

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS MAUI DISTRICT

SPECIAL PROVISIONS PROPOSAL, CONTRACT, AND BOND

FOR

HALEAKALA HIGHWAY
SLOPE AND SHOULDER REPAIR
VICINITY OF AINAKULA ROAD
TO KULALANI DRIVE

PROJECT NO. 377A-01-22M

DISTRICT OF MAKAWAO

ISLAND OF MAUI

FY 2024

NOTICE TO BIDDERS

Hawaii Revised Statutes (HRS), Chapter 103D

The receiving of bids for HALEAKALA HIGHWAY SLOPE AND SHOULDER

REPAIR, VICINITY OF AINAKULA ROAD TO KULALANI DRIVE, DISTRICT OF

MAKAWAO, ISLAND OF MAUI, PROJECT NO. 377A-01-22M, 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.ehawaii.gov/welcome.html.

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

HIEPRO OFFER DUE DATE & TIME is <u>August 2, 2024</u>, at 2:00 p.m., Hawaii Standard Time (HST). Bidders shall submit and <u>upload the complete proposal to HIEPRO</u> 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 <u>confidential and/or proprietary</u> shall be uploaded as a <u>separate file</u> 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. <u>FAILURE TO</u> <u>UPLOAD THE PROPOSAL TO HIEPRO SHALL BE GROUNDS FOR REJECTION.</u>

The scope of work consists of slope and shoulder repair, permanent slope erosion protection, asphalt concrete (AC) curb and gutter, surface drainage improvements, pavement resurfacing, and replacement of existing guardrail. The estimated cost of construction is between \$300,000 and \$500,000.

To be eligible for award, bidders shall possess a valid State of Hawaii General Engineering "A" license at the time of bidding.

A virtual pre-bid conference is scheduled for <u>July 11, 2024</u>, at 10:00 a.m., HST. Please call Microsoft Teams to join the pre-bid conference at 1-808-829-4853, Phone Conference ID: 614 883 033#. 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 HIePRO.

All Request for Information (RFI) questions and Substitution Requests shall be submitted in HIePRO no later than July 18, 2024, 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 HIePRO.

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 § 103-55.6 is applicable to this project.

Employment of State Residents on Construction Procurement Contracts. Compliance with HRS § 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 § 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.

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

The Equal Employment Opportunity Regulations of the Secretary of Labor implementing Executive Order 11246, as amended, shall be complied with on this project.

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).

<u>Driving While Impaired (DWI) Education</u>. 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 Larry Hail, Project Manager, by phone at (808) 873-3567, or by email at larry.d.hail@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.

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ROBIN K. SHISHIDO
Deputy Director of Transportation for Highways

HIePRO RELEASE DATE: July 2, 2024

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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.

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STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAYS MAUI DISTRICT

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:

<i></i>		
23	AAN	American Association of Nurserymen
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25	AASHTO	American Association of State Highway and
26		Transportation Officials
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28	ACI	American Concrete Institute
29	۸۵۸	Americana with Dischilities Act
30 31	ADA	Americans with Disabilities Act
32	ADAAG	Americans with Disabilities Act Accessibility Guidelines
33	ADAAG	Afficilities with Disabilities Act Accessibility Guidelines
34	AGC	Associated General Contractors of America
35	7100	7 toodiated Contral Contractors of 7 thorna
36	AIA	American Institute of Architects
37		
38	AISC	American Institute of Steel Construction
39		
40	AISI	American Iron and Steel Institute
41		
42	ANSI	American National Standards Institute
43		
44	APA	American Plywood Association
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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	ВМР	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 75	DCAB	Disability and Communication Access Board, Department of Health, State of Hawaii
76 77	DOTAX	Department of Taxation, State of Hawaii
78 79	EPA	U.S. Environmental Protection Agency
80 81 82	FHWA	Federal Highway Administration, U.S. Department of Transportation
83 84 85	FSS	Federal Specifications and Standards, General Services Administration, U.S. Department of Defense
86 87	HAR	Hawaii Administrative Rules
88 89 90	HDOT	Department of Transportation, State of Hawaii

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

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:

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138	Addendum (plural - Addenda) - A written or graphic document, including drawings
139	and specifications, issued by the Director during the bidding period. This document
140	modifies or interprets the bidding documents by additions, deletions, clarifications
141	or corrections.
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143	Addition (to the contract sum) - Amount added to the contract sum by change order.
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145	Advertisement - A public announcement inviting bids for work to be performed or
146	materials to be furnished.
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148	Amendment - A written document issued to amend the existing contract between
149	the State and Contractor and properly executed by the Contractor and Director.
150	and state and seminater and properly executed by the seminater and biresten
151	Award - Written notification to the bidder that the bidder has been awarded a
152	contract.
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154	Bad Weather Day (or Unworkable Day) - A day when weather or other conditions
155	prevent a minimum of four hours of work with the Contractor's normal work force on
156	critical path activities at the site.
157	onded pain delivides at the site.
158	Bag - 94 pounds of cement.
159	Bug of pounds of comonic
160	Barrel - 376 pounds of cement.
161	Buildi of a padriad of contents.
162	Base Course - The layer or layers of specified material or selected material of a
163	designed thickness placed on a subbase or subgrade to support a surface course.
164	designed anotheres placed on a subbase of subgrade to support a surface searce.
165	Basement Material - The material in excavation or embankments underlying the
166	lowest layer of subbase, base, pavement, surfacing or other specified layer.
167	lowest layer or easies, sace, pavernent, carracing or earler openined layer.
168	Bid - See Proposal.
169	Bia Coo i Toposai.
170	Bidder - An individual, partnership, corporation joint venture or other legal entity
171	submitting, directly or through a duly authorized representative or agent, a proposal
172	for the work or construction contemplated.
173	for the work of construction contemplated.
174	Bidding Documents (or Solicitation Documents) - The published solicitation
175	notice, bid requirements, bid forms and the proposed contract documents including
176	all addenda and clarifications issued prior to receipt of the bid.
177	an addenda and diannoations issued prior to receipt of the bid.
178	Bid Security - The security furnished by the bidder from which the State may
179	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.

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

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

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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.

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Contracting Officer - See Engineer.

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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.

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County - County of Maui, its Departments and agencies, acting through its authorized representative(s).

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

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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.

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Department Department of Budget and Fiscal Services, Department of Public Works, or County of Maui, whichever is applicable.

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Director - When used in context as Contracting Officer, Director shall mean the Director of Finance of the County of Maui, acting directly or through its duly authorized representative. When used in context as Officer-In-Charge, Director shall mean the Director of the Department of Public Works, acting through its duly authorized representative."

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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 - When used in context as Contracting Officer, Engineer shall mean the Director of Finance of the County of Maui, acting directly or through a duly authorized representative. When used in context as Officer-In-Charge, Engineer shall mean the Director of the Department of Public Works of the County of Maui, acting through its duly authorized representative.

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.

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 - Engineering Division, Department of Public Works 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.

318	Inspector - The Engineer's authorized representative assigned to make detailed
319	inspections of contract performance, prescribed work, and materials supplied.
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321	Laboratory - The testing laboratory of the Highways Division or other testing
322	laboratories that may be designated by the Engineer.
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324	Laws - All Federal, State, and local laws, executive orders and regulations having

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-ofway boundaries. Unpaved median areas between inside shoulders of divided highways and infield areas of interchanges are included.

407	Section and Subsection - Section or subsection shall be understood to refer to
408	these specifications unless otherwise specified.
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410	Shop Drawings - All drawings, diagrams, illustrations, schedules and other data or
411	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 Details - Drawings provided by the County for specific items of work approved for repetitive use.

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

State - The State of Hawaii or County of Maui, its Departments and agencies, acting through its authorized representative(s), whichever is applicable.

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.

			101.03
454 455 456	Subbase - A	A layer of specified material of specified thickness between the s	subgrade
457 458 459 460	subcontract	ct - Any written agreement between the Contractor fors which contains the conditions under which the subcontra- ortion of the work for the Contractor.	
461 462 463 464	other legal e Hawaii Rev	ctor - An individual, partnership, firm, corporation, or joint verentity, as licensed or required to be licensed under Chapter 4-rised Statutes, as amended, which enters into an agreement to perform a portion of the work.	44 of the
465 466 467 468	_	 The top surface of completed earthwork on which subbas avement, or a course of other material is to be placed. 	se, base,
469 470 471	completed t	I Completion - The Status of the project when the Contractive work, except for the planting period and plant establishment of the following requirements are met:	
472 473 474 475	(1)	All traffic lanes (including shoulders, ramps, sidewalks and bil are in their final configuration as designed and the final surface has been installed:	. ,

- 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;
- All required illumination and lighting for normal and safe use and (3) 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.

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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.

544	Working Day - A calendar day in which a Contractor is capable of working four or
545	more hours with its normal work force, exclusive of:
546	
547	(1) Saturdays, Sundays, and recognized legal State holidays and such
548	other days specified by the contract documents as non-working days,
549	
550	(2) Day in which the Engineer suspends work for four or more hours
551	through no fault of the Contractor."
552	
553	
554	
555	
556	END OF SECTION 101

Make this section a part of the Standard Specifications:

"SECTION 102 - BIDDING REQUIREMENTS AND CONDITIONS

102.01 Prequalification of Bidders. Prospective bidders shall be capable of performing the work for which they are bidding.

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

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

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

(1) The location,

(2) Description of the proposed work,

(3) The approximate quantities,

(4) Items of work to be done or materials to be furnished,

(5) A schedule of items, and

(6) The time in which the work shall be completed.

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 HIePRO.

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

93	(4)	The basis for the bid figure is solely on the construction contract					
94	docur	nents.					
95							
96		the bidder warrants that the bidder has examined the site of the					
97 98	work. From	its investigations, the bidder acknowledges satisfaction on:					
99	(1)	The nature and location of the work;					
100 101	(2)	The character, quality, and quantity of materials;					
102 103	(3)	The difficulties to be encountered; and					
104 105	(4)	The kind and amount of equipment and other facilities needed.					
106	(4)	The kind and amount of equipment and other facilities needed.					
107	Subs	urface information or hydrographic survey data furnished are for the					
108	bidders' con	venience only. The data and information furnished are the product of					
109	the Departm	nent's interpretation gathered in investigations made at the specific					
110		These conditions may not be typical of conditions at other locations					
111		project area or that such conditions remain unchanged. Also,					
112		ound at the time of the subsurface explorations may not be the same					
113		when work starts. The bidder shall be solely responsible for					
114		s, deductions, or conclusions the bidder may derive from the					
115	subsurface i	nformation or data furnished.					
116	_						
117		Engineer determines that the natural conditions differ from that					
118	•	nticipated or contemplated by the Contractor in the items of					
119	excavation, the State may treat the difference in natural conditions, as falling						
120	within the m	eaning of Subsection 104.02 – Changes.					
121							
122		reparation of Proposal. The submittal of its proposal shall be on					
123	forms furnish	ned by the Department. The bidder shall specify in words or figures:					
124	(4)						
125	(1)	A unit price for each pay item with a quantity given;					
126	(0)						
127	(2)	The products of the respective unit prices and quantities;					
128	(2)	The lump cum emounts and					
129	(3)	The lump sum amount; and					
130	(4)	The total amount of the proposal obtained by adding the amounts					
131	(4)	The total amount of the proposal obtained by adding the amounts					
132	oi the	e several items.					
133	Thou	words and figures shall be in ink or typed. If a discrepancy eccure					
134		words and figures shall be in ink or typed. If a discrepancy occurs					
135		prices written in words and those written in figures, the prices written					
136 137	in words sha	all govern.					
13/							

1	38
1	39
1	40

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

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

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

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

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

(1) The proposal is a form not furnished by the Department, altered, or detached:

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

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

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

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

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

181	Where the prospective bidder is bidding on multiple projects
182	simultaneously and the proposal limits the maximum gross amount of awards
183	that the bidder can accept at one bid letting, the proposal is not irregular if the
184	limit on the gross amount of awards is clear, and the Department selects the
185	awards that can be given.
186	
187	102.08 Proposal Guaranty. The Department will not consider a proposal of
188	\$25,000 or more unless accompanied by:
189	
190	(1) A deposit of legal tender; or
191	
192	(2) A valid surety bid bond, underwritten by a company licensed to
193	issue bonds in the State of Hawaii, in the form and composed,
194	substantially, with the same language as provided herewith and signed by
195	both parties; or
196	
197	(3) A certificate of deposit, share certificate, cashier's check,
198	treasurer's check, teller's check, or official check drawn by, or a certified
199	check accepted by and payable on demand to the State by a bank,
200	savings institution, or credit union insured by the Federal Deposit
201	Insurance Corporation (FDIC) or the National Credit Union Administration
202	(NCUA).
203	
204	(a) The bidder may use these instruments only to a maximum of
205	\$100,000.
206	
207	(b) If the required security or bond amount totals over \$100,000
208	more than one instrument not exceeding \$100,000 each and issued
209	by different financial institutions shall be acceptable.
210	
211	(c) The instrument shall be made payable at sight to the
212	Department.
213	
214	(d) Proposal Guaranty listed in (1) and (3) shall be in its original
215	form, and shall be received at the Contracts Office, Department of
216	Transportation, 869 Punchbowl Street, Honolulu, Hawaii 96813
217	before the bid deadline.
218	
219	In accordance with HRS Chapter 103D-323, the above shall be in a sum
220	not less than 5% of the amount bid.
221	400 00 D. H
222	102.09 Delivery of Proposal. The bidder shall submit the proposal in
223	HlePRO. Bids received after said due date and time shall not be considered.
224	Original bid documents do not have to be submitted. Award will be made based
225	on proposals submitted in HlePRO.

227	102.10 W	/ithdrawal or Revision of Proposals. A bidder may withdraw or					
228		posal after the bidder submits the proposal in HlePRO. Withdrawal					
229	or revision of proposal must be completed before the time set for the receiving of						
230	bids.						
231	Dido.						
232	102.11 Pi	ublic Opening of Proposals. Not applicable.					
233	102.11	ubile Opening of Froposais. Not applicable.					
234	102.12 Di	isqualification of Bidders. The Department may disqualify a bidder					
235		s proposal for the following reasons:					
236	and reject in	proposal for the following reasons:					
237	(1)	Submittal of more than one proposal whether under the same or					
238	` ,	ent name.					
239	dillor	cht name.					
240	(2)	Evidence of collusion among bidders. The Department will not					
241	` '	gnize participants in collusion as bidders for any future work of the					
242	_	irtment until such participants are reinstated as qualified bidders.					
243	Бера	initilent until such participants are remstated as qualified bidders.					
	(2)	Look of proposal supremby					
244	(3)	Lack of proposal guaranty.					
245	(4)	Cubusittal of an unaigned or insurance of circums					
246	(4)	Submittal of an unsigned or improperly signed proposal.					
247	<i>(E</i>)	Cubmittel of a prepagal without a listing of subcentractors or					
248	(5)	Submittal of a proposal without a listing of subcontractors or					
249	conta	ining only a partial or incomplete listing of subcontractors.					
250	(6)	Cubmittel of an irregular proposal in accordance with Cubecation					
251	(6)	Submittal of an irregular proposal in accordance with Subsection					
252	102.0	07 - Irregular Proposals.					
253	(7)	Fuidence of assistance from a narrow who has been an ampleyee					
254	(7)	Evidence of assistance from a person who has been an employee					
255		e agency within the preceding two years and who participated while in					
256		e office or employment in the matter with which the contract is directly					
257	CONCE	erned, pursuant to HRS Chapter 84-15.					
258	(0)	Constant and an elektronic disconnection as with LIDC Character 104 OF					
259	(8)	Suspended or debarred in accordance with HRS Chapter 104-25.					
260	(0)	Callura to complete the productification questionnaire, if applicable					
261	(9)	Failure to complete the prequalification questionnaire, if applicable.					
262	(40)	Callura to attend the mandatory are hid macting if applicable					
263264	(10)	Failure to attend the mandatory pre-bid meeting, if applicable.					
265	102.13 M	aterial Guaranty. The successful bidder may be required to furnish					
266		of the composition, origin, manufacture of materials, and samples.					
267	a statement	of the composition, origin, manufacture of materials, and samples.					
268	102.14 Si	ubstitution of Materials and Equipment Before Bid Opening. See					
269		106.13 for Substitution Of Materials and Equipment After Bid					
270	Opening.	100.10 IOI Substitution Of Materials and Equipment After bid					
	Operiling.						
271							

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. Qualification of such proposed alternate brands shall be submitted via email to the Contact person listed in HlePRO for the solicitation and also post a question in HIePRO under the guestion/answer tab referencing the email with the The request must be posted in HlePRO no later than 14 calendar days before the bid opening date, not including 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.

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

102.15 Preferences.

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

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

317	The following	ng provisions apply to this Apprenticeship Program.
318		
319	(1)	Definitions
320	` ,	
321		(a) "Apprenticeable trade", HRS Section 103-55.6 (c),
322		shall have the same meaning as 'apprenticeable occupation'
323		pursuant to Hawaii Administrative Rules (HAR) Section 30-
324		1-5.
324		1-3.
		(b) "Department" means the department of labor and
326		(b) "Department" means the department of labor and
327		industrial relations.
328		
329		(c) "Director" means the director of labor and industrial
330		relations.
331		
332		(d) "Employ" means the employment of a person in an
333		employer-employee relations.
334		
335		(e) "Governmental body" means as defined in HRS
336		Section 103D-104.
337		
338		(f) "Party to an apprenticeship agreement" means party
339		to a registered apprenticeship program with the department
340		of labor and industrial relations.
		of labor and industrial relations.
341		(a) "Du-f" the FO/ by which the sur-life of
342		(g) "Preference" means the 5% by which the qualified
343		bidder's offer amount would be decreased for evaluation
344		purposes.
345		
346		(h) "Public work" shall be as defined in HRS Section 104-
347		2 and HAR Section 12-22-1.
348		
349		(i) "Registered apprenticeship program" means a
350		construction trade program approved by the department
351		pursuant to HAR Section 12-30-1 and Section 12-30-4.
352		parasis to 1 ii ii t document 1 do 1 anno document 1 do 1.
353		(j) "Sponsor" means an operator of an apprenticeship
354		program and in whose name the program is approved and
355		registered with the department of labor and industrial
356		relations pursuant to HAR Section 12-30-1.
		relations pursuant to HAN Section 12-30-1.
357		(Is) Officer Entity/bidden cybesitting a present to
358		(k) Offeror – Entity/bidder submitting a proposal to
359		undertake a project.
360		m =
361		(I) Procurement Officer – Director of Transportation or
362		his authorized representative.
363		

364	(2)	Qualif	fication Procedures
365			
366		(a)	Any bidder seeking the preference must be a party to
367		an ap	prenticeship agreement registered with the department
368		at the	time the offer is made for each apprenticeable trade
369			dder will employ to construct the public works projects
370			nich the offer is being made.
371			3
372			1. The apprenticeship agreement shall be
373			registered and conform to the requirements of HRS
374			Chapter 372.
375			onapter or z.
376			2. Subcontractors do not have to be a party to an
377			apprenticeship agreement for the bidder to obtain the
378			preference.
379			preference.
380			3. The bidder is not required to have apprentices in
381			its employ at the time of submittal of an offer to qualify
382			for the preference.
383			ioi tile preference.
384		(h)	The department shall:
		(b)	The department shall:
385			4 Develop and maintain a list of construction
386			1. Develop and maintain a list of construction
387			trades in registered apprenticeship programs which
388			conform to HRS Chapter 372; and
389			
390			2. Electronically post the list, including any
391			amendments, on the department website
392			(http://labor.hawaii.gov).
393			
394		(c)	Bidder is responsible to comply with all submission
395		•	ements for registration of its apprenticeship program
396		before	e requesting a preference.
397			
398		(d)	Bidder shall provide a certification by the sponsor of
399			espective registered apprenticeship programs covering
400		the re	levant trade(s) for the public works project.
401			
402		(e)	Certification Form 1 issued by the department shall
403		includ	le:
104			
405			1. Contractor information;
406			
407			2. Solicitation reference;
408			
409			3. Trade(s);
			• •

410			
411			4. Date and name of apprenticeship program;
412			
413			5. Signature of authorized training coordinator of
414			training trust fund administrator certifying that the
415			contractor is a participant in the program, and that the
416			program is registered with the department;
417			
418			6. Contract information for sponsor's authorized
419			representative signing the form;
420			
421			7. Number of apprentices enrolled in the program
422			number who successfully completed the
423			apprenticeship program in the past 12 months
424			including whether the contractor is signatory to a
425			collective bargaining agreement for that trade, or i
426			not, provide for attachment of a copy of the
427			agreement between the contractor and the program.
428			ag. com and com com and com and and programm
429	(3)	Solicit	ation Procedures.
430	(-)		
431		(a)	If the NTB indicates that this project is covered by this
432		` '	ence, and the offer is less than \$250,000 this
433		•	ence will still be applicable in determining the lowes
434		bidde	
435			•
436		(b)	A claim for this preference must include the following:
437		()	у.
438			1. Allow bidder seeking to claim the preference to
439			state the trades the bidder will employ to perform the
440			work;
441			
442			2. For each trade to be employed to perform the
443			work, the bidder shall submit a completed signed
444			original <i>Certification Form 1</i> verifying participation in
445			an apprenticeship program registered with the
446			department;
447			acparation,
448			3. The Certification Form 1 shall be authorized by
449			an apprenticeship sponsor of the department's list of
450			registered apprenticeship programs. The
451			authorization shall be an original signature by ar
452			authorized official of the apprenticeship sponsor; and
453			authorized emicial of the apprehimeeship species, and
155			

454		4. The completed Certification Form 1 for each
455		trade must be submitted by the bidder with the offer.
456		Previous certifications shall not apply unless allowed
457		by the solicitation.
458		•
459		(c) Upon receiving Certification Form 1, the procurement
460		officer will verify with the department that the apprenticeship
461		program is on the list of apprenticeship programs registered
462		with the department. If the programs are not confirmed by
463		the department, the bidder will not qualify for the preference.
464		are department, are brader that first quality for the preferences.
465	(4)	Evaluation and Contract Award
466	(• /	Evaluation and Contract / Ward
467		(a) If the bidder certifies participation in an apprenticeship
468		program for each trade which will be employed by the bidder
469		for the project, the procurement officer shall apply the
470		preference and decrease the bidder's total bid amount by
471		five per cent (5%) for evaluation purposes.
472		inve per defit (070) for evaluation purposes.
473		(b) Should the bidder qualify for other statutory
474		preferences (for example, Hawaii products), all applicable
475		preferences shall be applied to the bidder's price.
476		preferences shall be applied to the bidder's price.
477		(c) The contract amount shall be the original offer
478		amount, exclusive of any preference; the preference is only
479		for evaluation purposes.
480		ioi evaluation purposes.
481		(d) Any claims challenging a bidder's representation that
482		the bidder is a participant in an apprenticeship program(s) as
483		claimed, shall be submitted to the procurement officer. The
484		procurement officer will refer the challenge to the department
485		of labor and industrial relations who shall investigate any
486		such claims and shall make a determination.
487		Such claims and shall make a determination.
488	(5)	Contract Administration
489	(3)	Contract Administration
490		(a) For the duration of a contract awarded utilizing the
491		apprenticeship preference, the contractor shall certify each
492		month that work is being conducted on the project, that it
493		continues to be a participant in the relevant apprenticeship
494		program for each trade it employs.
495		program for caon trade it employs.
コノン		

496	(b) Monthly certification shall be made on <i>Monthly</i>
497	Certification Form 2 prepared and made available by the
498	department, be a signed original by the respective
499	apprenticeship program sponsors authorized official, and
500	submitted by the contractor with its monthly payment
501	requests.
502	4
503	(c) Should the contractor fail or refuse to submit its
504	monthly certification forms, or at any time during the
505	construction of the project, cease to be a part to a registered
506	apprenticeship agreement for each apprenticeable trades
507	the contractor employs, or will employ, the contractor will be
507 508	subject to the following sanctions:
508 509	subject to the following sanctions.
510	1. Withholding of the requested payment until the
511	required form(s) are submitted;
512	roquired form(o) are easimited,
513	2. Temporary or permanent cessation of work on
514	the project, without recourse to breach of contract
515	claims by the contractor; provided the agency shall be
516	entitled to restitution for nonperformance or liquidated
517	damages claims; or
518	damagoo daimo, or
519	3. Proceed to debar or suspend pursuant to HRS
520	Section 103D-702.
521	000tion 100D 102.
522	(d) If events such as "acts of God," acts of a public
523	enemy, acts of the State or any other governmental body in
523 524	its sovereign or contractual capacity, fires, floods, epidemics,
52 5	freight embargoes, unusually severe weather, or strikes or
526	other labor disputes prevent the contractor from submitting
520 527	the certification forms, the contractor shall not be penalized
	·
528 520	as provided herein, provided the contractor completely and expeditiously complies with the certification process when
529 520	· · · · · · · · · · · · · · · · · · ·
530	the event is over.
531	This subscration shall not small unkers its soulisation will discussifie
532	This subsection shall not apply when its application will disqualify
533	the State from receiving federal funds or aid.
534	(O) Dustaness for Described Band at D. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.
535	(C) Preference for Recycled Products. Recycled Products shall not
536	apply to this project.
537	

(D) 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.

If a bidder has designated use of a Hawaii Product and fails to provide the product, the contract will become void, and no payments will be made.

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

"SECTION 103 - AWARD AND EXECUTION OF CONTRACT

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

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

103.02 Award of Contract. The award of contract, if it be awarded, will be made within sixty (60) calendar days after the opening of bids, to the lowest responsible and responsive bidder whose bid meets all the requirements and criteria set forth in the invitation for bids. (Through HlePRO). The successful bidder will be notified by letter mailed to the address shown in its proposal, that its proposal has been accepted, and that it has been awarded the contract.

(1) Requirement for Award. To be eligible for award, the apparent low bidder will be contacted to submit copies of the documents listed below to demonstrate compliance with HRS Section 103D-310(c). The documents shall be submitted to the Department within fourteen (14) days after bid opening unless otherwise specified in the invitation for bids or an extension is granted in writing by the Department. If a valid certificate/clearance is not submitted on a timely basis for award of a contract, a bidder otherwise responsive and responsible may not receive the award. See also Subsection 108.03 – Preconstruction Data Submittal.

The Department may request the bidders to allow the Department to consider the bids for the issuance of an award beyond the sixty (60) calendar day period. Agreement to such an extension must be made by a bidder in writing. Only bidders who have agreed to such an extension will be eligible for the award.

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(A) Tax Clearance. Pursuant to HRS Sections 103D-310(c), 103-53 and 103D-328, the successful bidder shall be required to submit a certified copy of its tax clearance issued by the Hawaii State Department of Taxation (DOTAX) and the Internal Revenue Service (IRS) to demonstrate its compliance with HRS Chapter 237. A tax clearance is valid for six (6) months from the most recent approval stamp date on the tax clearance and must be valid on the bid's first legal advertisement date or any date thereafter up to the bid opening date.

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

https://tax.hawaii.gov/

To receive DOTAX Forms by fax or mail, phone (808) 587-7572 or 1-800-222-7572.

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

(B) DLIR Certificate of Compliance. Pursuant to HRS Section 103D-310(c), the successful bidder shall be required to submit a copy (faxed copies are acceptable) of its approved certificate of compliance issued by the Hawaii State Department of Labor and Industrial Relations (DLIR) to demonstrate its compliance with unemployment insurance (HRS Chapter 383), workers' compensation (HRS Chapter 386), temporary disability insurance (HRS Chapter 392), and prepaid health care (HRS Chapter 393). The certificate is valid for six (6) months from the most recent approval stamp date on the certificate and must be valid on the bid's first legal advertisement date or any date thereafter up to the bid opening date. For certificates which receive a "pending" approval stamp, a DLIR approval stamp is required prior to the issuance of the Notice to Proceed.

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

http://labor.hawaii.gov/

More information is available by calling the DLIR Unemployment Insurance Division at (808) 586-8926.

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 HRS Section 103D-310(c), the successful bidder shall be required to submit a copy (faxed copies are acceptable) of its approved Certificate of Good Standing issued by the Hawaii State Department of Commerce and Consumer Affairs (DCCA), Business Registration Division (BREG) 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.

The Certificate of Good Standing is valid for six (6) months from the approval date on the certificate and must be valid on the bid's first legal advertisement date or any date thereafter up to the bid opening date. A Hawaii business that is a sole proprietorship, however, 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 and must be submitted 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 above, the bidder may make available proof of compliance through the Hawaii Compliance Express or any other designated certification process. Bidders may apply and register at the "Hawaii Compliance Express" website:

https://vendors.ehawaii.gov/hce/

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 (5) 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 bonds shall be of an amount equal to 100 percent of the amount of the contract price and include 5 percent of the contract amount estimated to be required for extra work. 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 HRS Section 103D-324.

103.06 Execution of the Contract. The contract bond and HRS Chapter 104 - Compliance Certificate, similar to a copy of the same annexed hereto, shall be executed by the successful bidder and returned within ten (10) 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.

Th	ne cor	ntract	shall not	bine	d the Dep	artment un	less	said partie	es execute t	the
contract	and	the	Director	of	Finance	endorses	the	bidder's	certificate	in
accordan	ice wi	th HF	RS Section	n 10)3-39.					

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

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 (15)
days after receipt, with a statement identifying the defect; or

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> (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 (10) 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 nonadjustment of the contract time or contract price, the contractor shall file a notice of intent to claim within thirty (30) 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 nonadjustment of the contract time or the contract price set forth in the unilateral change order.

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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 billing for the adjustment in price under any method listed in Subsections 104.06(1) through 104.06(7) shall be issued within ten (10) days after agreement on the method of adjustment."

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END OF SECTION 104

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

- (III) Amend Subsection 105.08 (A) Furnishing Drawings and Special Provisions to read as follows:
 - "(A) Furnishing Drawings and Special Provisions. The State will furnish the Contractor an electronic set of the special provisions and plans." The Contractor shall have and maintain at least one set of plans and specifications on the work site, at all times.
- (IV) Amend Subsection 105.14(D) No Designated Storage Area from lines 421 to 432 to read as follows:
 - "(D) No Designated Storage Area. If no storage area is designated within the contract documents, materials and equipment may be stored anywhere within the State highway right-of-way, provided such storage and access to and from such site, within the sole discretion of the Engineer, does not create a public or traffic hazard or an impediment to the movement of traffic."
- **(V)** Amend **105.16(A) Subcontract Requirements** by adding the following paragraph after line 483:

The 'Specialty Items' of work for this project are as follows:

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90	Section	Description
91	No.	
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93	401	Contract Item No. 401.0100 under Section 401 – Hot Mix
94		Asphalt Pavement
95	202	
96	606	All Contract Items under Section 606 - Guardrail
97	000	All Control the man and an Continue COO. Decrease Mandrings
98	629	All Contract Items under Section 629 - Pavement Markings
99 100	631	All Contact Items under Section 631 – Traffic Control,
100	031	Regulatory, Warning and Miscellaneous Signs
101		Regulatory, Warriing and Miscellaneous Signs
102	(VI) Amend Su	ubsection 105.16(B) - Substituting Subcontractors from line
103	487 to line 494 to	
105		. 1044
106	(B) Suk	ostituting Subcontractors. Under HRS Chapter 103D-302, the
107	` ,	is required to list the names of persons or firms to be engaged
108	by the Cor	ntractor as a subcontractor or joint contractor in the performance
109	of the co	ntract. No subcontractor may be added or deleted, unless
110	authorized	I by the Engineer. Substitutions will be allowed only if the
111	subcontrac	ctor:
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116		END OF SECTION 105

1	SECTION 106 – MATERIAL RESTRICTIONS AND REQUIREMENTS
2 3 4	Make the following amendment to said Section:
5 6 7	(I) Amend 106.05(B) – Deviation by revising the third sentence from line 106 to 108 to read as follows:
8 9 10	"Any deviations will be subject to Subsection 102.14 – Substitution of Materials and Equipment Before Bid Opening.
11 12 13	(II) Amend 106.11 Steel and Iron Construction Material from line 238 to line 277 to read as follows
14 15 16 17	"106.11 Steel and Iron Construction Material. (Not Applicable)"
18 19	END OF SECTION 106

Make the following amendments to said Section:

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

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

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

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

the Contractor (but not the Contractor's insurer), or by any other party who is not authorized to contractually name the State as an additional insured under the Contractor's insurance policy, is not sufficient to meet the Contractor's insurance obligations.

A mere Certificate of Insurance issued by a broker who represents

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

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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.

- (1) Workers' Compensation. The Contractor shall obtain worker's compensation insurance for all persons whom they employ in carrying out the work under this contract. This insurance shall be in strict conformity with the requirements of the most current and applicable State of Hawaii Worker's Compensation Insurance laws in effect on the date of the execution of this contract and as modified during the duration of the contract.
- (2) Auto Liability. The Contractor shall obtain Auto Liability Insurance covering all owned, non-owned and hired autos with a Combined single Limit of not less than \$1,000,000 per occurrence for bodily injury and property damage with the State of Hawaii named as additional insured. Refer to SPECIAL CONDITIONS for any additional requirements.
- (3) General Liability. The Contractor shall obtain General Liability insurance with a limit of not less than \$2,000,000 per occurrence and in the Aggregates for each of the following:
 - (a) Products Completed/Operations Aggregate,
 - (b) Personal & Advertising Injury, and
 - (c) Bodily Injury & Property Damage

The General Liability insurance shall include the State as an Additional Insured. The required limit of insurance may be provided by a single policy or with a combination of primary and excess policies. Refer to SPECIAL CONDITIONS for any additional requirements.

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

135	(II)	Add Section 107.18 Citizen and Residential Labor Force after line 745
136	to rea	ad as follows:
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138	"107.	18 Citizen and Residential Labor Force.
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140		(A) Citizen Labor. No person shall be employed as a laborer or
141		mechanic unless such person is a citizen of the United States or eligible to
142		become one; provided that persons without such qualifications may be
143144		employed with the approval of the Governor until persons who are citizens and are competent for such services are available for hire.
145		and are competent for such services are available for fille.
146		(B) Residential Labor Force. In accordance with Act 192; SLH 2011,
147		no less than eighty (80) percent of the bidder's labor force working on the
148		contract shall be provided by Hawaii residents. This act applies to all
149		construction procurements under HRS Chapter 103D; however this act
150		does not apply to procurements for professional services under Section
151		103D-304 and small purchases under Section 103D-305. This act is also
152		applicable to any subcontract of \$50.000.00 or more in connection with
153		this contract.
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155		Resident means a person who is physically present in the State of
156		Hawaii at the time the person claims to have established the person's
157		domicile in the State of Hawaii and shows the person's intent is to make

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sent in the State of lished the person's domicile in the State of Hawaii and shows the person's intent is to make Hawaii the person's primary residence.

- Percentage of workforce shall be determined by dividing the labor (C) hours (including subcontractors) provided by residents working on the project divided by the total number of hours worked by all employees of the contractor in the performance of the contract. Hours worked by employees within shortage trades as determined by the Department of Labor and Industrial Relations shall not be included in the calculation of this percentage.
- Certification of compliance with the forgoing provisions shall be (D) made by the contractor in the form of a written oath submitted to the Procurement Officer on a monthly basis for the duration of the contract.
- (E) Sanctions for non compliance with these provisions are as follows:
 - With respect to the General Contractor, withholding of (1) payment on the contract until the Contractor or its Subcontractor complies with HRS Chapter 103B as amended by Act 192, SLH 2011.

79	(2) Proceedings for debarment or suspension of the Contractor
80	or Subcontractor under Hawaii Revised Statutes § 103D-702.
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82	This Section shall not apply when its application will disqualify the State
83	from receiving federal funds or aid."
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88	END OF SECTION 107

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

"SECTION 108 - PROSECUTION AND PROGRESS

108.01 Notice to Proceed (NTP). A Notice To Proceed will be issued to the Contractor not more than thirty (30) calendar days after the contract certification date. The Engineer may suspend the contract before issuing the Notice To Proceed, in which case the Contractor's remedies are exclusively those set forth in Subsection 108.10 – Suspension of Work.

The Contractor shall be allowed up to fourteen (14) calendar days after the Notice to Proceed to begin physical work. The Start Work Date will be established when this period ends or on the actual day that physical work begins, whichever is first. Charging of Contract Time will begin on the Start Work Date. The Contractor shall notify the Engineer, in writing, at least five (5) working days before beginning physical work.

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

During the period between the Notice to Proceed and the Start Work Date the Contractor should adjust work forces, equipment, schedules, and procure materials and required permits, prior to beginning physical work.

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

In the event that the Engineer establishes, in writing, a Start Work Date that is beyond sixty (60) calendar days from the Notice to Proceed date, the Contractor may submit a claim in accordance with, Subsection 107.15 – Disputes and Claims for increased labor and material costs which are directly attributable to the delay beyond the first sixty (60) calendar days after the Notice to Proceed date.

The Contractor shall notify the Engineer at least twenty-four (24) hours before restarting physical work after a suspension of work pursuant to Subsection 108.10 – Suspension of Work.

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

108.02 Prosecution of Work. Unless otherwise permitted by the Engineer, in writing, the Contractor shall not commence with physical construction unless sufficient materials and equipment are available for either continuous construction or completion of a specified portion of the work.
108.03 Preconstruction Submittals. The awardee shall submit to the
Engineer for information and review the pre-construction submittals within twenty-
one (21) 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

(1) List of the Superintendent and other Supervisory Personnel, and their contact information.

in writing,

receipt of the following

- (2) Name of person(s) authorized to sign for the Contractor.
- (3) Work Schedule including hours of operation.

preconstruction submittals acceptable to the Engineer:

- **(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.

until the Engineer acknowledges,

- **(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

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

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

108.05 Contract Time.

(A) Calculation of Contract Time. When the contract time is on a working day basis, the total contract time allowed for the performance of the work will be the number of working days shown in the contract plus any additional working days authorized in writing as provided hereinafter. The count of elapsed working days to be charged against contract time, will begin from the Start Work Date and will continue consecutively to the date of Substantial Completion. When multiple shifts are used to perform the work, the State will not consider the hours worked over the normal eight (8) working hours per day or night as an additional working day.

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

(B) Modifications of Contract Time. Whenever the Contractor believes that an extension of contract time is justified, the Contractor shall serve written notice on the Engineer not more than five (5) working days after the occurrence of the event that causes a delay or justifies a contract time extension. Contract time may be adjusted for the following reasons or events, but only if and to the extent the critical path has been affected:

(1) Changes in the Work, Additional Work, and Delays Caused by the State. If the Contractor believes that an extension of time is justified on account of any act or omission by the State, and is not adequately provided for in a field order or change order, it must request the additional time as provided above. At the request of the Engineer, the Contractor must show how the critical path will be affected and must also support the time extension request with schedules, as well as statements from its subcontractors, suppliers, 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 thirty (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 thirty (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:

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- 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.
- **4.** State either that the above circumstances have been cleared and normal working conditions restored as of a certain day or that the above circumstances will continue to prevent completion of the project.
- **(b)** The Contractor shall notify the Engineer in writing when the delay ends. Time extensions will be the exclusive relief granted and no additional compensation will be paid the Contractor for such delays.
- (4) Delays in Delivery of Materials or Equipment. For delays in delivery of materials or equipment, which occur as a result of unforeseeable causes beyond the control and without fault of the Contractor, its subcontractor(s) or supplier(s), time extensions shall be the exclusive relief granted and no additional compensation will be paid the Contractor on account of such delay. The delay shall not exceed the difference between the originally scheduled delivery date and the actual delivery date. The Contractor may be granted an extension of time provided that it complies with the following procedures:
 - (a) The Contractor's written notice to the Engineer must describe the delays and state the effect such delays may have on the critical path.
 - **(b)** The Contractor, if requested, must submit to the Engineer within five (5) days after a firm delivery date for the material and equipment is established, a written statement regarding the delay. The Contractor must justify the delay as follows:
 - 1. State specifically all reasons for the delay. Explain in a detailed chronology the effect of the delay on the critical path.

225	2. Submit copies of purchase order(s), factory
226	invoice(s), bill(s) of lading, shipping manifest(s),
227	delivery tag(s), and any other documents to support the
228	time extension request.
229	·
230	3. Cite the start and end date of the delay and the
231	time extension requested.
232	•
233	(5) Delays for Suspension of Work. When the performance of
234	the work is totally suspended for one or more days (calendar or
235	working days, as appropriate) by order of the Engineer in
236	accordance with Subsections $108.10(A)(1)$, $108.10(A)(2)$, or
237	108.10(A)(5) the number of days from the effective date of the
238	Engineer's order to suspend operations to the effective date of the
239	Engineer's order to resume operations shall not be counted as
240	contract time and the contract completion date will be adjusted.
241	During periods of partial suspensions of the work, the Contractor will
242	be granted a time extension only if the partial suspension affects the
243	critical path. If the Contractor believes that an extension of time is
244	justified for a partial suspension of work, it must request the
245	extension in writing at least five (5) working days before the partial
246	suspension will affect the critical operation(s) in progress. The
247	Contractor must show how the critical path was increased based on
248	the status of the work and must also support its claim if requested,
249	with statements from its subcontractors. A suspension of work will
250	not constitute a waiver of pre-existing Contractor delay.
251	not constitute a waiver of pre-existing Contractor delay.
252	(6) Contractor Caused Delays. No time extension will be
252 253	granted under the following circumstances:
	granted under the following circumstances.
254255	(a) Delays within the Centractor's central in performing the
	(a) Delays within the Contractor's control in performing the
256	work caused by the Contractor, subcontractor, supplier, or any
257	combination thereof.
258	(h) Dolove within the Contractor's control in arrival of
259	(b) Delays within the Contractor's control in arrival of
260	materials and equipment caused by the Contractor,
261	subcontractor, supplier, or any combination thereof, in
262	ordering, fabricating, and delivery.
263	(a) Dolove requested for shapers which do not offer the
264	(c) Delays requested for changes which do not affect the
265	critical path.

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- (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 One-Hundred (100) Working Days Or One-Hundred and Forty (140) Calendar Days or Less. For contracts of \$2,000,000 or less or for contract time of one-hundred (100) working days or one hundred and forty (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

312	account for normal inclement weather, unusual soil or other
313	conditions that may influence the progress of the work,
314	schedules, and coordination required by any utility, off or on
315	site fabrications, and other pertinent factors that relate to
316	progress;
317	
318	(b) All features listed or not listed in the contract
319	documents that the Contractor considers a controlling factor
320	for the timely completion of the contract work.
321	The time of time of the time of the time of the time of time of the time of time of time of the time of ti
322	(c) The time span and sequence of the activities or events
323	for each feature, and its interrelationship and
324	interdependencies in time and logic to other features in order
325	to complete the project.
326	to complete the project.
327	(d) The total anticipated time necessary to complete work
328	required by the contract.
329	required by the contract.
330	(e) A chronological listing of critical intermediate dates or
331	time periods for features or milestones or phases that can
332	affect timely completion of the project.
333	allect timely completion of the project.
334	(f) Major activities related to the location on the project.
335	(i) Iviajor activities related to the location on the project.
336	(g) Non-construction activities, such as submittal and
337	(g) Non-construction activities, such as submittal and acceptance periods for shop drawings and material,
338	
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339 340	demobilization or order dates of long lead material.
	(h) Sot cohodula logic for out of coguence activities to
341 342	(h) Set schedule logic for out of sequence activities to retain logic. In addition, open ends shall be non-critical.
	retain logic. In addition, open ends shall be non-childar.
343	(i) Show target here for all activities
344 345	(i) Show target bars for all activities.
346	(i) Vertical and herizontal sight lines both major and miner
	(j) Vertical and horizontal sight lines both major and minor
347 348	shall be used as well as a separator line between groups.
	The Engineer will determine frequency and style.
349	(k) The file name print date revision number date and
350	(k) The file name, print date, revision number, data and
351	project title and number shall be included in the title block.
352	(I) Have columns with the commonwists data in these for
353	(I) Have columns with the appropriate data in them for
354	activity ID, description, original duration, remaining duration,
355	early start, early finish, total float, percent complete,
356	resources. The resource column shall list who is responsible

357	for the work to be done in the activity. These columns shall
358	be to the left of the bar chart.
359	
360	(2) For Contracts Which Have A Contract Amount More Than
361	\$2,000,000 Or Having A Contract Time Of More Than One-
362	Hundred (100) Working Days Or One-Hundred and Forty (140)
363	Calendar Days. For contracts which have a contract amount more
364	than \$2,000,000 or contract time of more than one-hundred (100)
365	working days or one hundred and forty (140) calendar days, the
366	Contractor shall submit a Timed-Scaled Logic Diagram (TSLD)
367	meeting the following requirements and having these essential and
368	distinctive elements:
369	
370	(a) The information and requirements listed in Subsection
371	108.06(A)(1) - For Contracts \$2,000,000 or Less or For
372	Contract Time One-Hundred (100) Working Days or One-
373	Hundred and Forty (140) Calendar Days or Less.
374	
375	(b) Additional reports and graphics available from the
376	software as requested by the Engineer.
377	, , ,
378	(c) Sufficient detail to allow at least weekly monitoring of
379	the Contractor and subcontractor's operations.
380	and Community and Community of Operation
381	(d) The time scaled schematic shall be on a calendar or
382	working days basis. What will be used shall be determined by
383	how the contract keeps track of time. It will be the same. Plot
384	the critical calendar dates anticipated.
385	the officer earlier acted afficipated.
386	(e) Breakdown of activity, such as forming, placing
387	reinforcing steel, concrete pouring and curing, and stripping
388	in concrete construction. Indicate location of work to be done
389	in such detail that it would be easily determined where work
390	would be occurring within approximately 200 feet.
391	would be occurring within approximately 200 feet.
392	(f) Latest start and finish dates for critical path activities.
393	(1) Latest start and linish dates for childar path activities.
394	(g) Identify responsible subcontractor, supplier, and others
395	for their respective activity.
396	ioi tileli respective activity.
397	(h) No individual activity shall have duration of more than
	` '
398 399	twenty (20) calendar days unless requested and approved by
400	the Engineer.
400	(i) All activities shall have work breakdown structure
	(i) All activities shall have work breakdown structure
402	codes and activity codes. The activity codes shall have

403 coding that incorporates information for phase, location, who 404 is responsible for doing work and type of operation and 405 activity description. 406 407 (i) Incorporate all physical access and 408 restraints. 409 410 (B) **Inspection and Testing.** All schedules shall provide reasonable 411 time and opportunity for the Engineer to inspect and test each work activity. 412 413 (C) **Engineer's Acceptance of Progress Schedule.** The submittal of, 414 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 415 416 modifications to the contract terms and conditions that appear in or may be 417 inferred from an acceptable schedule will not be valid or enforceable unless 418 and until the Engineer exercises discretion to issue an appropriate change 419 order. Nor shall any submittal or receipt imply the Engineer's approval of 420 the schedule's breakdown, its individual elements, any critical path that may 421 be shown, nor shall it obligate the State to make its personnel available 422 outside normal working hours or the working hours established by the 423 Contract in order to accommodate such schedule. The Contractor has the 424 risk of all elements (whether or not shown) of the schedule and its 425 execution. No claim for additional compensation, time, or both, shall be made by the Contractor or recognized by the Engineer for delays during 426 427 any period for which an acceptable progress schedule or an updated 428 progress schedule as required by Subsection 108.06(E) - Contractor's 429 Continuing Schedule Submittal Requirements had not been submitted. Any 430 acceptance or approval of the schedule shall be for general format only and 431 shall not be deemed an agreement by the State that the construction 432 means, methods, and resources shown on the schedule will result in work 433 that conforms to the contract requirements or that the sequences or 434 durations indicated are feasible. 435 436 (D) **Initial Progress Schedule.** The Contractor shall submit an initial 437 progress schedule. The initial progress schedule shall consist of the 438 following: 439 440 Four sets of the TSLD schedule. (1) 441 442 All the software files and data to re-create the TSLD in a **(2)** computerized software format as specified by the Engineer. 443 444 445 (3) A listing of equipment that is anticipated to be used on the 446 project. Including the type, size, make, year of manufacture, and all 447 information necessary to identify the equipment in the Rental Rate Blue Book for Construction Equipment. 448

availability

449	
450	(4) An anticipated manpower requirement graph plotting contract
451	time and total manpower requirement. This may be superimposed
452	over the payment graph.
453	
454	(5) A Method Statement that is a detailed narrative describing the
455	work to be done and the method by which the work shall be
456	accomplished for each major activity. A major activity is an activity
457	that:
458	
459	(a) Has a duration longer than five (5) days.
460	
461	(b) Is a milestone activity.
462	
463	(c) Is a contract item that exceeds \$10,000 on the contract
464	cost proposal.
465	
466	(d) Is a critical path activity.
467	
468	(e) Is an activity designated as such by the Engineer.
469	
470	Each Method Statement shall include the following items
471	needed to fulfill the schedule:
472	
473	(a) Quantity, type, make, and model of equipment.
474	
475	(b) The manpower to do the work, specifying worker
476	classification.
477	
478	(c) The production rate per eight (8) hour day, or the
479	working hours established by the contract documents needed
480	to meet the time indicated on the schedule. If the production
481	rate is not for eight hours, the number of working hours shall
482	be indicated.
483	
484	(6) Two sets of color time-scaled project evaluation and review
485	technique charts ("PERT") using the activity box template of Logic -
486	Early Start or such other template designated by the Engineer.
487	
488	If the contract documents establish a sequence or order for the work,
489	the initial progress schedule shall conform to such sequence or order.
490	
491	(E) Contractor's Continuing Schedule Submittal Requirements.
492	After the acceptance of the initial TSLD and when construction starts, the
493	Contractor shall submit four plotted progress schedules, two PERT charts,
494	and reports on all construction activities every two weeks (bi-weekly). This

scheduled bi-weekly submittal shall also include an updated version of the project schedule in a computerized software format as specified by the Engineer. The submittal shall have all the information needed to re-create that time period's TSLD plot and reports. The bi-weekly submittal shall include, but not limited to, an update of activities based on actual durations, all new activities and any changes in duration or start or finish dates of any activity.

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

The Contractor shall submit updates of the anticipated work completion graph, equipment listing, manpower requirement graph or method statement when requested by the Engineer. The Contractor shall submit such updates within four (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.

587	(d)	Critical submittals and requests for information (RFI's).
588		
589	(e)	The project title, project number, date created, period the schedule
590	cover	s, Contractor's name and creator of the schedule on each page.
591		
592		Two (2) days prior to each weekly meeting, the Contractor shall
593	subm	it a list of outstanding submittals, RFIs and issues that require
594	discus	ssion.
595		
596	108.08 Li	quidated Damages for Failure to Complete the Work or Portions
597		k on Time. The actual amount of damages resulting from the
598		failure to complete the contract in a timely manner is difficult to
599		etermine. Therefore, the amount of such damages shall be liquidated
600		set forth herein and in the special provisions. The State may, at its
601	•	educt the amount from monies due or that may become due under the
602	contract.	educt the amount norm monies due of that may become due under the
	Contract.	
603	\//ban	the Contractor fails to reach substantial completion of the work for
604		the Contractor fails to reach substantial completion of the work for
605		ated damages are specified, within the time or times fixed in the
606		any extension thereof, in addition to all other remedies for breach that
607	•	lable to the State, the Contractor shall pay liquidated damages to the
608	State, in the	amount of \$ per working day.
609	(4)	The Ideas Beauty and December 11 of the Office of the Control of the Office of the Off
610	(A)	Liquidated Damages Upon Termination. If the State terminates
611		count of Contractor's default, liquidated damages may be charged
612	_	st the defaulting Contractor and its surety until final completion of
613	work.	
614		
615	(B)	Liquidated Damages for Failure to Complete the Punchlist. The
616		actor shall complete the work on any punchlist created after the pre-
617	final ii	nspection, within the contract time or any extension thereof.
618		
619		When the Contractor fails to complete the work on such punchlist
620	within	the contract time or any extension thereof, the Contractor shall pay
621	liquida	ated damages to the State of 20 percent of the amount of liquidated
622	dama	ges established for failure to substantially complete the work within
623	contra	act time. Liquidated damages shall not be assessed for the period
624	betwe	een:
625		
626		(1) Notice from the Contractor that the project is substantially
627		complete and the time the punchlist is delivered to the Contractor.
628		•
629		(2) The date of the completion of punchlist as determined by the
630		Engineer and the date of the successful final inspection, and
631		5, -

632 633 634 635	(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.
636	(C) Actual Damages Recoverable If Liquidated Damages Deemed
637	Unenforceable. In the event a court of competent jurisdiction holds that
638	any liquidated damages assessed pursuant to this contract are
639	unenforceable, the State will be entitled to recover its actual damages for
640	Contractor's failure to complete the work, or any designated portion of the
641	work within the time set by the contract.
642	work main are arms sorral as a
643	108.09 Rental Fees for Unauthorized Lane Closure or Occupancy. In
644	addition to all other remedies available to the State for Contractor's breach of the
645	terms of the contract, the Engineer will assess the rental fees in the amount of
646	\$500 for every one-to fifteen-minute increment for each roadway lane closed to
647	public use or occupied beyond the time periods authorized in the contract or by the
648	Engineer. The maximum amount assessed per day shall be \$5,000. The State
649	may, at its discretion, deduct the amount from monies due or that may become
650	due under the contract. The rental fee may be waived in whole or part if the
651	Engineer determines that the unauthorized period of lane closure or occupancy
652	was due to factors beyond the control of the Contractor. Equipment breakdown is
653	not a cause to waive liquidated damages.
654	
057	
655	108.10 Suspension of Work.
655 656	·
655 656 657	(A) Suspension of Work. The Engineer may, by written order, suspend
655 656 657 658	(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
655 656 657 658 659	(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
655 656 657 658 659 660	(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
655 656 657 658 659 660 661	(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:
655 656 657 658 659 660 661 662	 (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
655 656 657 658 659 660 661 662 663	(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:
655 656 657 658 659 660 661 662 663 664	 (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.
655 656 657 658 659 660 661 662 663 664 665	 (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
655 656 657 658 659 660 661 662 663 664 665 666	 (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.
655 656 657 658 659 660 661 662 663 664 665 666 667	 (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.
655 656 657 658 659 660 661 662 663 664 665 666 667 668	 (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
655 656 657 658 659 660 661 662 663 664 665 666 667 668 669	 (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.
655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670	 (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.
655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671	 (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
655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672	 (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:
655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673	 (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
655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672	 (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:

677	(c) Perform the work in strict compliance with the
678	provisions of the contract.
679	
680	(d) Provide adequate supervision on the jobsite.
681	(5) The convenience of the State.
682	
683	(B) Partial and Total Suspension. Suspension of work on some but
684	not all items of work shall be considered a "partial suspension".
685	Suspension of work on all items shall be considered "total suspension".
686	The period of suspension shall be computed from the date set out in the
687	written order for work to cease until the date of the order for work to
688	resume.
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690	(C) Reimbursement to Contractor. In the event that the Contractor is
691	ordered by the Engineer in writing as provided herein to suspend all work
692	under the contract for the reasons specified in Subsections 108.10(A)(2),
693	108.10(A)(3), or 108.10(A)(5) of the "Suspension of Work" paragraph, the
694	Contractor may be reimbursed for actual direct costs incurred on work at
695	the jobsite, as authorized in writing by the Engineer, including costs
696 607	expended for the protection of the work. An allowance of 5 percent for
697	indirect categories of delay costs will be paid on any reimbursed direct
698	costs, including extended branch and home-office overhead and delay
699 700	impact costs. No allowance will be made for anticipated profits. Payment
700	for equipment which is ordered to standby during such suspension of work
701	shall be made as described in Subsection 109.06(H) - Idle and Standby
702	Equipment.
703	
704	(D) Cost Adjustment. If the performance of all or part of the work is
705	suspended for reasons beyond the control of the Contractor except an
706	adjustment shall be made for any increase in cost of performance of this
707	contract (excluding profit) necessarily caused by such suspension, and the
708	contract modified in writing accordingly.
709	
710	However, no adjustment to the contract price shall be made for any
711	suspension, delay, or interruption:
712	
713	(1) For weather related conditions.
714	
715	(2) To the extent that performance would have been so
716	suspended, delayed, or interrupted by any other cause, including the
717	fault or negligence of the Contractor.
718	
719	(3) Or, for which an adjustment is provided for or excluded under
720	any other provision of this Contract.
721	

(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 thirty (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.

108.11 Termination of Contract for Cause.

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- **Default.** If the Contractor refuses or fails to perform the work, or any (A) separable part thereof, with such diligence as will assure its completion within the time specified in this contract, or any extension thereof, or commits any other material breach of this contract, and further fails within seven (7) days after receipt of written notice from the Engineer to commence and continue correction of the refusal or failure with diligence and promptness, the Engineer may, by written notice to the Contractor, declare the Contractor in breach and terminate the Contractor's right to proceed with the work or the part of the work as to which there has been delay or other breach of contract. In such event, the State may take over the work, perform the same to completion, by contract or otherwise, and may take possession of, and utilize in completing the work, the materials, appliances, and plants as may be on the site of the work and necessary therefore. Whether or not the Contractor's right to proceed with the work is terminated, the Contractor and the Contractor's sureties shall be liable for any damage to the State resulting from the Contractor's refusal or failure to complete the work within the specified time.
- **(B)** Additional Rights and Remedies. The rights and remedies of the State provided in this contract are in addition to any other rights and remedies provided by law.
- (C) Costs and Charges. All costs and charges incurred by the State, together with the cost of completing the work under contract, will be

deducted from any monies due or which would or might have become due to the Contractor had it been allowed to complete the work under the contract. If such expense exceeds the sum which would have been payable under the contract, then the Contractor and the surety shall be liable and shall pay the State the amount of the excess.

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

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

108.12 Termination For Convenience.

- (A) Terminations. The Director may, when the interests of the State so require, terminate this contract in whole or in part, for the convenience of the State. The Director will give written notice of the termination to the Contractor specifying the part of the contract terminated and when termination becomes effective.
- (B) Contractor's Obligations. The Contractor shall incur no further obligations in connection with the terminated work and on the date set in the notice of termination the Contractor shall stop work to the extent specified. The Contractor shall also terminate outstanding orders and subcontracts as they relate to the terminated work. The Contractor shall settle the liabilities and claims arising out of the termination of subcontracts and orders connected with the terminated work subject to the State's approval. The Engineer may direct the Contractor to assign the Contractor's right, title, and interest under terminated orders or subcontracts to the State. The Contractor must still complete the work not terminated by the notice of termination and may incur obligations as necessary to do so.
- **(C)** Right to Construction and Goods. The Engineer may require the Contractor to transfer title and to deliver to the State in the manner and to the extent directed by the Engineer, the following:

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- (1) Any completed work.
- (2) Any partially completed construction, goods, materials, parts, tools, dies, jigs, fixtures, drawings, information, and contract rights (hereinafter called "construction material") that the Contractor has specifically produced or specially acquired for the performance of the terminated part of this contract.
- (3) The Contractor shall protect and preserve all property in the possession of the Contractor in which the State has an interest. If the Engineer does not elect to retain any such property, the Contractor shall use its best efforts to sell such property and construction materials for the State's account in accordance with the standards of HRS Chapter 490:2-706.

(D) Compensation.

- (1) The Contractor shall submit a termination claim specifying the amounts due because of the termination for convenience together with cost or pricing data, submitted to the extent required by HAR Subchapter 15, Chapter 3-122. If the Contractor fails to file a termination claim within one year from the effective date of termination, the Engineer may pay the Contractor, if at all, an amount set in accordance with Subsection 108.12(D)(3).
- (2) The Engineer and the Contractor may agree to a settlement provided the Contractor has filed a termination claim supported by cost or pricing data submitted as required and that the settlement does not exceed the total contract price plus settlement costs reduced by payments previously made by the State, the proceeds of any sales of construction, supplies, and construction materials under Subsection 108.12(C)(3), and the proportionate contract price of the work not terminated.
- (3) Absent complete agreement, the Engineer will pay the Contractor the following amounts less any payments previously made under the contract:
 - (a) The cost of all contract work performed prior to the effective date of the notice of termination work plus a 5 percent markup on the actual direct costs, including amounts paid to subcontractor, less amounts paid or to be paid for completed portions of such work; provided, however, that if it appears that the Contractor would have sustained a loss if the entire contract would have been completed, no markup shall be allowed or included and the amount of compensation shall

858			be reduced to reflect the anticipated rate of loss. No
859			anticipated profit or consequential damage will be due or paid.
860			
861			(b) Subcontractors shall be paid a markup of 10 percent on
862			their direct job costs incurred to the date of termination. No
863			anticipated profit or consequential damage will be due or paid
864			to any subcontractor. These costs must not include payments
865			made to the Contractor for subcontract work during the
866			contract period.
867			
868			(c) The total sum to be paid the Contractor shall not
869			exceed the total contract price reduced by the amount of any
870			sales of construction supplies, and construction materials.
871		(4)	Cost alsimond assumed to an antablished by the Otata aball be
872		(4)	Cost claimed, agreed to, or established by the State shall be
873		in acc	cordance with HAR Chapter 3-123.
874	400 42 D.	- Fina	J and Final Ingrestions
875 876	108.13 Pr	e-rina	al and Final Inspections.
876 877	(A)	Inone	notion Poquiromenta Pefere the Engineer undertakes a final
	` '	•	ection Requirements. Before the Engineer undertakes a final
878	•		f any work, a pre-final inspection must first be conducted. The
879			shall notify the Engineer that the work has reached substantial
880	compi	etion a	and is ready for pre-final inspection.
881	(D)	Dro E	inal Inapaction Defers notifying the Engineer that the work
882	(B)		Final Inspection. Before notifying the Engineer that the work
883			I substantial completion, the Contractor shall inspect the project
884			installed items with all of its subcontractors as appropriate. The
885		actor s	shall also submit the following documents as applicable to the
886	work:		
887		(4)	All written guerantees required by the contract
888 889		(1)	All written guarantees required by the contract.
890		(2)	Two accepted final field-posted drawings as specified in
890 891			on 648 – Field-Posted Drawings;
892		Secui	on 040 – Fleid-Fosted Diawings,
892 893		(2)	Complete weekly cortified navrall records for the Contractor
		(3)	Complete weekly certified payroll records for the Contractor
894		and S	Subcontractors.
895		(4)	Cartificate of Dlumbing and Floatrical Increation
896		(4)	Certificate of Plumbing and Electrical Inspection.
897		/E\	Cartificate of building accumancy as required
898		(5)	Certificate of building occupancy as required.
899		/6 \	Cartificate of Sail and Wood Treatments
900		(6)	Certificate of Soil and Wood Treatments.
901		/ 7 \	Cartificate of Water System Chlorination
902		(7)	Certificate of Water System Chlorination.
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- **(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 (10) 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 (10) 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 (5) 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.

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- (b) Repair or replace to new or pre-existing condition any damages resulting from such defective materials, equipment or installation thereof.
- The State will be entitled to the benefit of all manufacturers and (3) 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.
- 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.
- No Waiver of Legal Rights. The following will not operate or be 108.18 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.

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

1088	(1)	All written guarantees required by the contract.
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1090	(2)	Complete and certified weekly payrolls for the Contractor and
1091	its su	ıbcontractor's.
1092		
1093	(3)	Certificate of plumbing and electrical inspection.
1094		
1095	(4)	Certificate of building occupancy.
1096		
1097	(5)	Certificate for soil treatment and wood treatment.
1098		
1099	(6)	Certificate of water system chlorination.
1100		
1101	(7)	Certificate of elevator inspection, boiler and pressure pipe
1102	insta	llation.
1103		
1104	(8)	Tax clearance.
1105		
1106	(9)	All other documents required by the Contract or by law.
1107		
1108		re to Meet Closing Requirements. The Contractor shall meet
1109	the applicat	ble closing requirements within sixty (60) days from the date of
1110	-	eptance or the agreed to Punchlist complete date. Should the
1111	Contractor	fail to comply with these requirements, the Engineer may
1112	terminate th	ne contract for cause."
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1116		
1117		END OF SECTION 108

49	claims have	been fully	and	completely	discharged	or otherwise
50	satisfied."					
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55		END OF	SECT	ION 109		

1 2	SECTION 201 – CLEARING AND GRUBBING
3	Make the following amendments to said Section:
4 5 6	(I) Amend 201.04 – Measurement by revising lines 167 to 168 to read as follows:
7 8 9 10	"201.04 Measurement. The Engineer will measure clearing and grubbing per acre or square yard in accordance with the contract documents."
11 12	(II) Amend 201.05 – Payment by revising lines 170 to 179 to read as follows:
13 14 15 16	"201.05 Payment. The Engineer will pay for the accepted clearing and grubbing per acre or square yard. Payment will be full compensation for the world prescribed in this section and the contract documents.
17 18 19	The Engineer will pay for the following pay item when included in the proposal schedule:
20 21	Pay Item Pay Unit
22 23 24 25 26	Clearing and Grubbing Acre
27	END OF SECTION 201

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2 3	Make the following amendments to said Section:
4	N Amound 202 02/OV/OV/o) Marrian and Day Harit Woight from him of 245 to him
5 6 7	I) Amend 203.03(C)(2)(a) – Maximum Dry Unit Weight from line 245 to line 255 to read as follows:
8 9 10 11 12	"(a) Maximum Dry Unit Weight. Test for maximum of unit weight according to AASHTO T 180, and apply the correction for fraction larger than 3/4 inch. Use Haw Test Method HDOT TM 5 for sample preparation of sensiting soils when so designated by the Engineer."
13 14 15	II) Amend 203.04 – Measurement by revising lines 345 to 366 to read a collows:
16 17	203.04 Measurement.
18 19 20 21	(A) Excavation will be paid on a cubic yard basis. Measurement f payment will not apply.
22 23 24 25 26	(B) The Engineer will measure imported borrow per cubic yard accordance with the contract documents. The Engineer will compute quantities of imported borrow incorporated into the work on a volumbasis, using average end area method in place at work site."
27 28	III) Amend 203.05 – Payment by revising lines 368 to 457 to read as follows
29 30 31 32 33	203.05 Payment . The Engineer will pay for the accepted pay items listed below at the contract price per pay unit, as shown in the proposal scheduled ayment will be full compensation for the work prescribed in this section and the contract documents.
34 35 36	The Engineer will pay for each of the following pay items when included he proposal schedule:
37	Pay Item Pay Uni
38 39 40	Excavation Cubic Yar
41	mported Borrow Cubic Yar
42 43 44 45	The Engineer will pay for accepted quantities of subexcavation, coadway excavation at the contract unit price per cubic yard, when ordered he Engineer, for work prescribed in Subsection 203.03(A)(4) – Subexcavation

SECTION 203 – EXCAVATION AND EMBANKMENT

Payment will be full compensation for the work prescribed therein and in the contract documents.

The Engineer will pay for accepted quantities of unlined gutter excavation as roadway excavation at the contract unit price per cubic yard, when gutter is located as follows: within median area of a divided highway; and between roadbed shoulder and adjacent cut slope. Payment will be full compensation for removing and disposing of excavated material; backfilling and compacting; and for the work prescribed in the contract documents.

The Engineer will not pay for stockpiling selected material, placing selected material in final position, or placing selected material in windrows along tops of roadway slopes for erosion control work, separately and will consider the cost as included in the unit prices for the various excavation contract pay items. The cost is for work prescribed in this section and the contract documents.

The Engineer will not pay for overhaul separately and will consider the cost as included in the unit prices for the various excavation contract pay items. The cost is for work prescribed in this section and the contract documents.

The Engineer will not pay for embankment separately and will consider the cost as included in the unit price for roadway excavation. The cost is for work prescribed in this section and the contract documents."

END OF SECTION 203

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

"SECTION 209 - TEMPORARY WATER POLLUTION, DUST, AND EROSION CONTROL

209.01 **Description.** This section describes the following:

- (A) Including detailed plans, diagrams, and written Site-Specific Best Management Practices (BMP); constructing, maintaining, and repairing temporary water pollution, dust, and erosion control measures at the project site, including local material sources, work areas and haul roads; removing and disposing hazardous wastes; control of fugitive dust (defined as uncontrolled emission of solid airborne particulate matter from any source other than combustion); and complying with applicable State and Federal permit conditions.
- (B) Work associated with construction stormwater, dewatering, and hydrotesting activities and complying with conditions of the National Pollutant Discharge Elimination System (NPDES) permit(s) authorizing discharges associated with construction stormwater, dewatering, and hydrotesting activities.

(C) Potential pollutant identification and mitigation measures are listed in Appendix A for use in the development of the Contractor's Site-Specific BMP.

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

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209.02 Materials. Comply with applicable materials described in Chapters 2 and 3 of the current HDOT "Construction Best Management Practices Field Manual". In addition, the materials shall comply with the following:

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Grass. Grass shall be a quick growing species such as rye grass, (A) Italian rye grass, or cereal grasses. Grass shall be suitable to the area and provide a temporary cover that will not compete later with permanent cover. Alternative grasses are allowable if acceptable to the Engineer.

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- **(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.
- **Hydro-mulching**. Hydro-mulching used as a temporary vegetative (C) 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 seven (7) calendar days prior to the Start Work Date. Discuss sequence of work, plans and proposals for water pollution, dust, and erosion control.

90	(2) Water	r Pollu	ition, Dust, and Erosion Control Submittals.
91	Submit a Site	e-Spec	ific BMP Plan within twenty-one (21) calendar days
92			Submission of complete and acceptable Site-
93			is the sole responsibility of the Contractor and
94			time will not be issued for delays due to
95			clude the following:
96			and and the remaining.
97	(a)	Writte	n description of activities to minimize water
98	` ,		I soil erosion into State waters, drainage or sewer
99	•		MP shall include the following:
100	Gyotol	110. Di	Will chair include the following.
01		1.	An identification of potential pollutants and their
102		source	·
103		Source	CS .
104		2.	A list of all materials and heavy equipment to be
105			during construction.
		useu	during construction.
106		2	Descriptions of the methods and devices used to
107		3.	Descriptions of the methods and devices used to
108			lize the discharge of pollutants into State waters,
109		araina	age or sewer systems.
110			
111		4.	Details of the procedures used for the
112			enance and subsequent removal of any erosion or
113		siltatio	on control devices.
114		_	
115		5.	Methods of removing and disposing hazardous
116		waste	s encountered or generated during construction.
17			
18		6.	Methods of removing and disposing concrete and
19			alt pavement cutting slurry, concrete curing water,
120		and h	ydrodemolition water.
121			
122		7.	Spill Control and Prevention and Emergency Spill
123		Respo	onse Plan.
124			
125		8.	Fugitive dust control, including dust from grinding,
126		sweep	oing, or brooming off operations or combination
127		thered	of.
128			
129		9.	Methods of storing and handling of oils, paints
130		and o	ther products used for the project.
131			, , ,
132		10.	Material storage and handling areas, and other
133			ng areas.
134		J	
135		11.	Concrete truck washouts.

136 137	12. Concrete waste control.
	13. Fueling and maintenance of vehicles and other
138 139	equipment.
140	equipment.
141	14. Tracking of sediment offsite from project entries
142	and exits.
143	and Cate.
144	15. Litter management.
145	Ter Elder Management.
146	16. Toilet facilities.
147	
148	17. Other factors that may cause water pollution, dus
149	and erosion control.
150	
151	(b) Provide plans indicating location of water pollution, dus
152	and erosion control devices; provide plans and details of BMPs
153	to be installed or utilized; show areas of soil disturbance in cu
154	and fill, indicate areas used for construction staging and
155	storage including items (1) through (17) above, storage of
156	aggregate (indicate type of aggregate), asphalt cold mix, soil or
157	solid waste, equipment and vehicle parking, and show areas
158	where vegetative practices are to be implemented. Indicate
159	intended drainage pattern on plans. Include flow arrows
160	Include separate drawing for each phase of construction that
161	alters drainage patterns. Indicate approximate date wher
162	device will be installed and removed.
163	
164	(c) Construction schedule.
165	
166	(d) Name(s) of specific individual(s) designated responsible
167	for water pollution, dust, and erosion controls on the project
168	site. Include home, cellular, and business telephone numbers
169	fax numbers, and e-mail addresses.
170	(a) Description of fill motorial to be used
171 172	(e) Description of fill material to be used.
173	(f) For projects with an NDDES Parmit for Construction
173 174	(f) For projects with an NPDES Permit for Construction Activities, submit information to address all sections in the
175	Storm Water Pollution Prevention Plan (SWPPP).
176	Stoffi Water Foliation Flevention Flair (SWFFF).
177	(g) For projects with an NPDES Permit, information required
178	for compliance with the conditions of the Notice of Genera
179	Permit Coverage (NGPC)/NPDES Permit.
180	· c corolago (rro. oprin blo i offini.
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(h) Site-Specific BMP Review Checklist. The checklist may be downloaded from HDOT's Stormwater Management website at http://stormwaterhawaii.com.

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

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

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

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

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

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 fourteen (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:

268	(1) For construction areas discharging into waters not impaired for
269	nutrients or sediments, complete initial stabilization within fourteen
270	(14) calendar days after the temporary or permanent cessation of
271	earth-disturbing activities.
272	
273	(2) For construction areas discharging into nutrient or sediment
274	impaired waters, complete initial stabilization within seven (7) calendar
275	days after the temporary or permanent cessation of earth-disturbing
276	activities.
277	
278	For projects without an NPDES Permit for Construction activities,
279	complete initial stabilization within fourteen (14) calendar days after the
280	temporary or permanent cessation of earth-disturbing activities.
281	,, p
282	Any of the following types of activities constitutes initiation of
283	stabilization:
284	
285	(1) Prepping the soil for vegetative or non-vegetative stabilization;
286	(i) repping the content regulative of from regulative stabilization,
287	(2) Applying mulch or other non-vegetative product to the exposed
288	area;
289	arou,
290	(3) Seeding or planting the exposed area;
291	(b) Cooding of planting the expected area,
292	(4) Starting any of the activities in items $(1) - (3)$ above on a portion
293	of the area to be stabilized, but not on the entire area; and
294	of the area to be stabilized, but not on the chair area, and
295	(5) Finalizing arrangements to have stabilization product fully
296	installed in compliance with the deadline for completing initial
297	stabilization activities.
298	Stabilization detivities.
299	Any of the following types of activities constitutes completion of initial
300	stabilization activities:
301	Stabilization detivities.
302	(1) For vegetative stabilization, all activities necessary to initially
303	seed or plant the area to be stabilized; and/or
304	seed of plant the area to be stabilized, and/or
305	(2) For non-vegetative stabilization, the installation or application
306	of all such non-vegetative measures.
307	of all such hon-vegetative measures.
308	If the Contractor is unable to meet the deadlines above due to
309	circumstances beyond the Contractor's control, and the Contractor is using
310	vegetative cover for temporary or permanent stabilization, the Contractor
311	may comply with the following stabilization deadlines instead as agreed to by
312	the Engineer:
313	the Engineer.
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- (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.

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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:

404	(1) For construction areas discharging into nu	utrient or sedir	nent
405	impaired waters, inspect, prepare a written report,		
406	to BMP measures at the following intervals:		
407			
408	(a) Weekly.		
409	,		
410	(b) Within twenty-four (24) hours of any	rainfall of 0.25	inch
411	or greater which occurs in a 24-hour period.		
412	3		
413	(c) When existing erosion control meas	ures are dama	aged
414	or not operating properly as required by Site		_
415		•	
416	(2) For construction areas discharging to wate	rs not impaired	d for
417	nutrients or sediments, inspect, prepare a written	•	
418	repairs to BMP measures at the following intervals		
419	1		
420	(a) Weekly.		
421	(4)		
422	(b) When existing erosion control meas	ures are dama	aged
423	or not operating properly as required by Site		_
424	or more operations green property are required by one	, оросии 2ии	-
425	For projects without an NPDES Permit for Con-	struction activi	ities
426	inspect, prepare a written report, and make repairs to BM		
427	following intervals:	meacaree a	
428	iononing miorrane.		
429	(a) Weekly.		
430	(4)		
431	(b) When existing erosion control meas	ures are dama	aged
432	or not operating properly as required by Site		_
433		•	
434	Temporarily remove, replace or relocate any Site-	-Specific BMP	that
435	must be removed, replaced or relocated due to potential	•	
436	or potential danger or damage to project or public.		J,
437	h		
438	Maintain records of inspections of Site-Specific	BMP work. K	(eep
439	continuous records for duration of the project. Submit		
440	Report to the Engineer within twenty-four (24) hours after		
441	report to the Engineer Wallin Workly Total (21) hours after	odon mopodia	,
442	The Contractor's designated representative speci	ified in Subsec	ction
443	209.03(A)(2)(d) shall address any Site-Specific BMP defic		
444	by the Engineer immediately, including weekends a		
445	complete work to fix the deficiencies by the close of the r		
446	problem does not require significant repair or replacemen	-	
447	can be corrected through routine maintenance. Address	•	
448	BMP deficiencies brought up by the State's Third-Part		
449	timeframe above or as specified in the Consent Decre	•	
マサク	unionalite above of as specified in the Consell Decle	C OI IVIO4 INFI	ى_ى

450 Permit, whichever is more stringent. The Consent Decree timeframe 451 requirement applies statewide. The MS4 NPDES Permit only applies to Oahu. In this section, "immediately" means the Contractor shall take all 452 453 reasonable measures to minimize or prevent discharge of pollutants until a 454 permanent solution is installed and made operational. If a problem is 455 identified at a time in the day in which it is too late to initiate repair, initiation 456 of repair shall begin on the following work day. When installation of a new 457 pollution prevention control or a significant repair is needed, complete 458 installation or repair no later than seven (7) calendar days from the time of 459 notification/Contractor discovery. Notify the Engineer and document why it is infeasible to complete the installation or repair within seven (7) calendar 460 days and complete the work as soon as practicable and as agreed to by the 461 462 Address Site-Specific BMP deficiencies discovered by the 463 Contractor within the timeframe above. The Contractor's failure to 464 satisfactorily address these Site-Specific BMP deficiencies, the Engineer 465 reserves the right to employ outside assistance or use the Engineer's own 466 labor forces to provide necessary corrective measures. The Engineer will 467 charge the Contractor such incurred costs plus any associated project 468 engineering costs. The Engineer will make appropriate deductions from the 469 Contractor's monthly progress estimate. Failure to apply Site-Specific BMP measures may result in one or more of the following: assessment of 470 471 liquidated damages, suspension, or cancellation of Contract with the 472 Contractor being fully responsible for all additional costs incurred by the 473 State.

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(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).

480 481 482

483 484 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.

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(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.

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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

496	permit or NGPC.
497	(E) Discharges Associated with Dewatering Activities. If dewatering
498	activities require effluent discharge into State waters or drainage systems, a
499	NPDES Dewatering Permit (CWB-NOI Form G) or Individual Perm
500	authorizing discharges associated with dewatering from DOH-CWB
501	required from the DOH-CWB.
502	
503	Do not begin dewatering activities until the DOH-CWB has issued a
504	Individual NPDES Permit or Notice of General Permit Coverage (NGPC
505	Conduct dewatering operations in accordance with the conditions of the
506	permit or NGPC.
507	(F) Calid Wests Cubwit the Calid Wests Disclosure Forms f
508	(F) Solid Waste. Submit the Solid Waste Disclosure Form for
509	Construction Sites to the Engineer within twenty-one (21) calendar days
510 511	date of award. Provide a copy of all the disposal receipts from the facili permitted by the Department of Health to receive solid waste to the Engine
512	monthly. This should also include documentation from any intermedia
512	facility where solid waste is handled or processed, or as directed by the
514	Engineer.
515	Engineer.
516	(G) Construction BMP Training. The Contractor's representative
517	responsible for development of the Site-Specific BMP Plan ar
518	implementation of Site-Specific BMPs in the field shall attend the State
519	Construction Best Management Practices Training. The Contractor sha
520	keep training logs updated and readily available.
521	
522	209.04 Measurement.
523	(A) (() (() (() () (
524	(A) Installation, maintenance, monitoring, and removal of BMP will be pa
525	on a lump sum basis. Measurement for payment will not apply.
526 527	(P) The Engineer will only measure additional water pollution, dust ar
	(B) The Engineer will only measure additional water pollution, dust ar erosion control required and requested by the Engineer on a force account.
528 529	basis in accordance with Subsection 109.06 – Force Account Provisions ar
530	Compensation.
531	Compensation.
532	209.05 Payment. The Engineer will pay for accepted pay items listed below
533	contract price per pay unit, as shown in the proposal schedule. Payment will be fu
534	compensation for work prescribed in this section and contract documents.
535	
536	The Engineer will pay for each of the following pay items when included
537	proposal schedule:
538	
539	Pay Item Pay Unit
540	
541	Installation, Maintenance, Monitoring, and Removal of BMP

Force Account

An estimated amount for force account is allocated in proposal schedule under 'Additional Water Pollution, Dust, and Erosion Control', but actual amount to be paid will be the sum shown on accepted force account records, whether this sum be more or less than estimated amount allocated in proposal schedule. The Engineer will pay for BMP measures requested by the Engineer that are beyond scope of accepted Site-Specific BMP on a force account basis.

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

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

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

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-swppp/ under Concrete Curing and Irrigation Water.

Pollutant	Appropriate Site-Specific BMP to be	BMP
Source	Implemented	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.

Source		
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Materials associated with the operation and maintenance of equipment, such as oil, fuel, and hydraulic fluid leakage	 Implemented 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 cleanup 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 watertight 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 	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.
	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	

Pollutant	Appropriate Site-Specific BMP to be	ВМР
Source	Implemented	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 	Soil Stabilization 1. SM-22 Topsoil Management 2. EC-12 Seeding and Planting 3. EC-14 Mulching 4. EC-11 Geotextiles and Mats Slope
	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	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

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

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

Pollutant Source	Appropriate Site-Specific BMP to be Implemented	BMP Requirements
Sediment from soil stockpiles	 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. Place bagged materials on pallets and under cover. Provide physical diversion to protect stockpiles from concentrated runoff. Cover stockpiles with plastic or comparable material when practicable. Place silt fence, fiber filtration tubes, or straw wattles around stockpiles. 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. Unless infeasible, contain and securely protect stockpiles from the wind. Provide Storm Drain Inlet Protection and/or Perimeter Sediment Controls as applicable. See Stockpile Management Section SM-3 for additional requirements. 	See Stockpile Management Section SM-3. Storm Drain Inlet Protection SC-1, and Perimeter Sediment Controls where applicable.
Emulsified asphalt or prime/tack coat	 Provide training for employees and contractors on proper material delivery and storage practices and procedures. Restrict paving operations during wet weather to prevent paving materials from being discharged. Use asphalt emulsions such as prime coat when possible. Protect drain inlet structures and manholes during application of tack coat, seal coat, slurry seal, and fog seal. Keep ample supplies of drip pans and absorbent materials on site. Inspect inlet protection devices. See Material Storage and Handling Section SM-2 and Paving Operations Section SM-20 for additional requirements. Provide Storm Drain Inlet Protection and/or Perimeter Sediment Controls as applicable. 	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.

Materials associated with painting, such as paint and paint wash solvent Materials associated with painting, such as paint and paint wash solvent Materials as the paint and paint wash solvent Materials and waste wash area a minimum of 50 feet away or as far as practicable from storm drainage system. Do not dump liquid wastes into the storm drainage system. Filter and re-use solvents and thinners. Dispose of oil-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 drainage system. 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-9, Spill Pre	Pollutant	Appropriate Site-Specific BMP to be	ВМР
and stored in original containers. • Keep ample supply of cleanup materials on site. • Cere 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 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. • Ensure collection, removal, and disposal of hazardous waste. • 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-10, and Structure Construction and Structure Controls Section SM-10, and Structure Construction and Control Section SM-10		1	Requirements
requirements. Provide Storm Drain Inlet Protection and/or	Materials associated with painting, such as paint and paint wash	 Implemented 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. 	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

Delle de est	Ammunujata Cita Consilia DMD to be	DMD
Pollutant	Appropriate Site-Specific BMP to be	BMP
Source	Implemented	Requirements
Industrial	Hazardous chemicals shall be well-labeled and	See Material
chemicals,	stored in original containers.	Storage and
fertilizers,	Keep ample supply of cleanup materials on site.	Handling Use
and/or	Clean up spills immediately, using dry clean-up	Section SM-2,
pesticides	methods where possible, and dispose of used	Stockpile Management
	materials properly.	Section SM-3,
	Do not clean surfaces or spills by hosing the area down.	and Hazardous
	 Eliminate the source of the spill to prevent a 	Materials and
	discharge or a furtherance of an ongoing	Waste
	discharge.	Management
	 Dispose container only after all of the product 	Section SM-9,
	has been used.	and Spill
	Retain a complete set of safety data sheets	Prevention and
	(formerly MSDS) on site.	Control SM-10
	Store industrial chemicals in water-tight	
	containers and provide either cover or secondary	
	containment.	
	Provide cover when storing fertilizers or	
	pesticides to prevent these chemicals from coming	
	into contact with rainwater.	
	Restrict amount of pesticide prepared to quantity	
	necessary for the current application.	
	Do not apply fertilizers or pesticides during or	
	just before a rain event.	
	Do not apply to stormwater conveyance	
	channels with flowing water.	
	Comply with fertilizer and pesticide	
	manufacturer's recommended usage and disposal	
	instructions. Document departures from	
	manufacturer's specifications in Attachment J.	
	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.	
	Follow federal, state, and local laws regarding fertilizer application.	
	fertilizer application.	
	Do not dispose of toxic liquid wastes (solvents, used oils, and points) or chemicals (additives).	
	used oils, and paints) or chemicals (additives,	
	acids, and curing compounds) in dumpsters allocated for construction debris.	
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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.	Con Horardova
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 Poquiroments
	•	Requirements
Fugitive Dust Control and Dust Control Water	 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 	See Dust Control Section SM-19
	requirements.	
Concrete Truck Wash Water	 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
Sediment Track-Out	 Include Stabilized Construction Entrance at all points that exit onto paved roads. A sediment trapping device is required if a wash rack is used in conjunction with the stabilized construction entrance/exit. The pavement shall not be cleaned by washing down the street. 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. Use BMPs for adjacent drainage structures. Remove sediment tracked onto the street by the end of the day in which the track-out occurs. Restrict vehicle use to properly designated exit points. Include additional BMPs that remove sediment prior to exit when minimum dimensions cannot be met. See Stabilized Construction Entrance/Exit Section SC-11 for additional requirements. 	See Stabilized Construction Entrance/Exit Section SC-11
Irrigation Water	 Consider irrigation requirements. Where possible, avoid species which require irrigation. Design, timing and application methods of irrigation water to eliminate the runoff of excess irrigation water into the storm water drainage system. See Seeding and Planting Section EC-12 and California Stormwater BMP Handbook SD-12 Efficient Irrigation included in SWPPP Attachment A for additional requirements. 	See Seeding and Planting Section EC-12 and California Stormwater BMP Handbook SD- 12 Efficient Irrigation
Hydrotesting Effluent	• 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 thirty (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.	Site specific BMPs will be included in the NOI/NPDES Permit Form F submittal.

Pollutant Source	Appropriate Site-Specific BMP to be Implemented	BMP Requirements
Dewatering Effluent	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 thirty (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.	See Dewatering Operations SM-18. Site specific BMPs will be included in the NOI/NPDES Permit Form G submittal.
Saw-cutting Slurry	 Saw cut slurry shall be removed from the site by vacuuming. Provide storm drain protection during saw cutting. See Paving Operations Section SM-20 for additional requirements. Provide Storm Drain Inlet Protection and/or Perimeter Sediment Controls as applicable. 	See Paving Operations Section SM-20, Storm Drain Inlet Protection SC-1, Perimeter sediment controls where applicable
Concrete Curing Water	 Avoid overspraying of curing compounds. Apply an amount of compound that covers the surface, but does not allow any runoff of the compound. See California Stormwater BMP Handbook NS-12 Concrete Curing included in SWPPP Attachment A for additional requirements. 	See California Stormwater BMP Handbook NS- 12 Concrete Curing

Pollutant	Appropriate Site-Specific BMP to be	BMP
Source	Implemented	Requirements
Plaster Waste Water	 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. 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. 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. 	See Material, Storage and Handling Use Section SM-2, Stockpile Management Use Section SM-3, and Hazardous Materials and Waste Management Section SM-9
Water-Jet Wash Water	 For Water-Jet Wash Water used to clean vehicles, use off site wash racks or commercial washing facilities when practical. See Vehicle and Equipment Cleaning Section SM-11 for additional information. For Water-Jet Wash Water used to clean impervious surfaces, the runoff shall not be allowed to flow into drainage structures or State Waters. 	See Vehicle and Equipment Cleaning Section SM-11
Sanitary/Septic Waste	 Locate Sanitary facilities in a convenient place away from drainage facilities. Position sanitary facilities so they are secure and will not be tipped over or knocked down. Wastewater shall not be discharged to the ground or buried. A licensed service provider shall maintain sanitary/septic facilities in good working order. Schedule regular waste collection by a licensed transporter. See Sanitary Waste Section SM-7 for additional requirements. 	See Sanitary Waste Section SM-7.

46 47 48	(1) Blaw-Knox bituminous pavers shall be equipped with the Blaw-Knox Materials Management Kit (MMK).
49	Management (Millity).
50	(2) Cedarapids bituminous pavers shall be those
51	that were manufactured in 1989 or later.
52	that were managed to 1900 or later.
53	(3) Barber-Green/Caterpillar bituminous pavers
54	shall be equipped with deflector plates as
55	identified in the December 2000 Service
56	Magazine entitled "New Asphalt Deflector Kit
57	{6630, 6631, 6640}".
58	
59	Prior to the start of using the paver for placing plant
60	mix, the Contractor shall submit for approval a full
61	description in writing of the means and methodologies that
62 63	will be used to prevent bituminous paver segregation. Use of the paver shall not commence prior to receiving approval
64	from the Engineer.
65	nom the Engineer.
66	The Contractor shall supply a Certificate of
67	Compliance that verifies that the approved means and
68	methods used to prevent bituminous paver segregation have
69	been implemented on all pavers used on the project and is
70	working in accordance with the manufacturer's
71	requirements."
72	
73 74 75	(VI) Amend Section 401.03(F)(1) HMA Pavement Courses One and a Half Inches Thick Or Greater, from lines 499 to 505 to read as follows:
76	"(1) HMA Pavement Courses One and a Half Inches Thick Or
77	Greater. Where HMA pavement compacted thickness indicated
78	in the contract documents is 1-1/2 inches or greater, compact to not
79	less than 92.0 percent nor greater than 97.0 percent of the
80	maximum specific gravity determined in accordance with AASHTO
81	T 209, modified by deletion of Supplemental Procedure for Mixtures
82	Containing Porous Aggregate."
83	
84	
85	(VII) Amend Section 401.03(F)(3) HMA Pavement Courses One and a
86	Half Inches Thick or Greater In Special Areas Not Designated For Vehicular
87 88	Traffic , from lines 530 to 538 to read as follows:
89	"(3) HMA Pavement Courses One and a Half Inches Thick or
90	Greater In Special Areas Not Designated For Vehicular Traffic.
91	For areas such as bikeways that are not part of roadway and other
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93 94 95 96 97	areas not subjected to vehicular traffic, compact to not less that 90.0 percent of maximum specific gravity determined in accordance with AASHTO T 209, modified by deletion of Supplemental Procedure for Mixtures Containing Porous Aggregate. Increase asphalt content by at least 0.5 percent above that used for HMA pavements designed for vehicular traffic."
98 99 100 (VIII) 101 follow	Amend Section 401.04 Measurement , from lines 597 to 603 to read as vs:
103 "401 .	04 Measurement.
104 105 106 107 108	(A) Asphalt concrete pavement will be paid on a lump sum basis. Measurement for payment will not apply.
108 109 110	(B) The Engineer will measure asphalt concrete pavement per ton in accordance with the contract documents.
111 112 113 114	(C) The Engineer will measure leveling course per ton in accordance with the contract documents."
115 116 (IX)	
117 follov	Amend Section 401.05 Payment , from lines 605 to 635, to read as vs:
117 follow 118 119 " 401 . 120 listed 121 Payn 122 contr	vs:
117 follow 118 119 " 401 . 120 listed 121 Payn 122 contr 123 124 125 the p	05 Payment. The Engineer will pay for the accepted pay items below at the contract price per pay unit, as shown in the proposal schedule. The nent will be full compensation for the work prescribed in this section and the
117 follow 118 119 " 401 . 120 listed 121 Payn 122 contr 123 124 125 the p 126 127	O5 Payment. The Engineer will pay for the accepted pay items below at the contract price per pay unit, as shown in the proposal schedule. The heat documents. The Engineer will pay for each of the following pay items when included in
117 follow 118 119 " 401 . 120 listed 121 Payn 122 contr 123 124 125 the p 126 127 128 129	O5 Payment. The Engineer will pay for the accepted pay items below at the contract price per pay unit, as shown in the proposal schedule. nent will be full compensation for the work prescribed in this section and the act documents. The Engineer will pay for each of the following pay items when included in roposal schedule:
117 follow 118 119 " 401 . 120 listed 121 Payn 122 contr 123 124 125 the p 126 127 128	O5 Payment. The Engineer will pay for the accepted pay items below at the contract price per pay unit, as shown in the proposal schedule. The full compensation for the work prescribed in this section and the act documents. The Engineer will pay for each of the following pay items when included in roposal schedule: Pay Item Pay Unit

138 compacting the sampled area with new material conforming to the surrounding area; protecting the pavement; and final analysis.

The Engineer will pay for cold planing in accordance with and under Section 415 – Cold Planing of Existing Pavement.

The Engineer will pay for adjusting existing frames and covers and valve boxes in accordance with and under Section 604 – Manholes, Inlets and Catch Basins and Section 626 – Manholes and Valve Boxes for Water and Sewer Systems.

The Engineer may, in lieu of requiring removal and replacement, use the sliding scale factor to accept HMA pavements compacted below 92.0 percent and above 97.0 percent. The Engineer will make payment for the material in that production day at a reduced price arrived at by multiplying the contract unit price by the pay factor shown in Table 401.05-1.

Table 401.05-1 – Sliding Sc	ale Pay Factor for Compaction
Percent Compaction	Percentage Payment
> 98.0	Removal
97.1 - 98.0	95
92.0 - 97.0	100
90.0 - 91.9	80
<90.0	Removal

END OF SECTION 401

1		SI	ECTION 415 – COLD	PLANING OF E	XISTING PAVE	MENT
2 3 4	Make	e the fo	llowing amendments	to said Sections:		
5 6	(I)	Ame follow	nd Section 415.04 ws:	Measurement	t, from line 67 to	68 to read as
7 8 9	"415	5.04	Measurement.			
10 11 12		(A) acco	The Engineer will rdance with the contra		planing per s	quare yard in
13 14 15	(II)	Ame	nd Section 415.05 P a	ayment, from line	e 70 to 79 to read	d as follows:
16 17 18 19 20	Payn	l below nent wi	Payment. The at the contract price all be full compensation cuments.	per pay unit, as	shown in the prop	oosal schedule.
21 22	the p		Engineer will pay for al schedule:	one of the follow	ving pay items wl	hen included in
23 24 25			Pay Item			Pay Unit
26 27			Cold Planing			Square Yard
28 29 30 31			(1) 80 percent removing the indicopening to public tra	cated thickness	bid price upon and clean and	•
32 33 34 35			(2) 20 percent removing the mater		bid price upon of the removed	
36 37 38 39			FNF	O OF SECTION 4	115	
				· - · · · · · · · · · · · · · · · ·	-	

2	
3 4	Make the following amendments to said Section:
5 6 7	(I) Amend 503.04 – Measurement by revising lines 1201 to 1205 to read as follows:
8 9 10	"503.04 Measurement. The Engineer will not measure concrete when contracted on a lump sum basis.
11 12 13 14	The Engineer will not make deductions for the volume occupied by reinforcing steel, piles, floor drains, weepholes, timber bumpers, pipes less than eight (8) inches, conduits, or expansion joint materials.
15 16	The Engineer will consider the wingwalls to be a part of the structure."
17 18 19	(II) Amend 503.05 - Payment by revising lines 1206 to 1223 to read as follows:
20 21 22 23	*503.05 Payment. The Engineer will pay for the accepted quantities of concrete complete in place at the contract lump sum price for the pay items listed below and contained in the proposal.
24 25 26 27 28 29 30 31 32 33 34	The contract lump sum amount paid shall be full compensation for the concrete; for placing, curing and finishing; for furnishing materials including admixtures and cement (including extra cement added to concrete deposited under water); for furnishing and installing drains, scuppers, premolded joint fillers, joint seals, waterproofing at construction joints, waterstops, pipes and conduits; for furnishing and installing metal rockers, anchor bolts, structural shapes for expansion joints and other similar items; for timber bumpers, forms, form lining and falsework or centering, bearing pads, structural steel bearing plates; and for equipment, tools, labor, materials and incidentals necessary to complete the work.
35 36 37	The Engineer will pay for the following pay item when included in the proposal schedule:
38 39	Pay Item Pay Unit
40 41 42	Concrete Drainage Chute Lump Sum (Conc. Class "A")
43 44 45	The Engineer will pay for excavation and backfill for foundations in accordance with and under Section 205 – Excavation and Backfill for Bridge and Retaining Structures and Section 206 – Excavation and Backfill for Drainage
46 47	Facilities." END OF SECTION 503
	0774 04 0014

SECTION 503 - CONCRETE STRUCTURES

1 DIVISION 600 - INCIDENTAL CONSTRUCTION

2 3

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

4 5

SECTION 601 - STRUCTURAL CONCRETE

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

601.02 Materials.

Portland Cement	701.01
Fine Aggregate for Concrete	703.01
Coarse Aggregate for Portland Cement Concrete	703.02
Admixtures	711.03
Water	712.01

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

601.03 Construction.

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

 Sample, test, and inspect concrete to ensure quality control of component materials and concrete. Sampling and testing for quality control in accordance with standard methods shall be performed by certified ACI Concrete Field Technician Grade I. Perform quality control tests for slump, air content, temperature, and unit weight during 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.

			DESIGN OF ement Conte	_	
Class of Concrete	28-Day Strength f'c, psi.	Minimum Cement Content Ibs./c.y.	Maximum Water- Cement Ratio, Ib./Ib.	Minimum Cement Content with Mineralized CO2 lbs./c.y.	Maximum Water- Cement Ratio with Mineralized CO2 lb./lb.
А	3000	532	0.59	504	0.62
В	2500	475	0.66	450	0.70
С	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 = Specifie	d Modulus o	f 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 MET	THODS
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

114 When concrete is designated by compressive strength, f'c, or flexural 115 strength, f'r, or includes CO2 Mineralization technology, CSH-SEA or SCMs, the Engineer will require prequalification of materials and mix proportions 116 117 proposed for use before placing such concrete. The Engineer will prequalify concrete based on past performance records using statistical computations of 118 119 population sizes and (n-1) weighting, or trial batch test reports in compliance 120 with computed minimum average strength for material and mix proportions. 121 The Engineer will determine minimum average strength on probability of not 122 more than one in 20 tests falling below specified strength for the following 123 conditions: 125 When past performance records are available, furnish the (1) following documented performance records: 126

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

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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.

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The Engineer will analyze performance records to establish standard deviation.

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

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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 pregualifications, based on data of most recent tests made on concrete of proposed mix design, and data obtained within one year of proposed use.

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

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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.

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

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

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

- **(C) Batching.** Measure and batch materials in accordance with the following provisions:
 - (1) Portland Cement. Either sacked or bulk cement may be used. Do not use fraction of sack of cement in concrete batch unless cement is weighed.

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

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

- (2) Water. Measure water by volume or by weight. Use readily adjustable device for measurement of water, with accuracy within 1 percent, plus or minus, of quantity of water required for batch. Arrange device so that variable pressure in water supply line does not affect measurements. Equip measuring tanks with outside taps and valves or other accepted means to allow for checking calibration.
- (3) Aggregates. When storing and stockpiling aggregates, avoid separation of coarse and fine particles within each size, and do not intermix various sizes before proportioning. Protect stored or stockpiled aggregates from dust or other foreign matter. Do not stockpile together, aggregates from different sources and of different 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.

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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:

- 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.

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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 (3) 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.

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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.

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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 Sections 12 Inches Thick or Less	0 – 4 2 – 5	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.

546	(J) Curing Concrete. Cure concrete in accordance with applicable
547	sections.
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549	601.04 Measurement. The Engineer will measure concrete in accordance with the
550	applicable sections.
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552	601.05 Payment. The Engineer will pay for the accepted concrete under the
553	applicable sections.
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558	END OF SECTION 601

1			;	SECTION 606 – GUA	RDRAIL
2 3	Make	the fo	ollowing amend	dment to said Section:	
5	(I) A	mend	606.04 - Meas	surement by replacing	g lines 116 to 118 to read:
6 7 8	" 606. in ac			ent. The Engineer will ntract documents.	measure guardrail per linear foot
9 10 11 12 13	steel	ition se	ection posts. I ures, the Engir	f the Contractor make	o center of end treatment posts or s end connections to masonry or ne face of such structures (if
15 16 17	end t		Engineer will n		ype guardrail per linear foot from
18 19 20	trans	The ition se	,	measure end anchora	age, terminal section and
21 22		(1)	as units of e	ach kind when specifi	ed in the proposal or on the Plans
23 24 25		(2)	include in th measured s		ail of the respective type, to be
26 27	(II)	Ame	end 606.05 – P	ayment by revising lin	nes 120 to 138 to read as follows:
28 29 30	" 606. listed		Payment. / at contract pr	•	ny for the accepted pay items nown in the proposal schedule.
31 32 33 34 35 36	new or reflect full co	val and guardr ctive m	d disposal of e ail and end tre larkers (RM-5) lsation for the v	existing guardrail and existing guardrail and existence atments, new guardra and all required mour	ail System (MGS) shall include end treatments, and installation of ail posts, new spacer blocks, new nting hardware. Payment will be a section and the contract
38 39 40	propo		Engineer will p hedule:	pay for the following pa	ay items when included in the
41 42	Pa	y Item	1		Pay Unit
+2 43 44	Guar	drail T	ype MGS W-B	eam with Rubrail	Linear Foot
14 45 46	Guar	drail T	ype MGS Tran	sition	Linear Foot
47				END OF SECTION	N 606
				377A-01-22M	1

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SECTION 612 – GROUTE	ED RUBBLE PAVING
Make the following amendments to said Se	ection:
(I) Amend 612.04 - Measurement b follows:	y revising lines 46 to 47 to read as
" 612.04 Measurement. The Engineer we cubic yard or per square yard in accordance	vill measure grouted rubble paving per e with contract documents."
(II) Amend 612.05 – Payment by revision	ng lines 49 to 60 to read as follows:
612.05 Payment. The Engineer will paving per cubic yard or per square yard. he work prescribed in this section and con	
The Engineer will pay for the follo proposal schedule:	wing pay items when included in the
Pay Item	Pay Unit
Grouted Rubble Paving	Cubic Yard"
END OF SEC	TION 612

Make the following Section part of the Standard Specifications:								
(I)	Add Section follows:	Add Section 627 – Geoweb Soil Stabilization System to read as follows:						
	"SECTIO	ON 627 – GEOWEB SOIL STABILIZATION SYSTEM						
627.01	Description. This section includes providing all material, labor, too and equipment for installation of Cellular Confinement System a shown in the Contract Documents and as specified in this section.							
	The Cell	ular Confinement System shall be used for slope protection.						
627.02	Referen	ces.						
(A	•	rican Association of State Highway and Transportation ials (AASHTO).						
	(1)	AASHTO M 218 – Steel Sheet, Zinc-Coated (Galvanized) for Corrugated Steel Pipe.						
	(2)	AASHTO M 288 – Geotextile Specification for Highway Applications.						
(E	3) Ame	American Society of Testing and Materials (ASTM).						
	(1)	ASTM D 1505 – Density of Plastics by the Density-Gradient Technique.						
	(2)	ASTM D 1603 – Standard Test for Carbon Black in Olefin Plastics						
	(3)	ASTM D 1693 – Environmental Stress-Cracking of Ethylene Plastics.						
	(4)	ASTM D 5199 – Measuring Nominal Thickness of Geotextiles and Geomembranes.						
	(5)	ASTM E 41 – Terminology Relating to Conditioning.						
627.03a	Submitt	als						
(A	106.0	Submit manufacturer's shop drawings in accordance with Section 106.05 Sample Submittals. Submittals including Manufacturer's product data, samples and section layout.						
(E	,	Design Calculations and Drawings. Provide a complete set of design calculations including a description of the static analysis						

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53		(2)	Minir	num	overall des	ign fac	tor of sa	afety sl	nall be 1	1.4.	
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- (D) Submit qualifications of Manufacturer's field representative 93 certifying the field representative is experienced in the installation of 94 the specified products.
 - No material will be considered as an equivalent to the geocell (E) material specified herein unless it meets all requirements of this specification, without exception. Manufacturers seeking to supply what they represent as equivalent material must submit records, data, independent test results, samples, certifications, and documentation deemed necessary by the Engineer to prove equivalency. The Engineer shall approve or disapprove other Manufacturers' materials in accordance with the General Conditions after all information is submitted and reviewed. Any substitute materials submitted shall be subject to independent lab testing at the contractor's expense.

627.03b Quality Assurance and Control

- (A) The cellular confinement system material shall be provided from a single Manufacturer for the entire project.
- The Manufacturer's Quality Management System shall be certified (B) and in accordance with ISO 9001:2015 and CE certification. Any substitute materials submitted shall provide a certification that their cellular confinement manufacturing process is part of an ISO program and a certification will be required specifically stating that their testing facility is certified and in accordance with ISO. An ISO certification for the substitute material will not be acceptable unless it is proven it pertains specifically to the geocell manufacturing operations.
- (C) The Manufacturer shall provide certification of compliance to all applicable testing procedures and related specifications upon the customer's written request. Request for certification shall be submitted no later than the date of order placement. Manufacturer shall have a minimum of 20 years experience producing cellular confinement systems.
- (D) Pre-Installation Meeting: Prior to installation of any materials, conduct a pre-installation meeting to discuss the scope of work and review installation requirements. The pre-installation meeting shall be attended by all parties involved in the installation of the cellular confinement system.
- (E) Manufacturer's Field Representative Qualifications:

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site at the start of construction to ensure the system is installed in accordance with the Contract Documents. (2) Manufacturer's field representative shall have a minimum 5 years installation experience with the specified products in the specified application. (3) Manufacturer of any substitute materials to be used shall certify that a representative can meet the above criteria and will be on site for initial construction start up. (A) Delivery, Storage, and Handling (A) Deliver materials to site in Manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and Manufacturer. (B) The materials shall be stored in accordance with Manufacturer's instructions. The materials shall be protected from damage and away from direct sunlight. (C) The materials shall be delivered, unloaded and installed in a manner to prevent and minimize damage. (A) The Manufacturer shall warrant each section that it ships to be free from defects in materials and workmanship at the time of manufacture. The Manufacturer's exclusive liability under this warranty or otherwise will be to furnish without charge to the original f.o.b. point a replacement for any section which proves to be defective under normal use and service during the 10-year period which begins on the date of shipment. The Manufacturer reserves the right to inspect any allegedly defective section in order to verify the defect and ascertain its cause. (B) This warranty shall not cover defects attributable to causes or occurrences beyond the Manufacturer's control and unrelated to the manufacturing process, including, but not limited to, abuse, misuse, mishandling, neglect, improper storage, improper installation, improper alteration or improper application. (C) In no event shall the Manufacturer be liable for any special, indirect, incidental or consequential damages for the breach of any express or implied warranty or for any other reason, including negligence, in connection with the ceillular confinement system.	120	1	1) Manufacturar shall provide a qualified field representative on
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	181		
83	182		connection with the cellular confinement system.
	183		

184 185	627.03e G	Seoweb	Cellu	lar Confinement System			
186	(A)	Prod	ucts. /	An acceptable manufacturer shall be Presto			
187		Geos	Geosystems or approved equal.				
188 189	(B)	Manı	ıfactııı	ring Certification. The Manufacturer shall have earned			
190	(5)			of registration, which demonstrates that its quality-			
191				nt system for its Geoweb cellular confinement system is			
192				gistered to the ISO 9001:2008 and CE quality			
193		stand	lards.				
194 195	(C)	Raso	Mater	riale			
196	(0)	Dase	water	iais			
197		(1)	Poly	ethylene Stabilized with Carbon Black			
198			-	•			
199			(a)	Density shall be 58.4 to 60.2 pound/ft³ (0.935 to 0.965			
200				g/cm³) in accordance with ASTM D 1505.			
201 202			(h)	Environmental Stress Crack Resistance (ESCR) shall			
202			(b)	be 5000 hours in accordance with ASTM D 1693.			
204				be deed field in description with the five bridge.			
205			(c)	Ultra-Violet light stabilization with carbon black.			
206							
207			(d)	Carbon Black content shall be 1.5 to 2 percent by			
208				weight, through addition of a carrier with certified			
209 210				carbon black content.			
211			(e)	Carbon black shall be homogeneously distributed			
212			(-)	throughout material.			
213							
214			(f)	The manufacturer must have an in-place quality			
215				control to prevent irregularities in strip material.			
216 217	(D)	Call	Proper	tios			
218	(5)	OCII I	Topci	uco			
219		(1)	Indivi	idual cells shall be uniform in shape and size when			
220		` ,	expa	nded.			
221		(0)					
222		(2)		idual cell dimensions (nominal) shall be dimensions			
223 224			±10%	0			
225		(3)	GW3	0V-Cell			
226		(5)	20				
227			(a)	Length shall be 11.3 inches (287 mm).			
228							
229			(b)	Width shall be 12.6 inches (320 mm).			

230 231			(c)	Nominal area shall be 71.3 in2 (460 cm2) plus or minus 1%.
232 233			(4)	Nominal donth shall be 6 inches (150 mm)
234			(d)	Nominal depth shall be 6 inches (150 mm)
235	(E)	Strin	Prone	erties and Assembly
236	(-)	Otrip) i Tope	files and Assembly
237		(1)	Perfo	orated Textured Strip/Cell
238		(')	1 0110	rated restared outproch
239			(a)	Strip sheet thickness shall be 50 mil (1.27 mm), minus
240			(α)	5 percent, plus 10 percent in accordance with ASTM
241				D 5199. Determine thickness flat, before surface
242				disruption.
243				distaption.
244			(b)	Polyethylene strips shall be textured surface with a
245			(6)	multitude of rhomboidal (diamond shape)
246				indentations.
247				indontations.
248			(c)	Textured sheet thickness shall be 60 mil plus or
249			(0)	minus 6 mil (1.52 mm plus or minus 0.15 mm).
250				mindo o min (1.02 min pido or mindo o ro min).
251			(d)	Indentation surface density shall be 140 to 200 per in ²
252			(4)	(22 to 31 per cm ²).
253				(22 to 61 per on).
254			(e)	Perforated with horizontal rows of 0.4 inch (10 mm)
255			(0)	diameter holes.
256				didifficier fiolog.
257			(f)	Perforations within each row shall be 0.75 inches (19
258			(1)	mm) on-center.
259				mm) on conton
260			(g)	Horizontal rows shall be staggered and separated
261			(9)	0.50 inches (12 mm) relative to hole centers.
262				0.00 monos (12 mm) relativo to note contere.
263			(h)	Edge of strip to nearest edge of perforation shall be a
264			(,	minimum of 0.3 inches (8 mm).
265				minimani or olo monoo (o min).
266			(i)	Centerline of spot weld to nearest edge of perforation
267			(')	shall be a minimum of 0.7 inches (18 mm).
268				
269			(j)	A slot with a dimension of 3/8 inch x 1-3/8 inch (10
270			U)	mm x 35 mm) is standard in the center of the non-
271				perforated areas and at the center of each weld.
272				portorated areas and at the contor of each word.
273				
274				
-· ·				

275		(2)	Assen	nbly of Cell Sections
276		(-)	7 (0001)	nary or con cochorio
277			(a)	Fabricate using strips of sheet polyethylene each with
278			(ω)	a length of 142 inches (3.61 m) and a width equal to
279				cell depth.
280				con depth.
281			(b)	Connect strips using full depth ultrasonic spot-welds
282			(D)	aligned perpendicular to the longitudinal axis of strip.
283				alighted perpendicular to the longitudinal axis of strip.
284			(c)	Ultrasonic weld melt-pool width shall be 1.0 inch (25
			(c)	mm) maximum.
285				mini) maximum.
286			/ ₄ \	Wold analysis for CW20V call acations shall be 17.5
287			(d)	Weld spacing for GW30V-cell sections shall be 17.5
288				inches plus or minus 0.10 inch (445 mm plus or minus
289				2.5 mm).
290	(=)			
291	(F)	Cell S	seam S	trength Tests
292				
293		(1)		um seam strengths are required by design and shall
294				ported in test results. Materials submitted with average
295				cal values will not be accepted. Written certification of
296				um strengths must be supplied to the engineer at the
297			time o	f submittals.
298				
299		(2)	Short-	Term Seam Peel-Strength Test
300				
301			(a)	Cell seam strength shall be uniform over full
302				depth of cell.
303				
304			(b)	Minimum seam peel strength shall be 480 lbf
305				(2,130 N) for 6 inch (150 mm) depth.
306				
307		(3)	Long-	Term Seam Peel-Strength Test
308		. ,		<u>-</u>
309			(a)	Conditions: Minimum of seven (7) days in a
310			` ,	temperature-controlled environment that undergoes
311				change on a 1 hour cycle from room temperature to
312				130 °F (54 °C).
313				
314			(b)	Room temperature shall be in accordance with ASTM
315			(- /	E41.
316				
317			(c)	Test samples shall consist of two, four-inch (100 mm)
318			(-)	wide strips welded together.
319				
320				

321 322 323			(d)	Test sample consisting of two carbon black stabilized strips shall support a 160 pound (72.5 kg) load for test period
324 325		(4)	10,00	0-hour Seam Peel Strength Certification
326 327	627.03f In	tegral	Comp	onents
328 329	(A)	ΔΤΡΔ	® T≙n	don Clip or approved equal
330	(~)	71110		don one of approved equal
331 332 333 334		(1)	devic	Tendon Clip is a molded, high-strength polyethylene e with a locking member and post with minimum pull-gh of 420 lbs (191 kg).
335 336 337 338		(2)	meth	Tendon Clip is the recommended anchorage connection od for securing sections with tendons and transferring riving gravity forces to the cell wall.
339	(B)	ΔΤΡΔ	® Kay	or approved equal
340	(6)	Allv	t⊚ rtcy	or approved equal
341		(1)	The k	sey shall be constructed of polyethylene and provide a
342		(·)		strength connection with minimum pull-through of 275
343			_	25 kg).
344			(.	
345		(2)	The k	rey shall be used to connect sections together at each
346		()		eaf and end to end connection.
347				
348		(3)	Metal	staples or zip ties are not allowed.
349 350	627.03g Te	endon <i>i</i>	Ancho	orage
351	(4)	- .	_	
352	(A)	renac	on Typ	е
353		(4)	Move	on Dolycotor - TD 225
354 355		(1)	vvove	en Polyester – TP-225
356			(a)	Material shall be bright, high-tenacity, industrial-
357			(a)	continuous-filament, polyester yarn woven into a
358				braided strap.
359				braided strup.
360			(b)	Elongation shall be 9 to 15 percent at break.
361			(-)	5 <u></u>
362			(c)	Minimum break strength shall be 5100 lbf (22.5 kN)
363			` ,	for TP-225.
364				
365	(B)	Types	of Te	ndon Anchorage
366	` ,	- •		-

367 368 369		(1)	Tendons, ATR approved equal		Clips	and Earth	Anchors	or
370	627.03h Ce	ell Infil	l Materials					
371 372 373 374 375	(A)	Cell infill material shall be topsoil for vegetated surfaces and shall have an SCS texture of loam, sandy loam or silty loam. Topsoil shall be neither excessively acidic nor alkaline.						
376 377	(B)	Infill material shall be free of any foreign material.						
378 379	(C)	Clays and silts are not acceptable infill material.						
380 381 382	(D)	Infill material shall be free-flowing and not frozen when placed in the Geoweb panels.						
383	627.03i Ad	dition	al Components					
384 385 386	(A)	Vege	tation					
387 388		(1)	Vegetation shal	be as spec	cified in t	he Contract	Documents	3.
389 390	(B)	Surface Protection						
391 392 393		(1)	Surface protect [turf reinforcen Documents.			-		-
394 395	(C)	Geotextile						
396 397 398		(1)	The geotextile Contract Docum	•	layer sha	all be as sp	ecified in t	he
399 400 401	627.03j Ex	kamina	tion					
402 403 404 405 406	(A)	Verify site conditions are as indicated on the drawings. Notify the Engineer if site conditions are not acceptable. Do not begin preparation or installation until unacceptable conditions have been corrected.						
400 407 408 409 410 411 412	(B)	Verify layout of structure is as indicated on the drawings. Notify the Engineer if layout of structure is not acceptable. Do not bego preparation or installation until unacceptable conditions have becorrected.					gin	

413 414	627.03k	Installati	on of	the Slope Protection System		
415 416	(A)		Prepare sub grade and install protection system in accordance with Manufacturer's recommendations.			
417						
418	(B)	On-si	On-site time for installation assistance by the Manufacturer's field			
419			sentati	ve shall be 1 day with one trip. All travel and expense		
420		costs	for Ma	anufacturer's field representative installation assistance		
421 422		shall l	oe incli	uded in the base bid price.		
423	(C)	Sub (Sub Grade Preparation			
424			_			
425		(1)		vate or fill foundation soils so top of installed section is		
426 427				with or slightly lower than adjacent terrain or final grade		
427 428			as inc	dicated on the drawings or as directed by the Engineer.		
429		(2)	Inetal	I geotextile separation layer on prepared surfaces		
430		(2)		ring required overlaps are maintained and outer edges		
431				geotextile are buried in accordance with the		
432			_	facturer's recommendations.		
433			iviaria	nastaror o rosommondationo.		
434	(D)	Secti	on An	chorage		
435	(-)					
436		(1)	Anch	orage requirements for the sections shall be as shown		
437		()		e Contract Documents and as directed by the Engineer.		
438				, ,		
439		(2)	Anch	orage with Tendons & ATRA Tendon Clips/or approved		
440			equal	, and Earth Anchors Preferred Method - Top of Slope		
441			Instal	lation		
442						
443			(a)	Excavate the anchor trench at the top of the slope to		
444				the depth as shown on the Contract Documents.		
445						
446			(b)	Position the collapsed sections at the crest of the		
447				slope.		
448						
449			(c)	Measure and cut the tendon run lengths for each		
450				tendon location allowing extra length to connect to		
451				earth anchor.		
452			/ ₄ /\	Mark the tendency with a block necessary marker nor		
453 454			(d)	Mark the tendons with a black permanent marker per		
454 455				the ATRA Tendon Clip/or approved equal, Location		
455 456				Chart.		
450 457			(e)	Thread the tendons through the unexpanded section.		
457 458			(5)	Throad the tendens through the unexpanded section.		

459	(f)	Starting from the first cell, count the number of cells to
460		the next Tendon Clip location and repeat along that
461		cell row.
462		
463	(g)	Repeat this procedure for each additional cell row
464		Tendon Clip run.
465		
466	(h)	With all the Tendon Clips placed in the section, thread
467		the tendons through the I-slots in the unexpanded
468		section.
469		
470	(i)	Locate the corresponding mark on the Tendon and
471		position it in front of the cell wall. Hold the tendon and
472		connect to the Tendon Clip. Refer to manufacturer's
473		manual for Tendon Clip tie-off instructions for slope
474		installation.
475		
476	(j)	Repeat this process on each cell row Tendon/Tendon
477		Clip run.
478		
479	(k)	Install earth anchors in accordance with
480	` ,	Manufacturer's recommendations and instructions.
481		Earth anchor type and strength shall be as shown on
482		the Contract Documents.
483		
484	(I)	Place the collapsed section in the anchor trench,
485	()	secure tendons to earth anchors and expand down
486		the slope.
487		•
488	(m)	Adjust the section (i.e. a shake or two of the
489	` ,	expanded section works well for this) so that the
490		section and tendons are uniformly taut.
491		,
492	(n)	Terminate the bottom of the tendons with Tendon
493	(/	Clips.
494		
495	(o)	Fill the anchorage trench with the specified material
496	(-)	and compact as required by the Contract Documents.
497		and compact as required by the contract Becamemen
498	Alternate Method – On Slope Installation:	
499		
500	(a)	Excavate the anchor trench at the top of the slope to
501	(~)	the depth as shown on the Contract Documents.
502		are applied charm on the Contract Booth follow.
503	(b)	Position collapsed sections at the crest of the slope.
504	(-)	. 2231. Consepted Coolone at the Groot of the Glope.

505			(c)	Feed precut lengths of specified tendon material
506				through the I-slots in the cell walls before expanding
507				individual sections into position. Number of tendons
508				per section shall be per the Contract Documents.
509				Leave the trailing length of the tendon on the upslope
510				side of the section to allow for connection of the
511				Tendon Clips.
512			/ ₄ \	Install couth anchors in accordance with
513			(d)	Install earth anchors in accordance with
514				Manufacturer's recommendations and instructions.
515				Earth anchor type and strength shall be as shown on
516 517				the Contract Documents.
517 518			(0)	Place the collapsed section in the anchor trench
519			(e)	Place the collapsed section in the anchor trench, secure tendons to earth anchors, and expand down
520				the slope.
520 521				the slope.
522			(f)	Install the Tendon Clips at the locations indicated on
523			(')	the Contract Documents.
524				the Contract Boodments.
525			(g)	Hold the tendon and attach to the Tendon Clips.
526			(9)	Refer to the Slope Installation Manual for Tendon Clip
527				tie-off instructions.
528				as on mondono.
529			(h)	Adjust the section (i.e. a shake or two of the
530			(/	expanded section works well for this) so that the
531				section and tendons are uniformly taut.
532				•
533			(i)	Terminate the bottom of the tendons with Tendon
534			.,	Clips.
535				
536			(j)	Fill the anchorage trench with the specified material
537				and compact as required by the Contract Documents.
538				
539	(E)	Secti	on Pla	cement and Connection
540				
541		(1)	•	$^\prime$ all sections are expanded uniformly to required
542				nsions and that outer cells of each section are correctly
543			aligne	, ,
544				re upper surfaces of adjoining sections are flush at joint
545			and a	djoining cells are fully aligned at the cell wall slot.
546				
547		(2)		ect the sections with ATRA Keys/or approved equal, at
548				interleaf and end to end connection. Insert the Key
549			throu	gh the cell wall l-slot before inserting through the

550 551			adjacent cell. Turn the Key 90 degrees to lock the sections together.
552			
553	(F)) Tops	oil Infill Placement
554			
555		(1)	Place specified infill in expanded cells with suitable material
556			handling equipment, such as a backhoe, front-end loader,
557			conveyor, or crane-mounted skip.
558			
559		(2)	Limit drop height to a maximum of 3 feet (1 m) to prevent
560			panel distortion.
561		/ 23	
562		(3)	Fill sections from the crest of the slope to toe or in
563			accordance with Engineer's direction.
564		(4)	
565		(4)	Infill material shall be free-flowing and not frozen when
566			placed into the sections.
567		(5)	
568		(5)	Evenly spread infill and tamp into place.
569	(0	٠٤	and Tunnature out
570	(G) Surta	ce Treatment
571		/ 4 \	Curfoce protection shall be installed improdictely after
572 572		(1)	Surface protection shall be installed immediately after
573 574			placement of the infill material and secured per the Manufacturer's instructions
575			Manuacturer 5 mstructions
576	627.04	Mothod	of Measurement. The Geoweb soil stabilization system will
577	027.04		on a lump sum basis. Measurement for payment will not
578		apply.	on a fulfip sum basis. Measurement for payment will not
579		арріў.	
580	627.05	Basis of	Payment. The Engineer will pay for the accepted pay items
581	027.00		ow at the contract price per pay unit, as shown in the proposal
582			e. Payment will be full compensation for the work prescribed in
583			on and the contract documents
584			
585		The Fna	ineer will pay for the following pay items when included in the
586		_	schedule:
587		F F	
588		Pay Item	n Pay Unit
589		•	·
590		Geoweb	Soil Stabilization System Lump Sum"
591			
592			
593			
594			END OF SECTION 627
595			

SECTION 629 - PAVEMENT MARKINGS

Make the following amendments to said Section:

(I) Amend Subsection 629.03(B) – Temporary Pavement Markings by revising the third paragraph from line 62 to 63 to read:

"Maintain and replace temporary pavement markings, flexible delineators, and barricades."

(II) Amend Table 629.03 – 1 – Temporary Pavement Markings to read as follows:

"TABLE 629.03-1 TEMPORARY PAVEMENT MARKINGS				
ТҮРЕ	PAVEMENT MARKINGS			
Passing Permitted - Both Sides	Single 4-inch yellow stripe 5 feet in length spaced 20 feet on center with Type D markers spaced 40 feet on center and located on center of 5-foot length of stripe.			
Passing Prohibited - Both Sides	Double solid 4-inch yellow stripes with Type D markers placed 20 feet on center on one of 4-inch yellow stripes selected by the Engineer.			
Passing Permitted - One Side Only	Single continuous 4-inch yellow stripe with Type D markers placed on stripe 20 feet on center on no-passing side and single 4-inch yellow stripes 5 feet in length spaced 20 feet on center on passing side.			
Lane Lines - Lane Changing Permitted	Single 4-inch yellow or white stripe 5 feet in length spaced 20 feet on center with Type C or Type D markers spaced 40 feet on center.			
Lane Lines - Lane Changing Prohibited	Double solid 4-inch white stripes with Type C markers placed 20 feet on center on one of the 4-inch white stripes selected by the Engineer.			
Crosswalk	Two 12-inch white transverse lines spaced 8 feet on center or as ordered by the Engineer.			
Stop Line	Single 12-inch white transverse line.			
Note: Paint may be used for temporary markings in areas where final paving is not complete."				

(III) Amend **629.04 – Measurement** by revising lines 292 to 294 to read as follows:

"629.04 Measurement.

(A) The Engineer will measure thermoplastic and preformed pavement marking tape per linear foot in accordance with the contract documents. The longitudinal pavement markings will be measured per linear foot as a single stripe for the width specified in the contract and in the proposal. The Engineer will include the longitudinal gaps for skip striping, up to thirty (30) feet long, in the measurement.

The Engineer will not measure temporary pavement markings including flexible delineator posts with reflector makers or Type I Barricades and temporary signs installed for the longitudinal guidance of public traffic over reconstructed areas, cold planed surfaces, newly paved surfaces or other unmarked or scarified areas for payment.

The Contractor shall consider the work required for the removal of pavement markings incidental to the various contract items, except as provided in the proposal or elsewhere in the contract. If the contract stipulates that the Engineer will make payment for the removal of pavement markings, the Engineer will measure the removal of pavement markings.

(B) The Engineer will measure the pavement markers per each for the types shown in the proposal.

 The Engineer will measure the painted stripes that are twelve (12) inches wide or less as a single stripe. The Engineer will measure the painted stripes over twelve (12) inches wide as two (2) stripes. The Engineer will measure the double stripes that are twelve (12) inches or less in total width including the transverse space between the stripes as a single stripe.

The Engineer will measure the longitudinal pavement markings by the linear foot. Longitudinal gaps for skip striping that are 30 feet or less will be included in the measurement.

(IV) Amend **629.05 – Payment** by revising lines 296 to 330 to read as follows:

"629.05 Payment.

(A) The Engineer will pay for thermoplastic and preformed pavement marking tape at the contract price per linear foot or on a lump sum basis according to the contract, complete in place, including primers.

The Engineer will pay for double four (4) inch striping with a four (4) inch space between stripes at the contract price per linear foot or on a lump sum basis according to the contract.

The contract unit price paid shall be full compensation for furnishing labors, materials, tools, equipment and incidentals and for doing the work involved in furnishing and installing pavement markings complete in place according to the contract.

The Engineer will not pay for the temporary pavement markings including flexible delineator posts with reflector markers or Type I Barricades and temporary signs installed for the longitudinal guidance of public traffic over reconstructed areas, cold planed surfaces, newly paved surfaces or other unmarked or scarified areas for payment if not shown in the proposal separately. The Engineer will consider them incidental to the various contract items.

If the contact specifies payment for removal of pavement markings under unit price pay items, the Engineer will pay for the accepted quantities at the contract unit prices bid. The prices shall be full compensation for removing such items according to the contract.

- (B) The Engineer will pay for the various types of pavement markers at the contract price per each, complete in place, including adhesives.
- (C) The Engineer will pay for painted pavement striping at the contract price per linear foot.

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

Pay Item Pay Unit 4-Inch Double Yellow Pavement Striping (Thermoplastic Extrusion) Linear Foot 6-Inch White Pavement Striping (Thermoplastic Extrusion) Linear Foot Type "C" Reflective Pavement Marker Each Type "D" Reflective Pavement Marker Each" **END OF SECTION 629**

1 2 3	SECTION 631 – TRAFFIC CONTROL, REGULATORY, WARNING, AND MISCELLANEOUS SIGNS
4 N	Make the following amendment to said Section:
5 6 (I	Amend Section 631.03(C) Labeling of Signs, from lines 42 to 51 to read:
8 9 d	"(C) Labeling of Signs. Label back of each sign with sign stickers as lirected by the State. Sign stickers will be provided by the State."
•	II) Amend Section 631.04 – Measurement by replacing lines 67 to 69 to read:
14 a 15 th	631.04 Measurement. The Engineer will measure regulatory, warning, and miscellaneous signs as complete units of the type and design specified in the proposal.
18 t e	The Engineer will not measure removal and disposal and storing of existing and emporary signs that the Contractor will not incorporate in the completed highway or payment."
21 (I	III) Amend Section 631.05 – Payment by replacing lines 71 to 99 to read as ollows:
24 "(25 m 26 s 27 a 28 la	Payment. The Engineer will pay for regulatory, warning, and niscellaneous signs at the contract price per each for the type and design pecified complete in place. Payment will be full compensation for excavating and backfilling, furnishing and installing materials, furnishing equipment, tools, abors and incidentals necessary to complete the work.
32 h 33 c	The Engineer will not pay for removing and disposing or storing of existing and temporary signs that the Contractor will not incorporate in the completed eighway separately. The Engineer will consider them incidental to the various contract items.
34 35 36 p 37	The Engineer will pay for the following pay items when included in the proposal schedule:
38 39	Pay Item Pay Unit
	Regulatory Sign and Post (10 Square Feet or Less) Each
44 45	END OF SECTION 631

1	SECTION 639 - ASPHALT CONCRETE CURB AND GUTTER
2 3	Make the following amendments to said Section:
4 5 6 7	(I) Amend 639.04 – Measurement by revising lines 88 to 89 to read a follows:
8 9 10 11 12	1639.04 Measurement. The Engineer will measure accepted asphalt curl and gutter per linear foot in accordance with the contract documents. The Engineer will measure along the front face of the curb at the finished gradelevation. If gutter is measured separately, the gutter will be measured along the nvert of the gutter."
13 14 15	Amend 639.05 – Payment by revising lines 91 to 101 to read as follows:
16 17 18 19	639.05 Payment. The Engineer will pay for accepted asphalt concrete curb and gutter at contract unit price per linear foot. Payment will be further compensation for the work prescribed in this section and the contract documents
20 21	The Engineer will pay for the following pay item when included in the proposal schedule:
22 23	Pay Item Pay Uni
242526	Curb, Type 6 Linear Foot
27 28	Gutter, Type 7 Linear Foot
29 30	
31	END OF SECTION 639

1	SECTION 699 - MOBILIZATION
2	
3	Make the following amendments to said Section:
4	
5	(I) Amend 699.03 Applicability by revising from lines 21 to 24 to read as
6	follows:
7	
8	"699.03 Applicability. Maximum bid allowed for this item is an amount not to
9	exceed 6 percent of the sum of all items excluding the bid price of this item."
10	400 A 1000 D A 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
11	(II) Amend 699.05 Payment by revising from lines 44 to 47 to read as follows:
12	
13	"Mobilization (Not to exceed 6 percent of the sum of all items
14	excluding the bid price of this item) Lump Sum"
15	
16	
17	
18	
19	END OF SECTION 600
20	END OF SECTION 699

47 48	The color shall conform to the latest appropriate standard color tolerance chart issued by the U.S. Department of Transportation, Federal Highway
49 50	Administration and to the daytime and nighttime color requirements of ASTM D
50	4956.
51	
52	Test methods and procedures shall be in accordance with ASTM.
53	
54	(IV) Amend Subsection 750.02 Sign Posts by replacing lines 1168 through
55	1172 to read:
56	
57	"750.02 Square Tube Posts. Square and other tube posts shall conform to
58	ASTM A 653 for cold-rolled, carbon steel sheet, commercial quality; or ASTM A
59	787 for electric-resistance-welded, metallic-coated carbon steel mechanical
60	tubing."
61	3
62	
63	
64	
65	
66	
67	END OF SECTION 750
	END OF SECTION 750
68	
69	
70	
71	

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 journeyworkers 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
 journeyworker rate will not be considered a journeyworker 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 penaltie 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

eH104-3 Rev. 04/21

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS MAUI DISTRICT HONOLULU, HAWAII

<u>PROPOSAL</u>

PROPOSAL TO THE

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

PROJECT: Haleakala Highway Slope and Shoulder Repair

Vicinity of Ainakula Road To Kulalani Drive

District of Makawao, Island of Maui

PROJECT NO.: 377A-01-22M

COMPLETION TIME: 180 Working or Calendar days from the Start Work

Date from the Department.

DESIGN PROJECT MANAGER:

NAME: Larry D. Hail

ADDRESS: 650 Palapala Drive, Kahului, HI 96732

PHONE NO.: (808) 873-3567

EMAIL: larry.d.hail@hawaii.gov

FAX NO.: (808) 873-3544

ELECTRONIC SUBMITTAL:

Bidders shall submit and <u>upload the complete proposal to HlePRO</u> prior to the bid opening date and time. Any additional support documents explicitly designated as <u>confidential and/or proprietary</u> shall be uploaded as a <u>separate file</u> to HlePRO. Bidders shall refer to SPECIALPROVISIONS 102.09 Delivery of Proposal for complete details. <u>FAILURE TO UPLOAD THE COMPLETE PROPOSAL TO HIEPRO SHALL BE GROUNDS FOR REJECTION OF THE BID.</u>

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 ten (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 ten (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.

The bidder acknowledges receipt of and certifies that it has completely examined the following listed items: Hawaii Standard Specifications for Road and Bridge Construction, 2005, the Notice to Bidders, the Special Provisions, 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, 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. 3 _____

Addendum No. 1

Addendum No. 2	Addendum No. 4
bidder has listed the name of each person the project as Joint Contractor or Subco	Hawaii Revised Statutes, the undersigned as n or firm, who will be engaged by the bidder on ntractor and the nature of work to be done by ply with the aforementioned requirements may d.
Name of Subcontractor	Nature and Scope of Work
1	
2	
3.	
4.	
5	
6.	
7	
8	
9	
Name of Joint contractor	Nature and Scope of Work
1	
2.	-
3	

("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	
Authorized Signature	
Title	
Business Address	
Email Address	
Email Address	
Date	
Contact Person (If different from above	e.)
Phone Number and Email Address	

NOTE:

By

If bidder is a <u>CORPORATION</u>, 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 <u>PARTNERSHIP</u>, 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

Bidders agree that preferences shall be taken into consideration to determine the low bidder in accordance with said Sections and the rules promulgated, however, the award of contract will be in the amount of the bid offered exclusive of any preferences.

A. HAWAII PRODUCTS PREFERENCE

In accordance with ACT 174, SLH 2022, effective June 27, 2022, Hawaii Products Preference shall not apply to solicitations for public works construction. Therefore, the Hawaii Products Preference shall not apply to this project.

B. APPRENTICESHIP PROGRAMS PREFERENCE

In accordance with ACT 17, SLH 2009 – Apprenticeship Program, a 5% bid adjustment for bidders that are parties to apprenticeship agreements pursuant to Hawaii Revised Statutes (HRS) Section 103-55.6 may be applied to the bidder's price for evaluation purposes.

Any bidder seeking this preference must be a party to an apprenticeship agreement registered with the Department of Labor and Industrial Relations at the time the offer is made for each apprenticeable trade the bidder will employ to construct the public works projects for which the offer is being made.

The bidder is responsible for complying with all submission requirements for registration of its apprenticeship program before requesting the preference.

() Yes, I wish to be considered for the Apprenticeship Programs Preference. I have included Certification Form(s) 1 with my bid.

C. RECYCLED PRODUCT PREFERENCE

Recycled product preference shall not apply to this proposal.

PROPOSAL SCHEDULE						
ITEM NO.	ITEMS	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT	
201.1000	CLEARING AND GRUBBING	0.073	AC	\$	\$	
203.1000	EXCAVATION	5	C.Y.	\$	\$	
203.1001	IMPORTED BORROW	35	C.Y	\$	\$	
209.1000	INSTALLATION, MAINTENANCE, MONITORING, AND REMOVAL OF BMP	L.S.	L.S.	L.S.	\$	
209.1001	ADDITIONAL WATER POLLUTION, DUST, AND EROSION CONTROL	F.A.	F.A.	F.A.	\$ 10,000	
401.1000	HMA PAVEMENT, MIX NO. V	21	TON	\$	\$	
415.1000	COLD PLANING	240	S.Y.	\$	\$	
503.1000	CONCRETE DRAINAGE CHUTE (CONC. CLASS "A")	L.S.	L.S.	L.S.	\$	
606.1000	GUARDRAIL TYPE MGS W-BEAM WITH RUBRAIL	79	L.F.	\$	\$	
606.1001	GUARDRAIL TYPE MGS TRANSITION	56	L.F.	\$	\$	
612.1000	GROUTED RUBBLE PAVING	10	C.Y.	\$	\$	
627.1000	GEOWEB SOIL STABILIZATION SYSTEM (75 S.Y)	L.S.	L.S.	L.S.	\$	
629.1000	4-INCH DOUBLE YELLOW PAVEMENT STRIPING (THERMOPLASTIC EXTRUSION)	135	L.F.	\$	\$	
629.1001	6-INCH WHITE PAVEMENT STRIPING (THERMOPLASTIC EXTRUSION)	135	L.F.	\$	\$	
629.1002	TYPE "C" REFLECTIVE PAVEMENT MARKER	4	EA	\$	\$	

	PROPOSAL SCHEDULE						
ITEM NO.	ITEMS	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT		
629.1003	TYPE "D" REFLECTIVE PAVEMENT MARKER	7	EA	\$	\$		
631.1000	REGULATORY SIGN AND POST (10 SQUARE FEET OR LESS)	1	EA	\$	\$		
639.1000	CURB, TYPE 6	131	L.F.	\$	\$		
639.1001	GUTTER, TYPE 7	135	L.F.	\$	\$		
645.1000	TRAFFIC CONTROL	L.S.	L.S.	L.S.	\$		
645.1001	ADDITIONAL POLICE OFFICERS, ADDITIONAL TRAFFIC CONTROL DEVICES, & ADVERTISEMENT	F.A.	F.A.	F.A.	\$ 10,000		
699.1000	MOBILIZATION (NOT TO EXCEED 6% OF THE SUM OF ALL ITEMS EXCLUDING BID PRICE OF THIS ITEM)	L.S.	L.S.	L.S.	\$		

Α.	TOTAL AMOUNT FOR COMPARISON OF BIDS	\$
		'

NOTE:

- 1. Bids shall include all Federal, State, County and other applicable taxes and fees.
- 2. The TOTAL AMOUNT FOR COMPARISON OF BIDS shall be used to determine the lowest responsible bidder.
- 3. Bidders shall complete all unit prices and amounts. Failure to do so shall be grounds for rejection of bid.
- 4. If a discrepancy occurs between unit bid price and the bid price, the unit bid price shall govern.
- 5. Bidders shall submit and upload the complete proposal to 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 HIEPRO SHALL BE GROUNDS FOR REJECTION OF THE BID. If there is a conflict between the specification document and the HIEPRO solicitation, the specifications shall govern and control, unless otherwise specified.

PROPOSAL SCHEDULE

1 2 3

The bidder is directed to Subsection 105.16 – Subcontracts.

4 5

The bidder's attention is directed to Sections 696 - Field Office and Project Site Laboratory and 699 - Mobilization for the limitation of the amount bidders are allowed to bid.

7 8 9

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11 12

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If the bid price for any proposal item having a maximum allowable bid indicated therefore in any of the contract documents is in excess of such a maximum amount, the bid price for such proposal item shall be adjusted to reflect the limitation thereon. The comparison of bids to determine the successful bidder and the amount of contract to be awarded shall be determined after such adjustments are made, and such adjustments shall be binding upon the bidder.

141516

17

The bidder is directed to Section 717 – Cullet and Cullet-Made Materials regarding recycling of waste glass.

SURETY BID BOND

	Bond No
KNOW ALL BY THESE PRESENTS:	
That we,	
(Full n	name or legal title of offeror)
as Offeror, hereinafter called the Prin	ncipal, and
	me of bonding company) , a corporation authorized to transact business as a awaii, are held and firmly bound unto
as Owner, hereinafter called Owner,	(State/county entity) in the penal sum of
Dollars (\$	
WHEREAS: The Principal has submitted a	an offer for
(Project by	y number and brief description)
in the alternate, accept the offer of contract with the Owner in accordance or bonds as may be specified in the sufficient surety for the faithful pe payment of labor and material furnish	on is such that if the Owner shall reject said offer, or if the Principal and the Principal shall enter into a ce with the terms of such offer, and give such bond a solicitation or Contract Documents with good and erformance of such Contract and for the prompt shed in the prosecution thereof as specified in the be null and void, otherwise to remain in full force
and effect.	
Signed this	day of,
(Se	eal)Name of Principal (Offeror)
	Signature
	Title
(Se	eal)Name of Surety
	Signature
	Title

BB-1 r11/17/98

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HONOLULU, HAWAII

SAMPLE FORMS

Contract

Performance Bond (Surety)

Performance Bond

Labor and Material Payment Bond (Surety)

Labor and Material Payment Bond

Chapter 104, HRS Compliance Certificate

Certification of Compliance for Employment of State Residents

CONTRACT

CONTRACT	
THIS AGREEMENT, made this day,	by and between the
STATE OF HAWAII, by its Director of Transportation, hereinafter referred	to as "STATE",
and «CONTRACTOR», «STATE_OF_INCORPORATON», whose busines	ss/post office
address is <u>«ADDRESS»</u> hereinafter referred to as "CONTRACTOR",	
WITNESSETH: That for and in consideration of the payments herein	after 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	f which labor,
materials and construction shall be computed at the unit and/or lump sum pr	ices set forth in the
attached proposal schedule and shall be the sum of <u>«BASIC»</u> DOLLAR	S
(\$\scrip*\BASIC_NUMERIC\scrip*) as follows:	

TOTAL AMOUNT FOR COMPARISON OF BIDS......\$«BASIC_NUMERIC»

which shall be provided from the following funds:

Federal Funds	
State Funds	
TOTAL AMOUNT	

all in accordance with the specifications, the special provisions, if any, the notice to bidders, the instructions to bidders, the proposal and plans for <u>«PROJECT_NO_ONLY»</u>, 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 www.working_days., from the date indicated in the notice to proceed from the STATE, subject, however, to such extensions as may be provided for 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
<u>«BASIC»-----</u>DOLLARS (<u>\$«BASIC_NUMERIC»</u>) 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 <u>«EXTRAS»-----DOLLARS (\$«EXTRA_NUMERIC»)</u> is hereby provided for extra work and shall be provided from the following funds:

Federal Funds	
State Funds	
Total	

Where Federal funds are involved, it is covenanted and agreed by and between the parties hereto that the sum of _----«FEDERAL_BASIC»----DOLLARS

(\$«FEDERAL_BASIC_NUMERIC») and ----«FEDERAL_EXTRAS»----DOLLARS

(\$«FEDERAL_EXTRAS_NUMERIC»), a portion of the contract price and extras, respectively, shall be paid out of the applicable Federal funds, and that this contract shall be construed to be an agreement to pay said sums to the Contractor only out of the aforesaid Federal funds if and when such Federal funds shall be received from the Federal Government, and that this contract shall not be construed to be a general agreement to pay said portions at all events out of any funds other than those which may be so received from the Federal Government; provided, that if the Federal share of the cost of the project is not immediately forthcoming from the Federal Government, the STATE may advance the CONTRACTOR the anticipated Federal reimbursement of the cost of the completed portions of the work from funds which have been appropriated by the STATE for its pro rata share.

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»
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	of Contractor)
	er called Principal, and	
	(Name and Street Address of Bonding	g Company)
•	illed Surety, a corporation(s) authori	
surety in the State of Hav	waii, are held and firmly bound unto	the, (State/County Entity)
its successors and assig	ns, hereinafter called Obligee, in the	e amount of
), to which payment Prin Iministrators, successors and assigr	
	above-bound Principal has signed a for the following project:	
hereinafter called Contra hereof.	ict, which Contract is incorporated h	nerein by reference and made a part

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 TO ALL BY THESE PRESENTS:

That	we,,
	(Full Legal Name and Street Address of Contractor)
as Contracto	or, hereinafter called Contractor, is held and firmly bound unto the
	, its successors and assigns, as Obligee, hereinafter called
	ne amount of
	(Dollar Amount of Contract)
	which to the said Obligee, well and truly to be made, Contractor binds itself, its tors, administrators, successors and assigns, firmly by these presents. Said
	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, 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

	Teller's Check No.	, dated	, issued
	by		,
	urawn on		· · · · · · · · · · · · · · · · · · ·
	a bank, savings institution or cre	edit union insured by the Fede	eral Deposit
	Insurance Corporation or the Na	ational Credit Union Administr	ation, payable at
	sight or unconditionally assigne	d to	
	, ,		;
	Treasurer's Check No.	dated	issued
	by		
	drawn an		
	a bank, savings institution or cre	adit union insured by the Fede	aral Denosit
	Insurance Corporation or the Na		
	sight or unconditionally assigne	u to	
			,
	06 01		
	Official Check No.		
	by		
	drawn on a bank, savings institution or cre		,
	Insurance Corporation or the Na		
	sight or unconditionally assigne	d to	
			;
	0 45 101 111		
	Certified Check No		
	by a bank, savings institution o		
	Insurance Corporation or the N		
	sight or unconditionally assigne	ed	
			;
WHEREAS:			
Tho	Contractor has by written agreems	ent datad	antarad into a
	Contractor has by written agreeme	nii daled	entered into a
contract with	n Obligee for the following Project:		
			
			
hereinafter o	called Contract, which Contract is i	ncorporated herein by referen	re and made a part
hereof.	Zanou Contidot, Willon Contidot IS I	ico. porated fiorein by following	ioo ana maac a part

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, the 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 goo	od faith hereunder.	, , , , , , , , , , , , , , , , , , , ,	
Signed this	day of	··	
	(Seal)	Name of Contractor	
		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		
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		

A "Claimant" shall be defined herein as any person who has furnished labor or materials

time, alterations, or additions, and agrees that they shall become part of the Contract.

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
	(Seal)	Title
		* Signature
		 Title

*ALL SIGNATURES MUST BE ACKNOWLEDGED BY A NOTARY PUBLIC

LABOR AND MATERIAL PAYMENT BOND

KNOW ALL BY THESE PRESENTS:

٦	hat we,
	actor, hereinafter called Contractor, is held and firmly bound unto (State/County entity)
	ssors and assigns, as Obligee, hereinafter called Obligee, in the amount
	DOLLARS (\$),
	DOLLARS (\$), (Dollar amount of Contract)
and truly	oney of the United States of America, for the payment of which to the said Obligee, well to be made, Contractor binds itself, its heir, executors, administrators, successors and firmly by these presents. Said amount is evidenced by:
	Legal Tender;
	Share Certificate unconditionally assigned to or made payable at sight to
	Description:
0	Certificate of Deposit, 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;
0	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
	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
	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

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WHEREAS:
The Contractor has by written agreement datedentered 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

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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.
- 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
	« Name of Corporation, Partners	CONTRACTOR»
Name of Corporation, Partitlet		sinp, or marviduar
	Signature and Title of Signe	
Notary Seal NOTARY ACKNOWLEDGEMENT	Notary Seal NOTARY CERTIFICATION	I
Subscribed and sworn before me thisday of	Doc. Date: Notary Name:	-
Notary signature	Doc. Description:	
Notary public, State of		
My Commission Expires:	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.
 - 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.
 - 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 Statues §103D-702.
- 3. <u>Conflict with Federal Law</u>: 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.:	
of Hawaii 2011-Employment of State	tes Chapter103B, as amended by Act 192, Session Laws Residents on Construction Procurement Contracts, I n officer of and
for the Project Contract indicated above	ve, was in (Name of Contractor or Subcontractor Company)
compliance with HRS Chapter 103B,	as amended by Act 192, SLH 2011, by employing a ty percent are Hawai'i residents, as calculated according
	☐ I am an officer of the Contractor for this contract.
CORPORATE SEAL	☐ I am an officer of a Subcontractor for this contract.
	(Name of Company)
	(Signature)
	(Print Name)
	(Print Title)
Subscribed and sworn to me before this	Doc. Date: # of Pages 1st Circuit
day of, 2011.	Notary Name: Doc. Description:
Notary Public, 1st Circuit, State of Hawai'i	
My commission expires:	Notary Signature Date