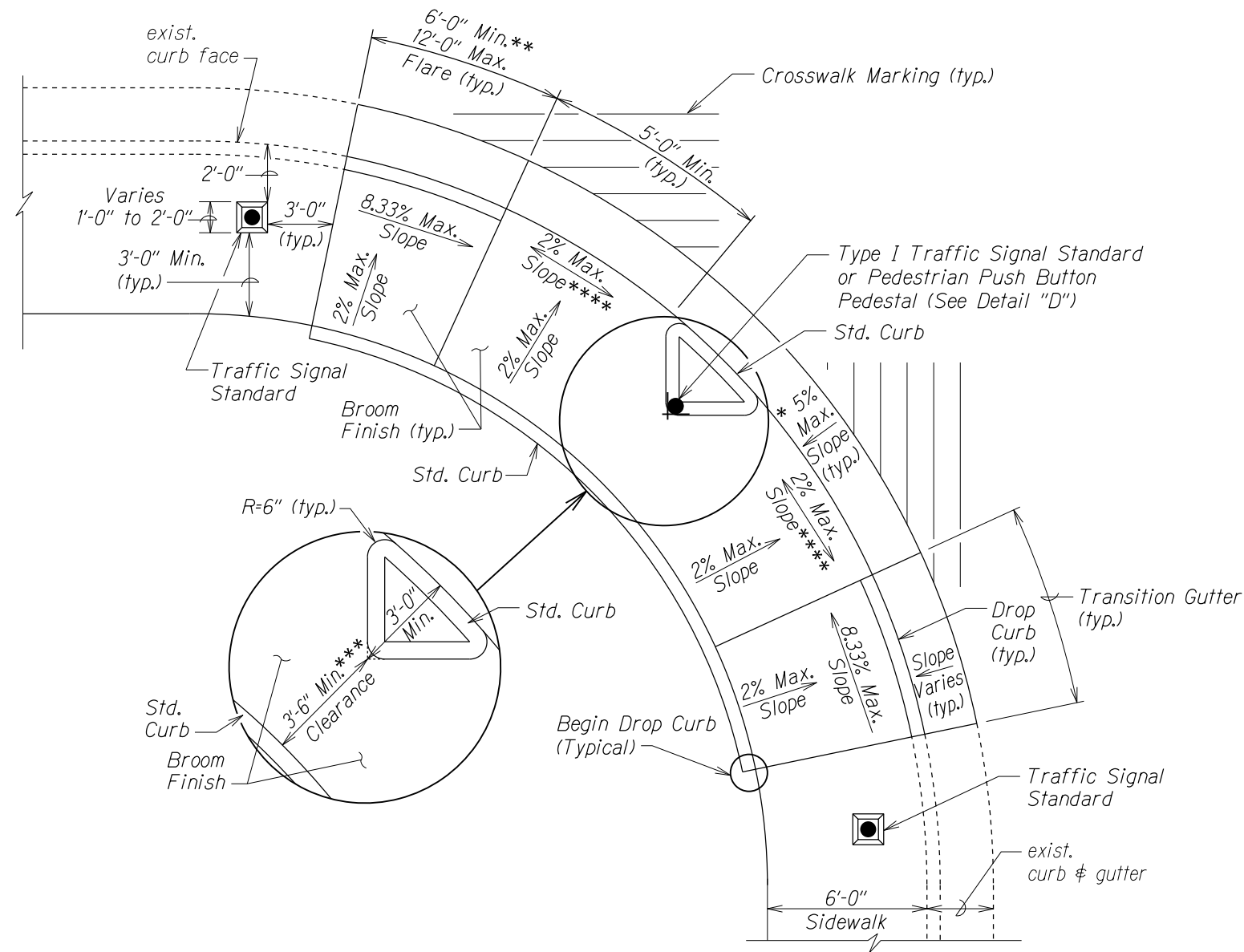
FIGURE 3.5

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CURB RAMP DETAILS
SIDEWALK, CURB AND GUTTER, CONCRETE
MEDIAN BARRIER REPAIRS AT VARIOUS LOCATIONS
ISLAND OF OAHU
PROJECT NO. HWY-OM-2027-38
Not to Scale Date: June, 2022
SHEET No. 5 OF 9 SHEETS

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

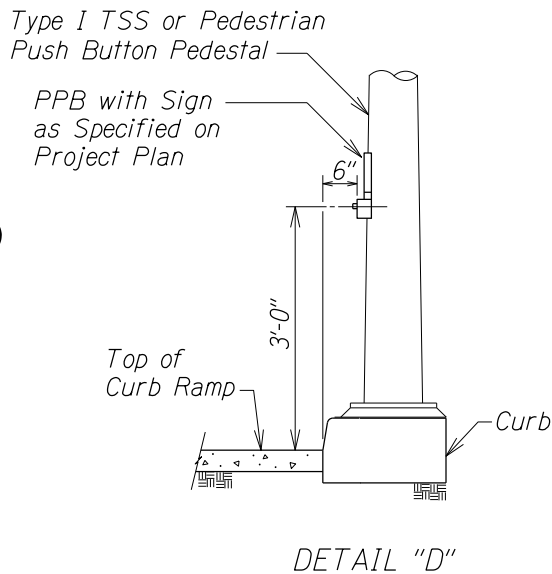
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-OM-2027-38	2023	6	9



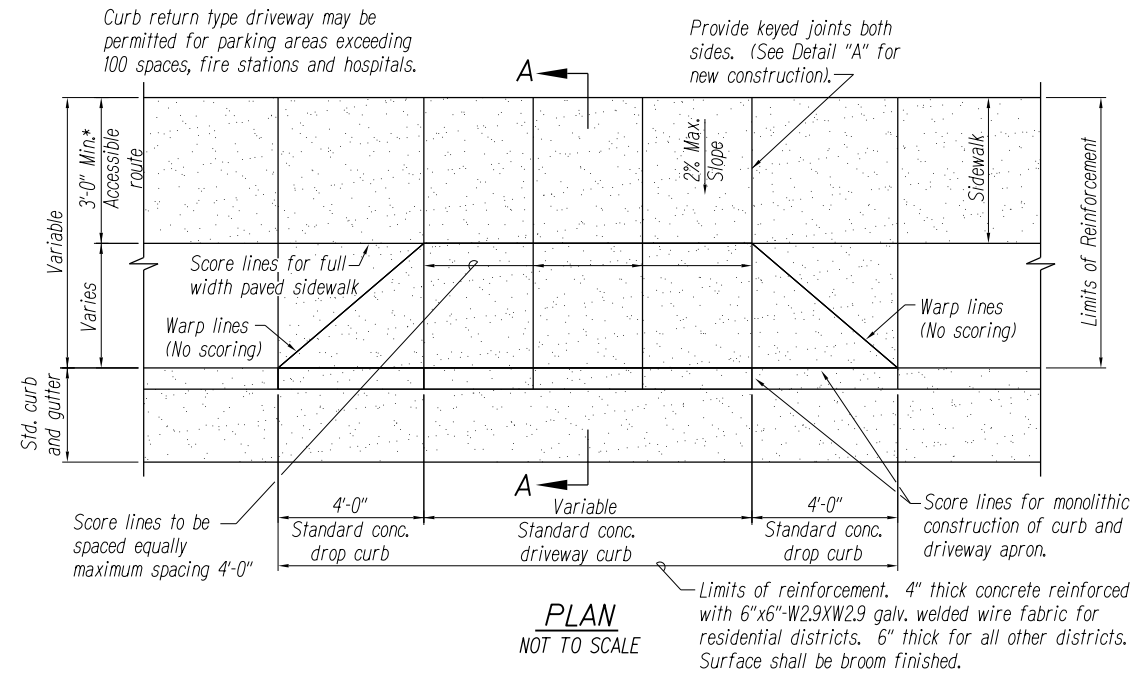
CURB RAMP - TYPE "E"
SIDEWALK WIDTH 7'-0" OR GREATER

(TO BE USED ONLY WITH TRAFFIC SIGNAL STANDARD OR PEDESTRIAN PUSH BUTTON PEDESTAL ON TRIANGULAR "ISLAND")

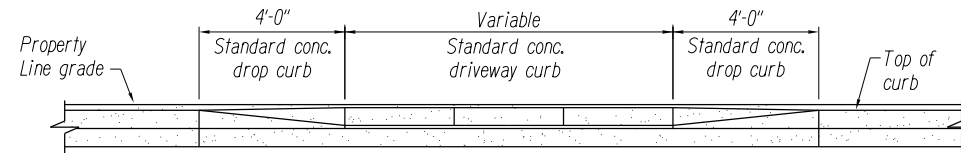
- * See Curb Ramp and Sidewalk Note No. 9
- ** The slope of the ramp shall take precedence over the length of the ramp. If the maximum slope of a ramp cannot be met within a length of 12 feet, then the slope of the ramp shall be set when the length of the ramp is set at the maximum of 12 feet.
- *** The Clearance shall be increased to 6'-0" or wider at areas with high pedestrian traffic or as directed by the Engineer or as shown on the plans.
- **** If Roadway Slope >2% Conform to Roadway Slope and File Technical Infeasibility (TI) Statement



DETAIL "D"

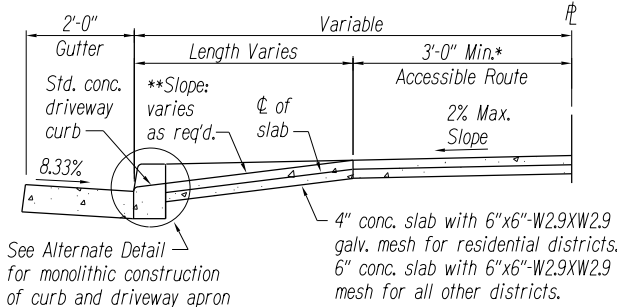


PLAN
NOT TO SCALE

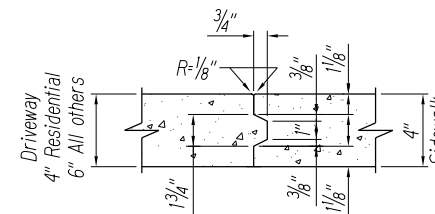


ELEVATION
NOT TO SCALE

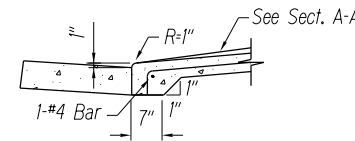
- * Match width of existing sidewalk whenever possible.
- ** Breakover and departure angles should not exceed 10 degrees or 17%.



SECTION A-A
NOT TO SCALE



DETAIL "A"
NOT TO SCALE
(NEW CONSTRUCTION)



ALTERNATE DETAIL
NOT TO SCALE

DRIVEWAY APRON **FIGURE 3.6**

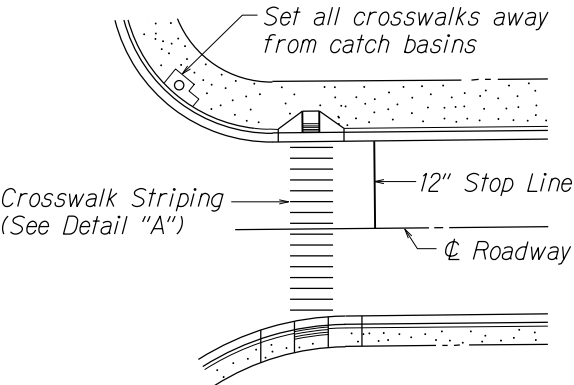
NOTES:

- For extension to existing driveway, scoring and finish shall match existing scoring and finish. For driveway constructed in built up areas, scoring conforming to scoring at adjacent driveways may be authorized.
- This detail is only one method for providing ADA access. Other methods can be used. These methods are shown in references listed in Curb Ramp and Sidewalk Note No. 21.

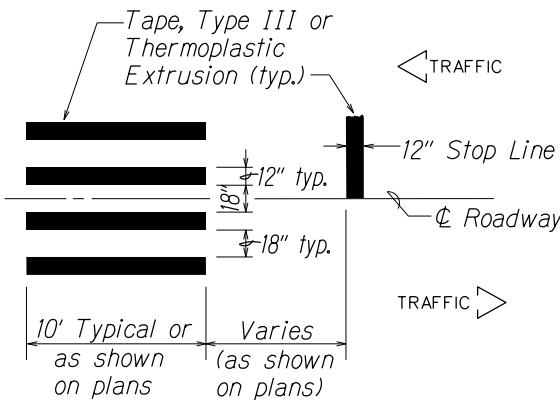
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CURB RAMP DETAILS
SIDEWALK, CURB AND GUTTER, CONCRETE
MEDIAN BARRIER REPAIRS AT VARIOUS LOCATIONS
ISLAND OF OAHU
PROJECT NO. HWY-OM-2027-38
Not to Scale Date: June, 2022
SHEET No. 6 OF 9 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-OM-2027-38	2023	7	9



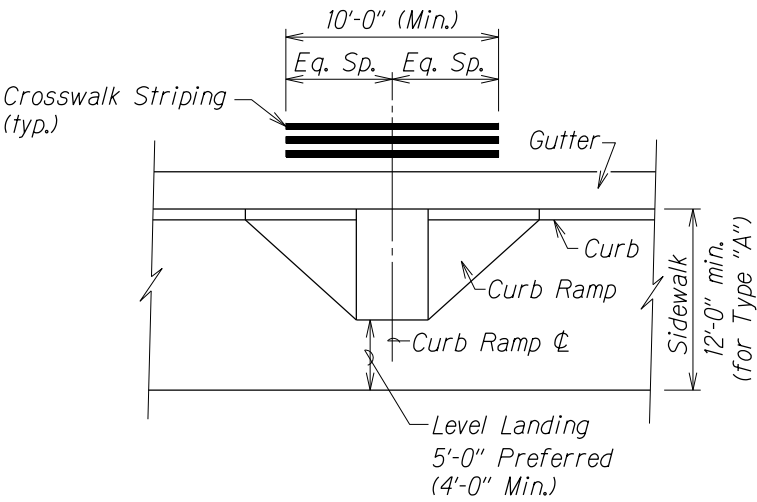
PLAN



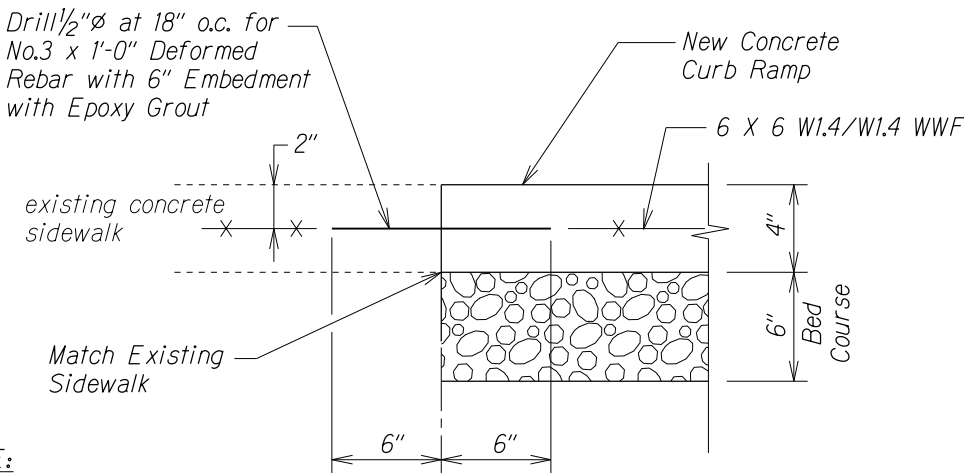
DETAIL "A"

CROSSWALK STRIPING DETAIL

NOTE:
Longitudinal lines shall be parallel to traffic flow.

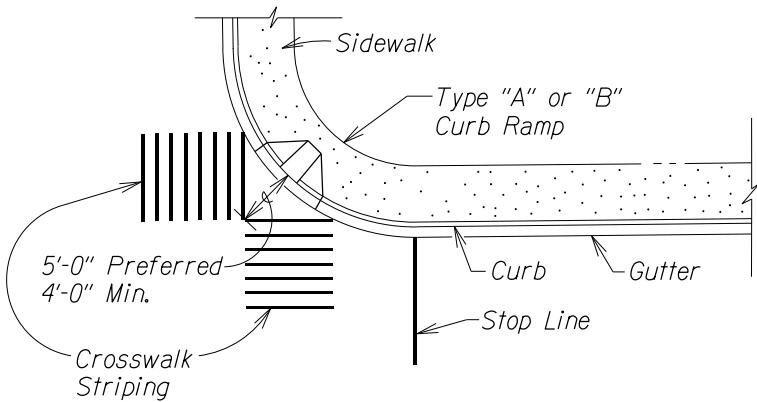


TYPICAL CROSSWALK STRIPING
AT CURB RAMP

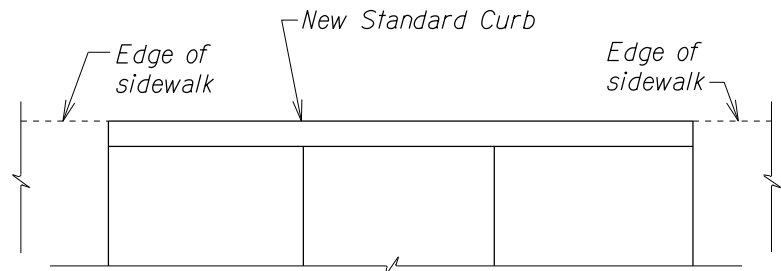


NOTE:
All curb ramps shall be reinforced.

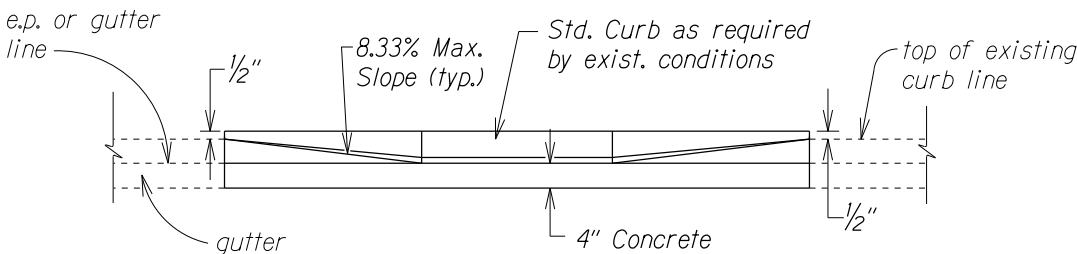
TYPICAL CONSTRUCTION JOINT
AT EXISTING SIDEWALK



TYPICAL CROSSWALK STRIPING
AT DIAGONAL CURB RAMP



PLAN



ELEVATION

DETAIL - BACK CURB

NOTE:
This detail can be used in situations where the edge of sidewalk cannot be flush with the face of (back) curb due to right of way restrictions.

FIGURE 3.7

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

MISCELLANEOUS DETAILS

SIDEWALK, CURB AND GUTTER, CONCRETE

MEDIAN BARRIER REPAIRS AT VARIOUS LOCATIONS

ISLAND OF OAHU

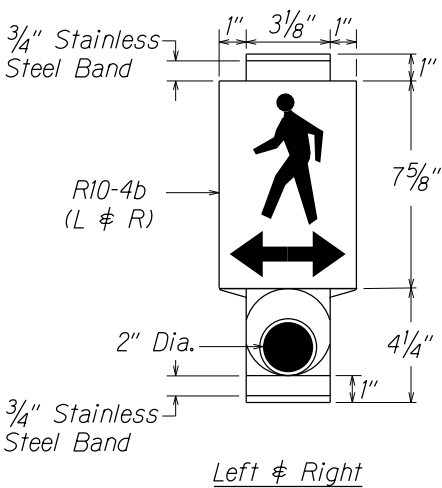
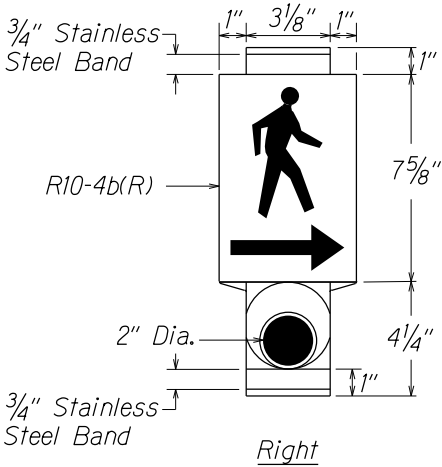
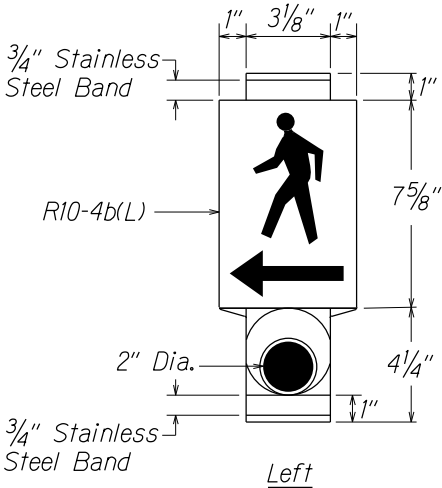
PROJECT NO. HWY-OM-2027-38

Not to Scale

Date: June, 2022

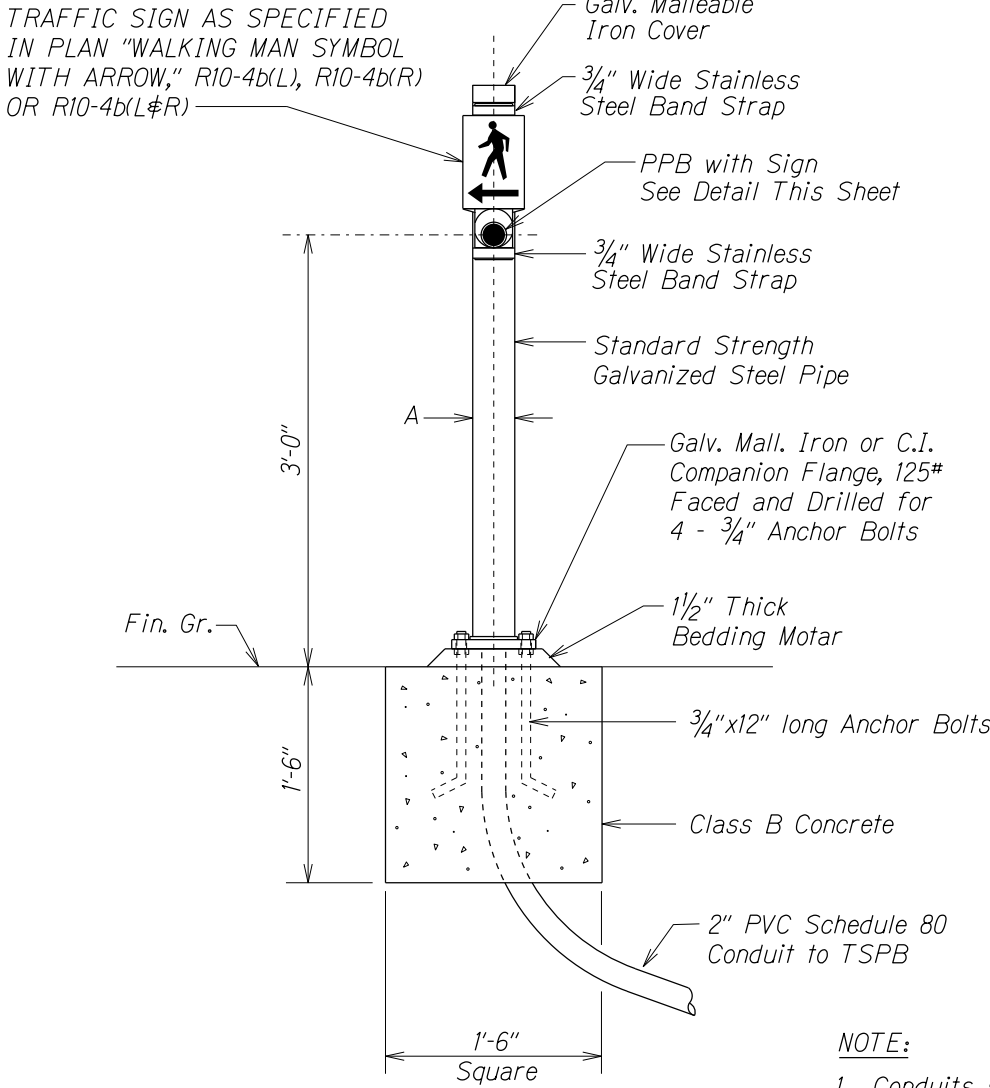
SHEET No. 7 OF 9 SHEETS

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



PEDESTRIAN PUSH BUTTON WITH SIGN

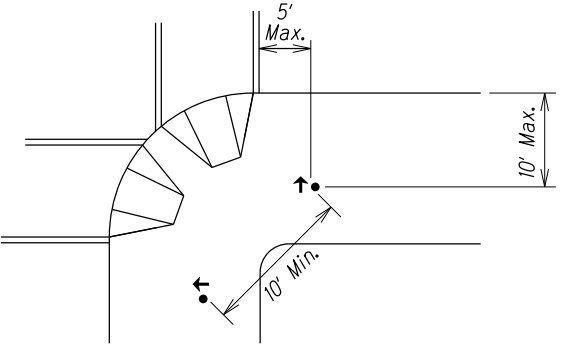
Man, Arrow & Push Button - White Background - Black



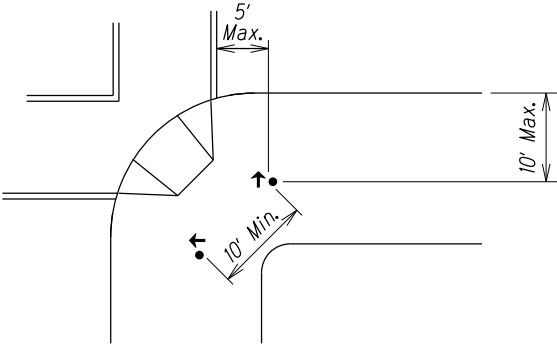
PPB POST AND FOOTING DETAIL

GENERAL NOTES:

- There shall be a 30" x 48" level ground surface (2% max. cross slope, both directions) for a forward or side approach, as appropriate, to a pedestrian push button. Location of pedestrian push button shall be shown on Civil Plans in addition to Electrical Plans.
- At intersection corners where two pedestrian push buttons are provided, the push buttons should be separated by a distance of at least 10 ft. and located as follows:
 - adjacent to a level all-weather surface to provide access from a wheelchair and, where there is an all-weather surface, wheelchair accessible route to the ramp
 - within 5 ft. of the crosswalk extended
 - within 10 ft. of the edge of the curb, shoulder or pavement
 - parallel to the crosswalk to be used



TWO CURB-CUT RAMPS

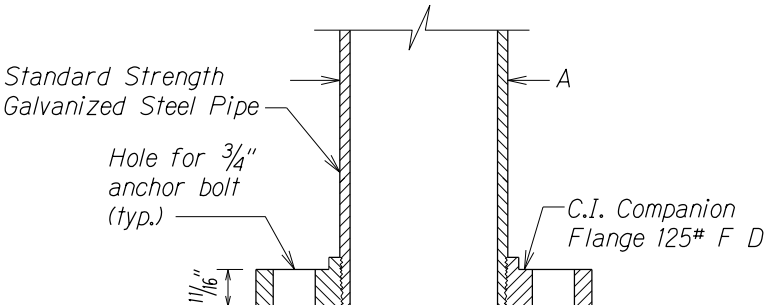


ONE CURB-CUT RAMP

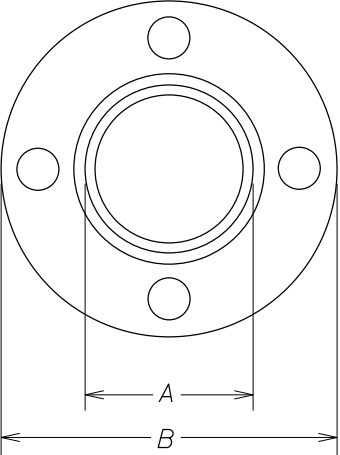
DATA TABLE FOR PPB POST		
AMOUNT OF PPB	DIMENSIONS	
	A	B
1	3 1/2"	8"
2-3	4 1/2"	9"

NOTE:

- Conduits shall protrude 2" max. above finished surface of foundation.
- Conduits shall slope away from post foundation.



SECTION



TOP VIEW

FLANGE DETAIL

FIGURE 3.8

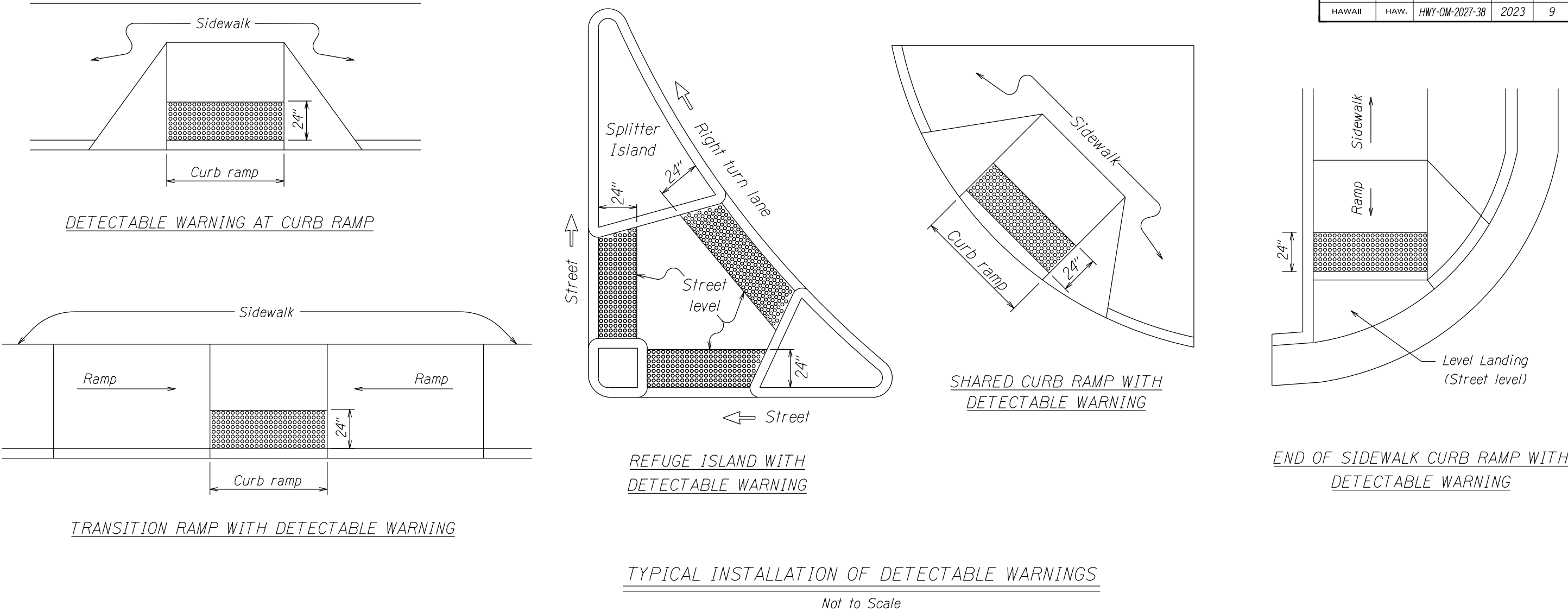
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PEDESTRIAN PUSH BUTTON DETAILS

SIDEWALK, CURB AND GUTTER, CONCRETE
MEDIAN BARRIER REPAIRS AT VARIOUS LOCATIONS
ISLAND OF OAHU
PROJECT NO. HWY-OM-2027-38
Not to Scale Date: June, 2022

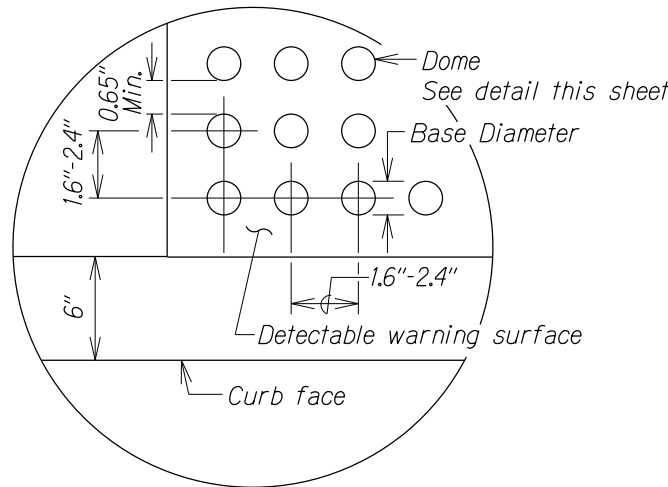
SHEET No. 8 OF 9 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-OM-2027-38	2023	9	9

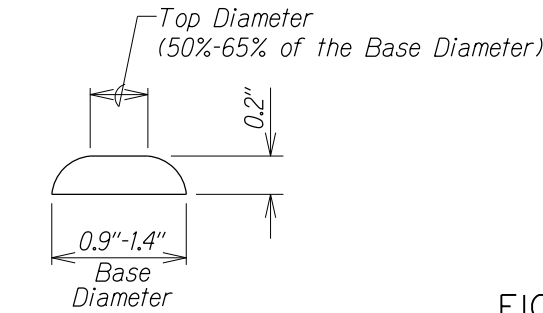


NOTES:

1. Detectable warnings shall be 24 inches in the direction of travel and extend the full width of the curb ramp or flush surface (does not include flares).
2. Truncated domes shall have a diameter of 0.9 to 1.4 inch at the bottom, a diameter of 50%-65% of the base diameter at the top, a height of 0.2 inch and a center-to-center spacing of 1.6 to 2.4 inches measured along one side of a square arrangement.
3. Domes shall be aligned on a square grid in the predominant direction of travel to permit wheels to roll between the domes.
4. There shall be a minimum of 70 percent contrast in light reflectance between the detectable warning and an adjoining surface, or the detectable warning shall be "safety yellow".
5. The material used to provide visual contrast shall be an integral part of the detectable warning surface.
6. The detectable warning shall be located so that the edge nearest the curb line or other potential hazard is 6 to 8 inches from the curb line.



ENLARGEMENT



DOME SECTION

DETECTABLE WARNING DETAIL

Not to Scale

FIGURE 3.9

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DETECTABLE WARNING DETAILS
SIDEWALK, CURB AND GUTTER, CONCRETE
MEDIAN BARRIER REPAIRS AT VARIOUS LOCATIONS
ISLAND OF OAHU
PROJECT NO. HWY-OM-2027-38
Not to Scale Date: June, 2022

SHEET No. 9 OF 9 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0M-2027-38	2027	1	4

STRUCTURAL GENERAL NOTES

1. GENERAL SPECIFICATIONS:

A. Hawaii Department of Transportation (HDOT), Standard Specifications for Roads and Bridges, Construction, 2005, together with Special Provisions prepared for this project.
2. DESIGN SPECIFICATIONS:

A. AASHTO 2020 LRFD Bridge Design Specifications, ninth Edition, includingsubsequent interim supplements and modifications by the HDOT Highways Division.

B. HDOT document dated August 8, 2014 with subject title "Design Criteria for Bridges and Structures."
3. GENERAL:

A. The contract documents are complementary. Any requirement occurring in one document is as binding as though occurring in all. A stricter requirement prevails over any less strict requirement. The stricter requirement will be the requirement that provides the greater product life, durability, strength and function.

B. Existing conditions are shown on the drawings to the best of the Designer's knowledge and are intended to aid the Contractor during construction. Existing measurements shown may not be exact and are provided for information only. Contractor shall field verify all existing dimensions prior to construction. All discrepancies shall be promptly called to the attention of the Engineer and shall be resolved prior to proceeding with any construction work.
4. MATERIALS:

A. New reinforcing steel shall be ASTM A615, Grade 60, unless noted other wise. Where welded connections are required, reinforcing steel shall be ASTM A706 Grade 60 deformed bars.

B. Repair Mortar for defective concrete repairs shall be a factory-blended, rapid-setting, shrinkage-compensated cementitious patching material (containing no gypsum) combined with a polymer type admixture, water, and a penetrating inhibitor. It shall meet the following minimum material properties:

(1). 7-day Compressive Strength: 4,000 psi.

(2). 28-day Compressive Strength: 6,000 psi.

(3). 28-day Permeability: < 1,000 coulombs (ASTM C1202)

(4). 28-day Bond Strength: 2,000 psi. (ASTM C882)

C. Spall repair bonding agent shall be a three-component, pre-proportioned, water-based, epoxy-modified Portland Cement bonding agent and anti-corrosion coating. Bond strength shall exceed 2,400 psi., in accordance with ASTM C882.

D. Curing compound shall be Sinak LithiumCure 1000 curing compound.

5. CONSTRUCTION NOTES:

A. The Contractor shall be solely responsible for the protection of adjacent properties, utilities and existing structures from damage due to construction.

B. Existing reinforcing shall not be damaged during demolition work, unless otherwise permitted.

C. Drilling procedures, equipment, material and certifications shall be submitted to the Engineer for approval.

D. Drilling holes in existing concrete for anchors and dowels shall not be left unfilled for more than eight (8) hours. Adhesive material in drilled holes shall be fully cured prior to pouring of concrete around reinforcing steel dowels.

E. All holes drilled into concrete that go unused shall be completely filled with a polymer-modified cementitious repair mortar.

F. Designated repair locations are not necessarily inclusive of all repair work required. The Contractor shall inspect and identify any and all defective concrete. Problematic areas should be reported to the Engineer for review. If approved, the Engineer will pay for the repair of the areas under the respective pay items.

G. The Contractor will sound and mark all locations to be repaired. The Contractor shall sound with a hammer or other suitable device and mark the location with paint the exact perimeter of the repairs. The Contractor shall measure and the Engineer shall verify the locations prior to starting the demolition work.

H. Demolition work shall be coordinated with construction of new work. Contractor shall submit proposed schedule and sequence of demolition work for the Engineer's review prior to commencing with demolition work.

I. Sawcut around the damaged concrete at 90 degree angles, at least 1" beyond the edges of the damaged area, and chip down to solid concrete. If reinforcing is exposed, remove the concrete behind the reinforcing bar and provide at least 1-inch clear around the bar.
6. REPAIR NOTES:

A. All deteriorated, damaged, cracked, or spalled concrete shall be removed as shown and repaired with an appropriate concrete patch material. Damaged or severely deteriorated reinforcing bars shall be removed and replaced prior to the patch material application.

B. Provide minimum 1½" concrete cover over reinforcement.

C. Wet repair surface with water. Use compressed air to remove all surface moisture in the repair location just prior to application of repair material (saturated surface dry).

D. Apply patch material and cure as per manufacturer's recommendations and instructions.

FIGURE 4.1

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STRUCTURAL NOTES

SIDEWALK, CURB AND GUTTER, CONCRETE
MEDIAN BARRIER REPAIRS AT VARIOUS LOCATIONS
ISLAND OF OAHU

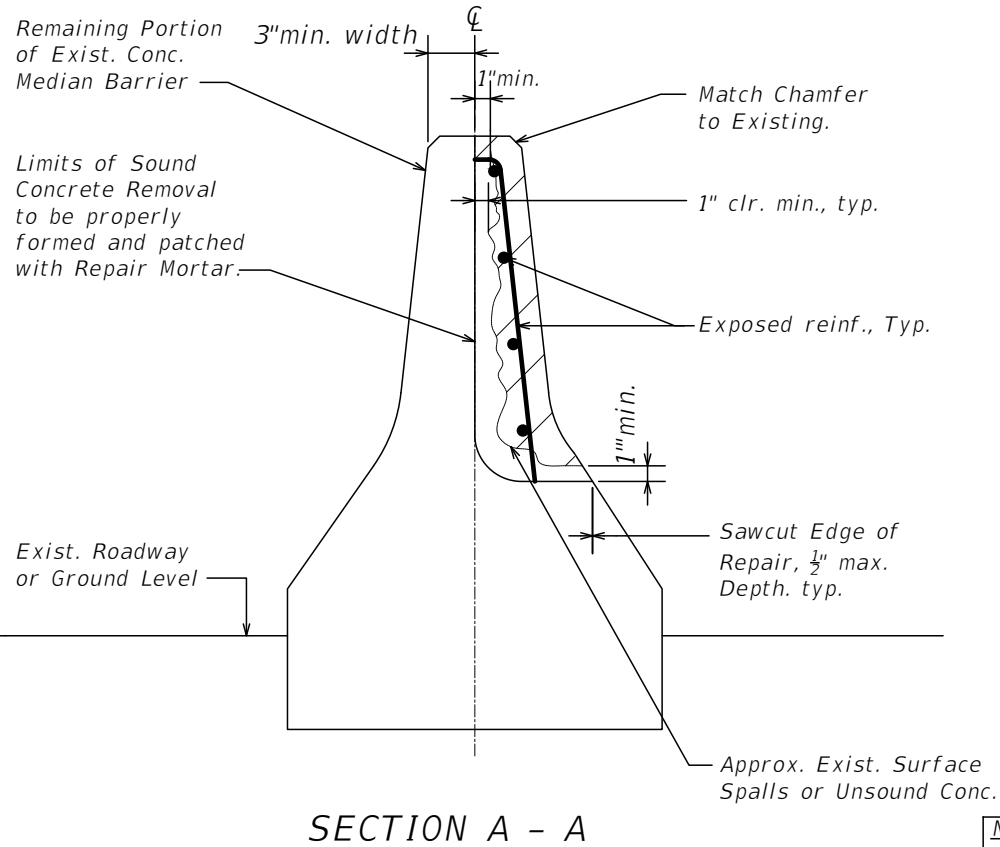
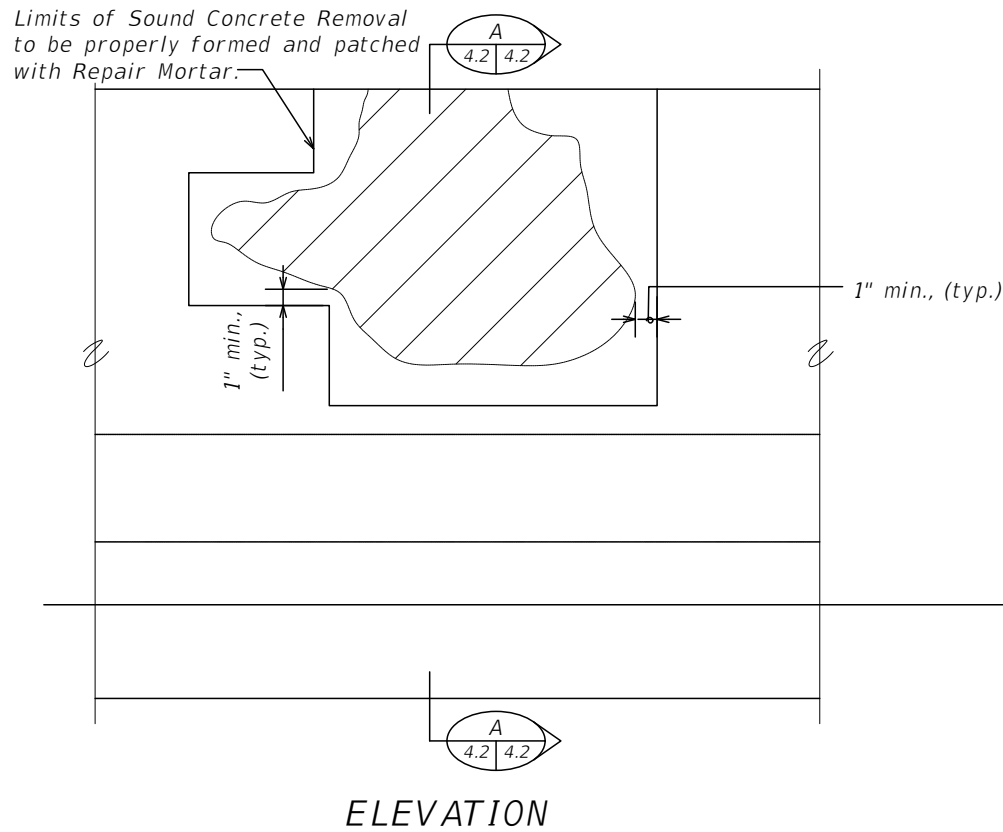
Project NO. HWY-0M-2027-38

Scale: As NotedDate:June, 2022

SHEET No. 1 OF 4 SHEETS

ORIGINAL SURVEY PLOTTED BY	DATE
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CHECKED BY	XX 1997
DESIGNED BY	XX 1997
NOTED BY	XX 1997
QUANTITIES BY	XX 1997
CHECKED BY	XX 1997

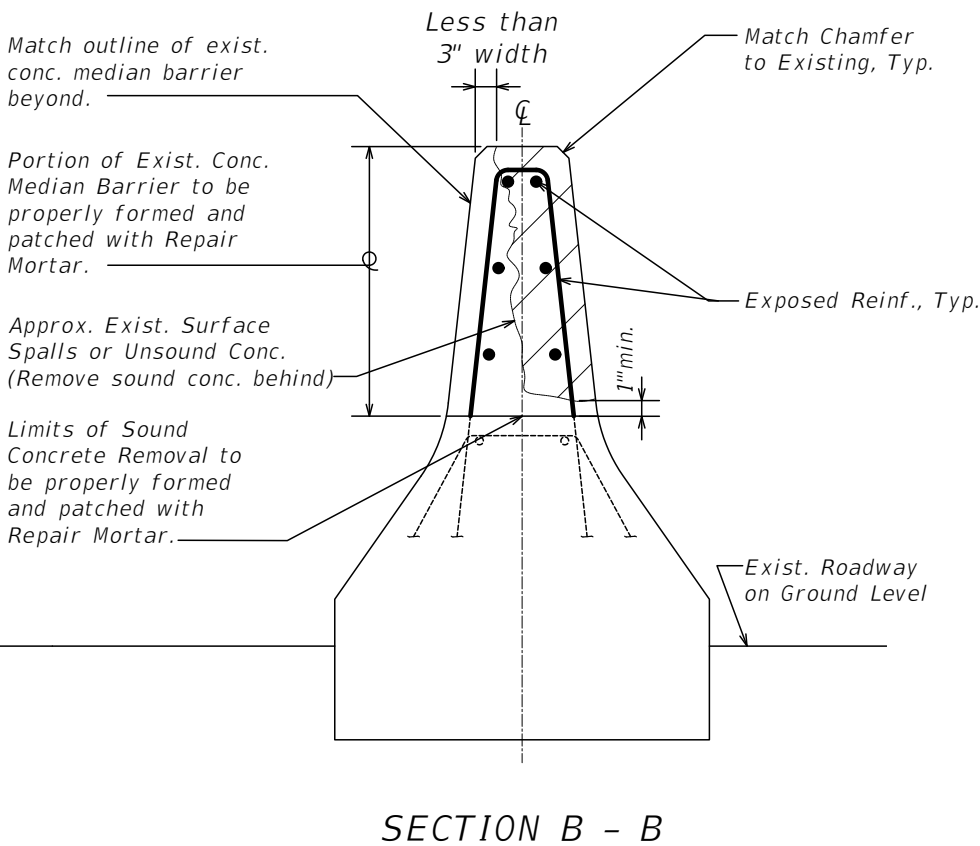
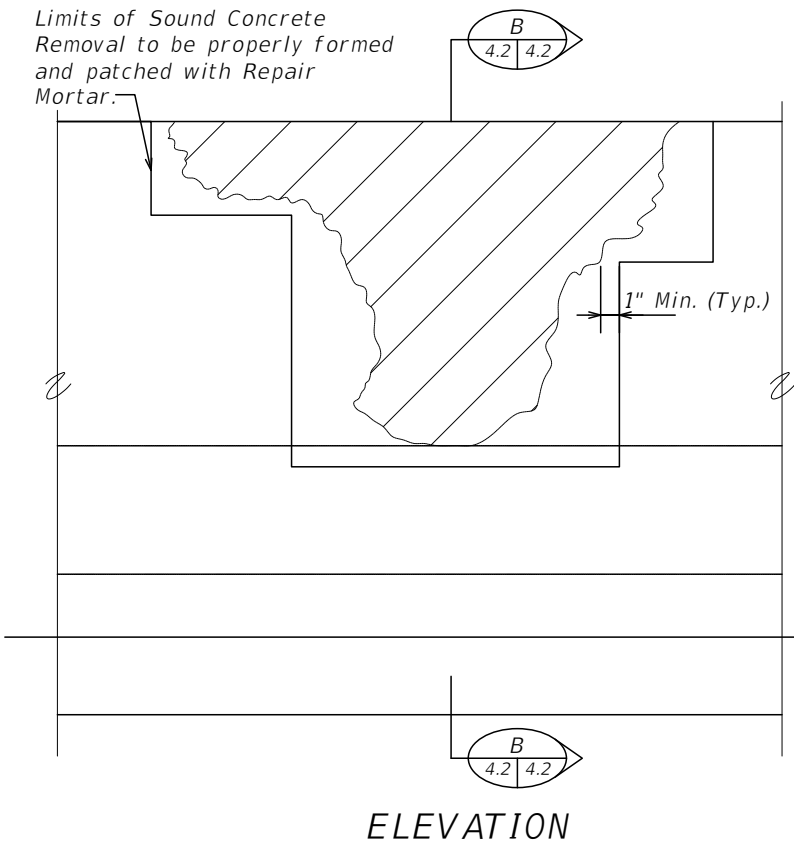
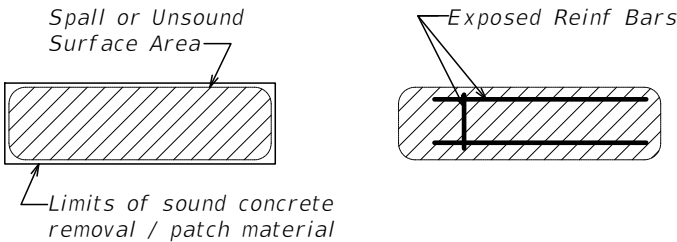
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0M-2027-38	2027	2	4



**TYPICAL CONCRETE REPAIR
3" or GREATER REMAINING**
SCALE: N.T.S.

- NOTES:**
1. See Special Provisions Section 680 - Defective Concrete Repairs.
 2. When existing reinforcing bars are damaged, remove and include additional reinforcement per TYPICAL CONCRETE REPAIR -- ADDITIONAL REINFORCEMENT.
 3. Placed Repair Mortar shall match previous existing concrete median barrier dimensions.

SYMBOLS AND ABBREVIATIONS:



**TYPICAL CONCRETE REPAIR
-LESS THAN 3" REMAINING**
SCALE: N.T.S.

FIGURE 4.2

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DETAILS AND NOTES

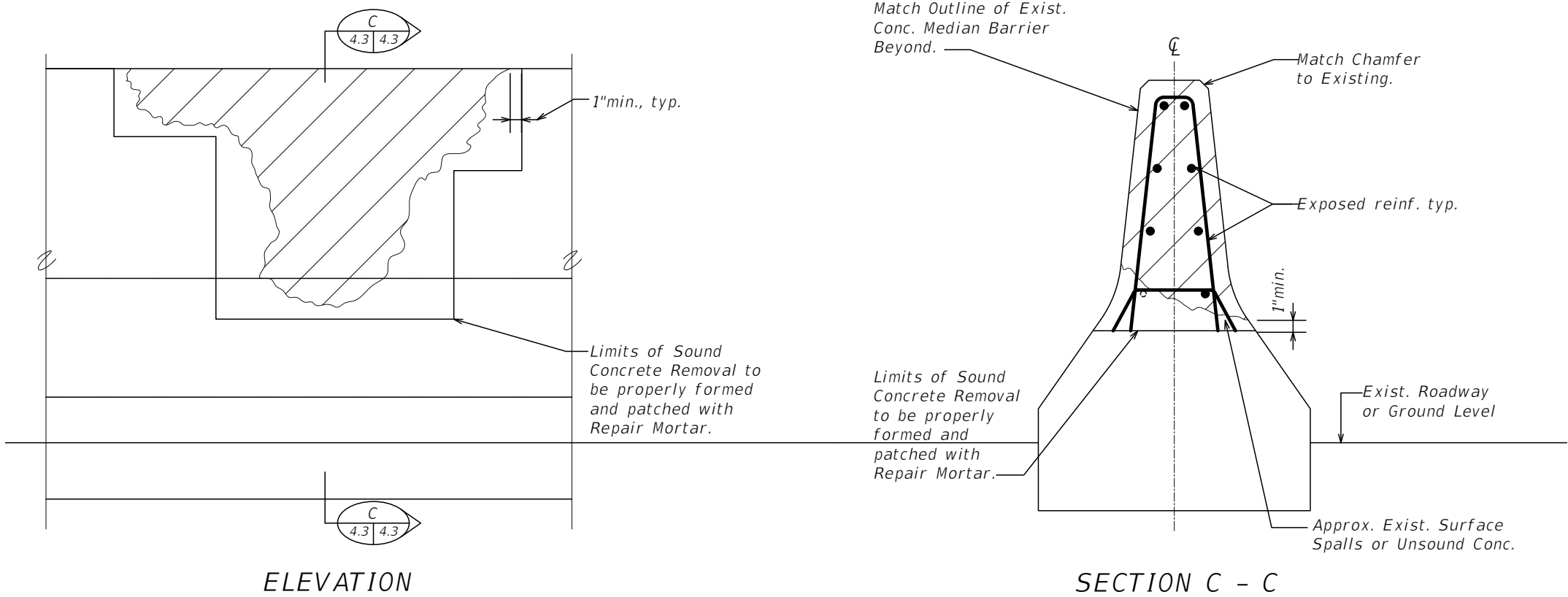
SIDEWALK, CURB AND GUTTER, CONCRETE
MEDIAN BARRIER REPAIRS AT VARIOUS LOCATIONS
ISLAND OF OAHU

Project NO. HWY-0M-2027-38

Scale: As Noted Date: June, 2022

SHEET No. 2 OF 4 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-OM-2027-38	2027	3	4



TYPICAL CONCRETE REPAIR
- FULL WIDTH FAILURE
SCALE: N.T.S.

- NOTES:
1. See Special Provisions Section 680 - Defective Concrete Repairs.
 2. When existing reinforcing bars are damaged, remove and include additional reinforcement per TYPICAL CONCRETE REPAIR -- ADDITIONAL REINFORCEMENT.
 3. Placed Repair mortar shall match previous existing concrete median barrier dimensions.

SYMBOLS AND ABBREVIATIONS:

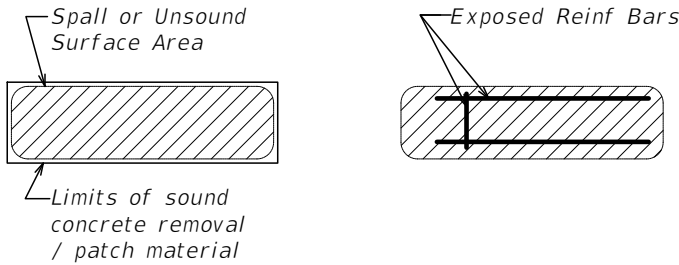


FIGURE 4.3

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

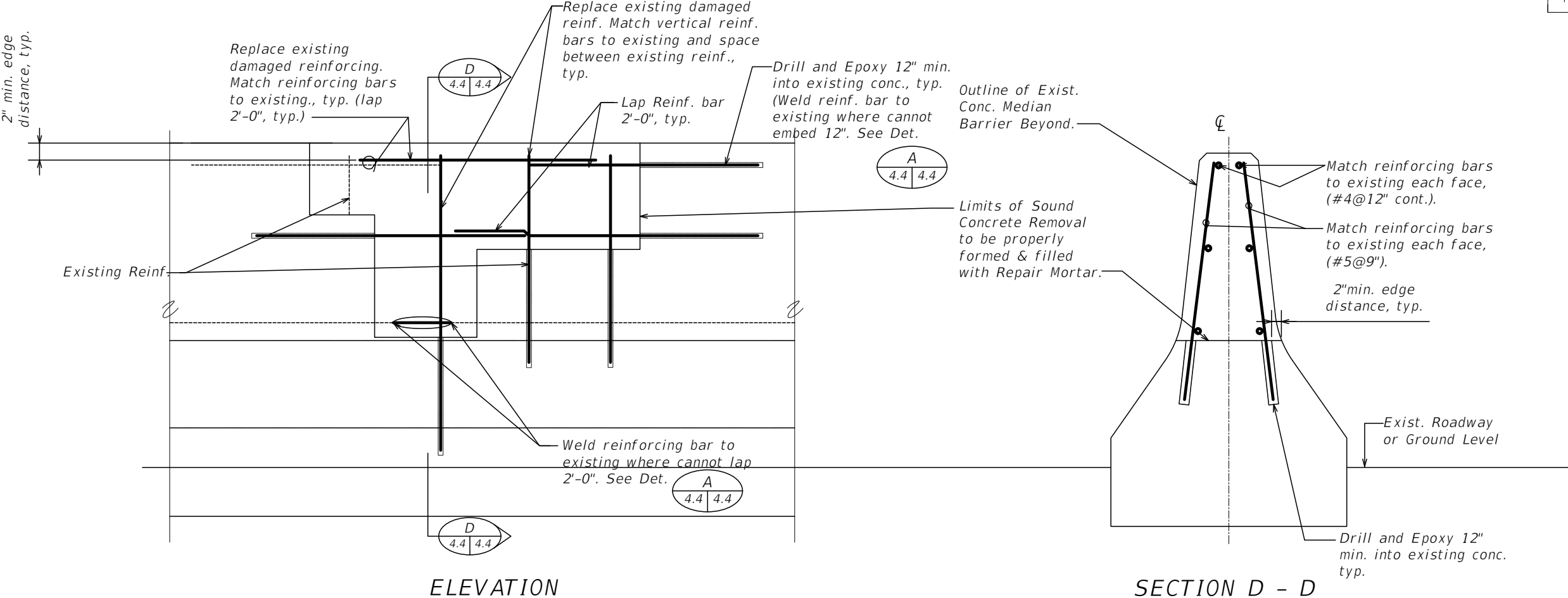
DETAILS AND NOTES

SIDEWALK, CURB AND GUTTER, CONCRETE
MEDIAN BARRIER REPAIRS AT VARIOUS LOCATIONS
ISLAND OF OAHU
Project NO. HWY-OM-2027-38

Scale: As Noted Date: June, 2022

SHEET No. 3 OF 4 SHEETS

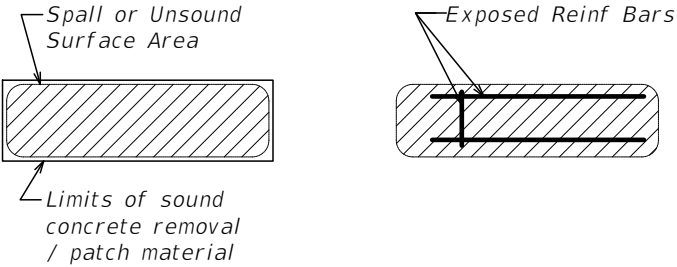
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-OM-2027-38	2027	4	4



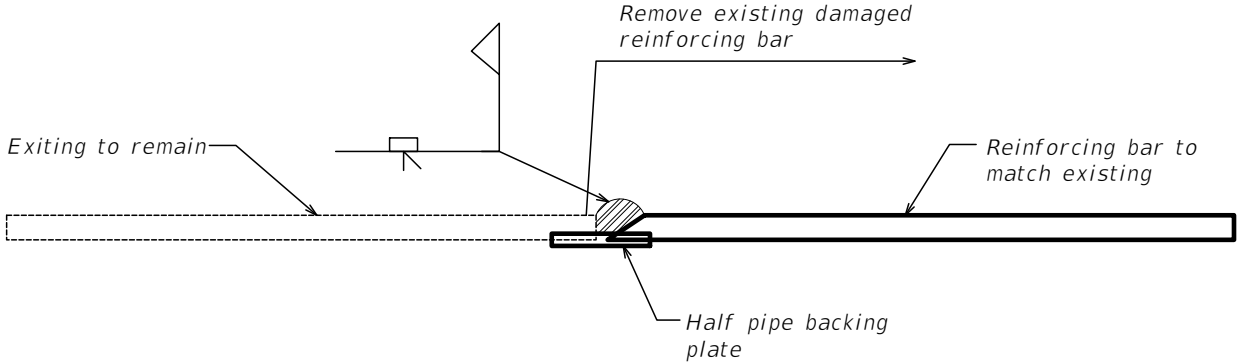
NOTE:
Reinforcing bars are noted as damaged if bent or bar diameter is reduced by at least $\frac{1}{8}$ " for #5 bars and larger, or $\frac{1}{16}$ " for #4 bars and smaller. All damaged reinforcing bars shall be removed and replaced.

- NOTES:**
1. See Special Provisions Section 680 - Defective Concrete Repairs.
 2. When existing reinforcing bars are damaged, remove and include additional reinforcement per TYPICAL CONCRETE REPAIR -- ADDITIONAL REINFORCEMENT.
 3. Placed Repair Mortar shall match previous existing concrete median barrier dimensions.

SYMBOLS AND ABBREVIATIONS:



**TYPICAL CONCRETE REPAIR -
ADDITIONAL REINFORCEMENT**
SCALE: N.T.S.



WELDED REINFORCING BAR DETAIL
SCALE: 6"=1'-0"

FIGURE 4.4

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DETAILS AND NOTES

**SIDEWALK, CURB AND GUTTER, CONCRETE
MEDIAN BARRIER REPAIRS AT VARIOUS LOCATIONS
ISLAND OF OAHU**

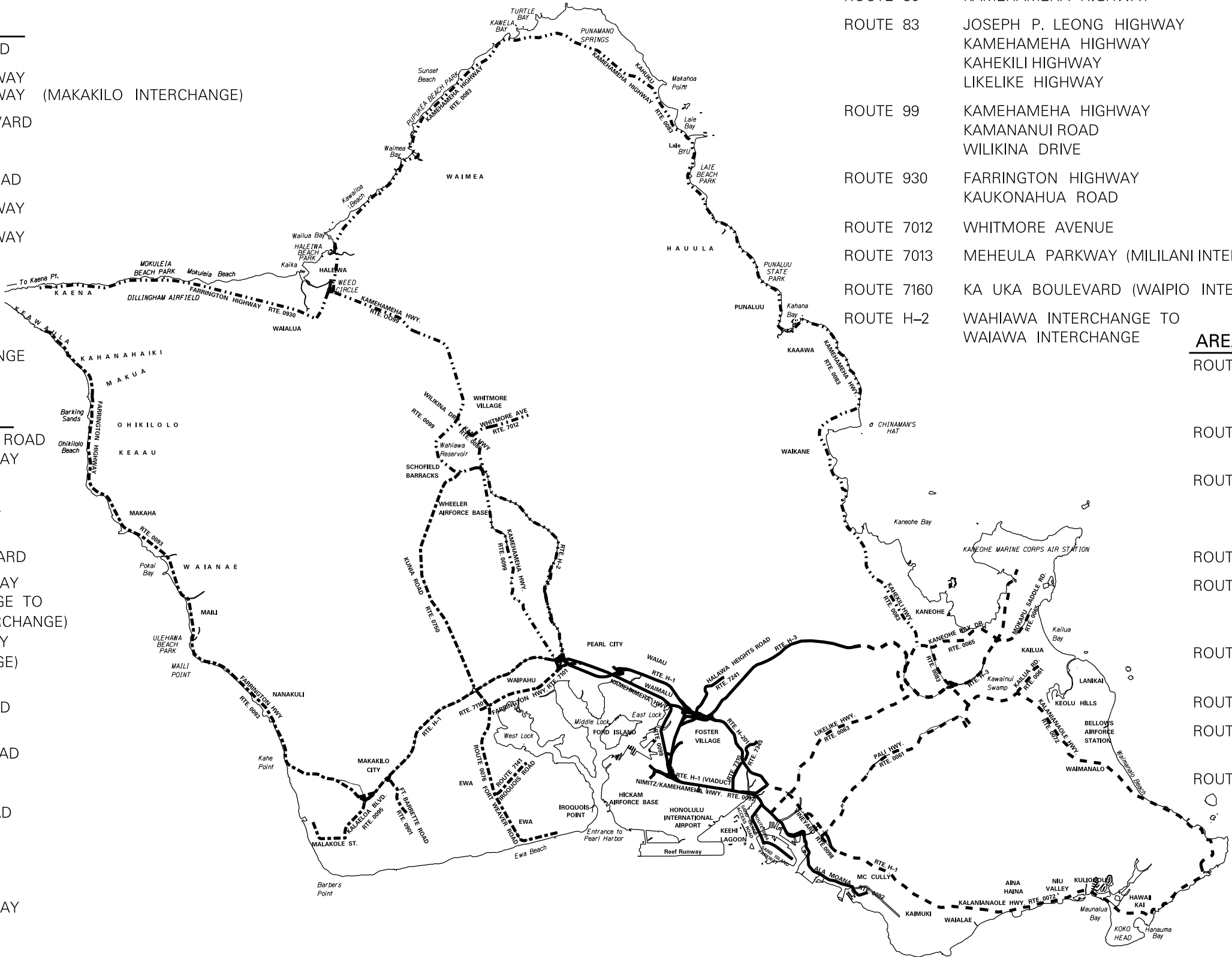
Project NO. HWY-OM-2027-38

Scale: As Noted Date: June, 2022

SHEET No. 4 OF 4 SHEETS

AREA 2	
ROUTE 76	FORT WEAVER ROAD
ROUTE 93	FARRINGTON HIGHWAY FARRINGTON HIGHWAY (MAKAKILO INTERCHANGE)
ROUTE 95	KALALELOA BOULEVARD
ROUTE 750	KUNIA ROAD
ROUTE 901	FORT BARRETTE ROAD
ROUTE 7101	FARRINGTON HIGHWAY
ROUTE 7110	FARRINGTON HIGHWAY
ROUTE 7141	IROQUOIS ROAD
ROUTE 7142	WAIPAHU STREET
ROUTE H-1	KALAELOA BOULEVARD TO WAIAWA INTERCHANGE

AREA 1	
ROUTE 64	SAND ISLAND ACESS ROAD SAND ISLAND PARKWAY
ROUTE 78	MOANALUA FREEWAY
ROUTE 92	KAM-NIMITZ HIGHWAY NIMITZ HIGHWAY ALA MOANA BOULEVARD
ROUTE 99	KAMEHAMEHA HIGHWAY (WAIAWA INTERCHANGE TO PEARL HARBOR INTERCHANGE) FARRINGTON HIGHWAY (WAIAWA INTERCHANGE)
ROUTE 7239	ULUNE STREET HALAWA VALLEY ROAD
ROUTE 7241	KAHUAPAANI STREET HALAWA HEIGHTS ROAD
ROUTE 7310	PUULOA ROAD
ROUTE 7345	JARRETTE WHITE ROAD
ROUTE 7350	BOUGAINVILLE DRIVE
ROUTE 7351	RADFORD DRIVE
ROUTE 7401	KAMEHAMEHA HIGHWAY
ROUTE 7413	LILIIHA STREET
ROUTE 7415	MIDDLE STREET
ROUTE H-1	WAIAWA INTERCHANGE TO MIDDLE STREET
ROUTE H-3	HALAWA INTERCHANGE TO HALAWA PORTAL OF HARANO TUNNEL
ROUTE H201	MOANALUA FREEWAY



AREA 3	
ROUTE 80	KAMEHAMEHA HIGHWAY
ROUTE 83	JOSEPH P. LEONG HIGHWAY KAMEHAMEHA HIGHWAY KAHEKILI HIGHWAY LIKELIKE HIGHWAY
ROUTE 99	KAMEHAMEHA HIGHWAY KAMANANUI ROAD WILIKINA DRIVE
ROUTE 930	FARRINGTON HIGHWAY KAUKONAHUA ROAD
ROUTE 7012	WHITMORE AVENUE
ROUTE 7013	MEHEULA PARKWAY (MILILANI INTERCHANGE)
ROUTE 7160	KA UKA BOULEVARD (WAIPIO INTERCHANGE)
ROUTE H-2	WAIHAWA INTERCHANGE TO WAIAWA INTERCHANGE

AREA 4	
ROUTE 61	PALI HIGHWAY KALANIANA'OLE HIGHWAY KAILUA ROAD
ROUTE 63	KALIHI STREET LIKELIKE HIGHWAY
ROUTE 65	KANEOHE BAY DRIVE MOKAPU SADDLE ROAD MOKAPU BOULEVARD
ROUTE 72	KALANIANA'OLE HIGHWAY
ROUTE 98	VINEYARD BOULEVARD HALONA STREET OLOMEA STREET
ROUTE 7601	OLD WAIALAE ROAD (KAPIOLANI INTERCHANGE)
ROUTE 7801	WAIALAE AVENUE
ROUTE H-1	MIDDLE STREET TO AINAKOA AVENUE
ROUTE H-3	HAIKU PORTAL OF HARANO TUNNEL TO KANEOHE MARINE CORP BASE

ISLAND OF OAHU

Note: There are numerous side streets with or without route numbers along State highways where State Jurisdiction extends various distances into side streets.
This map does not show all Hawaii Department of Transportation Jurisdiction as stated in Section 110.03 – Areas of Coverage.

HWY-OM-2027-38
FIGURE 5

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**WORK ORDER FORM
(COMPLAINT/REQUEST)**

Tracking Number:

Time:

Date:

Name:

Company Name

Address:

City:

Zip Code:

Phone

Home:

Business:

Complaints:

Area:

Route:

Loc.:

Remarks:

Route Name:

Call Rec. By:

Ref. To:

Act. taken:

Comp. date:

Sign:

Ref. W/O:

Tort:

Requirements of Chapter 104, HRS

Wages and Hours of Employees on Public Works Law

Chapter 104, HRS, applies to every public works construction project over \$2,000, regardless of the method of procurement or financing (purchase order, voucher, bid, contract, lease arrangement, warranty, SPRB).

Rate of Wages for Laborers and Mechanics

- Minimum prevailing wages (basic hourly rate plus fringe benefits), as determined by the Director of Labor and Industrial Relations and published in wage rate schedules, shall be paid to the various classes of laborers and mechanics working on the job site. [§104-2(a), (b), Hawaii Revised Statutes (HRS)]
- If the Director of Labor determines that prevailing wages have increased during the performance of a public works contract, the rate of pay of laborers and mechanics shall be raised accordingly. [§104-2(a) and (b), HRS; §12-22-3(d) Hawaii Administrative Rules (HAR)]

Overtime

- Laborers and mechanics working on a Saturday, Sunday, or a legal holiday of the State or more than eight hours a day on any other day shall be paid overtime compensation at not less than one and one-half times the basic hourly rate plus the cost of fringe benefits for all hours worked. If the Director of Labor determines that a prevailing wage is defined by a collective bargaining agreement, the overtime compensation shall be at the rates set by the applicable collective bargaining agreement [§§104-1, 104-2(c), HRS; §12-22-4.1, HAR]

Weekly Pay

- Laborers and mechanics employed on the job site shall be paid their full wages at least once a week, without deduction or rebate, except for legal deductions, within five working days after the cutoff date. [§104-2(d), HRS]

Posting of Wage Rate Schedules

- Wage rate schedules with the notes for prevailing wages and special overtime rates, shall be posted by the contractor in a prominent and easily accessible place at the job site. A copy of the entire wage rate schedule shall be given to each laborer and mechanic employed under the contract, except when the employee is covered by a collective bargaining agreement. [§104-2(d), HRS]

Withholding of Accrued Payments

- If necessary, the contracting agency may withhold accrued payments to the contractor to pay to laborers and mechanics employed by the contractor or subcontractor on the job site any difference between the wages required by the public works contract or specifications and the wages received. [§104-2(e), HRS]

Certified Weekly Payrolls and Payroll Records

- A certified copy of all payrolls shall be submitted weekly to the contracting agency. [§104-3(a), HRS; §12-22-10, HAR]
- The contractor is responsible for the submission of certified copies of the payrolls of all subcontractors. The certification shall affirm that the payrolls are correct and complete, that the wage rates listed are not less than the applicable rates contained in the applicable wage rate schedule, and that the classifications for each laborer or mechanic conform with the work the laborer or mechanic performed. [§104-3(a), HRS; §12-22-10, HAR]
- Payroll records shall be maintained by the contractor and subcontractors for three years after completion of construction. The records shall contain: [§104-3(b), HRS; §12-22-10, HAR]
 - the name and home address of each employee
 - the last four digits of social security number
 - a copy of the apprentice's registration with DLIR
 - the employee's correct classification
 - rate of pay (basic hourly rate + fringe benefits)
 - itemized list of fringe benefits paid
 - daily and weekly hours worked
 - weekly straight time and overtime earnings
 - amount and type of deductions
 - total net wages paid
 - date of payment
- Records shall be made available for examination by the contracting agency, the Department of Labor and Industrial Relations (DLIR), or any of its authorized representatives, who may also interview employees during working hours on the job. [§§104-3(c), 104-22(a), HRS; §12-22-10, HAR]

Termination of Work on Failure to Pay Wages

- If the contracting agency finds that any laborer or mechanic employed on the job site by the contractor or any subcontractor has not been paid prevailing wages or overtime, the contracting agency may, by written notice to the contractor, terminate the contractor's or subcontractor's right to proceed with the work or with the part of the work in which the required wages or overtime compensation have not been paid. The contracting agency may complete this work by contract or otherwise, and the contractor or contractor's sureties shall be liable to the contracting agency for any excess costs incurred. [§104-4, HRS]

Apprentices

- Apprentice wage rates apply to contractors who are a party to a bona fide apprenticeship program which has been registered with the DLIR. In order to be paid apprentice rates, apprentices must be parties to an agreement either registered with or recognized as a USDOL nationally approved apprenticeship program by the DLIR, Workforce Development Division, (808) 586-8877, and the apprentice must be individually registered by name with the DLIR. [§12-22-6(1) and (2), HAR]
- The number of apprentices on any public work in relation to the number of journeymen in the same craft classification as the apprentices employed by the same employer on the same public work may not exceed the ratio allowed under the apprenticeship standards registered with or recognized by the DLIR. A registered or recognized apprentice receiving the journeyman rate will not be considered a journeyman for the purpose of meeting the ratio requirement. [§12-22-6(3), HAR]

Enforcement

- To ensure compliance with the law, DLIR and the contracting agency will conduct investigations of contractors and subcontractors. If a contractor or subcontractor violates the law, the penalties are: [§104-24, HRS]
 - First Violation Equal to 25% of back wages found due or \$250 per offense up to \$2,500, whichever is greater.
 - Second Violation Equal to amount of back wages found due or \$500 for each offense up to \$5,000, whichever is greater.
 - Third Violation Equal to two times the amount of back wages found due or \$1,000 for each offense up to \$10,000, whichever is greater; and
Suspension from doing any new work on any public work of a governmental contracting agency for three years.
- A violation would be deemed a second violation if it occurs within two years of the **first notification of violation**, and a third violation if it occurs within three years of **the second notification of violation**. [§104-24, HRS; §12-22-25(b), HAR]
- **Suspension:** For a first or second violation, the department shall immediately suspend a contractor who fails to pay wages or penalties until all wages and penalties are paid in full. For a third violation, the department shall penalize and suspend the contractor as described above, **except that if the contractor continues to violate the law, then the department shall immediately suspend the contractor for a mandatory three years. The contractor shall remain suspended until all wages and penalties are paid in full.** [§§104-24, 104-25, HRS]
- **Suspension:** Any contractor who fails to make payroll records accessible or provide requested information within 10 days, or fails to keep or falsifies any required record, shall be assessed a penalty including suspension as provided in Section 104-22(b) and 104-25(a)(3), HRS. [§104-3(c), HRS; §12-22-26, HAR]
- If any contractor interferes with or delays any investigation, the contracting agency shall withhold further payments until the delay has ceased. Interference or delay includes failure to provide requested records or information within ten days, failure to allow employees to be interviewed during working hours on the job, and falsification of payroll records. The department shall assess a penalty of \$10,000 per project, and \$1,000 per day thereafter, for interference or delay. [§104-22(b), HRS; §12-22-26, HAR]
- Failure by the contracting agency to include in the provisions of the contract or specifications the requirements of Chapter 104, HRS, relating to coverage and the payment of prevailing wages and overtime, is not a defense of the contractor or subcontractor for noncompliance with the requirements of this chapter. [§104-2(f), HRS]



For additional information, visit the department's website at <http://labor.hawaii.gov/wsd> or contact any of the following DLIR offices:

Oahu (Wage Standards Division)(808) 586-8777
Hawaii Island.....(808) 974-6464
Maui and Kauai(808) 243-5322

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
HONOLULU, HAWAII

P R O P O S A L

6/02/98

**PROPOSAL TO THE
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION**

PROJECT: **SIDEWALK, CURB AND GUTTER, CONCRETE
MEDIAN BARRIER REPAIRS AT
VARIOUS LOCATIONS
ISLAND OF OAHU**

PROJECT NO.: **HWY-OM-2027-38**

CONTRACT PERIOD: **TWENTY-FOUR (24) MONTHS from the date
indicated in the Notice to Proceed from the
Department with the option to extend for three (3)
additional twelve (12) month periods upon mutual
agreement.**

DESIGN PROJECT MANAGER:

NAME: **Jillian Chen**
ADDRESS: **601 Kamokila Boulevard, Room 609
Kapolei, Hawaii 96707**
PHONE NO.: **(808) 692-8439**
EMAIL: **jillian.m.chen@hawaii.gov**

ELECTRONIC SUBMITTAL:

Bidders shall submit and upload the complete proposal to HlePRO prior to the bid opening date and time. Any additional support documents explicitly designated as confidential and/or proprietary shall be uploaded as a separate file to HlePRO. See SPECIAL PROVISIONS 102.09 DELIVERY OF PROPOSALS for complete details. FAILURE TO UPLOAD THE COMPLETE PROPOSAL TO HlePRO SHALL BE GROUNDS FOR REJECTION OF THE BID.

Director of Transportation
869 Punchbowl Street
Honolulu, Hawaii 96813

Dear Sir:

The undersigned bidder declares the following:

1. It has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with this proposal.
2. It has not been assisted or represented on this matter by any individual who has, in a State capacity, been involved in the subject matter of this contract within the past two years.
3. It has not and will not, either directly or indirectly offered or given a gratuity (i.e. an entertainment or gift) to any State or County employee to obtain a contract or favorable treatment under a contract.

The undersigned bidder further agrees to the following:

1. If this proposal is accepted, it shall execute a contract with the Department to provide all necessary labor, machinery, tools, equipment, apparatus and any other means of construction, to do all the work and to furnish all the materials specified in the contract in the manner and within the time therein prescribed in the contract, and that it shall accept in full payment therefore the sum of the unit and/or lump sum prices as set forth in the attached proposal schedule for the actual quantities of work performed and materials furnished and furnish satisfactory security in accordance with Section 103D-324, Hawaii Revised Statutes, within 10 days after the award of the contract or within such time as the Director of Transportation may allow after the undersigned has received the contract documents for execution, and is fully aware that non-compliance with the aforementioned terms will result in the forfeiture of the full amount of the bid guarantee required under Section 103D-323, Hawaii Revised Statutes.
2. That the quantities given in the attached proposal schedule are approximate only and are intended principally to serve as a guide in determining and comparing the bids.
3. That the Department does not either expressly or by implication, agree that the actual amount of work will correspond therewith, but reserves the right to increase or decrease the amount of any class or portion of the work, or to omit portions of the work, as may be deemed necessary or advisable by the Director of Transportation, and that all increased or decreased quantities of work shall be performed at the unit prices set forth in the attached proposal schedule except as provided for in the specifications.

4. In case of a discrepancy between unit prices and the totals in said Proposal Schedule, the unit prices shall prevail.
5. Agrees to begin work within 10 working days after the date of notification to commence with the work, which date is in the notice to proceed, and shall finish the entire project within the time prescribed.
6. The Director of Transportation reserves the right to reject any or all bids and to waive any defects when in the Director's opinion such rejections or waiver will be for the best interest of the public.
7. The undersigned Bidder further agrees to the following: Pursuant to HRS §103D-405(d), any contractor (including consultants) paid for services to develop or prepare specifications or work statements shall be precluded from submitting an offer or receiving a contract for that particular solicitation. This includes the preparation of reports relied upon by HDOT in the development of the project scope.

The bidder acknowledges receipt of and certifies that it has completely examined the following listed items: the Hawaii Standard Specifications for Road and Bridge Construction dated 2005, the Notice to Bidders, the Special Provisions, if any, the Technical Provisions, the Proposal, the Contract and Bond Forms, and the Project Plans.

In accordance with Section 103D-323, Hawaii Revised Statutes, this proposal is accompanied with a bid security in the amount of 5% of the total amount bid per area, in the form checked below. (Check applicable bid security submitted with bid.)

_____ Surety Bid Bond (Use standard form),

_____ Cash,

_____ Cashier's Check,

_____ Certified Check, or

_____ (Fill in other acceptable security.)

The undersigned bidder acknowledges receipt of any addendum issued by the Department by recording in the space below the date of receipt.

Addendum No. 1 _____

Addendum No. 3 _____

Addendum No. 2 _____

Addendum No. 4 _____

In accordance with Section 103D-302, Hawaii Revised Statutes, the undersigned as bidder has listed the name of each person or firm, who will be engaged by the bidder on the project as Joint Contractor or Subcontractor and the nature of work to be done by each. **The Bidder must adequately and unambiguously disclose the unique nature and scope of the work to be performed by each Subcontractor or Joint Contractor.** For each listed firm, the Bidder declares the respective firm is a Sub- or Joint Contractor and subject to evaluation as a Sub- or Joint Contractor. It is understood that failure to comply with the aforementioned requirements may be cause for rejection of the bid submitted.

<u>Name of Subcontractor</u>	<u>Nature and Scope of Work</u>
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____
6. _____	_____
7. _____	_____
8. _____	_____

<u>Name of Joint Contractor</u>	<u>Nature and Scope of Work</u>
1. _____	_____
2. _____	_____
3. _____	_____

NOTES:

"None" or if left blank indicates no Subcontractor or Joint Contractor.

If more space is needed, attach additional sheets.

The undersigned hereby certifies that the bid prices contained in the attached proposal schedule have been carefully checked and are submitted as correct and final.

This declaration is made with the understanding that the undersigned is subject to the penalty of perjury under the laws of the United States and is in violation of the Hawaii Penal Code, Section 710-1063, unsworn falsification to authorities, of the Hawaii Revised Statutes, for knowingly rendering a false declaration.

Bidder (Company Name)

By _____
Authorized Signature

Print Name and Title

Business Address

Business Telephone

Email

Date

Contact Person (If different from above)

Phone: _____ Email: _____

NOTE:

If bidder is a CORPORATION, the legal name of the corporation shall be set forth above, the corporate seal affixed, together with the signature(s) of the officer(s) authorized to sign contracts for the corporation. Please attach to this page current (not more than six months old) evidence of the authority of the officer(s) to sign for the corporation.

If bidder is a PARTNERSHIP, the true name of the partnership shall be set forth above, with the signature(s) of the general partner(s). Please attach to this page current (not more than six months old) evidence of the authority of the partner authorized to sign for the partnership.

If bidder is an INDIVIDUAL, the bidder's signature shall be placed above.

If signature is by an agent, other than an officer of a corporation or a partner of a partnership, a POWER OF ATTORNEY must be on file with the Department before opening bids or submitted with the bid. Otherwise, the Department may reject the bid as irregular and unauthorized.

PREFERENCES FOR AREA 1

Bidders acknowledge that while preferences are considered in the evaluation of bids, the award of the contract will be in the amount of the bid offered exclusive of any preferences.

A. HAWAII BIDDER PREFERENCE

In accordance with HRS §103D-302, the Hawaii bidder preference is applicable to this solicitation for evaluation purposes only. Bidders desiring to qualify for the five per cent (5%) preference shall submit with their bid a completed *Hawaii Bidder/Offeror Preference Certification Form* (Form SPO-081) at or before the time set for receipt of bids. Certifications submitted for previous or other solicitations will not be accepted.

☐ **Yes, the Bidder elects to receive the Hawaii Bidder Preference and has included the Form SPO-081 with the bid.**

B. APPRENTICESHIP AGREEMENT PREFERENCE

In accordance with HRS §103-55.6, the estimated value of this public works contract is \$250,000 or more and the apprenticeship agreement preference is applicable to this solicitation for evaluation purposes only. Bidders desiring to qualify for the five per cent (5%) preference shall submit with their bid a complete, valid CERTIFICATION OF BIDDER'S PARTICIPATION IN APPROVED APPRENTICESHIP PROGRAM UNDER ACT 17 (Certification Form 1) *for each apprenticeable trade* the Bidder will employ on the project.

☐ **Yes, the Bidder elects to receive the Apprenticeship Agreement Preference and has attached Certification Form(s) 1 for each apprenticeable trade the Bidder will employ for this project (excluding subcontractors).**

By submission of this offer, the Bidder certifies that it has indicated **all apprenticeable trades that Bidder will employ** for this project (excluding subcontractors) by listing the applicable trades below:

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

(Attach additional sheet if necessary.)

Form 1 Required. Failure to submit a valid Form 1 with the bid for every apprenticeable trade that Bidder will employ on the project will result in the preference being denied, regardless of whether the

trade is listed above. If a Form 1 is submitted for a trade that is not listed above, the Form 1 will take precedence over the listing and may be used to qualify Bidder for the preference.

Form 2 Required. If awarded the contract with the Apprenticeship Agreement Preference applied, then for the duration of the contract, the Bidder **shall** certify each month that work is being conducted on the project that the Contractor continues to be a participant in the relevant apprenticeship program for each trade it employs. Monthly certification shall be made on the Certification Form 2 and submitted to the HDOT.

Failure to comply with the requirements of the Apprenticeship Agreement Preference program will subject the Contractor to sanctions pursuant to HRS §103-55.6.

C. HAWAII PRODUCTS PREFERENCE

Hawaii Products Preference shall not apply to this solicitation.

D. RECYCLED PRODUCT PREFERENCE

Recycled Product Preference shall not apply to this solicitation.



STATE OF HAWAII
Hawaii Bidder/Offeror Preference
Certification Form
(As Defined in HRS 103D-1001)
AREA 1

I, _____, _____ of
(Authorized Officer's Name) (Office or Position Held)

_____, certify the following:
(Name of Bidder/Offeror)

- (1) That the Bidder/Offeror holds a valid commercial place of business located in the State of Hawaii at the following address:

and that the above-named office was opened on the following date: _____,
and has been staffed by the Bidder/Offeror or an employee of the Bidder/Offeror for not less than two (2) consecutive years immediately preceding the time and date set for the opening of bids or receipt of proposals;

- (2) That the bid or proposal in response to IFB/RFP No. _____, is submitted under the name under which the Bidder/Offeror is authorized to do business in the State;
- (3) That not less than fifty-one percent (51%) of the total direct labor hours required for performance of the contract will be performed within the State; and
- (4) If the Bidder/Offeror is a joint venture, the Bidder/Offeror is composed entirely of parties meeting the requirements of paragraphs (1), (2), and (3).

I certify under penalty of perjury that the above statements are true. I agree to maintain the above qualifications throughout contract performance; any changes in eligibility shall be reported to the Contract Administrator or purchasing agency's contact person identified in the RFP/IFB. I acknowledge that failure to maintain the above qualifications triggers a price adjustment equal to the value of the preference applied and may constitute cause for debarment under HRS §103D-702.

Signature of Authorized Officer

Print Name and Title

Date

PROPOSAL SCHEDULE – AREA 1					
ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
209.1000	Installation, Maintenance, Monitoring, and Removal of BMP	FA	FA	FA	\$50,000.00
602.1000	Reinforcing Steel for Concrete Barrier Repairs	200	LB	\$ _____	\$ _____
621.1000	Invasive Species Management	FA	FA	FA	\$10,000.00
634.1000	4-Inch Portland Cement Concrete Sidewalk	45	SY	\$ _____	\$ _____
634.1010	Removing Existing PCC Sidewalk	45	SY	\$ _____	\$ _____
638.1000	Curb, Type 2D	35	LF	\$ _____	\$ _____
638.1010	Curb and Gutter, Type 2DG	35	LF	\$ _____	\$ _____
638.1030	Removing Existing Curb	35	LF	\$ _____	\$ _____
638.1040	Removing Existing Curb and Gutter	35	LF	\$ _____	\$ _____
645.1000	Traffic Control (Interstate Freeway)	1	Lane Mile	\$ _____	\$ _____
645.1001	Traffic Control (State Highway)	1	Lane Mile	\$ _____	\$ _____
645.1002	Electronic Message Board (per day)	45	EA	\$ _____	\$ _____
650.1010	Curb Ramp, Type A	1	EA	\$ _____	\$ _____
650.1020	Curb Ramp, Type B	1	EA	\$ _____	\$ _____
650.1021	Curb Ramp, Type B Modified	1	EA	\$ _____	\$ _____

PROPOSAL SCHEDULE – AREA 1					
ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
650.1030	Curb Ramp, Type C	1	EA	\$_____	\$_____
650.1031	Curb Ramp, Type C Modified	1	EA	\$_____	\$_____
650.1040	Curb Ramp, Type D	1	EA	\$_____	\$_____
650.1041	Curb Ramp, Type D Modified	1	EA	\$_____	\$_____
650.1050	Curb Ramp, Type E	1	EA	\$_____	\$_____
650.1100	Detectable Warning Mat	1	EA	\$_____	\$_____
671.1000	Protection of Endangered Species	FA	FA	FA	\$50,000.00
680.1100	Concrete Barrier Repairs – 3” or Greater Remaining	50	CF	\$_____	\$_____
680.1200	Concrete Barrier Repairs – Less than 3” Remaining	50	CF	\$_____	\$_____
680.1300	Concrete Barrier Repairs – Full Width	50	CF	\$_____	\$_____
Total Amount for Comparison of Bids – AREA 1 \$_____ NOTE: Bidders shall complete all unit prices and amounts. Failure to do so shall be grounds for rejection of bid.					

PREFERENCES FOR AREA 2

Bidders acknowledge that while preferences are considered in the evaluation of bids, the award of the contract will be in the amount of the bid offered exclusive of any preferences.

A. HAWAII BIDDER PREFERENCE

In accordance with HRS §103D-302, the Hawaii bidder preference is applicable to this solicitation for evaluation purposes only. Bidders desiring to qualify for the five per cent (5%) preference shall submit with their bid a completed *Hawaii Bidder/Offeror Preference Certification Form* (Form SPO-081) at or before the time set for receipt of bids. Certifications submitted for previous or other solicitations will not be accepted.

☐ **Yes, the Bidder elects to receive the Hawaii Bidder Preference and has included the Form SPO-081 with the bid.**

B. APPRENTICESHIP AGREEMENT PREFERENCE

In accordance with HRS §103-55.6, the estimated value of this public works contract is \$250,000 or more and the apprenticeship agreement preference is applicable to this solicitation for evaluation purposes only. Bidders desiring to qualify for the five per cent (5%) preference shall submit with their bid a complete, valid CERTIFICATION OF BIDDER'S PARTICIPATION IN APPROVED APPRENTICESHIP PROGRAM UNDER ACT 17 (Certification Form 1) *for each apprenticeable trade* the Bidder will employ on the project.

☐ **Yes, the Bidder elects to receive the Apprenticeship Agreement Preference and has attached Certification Form(s) 1 for each apprenticeable trade the Bidder will employ for this project (excluding subcontractors).**

By submission of this offer, the Bidder certifies that it has indicated **all apprenticeable trades that Bidder will employ** for this project (excluding subcontractors) by listing the applicable trades below:

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

(Attach additional sheet if necessary.)

Form 1 Required. Failure to submit a valid Form 1 with the bid for every apprenticeable trade that Bidder will employ on the project will result in the preference being denied, regardless of whether the trade is listed above. If a Form 1 is submitted for a trade that is not listed above, the Form 1 will take

precedence over the listing and may be used to qualify Bidder for the preference.

Form 2 Required. If awarded the contract with the Apprenticeship Agreement Preference applied, then for the duration of the contract, the Bidder **shall** certify each month that work is being conducted on the project that the Contractor continues to be a participant in the relevant apprenticeship program for each trade it employs. Monthly certification shall be made on the Certification Form 2 and submitted to the HDOT.

Failure to comply with the requirements of the Apprenticeship Agreement Preference program will subject the Contractor to sanctions pursuant to HRS §103-55.6.

C. HAWAII PRODUCTS PREFERENCE

Hawaii Products Preference shall not apply to this solicitation.

D. RECYCLED PRODUCT PREFERENCE

Recycled Product Preference shall not apply to this solicitation.



STATE OF HAWAII
Hawaii Bidder/Offeror Preference
Certification Form
(As Defined in HRS 103D-1001)
AREA 2

I, _____, _____ of
(Authorized Officer's Name) (Office or Position Held)

_____, certify the following:
(Name of Bidder/Offeror)

- (1) That the Bidder/Offeror holds a valid commercial place of business located in the State of Hawaii at the following address:

and that the above-named office was opened on the following date: _____,

and has been staffed by the Bidder/Offeror or an employee of the Bidder/Offeror for not less than two (2) consecutive years immediately preceding the time and date set for the opening of bids or receipt of proposals;

- (2) That the bid or proposal in response to IFB/RFP No. _____, is submitted under the name under which the Bidder/Offeror is authorized to do business in the State;
- (3) That not less than fifty-one percent (51%) of the total direct labor hours required for performance of the contract will be performed within the State; and
- (4) If the Bidder/Offeror is a joint venture, the Bidder/Offeror is composed entirely of parties meeting the requirements of paragraphs (1), (2), and (3).

I certify under penalty of perjury that the above statements are true. I agree to maintain the above qualifications throughout contract performance; any changes in eligibility shall be reported to the Contract Administrator or purchasing agency's contact person identified in the RFP/IFB. I acknowledge that failure to maintain the above qualifications triggers a price adjustment equal to the value of the preference applied and may constitute cause for debarment under HRS §103D-702.

Signature of Authorized Officer

Print Name and Title

Date

PROPOSAL SCHEDULE – AREA 2					
ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
209.2000	Installation, Maintenance, Monitoring, and Removal of BMP	FA	FA	FA	\$50,000.00
602.2000	Reinforcing Steel for Concrete Barrier Repairs	200	LB	\$ _____	\$ _____
621.2000	Invasive Species Management	FA	FA	FA	\$10,000.00
634.2000	4-Inch Portland Cement Concrete Sidewalk	45	SY	\$ _____	\$ _____
634.2010	Removing Existing PCC Sidewalk	45	SY	\$ _____	\$ _____
638.2000	Curb, Type 2D	35	LF	\$ _____	\$ _____
638.2010	Curb and Gutter, Type 2DG	35	LF	\$ _____	\$ _____
638.2030	Removing Existing Curb	35	LF	\$ _____	\$ _____
638.2040	Removing Existing Curb and Gutter	35	LF	\$ _____	\$ _____
645.2000	Traffic Control (Interstate Freeway)	1	Lane Mile	\$ _____	\$ _____
645.2001	Traffic Control (State Highway)	1	Lane Mile	\$ _____	\$ _____
645.2002	Electronic Message Board (per day)	45	EA	\$ _____	\$ _____
650.2010	Curb Ramp, Type A	1	EA	\$ _____	\$ _____
650.2020	Curb Ramp, Type B	1	EA	\$ _____	\$ _____
650.2021	Curb Ramp, Type B Modified	1	EA	\$ _____	\$ _____

PROPOSAL SCHEDULE – AREA 2					
ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
650.2030	Curb Ramp, Type C	1	EA	\$_____	\$_____
650.2031	Curb Ramp, Type C Modified	1	EA	\$_____	\$_____
650.2040	Curb Ramp, Type D	1	EA	\$_____	\$_____
650.2041	Curb Ramp, Type D Modified	1	EA	\$_____	\$_____
650.2050	Curb Ramp, Type E	1	EA	\$_____	\$_____
650.2100	Detectable Warning Mat	1	EA	\$_____	\$_____
671.2000	Protection of Endangered Species	FA	FA	FA	\$50,000.00
680.2100	Concrete Barrier Repairs – 3” or Greater Remaining	50	CF	\$_____	\$_____
680.2200	Concrete Barrier Repairs – Less than 3” Remaining	50	CF	\$_____	\$_____
680.2300	Concrete Barrier Repairs – Full Width	50	CF	\$_____	\$_____
Total Amount for Comparison of Bids – AREA 2 \$_____ NOTE: Bidders shall complete all unit prices and amounts. Failure to do so shall be grounds for rejection of bid.					

PREFERENCES FOR AREA 3

Bidders acknowledge that while preferences are considered in the evaluation of bids, the award of the contract will be in the amount of the bid offered exclusive of any preferences.

A. HAWAII BIDDER PREFERENCE

In accordance with HRS §103D-302, the Hawaii bidder preference is applicable to this solicitation for evaluation purposes only. Bidders desiring to qualify for the five per cent (5%) preference shall submit with their bid a completed *Hawaii Bidder/Offeror Preference Certification Form* (Form SPO-081) at or before the time set for receipt of bids. Certifications submitted for previous or other solicitations will not be accepted.

☐ **Yes, the Bidder elects to receive the Hawaii Bidder Preference and has included the Form SPO-081 with the bid.**

B. APPRENTICESHIP AGREEMENT PREFERENCE

In accordance with HRS §103-55.6, the estimated value of this public works contract is \$250,000 or more and the apprenticeship agreement preference is applicable to this solicitation for evaluation purposes only. Bidders desiring to qualify for the five per cent (5%) preference shall submit with their bid a complete, valid CERTIFICATION OF BIDDER'S PARTICIPATION IN APPROVED APPRENTICESHIP PROGRAM UNDER ACT 17 (Certification Form 1) *for each apprenticeable trade* the Bidder will employ on the project.

☐ **Yes, the Bidder elects to receive the Apprenticeship Agreement Preference and has attached Certification Form(s) 1 for each apprenticeable trade the Bidder will employ for this project (excluding subcontractors).**

By submission of this offer, the Bidder certifies that it has indicated **all apprenticeable trades that Bidder will employ** for this project (excluding subcontractors) by listing the applicable trades below:

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

(Attach additional sheet if necessary.)

Form 1 Required. Failure to submit a valid Form 1 with the bid for every apprenticeable trade that Bidder will employ on the project will result in the preference being denied, regardless of whether the trade is listed above. If a Form 1 is submitted for a trade that is not listed above, the Form 1 will take

precedence over the listing and may be used to qualify Bidder for the preference.

Form 2 Required. If awarded the contract with the Apprenticeship Agreement Preference applied, then for the duration of the contract, the Bidder **shall** certify each month that work is being conducted on the project that the Contractor continues to be a participant in the relevant apprenticeship program for each trade it employs. Monthly certification shall be made on the Certification Form 2 and submitted to the HDOT.

Failure to comply with the requirements of the Apprenticeship Agreement Preference program will subject the Contractor to sanctions pursuant to HRS §103-55.6.

C. HAWAII PRODUCTS PREFERENCE

Hawaii Products Preference shall not apply to this solicitation.

D. RECYCLED PRODUCT PREFERENCE

Recycled Product Preference shall not apply to this solicitation.



STATE OF HAWAII
Hawaii Bidder/Offoror Preference
Certification Form
(As Defined in HRS 103D-1001)
AREA 3

I, _____, _____ of
(Authorized Officer's Name) (Office or Position Held)

_____, certify the following:
(Name of Bidder/Offoror)

- (1) That the Bidder/Offoror holds a valid commercial place of business located in the State of Hawaii at the following address:

and that the above-named office was opened on the following date: _____,

and has been staffed by the Bidder/Offoror or an employee of the Bidder/Offoror for not less than two (2) consecutive years immediately preceding the time and date set for the opening of bids or receipt of proposals;

- (2) That the bid or proposal in response to IFB/RFP No. _____, is submitted under the name under which the Bidder/Offoror is authorized to do business in the State;
- (3) That not less than fifty-one percent (51%) of the total direct labor hours required for performance of the contract will be performed within the State; and
- (4) If the Bidder/Offoror is a joint venture, the Bidder/Offoror is composed entirely of parties meeting the requirements of paragraphs (1), (2), and (3).

I certify under penalty of perjury that the above statements are true. I agree to maintain the above qualifications throughout contract performance; any changes in eligibility shall be reported to the Contract Administrator or purchasing agency's contact person identified in the RFP/IFB. I acknowledge that failure to maintain the above qualifications triggers a price adjustment equal to the value of the preference applied and may constitute cause for debarment under HRS §103D-702.

Signature of Authorized Officer

Print Name and Title

Date

PROPOSAL SCHEDULE – AREA 3					
ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
209.3000	Installation, Maintenance, Monitoring, and Removal of BMP	FA	FA	FA	\$50,000.00
602.3000	Reinforcing Steel for Concrete Barrier Repairs	200	LB	\$ _____	\$ _____
621.3000	Invasive Species Management	FA	FA	FA	\$10,000.00
634.3000	4-Inch Portland Cement Concrete Sidewalk	45	SY	\$ _____	\$ _____
634.3010	Removing Existing PCC Sidewalk	45	SY	\$ _____	\$ _____
638.3000	Curb, Type 2D	35	LF	\$ _____	\$ _____
638.3010	Curb and Gutter, Type 2DG	35	LF	\$ _____	\$ _____
638.3030	Removing Existing Curb	35	LF	\$ _____	\$ _____
638.3040	Removing Existing Curb and Gutter	35	LF	\$ _____	\$ _____
645.3000	Traffic Control (Interstate Freeway)	1	Lane Mile	\$ _____	\$ _____
645.3001	Traffic Control (State Highway)	1	Lane Mile	\$ _____	\$ _____
645.3002	Electronic Message Board (per day)	45	EA	\$ _____	\$ _____
650.3010	Curb Ramp, Type A	1	EA	\$ _____	\$ _____
650.3020	Curb Ramp, Type B	1	EA	\$ _____	\$ _____
650.3021	Curb Ramp, Type B Modified	1	EA	\$ _____	\$ _____

PROPOSAL SCHEDULE – AREA 3					
ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
650.3030	Curb Ramp, Type C	1	EA	\$_____	\$_____
650.3031	Curb Ramp, Type C Modified	1	EA	\$_____	\$_____
650.3040	Curb Ramp, Type D	1	EA	\$_____	\$_____
650.3041	Curb Ramp, Type D Modified	1	EA	\$_____	\$_____
650.3050	Curb Ramp, Type E	1	EA	\$_____	\$_____
650.3100	Detectable Warning Mat	1	EA	\$_____	\$_____
671.3000	Protection of Endangered Species	FA	FA	FA	\$50,000.00
680.3100	Concrete Barrier Repairs – 3” or Greater Remaining	50	CF	\$_____	\$_____
680.3200	Concrete Barrier Repairs – Less than 3” Remaining	50	CF	\$_____	\$_____
680.3300	Concrete Barrier Repairs – Full Width	50	CF	\$_____	\$_____
Total Amount for Comparison of Bids – AREA 3 \$_____ NOTE: Bidders shall complete all unit prices and amounts. Failure to do so shall be grounds for rejection of bid.					

PREFERENCES FOR AREA 4

Bidders acknowledge that while preferences are considered in the evaluation of bids, the award of the contract will be in the amount of the bid offered exclusive of any preferences.

A. HAWAII BIDDER PREFERENCE

In accordance with HRS §103D-302, the Hawaii bidder preference is applicable to this solicitation for evaluation purposes only. Bidders desiring to qualify for the five per cent (5%) preference shall submit with their bid a completed *Hawaii Bidder/Offeror Preference Certification Form* (Form SPO-081) at or before the time set for receipt of bids. Certifications submitted for previous or other solicitations will not be accepted.

☐ **Yes, the Bidder elects to receive the Hawaii Bidder Preference and has included the Form SPO-081 with the bid.**

B. APPRENTICESHIP AGREEMENT PREFERENCE

In accordance with HRS §103-55.6, the estimated value of this public works contract is \$250,000 or more and the apprenticeship agreement preference is applicable to this solicitation for evaluation purposes only. Bidders desiring to qualify for the five per cent (5%) preference shall submit with their bid a complete, valid CERTIFICATION OF BIDDER'S PARTICIPATION IN APPROVED APPRENTICESHIP PROGRAM UNDER ACT 17 (Certification Form 1) *for each apprenticeable trade* the Bidder will employ on the project.

☐ **Yes, the Bidder elects to receive the Apprenticeship Agreement Preference and has attached Certification Form(s) 1 for each apprenticeable trade the Bidder will employ for this project (excluding subcontractors).**

By submission of this offer, the Bidder certifies that it has indicated **all apprenticeable trades that Bidder will employ** for this project (excluding subcontractors) by listing the applicable trades below:

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

(Attach additional sheet if necessary.)

Form 1 Required. Failure to submit a valid Form 1 with the bid for every apprenticeable trade that Bidder will employ on the project will result in the preference being denied, regardless of whether the trade is listed above. If a Form 1 is submitted for a trade that is not listed above, the Form 1 will take

precedence over the listing and may be used to qualify Bidder for the preference.

Form 2 Required. If awarded the contract with the Apprenticeship Agreement Preference applied, then for the duration of the contract, the Bidder **shall** certify each month that work is being conducted on the project that the Contractor continues to be a participant in the relevant apprenticeship program for each trade it employs. Monthly certification shall be made on the Certification Form 2 and submitted to the HDOT.

Failure to comply with the requirements of the Apprenticeship Agreement Preference program will subject the Contractor to sanctions pursuant to HRS §103-55.6.

C. HAWAII PRODUCTS PREFERENCE

Hawaii Products Preference shall not apply to this solicitation.

D. RECYCLED PRODUCT PREFERENCE

Recycled Product Preference shall not apply to this solicitation.



STATE OF HAWAII
Hawaii Bidder/Offeror Preference
Certification Form
(As Defined in HRS 103D-1001)
AREA 4

I, _____, _____ of
(Authorized Officer's Name) (Office or Position Held)

_____, certify the following:
(Name of Bidder/Offeror)

- (1) That the Bidder/Offeror holds a valid commercial place of business located in the State of Hawaii at the following address:

and that the above-named office was opened on the following date: _____,
and has been staffed by the Bidder/Offeror or an employee of the Bidder/Offeror for not less than two (2) consecutive years immediately preceding the time and date set for the opening of bids or receipt of proposals;

- (2) That the bid or proposal in response to IFB/RFP No. _____, is submitted under the name under which the Bidder/Offeror is authorized to do business in the State;
- (3) That not less than fifty-one percent (51%) of the total direct labor hours required for performance of the contract will be performed within the State; and
- (4) If the Bidder/Offeror is a joint venture, the Bidder/Offeror is composed entirely of parties meeting the requirements of paragraphs (1), (2), and (3).

I certify under penalty of perjury that the above statements are true. I agree to maintain the above qualifications throughout contract performance; any changes in eligibility shall be reported to the Contract Administrator or purchasing agency's contact person identified in the RFP/IFB. I acknowledge that failure to maintain the above qualifications triggers a price adjustment equal to the value of the preference applied and may constitute cause for debarment under HRS §103D-702.

Signature of Authorized Officer

Print Name and Title

Date

PROPOSAL SCHEDULE – AREA 4					
ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
209.4000	Installation, Maintenance, Monitoring, and Removal of BMP	FA	FA	FA	\$50,000.00
602.4000	Reinforcing Steel for Concrete Barrier Repairs	200	LB	\$ _____	\$ _____
621.4000	Invasive Species Management	FA	FA	FA	\$10,000.00
634.4000	4-Inch Portland Cement Concrete Sidewalk	45	SY	\$ _____	\$ _____
634.4010	Removing Existing PCC Sidewalk	45	SY	\$ _____	\$ _____
638.4000	Curb, Type 2D	35	LF	\$ _____	\$ _____
638.4010	Curb and Gutter, Type 2DG	35	LF	\$ _____	\$ _____
638.4030	Removing Existing Curb	35	LF	\$ _____	\$ _____
638.4040	Removing Existing Curb and Gutter	35	LF	\$ _____	\$ _____
645.4000	Traffic Control (Interstate Freeway)	1	Lane Mile	\$ _____	\$ _____
645.4001	Traffic Control (State Highway)	1	Lane Mile	\$ _____	\$ _____
645.4002	Electronic Message Board (per day)	45	EA	\$ _____	\$ _____
650.4010	Curb Ramp, Type A	1	EA	\$ _____	\$ _____
650.4020	Curb Ramp, Type B	1	EA	\$ _____	\$ _____
650.4021	Curb Ramp, Type B Modified	1	EA	\$ _____	\$ _____

PROPOSAL SCHEDULE – AREA 4					
ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
650.4030	Curb Ramp, Type C	1	EA	\$_____	\$_____
650.4031	Curb Ramp, Type C Modified	1	EA	\$_____	\$_____
650.4040	Curb Ramp, Type D	1	EA	\$_____	\$_____
650.4041	Curb Ramp, Type D Modified	1	EA	\$_____	\$_____
650.4050	Curb Ramp, Type E	1	EA	\$_____	\$_____
650.4100	Detectable Warning Mat	1	EA	\$_____	\$_____
671.4000	Protection of Endangered Species	FA	FA	FA	\$50,000.00
680.4100	Concrete Barrier Repairs – 3” or Greater Remaining	50	CF	\$_____	\$_____
680.4200	Concrete Barrier Repairs – Less than 3” Remaining	50	CF	\$_____	\$_____
680.4300	Concrete Barrier Repairs – Full Width	50	CF	\$_____	\$_____
Total Amount for Comparison of Bids – AREA 4 \$_____ NOTE: Bidders shall complete all unit prices and amounts. Failure to do so shall be grounds for rejection of bid.					

PROPOSAL SCHEDULE – SUMMARY	
	AMOUNT
TOTAL AMOUNT FOR COMPARISON OF BIDS – AREA 1	\$ _____
TOTAL AMOUNT FOR COMPARISON OF BIDS – AREA 2	\$ _____
TOTAL AMOUNT FOR COMPARISON OF BIDS – AREA 3	\$ _____
TOTAL AMOUNT FOR COMPARISON OF BIDS – AREA 4	\$ _____

1 **PROPOSAL SCHEDULE**

2
3 The bidder is directed to Subsection 105.16 – Subcontracts.

4
5 The bidder is directed to Section 717 – Cullet and Cullet-Made Materials
6 regarding recycling of waste glass.

7
8 For each area, the “Total Amount for Comparison of Bids” shall be used to
9 determine the lowest responsible bidder.

10
11 Notes:

- 12
13 1. Bids shall include all Federal, State, County and other applicable taxes and
14 fees.
15
16 2. Bidders shall complete all unit prices and amounts. Failure to do so shall
17 be grounds for rejection of bid.
18
19 3. If a discrepancy occurs between unit bid price and the bid price, the unit bid
20 price shall govern.

- 21
22 4. **Bidders shall submit and upload the complete proposal to HlePRO**
23 **prior to the bid opening date and time. Proposals received after said**
24 **due date and time shall not be considered. Any additional support**
25 **documents explicitly designated as confidential and/or proprietary**
26 **shall be uploaded as a separate file to HlePRO. Bidders shall not**
27 **include confidential and/or proprietary documents with the proposal.**
28 **The record of each bidder and respective bid shall be open to public**
29 **inspection. Original (wet ink, hard copy) proposal documents are not**
30 **required to be submitted. Contract award shall be based on evaluation**
31 **of proposals submitted and uploaded to HlePRO.**
32 **FAILURE TO UPLOAD THE COMPLETE PROPOSAL TO HlePRO**
33 **SHALL BE GROUNDS FOR REJECTION OF THE BID.**

34
35 If there is a conflict between the specification document and the HlePRO
36 solicitation, the specifications shall govern and control, unless otherwise
37 specified.

- 38
39 5. Bid prices are for travel time, mileage, and furnishing all labor, tools, traffic
40 controls, all applicable taxes, fees, and equipment necessary for all work
41 shown and called for in accordance with the true intent and meaning of the
42 specifications.
43
44 6. Bidder may bid on any or all areas. To be considered, bidder shall submit
45 a bid for all items within an area. Separate contracts will be awarded for
46 each area, but if a bidder is determined the lowest bidder for multiple areas,
47 one combined contract will be awarded.

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7. Any contract which is awarded shall be an open-ended contract since the exact value of work to be performed during the contract period cannot be determined beforehand. The unit price for each item of work on any particular work order shall be that which corresponds to the quantity of work for that item actually performed for each work order.
 8. The sum of all work and materials required to perform the required repairs are issued on a "single work order". A single work order shall be a work order submitted by the Contractor for work that can be performed by the Contractor without relocating a distance of more than 3,000 feet between any two adjacent repair locations.
 9. The quantities on the proposal schedule are for bidding purposes only, and this is no guarantee of the quantity of work that will be issued.

SURETY BID BOND

Bond No. _____

KNOW TO ALL BY THESE PRESENTS:

That we, _____
(full name or legal title of offeror)
as Offeror, hereinafter called the Principal, and

(name of bonding company)
as Surety, hereinafter called Surety, a corporation authorized to transact business as
Surety in the State of Hawaii, are held and firmly bound unto

(State/county entity)
as Owner, hereinafter called Owner, in the penal sum of

(required amount of bid security)
Dollars(\$ _____), lawful money of the United States of America, for the
payment of which sum well and truly to be made, the said Principal and the said Surety
bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and
severally, firmly by these presents.

WHEREAS:

The Principal has submitted an offer for

(project by number and brief description)

NOW, THEREFORE:

The condition of this obligation is such that if the Owner shall reject said offer, or
in the alternate, accept the offer of the Principal and the Principal shall enter into a
contract with the Owner in accordance with the terms of such offer, and give such bond
or bonds as may be specified in the solicitation or Contract Documents with good and
sufficient surety for the faithful performance of such Contract and for the prompt payment
of labor and material furnished in the prosecution thereof as specified in the solicitation
then this obligation shall be null and void, otherwise to remain in full force and effect.

Signed this _____ day of _____, _____

Name of Principal (Offeror)

(Seal)

Signature

Print Name and Title

Name of Surety

(Seal)

Signature

Print Name and Title

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HONOLULU, HAWAII

FORMS

Contents

Contract

Performance Bond (Surety)

Performance Bond

Labor and Material Payment Bond (Surety)

Labor and Material Payment Bond

Chapter 104 Compliance Certificate

Certification of Compliance for Employment of State Residents

CONTRACT

THIS AGREEMENT, made this day of _____, by and between the STATE OF HAWAII, by its Director of Transportation, hereinafter referred to as "STATE", and «CONTRACTOR», «STATE_OF_INCORPORATION», whose business/post office address is «ADDRESS», hereinafter referred to as CONTRACTOR";

WITNESSETH: That for and in consideration of the payments hereinafter mentioned, the CONTRACTOR hereby covenants and agrees with the STATE to complete in place, furnish and pay for all labor and materials necessary for "«PROJECT_NAME_AND_NO»", or such a part thereof as shall be required by the STATE, the total amount of which labor, material and construction shall be computed at the unit and/or lump sum prices set forth in the attached proposal schedule and shall be the sum of «BASIC»----DOLLARS (\$«BASIC_NUMERIC») as follows:

TOTAL AMOUNT FOR COMPARISON OF BIDS.....\$«BASIC_NUMERIC»

which sum shall be provided from State funds, all in accordance with the specifications, the special provisions, if any, the notice to bidders, the instructions to bidders, the proposal and plans for «PROJECT_NO_ONLY», and any supplements thereto, on file in the office of the Director of Transportation. These documents, together with all alterations, amendments, and additions thereto and deductions therefrom, are attached hereto or incorporated herein by reference and made a part of this contract.

The CONTRACTOR hereby covenants and agrees to complete such construction within «WORKING_DAYS» from the date indicated in the Notice to Proceed from the State subject, however, to such extensions as may be provided for in writing under the specifications.

For and in consideration of the covenants, undertakings and agreements of the CONTRACTOR herein set forth and upon the full and faithful performance thereof by the CONTRACTOR, the STATE hereby agrees to pay the CONTRACTOR the sum of «BASIC»---DOLLARS (\$«BASIC_NUMERIC») in lawful money, but not more than such part of the same as is actually earned according to the STATE's determination of the actual quantities of work performed and materials furnished by the CONTRACTOR at the unit or lump sum prices set forth in the attached proposal schedule. Such payment, including any extras, shall be made, subject to such additions or deductions hereto or hereafter made in the manner and at the time prescribed in the specifications and this contract.

An additional sum of «EXTRAS»-----DOLLARS (\$«EXTRA_NUMERIC») is hereby provided for extra work.

All words used herein in the singular shall extend to and include the plural. All words used in the plural shall extend to and include the singular. The use of any gender shall extend to and include all genders.

IN WITNESS WHEREOF, the parties hereto have caused this instrument to be duly executed the day and year first above written.

STATE OF HAWAII

Director of Transportation

«CONTRACTOR»

(Seal)

Signature

Print name

Print Title

Date

PERFORMANCE BOND (SURETY)
(6/21/07)

KNOW TO ALL BY THESE PRESENTS:

That _____,
(Full Legal Name and Street Address of Contractor)

as Contractor, hereinafter called Principal, and _____

(Name and Street Address of Bonding Company)

as Surety, hereinafter called Surety, a corporation(s) authorized to transact business as a
surety in the State of Hawaii, are held and firmly bound unto the _____,
(State/County Entity)

its successors and assigns, hereinafter called Obligee, in the amount of _____

DOLLARS (\$ _____), to which payment Principal and Surety bind themselves,
their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by
these presents.

WHEREAS, the above-bound Principal has signed a Contract with Obligee on
_____, for the following project: _____

hereinafter called Contract, which Contract is incorporated herein by reference and made a part
hereof.

NOW THEREFORE, the condition of this obligation is such that:

If the Principal shall promptly and faithfully perform, and fully complete the Contract in
strict accordance with the terms of the Contract as said Contract may be modified or amended
from time to time; then this obligation shall be void; otherwise to remain in full force and effect.

Surety to this Bond hereby stipulates and agrees that no changes, extensions of time, alterations, or additions to the terms of the Contract, including the work to be performed thereunder, and the specifications or drawings accompanying same, shall in any way affect its obligation on this bond, and it does hereby waive notice of any such changes, extensions of time, alterations, or additions, and agrees that they shall become part of the Contract.

In the event of Default by the Principal, of the obligations under the Contract, then after written Notice of Default from the Obligee to the Surety and the Principal and subject to the limitation of the penal sum of this bond, Surety shall remedy the Default, or take over the work to be performed under the Contract and complete such work, or pay moneys to the Obligee in satisfaction of the surety's performance obligation on this bond.

Signed this _____ day of _____, _____.

(Seal)

Name of Principal (Contractor)

*

Signature

Title

(Seal)

Name of Surety

*

Signature

Title

*ALL SIGNATURES MUST BE ACKNOWLEDGED
BY A NOTARY PUBLIC

PERFORMANCE BOND

KNOW ALL BY THESE PRESENTS:

That we, _____
(full legal name and street address of Contractor)

as Contractor, hereinafter called Contractor, is held and firmly bound unto the

(State/County entity)

its successors and assigns, as Oblige, hereinafter called Oblige, in the amount

_____ DOLLARS
(\$ _____),
(Dollar amount of Contract)

lawful money of the United States of America, for the payment of which to the said Oblige, well and truly to be made, Contractor binds itself, its heir, executors, administrators, successors and assigns, firmly by these presents. Said amount is evidenced by:

- ☐ **Legal Tender;**
- ☐ **Share Certificate** unconditionally assigned to or made payable at sight to _____
Description: _____;
- ☐ **Certificate of Deposit, No.** _____, dated _____
issued _____ by _____
on _____ a _____
bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;
- ☐ **Cashier's Check No.** _____, dated _____
drawn _____ on _____
a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;
- ☐ **Teller's Check No.** _____, dated _____
drawn _____ on _____
a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;
- ☐ **Treasurer's Check No.** _____, dated _____
drawn _____ on _____
a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;
- ☐ **Official Check No.** _____, dated _____
drawn _____ on _____
a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;

- ☐ **Certified Check No.** _____, dated _____, accepted by a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;

WHEREAS:

The Contractor has by written agreement dated _____ entered into a contract with Obligee for the following Project: _____

_____ hereinafter called Contract, which Contract is incorporated herein by reference and made a part hereof.

NOW THEREFORE,

The Condition of this obligation is such that, if Contractor shall promptly and faithfully perform the Contract in accordance with, in all respects, the stipulations, agreements, covenants and conditions of the Contract as it now exists or may be modified according to its terms, and shall deliver the Project to the Obligee, or to its successors or assigns, fully completed as in the Contract specified and free from all liens and claims and without further cost, expense or charge to the Obligee, its officers, agents, successors or assigns, free and harmless from all suits or actions of every nature and kind which may be brought for or on account of any injury or damage, direct or indirect, arising or growing out of the doing of said work or the repair or maintenance thereof or the manner of doing the same or the neglect of the Contractor or its agents or servants or the improper performance of the Contract by the Contractor or its agents or servants or from any other cause, then this obligation shall be void; otherwise it shall be and remain in full force and effect.

AND IT IS HEREBY STIPULATED AND AGREED that suit on this bond may be brought before a court of competent jurisdiction without a jury, and that the sum or sums specified in the said Contract as liquidated damages, if any, shall be forfeited to the Obligee, its successors or assigns, in the event of a breach of any, or all, or any part of, covenants, agreements, conditions, or stipulations contained in the Contract or in this bond in accordance with the terms thereof.

The amount of this bond may be reduced by and to the extent of any payment or payments made in good faith hereunder.

Signed and sealed this _____ day of _____, _____.

(Seal) _____
Name of Contractor

* _____
Signature

Title

*ALL SIGNATURES MUST BE
ACKNOWLEDGED BY A NOTARY PUBLIC

LABOR AND MATERIAL PAYMENT BOND (SURETY)
(6/21/07)

KNOW TO ALL BY THESE PRESENTS:

That _____,
(Full Legal Name and Street Address of Contractor)

as Contractor, hereinafter called Principal, and _____

_____,
(Name and Street Address of Bonding Company)

as Surety, hereinafter called Surety, a corporation(s) authorized to transact business as a surety in the State of Hawaii, are held and firmly bound unto the _____,
(State/County Entity)

its successors and assigns, hereinafter called Obligee, in the amount of _____

_____ Dollars (\$ _____), to which payment Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the above-bound Principal has signed Contract with the Obligee on _____ for the following project: _____

_____ hereinafter called Contract, which Contract is incorporated herein by reference and made a part hereof.

NOW THEREFORE, the condition of this obligation is such that if the Principal shall promptly make payment to any Claimant, as hereinafter defined, for all labor and materials supplied to the Principal for use in the performance of the Contract, then this obligation shall be void; otherwise to remain in full force and effect.

1. Surety to this Bond hereby stipulates and agrees that no changes, extensions of time, alterations, or additions to the terms of the Contract, including the work to be performed thereunder, and the specifications or drawings accompanying same, shall in any way affect its obligation on this bond, and it does hereby waive notice of any such changes, extensions of time, alterations, or additions, and agrees that they shall become part of the Contract.

2. A "Claimant" shall be defined herein as any person who has furnished labor or materials to the Principal for the work provided in the Contract.

Every Claimant who has not been paid amounts due for labor and materials furnished for work provided in the Contract may institute an action against the Principal and its Surety on this bond at the time and in the manner prescribed in Section 103D-324, Hawaii Revised Statutes, and have the rights and claims adjudicated in the action, and judgment rendered thereon; subject to the Obligee's priority on this bond. If the full amount of the liability of the Surety on this bond is insufficient to pay the full amount of the claims, then after paying the full amount due the Obligee, the remainder shall be distributed pro rata among the claimants.

Signed this _____ day of _____, _____.

(Seal)

Name of Principal (Contractor)

*

Signature

Title

(Seal)

Name of Surety

*

Signature

Title

*ALL SIGNATURES MUST BE ACKNOWLEDGED
BY A NOTARY PUBLIC

LABOR AND MATERIAL PAYMENT BOND

KNOW ALL BY THESE PRESENTS:

That we, _____
(full legal name and street address of Contractor)
as Contractor, hereinafter called Contractor, is held and firmly bound unto _____
(State/County entity)
its successors and assigns, as Obligee, hereinafter called Obligee, in the amount
_____ DOLLARS (\$ _____),
(Dollar amount of Contract)

lawful money of the United States of America, for the payment of which to the said Obligee, well and truly to be made, Contractor binds itself, its heir, executors, administrators, successors and assigns, firmly by these presents. Said amount is evidenced by:

- ☐ **Legal Tender;**
- ☐ **Share Certificate** unconditionally assigned to or made payable at sight to _____
Description: _____
- ☐ **Certificate of Deposit, No.** _____, dated _____
issued by _____
drawn on _____
a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;
- ☐ **Cashier's Check No.** _____, dated _____
drawn on _____
a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;
- ☐ **Teller's Check No.** _____, dated _____
drawn on _____
a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;
- ☐ **Treasurer's Check No.** _____, dated _____
drawn on _____
a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;
- ☐ **Official Check No.** _____, dated _____
drawn on _____
a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;
- ☐ **Certified Check No.** _____, dated _____
accepted by a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;

WHEREAS:

The Contractor has by written agreement dated _____
entered into a contract with Obligee for the following Project: _____

hereinafter called Contract, which Contract is incorporated herein by reference and made a part hereof.

NOW THEREFORE,

The condition of this obligation is such that, if Contractor shall promptly and faithfully perform the Contract in accordance with, in all respects, the stipulations, agreements, covenants and conditions of the Contract as it now exists or may be modified according to its terms, free from all liens and claims and without further cost, expense or charge to the Obligee, its officers, agents, successors or assigns, free and harmless from all suits or actions of every nature and kind which may be brought for or on account of any injury or damage, direct or indirect, arising or growing out of the doing of said work or the repair or maintenance thereof or the manner of doing the same or the neglect of the Contractor or its agents or servants or the improper performance of the Contract by the Contractor or its agents or servants or from any other cause, then this obligation shall be void; otherwise it shall be and remain in full force and effect.

AND IT IS HEREBY STIPULATED AND AGREED that suit on this bond may be brought before a court of competent jurisdiction without a jury, and that the sum or sums specified in the said Contract as liquidated damages, if any, shall be forfeited to the Obligee, its successors or assigns, in the event of a breach of any, or all, or any part of, covenants, agreements, conditions, or stipulations contained in the Contract or in this bond in accordance with the terms thereof.

AND IT IS HEREBY STIPULATED AND AGREED that this bond shall inure to the benefit of any and all persons entitled to file claims for labor performed or materials furnished in said work so as to give any and all such persons a right of action as contemplated by Sections 103D-324(d) and 103D-324(e), Hawaii Revised Statutes.

The amount of this bond may be reduced by and to the extent of any payment or payments made in good faith hereunder, inclusive of the payments of mechanics' liens which may be filed of record against the Project, whether or not claim for the amount of such lien be presented under and against this bond.

Signed this _____ day of _____, _____.

(Seal) _____
Name of Contractor

* _____
Signature

Title

*ALL SIGNATURES MUST BE
ACKNOWLEDGED BY A NOTARY PUBLIC

CHAPTER 104, HRS COMPLIANCE CERTIFICATE

The undersigned bidder does hereby certify to the following:

1. Individuals engaged in the performance of the contract on the job site shall be paid:
 - A. Not less than the wages that the director of labor and industrial relations shall have determined to be prevailing for corresponding classes of laborers and mechanics employed on public works projects; and
 - B. Overtime compensation at one and one-half times the basic hourly rate plus fringe benefits for hours worked on Saturday, Sunday, or a legal holiday of the State or in excess of eight hours on any other day.
2. All applicable laws of the federal and state governments relating to workers' compensation, unemployment compensation, payment of wages, and safety shall be fully complied with.

DATED at Honolulu, Hawaii, this _____ day of _____, 20__.

«CONTRACTOR»

Name of Corporation, Partnership, or Individual

Signature and Title of Signer

Notary Seal
NOTARY ACKNOWLEDGEMENT

Subscribed and sworn before me this _____ day of _____
Notary signature _____
Notary public, State of _____
My Commission Expires: _____

Notary Seal
NOTARY CERTIFICATION

Doc. Date: _____ #Pages: _____
Notary Name: _____ Circuit _____
Doc. Description: _____

Notary signature _____
Date _____

PROVISIONS TO BE INCLUDED IN CONSTRUCTION PROCUREMENT SOLICITATIONS

1. Definitions for terms used in HRS Chapter 103B as amended by Act 192, SLH 2011:
 - a. "Contract" means contracts for construction under 103D, HRS.
 - b. "Contractor" has the same meaning as in Section 103D-104, HRS, provided that "contractor" includes a subcontractor where applicable.
 - c. "Construction" has the same meaning as in Section 103D-104, HRS.
 - d. "General Contractor" means any person having a construction contract with a governmental body.
 - e. "Procurement Officer" has the same meaning as in Section 103D-104, HRS.
 - f. "Resident" means a person who is physically present in the State of Hawai'i at the time the person claims to have established the person's domicile in the State of Hawai'i and shows the person's intent is to make Hawai'i the person's primary residence.
 - g. "Shortage trade" means a construction trade in which there is a shortage of Hawai'i residents qualified to work in the trade as determined by the Department of Labor and Industrial Relations.
2. HRS Chapter 103B as amended by Act 192, SLH 2011--Employment of State Residents Requirements:
 - a. A Contractor awarded a contract shall ensure that Hawai'i residents comprise not less than 80% of the workforce employed to perform the contract work on the project. The 80% requirement shall be determined by dividing the total number of hours worked on the contract by Hawai'i residents, by the total number of hours worked on the contract by all employees of the Contractor in the performance of the contract. The hours worked by any Subcontractor of the Contractor shall count towards the calculation for this section. The hours worked by employees within shortage trades, as determined by the Department of Labor and Industrial Relations (DLIR), shall not be included in the calculation for this section.

- b. Prior to award of a contract, an Offeror/Bidder may withdraw an offer/bid without penalty if the Offeror/Bidder finds that it is unable to comply with HRS Chapter 103B as amended by Act 192, SLH 2011.
- c. Prior to starting any construction work, the Contractor shall submit the subcontract dollar amount for each of its Subcontractors.
- d. The requirements of this section shall apply to any subcontract of \$50,000 or more in connection with the Contractor; that is, such Subcontractors must also ensure that Hawai'i residents comprise not less than 80% of the Subcontractor's workforce used to perform the subcontract.
- e. The Contractor and any Subcontractor whose subcontract is \$50,000 or more shall comply with the requirements of HRS Chapter 103B as amended by Act 192, SLH 2011.
 - 1) Certification of compliance shall be made in writing under oath by an officer of the General Contractor and applicable Subcontractors and submitted with the final payment request.
 - 2) The certification of compliance shall be made under oath by an officer of the company by completing a "Certification of Compliance for Employment of State Residents" form and executing the Certificate before a licensed notary public.
 - 3) In addition to the certification of compliance as indicated above, the Contractor and Subcontractors shall maintain records such as certified payrolls for laborers and mechanics who performed work at the site and time sheets for all other employees who performed work on the project. These records shall include the names, addresses and number of hours worked on the project by all employees of the Contractor and Subcontractor who performed work on the project to validate compliance with HRS Chapter 103B as amended by Act 192, SLH 2011. The Contractor and Subcontractors shall retain these records and provide access to the State for a minimum period of four (4) years after the final payment, except that if any litigation, claim, negotiation, investigation, audit or other action involving the records has been started before the expiration of the four-year period, the Contractor and Subcontractors shall retain the records until completion of the action and resolution of all issues that arise from it, or until the end of the four-year period, whichever occurs later. Furthermore, it shall be the Contractor's responsibility to enforce compliance with this provision by any Subcontractor.

- f. A General Contractor or applicable Subcontractor who fails to comply with this section shall be subject to any of the following sanctions:
- 1) With respect to the General Contractor, withholding of payment on the contract until the Contractor or its Subcontractor complies with HRS Chapter 103B as amended by Act 192, SLH 2011.
 - 2) Proceedings for debarment or suspension of the Contractor or Subcontractor under Hawai'i Revised Statutes §103D-702.
3. Conflict with Federal Law: This section shall not apply if the application of this section is in conflict with any federal law, or if the application of this section will disqualify the State from receiving Federal funds or aid.

**CERTIFICATION OF COMPLIANCE
FOR
EMPLOYMENT OF STATE RESIDENTS
HRS CHAPTER 103B, AS AMENDED BY ACT 192, SLH 2011**

Project Title: _____

Agency Project No: _____

Contract No.: _____

As required by Hawai'i Revised Statutes Chapter 103B, as amended by Act 192, Session Laws of Hawaii 2011--Employment of State Residents on Construction Procurement Contracts, I hereby certify under oath, that I am an officer of _____ and

(Name of Contractor or Subcontractor Company)

for the Project Contract indicated above, _____ was in

(Name of Contractor or Subcontractor Company)

compliance with HRS Chapter 103B, as amended by Act 192, SLH 2011, by employing a workforce of which not less than eighty percent are Hawai'i residents, as calculated according to the formula in the solicitation, to perform this Contract.

☐ I am an officer of the **Contractor** for this contract.

☐ I am an officer of a **Subcontractor** for this contract.

CORPORATE SEAL

(Name of Company)

(Signature)

(Print Name)

(Print Title)

Subscribed and sworn to me before this
____ day of _____, 2011.

Doc. Date: _____ # of Pages _____ 1st Circuit

Notary Name: _____

Doc. Description: _____

Notary Public, 1st Circuit, State of Hawai'i
My commission expires: _____

Notary Signature

Date

NOTARY CERTIFICATION