

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS
HONOLULU, HAWAII

SPECIAL PROVISIONS, SPECIFICATIONS, PROPOSAL
AND CONTRACT

FOR

FURNISHING AND DELIVERING MOTOR
VEHICLES AND EQUIPMENT

ISLANDS OF
OAHU, MAUI, LANAI, MOLOKAI, HAWAII AND KAUAI

PROJECT NO. HWY-CM-26-01

2026

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

The receiving of bids for **FURNISHING AND DELIVERING MOTOR VEHICLES AND EQUIPMENT, ISLANDS OF OAHU, MAUI, LANAI, MOLOKAI, HAWAII AND KAUAI, PROJECT NO. HWY-CM-26-01**, will begin as of the HiePRO Release Date.

Bidders shall register and submit complete bids through HiePRO only. Refer to the following HiePRO link for important information on Vendor Registration:

<https://hiepro.hawaii.gov/welcome.html>.

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

HiePRO OFFER DUE DATE AND TIME is April 10, 2026, at 2:00 p.m., Hawaii Standard Time (HST). **Bidders shall submit and upload the complete proposal to HiePRO prior to the offer due date and time. Proposals received after said due date and time shall not be considered. Any additional support documents explicitly designated as confidential and/or proprietary shall be uploaded as a separate file to HiePRO. Bidders shall not include confidential and/or proprietary documents as part of their proposal. The record of each bidder and their respective proposal shall be open to public inspection. FAILURE TO UPLOAD THE PROPOSAL TO HiePRO SHALL BE GROUNDS FOR REJECTION.**

The scope of work consists of furnishing and delivering motor vehicles and equipment to the islands of Oahu, Maui, Lanai, Hawaii, and Kauai.

All Request for Information (RFI) questions and Substitution Requests shall be submitted in HiePRO **no later than March 17, 2026, at 2:00 p.m., HST.** RFI questions received after the stated deadline shall not be addressed. Substitution Requests received after the stated deadline

shall not be considered. Verbal RFI(s) shall not receive a response. All responses to RFI questions shall be provided for clarification and information only and issued by formal addendum. Any amendments to the solicitation shall be made by formal addendum and posted in HiePRO.

If there is a conflict between the solicitation and information stated in the responses to RFI questions, the solicitation shall govern and control, unless as amended by formal addendum.

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.

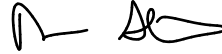
Protests. Any protest of this solicitation shall be submitted in writing to the Director of Transportation, in accordance with HRS § 103D-701 and Hawaii Administrative Rules § 3-126.

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).

For additional information, contact Maaza C. Mekuria, Acting Construction & Maintenance Program Manager, by phone at (808) 587-2332, or by email at maaza.c.mekuria@hawaii.gov.

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



ROBIN K. SHISHIDO
Deputy Director of Transportation for Highways

HIePRO RELEASE DATE: March 4, 2026

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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS
HONOLULU, HAWAII

SPECIAL PROVISIONS

SPECIAL PROVISIONS

These specifications contained herein are amended as follows:

SECTION 1 - DEFINITION OF TERMS

1.33 SUBCONTRACTOR is amended by deleting it and replacing it with the following:

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

Add the following new definition:

“1.39 HAWAII ePROCUREMENT SYSTEM (HIePRO) - The State of Hawaii eProcurement System for issuing solicitations, receiving proposals and responses, and issuing notices of award.”

SECTION 2 - PROPOSAL REQUIREMENTS AND CONDITIONS is amended as follows:

2.3 DELIVERY OF PROPOSALS is amended by replacing the entire subsection with:

“2.3 DELIVERY OF PROPOSALS – **Bidders shall submit and upload the complete proposal to HIePRO 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 HIePRO. 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 HIePRO.**

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.”

2.4 WITHDRAWAL OF PROPOSALS is amended by replacing the entire subsection with:

“2.4 WITHDRAWAL OF PROPOSALS – Bids may be modified or withdrawn prior to the bid opening date and time. Withdrawal or revision of proposal shall be completed, and submitted and uploaded to HIePRO prior to the bid opening date and time.”

2.5 PUBLIC OPENING OF PROPOSALS is not applicable.

The following subsections are added to this section:

“2.10 - BIDDER QUALIFICATION

Service Facility – At the time of bidding, bidder shall have an established place of commercial business with a reasonable inventory of replacement parts and commercial shop facility for the repair and servicing of vehicle/trailer/utility tractor/equipment offered. Such facility shall be located on the island where required item will be delivered, as indicated in the Delivery Schedule.

If the bidder does not have such a facility on the designated island, he shall arrange with a company on that island to make available to the State a commercial facility for the repair and service of vehicle/trailer/utility tractor/equipment offered. Bidders shall furnish the name and address of their warranty facility on the Service and Repair Facility Form provided and shall be submitted to the Project Manager by close of business, 4:30 P.M. Hawaii Standard Time (HST), five (5) working days after bid opening. Failure on the part of the bidder to furnish the requested information in the proposal shall result in a rejection of the bid.

For the Island of Molokai and Lanai the designated service facility on the Island of Maui will be accepted. This service shall be provided at no additional transportation costs to the State within the warranty period.

The State reserves the right to inspect bidder’s repair and service shop to determine acceptability under this requirement. Failure on the part of the bidder to meet the requirements of the Service Facility shall result in rejection of bid.

2.11 - BID PREPARATION

Legal Name. Bidder is required to submit bid-using bidder’s exact legal name as registered at the Department of Commerce and Consumer Affairs. Failure to do so may delay proper execution of the contract.

State License. Chapter 437, H.R.S., as amended, provides for regulating and licensing of motor vehicle manufacturers and distributors and their branches and representatives, motor vehicle dealers, salesmen, auctions and auctioneers and any other persons engaged in the business of selling or purchasing motor vehicles in the State of Hawaii; therefore, all prospective bidders who are interested in selling motor vehicles to the State of Hawaii shall provide proof that they do meet and satisfy the licensing requirement set forth in said statute by listing the license number in the space provided for in the proposal.

A Motor Vehicle includes any vehicle, motor vehicle, or truck, as defined in Sections 249-1 and 249-2, H.R.S., as amended, except for tractors, trailers and amphibious vehicles.

Bid Quotation. Bid price(s) quoted herein shall be based on delivery to destination and shall include, when applicable, cost for installation, modification, and instructional training in use of equipment.

Make, Model, and Other Information. Bidder shall identify in the proposal the exact brand or manufacturer's name and vehicle/equipment/product model number, order number or other identifier(s) of each item offered. Failure to do so or the inclusion of remarks such as "as specified" shall result in rejection of bid.

If any of the called-for elements of production information is missing from bidder's proposal, the State will not be able to determine from the information given, whether or not the product is acceptable. If additional space is needed to provide complete product identification, bidder may attach a separate sheet to the bid for that purpose. Bidders will not be allowed to clarify product identification after bid opening. This is to assure that all bids are submitted under the same conditions with no opportunity for one bidder to have advantage over any other bidder after exposure of offers.

Certification Letter. Upon request through the Detailed Specifications/Proposal Schedule, bidder(s) shall submit a certified letter(s) from their manufacturer(s) to certify the prospective bidder as the factory authorized warranty dealer (letter required for both chassis and equipment). Requested document shall be submitted to the Project Manager by close of business, 4:30 P.M. HST five (5) working days after the bid opening. Failure to submit certified letter(s) shall result in rejection of bid.

Brochures and Specifications Literature. Bidder shall submit current brochures and specifications pertaining to bid proposal to the Project Manager by close of business, 4:30 P.M. HST, five (5) working days after the bid opening. Failure to do so shall result in rejection of bid. All brochures and specifications shall be labeled with bidder's name and corresponding item number on both brochure and specification.

Trade-ins. Trade-in unit(s), if any, will be available for inspection by interested bidders at each respective location. Bidders shall contact agency indicated herein prior to attending an inspection visit.

It shall be the bidder's responsibility to meet with the agency to inspect the trade in units(s) for their general condition prior to bid opening. It shall also be the bidder's responsibility to ascertain which, if any, of the optional accessories and/or equipment, either installed or contained within the trade-in unit, are to be considered part of the trade in. Condition of trade-in unit(s) at the time of delivery may be commensurate with its condition at the time of inspection; however, bidder is advised that trade-in unit(s) will continue to be used until delivery and acceptance of new equipment is completed."

SECTION 3.1 - AWARD OF CONTRACT is amended by adding the following:

“The awarding of the contract(s) will be made by individual vehicle/equipment listed in the proposal schedule and be given to the lowest responsible bidder(s) for each vehicle/equipment whose proposal complies with all the requirements prescribed.

The State reserves the right to reject any and all proposals and to waive any defects as may be deemed to be in the best interest of the public.

The Contractor shall submit a copy of the order(s) placed with the factory for each item awarded to the Project Manager within ten (10) working days of the Notice to Proceed. Within fifteen (15) working days after the factory order is submitted, the Contractor shall also provide a copy of the factory’s acknowledgement and confirmation of receiving the order. Requests for extension time will NOT be considered unless both documents are furnished within the time limits specified.”

SECTION 6.2 – TRADE NAMES AND ALTERNATES is amended as follows:

1. The first paragraph of A. QUALIFICATION BEFORE BID OPENING shall be replaced with the following:

“A. QUALIFICATION BEFORE BID OPENING - When the specifications and/or plans specify one or more manufacturer's brand names of materials or equipment to indicate a quality, style, appearance, or performance, the bidder will be assumed to have based its bid on one of the specified named products, except where such proprietary product are specified, alternate brands may be qualified if found equal or better by the Department. The bidder shall submit a request to the Department for review and approval at the earliest date possible. As specified in the Notice to Bidders, all requests shall be posted as a question in HiePRO under the “Question and Answer” tab. All requests and supporting documents shall also be emailed to the State Project Manager specified in the Notice to Bidders. All requests must be posted in HiePRO and supporting documents must be received by the State Project Manager no later than fourteen (14) calendar days before the bid opening date.”

2. The first sentence of the second paragraph of A. QUALIFICATION BEFORE BID OPENING shall be replaced with the following:

“It shall be the responsibility of the bidder to submit sufficient evidence based upon which a determination can be made by the Department that the alternate brand is a qualified equivalent.”

SECTION 8.2 - LIQUIDATED DAMAGES is amended by adding the following:

“Delivery extension shall be considered only with written notice prior to delivery deadline. Written notice requesting extension will not be considered without a copy of the factory order, factory confirmation of order and without documents substantiating that

the cause(s) for delay is, in fact, beyond the control of the Contractor. The State shall be the sole judge of whether such delay is truly beyond the control of the Contractor and whether an extension will be granted.”

SECTION 9.1 - PAYMENT is amended by adding the following:

“No payment, whether partial or final shall be construed to be an acceptance of defective work or latent defect.”

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS
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SPECIFICATIONS

SECTION 1 - DEFINITION AND TERMS

Whenever the following pronouns are used in these specifications, or in any documents or instruments where these specifications govern, the intent and meaning shall be interpreted as follows:

1.1 ADDENDA - A written document which may be issued by the Director during the bidding period involving changes to the specifications and plans, if any, which shall be considered and made a part of the contract.

1.2 AIRPORTS DIVISION - Airports Division, Department of Transportation, State of Hawaii.

1.3 AWARD - The written acceptance of a proposal by the State.

1.4 BIDDER - Any individual, partnership, corporation or other legal entity, or combination thereof, submitting a proposal for the work contemplated, acting either directly or through a duly authorized representative.

1.5 CALENDAR DAY - Every day shown on the calendar. If no designation of calendar or working day is made, "day" shall mean calendar day.

1.6 CHANGE ORDER - A written order issued by the Director to the Contractor requiring the contract work to be performed in accordance with a change or changes that may involve an adjustment in contract time and price or requiring performance of any unforeseen work essential to complete the contract.

1.7 CONTRACT - The written agreement between the State and the Contractor setting forth the obligations of the parties thereunder, including, but not limited to, the performance of the work, the furnishing of labor and materials, and the basis of payment.

The contract includes the (1) notice to bidders, (2) proposal, (3) contract form and contract bond, (4) specifications, (5) special provisions and plans, if any, (6) addenda, (7) notice to proceed, and (8) change orders and agreements that are required to complete the work, all of which constitute one instrument.

1.8 CONTRACT BOND - The approved form of security, executed by the Contractor and its Surety or Sureties, guaranteeing the completion of the work in accordance with the terms of the contract, and guaranteeing full payment of all claims for labor, materials, and supplies used or incorporated in the work.

1.9 CONTRACT TIME - The number of working days or calendar days allowed for completion of the contract, including authorized time extensions.

If a calendar date is specified as the date of completion in lieu of the number of working days or calendar days, the contract shall be completed by that date.

In case the contract is for a specified period of time, the contract time shall be for said specified period of time.

1.10 CONTRACTOR - The individual, partnership, corporation or other legal entity, or combination thereof, contracting with the State for performance of the prescribed work.

1.11 DEPARTMENT - The State Department of Transportation.

1.12 DIRECTOR - The Director of Transportation, acting either directly or through the Director's duly authorized representative.

1.13 EQUAL OR APPROVED EQUAL - Whenever this term is used in the specifications and plans, if any, it means a brand or article pre-qualified in accordance with Section 6.2 Trade Names and Alternates and which may be used in place of the one specified.

1.14 H.A.R. or HAR - Hawaii Administrative Rules.

1.15 H.R.S. or HRS - Hawaii Revised Statutes.

1.16 HARBORS DIVISION - Harbors Division, Department of Transportation, State of Hawaii.

1.17 HIGHWAYS DIVISION - Highways Division, Department of Transportation, State of Hawaii.

1.18 HOLIDAYS - The days which are set apart and established as State holidays pursuant to Section 8-1, H.R.S.

1.19 INSPECTOR - The Director's authorized representative assigned to make detailed inspections of contract performance and materials supplied.

1.20 NOTICE TO BIDDERS - The public announcement, as required by law, inviting proposals for the work to be performed or materials to be furnished.

1.21 NOTICE OF FINAL ACCEPTANCE - Written notice from the Director to the Contractor that the entire contract has been completed in all respects in accordance with the specifications and plans, if any, and any changes thereof previously approved by the Director.

1.22 NOTICE TO PROCEED - Written notice from the Director to the Contractor advising the Contractor of the date on which he is to begin the prosecution of the work.

1.23 PLANS - The contract drawings approved by the Director which show the location, character, dimensions and details of the work to be done and shall be a part of the contract.

1.24 PROCUREMENT OFFICER - The Director's duly authorized representative including project managers, project engineers and contract administrators assigned to prepare, evaluate and administer contracts for the purchasing of goods and services.

1.25 PROPOSAL (OR BID) - The offer of a bidder, on the prescribed form, to perform the work and to furnish the labor and materials at the prices quoted.

1.26 PROPOSAL FORM - The approved format prepared by the Department or a facsimile thereof on which bids for the work must be prepared and submitted. (Reasonable facsimile acceptable for bidding.)

1.27 PROPOSAL GUARANTY - The security furnished with a proposal to guarantee that the bidder will enter into the contract and furnish all other requirements if the bidder's proposal is accepted.

1.28 QUALIFICATION QUESTIONNAIRE - The specified forms on which the bidder shall furnish required information as to the bidder's ability to perform and finance the work.

1.29 S.L.H. or SLH - Session Laws of Hawaii.

1.30 SPECIAL PROVISIONS - Revisions to the specifications. The specific clauses setting forth conditions or requirements peculiar to the project under consideration which are not thoroughly or satisfactorily stipulated in these specifications.

1.31 SPECIFICATIONS - The directions, provisions, and requirements pertaining to the method and manner of performing the work and to the quantities and qualities of materials to be furnished under the contract.

1.32 STATE - The State of Hawaii.

1.33 SUBCONTRACTOR - An individual, partnership, corporation, other legal entity, or any combination thereof, that enters into an agreement with the Contractor to perform a portion of the work for the Contractor.

1.34 SUPERINTENDENT - The Contractor's representative who is responsible for and in charge of the work.

1.35 SURETY - The corporation, partnership or individual, other than the Contractor, executing a bond furnished by the Contractor and guaranteeing performance by the Contractor.

1.36 TITLES (OR HEADINGS) - The titles or headings of the Sections herein are intended for convenience of reference and shall not be considered as having any bearing on their interpretation. Unless otherwise indicated, whenever the word "Section" is used, reference is being made to a Section in these specifications.

1.37 WORK - The furnishing of all labor, materials, equipment, and other incidentals necessary or convenient for the successful completion of the project and the execution of all the duties and obligations imposed by the contract.

1.38 WORKING DAY - Any day, except Saturdays, Sundays and State holidays.

SECTION 2 - PROPOSAL REQUIREMENTS AND CONDITIONS

2.1 PROPOSAL FORMS - All proposals shall be made on forms furnished by the Department. All proposals shall give the prices proposed in the spaces provided and shall be signed by the bidder, who shall fill out all blanks in the proposal form as therein required.

2.2 REJECTION OF PROPOSALS CONTAINING ALTERATIONS, ERASURES, OR IRREGULARITIES - Proposals may be rejected if they show any alterations of form, additions not called for, conditional bids, incomplete bids, erasures, or irregularities of any kind.

When proposals are signed by any agent, other than the officer or officers of a corporation authorized to sign contract on its behalf or a member of copartnership, a Power of Attorney must be on file with the Department prior to opening bids or shall be submitted with the proposal; otherwise, the proposal may be rejected as irregular and unauthorized.

Members of a joint venture may be requested to supply the Department with a copy of their joint venture agreement or each member of the joint venture may be required to sign the proposal.

2.3 DELIVERY OF PROPOSALS - Each proposal shall be placed, together with the proposal guaranty, when required, in an envelope and sealed and so marked as to indicate the identity of the project, the name and address of the bidder, and other required information and then delivered as indicated in the Notice to Bidders. Proposals will be received up to the time fixed in the Notice to Bidders for the opening of bids.

2.4 WITHDRAWAL OF PROPOSALS - Any proposal may be withdrawn at any time prior to the time fixed in the Notice to Bidders for the opening of proposals upon the filing of a written request therefor with the Department, executed by the bidder or his duly authorized representative. The withdrawal of a proposal shall not preclude a bidder from submitting a new proposal.

2.5 PUBLIC OPENING OF PROPOSALS - Proposals will be opened and read publicly at the time and place indicated in the Notice to Bidders. Bidders or their authorized agents are invited to be present.

2.6 DISQUALIFICATION OF BIDDERS - Any of the following reasons may be considered as being sufficient grounds for the disqualification of a bidder and the rejection of his proposal or proposals.

A. More than one proposal for the same work from an individual, firm, or corporation under the same or different name.

B. Evidence of collusion among bidders. Participants in such collusion will receive no recognition as bidders for any future work of the Department until such participant shall have been reinstated as a qualified bidder.

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

D. Lack of proposal guaranty.

E. Unsigned proposal or proposal not signed in ink by person or persons legally authorized to submit a proposal on behalf of the bidder.

2.7 MATERIAL GUARANTY - The bidder may be required to furnish a complete statement of the origin, composition and manufacture of any or all materials to be used in the prosecution of the work, together with samples. Such samples may be subjected to tests to determine their quality and fitness for the work.

2.8 OUT-OF-STATE BIDDERS - Pursuant to Section 103D-1008, Hawaii Revised Statutes, on out-of-state purchases where the bidder or vendor is an out-of-state vendor, not doing business in the State, the bid price of such out-of-state vendor, for the purpose of determining the lowest price bid, shall be increased by the applicable retail rate of general excise tax and the applicable use tax. The lowest responsible bidder, taking into consideration the above increases, shall be awarded the contract, but the contract amount of any contract awarded shall be the amount of the bid offered and shall not include the amount of said increases.

Such increases will not be applied in case an out-of-state vendor specifies in its bid that its bid price includes said general excise tax; the bidder will be required to pay said general excise tax and use tax in case the bidder is awarded the contract.

2.9 TAX REQUIREMENTS - Work to be done under this contract is a taxable transaction and the bidder receiving the award for this work will be required to pay the State of Hawaii General Excise Tax (GET) and the State of Hawaii use Tax.

Additional information regarding the tax rates may be obtained from the Department of Taxation (DOTAX) website at <http://tax.hawaii.gov/geninfo/countysurcharge/>

If awardee is an out-of-state bidder not holding a Hawaii GET License, the awardee will have to obtain a Hawaii GET License and pay all taxes due to obtain a tax clearance required before final contract payment is made by the State.

To obtain the tax clearance applications, see subsection 3.1.A. Tax Clearance of these Specifications.

Vendors may apply for either a regular or a one-time GET License. Information on applying for a GET License may be found at <http://tax.hawaii.gov/geninfo/get/>

SECTION 3 - AWARD AND EXECUTION OF CONTRACT

3.1 AWARD OF CONTRACT - The State reserves the right to reject any and all proposals and to waive any defects as may be deemed to be in the best interest of the public.

The award of contract, if it be awarded, shall be made within sixty (60) calendar days after the opening of bids to the lowest responsive and responsible bidder whose proposal complies with all the prescribed requirements. 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 shall be made by a bidder in writing. Only bidders who have agreed to such an extension shall be eligible for the award.

Requirement for award. The Bidder, as proof of compliance with the requirements of section 103D-310(c), HRS, upon award of a contract made pursuant to section 103D-302, HRS, shall provide the documents listed below. The documents shall be submitted promptly to the Department. If a valid certificate/clearance is not submitted on a timely basis upon award, the Bidder may be deemed non-responsible.

A. Tax Clearance.

Pursuant to section 103D-310(c), 103-53 and 103D-328, HRS, the bidder shall submit a tax clearance certificate from the State of Hawaii Department of Taxation (DOTAX) and the Internal Revenue Service (IRS), subject to section 103D-328, HRS, current within six months of issuance 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)587-4242 or 1-800-222-3229.

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

B. Certificate of Compliance.

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

Form LIR#27, Application for Certificate of Compliance with section 3-122-112, HAR, is available at the following website:

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

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

Inquiries regarding the status of a LIR#27 Form are available from the DLIR Disability Compensation Division at (808)586-9200.

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

C. Certificate of Good Standing.

Pursuant to section 103D-310(c), HRS, the bidder shall submit a certificate of good standing from the business registration division (BREG) of the State of Hawaii Department of Commerce and Consumer Affairs (DCCA), current within six months of issuance date, to demonstrate it is either:

- (1) incorporated or organized under the laws of the State; or
- (2) registered to do business in the State as a separate branch or

division that is capable of fully performing under the contract.

A Hawaii business that is a sole proprietorship, is not required to register with the BREG, and therefore not required to submit a certificate of good standing. Bidders are advised of 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:

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

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

D. IN LIEU OF the certificates referenced in subsection A, B, and C, bidder may make available proof of compliance through a state procurement office designated certification process.

3.2 CANCELLATION OF AWARD - The State reserves the right to cancel the award of any contract any time before the execution of said contract by all parties without any liability to the successful bidder or any other bidder.

3.3 EXECUTION OF CONTRACT - The contract shall be executed by the successful bidder and returned, together with the contract bonds, when required, 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.

Pursuant to Section 103D-309, H.R.S., the contract shall not bind the State in any way unless said contract has been fully and properly executed by all the parties thereto and the Comptroller has endorsed thereon a certificate that there is available an unexpended appropriation over and above all outstanding contracts, sufficient to cover the amount required by the contract.

3.4 FAILURE TO EXECUTE CONTRACT - Failure to execute the contract and file acceptable bonds, when required, within

ten (10) days after the award of the contract, or within such further time as the Director may allow, shall be cause for the cancellation of the award and the forfeiture of the proposal guaranty. Award of the contract may then be made to the next lowest responsible bidder.

SECTION 4 - SCOPE OF WORK

4.1 WORK TO BE DONE - The work to be done is described in the Section(s) following Section 9 of these specifications.

4.2 PERFORMANCE OF WORK - The Contractor shall employ, so far as possible, such methods and means in carrying out his work so as not to cause any interruption, disturbance, or interference with the public.

In case the Contractor is performing work in a building, the Contractor shall conduct the work in such a manner so as not to cause any interruption, disturbance, or interference with the business activities of the tenants in the building.

4.3 EXTRA WORK - New and unforeseen items of work will be classed as extra work when they cannot be covered by any of the various items for which there is a bid price.

4.4 CHANGES AND CLAIMS FOR ADJUSTMENT

A. Change order. By a written order, at any time, and without notice to any surety, the procurement officer may, subject to all appropriate adjustments, make changes within the general scope of this contract in any one or more of the following:

1. Drawings, designs, or specifications, if the goods to be furnished are to be specially manufactured for the State in accordance therewith;
2. Method of shipment or packing;
3. Place of delivery;
4. Changes in the work within the scope of the contract; or
5. Changes in the time of performance of the contract that do not alter the scope of work.

B. Adjustments of price or time for performance. If any change order increases or decreases the contractor's cost of, or the time required for, performance of any part of the work under this contract, whether or not changed by the order, an adjustment shall be made and the contract modified in writing accordingly. Any adjustment in contract price made pursuant to this clause shall be determined in accordance with the price adjustment clause of this contract. Failure of the parties to agree to an adjustment shall not excuse the contractor from proceeding with the contract as changed, provided that the procurement officer promptly and duly make the provisional adjustments in payment or time for performance as may be reasonable. By proceeding with the work, the contractor shall not be deemed to have

prejudiced any claim for additional compensation, or an extension of time for completion.

C. Time period for claim. Within thirty (30) days after receipt of a written change order under subsection (a) unless the period is extended by the procurement officer in writing, the contractor shall file notice of intent to assert a claim for an adjustment. Later notification shall not bar the contractor's claim unless the State or county is prejudiced by the delay in notification.

D. Claim barred after final payment. No claim by the contractor for an adjustment hereunder shall be allowed if notice is not given prior to final payment under this contract.

E. Other claims not barred. In the absence of a change order, nothing in this clause shall be deemed to restrict the contractor's right to pursue a claim as under the contract or for breach of contract.

4.5 PRICE ADJUSTMENT

Any adjustment in contract price pursuant to a clause in this contract shall be made in one or more of the following ways:

A. By agreement on a fixed price adjustment before commencement of the pertinent performance or as soon thereafter as practicable;

B. By unit prices specified in the contract or subsequently agreed upon;

C. By the costs attributable to the event or situation covered by the clause, plus appropriate profit or fee, all as specified in the contract or subsequently agreed upon;

D. In such other manner as the parties may mutually agree; or

E. In the absence of agreement between the parties, by a unilateral determination by the procurement officer of the costs attributable to the event or situation covered by the clause, plus appropriate profit or fee, all as computed by the procurement officer in accordance with generally accepted accounting principles and applicable sections of chapters 3-123 and 3-126 of the Hawaii Administrative Rules.

4.6 VARIATION IN QUANTITY

Upon agreement of the parties, the quantity of goods or services or both specified in this contract may be increased by a maximum of ten (10) percent provided (1) the unit prices will remain the same except for any price adjustments otherwise applicable and (2) the procurement officer makes a written determination that such an increase will either be more economical than awarding another contract or that it would not be practical to award another contract.

SECTION 5 - CONTROL OF WORK

5.1 AUTHORITY OF DIRECTOR - The Director shall decide all questions which may arise as to the quality or acceptability of materials furnished and work performed, the manner of performance and rate of progress of the work, and compensation for work performed, interpretation of the contract and fulfillment of the contract on the part of the Contractor. The Director shall have authority to enforce and make effective such decisions and orders which the Contractor fails to carry out properly and diligently. The decision of the Director shall be final.

5.2 COORDINATION OF PLANS, SPECIFICATIONS AND SPECIAL PROVISIONS - These specifications, plans, special provisions, and all supplementary documents are essential parts of the contract, and a requirement occurring in one is as binding as though occurring in all. They are intended to be complementary and to describe and provide for a complete work.

5.3 CLAIMS AND DISPUTES - The Contractor may give notice in writing to the procurement officer for claims that extra compensation, damages, or an extension of time for completion is due the Contractor for one or more of the following reasons:

- A. Requirements not clearly covered in the contract, or not ordered by the procurement officer as an extra work;
- B. Failure between the State and the Contractor to agree to an adjustment in price for a contract change order issued by the State; or
- C. An action or omission on the part of the procurement officer requiring performance changes within the scope of the contract.

The Contractor shall continue with performance of the contract in compliance with the directions or orders of the procurement officer, but by so doing, the Contractor shall not be deemed to have prejudiced any claim for additional compensation, damages, or an extension of time for completion; provided:

- A. The notice in writing be given:
 - 1. Before the commencement of the work involved, if at that time the Contractor knows of such requirements or the occurrence of such actions or omissions; or
 - 2. Within thirty (30) calendar days after the

Contractor knows of such requirements or the occurrence of such action or omission if the Contractor did not have such knowledge before the commencement of the work; or

3. Within thirty (30) calendar days after receipt of the written contract change order that was not agreed upon by both parties; or

4. Within such further time as may be allowed by the procurement officer in writing.

B. The notice shall clearly state the Contractor's intention to make claim and the reasons why the Contractor believes that additional compensation, changes or an extension of time may be remedies to which the Contractor is entitled; and afford the procurement officer every facility for keeping records of the actual cost of work. Failure on the part of the Contractor to give such notification or to afford the procurement officer proper facilities for keeping strict account of actual cost shall constitute waiver of the claim for such extra compensation. The filing of such notice by the Contractor and the keeping of costs by the procurement officer shall not in any way be construed to prove the validity of the claim.

The procurement officer will review the notice and render a decision. The procurement officer's decision shall be final and conclusive unless, within thirty (30) calendar days from the date of the decision, the Contractor mails or otherwise furnishes a written appeal to the Director. The decision of the Director shall be final. Later notification of such claims shall not bar the Contractor's claim unless the State is prejudiced by the delay in notification. No claim by the Contractor for an adjustment hereunder shall be allowed if notice is not given before final payment under this contract. Any adjustment in the contract price made pursuant to this clause shall be determined according to Section 4.5 - Price Adjustment.

The provisions of this Section shall not be construed as establishing any claims contrary to the terms of Section 4.4 - Changes and Claims for Adjustment.

Nothing herein contained, however, shall excuse the Contractor from compliance with any rules of law precluding any state officers and any Contractors from acting in collusion or bad faith in issuing or performing contract change orders which are clearly not within the scope of the contract.

SECTION 6 - CONTROL OF MATERIAL AND EQUIPMENT

6.1 DEFECTIVE MATERIALS - All materials not conforming to the requirements of these specifications or the special provisions shall be considered defective and all such materials, whether in place or not, shall be rejected. They shall be removed immediately from the site of the work, unless otherwise permitted by the Director. No rejected materials, the defects of which have been subsequently corrected, shall be used until approval in writing has been given by the Director. Upon failure on the part of the Contractor to comply promptly with any order to remove and replace defective materials, the Director may remove and replace defective material and to deduct the cost of removal and replacement from any monies due or to become due the Contractor.

6.2 TRADE NAMES AND ALTERNATES - For convenience in designation on the plans or in the specifications, certain equipment or articles or materials may be designated under a trade name or the name of a manufacturer and its information catalogue. The use of alternate equipment or an article or material which is of equal quality and of the required characteristics for the purposes intended will be permitted, subject to the written approval of the Director, in accordance with the following requirements:

A. QUALIFICATION BEFORE BID OPENING - When the specifications and/or plans specify one or more manufacturer's brand names of materials or equipment to indicate a quality, style, appearance, or performance, the bidder will be assumed to have based its bid on one of the specified named products, except where such proprietary product are specified, alternate brands may be qualified if found equal or better by the Director. Bidders requesting qualification of alternate proprietary products must submit a request to the Director for review and approval at the earliest date possible, but in any event, such request must be received at the Contracts office not later than ten (10) days before the bid opening date, not including the bid opening date.

It shall be the responsibility of the bidder to submit sufficient evidence based upon which a determination can be made by the Director that the alternate brand is qualified. The evidence shall be transmitted with a covering letter which shall list the evidence submitted and the items for which the substitution is requested.

If the evidence accompanying a request for substitution is insufficient to qualify a particular

model, the request shall be denied provided that further evidence may be submitted to qualify the item five (5) days prior to the bid opening date if the initial request was made prior to the deadline set above.

B. SUBSTITUTION AFTER BID OPENING - Substitution of material or equipment will not be allowed after the bid opening date except under the following unforeseen circumstances:

1. If a specified or pre qualified item is delayed by a lengthy strike in the factory or other unforeseeable contingency beyond the control of the Contractor which would cause an abnormal delay in the project completion.
2. If a specified or pre qualified item is found to be unusable due to change or other circumstances.
3. If the Contractor is willing to provide a more recently developed or manufactured item of material or equipment of the same manufacturer which the Director determines to be equal or better than the one specified or pre-qualified.

A substitution request, regardless of reason, shall be fully explained in writing by the Contractor and shall include its justification for said request, the quantities and unit prices involved, quotations and such other documents as are deemed necessary to support the request. Any savings in cost will accrue to the State and any additional cost for the substituted items will be paid by the Contractor.

The burden of proof as to the comparative quality and suitability of alternate equipment, articles, or materials shall be upon the bidder or Contractor and bidder or Contractor shall furnish, at its own expense, all information necessary or related thereto as required by the Director. The Director shall be the sole judge as to the comparative quality and suitability of alternate equipment, articles or materials and the Director's decisions shall be final.

The above shall not be construed to mean that substitution for brand name specified materials and equipment will be allowed; the Director reserves the right to deny any request he deems irregular or not in the best interest of the State.

6.3 ASSIGNMENT OF ANTITRUST CLAIMS FOR OVERCHARGES FOR GOODS AND MATERIALS PURCHASED

A. Vendor and purchaser recognize that in actual economic practice, overcharges resulting from antitrust violations are in fact usually borne by the purchaser. Therefore, vendor hereby assigns to purchaser any and all claims for such overcharges as to goods and materials purchased in connection with this order or contract, except as to overcharges which result from antitrust violations commencing after the price is established under this order or contract and which are not passed on to the purchaser under an escalation clause.

B. Contractor and owner recognize that in actual economic practice, overcharges resulting from antitrust violations are in fact usually borne by the owner. Therefore, contractor hereby assigns to owner any and all claims for such overcharges as to goods and materials purchased in connection with this order or contract, except as to overcharges which result from antitrust violations commencing after the price is established under this order or contract and any change order. In addition, contractor warrants and represents that each of its first tier suppliers and subcontractors shall assign any and all such claims to owner, subject to the aforementioned exception.

SECTION 7 - LEGAL RELATIONS AND RESPONSIBILITY

7.1 LAWS TO BE OBSERVED - The Contractor shall comply with all federal, state, city and county laws, ordinances, rules and regulations which in any manner affect those engaged or employed in the work, the materials used in the work, and the conduct of the work. Any reference to such laws, ordinances, rules and regulations shall include any amendments thereto effective as of the date of the call for sealed proposals.

The Contractor shall hold harmless, indemnify, defend and where appropriate, insure the State, its officers, agents and employees against any claim or liability arising from or based on the violation of any such laws, ordinances, rules or regulations. If any discrepancy or inconsistency is discovered in the contract for the work in relation to any law, ordinance, rule, regulation, order or decree, the Contractor shall forthwith report the same to the Director in writing.

7.2 PERMITS AND LICENSES - The Contractor shall procure all permits and licenses, pay all charges and fees, and give all notices necessary and incident to the due and lawful prosecution of the work.

7.3 PATENTS - The Contractor shall assume all costs arising from the use of patented materials, equipment, devices, or processes used on or incorporated in the work, and shall hold harmless, indemnify, defend and where appropriate, insure the State, its officers, agents and employees from all suits at law or actions of every nature, for or on account of the use of any patented materials, equipment, devices or processes.

7.4 RESPONSIBILITY FOR INJURY AND DAMAGE - The State, its officers, agents and employees shall not be held accountable in any manner for any loss or damage to the work or any part thereof, or for any of the materials and equipment used or employed in performing the work, or for any injury to any person or persons either workers or the public, or for any damage to property caused by the Contractor or its workers or any one employed by the Contractor. The Contractor shall be responsible for any liability imposed by law for any injury to any person or any damage to property resulting from defects or obstructions or from any cause whatsoever during the progress of the work or at any time before its completion and final acceptance. The acceptance of the completed work of the Contractor by the Director shall not relieve the Contractor from any liability which may have accrued or may accrue as a result of the performance of the work by the Contractor. The Contractor shall hold harmless, indemnify, defend and where appropriate, insure the State, its officers, agents and employees, from all suits or actions of every name, kind and description, brought for or on account of

any injuries or damages sustained by any persons or property caused by the Contractor, its servants or agents, or by or on account of any act or omission of the Contractor or its servants or agents, regardless of whether such actions or any claim is brought against them or any one of them before or after the final acceptance of the work. In addition to any remedy authorized by law, the State may withhold payment of any money due to Contractor as shall be reasonable until disposition has been made of any suits or claims for injuries or damages.

It is not the intention of the parties to this contract to make the public or any member thereof a third party beneficiary hereunder, or to authorize anyone not a party hereto to maintain a suit for personal injuries or property damage based on a contract theory of liability. In any event, the Contractor shall hold harmless, indemnify, defend and where appropriate, insure the State from suits and claims for personal injuries or property damage where such injuries or damage are caused by the negligent acts or omissions of the Contractor, its agents or employees.

7.5 COOPERATION BETWEEN CONTRACTORS - Where two or more Contractors are employed on related or adjacent work, each shall conduct its operations in such a manner as not to cause any unnecessary delay or hindrance to the other.

7.6 CONTRACTOR'S RESPONSIBILITY FOR WORK - Until the acceptance of the contract, the Contractor shall have the charge and care thereof and shall bear the risk of injury or damage to any part thereof by the action of the elements or from any other cause, whether arising from the execution or from the non-execution of the work. The Contractor shall rebuild, repair, restore, and make good all damages to any portion of the work occasioned by any of the above causes before its completion and acceptance and shall bear the expenses thereof.

7.7 NO PERSONAL LIABILITY - Neither the Director nor any other officer or authorized employee of the Department shall be personally responsible for any liability arising under the contract.

7.8 INSURANCE - Prior to commencing with the work, the Contractor shall, at its own expense, obtain and submit to the Department, Certificate of Insurance from an insurance company authorized by the laws of the State to issue such insurance in the State of Hawaii showing full policy coverage of the Contractor.

TYPES OF INSURANCE:

A. 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. The minimum limit of liability for workers compensation is the HRS 386 statutory limit.

B. Comprehensive Automobile 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 accident for bodily injury and property damage with the State of Hawaii named as additional insured. The required limit of insurance may be provided by a single policy or with a combination of primary and excess policies.

C. Commercial General Liability:

The Contractor shall obtain General Liability insurance with a limit of not less than \$1,000,000 per occurrence and in the aggregates. The General liability insurance shall include the State of Hawaii 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.

All policies must provide that 30 days prior written notice of cancellation or material change in coverage be given to certificate holders stated above.

Such insurance when accepted by the Director in writing shall become applicable and shall remain unmodified throughout the entire term of the contract and in no event shall be terminated or otherwise allowed to lapse prior to written certification of final acceptance of the work by the State. Such insurance aforementioned shall cover the State for all work performed under the contract, all work performed incidental thereto or directly or indirectly connected therewith, including other work performed outside of the work area, and all change orders.

Any delay in the submission and approval of insurance certificates shall not be justification of or grounds for a request by the Contractor postponing the issuance of a notice to proceed notwithstanding the fact that the Contractor shall not be allowed to proceed with the work until said certificates are submitted and approved.

Failure to obtain insurance in accordance with the Section, on the part of the Contractor, shall be considered a major breach of the contract; and should the State be forced to expend funds which would have been covered under the insurance, the Contractor agrees to assume the liability for such funds and to indemnify and hold the State harmless.

SECTION 8 - PROSECUTION AND PROGRESS

8.1 PROGRESS OF WORK - The Contractor shall diligently prosecute the work to completion within the time limit specified in the proposal. The Contractor shall give its personal attention to the fulfillment of the contract and shall keep the work under its control. Work shall commence on the date indicated in the "Notice to Proceed" letter from the State.

8.2 LIQUIDATED DAMAGES - Time is of the essence in this contract and in case the Contractor fails to complete the work within the time specified in the proposal, damages will be sustained by the State. Since the amount of damages is difficult and not possible of definite ascertainment and proof, the amount of such damages are fixed in advance at the sum shown in the proposal for each and every calendar (or working) day which the Contractor has delayed in the completion of this contract; and the Contractor shall pay such amount as liquidated damages, and not by way of penalty, and in case the same are not paid, the State may deduct such amount thereof from any monies due or that may become due the Contractor under this contract.

If the Contractor finds it impossible for reasons beyond its control to complete the work within the contract time as specified, the Contractor shall, within 10 days from the first day of notification from the manufacturer or supplier of any delay and prior to the expiration of the contract time, make a written request to the Director for an extension of time setting forth therein the reasons which the Contractor believes will justify the granting of its request. The Contractor's plea that insufficient time was specified is not a valid reason for extension of time. If the Director finds that the work was delayed because of conditions beyond the control and without the fault of the Contractor, the Director may extend the time for completion in such extension as the conditions justify. The extended time for completion shall then be in full force and effect the same as though it were the original time for completion.

8.3 TEMPORARY SUSPENSION OF WORK

A. Order to stop work. The Director, may, by written order to the contractor, at any time, and without notice to any surety, require the contractor to stop all or any part of the work called for by this contract. This order shall be for a specified period not exceeding sixty (60) days after the order is delivered to the contractor, unless the parties agree to any further period. Any such order shall be identified specifically as a stop work order issued pursuant to this section. Upon receipt of such an order, the contractor shall forthwith comply with its terms and take all reasonable steps to minimize the occurrence of costs allocable to

the work covered by the order during the period of work stoppage. Before the stop work order expires, or within any further period to which the parties shall have agreed, the Director shall either:

1. Cancel the stop work order; or
2. Terminate the work covered by such order as provided in the "termination for default clause" or the "termination for convenience clause" of this contract.

B. Cancellation or expiration of the order. If a stop work order issued under this section is canceled or if the period of the order or any extension thereof expires, the contractor shall have the right to resume work. An appropriate adjustment shall be made in the delivery schedule or contract price, or both, and the contract shall be modified in writing accordingly; if:

1. The stop work order results in an increase in the time required for, or in the contractor's cost properly allocable to, the performance of any part of this contract; and
2. The contractor asserts a claim for such an adjustment within thirty (30) days after the end of the period of work stoppage; provided that, if the Director decides that the facts justify such action, any such claim asserted may be received and acted upon at any time prior to final payment under this contract.

C. Termination of stopped work. If a stop work order is not canceled and the work covered by such order is terminated for default or convenience, the reasonable costs resulting from the stop work order shall be allowable by adjustment or otherwise.

D. Adjustment of price. Any adjustment in contract price made pursuant to this clause shall be determined in accordance with the price adjustment clause of this contract.

8.4 DEFAULT AND TERMINATION OF CONTRACT

A. Termination by Default. If the contractor refuses or fails to perform any of the provisions of this contract with such diligence as will ensure its completion within the time specified in this contract, or any extension thereof, otherwise fails to timely satisfy the contract provisions, or commits any other substantial breach of this contract, the Director may notify the contractor in writing of the delay or non-performance and if not cured in ten (10) days or any

longer time specified in writing by the Director, such officer may terminate the contractor's right to proceed with the contract or such part of the contract as to which there has been delay or a failure to properly perform. In the event of termination in whole or in part the Director may procure similar goods or services in the manner and upon terms deemed appropriate by the Director. The contractor shall continue performance of the contract to the extent it is not terminated and shall be liable for excess costs incurred in procuring similar goods or services.

1. Contractor's duties. Notwithstanding termination of the contract and subject to any directions from the Director, the contractor shall take timely, reasonable, and necessary action to protect and preserve property in the possession of the contractor in which the State or county has an interest.

2. Compensation. Payment for completed goods delivered and accepted by the State shall be at the contract price. Payment for the protection and preservation of property shall be in an amount agreed upon by the contractor and Director; if the parties fail to agree, the Director shall set an amount subject to the contractor's rights under chapter 3-126, HAR. The State may withhold from amounts due the contractor such sums as the Director deems to be necessary to protect the State against loss because of outstanding liens or claims of former lien holders and to reimburse the State for the excess costs incurred in procuring similar goods and services.

3. Excuse for nonperformance or delayed performance. Except with respect to defaults of subcontractors, the contractor shall not be in default by reason of any failure in performance of this contract in accordance with its terms, including any failure by the contractor to make progress in the prosecution of the work hereunder which endangers such performance, if the contractor has notified the Director within fifteen (15) days after the cause of the delay and the failure arises out of causes such as: acts of God; acts of the public enemy; acts of the State and any other governmental body in its sovereign or contractual capacity; fires; floods; epidemics; quarantine restrictions; strikes or other labor disputes; freight embargoes; or unusually severe weather. If the failure to perform is caused by the failure of a subcontractor to perform or to make progress, and if such failure arises out of causes similar to those set forth above, the contractor shall not be

deemed to be in default, unless the goods or services to be furnished by the subcontractor were unreasonably obtained from other sources in sufficient time to permit the contractor to meet the contract requirements. Upon request of the contractor, the Director shall ascertain the facts and extent of such failure, and if such officer determines that any failure to perform was occasioned by any one or more of the excusable causes, and that, but for the excusable cause, the contractor's progress and performance would have met the terms of the contract, the delivery schedule shall be revised accordingly, subject to the rights of the State under the clause entitled "Termination for Convenience". As used in this paragraph of this clause, the term "subcontractor" means subcontractor at any tier.

4. Erroneous termination for default. If, after notice of termination of the contractor's right to proceed under the provisions of this clause, it is determined for any reason that the contractor was not in default under the provisions of the clause, or that the delay was excusable under the provisions of paragraph (3), Excuse for nonperformance or delayed performance of this clause, the rights and obligations of the parties shall, if the contract contains a clause providing for termination for convenience of the State, be the same as if the notice of termination had been issued pursuant to such clause.

5. Additional rights and remedies. The rights and remedies provided in this clause are in addition to any other rights and remedies provided by law or under this contract.

B. Termination for convenience. 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 shall give written notice of the termination to the contractor specifying the part of the contract terminated and when termination becomes effective.

1. Contractor's obligation. The contractor shall incur no further obligations in connection with the terminated work and on the dates set in the notice of termination the contractor will 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. The Director

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 are necessary to do so.

2. Right to goods. The Director may require the contractor to transfer title and deliver to the State in the manner and to the extent directed by the procurement officer:

- a. Any completed goods; and
- b. The partially completed goods and materials, parts, tools, dies, jigs, fixtures, plans, drawings, information, and contract rights hereinafter called "manufacturing material," as the contractor has specifically produced or specially acquired for the performance of the terminated part of this contract.

The contractor shall, upon direction of the Director, protect and preserve property in the possession of the contractor in which the State has an interest. If the Director does not exercise this right, the contractor shall use the contractor's best efforts to sell such goods and manufacturing materials. Use of this section in no way implies that the State has breached the contract by exercise of the termination for convenience clause.

3. Compensation:

- a. The contractor shall submit a termination claim specifying the amounts due because of the termination for convenience together with cost or pricing data to the extent required by subchapter 15, chapter 3-122, HAR, bearing on such claim. If the contractor fails to file a termination claim within one (1) year from the effective date of termination, the Director may pay the contractor, if at all, an amount set in accordance with subparagraph c. below.
- b. The Director and the contractor may agree to settlement provided the contractor has filed a termination claim supported by cost or pricing data to the extent required by subchapter 15, chapter 3-122, HAR, 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 goods and manufacturing materials under paragraph (2) of this clause, and the contract price of the work not terminated.

c. Absent complete agreement under subparagraph b above, the Director shall pay the contractor the following amounts, provided payments agreed to under subparagraph b. shall not duplicate payments under this subparagraph for the following:

(i) Contract prices for goods or services accepted under the contract;

(ii) Costs incurred in preparing to perform and performing the terminated portion of the work plus a fair and reasonable profit on such portion of the work, such profit shall not include anticipatory profit or consequential damages, less amounts paid or to be paid for accepted goods or services; provided that if it appears that the contractor would have sustained a loss if the entire contract would have been completed, no profit shall be allowed or included and the amount of compensation shall be reduced to reflect the anticipated rate of loss;

(iii) Costs of settling and paying claims arising out of the termination of subcontracts or orders pursuant to paragraph (1) of this clause. These costs must not include costs paid in accordance with subparagraph (ii) above.

(iv) The reasonable settlement costs of the contractor including accounting, legal, clerical, and other expenses reasonably necessary for the preparation of settlement claims and supporting data with respect to the terminated portion of the contract and for the termination of subcontracts thereunder, together with reasonable storage, transportation, and other costs incurred in connection with the protection or disposition of property allocable to the terminated portion of this contract. The total sum to be paid the contractor under this subparagraph shall not exceed the total contract price plus the reasonable settlement cost of the contractor reduced by the amount of

payments otherwise made, the proceeds of any sales of supplies and manufacturing materials under subparagraph b. of this paragraph, and the contract price of work not terminated.

d. Cost claimed, agreed to, or established under subparagraphs b. and c. shall be in accordance with chapter 3-123, H.A.R. bearing on such claim.

8.5 TERMINATION OF CONTRACTOR'S RESPONSIBILITY - The contract will be considered complete when all work has been completed, the work accepted by the Director, and the final estimate paid. The Contractor will then be released from further obligation except as set forth in the contract and bond, when applicable.

SECTION 9 - PAYMENT

9.1 PAYMENT - The Contractor's bid price shall be inclusive of all costs, direct or indirect, including all taxes, required for the fulfillment of this contract.

Contract payments to the Contractor by the State shall be full payment, for furnishing all labor, and for furnishing and delivering all equipment, materials, supplies and other incidentals to the location(s) designated in these specifications.

9.2 PROGRESS PAYMENTS - If more than one shipment is required under these specifications, progress payments may be made to the Contractor after each shipment, provided the equipment materials, supplies, etc., furnished and delivered have satisfactorily met the requirements of these specifications. Five per cent (5%) of the amount of each progress payment shall be retained by the Department until the final acceptance of the work.

To expedite processing of all payments, for item(s) furnished and delivered to the Department, the Contractor shall forward an original and one copy of invoice with each shipment made to the recipient office.

Each invoice shall contain the following:

- A. Vendor's name, address and phone number.
- B. Contract or Purchase Order No.
- C. Description of item, the quantity, unit or lump sum price, sub-total and total.

9.3 FINAL ACCEPTANCE AND FINAL PAYMENT - Final acceptance means the acceptance in writing by the Director of the satisfactory completion of the work as provided under Section 8.5 followed by final payment in accordance with the Director's final estimate. The Department shall make final acceptance and payment promptly after the contract has been satisfactorily completed and final inspection made.

No payment will be made for any work which was not authorized by the Director in writing.

Final payment shall be made only after the issuance of the notice of final acceptance and after the Contractor has filed with the Director the following:

- A. Consent of the Contractor's surety, when applicable, of the final payment;

B. Satisfactory evidence by affidavit that all debts resulting from the contract have been fully paid or satisfactorily secured;

C. A current "Certificate of Vendor Compliance" issued by the Hawaii Compliance Express (HCE). The Certificate of Vendor Compliance is used to certify the Contractor's compliance with (a) Section 103D-328, HRS (for all contracts \$25,000 or more) which requires a current tax clearance certificate issued by the Hawaii State Department of Taxation and the Internal Revenue Service; (b) Chapters 383, 386, 392, and 393, HRS; and (c) Subsection 103D-310(c), HRS. The State reserves the right to verify that compliance is current prior to the issuance of final payment. Contractors are advised that non-compliance status will result in final payment being withheld until compliance is attained.

The filing of willfully false affidavits will disqualify the Contractor from bidding on future work of the Department.

SECTION 10 – GENERAL SPECIFICATIONS FOR FURNISHING AND DELIVERING
MOTOR VEHICLES AND EQUIPMENT

GENERAL SPECIFICATIONS – In addition to Detailed Specifications listed herein, the following requirements shall form a part of these Specifications:

1. Quality of Vehicle, Trailer, Utility Tractor, and Equipment

- a. All vehicle, trailer, utility tractor, and equipment offered will comply with ANSI and OSHA safety requirements and any other Federal and State safety requirements. If applicable or when requested, equipment shall bear a label or written documentation indicating approval of safety requirements from a bona fide testing laboratory.
- b. Vehicles, trailers, utility tractors and equipment furnished under these Provisions and Specifications shall be new and of the best quality of its respective kind and shall be completely assembled and free of defects which may render them unfit for use.
- c. All vehicles, trailers, utility tractors and equipment having modifications and/or being built through after manufacturer companies shall not use the process of torch scarfing of rivets and bolts. Areas affected by rivets and bolts being removed shall be corrosion treated, primed and completely painted before modifications or installations are completed. No exceptions shall be accepted.
- d. The State may at any time, by written order, stop delivery of vehicle, trailer, utility tractor, and equipment not conforming to these Specifications. Such stop order shall not relieve the contractor of its obligation to complete the project within contract time limits, nor shall it in any way terminate, cancel or abrogate the contract or any part thereof.
- e. All electrical modifications and/or additions built through after manufacturer company shall: use continuously numbered or same colored wiring as the manufacturer; use the same wire gauges (size) as the original manufacturer; encase all wiring in protective looms and be grommet protected when passing through metal or sharp surfaces. Contractor shall supply two (2) copies of the Electrical Schematic (CD/DVD/Flash Drive) for the modification at time of delivery. No exceptions shall be accepted.

2. Submittals

Upon delivery, contractor shall provide the following to the representatives of the state:

- a. Two (2) copies Owner-Operator Manual and one (1) copy Service and Parts Manual for vehicles, trailers, utility tractors and equipment in any of the following formats: book/CD/DVD/Flash Drive.

- b. List of manufacturers trained and authorized personnel able to provide installation and service support. List of identifying items and systems, which require factory authorized personnel to install and maintain; and also stock all necessary parts for same.

3. Certificates and Procedures for Processing Vehicle/Trailer Registration

- a. Prior to delivery, contractor shall submit the following to the “Fiscal Office, Highways, 869 Punchbowl Street, Room 201, Honolulu, Hawaii 96813.”
 - i. Application for registration (C&C Form DFL-1 / DFI-2): Form shall be completely filled out; registered owner(s) shall be “Department of Transportation, Honolulu, Hawaii 96813,” Lien Holder shall be “None”.
 - ii. Safety Inspection Certificate.
 - iii. Certificate of Weight and Measures (required if factory furnished vehicle weight is unavailable; e.g. vehicle with post-factory modifications or alterations). Certificate shall include make, model number, year and vehicle identification number, verified weight in pounds shall be officially machine stamped; handwritten weight will not be acceptable.
 - iv. Certificate of origin for a vehicle.
 - v. Notarized Bill of Sale from seller.
 - vi. Contractor contact person(s) name, telephone number, email address.
- b. The Fiscal Office shall process the paperwork (normally two (2) to three (3) working days) and shall call the contractor to pick up the paperwork.
- c. The contractor shall obtain Certificate of Registration, Certificate of Title and State license plates from the “Division of Motor Vehicles and Licensing, City and County of Honolulu, Kapalama Satellite City Hall, 925 Dillingham Blvd. 2nd Floor, Honolulu, Hawaii, 96817.” The State license plates shall be installed on vehicle/trailers for delivery. Three (3) copies of the Certificate of Registration and Certificate of Title shall be delivered to the respective accepting districts of the vehicle or equipment. The original Certificate of Registration and Certificate of Title shall be sent by Certified Mail or hand delivered to the “Fiscal Office, Highways, 869 Punchbowl Street, Room 201, Honolulu, Hawaii 96813.”

The contractor shall be responsible for registration and licensing of vehicle or trailer in accordance with procedures in the above (parts 3a, 3b and 3c of Certificates and Procedures for Progressive Vehicle Registration).

4. Training - Unless stated differently in the individual Detailed Specifications

Upon request by receiving agency, contractor shall schedule operator and maintenance training to demonstrate proper and safe operation of vehicle/trailers/utility tractors/equipment (when specified trainer shall be from manufacturer). This service shall be provided at no additional cost to the State. This service shall be completed no

later than fifteen (15) calendar days after acceptance of delivery. All training shall be consistent with OSHA requirements. Copy of attendance record showing class date, time, location, class type, instructor's name and attendees shall be submitted to:

State of Hawaii
 Department of Transportation
 Highways
 Construction & Maintenance Branch
 Attention: Equipment Superintendent/Safety Coordinator
 869 Punchbowl Street, Room 404
 Honolulu, Hawaii 96813

5. Delivery

- a. Vehicles/trailer/utility tractors/equipment furnished under these Specifications shall be delivered to the following:

<u>Section</u>	<u>Address</u>	<u>Attention</u>
17, 18, 19, 20 21, 22, 39, 40 41	Department of Transportation Highways Oahu District 727 Kakoi Street Honolulu, Hawaii 96819	David Okaneku (808) 833-7768 Cell: (808) 258-1863
11, 12, 13,14 15, 16	Department of Transportation Highways Hawaii District 50 Makaala Street Hilo, Hawaii 96720	Wendell Vincent (808) 933-8866
27, 28, 29, 30 31, 32, 33, 34 35, 36, 37, 38	Department of Transportation Highways Maui District 650 Palapala Drive Kahului, HI 96732	Derek Takahashi (808) 873-3535
16, 23, 24, 25 26, 42, 43, 44 45, 46, 47	Department of Transportation Highways Kauai District 1720 Haleukana Street Lihue, Kauai 96766	David Braun (808) 241-3041

Representatives of both the contractor and State shall be present at the delivery site for purpose of visual inspection and, if necessary, for instruction in use of vehicle/trailer/utility tractor/equipment.

- b. Prior to delivery, contractor shall contact State representative at the location indicated in the Delivery Schedule to coordinate delivery.

6. Warranty

- a. Motor vehicles, trailers, utility tractors and equipment, furnished shall be fully warranted by the contractor for a minimum period of one (1) year, or for the period warranted by the manufacturer, or for the period stated in the Detailed Specifications, whichever is longer, against defects, resulting from the use of defective or inferior materials or from negligent workmanship, or against all design and manufacturing defects.
- b. Warranty period shall begin from the date the motor vehicle, trailer, utility tractor and equipment is accepted by State Highways, applicable training is completed.
- c. A performance period of thirty (30) working days shall be allowed, so the State can ascertain whether the motor vehicle, utility tractor or equipment meet the needs of the State. Should any problem occur, the contractor shall remedy the situation within five (5) working days of notification.
- d. Warranty documents shall be delivered upon delivery and shall detail manufacturer's obligation and warranty procedures.
- e. Contractor shall replace or repair defective materials and/or workmanship at no cost to the State for parts/labor during the warranty period, provided such defects are not due to abuse or negligence on the part of the State.
- f. Contractor shall provide a loaner (of similar type), in the event warranty repairs exceed a period of five (5) working days. This loaner shall be provided at no additional cost to the State.
- g. Contractor shall provide a service facility as described in the Special Provisions Section 2, "2.10 BIDDER QUALIFICATION", throughout the motor vehicles, trailers, utility tractors and equipment warranty period. Contractor shall inform the State, in writing, immediately of any change in warranty service facility.
- h. Failure to provide and complete warranty service/repair within two weeks (14 calendar days) of vehicle/equipment entering contractor's facility shall result in the State to deny the contractor from bidding in future projects due to poor performance.

**FURNISHING AND DELIVERING MOTOR VEHICLES AND EQUIPMENT
ISLANDS OF OAHU, MAUI, LANAI, MOLOKAI, HAWAII AND KAUAI
PROJECT NO. HWY-CM-26-01**

SERVICE AND REPAIR FACILITY FORM

Service and Repair Facility on each island:

Oahu _____ Phone No.: _____

Hawaii _____ Phone No.: _____

Maui _____ Phone No.: _____

Molokai _____ Phone No.: _____

Kauai _____ Phone No.: _____

Note: Bidders shall furnish the name and address of their warranty facility on the Service and Repair Facility Form provided. **THIS FORM SHALL BE SUBMITTED TO THE PROJECT MANAGER WITHIN FIVE (5) WORKING DAYS OF THE BID OPENING. FAILURE ON THE PART OF THE BIDDER TO FURNISH THE REQUESTED INFORMATION SHALL RESULT IN A REJECTION OF THE BID.**

Section 11 – SIX MAN Crew Cab - One Ton with Utility Box and Lift Gate

11.1- SCOPE OF WORK - The work consists of furnishing and delivering two (2) each Six (6) Man Crew Cab - One (1) Ton with Utility Box and Lift Gate, to the Island of Hawaii. The Contractor shall present the equipment complete, ready to use, and fully operational.

11.2- SIX (6) MAN CREW CAB ONE (1) TON WITH UTILITY BOX AND LIFT GATE - The Specifications contained herein establish minimum standards (unless stated differently). Equipment offered shall include any other standard features not listed but detailed in manufacturer's brochures and deemed necessary for proper and safe operation of equipment.

DETAILED SPECIFICATION FOR A SIX (6) MAN CREW CAB
ONE (1) TON WITH UTILITY BOX AND LIFT GATE

1. Model/Year: Crew Cab Truck, 2025 or latest production.
2. Type: 2X4 two-wheel drive
3. GVW Rating: 19,500 lbs. minimum capacity.
4. Wheel Base: 137 inches minimum.
5. Engine:
 - a. 6.7 liter power stroke diesel or equal with engine idle shutdown.
 - b. Fuel (diesel) tank (40 gallons) minimum.
 - c. Heavy duty cooling system.
6. Transmission:
 - a. 10-speed Automatic Transmission with tow/haul mode, minimum.
 - b. Transmission oil cooler.
 - c. Auxiliary transmission oil cooler.
7. Axle: 3.55 rear gear ratio posi-locking rear differential.
8. Electrical System: Twenty four (24) volt with heavy duty alternator (157 amp minimum)
9. Steering: Power or power assisted.

10. Brakes:

- a. Power or power assisted 4-wheel disc brake.
- b. Anti-lock brake system.
- c. Exhaust/engine brake

11. Cab/Interior:

- a. Crew Cab, Four (4) Doors
- b. Front - Bench seat (40/20/40 split bench seat) heavy duty vinyl material.
- c. Rear - Bench seat, heavy duty vinyl material.
- d. Driver and passenger air bag
- e. Interior rear view mirror with glare control.
- f. Power windows and power door locks.
- g. Floor covering vinyl/rubber with insulation.
- h. AM/FM radio with bluetooth.
- i. Rhino Liner floor mats or equal.
- j. Factory installed air condition.
- k. Rain guards or vent shades on all doors.
- l. Twelve (12) volt power accessory outlet.
- m. Trailer brake controller.
- n. Upfitter switches (4)
- o. 2500 Watt Power Inverter mounted under rear seat

12. Body/Exterior:

- a. Power mirrors
- b. Utility Truck Bed: Royal Truck Body, 9 foot standard DRW, Model 40-VDO-108, or equivalent.

- i. Length: 108 inches
 - ii. Height: 40 inches
 - iii. Body Width 79 inches
 - iv. Compartment Depth: 22 inches
 - v. Floor Width: 49 inches
 - vi. Weight: 1570 pounds
 - vii. Storage Capacity 81.5 cubic feet
 - viii. Safety body prop and all lights and reflectors as required to meet Federal and State requirements.
- c. Roof clearance lights
 - d. Exterior back up alarm
 - e. Skid plate transfer case and fuel tank
 - f. Spray-in bed liner
 - g. Power trailer tow mirrors
 - h. Electric/Hydraulic lift gate with power closing; diamond plate steel platform; 1,500 lbs lift capacity; Tommy Gate G2 series dual cylinders or equal
 - i. Reverse sensors

13. Tires/Wheels:

- a. All terrain tires E rating that meets Federal GAWR requirements for GVW submitted.
- b. Full size spare mounted on carrier, on vehicle.
- c. Jack and wheel wrench.
- d. 18 inch 6-Spoke Cast-Aluminum Wheels or manufacturer standard

14. Suspension:

- a. Heavy duty – springs and shock absorbers shall meet manufacturer and Federal GAWR requirements for GVW submitted.

15. Color:

- a. White, Dupont 93-96923 High Gloss Enamel or manufacturer's equal.
- b. Chevron markings on lift gate bottom, Omaha orange and white (comparable to existing HDOT Highways Division Fleet).

16. Other:

- a. Operator's Manual two (2) copies, Shop Repair Manual one (1) copy, Parts Manual one (1) copy. Book format/CD/DVD.
- b. Safety Inspection, License, Registration, and Certificates as required in General Specifications.
- c. Complete after factory rustproof, minimum of seven (7) years unlimited mileage warranty, in accordance with Federal Specifications 297A or its latest revision.
- d. One (1) each 2.2 kg (5 lbs.) ABC Fire extinguisher mounted in cab.
- e. Complete factory towing/electrical. To include wire harness connectors (Cole Hersee male 6-prong, part no. 1236, or equivalent) and 7pin & 4pin plug, under carriage tow receiver (Type IV), 3-inch pintle hook and 2-inch ball combination receiver.
- f. Light Bar – Make ECCOESG Model 12-50068-ES or equal; sleek, low-profile strobe; amber color; mounted on the cab in the middle with controls in cab. All cable and wiring shall be conduit protected and shall use grommets through sheet metal panels.
- g. Warranty shall be minimum 36 months/36,000 miles (to include all attachments).
- h. First Service Kit shall include all required filters (oil, fuel, air, breather, transmission, etc.).
- i. First Aid Kit (OSHA/ANSI recommended).
- j. Triangle road safety kit
- k. Heavy-duty jumper cables

17. Training:

Upon request by receiving agency, Contractor shall provide proper fueling procedure/safe operation and maintenance of equipment. This training shall include a minimum of one (1) hour classroom and one (1) hour per operator hands on training. This service shall be provided at no additional cost to the State. Contractor shall provide classroom site. Training shall be consistent to OSHA requirements.

Copy of attendance record showing class date, time, location, class type, instructor's name, and attendees shall be submitted to:

State of Hawaii
Department of Transportation
Highways
Construction and Maintenance Branch
Attention: Equipment Superintendent/Safety
Coordinator 869 Punchbowl Street
Honolulu, Hawaii 96813

SECTION 12 - TRUCK TANK, 4,000 GALLONS

12.1- SCOPE OF WORK - The work consists of furnishing and delivering one (1) only, Truck Tank, 4,000 Gallons to the Island of Hawaii. The Contractor shall present the vehicle/equipment complete, ready to use, and fully operational.

12.2- TRUCK TANK, 4,000 GALLONS - The Specifications contained herein establish minimum standards (unless stated differently). Vehicle/equipment offered shall include any other standard features not listed but detailed in manufacturer's brochures and deemed necessary for proper and safe operation of vehicle/equipment.

DETAILED SPECIFICATIONS FOR A TRUCK TANK, 4,000 GALLONS

1. Model/Year: Truck Tank, 2026 or latest production.
2. GVW Rating: 66,000 lbs. capacity, minimum.
3. Wheelbase: 4,826 mm (190 in.) minimum.
4. Cab:
 - a. Aluminum conventional cab with tilt hood or steel conventional cab with tilt hood and ten (10) year warranty.
 - b. Steps both sides of cab with 3-point access.
 - c. Cab entry handles located both sides of cab, exterior "B" pillar mounted.
 - d. Passenger side grab handle, interior mounted on "A" pillar.
 - e. Driver seat – manufacturer standard air or hydraulic suspension, with adjustable mechanical lumbar support, front cushion adjustment to include 3-point seat belt
 - f. Passenger seat. manufacturer standard air or hydraulic suspension, with adjustable mechanical lumbar support, front cushion adjustment to include 3-point seat belt
 - g. Full-width, clear safety glass for rear window. Shall have manufacturer installed or custom built right door peep window and rear quarter/corner windows both sides of cab
 - h. Full instrumentation, including gauges for engine temperature, oil pressure, air pressure, tacho meter, fuel and amp meter/voltmeter.
5. Engine:
 - a. PX-9 or equal - Diesel powered, wet sleeved engine or dry sleeved engine with ten (10) year unlimited mileage warranty. Emissions compliant, Tier 4. Shall be capable of operating on a B20 blend of bio-diesel without any adverse effects.

- b. Net Horsepower - 380 HP minimum at rated RPM.
 - c. Six (6) cylinder.
 - d. Heavy duty cooling system, with deaeration system with tank and sight glass.
 - e. Low coolant temperature indicator, and audible alarm.
 - f. Low oil pressure indicator and audible alarm.
 - g. Heavy duty, dry type air cleaner with pop-up restriction indicator.
 - h. Oil filter- spin-on type.
 - i. DAVCO Fuel Pro 382 fuel/water separator B20 Bio-Diesel compatible, or equivalent.
 - j. Engine idle shut down, set at five (5) minutes. Engine shall not shut down when warning lights are in operation.
 - k. Single horizontal muffler with after treatment device frame mounted and vertical exhaust pipe with protective shield and rain cap. Shall have two position exhaust switch to inhibit diesel particulate filter regeneration as long as switch is “on” position.
6. Electrical:
- a. Twelve (12) volts.
 - b. Battery - Three (3) AGM batteries rated at 2775 CCA.
 - c. Alternator - 200 amp minimum, capable of charging at low engine speeds.
 - d. Heavy duty transistorized turn signal.
7. Transmission:
- a. Allison 4500 RDS, or equivalent; Water/oil heat exchanger; Automatic transmission oil temperature gauge; Transmission shift control push button/lever; transmission oil cooler.
 - b. PTO drive grab must provide a minimum of 17.w (750 feet per minute), pitch line velocity to adequately handle related equipment of the flusher hydrostatic front engine drive.

8. Steering:

- a. Hydraulic power assisted.
- b. Steering wheel 457.2mm (18 in.) diameter.

9. Suspension:

- a. Must meet manufacturers and Federal GAWR requirements for GVW submitted.
- b. Axle, front - 20,000 lbs. capacity, minimum.
- c. Axle, rear - 46,000 lbs. capacity, minimum
- d. Shock absorbers – Heavy duty front.

10. Brakes:

- a. Service - 100% full air; front and rear reserved, 29,338.1 cm³ (1,790 cu. in.) capacity, minimum.
- b. Compressor – 373.8 cm³ (13.2 cu. ft.) capacity, minimum. Pressure gauge and low air warning buzzer.
- c. Safety - spring loaded on rear axle; cab controlled; emergency air tank for releasing.
- d. Retarder – Telma or Klam Retarder, or equivalent, driveline mount with handle lever positioned, and foot brake application.
- e. Anti-lock brake system. Front and rear disc brakes with dust shields.
- f. Air dryer.

11. Frame: Manufacturer standard; Heavy duty and reinforced, double framed 2,500,000 RBM minimum.

12. Fuel Tank: 110 gallon tank; mounted under cab. Locking fuel cap.

13. Wheels: Eight (8) - 24.5 inch x 8.25 inch Alcoa Dura-Bright Polished, or equivalent; Hub Pilot (two (2) Spars to be included)

14. Tires: Front- Three (3) each to match wheel and rated for GVWR, 16-ply tubeless radial (includes spare).
Rear- Five (5) each to match wheel and rated for GVWR, 16-ply tubeless radial (includes spare).

15. Accessories:

- a. All as required by law and MVS, MCB, General Order No. 2 as amended.
- b. Dual electric windshield wiper and washer.
- c. Power windows/locks.
- d. Four-way hazard warning switch connected to indicator lights.
- e. Two (2) front tow hook.
- f. Light Bar – Make ECCOESG Model 12-50068-ES or equal; Sleek, Low Profile Strobe; Amber Color; Mounted on the cab in the middle with controls in cab
- g. Light Bar – Make ECCOESG Model 12-50006-ES or equal; Sleek, Low Profile Strobe; Amber Color; Mounted on top of the rear center of the tank in the middle with controls in cab connected to the front cab light bar
- h. Air horn mounted on cab.
- i. Instrument panel to include, engine tachometer, oil, amp meter, hour meter, and temperature gauges.
- j. Mirrors:
- k. Powered dual exterior rear view mirrors, 152.4mm (6 in.) x 406.4mm (16 in.) minimum, west coast type or equal, with convex bottom section. All brackets and backs shall be of stainless steel, aluminum or corrosion proof composite. Shall have a down view mirror on passenger door.
- l. Clearance lights, reflectors, identification lights and directional lights shall conform with PUC regulations. Shall be LED lighting.
- m. Electronic reverse alarm signal.
- n. One (1) 4.5 kg (10 lbs.) ABC dry chemical fire extinguisher mounted in cab.
- o. Road safety triangle kit; and self-charging four pack Kit Aervoe Super LED Road Flares, shall have yellow housing with red LED lighting. All housing and case shall be etched “HDOT HIGHWAYS”.
- p. AM/FM/Bluetooth radio. Reverse Camera.
- q. Factory installed air condition. Heater/defroster vents.

- r. Color – White, Dupont 93-96923 High Gloss Enamel or equal.

TANK

16. Body:

- a. Capacity - Tank minimum 15,040 L (4,000 gal.) capacity; tank maximum 15,040 L (4,000 gal.) capacity (OMCO, Rosco, Hydra-Flush, or equal).
- b. Tank - The cross section of the tank is to be oval or elliptical, with the longer axis horizontal. Material shall be T304L stainless steel; bottom section of tank and head to be 3/16 inch T304L-2B; upper section ten (10) gauge T304 stainless steel; surge plates ten (10) gauge T304L stainless steel. Skid mount rails shall be constructed from 3/16 inch stainless steel T304L-2B. The shell skin shall be un-spliced section for the entire length of the tank and be electrically welded longitudinally. Entire tank to be acid bathed, prime coated outside and painted with Sherwin Williams G2A-7603-00 (State buff) urethane or equal. The tank shall be designed so as to give proper load distribution on the truck. Heads are to be convex, dished or flanged and reinforced. A sufficient number of 4.8mm (3/16 in.) stainless steel surge plates shall be built inside the tank, not more than 1,016mm (40 in.) apart (between surge plates and or heads), so as to minimize surging of the water. Surge plates shall have crawl holes of adequate size to permit a man to pass through, and sufficient additional holes to allow free flow of water to provide complete draining of the tank, crawl holes shall be staggered.
- c. Opening - A T304L manhole of minimum 508 mm (20 in.) diameter is to be provided at the top of the tank; having quick opening; with gasket; constructed to relieve when pressure in tank reaches 34.5 kPa (5 lbs. Per square inch). An overflow pipe of 76.2mm (3 in.) minimum diameter shall be provided on the tank centerline, extending down through the bottom of the tank in such a location to clear all truck members. Tank to have float type overload indicator at top front of tank, visible to operator at hydrant, indicating when eighty (80) percent full.
- d. Clean Out - A clean out and drain hole shall be provided at the bottom of the tank.
- e. Tank Mounting - Full-length tank cradle with manufacture cushioning design to allow for tank flexing; a rear platform with stainless steel canopy for accessory compartment (lock type) shall be provided; completely covered floor. Full length catwalks on each side of the tank of non-skid tread stainless steel plate shall be provided prior to painting, State buff G2A-7603-00 high gloss urethane or equal. Flusher to be prime painted, and finish painted with State buff.
- f. Tank Accessories - Pump and all components, necessary stainless steel plumbing, and installation shall be completely provided. Compartment and rear deck to be stainless steel.

- g. Pump - Flushing pump shall be single stage high-pressure pump with a vertically slipcase, having a minimum 101.6mm (4 in.) suction, and 101.6mm (4 in.) discharge ports. It shall have a performance capacity of 2,271 l/min (600 gpm) at 100 psi and be capable of maintaining at 266.8 N (60#) pressure, with four (4) nozzles operating. Self-priming pump shall be directly connected to the hydraulic drive motor.
- h. Nozzles - Five (5) adjustable flushing nozzles. They shall be bronze, two-piece, horizontally split, slot type, and adjustable swivel in three planes. Lockable in position. Each nozzle shall have a capacity 567.8 l/min (150 gallons per minute) at 344.8 kPa (50 lbs. per square inch) pressure. One (1) nozzle shall be located midway right side between the truck wheels and cab; two (2) mounted at the front corners of the truck; and two (2) mounted at the rear corners of the truck; front of rear nozzles shall have a minimum discharge arc of fifteen (15) degrees; mid ship nozzle should be able to discharge six (6) feet outward and eight (8) feet upward approximately.
- i. Top of tank mounted monitor cannon. Remote controlled from inside cab or console.
- j. Shall have a spray bar running across rear of truck.
- k. Shall be equipped with a hose reel mounted at right side rear area with auto and manual rewind fitted with 338.1m (125 ft.) by 25.4mm (1 in.) hose with an adjustable spray nozzle. Hose shall be connected to the pump. The discharge from the nozzle shall be controlled by remote control valve utilizing air pressure from truck. Truck to be equipped with air control system. There shall be a solenoid-operated valve for each control valve. Solenoids shall be controlled by switch mounted in truck cab.
- l. Fire hydrant quick connect adapter and 25 feet length of 2 ½ inch diameter hose for filling from hydrants.
- m. Piping - Shall be a stainless steel, in combination with high-pressure rubber water hose for increased flexibility. Suction link to be 152.4mm (6 in.) stainless steel tubing, connected by 152.4mm (6 in.) flexible hose to pump. Piping system to be provided with petcocks or plugs to fully drain pump, valves and entire system. Shall have hydrant filling capabilities mounted at right side rear area.
- n. Water Pressure Gauge and Controls - All controls shall be panel-mounted in truck cab and fully operational within easy reach of operator. To include hour meter electric automatic water system pressure control – an electrical sensing system with a quadrant throttle to control water pump speed and reference pressure gauge mounted in cab for operating pressure selection. The operator may change to higher or lower pressure settings by the single selector dial only. The system shall provide consistent water pressure regardless of water flow or vehicle speed in the range of 3 to 25 MPH. A manual switch at the control panel shall be provided to override the constant pressure sensing system, if necessary. nozzles (Discharge Control) the discharge from each nozzle to be controlled by remote controlled valve with cold water

replaceable disc and built-in diaphragm to open and close valve, using air pressure from truck system. All valves to be solenoid activated with controls at panel in cab.

o. Full length fenders, for rear wheels.

17. Hydrostatic Pump Drive: Hydrostatic transmission PTO drive/front engine PTO.
Consisting of:

- a. Pump – 6.1 C.I.R. closed loop hydro-static pump/transmission
- b. Motor – 2.44 C.I.R. bent axis VOAC motor.

18. Hydraulic Components:

- a. High-pressure hoses and fittings per SAE standard.
- b. Reservoir: Minimum 37.96 (10 gal.) reservoir with dial thermometer.
- c. Filter: 10 micron replaceable spin on cartridge type suction filter.
- d. Oil Cooler: Radiator mounted cooler.

19. Other:

- a. First Service Kit shall include all required filters (oil, fuel, air, breather, transmission, etc.) for truck/tank system.
- b. Truck/tank shall be outlined with conspicuity material (tape) along the perimeters. Conspicuity material shall be red and white (reflexite or equal).
- c. Four (5) Work lights Make ECCO Model EW3132 or equal; two (2) mounted on the driver side at the top, front and rear of the tank, two (2) on the passenger side at the top front and rear of the tank; one (1) mounted on the rear of the tank
- d. Complete after factory rustproof with minimum seven (7) year unlimited mileage requirement warranty. In accordance with Federal Specification 297A or its latest revision.
- e. List of factory trained authorized personnel who will provide service.
- f. Contractor shall provide the following technical manuals (book format/CD/DVD):
 - i. Two (2) copies Operator's Manual.
 - One (1) copy Service and Repair Manual.
 - ii. Two (2) copies Parts Manual.

- iii. Two (2) copies each, Service, Parts, and Repair Manuals for hydrostatic pump and components.
- g. PUC Certification, License, Registration and Certificates as required in General Specifications.
- h. Vehicle shall conform to code of Federal Regulations, Title 40, Part 85, Control of Air Pollution From New Motor Vehicles, Engines, Environmental Protection Agency; Federal Motor Vehicle Safety Standard.
- i. Vehicle shall conform to all applicable State, Federal and OSHA requirements, necessary for safety, licensing, registration, and certification purposes.
- j. First Aid Kit OSHA/ANSI recommended.
- k. Upon "Notice to Proceed", Contractor shall submit "Application" (To State Motor Vehicle Safety Office) to meet the requirements of Section 286-202 (12), Hawaii revised statutes, for approval of a major modification. Construction, or reconstruction of a vehicle with a gross vehicle weight rating (GVWR) of 10,001 pounds and above. Application is available at:

State of Hawaii
Department of Transportation
Highways Division
Motor Vehicle Safety Office
339 Ponoana Place
Aiea, Hawaii 96701

Copy of approved application shall be submitted at time of delivery.

20. Training:

Bidder shall provide manufacturer training syllabus at time of bid submittal. Contractor shall provide manufacturer training at initial delivery and refresher training one (1) year after initial training for proper and safe operation, maintenance of equipment. This training shall include a minimum of one (1) hour classroom and one (1) hour per operator hands on training. Training shall be consistent to OSHA requirements. This service shall be provided at no extra cost to the State. Copy of attendance record showing class date, time, location, class type, instructor's name and attendees shall be submitted to:

State of Hawaii
Department of Transportation
Highways
Construction and Maintenance Branch
Attn: Equipment Superintendent/Safety Coordinator
869 Punchbowl Street
Honolulu, Hawaii 96813

21. Bidder(s) shall submit with their bid a certified letter(s) from the manufacturer(s) to certify the prospective bidder as the factory authorized warranty dealer (letter required for both chassis and equipment).

22. Note:

The new unit shall be capable of carrying the factory rated capacity without adverse effects.

SECTION 13 - CAB/CHASSIS WITH 7 CUBIC YARD DUMP BODY AND 17 TON HOIST

13.1- SCOPE OF WORK – The work consists of furnishing and delivering two (2), Cab/Chassis with Seven (7) Cubic Yard Dump Body and Seventeen (17) Ton Hoist to the Island of Hawaii. The contractor shall present the vehicle complete, ready to use and fully operational.

13.2- CAB/CHASSIS WITH 7 CUBIC YARD DUMP BODY – The specifications contained herein establish minimum standards (unless stated differently). Vehicle offered shall include any other standard features not listed but detailed in manufacturer’s brochures and deemed necessary for proper and safe operation of vehicle.

DETAILED SPECIFICATIONS FOR A CAB/CHASSIS WITH 7 CUBIC YARD DUMP BODY

1. Model/Year: Dump Truck, 2026 or latest production year.
2. GVW Rating: 15,876 kg (35,000 lbs.) minimum capacity.
3. Wheel Base: 3,680.8 mm (152 in.) minimum.
4. Cab to Axle: 2,108.2 mm (83 in.) minimum.
5. Axle to Frame: 1,600.2 mm (63 in.) minimum.
6. Engine:
 - a. Diesel powered, wet sleeved engine or dry sleeved engine with seven (7) year unlimited warranty. 2018 emissions compliant, Tier 4.
 - b. Liquid cooled with deaeration system with tank and sight glass. Silicone radiator and heater hoses.
 - c. Six (6) cylinders.
 - d. Net horsepower: 223.7kw (300 HP) minimum at rated RPM.
 - e. Fuel water separator (Racor Model 21000) or manufacturer’s equal.
 - f. Heavy duty dry type air cleaner with pop-up restriction indicator.
7. Exhaust: Single horizontal muffler with after treatment device, frame mounted and vertical exhaust pipe with protective shield with rain cap. Shall have two position exhaust switch to inhibit diesel particulate filter regeneration as switch is in “on” position.

8. Transmission:

- a. Automatic Allison MD 3500RDS-P, rugged duty service. 935 lb. ft. torque, or equal.
- b. Water/oil heat exchange.
- c. PTO: Hot Shift PTO with piggyback pump (Chelsea 230XKAJX-A3XE or equal).
- d. Automatic transmission oil temperature gauge.
- e. Transmission shift control – push button/lever.
- f. Transmission oil cooler.

9. Axle:

- a. Front: 6,350.4 kg (14,000 lbs.) capacity, minimum.
- b. Rear: 10,433 kg (23,000 lbs.) capacity, minimum single reduction with 200 wheel end (Spicer W-230S or equivalent).

10. Springs:

- a. Front: 6,350.4 kg (14,000 lbs.) heavy-duty capacity, minimum.
- b. Rear: 10,433 kg (23,000 lbs.) capacity, minimum.
- c. Auxiliary Rear: 2,041.2 kg (4,500 lbs.) capacity, minimum.
- d. Note: Front and rear springs shall not bottom out at maximum vehicle load capacity set by the manufacturer (the State carries various materials at various weights).

11. Shock Absorbers: Heavy Duty front.

12. Wheels:

- a. Seven (7) each, disc type, hub piloted; Same size single front, dual rear, and spare.
- b. 22.5 x 7.5, 10-stud DC rims with steel hubs.

13. Tires:

- a. Seven (7) each, truck, tubeless type, same size single front, dual rear, and spare. 11R 22.5, 16-ply load range H.

- b. Dual rear wheels shall be able to accept any brand of tire; tires shall not touch when inflated and loaded.

14. Brakes:

- a. Dual air system with 18.7 CFM compressor, anti-lock with air dryer, and pressure gauge with low air warning buzzer.
- b. Parking piggyback, spring actuated, double diaphragm: Anchor lock, MGM or equal.
- c. Safety spring loaded on rear axle, cab controller emergency air tank for release.
- d. Trailer hand control brake lever mounted on steering column and tractor protection valve.
- e. Non-asbestos material.
- f. Anti-lock brake system.
- g. Retarder – Telma Retarder, driveline mount with handle lever positioner.

15. Steering: Powered.

16. Electrical:

- a. Dual twelve (12) volt batteries. Gel type maintenance free, batteries shall have the rating of 2775 CCA, minimum. Aluminum battery storage box.
- b. Alternator: 200 amp minimum, capable of charging at low engine speed.
- c. Electrical brake controller wired to seven-way receptacle at rear pintle hitch. Control switch within view and reach of driver.

17. Cab:

- a. Aluminum conventional cab with tilt hood or steel conventional cab with tilt hood and seven (7) year unlimited warranty.
- b. Complete head lining.
- c. Clear safety glass on rear window. Shall have manufacturer installed or custom built right door lower peep window and rear quarter/corner windows both sides of cab (These windows shall provide additional visibility for the operational safety of the vehicle).

- d. Individual seats for driver and passenger with safety belts, driver's seat shall be air suspension type (Bostrom Freedom XC or equal), with adjustable mechanical lumbar support, front cushion adjustment, vinyl material. Passenger seat shall be two-man passenger, vinyl.
- e. Steps and grab handles located both sides of cab. Allow for 3-point contact.
- f. Floor mats.
- g. Sun visor for driver and passenger.
- h. Factory installed air condition.

18. Chassis Frame: Heat treated alloy steel 120,000 psi yield, minimum.

19. Dump Body:

- a. Contractor's Type – 5.4m (7 cubic yards).
- b. Dimensions – 3.m length x 2,209.8mm width x 863.6mm height (10 ft. x 87 in. x 34 in.) with steel side board 3.m x 50.4mm x 203.2mm (10 ft. x 2 in. x 8 in.), to be installed on left and right sides atop dump box. 1,066.8 mm (42 inch) tailgate.
- c. Headboard and sides – minimum 8 gauge steel. Shall be 100,000 yield PSI; 110,000 tensile PSI minimum.
- d. Floor and tailgate – minimum 4.76mm (3/16 in.) minimum eight (8) gauge steel. Shall be 145,000 yield PSI; 180,000 tensile PSI minimum. Tailgate shall be full boxed framed.
- e. Head board with half cab shield fully welded between dump body and headboard.
- f. Grab bar on driver side front top of box; grab bar outside of box on both sides above rear tires.
- g. Horizontal bracing.
- h. Dump box shall be equipped with the following: 304.8mm (12 inches) spreader apron; four (4) lashing hooks on each side of box and two (2) lashing hooks on tailgate; flat (not angled) running board or catwalk to extend out along each bottom side of box with safety threads or a painted on non-slip coating (no metal grating).
- i. Safety step ladder slide out left and right side, with grab handles for 3-point contact.
- j. High Lift Air tailgate with controls in cab.

- k. Pull tarp automatic load cover (one man operation), retractable, with steel protector shield.
- l.
- m. Shall be lined inside with spray on liner minimum of 6.35mm (1/4 inch) thickness (liner shall be compatible with hot/cold asphalt mix).

20. Hoist:

- a. 15,422 kg (17 ton) minimum capacity, class 60.
- b. Under-body mounted with safety locks.
- c. Control levers with safety lock mounted on floorboard of cab (right side of driver's seat).
- d. There shall be a stopper block designed to lock dump body and hoist in place, in the event of a weld failure at dump box frame and hoist connected while dump is being operated.

21. Bumper:

- a. Heavy duty front bumper with 16,000 lbs. warn winch or equal mounted in bumper
- b. One (1) or two (2) tow hooks mounted on front bumper or chassis front frame.
- c. Pintle hook with two "D" rings, 8,164.6 kg (9 ton) minimum tow capacity, a Holland Hitch CP400H or equal. Mounted on rear "A" bracket frame. Center of hitch to be mounted approximately 711.12 mm (28 in.) from ground.

22. Preparation: All bare metal shall be treated with OSPHO and primed prior to application of finish coat on dump body.

23. Other:

- a. Dual step-type fuel tanks, 189.3 L (50 gal.) minimum capacity each, with additional swing step for both sides. Aluminum construction with locking tank caps.
- b. Full radiator gravel guard.
- c. Air horn.
- d. Glad hands and plumbing with electrical wire connection (Warner 13-281-001 or equal) mounted at rear. Additional Cole Hersee #12063 six (6) prong socket trail hook-up, or equivalent, shall also be mounted at rear. All electrical connectors to include both male and female connectors.

- e. Instrument Panel:
 - i. Gauges; coolant temperature, fuel, tachometer, amp meter, oil pressure, air pressure, and hour meter.
 - ii. Parking brake control dash mounted.
 - iii. Water in fuel warning light and buzzer; low oil pressure, low coolant level, and high coolant temperature.
 - iv. AM/FM radio.
 - v. Twelve (12) volt power accessory outlet.
- f. Mirrors: Dual exterior rear view mirrors (aluminum or stainless steel backs/bracket or non corrosive composite type), 152.4 mm x 406.4 mm (6 in. x 16 in.) minimum, West Coast type or equal, with convex bottom section. Power type.
- g. Clearance lights, reflectors, identification lights, and directional lights shall conform with PUC regulations.
- h. Anti-sail mud flaps, front and rear tire.
- i. Electronic reverse alarm.
- j. One (1) 2.2 kg (5 lbs.) ABC dry chemical fire extinguisher mounted in cab.
- k. Road safety triangle kit and four-pack PF200 Power Flare Safety Light or equal, with carry bag. Power Flare shall have yellow housing with red LED lighting. All housing shall be etched "HDOT HIGHWAYS".
- l. Light Bar – Make ECCOESG Model 12-50068-ES or equal; sleek, low profile strobe; amber color; mounted on the cab in the middle with controls in cab.
- m. Color – White, Dupont 93-96923 high gloss enamel or equal; Chevron markings on tailgate – Omaha orange and white (comparable to existing HDOT Highways Division Fleet).
- n. Complete after factory rust proofing, with minimum seven (7) year, unlimited mileage requirement warranty. In accordance with Federal Specifications 297A at its latest revision.
- o. PUC Certification, License, Registration, and Certificates as required in General Specifications.
- p. Vehicle shall conform to Code of Federal Regulations, Title 40, Part 85, Control of Air Pollution from New Motor Vehicles, Engines, Environmental Protection Agency; Federal Motor Vehicle Safety Standards.

- q. Vehicles shall conform to all applicable State, Federal and OSHA requirements necessary for licensing, registration and certification process.
- r. Technical resources: One (1) copy of Repair Manual, one (1) copy of Parts Catalog, two (2) copies of Operator's Manual. Book format/CD/DVD.
- s. First Service Kit shall include all required filters (oil, fuel, air breather, transmission, etc.).
- t. Vehicle shall be outlined with conspicuity material tape, along the perimeters. Conspicuity material shall be red and white (reflexite or equal).
- u. 457.2mm (18 inches) x 457.2mm (18 inches) x 1,066mm (42 inches) aluminum weather proof frame mounted lockable toolbox.
- v. First Aid Kit, OSHA/ANSI recommended.
- w. Upon "Notice to Proceed", Contractor shall submit "Application" (To State Motor Vehicle Safety Office) to meet the requirements of Section 286-202 (12), Hawaii Revised Statutes for approval of a major modification, construction, or reconstruction of a vehicle with a gross vehicle weight rating (GVWR) of 10,001 pounds and above.

Application is available at:

State of Hawaii
Department of Transportation
Highways
Motor Vehicle Safety Office
601 Kamokila Boulevard, #511
Kapolei, Hawaii 96707

Copy of approved application shall be submitted at time of delivery.

24. Training:

Contractor shall provide proper and safe operation, maintenance of equipment. This training shall include a minimum of one (1) hour classroom and one (1) hour per operator hands-on training. Training shall be consistent to OSHA requirements. This service shall be provided at no additional cost to the State. Contractor shall provide classroom site.

Copy of attendance record showing class date, location, class type, instructor's name and attendee's shall be submitted to:

State of Hawaii
Department of Transportation
Highways
Construction and Maintenance Branch
Attn: Equipment Superintendent/Safety
Coordinator 869 Punchbowl Street #301
Honolulu, Hawaii 96813

25. Bidder(s) shall submit with their bid a certified letter(s) from the manufacturer(s) to certify the prospective bidder as the Factory Authorized Warranty Dealer (letter required for both chassis and equipment).

26. Note:

The new unit shall be capable of carrying the factory rated capacity without adverse effects.

SECTION 14 – CAB/CHASSIS WITH 2 ½ CUBIC YARD DUMP BODY

14.1- SCOPE OF WORK – The work consists of furnishing and delivering one (1), Cab/Chassis with 2 ½ Cubic Yard Dump Body to the Island of Hawaii. The contractor shall present the vehicle complete, ready to use and fully operational.

14.2- CAB/CHASSIS WITH 2½ CUBIC YARD DUMP BODY – The specifications contained herein establish minimum standards (unless stated differently). Vehicle offered shall include any other standard features not listed but detailed in manufacturer’s brochures and deemed necessary for proper and safe operation of vehicle.

DETAILED SPECIFICATIONS FOR A CAB/CHASSIS WITH 2 ½ CUBIC YARD DUMP BODY

1. Model/Year: Dump Truck, 2026 or latest production.
2. GVW Rating: 11,753.6 kg (26,000 lbs.) capacity maximum.
3. Wheel Base: 3,680.8 mm (152 in.) minimum.
4. Cab to Axle: 2,108.2 mm (83 in.) minimum.
5. Axle to Frame: 1,600.2 mm (63 in.) minimum
6. Engine:
 - a. Diesel powered, wet sleeved engine or dry sleeved engine with ten (10) year unlimited mileage warranty. 2016 emissions compliant, Tier 4. Shall have capability of operating on a B20 blend of bio-diesel, with no adverse effects.
 - b. Liquid cooled with deaeration system with tank and sight glass, full radiator guard.
 - c. Silicone cooling hoses.
 - d. Six (6) cylinders.
 - e. Net horsepower 223.7 kW (300 HP) minimum, at rated RPM. 1,150 ft. lb. torque.
 - f. Fuel water separator DAVCO Fuel Pro 382, or equivalent.
 - g. Engine compression brake, exhaust brake shall be rejected.

7. Exhaust: Single horizontal muffler with after treatment device, frame mounted and vertical exhaust pipe with protective shield with rain cap. Shall have two position exhaust switch to inhibit diesel particulate filter regeneration as switch is in “on” position.
8. Transmission:
 - a. Automatic, close ratio, 6-speed, with PTO gear (Allison MD-3060P or equal).
 - b. Transmission shift control – push button with lockout or lever type.
 - c. PTO power shift.
 - d. Automatic transmission oil temperature gauge.
 - e. Transmission oil cooler.
9. Axle:
 - a. Front – 3,628.8 kg (8,000 lbs.) capacity, minimum.
 - b. Rear – 7,938 kg (17,500 lbs.) capacity minimum.
 - i. 180/190 wheel ends.
 - ii. Gear ratio – manufacturer recommended to meet criteria of both highways (including up/down hill terrain) and off road hauling and dumping of various materials (density and weight).
10. Springs:
 - a. Front – 4,082.4 kg (9,000 lbs.) capacity, minimum.
 - b. Rear – 8,618.4 kg (19,000 lbs.) capacity, minimum.
 - c. Auxiliary Rear – 2,041.2 kg (4,500 lbs.) capacity, minimum.
 - d. Note – Front and Rear springs shall not bottom out at maximum vehicle load capacity set by the manufacturer (the State carries various materials at various weights).
11. Shock Absorbers: Heavy Duty front and rear.
12. Wheels:
 - a. Seven (7) each, disc type, hub piloted; Same size single front, dual rear, and spare.

- b. 22.5 x 7.5, 10-stud DC rims with steel hubs.

13. Tires

- a. Seven (7) each, truck, tubeless type, same size single front, dual rear, and spare. 10R 22.5, 14-ply load range G, minimum.
- b. Dual rear wheels shall be able to accept any brand of tire; tires shall not touch when inflated and loaded.

14. Brakes:

- a. Dual air system 22.4m³ /h (13.2 cubic feet) compressor, with air dryer, and pressure gauge with low air warning buzzer.
- b. Safety spring loaded on rear axle, cab controller emergency air tank for release.
- c. Parking piggyback, spring actuated, double diaphragm: Anchor lock MGM or equal.
- d. Front and rear disc brake system.
- e. Anti-lock brake system. Traction control.

15. Steering: Powered.

16. Electrical:

- a. Dual twelve (12) volt battery. AGM type batteries shall have the rating of 1250 CCA, minimum.
- b. Alternator: 115 amp minimum, capable of charging at low engine speed.

17. Cab:

- a. Aluminum cab with tilt hood or steel conventional cab with tilt hood and ten (10) year warranty.
- b. Complete head lining.
- c. Clear safety glass on rear window. Shall have manufacturer installed or custom built right door lower peep window and rear quarter/corner windows both sides of cab (These windows shall provide additional visibility for the operational safety of the vehicle).

- d. Seating for two (2), vinyl upholstery, seat belts for two (2) people; high back air ride seats.
 - e. Steps and grab handles located on both sides of cab, allowing for 3-point contact upon entering/disembarking.
 - f. Floor mats.
 - g. Sun visor for driver and passenger.
 - h. Factory installed air condition, heater, defroster, and vent system.
 - i. AM/FM/Blue Tooth radio; Reverse Camera.
 - j. Power windows and locks; Rain guards both doors.
18. Chassis Frame: High strength low alloy steel (120,000 psi yield); 2,136,000in./lbs. per rail.
19. Dump Body:
- a. Dimensions - 3,048 mm (10 ft.) length, 2,133.6 mm (7 ft.) width, 304.8 mm (12 in.) high, minimum measurements. With wood side boards, 3,048 mm (10 ft.) long, 50.8 mm (2 in.) thick, 304.8 mm (12 in.) high; to be installed on left and right sides, at top of dump box.
 - b. Drop-side extenders (cheater boards) – 3,048 mm (10 Ft.) length, 2,133.6 mm (7 ft.) width, 609.6 mm (24 in.) high, minimum measurements.
 - c. Automated retractable load cover with steel protector system, mounted at front of dump box.
 - d. Head board and sides: Ten (10) gauge steel minimum.
 - e. Floor and tailgate: Eight (8) gauge steel minimum. Tailgate shall be double paneled.
 - f. Dump box shall be furnished with four (4) lashing hooks of each side of box and three (3) lashing hooks on tailgate.
 - g. Headboard with half-cab shield, fully welded between dump body and headboard.
 - h. Light Bar – Make ECCOESG Model 12-50068-ES or equal; sleek, low profile strobe; amber color; mounted on the cab in the middle with controls in cab.

- i. Shall be lined inside with spray on liner minimum of 6.35 mm (1/4 in.) thickness (liner shall be compatible with asphalt).
- j. Air actuated tailgate release, with controls in cab. Four-way tailgate.

20. Hoist:

- a. 9,071.8 kg (10 ton) minimum lift capacity.
- b. Under-body mounted with safety locks.
- c. Control levers with safety lock mounted on floorboard of cab (right side of driver seat).
- d. Safety drop leg.
- e. There shall be a stopper block designed to lock dump body and hoist in place, in the event of a weld failure at dump box frame and hoist connection while dump is being operated.

21. Bumper:

- a. Heavy duty front bumper.
- b. One (1) or two (2) tow hooks mounted on front bumper or chassis front frame.
- c. Pintle hook with two (2) "D" rings, 8,164.6 kg (9 ton) minimum tow capacity, a Holland Hitch PH30 or equal, mounted at rear "ICC" bracket frame. Center of hitch to be mounted approximately 711.2 mm (28 in.) from ground.

22. Preparation: All bare metal shall be treated with OSPHO and primed prior to application of finish coat on dump body.

23. Other:

- a. Step-type fuel tank, 189.3 L (50 gal.) capacity, including nine (9) gallon DEF tank minimum.
- b. Full radiator gravel guard.
- c. Air horn.
- d. Anti-sail mud flaps, front/rear tire.

- e. Instrument Panel:
- Gauges: Coolant temperature, fuel, tachometer, ammeter/volt meter, oil pressure, and hour meter.
 - Parking brake control dash mounted.
 - Warning light: Water in fuel.
 - Warning light and buzzer: Low oil pressure, low coolant level, and high coolant temperature.
- f. Mirrors: Powered dual exterior rear view mirrors (backs and brackets shall be aluminum or stainless steel or non-corrosive composite type), approximate 152.4 mm x 406.4 mm (6 in. x 16 in.) minimum, West Coast type or equal, with convex bottom section. Passenger door down view mirror.
- g. Clearance lights, reflectors, identification lights, and directional lights shall conform with PUC regulations.
- h. Electronic reverse alarm.
- i. One (1) 2.2 kg (5 lbs.) ABC dry fire extinguisher mounted in cab.
- j. Road safety triangle kit; and self-charging four pack kit AERVOR Super LED Road Flares or equal, shall have yellow housing with red LED lighting. All housing and case shall be etched "HDOT Highways".
- k. Glad hands with complete air plumbing/connections with electrical six-wire (Cole Hersee, or equivalent) connector mounted at rear. With tractor protection valve and hand control lever. Electric brake controller wired to seven-way receptacle; Control switch shall be mounted within operator reach.
- l. Color – White, Dupont 93-96923 High Gloss Enamel or manufacturer's equal; Chevron markings on tailgate – Omaha orange and white (comparable to existing HDOT Highways Division Fleet. Vehicle shall be outlined with conspicuity material tape along the perimeters. Conspicuity material shall be red/white (reflexite or equal).
- m. Complete after factory rust proofing, with minimum seven (7) year, unlimited mileage requirement warranty. In accordance with Federal Specifications 297A at its latest revision.
- n. PUC Certification, License, Registration and Certificates as required in General Specifications.

- o. Vehicle shall conform to Code of Federal Regulations, Title 40, Part 85, Control of Air Pollution from New Motor Vehicles, Engines, Environmental Protection Agency; Federal Motor Vehicle Safety Standards.
- p. Vehicles shall conform to all applicable State, Federal and OSHA requirements necessary for licensing, registration and certification process.
- q. Technical resources: One (1) copy of Repair Manual, one (1) copy of Parts Catalog, two (2) copies of Operator's Manual. Book format/CD/DVD.
- r. First Service Kit shall include all required filters (oil, fuel, air, breather, transmission, etc.).
- s. DAVCO Shop Pro, Model FXP, Part No. 782050DAV01-07 with regulator, filtration equipment, or equivalent. To include Manufacturer training for mechanics.
- t. Aluminum weather proof frame mounted lockable toolbox approximate measurement 457.2 mm (18 in.) x 457.2 mm (18 in.) x 914.4 mm (36 in.).
- u. Upon "Notice to Proceed", contractor shall submit "Application" (To State Motor Vehicle Safety Office) to meet the requirements of Section 286-102 (12), Hawaii Revised Statutes, for approval of a major modification, construction, or reconstruction of a vehicle with a gross vehicle weight rating (GVWR) of 10,001 pounds and above.

Application is available at:

State of Hawaii
 Department of Transportation
 Highways
 Motor Vehicle Safety Office
 601 Kamokila Boulevard, #511
 Kapolei, Hawaii 96707

Copy of approved application shall be submitted at time of delivery.

24. Training:

Contractor shall provide proper and safe operation, maintenance of equipment. This training shall include a minimum of one (1) hour classroom and one (1) hour per operator hands-on training.

Training shall include manufacturer training for the equipment.

Training shall be consistent to OSHA requirements. This service shall be provided at no additional cost to the State. Contractor shall provide classroom site.

Copy of attendance record showing class date, location, class type, instructors name and attendee's shall be submitted to:

State of Hawaii
Department of Transportation
Highways
Construction and Maintenance Branch
Attn: Equipment Superintendent/Safety Coordinator
869 Punchbowl Street
Honolulu, Hawaii 96813

25. Bidder(s) shall submit with their bid a certified letter(s) from the manufacturer(s) to certify the prospective bidder as the Factory Authorized Warranty Dealer (letter required for both chassis and equipment).
26. Note:
The new unit shall be capable of carrying the factory rated capacity without adverse effects. The unit shall be designed for both highway and off-road hauling and dumping of various materials (density and weight).

SECTION 15 - SIX (6) MAN CREW CAB ONE (1) TON DUMP WITH LIFT GATE

15.1- SCOPE OF WORK - The work consists of furnishing and delivering one (1) only Six (6) Man Crew Cab - One (1) Ton Dump, to the Island of Hawaii. The Contractor shall present the equipment complete, ready to use, and fully operational.

15.2- SIX (6) MAN CREW CAB ONE (1) TON DUMP WITH LIFT GATE - The Specifications contained herein establish minimum standards (unless stated differently). Equipment offered shall include any other standard features not listed but detailed in manufacturer's brochures and deemed necessary for proper and safe operation of equipment.

DETAILED SPECIFICATION FOR A SIX (6) MAN CREW CAB
ONE (1) TON DUMP WITH LIFT GATE

1. Model/Year: Pickup Truck, 2025 or latest production.
2. Type: 2X4 two wheel drive
3. GVW Rating: 19,500 lbs. minimum capacity.
4. Wheel Base: 137 inches minimum.
5. Engine:
 - a. 6.7 liter power stroke diesel or equal with engine idle shutdown.
 - b. Fuel (diesel) tank (40 gallons) minimum.
 - c. Heavy duty cooling system.
6. Transmission:
 - a. 6-speed Automatic Transmission with tow/haul mode, minimum.
 - b. Transmission oil cooler.
 - c. Auxiliary transmission oil cooler.
7. Axle: 3.55 gear ratio posi-locking rear differential.
8. Electrical System: Twenty four (24) volt with heavy duty alternator (157 amp minimum)
9. Steering: Power or power assisted.

10. Brakes:

- a. Power or power assisted 4-wheel disc brake.
- b. Anti-lock brake system.
- c. Exhaust/engine brake

11. Cab/Interior:

- a. Crew Cab, Four (4) Doors
- b. Front - Bench seat (40/20/40 split bench seat) heavy duty vinyl material.
- c. Rear - Bench seat, heavy duty vinyl material.
- d. Driver and passenger air bag
- e. Interior rear view mirror with glare control.
- f. Power windows and power door locks.
- g. Floor covering vinyl/rubber with insulation.
- h. AM/FM radio with bluetooth.
- i. Husky Liner floor mats (front & rear) or equal.
- j. Factory installed air conditioning.
- k. Rain guards or vent shades on all doors.
- l. Twelve (12) volt power accessory outlet.
- m. Trailer brake controller
- n. Upfitter switches (4)
- o. 2500 Watt Power Inverter mounted under rear seat

12. Body/Exterior:

- a. Power mirrors
- b. Cargo Box: 2-yard cubic drop side dump body minimum, 3 yard maximum, Knapheide KDBDS912, or equal. Ends & sides of minimum 12-gauge, floor of

minimum 10-gauge 50,000 PSI yield high strength alloy steel. 8' long x 78" inside width with 14" high sides, 20" high tailgate, 35" bulkhead. Bulkhead to be furnished with minimum ¼, maximum ½-cab protector shield and rear-view mirror, cut out with screen. 7" interlocking longsills. Side board pocket extensions with rubber removable 6" "cheater" boards. Mud flaps fore and aft of rear wheels. Safety body prop and all lights and reflectors as required to meet Federal and State requirements.

- c. Hoist: Underbody subframe scissor hoist, 6.8-ton light capacity, single acting, NTEA performance class 10. Electric pump with push button control, mounted in cab near diver side
- d. Roof clearance lights
- e. Exterior back up alarm
- f. Skid plate transfer case and fuel tank
- g. Spray-in bed liner
- h. Power trailer tow mirrors
- i. Reverse sensors
- j. 16,000 lbs (minimum) Winch with remote mounted on front of vehicle.

13. Tires/Wheels:

- a. All terrain tires E rating that meet Federal GAWR requirements for GVW submitted.
- b. Full size spare mounted on carrier, on vehicle.
- c. Jack and wheel wrench.
- d. 18 inch 6-Spoke Cast-Aluminum Wheels if manufacturer standard

14. Suspension:

- a. Heavy duty – springs and shock absorbers shall meet manufacturer and Federal GAWR requirements for GVW submitted.

15. Color:

- a. White, Dupont 93-96923 High Gloss Enamel or manufacturer's equal.
- b. Chevron markings on dump box gate bottom, Omaha orange and white (comparable to existing HDOT Highways Division Fleet).

16. Other:

- a. Operator's Manual two (2) copies, Shop Repair Manual one (1) copy, Parts Manual one (1) copy. Book format/CD/DVD.
- b. Safety Inspection, License, Registration, and Certificates as required in General Specifications.
- c. Complete after factory rustproof, minimum of seven (7) years unlimited mileage warranty, in accordance with Federal Specifications 297A or its latest revision.
- d. One (1) each 2.2 kg (5 lbs.) ABC Fire extinguisher mounted in cab.
- e. Complete factory towing/electrical. To include wire harness connectors (Cole Hersee male 6-prong) and 7pin & 4pin plug, under carriage tow receiver (Type IV), 3-inch pintle hook and 2 inch ball combination receiver.
- f. Light Bar – Make ECCOESG Model 12-50068-ES or equal; sleek, low profile strobe; amber color; mounted on the cab in the middle with controls in cab. All cable and wiring shall be conduit protected and shall use grommets through sheet metal panels.
- g. Warranty shall be minimum 36 months/36,000 miles (to include all attachments).
- h. First Service Kit shall include all required filters (oil, fuel, air, breather, transmission, etc.).
- i. First Aid Kit (OSHA/ANSI recommended).
- j. Triangle road safety kit
- k. Heavy duty jumper cables

17. Training:

Upon request by receiving agency, Contractor shall provide proper fueling procedure/safe operation and maintenance of equipment. This training shall include a minimum of one (1) hour classroom and one (1) hour per operator hands on training. This service shall be provided at no additional cost to the State. Contractor shall provide classroom site. Training shall be consistent to OSHA requirements.

Copy of attendance record showing class date, time, location, class type, instructor's name, and attendees shall be submitted to:

State of Hawaii
Department of Transportation
Highways
Construction and Maintenance Branch
Attention: Equipment Superintendent/Safety Coordinator
869 Punchbowl Street
Honolulu, Hawaii 96813

SECTION 16 - REGENERATIVE AIR SWEEPER, TRUCK MOUNTED

16.1- SCOPE OF WORK - The work consists of furnishing and delivering two (2) only, Regenerative Air Sweepers Truck Mounted, one (1) each to the island of Hawaii and one (1) each to the island of Kauai. The Contractor shall present the vehicle/equipment complete, ready to use, and fully operational.

16.2- REGENERATIVE AIR SWEEPER, TRUCK MOUNTED - The Specifications contained herein establish minimum standards (unless stated differently). Vehicle/equipment offered shall include any other standard features not listed but detailed in manufacturer's brochures and deemed necessary for proper and safe operation of vehicle/equipment.

DETAILED SPECIFICATION FOR A REGENERATIVE AIR SWEEPER, TRUCK MOUNTED

1. Model/Year: Air Sweeper Truck, 2026 or latest production, with Schwarze A8000, Tymco 600 or approved equal.
2. Type:
 - a. Four-wheeled, truck mounted.
 - b. Regenerative Air, Vacuum.
 - c. Front wheel-steered. Dual steering and controls.
 - d. Diesel powered.
3. Hopper:
 - a. Volumetric capacity 4.59 cum (6.0 cu. yd.) minimum.
 - b. Variable dump height of 609.6mm (24in.) to 3,600mm (144in.) minimum.
 - c. Hopper lift and dump control - located in cab.
 - d. Position indicator, to include audible sound when hopper is lifted.
 - e. Shall be constructed of 304 stainless steel, including door, screens and dust separator.
4. Dimensions:
 - a. Wheelbase maximum 3,302mm (130 in.).
 - b. Turning radius maximum 5,867.4mm (19 ft. 3 in.).
 - c. Maximum height 3,200.4mm (126 in.).

d. Maximum width, brooms retracted 2,590.8mm (8 ft. 6 in.).

5. Cab:

- a. Full enclosed cab over- Aluminum or galvanized steel construction (with ten (10) year unlimited warranty) - rubber mounted to frame for isolation; cab tilt assist system for access to engine/transmission.
- b. Single operator, dual steering and controls.
- c. Dust and weather sealed.
- d. Ventilation (in dash) fresh air/heater.
- e. Air condition - in dash.
- f. Adjustable bucket-type adjustable seats with lumbar support; seat belts; air suspension type (Bolstrom T series or equal).
- g. Powered West Coast style mirrors with spot mirrors, two (2) each; aluminum/stainless steel/corrosion proof composite backs and brackets. Passenger door down view mirror.
- h. Windshield wipers - Two speed electric with washer.
- i. Power windows and locks.
- j. Two (2) sun visor.
- k. Low exit steps and grab handles shall be mounted, for safety, easy access and exit (3-point contact) to cab.
- l. 2.2 kg (5 lbs.) ABC fire extinguisher, mounted in cab.
- m. Road safety triangle kit; and self-charging four pack kit Aervoe Super LED Road Flares or equal, shall have yellow housing with red LED lighting. All housing and case shall be etched "HDOT HIGHWAYS".
- n. AM/FM/Blue Tooth Radio; Reverse Camera.
- o. Twelve (12) volt accessory outlet.

6. Power Unit: (Truck)
 - a. Diesel powered, wet sleeved engine or dry sleeved engine; with ten (10) year unlimited mileage warranty. 2016 emissions compliant, Tier 4.
 - b. 223.7 kW (300 HP) at rated RPM required minimum.
 - c. Six (6) cylinder minimum.
 - d. 190 L (50 gals.) fuel capacity minimum. Fuel water separator, DAVCO Fuel Pro 382, or equivalent.
 - e. Single Stage dry type air cleaner with safety element and restriction indicator.
 - f. Shall be equipped with an engine compression brake (exhaust brake shall not be accepted).
 - g. Single muffler with after treatment device frame mounted or manufacturer standard. Two position switch to inhibit diesel particulate filter regeneration, as long as the switch is "on" position.

7. Power Unit: Sweeper auxiliary engine.
 - a. Diesel - liquid cooled. 2016 emissions compliant, Tier 4.
 - b. 115 HP governed at 2,400 RPM minimum.
 - c. Four (4) cylinder minimum.
 - d. Fuel 190 L (50 gal.) common minimum. Including nine (9) gallon DEF tank minimum.
 - e. Two stage dry type air filter with safety element; restriction indicator (mounted in cab).
 - f. Fuel water separator. DAVCO Fuel Pro 382, or equivalent.
 - g. Engine and radiator shall be vibration isolated.
 - h. High temperature shut down system.
 - i. Sweeper to have mounted in cab, tachometer, hour meter, voltage meter, oil pressure, and temperature, air intake restriction indicator.

- j. Engine housing shall have dual access doors, for full access for daily maintenance at ground level.
8. Chassis:
- a. GVW - 14,968.8 kg (33,000 lbs.) minimum.
 - b. Wheel Base - 3,073.4mm (121 in.) minimum.
 - c. Cab to Axle - 2,311.4mm (91 in.) minimum.
9. Steering: Power or power assisted.
10. Transmission: Automatic with oil cooler; Allison MD3060, 6-speed or equal; controls located within easy reach of driver on both driver stations; transmission oil temperature gauge; magnetic oil drain plug.
11. Axle:
- a. Front axle - 5,443.2 kg (12,000 lbs.); front spring suspension 5,896.8 kg (13,000 lbs.) minimum; heavy duty shock absorbers.
 - b. Rear Axle - 9,525.6 kg (21,000 lbs.); rear suspension 10,659.6 kg (23,500 lbs.) minimum, multi leaf spring suspension or air bag suspension; heavy duty shock absorbers; dual speed, ratio 5.38/7.50:1 or manufacturers recommendation.
12. Wheels:
- a. Seven (7) each, disc type: Same size single front, dual rear and spare.
 - b. 22.5 x 7.5, 10-hole DC rims with steel hubs.
13. Tires:
- a. Seven (7) each, truck tubeless type, same size single front, dual rear, and spare. 11R22.5G, 14-ply minimum.
 - b. Dual rear wheels shall be able to accept any brand of tire; tires shall not touch when inflated and loaded.
14. Brakes:
- a. Full air brakes with 22.4m³/h (13.2 cu. ft.) compressor.
 - b. Equipped with air dryer, and pressure gauge with low air warning buzzer.

- c. Safety spring loaded on rear axle, cab controlled emergency air tank for release.
- d. Piggyback, spring actuated, double diaphragm; anchor lock, MGM or equal.
- e. Front and rear disc brake system.
- f. Anti-lock brake system; Traction Control.
- g. Engine compression brake, with selector switch. Exhaust brake shall be rejected.

15. Electrical:

- a. Minimum 150 amp alternator for chassis.
- b. Minimum 65 amp alternator for sweeper.
- c. Two (2) 12-volt 750 CCA maintenance free AGM batteries for chassis.
- d. One (1) 850 CCA maintenance free AGM battery for auxiliary engine.
- e. LED type headlights, stop, tail, backup, license plate, clearance, signal, identification, side broom, and directional lights with hazard switch. Flood lights for brooms
- f. Truck engine to have speedometer/odometer, tachometer, voltmeter, fuel, oil, air pressure and temperature gauges, warning light and audible alarm for low oil and coolant level, and warning lights for battery, cab latch, water in fuel, seat belt and hour meter.
- g. Full load indicator.
- h. Warning lights/indicators/gauges for air brakes, park brakes, air filter, full load, engine oil filter restriction, charging system, parking brake, hopper up, machine level and low spray water.

16. Hydraulic:

- a. 16 gpm @ 1,800 RPM, for total operation minimum.
- b. Minimum 94 L (25 gal.) reservoir with outside level indicator.
- c. Four stage direct gear pump. Electronic - hydraulic controls.

- d. All pressure hydraulic fittings to be positive seal "O" ring type/ JIC type (pipe threads are not allowed).
- e. All pump circuits to have quick connect/disconnect pressure checkpoints.
- f. Filtration - 100-mesh inlet strainer; 10-micron spin on filter.

17. Brooms:

- a. Side Brooms/Gutter brooms two (2) each: 1,118mm (44 in.) minimum diameter. All controls from cab; variable speed; brooms to stop/raise automatically in reverse; non-reversible; shall have position indicators in cab.
- b. All controls from cab to include; tilt angle adjustments; down pressure adjustments; broom extension override.
- c. Side brooms shall be recessed with shielded broom motor.
- d. Broom contact pattern must remain constant with regards to vertical broom movement due to changes in pavement condition.

18. Fan:

- a. Radial closed face or equal.
- b. Direct drive. Fan speed independent of vehicle speed.
- c. Sound suppressed housing and includes replaceable wear liner or constructed of abrasion resistant steel. Housing shall incorporate an inspection/clean out door.
- d. Vacuum enhancer for heavy/light material.
- e. Re-greaseable sealed bearings.
- f. Fan; Fan compartment; and All drive mechanism shall be housed in an enclosed compartment for safety and additional sound suppression.

19. Pick Up Head.

- a. Minimum of 2,209.8mm (87in.) wide with abrasion resistant steel shoes/runners; heavy duty 8.5mm (3/8in.) thick wall wire-reinforced rubber hoses attaching to hopper; quick disconnect on suction hose only; suspended from a minimum of four (4) adjustable springs one (1) on each corner of pick-up head or equivalent design.

- b. For safety, the Pick-up Head must automatically raise when the truck is placed in reverse.
- c. A quick disconnect shall be located near the pick-up head to allow for easy clean out.

20. Water System:

- a. 1,135.5 L (300 gals.) capacity minimum. Tank shall have a minimum ten (10) year warranty.
- b. No steel tanks; no ferrous material in system to rust.
- c. Centrifugal Pump - capable of running dry indefinitely with no damage.
- d. 7.6 m (25 ft.) wash down hose
- e. Anti-siphon water fill with strainer.
- f. Controls and water indicators located in cab.
- g. One (1) front-spray bar; Minimum two (2) spray nozzles for each side/gutter broom; Minimum one (1) spray nozzle inside of hopper to dampen debris being swept by suction system; All nozzles controlled separately from in-cab controls; Spray system shall be protected with a stainless steel mesh filter to prevent clogging; Spray systems shall be constructed with galvanize/brass.

21. Color: Federal Safety School Bus Yellow.

22. Dust Control: Shall effectively control dust by one of the following methods:

- a. By use of water (wet).
- b. Dry dust control without use of water (dry). Through vacuum fan and filters.
- c. Combination of wet and dry.

23. Other:

- a. Chassis and sweeper power units to have auto shutdown for high temperature, low oil pressure and low hydraulic oil level.
- b. Sweeper power unit shall be protected from weather and elements; shall have a vandalism package, and be keyed alike.

- c. Three (3) beacons (Whelen Super LED Stainless Steel Micro 400s or equal) to be mounted with mirror mount brackets left and right side of cab and mounted at rear of sweeper top. To include cab switches, warning lights, power supply and all necessary wiring.
- d. Complete after factory rust proofing with minimum seven (7) year unlimited mileage. In accordance with Federal Specifications 297A at its latest revision.
- e. PUC Certification, License, Registration and Certificates as required in General Specifications.
- f. Operator Manual two (2) copies. Book Format/CD/DVD/Flash Drive.
- g. Repair/Service Manual, Parts Catalog and Electric Manual one (1) copy each. Book Format/CD/DVD/Flash Drive.
- h. First Aid Kit OSHA/ANSI recommended.
- i. First service kit shall include all required filters (oil, fuel, air, breather, transmission, etc.). For both truck and sweeper engines.
- j. One (1) each spare broom set, side, gutter and main (if applicable).
- k. Contractor shall furnish letter from the manufacturer to certify full compliance with Federal motor vehicle safety standards.
- l. Electronic reverse alarm.
- m. Dual electric horn.
- n. Arrow Board (MUTCD approved) approximately 30in. X 60in. with 25 lamps, legible visibility of .75mile, to be mounted at rear with control in cab.
- o. Sweeper, truck mounted shall be lined with conspicuity material (reflexite or equal); red/white.
- p. Sweeper shall be equipped with an automatic lubrication system.
- q. Contractor to provide certified letter from sweeper manufacturer that PM10 requirements have been met. Letter shall be submitted at time of bid submission. Failure to submit letter shall be grounds for rejection of bid.
- r. Upon "Notice to Proceed", Contractor shall submit "Application" (To State Motor Vehicle Safety Office) to meet the requirements of Section 286-202 (12), Hawaii

revised statutes, for approval of a major modification. Construction, or reconstruction of a vehicle with a gross vehicle weight rating (GVWR) of 10,001 pounds and above.

Application is available at:

State of Hawaii
Department of Transportation
Highways
Motor Vehicle Safety Office 601
Kamokila Boulevard, #511
Kapolei, Hawaii 96707

Copy of approved application shall be submitted at time of delivery.

24. Training:

Contractor shall provide initial manufacturer's training at time of delivery for proper operation and maintenance of equipment and refresher manufacturer training one (1) year after initial delivery. This training shall include a minimum of one hour classroom and one hour per operator hands on training. Training shall be consistent to OSHA requirements. This service shall be provided at no extra cost to the State.

Copy of attendance record showing class date, time, location, class type, instructor's name and attendees shall be submitted to:

State of Hawaii
Department of Transportation
Highways
Construction and Maintenance Branch
Attn: Equipment Superintendent/Safety Coordinator
869 Punchbowl Street
Honolulu, Hawaii 96813

25. Note:

Bidder(s) shall submit with their bid a certified letter(s), from their manufacturer(s) to certify the prospective bidder as the factory authorized warranty dealer (letter required for both chassis and equipment); and PMIO certified letter required for part no. 23r of this specification. Failure to submit certified letter(s) shall be sufficient grounds for rejection of bid.

SECTION 17 — ONE TON CREW CAB, PICK-UP TRUCK WITH LIFT GATE AND
ARROW BOARD

17.1- SCOPE OF WORK – The work consists of furnishing and delivering four (4) only, One Ton Crew Cab, Pick-Up Truck with Lift Gate and Arrow Board, to the island of Oahu. The Contractor shall present the vehicle complete, ready to use, and fully operational.

17.2- ONE TON PICK-UP TRUCK WITH LIFT GATE AND ARROW BOARD - The Specifications contained herein establish minimum standards (unless stated differently). Vehicle offered shall include any other standard features not listed but detailed in manufacturer's brochures and deemed necessary for proper and safe operation of vehicle.

DETAILED SPECIFICATIONS FOR A ONE TON PICK-UP TRUCK WITH LIFT GATE AND
ARROW BOARD

1. Model/Year: One Ton Crew Cab, Pick-Up Truck, 2026 or latest production.
2. Type: 2-Wheel Drive. Single rear wheel.
3. Wheel Base: 4368.8 mm (172 inches) minimum.
4. GVW: 4,989.6 kg (11,000 lbs.) minimum capacity.
5. Engine:
 - a. Diesel powered. 2010 Emissions compliant, Tier 3.
 - b. Heavy duty cooling system.
6. Transmission
 - a. 6-speed automatic minimum.
 - b. Transmission oil cooler.
 - c. External Transmission oil cooler.
7. Axle: Rear locking or limited slip differential.
8. Electrical System:
 - a. Twelve (12) volt with alternator capable of charging battery at low engine speeds.
 - b. Dual battery system.

9. Steering: Power or power assisted.

10. Brakes:

- a. Full air system, s-cam actuated, 16.5 inch x 6 inch front and 16.5 inch x 8.625 inch rear drum type brakes.
- b. Anti-lock brake system.
- c. Roll stability control.

11. Body/Interior:

- a. Crew cab.
- b. Bench seats (front and rear), seat belts for three (3) people (front and rear).
- c. Upholstery of manufacturer's standard vinyl/cloth material.
- d. Interior rear view mirror with glare control.
- e. Roll down windows on all doors.
- f. Floor covering vinyl/rubber with insulation, with floor mats.
- g. Dual outer mirrors with spot mirrors, on swing out or telescoping brackets.
- h. AM/FM radio.
- i. Factory installed air conditioning.
- j. Cigarette lighter.
- k. Rain guards or vent shades on all doors.

12. Body: 2,438mm (8 ft.) bed; fleet side, style side, swept line or equal.

13. Bumpers:

- a. Standard front.
- b. Electric/hydraulic lift gate with power closing; diamond plate steel platform; 226.8 kg (500 lbs.) lift capacity, minimum.

14. Tires/Wheels:

- a. Tires and wheels shall meet manufacturer's and Federal GAWR requirements for GVW submitted; all terrain type.
- b. Full size spare mounted on under frame carrier.
- c. Jack and wheel wrench.
- d. No chrome/aluminum wheels, unless manufacturer standard.

15. Suspension: Heavy Duty – Axles, springs, and shock absorbers shall meet manufacturer's and Federal GAWR requirements for GVW Submitted.

16. Color:

- a. White, Dupont 93-96923 High Gloss Enamel or manufacturer's equal.
- b. Chevron markings on lift gate bottom, Omaha orange and white (comparable to existing State Highways Division Fleet). Spray-on bed liner.

17. Other:

- a. Operator's Manual two (2) copies, Shop Repair Manual one (1) copy, Parts Manual one (1) copy. Book format/CD/DVD.
- b. 2.2kg (5 lbs.) ABC fire extinguisher mounted in cab.
- c. Complete after factory rustproof, minimum of seven (7) years unlimited mileage requirement warranty, in accordance with Federal Specifications 297A or its latest revision.
- d. Cross mount tool box installed. Shall be low profile type with double/locking gull-wing type covers. Shall be aluminum type, heavy construction, with concealed hinges. Shall be painted to match vehicle color or be diamond plate aluminum (lockable).
- e. Complete factory towing/electrical. To include wire harness connector (vehicle and trailer end), under carriage tow receiver, (Type IV), 907.2 kg (2,000 lbs.) pintle hook and ball combination receiver.
- f. Reverse alarm.
- g. Gauge package.

- h. Safety Inspection, License, Registration, and Certificates as required in General Specifications. To include PUC certification (if over 10,000 lbs.).
- i. Complete after factory rust proofing, with minimum seven (7) years unlimited mileage requirement warranty, in accordance with Federal Specifications 297A or its latest revision.
- j. The lightbar system shall be a Whelen model FX0HIDOT or equal. The bar shall be sixty (60) inches long minimum. The main structure of the lightbar must be an extruded aluminum I-Beam design. The lightbar shall house all electronic components. The lightbar must have Hi/Low power control of all inboard LED modules. The lightbar shall contain one (1) control module I/O board which must control all internal lighthoods. The I/O board shall produce a minimum flash rate of 75 Comet flashes per minute with alternating corners, not an 'x' pattern. There shall be ten (10) Scan Lock flash patterns to choose from. Each pair of LED lamps must be capable of operating in a different flash pattern.

The lightbar shall have all linear LED modules and shall meet SAE-J845 Class I and SAE-J595 requirements. The lightbar shall have linear LED modules in the four corners. Each linear 18 corner module shall consist of a minimum of eighteen (18) high output LED's permanently mounted within a single dual (over/under) "removable" highly mirrored parabolic reflector for maximum light output. The eighteen (18) LED's shall be mounted in two straight lines of 9 LED's each (over/under) for maximum light output. The linear reflector shall extend to the MR11 alley light with no appreciable open gap between the LED module on the alley light. The LED work light must be the same size module as used for the warning lights, but must consist of two staggered rows of six Super LED's and be able to flash and steady burn. All LED panels shall be the same design as the Linear 18 described above, and must contain 12 Super LED's (6 over 6). All inboard lighthoods must be 400 Series (this will allow for placement of this lighthood in any inboard position). All LED inboard modules must produce a minimum 180 degree light pattern. The I/O module shall be 100% solid state with built-in reverse polarity protection and output short protection. The I/O board shall operate from 10 —16 VDC with no degradation in flash rate. The lightbar shall be designed to have up to eight (8) lamps to the front, eight lamps to the rear, and one (1) on each end. Each lamp module position shall have colored lens sections, independent of the others, that match the color of the LED module. For split modules, clear lenses must be used. The LED panel must be mounted within the lightbar. The corner Linear LED's must have a two intensity cruise light mode. This provides a lightbar that has illuminated corners (no flashing), which are used for marker lights.

The user shall have a choice of ten (10) Scan-Lock flash patterns to choose from the LED modules, and four (4) Scan-Lock flash patterns for the flashing work

lights and flashing alleys. The pattern must be selected by an external connection, not requiring the user to open the lightbar to change flash patterns.

The light bar shall have: Front — Two (2) Corner Linear 18's (amber), Eight (8) inboard Linear12 LED's (6 amber / 2 white); Rear Two (2) Corner Linear 18's (amber), Six (6) Inboard Linear12 LED's (4 amber / 2 red), Two (2) Inboard staggered white TIR12 Super-Led modules for use as work lights; Ends — Two (2) MR11 alley lights; Additional, two (2) spare MR11 halogen replacement bulbs.

The light bar shall be wired to function as follows: All Amber warning LED's; All white warning LED's and flashing LED work light; Left Alley; Right Alley; Flashing Alley; LED Work light, steady; Hi/Low power. All switches shall be lighted type and mounted within a console attached to the dash or mounted as part of OEM console, with provisions to mount an external radio system. Lightbar power cable must be brought to the power source with a fuse (thermal circuit breakers shall be rejected). Power cable shall be labeled with a permanent label at the power source, marked "Lightbar". All cable and wiring shall be conduit protected and shall use grommets through sheet metal panels. Note: The rear bar red LED's must be separately wired for activation.

The four corner Linear18's must be identical and all other inboard lighthoods must be 400 series. All internal lighthoods must snap into sliding brackets that are mounted in the lightbar.

The lightbar must contain a maximum of eight (8) screws, four (4) for each end cap to access all internal lighthoods. Lighthoods that require the removal of more than eight screws to remove all internal lighthoods are unacceptable. Lightbars with modules mounted outside of the main lightbar are not acceptable. The lightbar shall contain a permanent mounting kit to prevent theft of the lightbar, and be laser etched "STATE DOT HIGHWAYS", lettering shall be 1.5 inches tall.

- k. First Service Kit shall include all filters as required by manufacturer (oil, air, breather, transmission, etc.).
- l. Warranty shall be a minimum of 36 months/36,000miles (to include all attachments).
- m. First Aid Kit (OSHA/ANSI recommended).
- n. Road safety triangle kit; and four pack PF200 Power Flare Safety Light with carry bag. Power flare shall have yellow housing with red LED lighting. All housing shall be etched "STATE DOT HIGHWAYS".

- o. Fold down Arrow Board (MUTCD approved) to be mounted at the rear of the cab (front of pick-up box) to extend above cab roof height to include all wiring and controls mounted in cab within drivers reach. In folded down position, Arrow Board shall not block view of light bar and third brake light. A travel height placard shall be mounted on the dash.

18. Training: Contractor shall provide proper and safe operation and maintenance of vehicle/equipment.

SECTION 18– ONE TON PICK-UP TRUCK WITH LIFT GATE AND ARROW BOARD

18.1- SCOPE OF WORK – The work consists of furnishing and delivering two (2) only, One Ton Pick-Up Truck with Lift Gate and Arrow Board, to the island of Oahu. The Contractor shall present the vehicle complete, ready to use, and fully operational.

18.2- ONE TON PICK-UP TRUCK WITH LIFT GATE AND ARROW BOARD - The Specifications contained herein establish minimum standards (unless stated differently). Vehicle offered shall include any other standard features not listed but detailed in manufacturer's brochures and deemed necessary for proper and safe operation of vehicle.

DETAILED SPECIFICATIONS FOR A ONE TON PICK-UP TRUCK WITH LIFT GATE AND ARROW

1. Model/Year: One Ton Pick-Up Truck, 2026 or latest production.
2. Type: 2-Wheel Drive. Single rear wheel.
3. Wheel Base: 3,556 mm (140 inches) minimum.
4. GVW: 4,536 kg (10,000 lbs.) minimum capacity.
5. Engine:
 - a. Diesel powered. 2013 Emissions compliant, Tier 4.
 - b. Heavy duty cooling system.
6. Transmission
 - a. 6-speed automatic minimum.
 - b. Transmission oil cooler.
 - c. External Transmission oil cooler.
7. Axle: Rear locking or limited slip differential.
8. Electrical System:
 - a. Twelve (12) volt with alternator capable of charging battery at low engine speeds.
 - b. Dual battery system.

9. Steering: Power or power assisted.

10. Brakes:

- a. Power or power assisted. Four wheel disc brakes.
- b. Anti-lock brake system.
- c. Roll stability control.

11. Body/Interior:

- a. Conventional cab.
- b. Bench seat, seat belts for three (3) people.
- c. Upholstery of manufacturer's standard vinyl/cloth material.
- d. Interior rear view mirror with glare control.
- e. Roll down windows on all doors.
- f. Floor covering vinyl/rubber with insulation, with floor mats.
- g. Dual outer mirrors with spot mirrors, on swing out or telescoping brackets
- h. AM/FM radio
- i. Factory installed air conditioning.
- j. Cigarette lighter.
- k. Rain guards or vent shades on all doors.

12. Body: 2,438mm (8 ft.) bed; fleet side, style side, swept line or equal.

13. Bumpers:

- a. Standard front.
- b. Electric/hydraulic lift gate with power closing; diamond plate steel platform; 589.6 kg (1,300 lbs.) lift capacity, (Tommy Gate G2 series, dual cylinders or equal) minimum.

14. Tires/Wheels:

- a. Tires and wheels shall meet manufacturer's and Federal GAWR requirements for GVW submitted; all terrain type.
- b. Full size spare mounted on under frame carrier.
- c. Jack and wheel wrench.
- d. No chrome/aluminum wheels, unless manufacturer standard.

15. Suspension: Heavy Duty – Axles, springs, and shock absorbers shall meet manufacturer's and Federal GAWR requirements for GVW Submitted.

16. Color:

- a. White, Dupont 93-96923 High Gloss Urethane or manufacturer's equal.
- b. Chevron markings on lift gate bottom, Omaha orange and white (comparable to existing State Highways Division Fleet). Spray-on bed liner.

17. Other:

- a. Operator's Manual two (2) copies, Shop Repair Manual one (1) copy, Parts Manual one (1) copy. Book format/CD/DVD.
- b. 2.2kg (5 lbs.) ABC fire extinguisher mounted in cab.
- c. Complete after factory rustproof, minimum of seven (7) years unlimited mileage requirement warranty, in accordance with Federal Specifications 297A or its latest revision.
- d. Cross mount tool box installed. Shall be low profile type with double/locking gull-wing type covers. Shall be aluminum type, heavy construction, with concealed hinges. Shall be painted to match vehicle color or be diamond plate aluminum (lockable).
- e. Complete factory towing/electrical. To include wire harness connector (vehicle and trailer end), under carriage tow receiver, (Type IV), 907.2 kg (2,000 lbs.) pintle hook and ball combination receiver.
- f. Reverse alarm.
- g. Gauge package.

- h. Safety Inspection, License, Registration, and Certificates as required in General Specifications. To include PUC certification (if over 10,000 lbs.).
- i. Complete after factory rust proofing, with minimum seven (7) years unlimited mileage requirement warranty, in accordance with Federal Specifications 297A or its latest revision.
- j. The lightbar system shall be a Whelen model FCOHIDOT, part no. 01-0684294-72 or equal. The bar shall be sixty (60) inches long minimum. The main structure of the lightbar must be an extruded aluminum I-Beam design. The lightbar shall house all electronic components. The lightbar must have Hi/Low power control of all inboard LED modules. The lightbar shall contain one (1) control module I/O board which must control all internal lighthoods. The I/O board shall produce a minimum flash rate of 75 Comet flashes per minute with alternating corners, not an "x" pattern. There shall be ten (10) Scan Lock flash patterns to choose from. Each pair of LED lamps must be capable of operating in a different flash pattern.

The lightbar shall have all linear LED modules and shall meet SAE-J845 Class I and SAE-J595 requirements. The lightbar shall have linear LED modules in the four corners. Each linear 18 corner module shall consist of a minimum of eighteen (18) high output LED's permanently mounted within a single dual (over/under) "removable" highly mirrored parabolic reflector for maximum light output. The eighteen (18) LED's shall be mounted in two straight lines of 9 LED's each (over/under) for maximum light output. The linear reflector shall extend to the MR11 alley light with no appreciable open gap between the LED module on the alley light. The LED work light must be the same size module as used for the warning lights, but must consist of two staggered rows of six Super LED's and be able to flash and steady burn. All LED panels shall be the same design as the Linear 18 described above, and must contain 12 Super LED's (6 over 6). All inboard lighthoods must be 400 Series (this will allow for placement of this lighthood in any inboard position). All LED inboard modules must produce a minimum 180 degree light pattern. The I/O module shall be 100%'solid state with built-in reverse polarity protection and output short protection. The I/O board shall operate from 10 — 16 VDC with no degradation in flash rate. The lightbar shall be designed to have up to eight (8) lamps to the front, eight lamps to the rear, and one (1) on each end. Each lamp module position shall have colored lens sections, independent of the others, that match the color of the LED module. For split modules, clear lenses must be used. The LED panel must be mounted within the lightbar. The corner Linear LED's must have a two intensity cruise light mode. This provides a lightbar that has illuminated corners (no flashing), which are used for marker lights.

The user shall have a choice of ten (10) Scan-Lock flash patterns to choose from the LED modules, and four (4) Scan-Lock flash patterns for the flashing work

lights and flashing alleys. The pattern must be selected by an external connection, not requiring the user to open the lightbar to change flash patterns.

The light bar shall have: Front — Two (2) Corner Linear 18's (amber), Eight (8) inboard Linear12 LED's (6 amber / 2 white); Rear — Two (2) Corner Linear 18's (amber), Six (6) Inboard Linear12 LED's (4 amber / 2 red), Two (2) Inboard staggered white TIR12 Super-Led modules for use as work lights; Ends — Two (2) MR11 alley lights; Additional, two (2) spare MR11 halogen replacement bulbs.

The light bar shall be wired to function as follows: All Amber warning LED's; All white warning LED's and flashing LED work light; Left Alley; Right Alley; Flashing Alley; LED Work light, steady; Hi/Low power. All switches shall be lighted type and mounted within a console attached to the dash or mounted as part of OEM console, with provisions to mount an external radio system. Lightbar power cable must be brought to the power source with a fuse (thermal circuit breakers shall be rejected). Power cable shall be labeled with a permanent label at the power source, marked "Lightbar". All cable and wiring shall be conduit protected and shall use grommets through sheet metal panels.

Note: The rear bar red LED's must be separately wired for activation.

The four corner Linear 18's must be identical and all other inboard lightheads must be 400 series. All internal lightheads must snap into sliding brackets that are mounted in the lightbar.

The lightbar must contain a maximum of eight (8) screws, four (4) for each end cap to access all internal lightheads. Lightheads that require the removal of more than eight screws to remove all internal lightheads are unacceptable. Lightbars with modules mounted outside of the main lightbar are not acceptable. The lightbar shall contain a permanent mounting kit to prevent theft of the lightbar, and be laser etched "STATE DOT HIGHWAYS", lettering shall be 1.5 inches tall.

- k. First Service Kit shall include all filters as required by manufacturer (oil, air, breather, transmission, etc.).
- l. Warranty shall be a minimum of 36 months/36,000miles (to include all attachments).
- m. First Aid Kit (OSHA/ANSI recommended).
- n. Road safety triangle kit; and four pack PF200 Power Flare Safety Light with carry bag. Power flare shall have yellow housing with red LED lighting. All housing shall be etched "STATE DOT HIGHWAYS".

- o. Fold down Arrow Board (MUTCD approved) to be mounted at the rear of the cab (front of pick-up box) to extend above cab roof height to include all wiring and controls mounted in cab within drivers reach. In folded down position, Arrow Board shall not block view of light bar and third brake light. A travel height placard shall be mounted on the dash. Automated electric/hydraulic.
- p. Twenty (20) each vehicle "Geotab G06" plug and play device by Sprint with 5 year "Pro Plan", to enhance vehicle safety and security. Report information shall be monitored by the Highways Construction and Maintenance Branch.

18. Training: Contractor shall provide proper and safe operation and maintenance of vehicles/equipment.

SECTION 19 - CAB/CHASSIS WITH DIGGER DERRICK

19.1- SCOPE OF WORK – The work consists of furnishing and delivering, One (1) only, Cab/Chassis with Digger Derrick, to the island of Oahu. The Contractor shall present the vehicles complete, ready to use, and fully operational.

19.2- CAB/CHASSIS WITH DIGGER DERRICK - The Specifications contained herein establish minimum standards (unless stated differently). Vehicle/equipment offered shall include any other standard features not listed but detailed in manufacturer's brochures and deemed necessary for proper and safe operation to vehicle/equipment.

DETAILED SPECIFICATIONS FOR A CAB/CHASSIS DIGGER WITH DERRICK

1. Model/Year: Cab/Chassis with Digger Derrick, 2026 or latest Production.
2. GVW Rating: 16,329.6 kg (36,000 lbs.) minimum capacity
3. Wheel Base: 4,572mm (180 inches) minimum.
4. Cab to Axle: 2,743.2 mm (108 inches) minimum.
5. Engine:
 - a. Diesel powered, wet sleeved engine or dry sleeved engine with seven (7) year unlimited warranty. 2013 emissions certified, Tier 4.
 - b. Liquid cooled with deaeration system with tank and sight glass.
 - c. Six (6) cylinder.
 - d. Net Horsepower: 260.9 kw (350 HP) minimum at rated RPM. 1,000 ft. lb. torque.
 - e. Fuel water separator (Racor Model 21000) or manufacturer's equal.
 - f. Heavy duty dry type air cleaner with pop-up restriction indicator.
6. Exhaust: Single horizontal muffler with after treatment device frame mounted and Short tail pipe or manufacturer standard. Two position exhaust switch to inhibit diesel particulate filter regeneration as long as switch is "on" position.
7. Transmission:
 - a. Automatic Allison MD 3000RDSP, 1200 lb. ft. torque, or equal. Six (6) speeds or equal.

- b. Water/oil heat exchange.
 - c. PTO: Hot shift PTO with piggy back pump (Chelsea 230XKAJX-A3XE or equal).
 - d. Automatic transmission oil temperature gauge.
 - e. Transmission shift control – push button/lever
 - f. Transmission oil cooler.
8. Axle:
- a. Front: 6,350.4 kg (14,000 lbs.) capacity, minimum.
 - b. Rear: 10,433 kg (23,000 lbs.) capacity, minimum single reduction with 200 wheel end.
 - c. Auxiliary: 2,041.2kg (4,500 lbs.) capacity, minimum.
 - d. Differential locking/limited slip.
9. Springs:
- a. Front: 6,350.4 kg (14,000 lbs.) heavy-duty capacity, minimum.
 - b. Rear: 10,433 kg (23,000 lbs.) capacity, minimum.
 - c. Note: Front and rear springs shall not bottom out at maximum vehicle load capacity set by the manufacturer.
10. Shock Absorbers: Heavy duty front.
11. Wheels:
- a. Seven (7) each disc type, hub piloted; same size single front, dual rear, and spare.
 - b. 22.5 x 8.25, 10-stud DC painted rims; with steel hubs.
12. Tires:
- a. Seven (7) each, truck tubeless type, same size single front, dual rear, and spare. 11R 22.5, 16-ply, loading range H. Air stems extended for all wheels for easy access.

- b. Dual rear wheels shall be able to accept any brand of tire; tires shall not touch when inflated and loaded.

13. Brakes:

- a. Dual air system with 18.7 cubic foot compressor, anti-lock with air dryer, and pressure gauge with low air warning buzzer.
- b. Front disc brakes. System shall comply with new stopping distance NHSTA regulations.
- c. Parking — Piggyback, spring actuated, double diaphragm: Anchor lock, MGM or equal, S-cam
- d. Safety spring loaded on rear axle, cab controlled emergency air tank for release.
- e. Anti-lock brake system. Full vehicle wheel control.
- f. Retarder - Telma Retarder, driveline mount with handle lever positioner. Rated for 60A0 lb. gross combination.

14. Steering: Powered.

15. Electrical:

- a. Dual, twelve (12) volt batteries. Maintenance free gel type, batteries shall have the rating of 2775 CCA, minimum.
- b. Alternator: 200 amp minimum, capable of charging at low engine speed.
- c. Color coded wiring or continuously numbered.

16. Cab:

- a. Aluminum conventional cab with tilt hood, aluminum cab shall have no steel reinforcements, and have a dual air bag suspension design; or steel conventional cab with tilt hood and ten (10) year unconditional warranty.
- b. Complete head lining.
- c. Clear safety glass on rear window. Shall have manufacturer installed or custom built right door peep window and rear quarter/corner windows both sides of cab. These windows shall provide additional visibility for the operational safety of the vehicle.

- d. Individual seats for driver and passenger with safety belts, driver's seat shall be air suspension type (Bostrom Freedom XC or equal), with adjustable mechanical lumbar support, front cushion adjustment, vinyl material. Passenger seat shall be two-man passenger, vinyl. Air bag protection for driver/passenger.
 - e. Steps and grab handles located both sides of cab. Allow for 3-point contact.
 - f. Floor mats. Rain guards on both doors.
 - g. Sunvisor, driver and passenger.
 - h. Factory installed air condition.
 - i. Travel height placard mounted on dash.
17. Chassis Frame: Heat treated alloy steel (120,000 psi yield), RBM 2,239,600, minimum.

18. Digger Derrick/Body:

- a. Altec Model No. D945TR, Terex Model No. 4045, 2014 or latest production, or equal. Complete hydraulically actuated boom package, designed for mounting over rear axle, mounted directly to chassis frame through a full length tubular steel structure sub-frame; 100 degree minimum boom travel; 13.2L (50 gallon) hydraulic oil reservoir; Hydraulic tool circuit at curbside, includes 25 foot hose and automatic take up reel under walkway curbside, also tool circuit at upper controls; Boom angle indicator; Boom interlock; Continuous unrestricted rotation; Single stick control if available. All lower control functions shall be from an operator's seat pedestal. Full pressure stacked valves or proportional hydraulic controls will be utilized; Start/stop and throttle advance at top controls; canvas covers for upper and lower controls; dual lift cylinders; Fiberglass hydraulic upper boom; Insulated, rated at 46KV, dielectrically tested at 100KV; Meet/exceed ANSI A10.31; Open center hydraulic system; Front/rear A-type outriggers, independently controlled; Outrigger motion alarm; Outrigger/boom interlock; Truck angle indicator; Transferable pole buddy; 6,804kg (15,000 lbs.) turn table winch; Synthetic rope anchoring. Minimum of 115 feet of "Sampson Spectron II" braid rope with eye on both ends, with swivel hook, Crosby type, designed for 6 metric tons; Material handling jib; Hydraulic overload system; Digger transfer protection (protect against damage to transfer mechanism when stowing digger and auger; 12,000 foot pound, two speed digger, planetary gear drive powered by reversible hydraulic motor mounted on main boom and transferable to second stage; Auger 60" long x 18" diameter and have 2 5/8 hex drive hub with adjustment holes. Auger shall be 9" between flights. Auger shall have carbide teeth. Auger storage latch release hydraulic operated form handle

rack control stations. Safety latch for auger. Auger roll up rope with Sampson braid rope, storage bracket to be equipped with torque limiter; Auger storage; Fiberglass personnel platform with fall protection anchor and canvas cover; Truck ground reel including 75 feet of 600 volt, 1/0 copper cable, with ferrule and approved ground clamp on one end. Mounted on the rear tail shelf of the curb side, pay out to side of vehicle; Pole puller and accessories;

Tilt pole guide (heavy duty) to be transferable from second to third stage and vice versa. To be equipped with a holding valve on tilt cylinder and control shall be full pressure hydraulically operated. A safety switch will be in place to prevent extension of the fiber boom with pole claws in the down position.

- b. Body – Lineman type 150”L x 48”H x 92”W with a 56” floor space and 18” compartments; Body shall be constructed of 16 gauge, A-60 galvanized steel with 100% zinc alloy coating; Floor of bed and back of line body to be constructed of ¼" diamond plate. The rear of the bed (rear overhang) will have a 2” lip all the way around. Several slots shall be cut in at bed level to allow water to drain; Top of compartments are to be covered with tread plate; Drip moldings over all doors; Body including interior painted to match cab/chassis; Mud flaps installed behind rear wheels; Non-skid paint on all walk surfaces; Double panel doors with flush, twist T-type stainless steel folding three point latches, keyed alike cylinder type locks and a master lock system; Automotive type door seals (seals that stick/glue on shall be rejected); Limiting chains on all compartment doors, two chains on horizontal compartment doors. All doors spring operated with stainless steel hinges; Two (2) pole carriers designed to carry aluminum/wooden poles. Swivel LED lights, four each, two each mounted at back of cab, and two each at rear of truck to illuminate body/work area.
- c. Compartment Curbside – 1st vertical 24” five stationary “J” hooks located 1-3-1; 24” side entrance step up with hand rails both sides; 2nd vertical 24” three adjustable shelves with dividers on two inch centers; Horizontal 54” three slide out drawers with thumb latches at rear, front open; Rear vertical 24” five stationary “J” hooks located 1-3-1.
- d. Compartment street side – 1st vertical 24” five stationary “J” hooks located 1-3-1; 2nd vertical 24” two adjustable shelves with adjustable dividers on two inch centers; 3rd vertical 24” three adjustable shelves with dividers on two inch centers; Horizontal 54” open; Rear vertical 24” three adjustable shelves with adjustable dividers on two inch centers; 126” x 9” thru shelf at top with rear drop down door (hot stick bin); 22” rear tail shelf with thru compartment with drop down door on each side.
- e. LED lights in all compartments with independent switches and master switch located in cab.
- f. Two cable type stirrup steps and grab handles one each side at rear of platform.

- g. Four (4) outrigger pad racks located under the line body. Four (4) outrigger pads, wooden type, 24" x 24" x 3".
- h. Holland T100A (10 ton) pintle hook with reinforcement and safety chain D-rings, or equivalent.
- i. Two rubber dock bumpers installed at rear of chassis frame rails. Four (4) wheel chocks and holders built into wheel wells.
- j. Six (6) tie down rings — three (3) on each side on the inside of bed.
- k. Clearance lights, reflectors, identification lights and directional lights shall conform to PUC regulations. Lights shall be LED type.
- l. Inverter 2.5 kW installed in left rear vertical cabinet, with two GFI outlets mounted at front and rear of body.
- m. Hydraulic pole tamp — Racine model HPT59-RI, or equivalent, with 18" whips, to be provided.
- n. Hydraulic impact wrench — Racine model HIW716VT, or equivalent, including 8' of non-conductive hose and Bruning FF-371-6FP female and FF-372-6FP male couplers, or equivalent, to be provided.
- o. Hydraulic 12-ton compression tool — Burndy Y644HSXT, or equivalent, 12-ton compression tool with 8 feet of non-conductive whip hose with Bruning FF-371-6FP female and FF-372-6FP male couplers to be provided.

19. Bumper:

- a. Heavy duty front bumper.
- b. One (1) or two (2) tow hooks mounted on front bumper or chassis front frame.

20. Preparation: All bare metal shall be treated with OSPHO and primed prior to application of finish coat on dump body.

21. Other:

- a. Single step-type fuel tank, 189.3 L (50 gal.) capacity located left side under cab with nine (9) gallon DEF tank, minimum.
- b. Full radiator gravel guard.

- c. Air horn.
- d. Glad hands and plumbing with electrical wire connection (Warner 13-281-001 or equal) mounted at rear. Additional Cole Hersee #12063 six (6) prong socket trail hook-up, or equivalent, shall also be mounted at rear. All electrical connectors to include both male and female connectors.
- e. Instrumental panel:
 - i. Gauges; coolant temperature, fuel, tachometer, volt meter, oil pressure, air pressure, and hour meter.
 - ii. Parking brake control dash mounted.
 - iii. Water in fuel warning light and buzzer; low oil pressure, low coolant level, and high coolant temperature.
 - iv. AM/FM radio.
 - v. Twelve (12) volt power accessory outlet.
- f. Mirrors: Dual exterior view mirrors (aluminum or stainless steel backs/brackets or non corrosive composite type), 152.4mm x 406.4mm (6 in. x 16 in.) minimum, west coast type or equal, with convex bottom section. Power type.
- g. Anti-sail mud flaps, front and rear tire.
- h. Electronic reverse alarm.
- i. Two (2) each 2.2 kg (5 lbs.) ABC dry chemical fire extinguisher, one each mounted in cab, and one each mounted rear of lineman body.
- j. Road Safety Triangle Kit, and Four Pack PF200 Power Flare Safety Light, or equivalent, with carry bag. Power flare shall have yellow housing with red LED lighting. All housing shall be etched "STATE DOT HIGHWAYS".
- k. Four LED light system, Whelen Model DOT3701, or equivalent, DOT3 System Four light head system to include two (2) Amber Micro Freedom LED light head with branch guard, installed on cab/mirror mounted, two (2) Rectangular 7-gauge welded steel housings installed on rear of body, one on each side, containing two (2) 700 series amber linear LED light heads, one on each side, two (2) 700 series red LED brake/tail/turn light heads, one (1) on each side, two (2) 700 series clear back-up lights, one on each side, one (1) Whelen Model ISP94, 90-watt output power supply installed in cab behind seat, allowing for service access, one (1) standard lighted switch panel with Diagnostic indicator installed in or under dash within easy reach of driver. Waterproof, oil, and corrosion resistant TPR cables with waterproof connectors shall be installed with the above system. AMECA certified to SAE standards and/or minimum specifications.

- l. Color — White, Dupont 93-96923 high gloss urethane or equal; Chevron marking on tailgate — Omaha orange and white (comparable to existing State Highways Division fleet).
- m. Complete after factory rust proofing, with minimum seven (7) years unlimited mileage requirement warranty in accordance with Federal Specifications, 297A or its latest revision.
- n. PUC Certification, License, Registration, and Certificates as required in General Specifications.
- o. Vehicle shall conform to Code of Federal Regulations, Title 40, Part 85; Control of Air Pollution from New Motor Vehicles, Engines, Environmental Protection Agency; Federal Motor Vehicle Safety Standards.
- p. Vehicle shall conform to all applicable State, County, Federal, and OSHA requirements necessary for licensing, registration, and certification purposes.
- q. Technical Resources: One (1) copy of Repair Manual, one (1) copy of Parts Catalog, two (2) copies of Operator's Manual. Book format/CD/DVD.
- r. First Service Kit shall include all required filters (oil, fuel, air, breather, transmission, etc.).
- s. Twenty (20) each "Geotab G06" plug and play device by Sprint with five (5) year "Pro Plan", to enhance vehicle safety and security. Report information shall be monitored by the Highways Construction and Maintenance Branch.
- t. Vehicle shall be outlined with conspicuity material (tape along the perimeters). Conspicuity material shall be red and white (reflexite or equal).
- u. First Aid Kit, OSHA/ANSI recommended.
- v. Upon "Notice to Proceed", Contractor shall submit "Application" (to State Motor Vehicle Safety Office) to meet the requirements of Section 286-202 (12), Hawaii Revised Statutes, for approval of a major modification. Construction or reconstruction of a vehicle with a gross vehicle weight rating (GVWR) of 10,001 pounds and above. Application is available at:

State of Hawaii
Department of Transportation
Highways
Motor Vehicle Safety Office
601 Kamokila Boulevard, #511
Kapolei, Hawaii 96707

Copy of approved application shall be submitted at time of delivery.

22. Bidder(s) shall submit with their bids a certified letter(s) from the manufacturer(s) to certify the prospective bidder as the Factory Authorized Warranty Dealer (letter required for both chassis and equipment).

23. Training:

Contractor shall provide proper and safe operation and maintenance of equipment. This training shall include a minimum of one (1) hour classrooms and one (1) hour per operator hands-on training. This service shall be provided at no additional cost to the State. Contractor shall provide classroom site. Training shall be consistent to OSHA requirements.

Copy of attendance record showing class date, time, location, class type, instructor's name and attendees shall be submitted to:

State of Hawaii
Highways
Department of Transportation
Construction and Maintenance Branch
Attn: Equipment Superintendent/Safety Coordinator
869 Punchbowl Street
Honolulu, Hawaii 96813

SECTION 20 - CAB/CHASSIS UTILITY BODY WITH 35 FOOT AERIAL

20.1- SCOPE OF WORK – The work consists of furnishing and delivering one (1) each, Cab/Chassis Utility Body with 35 Foot Aerial, to the island of Oahu. The Contractor shall present the vehicle complete, ready to use, and fully operational.

20.2- CAB/CHASSIS UTILITY BODY WITH 35 FOOT AERIAL - The Specifications contained herein establish minimum standards (unless stated differently). Vehicle offered shall include any other standard features not listed but detailed in manufacturer's brochures and deemed necessary for proper and safe operation of vehicle.

DETAILED SPECIFICATIONS FOR A CAB/CHASSIS UTILITY BODY WITH 35 FOOT AERIAL

1. Model/Year: Model/Year: Cab/Chassis Utility Body with Aerial, 2026 or latest production.
2. GVW Rating: 8,164.8 kg (18,000 lbs.) capacity minimum.
3. Wheel Base: 3,860.8 mm (152 in.) minimum.
4. Cab to Axle: 2,133.6mm (84 in.) maximum.
5. Engine:
 - a. Diesel powered, 2013 emissions certified, Tier 4.
 - b. Liquid cooled with deaeration system with tank and sight glass, full radiator guard.
 - c. Size (6) cylinder. Engine brake.
 - d. Net horsepower 223.7kW (300 HP) minimum, at rated RPM.
 - e. Fuel water separator (Racor Model 21000) or manufacturers equal. Fuel tank 151.4L (40 gal.) minimum. Including nine (9) gallon DEF tank.
 - f. Exhaust, single horizontal muffler with after treatment device frame mounted and short tail pipe or manufacturer standard. Two position exhaust switch to inhibit diesel particulate filter regeneration as long as switch is "on" position.
 - g. Hour meter and tachometer.
6. Differential: Locking

7. Frame:

- a. Steel channel type.
- b. 80,000 psi, minimum.

8. Transmission:

- a. Automatic, 6-speed or equal.
- b. PTO/Clutch Pump for aerial unit operation.
- c. Automatic transmission oil temperature gauge.

9. Electrical:

- a. Twelve volt system with dual gel type batteries.
- b. 160 AMP alternator, capable of charging at low engine speeds.
- c. Color coded wiring or continuously numbered.
- d. Circuit breakers at main panel to replace all fuses except instrument cluster feed.

10. Steering: Powered.

11. Brakes:

- a. Hydraulic system.
- b. Antilock Brake System – full vehicle wheel control.
- c. Parking Brake System.
- d. Four wheel disc brake system. Shall comply with new reduced stopping distance NHTSA regulations.

12. Wheels/Tires:

- a. Seven (7) each; single front, dual rear, spare.
- b. Tires – 225/70 R 19.5 load rating G.
- c. Wheels – 19.5 x 6.0, disc painted steel 10-stud with steel hubs.

13. Axle:

- a. Front —3,175.2 kg (7,000 lbs.) minimum.
- b. Rear — 6,123.6 kg (13,500 lbs.) minimum.

14. Springs:

- a. Front — 3,175.2 kg (7,000 lbs.) minimum with shock absorbers.
- b. Rear — 6,123.6 kg (13,500 lbs.) minimum.
- c. Manufacturer's standard auxiliary springs.
- d. Heavy duty front shock absorber (front and rear).

15. Cab:

- a. Aluminum conventional cab or steel conventional cab with 10-year unlimited warranty.
- b. Complete head lining.
- c. Clear safety glass on rear window (full width).
- d. Full width bench seat or split bench and seat belts for three (3) persons. Front and side air bag protection for driver and passenger.
- e. Steps and grab handles located on both sides of cab, to allow for 3-point contact when entering or disembarking.
- f. Floor mats.
- g. Sun visor, driver and passenger.
- h. Factory installed air condition.
- i. Vinyl/cloth upholstery.
- j. AM/FM radio, factory installed.
- k. Dual exterior powered rear view mirrors (backs/brackets shall be aluminum/stainless steel, or non-corrosive composite type, 152.4mm x 406.4mm (6

in. x 16 in.), with convex bottom section minimum. West Coast type or manufacturer's equal.

- l. Rain guards on both doors.
- m. The lightbar system shall be a Whelen Model FCOHIDOT, part no. 01-0684294-72 or equal. The bar shall be sixty (60) inches long minimum. The main structure of the lightbar must be an extruded aluminum I-Beam design. The lightbar shall house all electronic components. The lightbar must have Hi/Low power control of all inboard LED modules. The lightbar shall contain one (1) control module I/O board which must control all internal light heads. The I/O board shall produce a minimum flash rate of 75 Comet flashes per minute with alternating corners, not an 'x' pattern. There shall be ten (10) Scan Lock flash patterns to choose from. Each pair of LED lamps must be capable of operating in a different flash pattern. The lightbar shall have all linear LED modules and shall meet SAE-J845 Class I and SAE-J595 requirements. The lightbar shall have linear LED modules in the four corners.

Each linear 18 corner module shall consist of a minimum of eighteen (18) high output LED's permanently mounted within a single dual (over/under) "removable" highly mirrored parabolic reflector for maximum light output. The eighteen (18) LED's shall be mounted in two straight lines of 9 LED's each (over/under) for maximum light output. The linear reflector shall extend to the MR11 alley light with no appreciable open gap between the LED module on the alley light. The LED work light must be the same size module as used for the warning lights, but must consist of two staggered rows of six Super LED's and be able to flash and steady burn. All LED panels shall be the same design as the Linear 18 described above, and must contain 12 Super LED's (6 over 6). All inboard light heads must be 400 Series (this will allow for placement of this light head in any inboard position). All LED inboard modules must produce a minimum 180 degree light pattern. The I/O module shall be 100% solid state with built-in reverse polarity protection and output short protection. The I/O board shall operate from 10 — 16 VDC with no degradation in flash rate. The lightbar shall be designed to have up to eight (8) lamps to the front, eight lamps to the rear, and one (1) on each end. Each lamp module position shall have colored lens sections, independent of the others, that match the color of the LED module. For split modules, clear lenses must be used. The LED panel must be mounted within the lightbar. The corner Linear LED's must have a two-intensity cruise light mode. This provides a lightbar that has illuminated corners (no flashing), which are used for marker lights. The user shall have a choice of ten (10) Scan-Lock flash patterns to choose from the LED modules, and four (4) Scan-Lock flash patterns for the flashing work lights and flashing alleys. The pattern must be selected by an external connection, not requiring the user to open the lightbar to change flash patterns.

The light bar shall have: Front — Two (2) Corner Linear 18's (amber), Eight (8) inboard Linear12 LED's (6 amber / 2 white); Rear — Two (2) Corner Linear 18's (amber), Six (6) Inboard Linear12 LED's,(4 amber / 2 red), Two (2) Inboard

staggered white TIR12 Super-Led modules for use as work lights; Ends — Two (2) MR11 alley lights; Additional, two (2) spare MR11 halogen replacement bulbs.

The light bar shall be wired to function as follows: All Amber warning LED's; All white warning LED's and flashing LED work light; Left Alley; Right Alley; Flashing Alley; LED Work light, steady; Hi/Low power.

All switches shall be lighted type and mounted within a console attached to the dash or mounted as part of OEM console, with provisions to mount an external radio system. Lightbar power cable must be brought to the power source with a fuse (thermal circuit breakers shall be rejected). Power cable shall be labeled with a permanent label at the power source, marked "Lightbar". All cable and wiring shall be conduit protected and shall use grommets through sheet metal panels.

Note: The rear bar red LED's must be separately wired and switched for activation.

The four corner Linear18's must be identical and all other inboard light heads must be 400 series. All internal light heads must snap into sliding brackets that are mounted in the lightbar.

The lightbar must contain a maximum of eight (8) screws, four (4) for each end cap to access all internal light heads. Light heads that require the removal of more than eight screws to remove all internal light heads are unacceptable. Lightbars with modules mounted outside of the main lightbar are not acceptable. The lightbar shall contain a permanent mounting kit to prevent theft of the lightbar, and be laser etched "STATE DOT HIGHWAYS", lettering shall be 1.5 inches tall.

- n. Twelve (12) volt power accessory outlet.
- o. Rear window guard.
- p. Travel height placard, mounted on dash.
- q. Air bag protection for driver and passenger.

16. Body:

- a. Aerial Service Line/Step Body, Knapheide 6133HC or equal, suitable for installing on any chassis with a minimum CA dimension of 2,133.6mm (84 in.), built in accordance with standard specifications with dimensions and compartments as specified.
- b. Body fabricated from hot-dipped galvanized steel with 100% iron zinc alloy coating:
 - 1. Sixteen (16) gauge outside panels.

2. Fourteen (14) gauge end panels.
3. Eighteen (18) gauge shelving.
4. Twenty (20) gauge double panel doors.
5. Twelve (12) gauge tread plate steel door.
6. Structural channel sub base with 76.2mm (3 in.) cross members.
7. Fourteen (14) gauge tread plate installed on top of body compartments.

c. Body dimensions: Minimum

1. 3,352.8mm (132 in.) overall length.
2. 2,362.2mm (93 in.) outside width.
3. 1,092.2mm (43 in.) body height.
4. 457.2mm (18 in.) compartment depth.
5. 1,447.8mm (57 in.) floor width (cargo area).

d. Compartments – left side (driver’s side)

1. First vertical – 762mm (30 in.) w. Two (2) adjustable shelves with removable dividers on 101.6mm (4 in.) centers.
2. Second vertical - 711.2mm (28 in.) w. Two (2) adjustable shelves with removable dividers on 101.6mm (4 in.) centers.
3. Horizontal - 1,168.4mm (46 in.) w. One (1) removable shelf with removable dividers on 203.2mm (8 in.) centers.
4. Rear vertical - 711.2mm (28 in.) w. Six (6) fixed material hooks.

e. Compartments – right side (passenger side)

1. First vertical - 762mm (30 in.) w. Six (6) fixed material hooks.
2. Second vertical - 711.2mm (28 in.) w. Six (6) fixed material hooks.
3. Horizontal - 1,168.4mm (46 in.). One (1) removable shelf with removable dividers on 203.2mm (8 in.) centers.
4. Rear vertical - 711.2mm (28 in.) w. Two (2) adjustable shelves with removable dividers on 101.6mm (4 in.) centers.
5. Through shelf, full length and rear door.

f. Standard Body features:

1. Wheel chock holders, installed one (1) each side in fender panels behind rear wheels, with rubber wheel chocks with metal handles.
2. All doors full double paneled self-sealed with built in drainage for maximum weather tightness. Stainless steel hinge rod extends entire length of door.
3. All doors shall have stainless steel flush type, single point locks with recessed handles, included keyed alike locks and two-stage strikers.
4. All edges either folded or rolled for strength and safety.

5. Door header drip rail at top for maximum weather protection.
6. Neoprene fenders.
7. Completely painted; all interior bases and walking surfaces shall be coated with non-skid.
8. Lights in all compartments, pressure switches on each door, compartment lights wiring through master switch in cab.

g. Custom Features:

1. Galvanized rear extension/bumper tail-shelf 736.6mm (29 in.).
2. One (1) each cable step. Install curbside of rear platform extension.
3. Grab handles curbside of tail-shelf (shall be designed for 3-point contact).
4. Two (2) each large splash aprons, installed behind rear wheels.
5. Two (2) each large mud flaps/brackets mounted behind rear wheel.
6. One (1) 2.2 kg (5 lbs.) ABC Dry Chemical Fire extinguisher mounted in first left side compartment.
7. Lights and reflectors in accordance with FMVSS#108 modular lighting package, all wiring connections crimped with solderless connectors and enclosed in shrink tube with waterproof sealant. All wire ends are tinned before insertion into plugs. All plug connections are completely sealed and weather proof. Entire assembly is enclosed in a continuous plastic loom to form a one-piece harness. Lighting package is complete with sealed polycarbonate lenses and housings, affording superior impact and heat protection, flush mounted in rubber grommets as follows:

two (2) clear back up lights; four (4) red stop/turn/tail lights; seven (7) 63.5 mm (2.5 in.) diameter red clearance lights; license plate light. Lighting shall be LED type.

17. Aerial Unit:

- a. ALTEC AT-35G or approved equal (shall be approved in writing ten (10) days before bid opening), insulated articulating arm and continuous rotation. Installed behind chassis cab.
- b. Front torsion bar- front axle, under frame.
- c. Rear torsion bar- rear under frame.
- d. Ground to bottom of platform height 10,911.84mm (35.8 ft.).
- e. Working height 12,435.84mm (40.8 ft.).

- f. Maximum reach to edge of platform 8,625.84mm (28.3 ft.) at 3,870.96mm (12.7 ft.) platform height (edge of platform).
- g. Post type pedestal design with large service openings.
- h. Continuous rotation provided by worm gear drive, equipped with extended shaft for manual rotation driving a shear ball bearing rotation gear. Provisions for adjusting backlash.
- i. Turntable shall have a steel bottom plate, minimum thickness of 25.4mm (1 in.). Bottom of plate shall be machined to insure flat mounting surface for rotation bearing.
- j. The articulating arm shall be designed so that the stress proof articulating arm and lower boom are compensating. Articulating arm shall remain within 457.2mm (18 in.) of side of truck.
- k. Lift cylinders shall be one-piece design cast steel on the blind end, which utilizes cartridge type bi-directional counter balance holding valves.
- l. Lower boom- fabricated, reinforced steel box structure. Pivot pin of high strength chrome plated steel with self-lubricating replaceable, non-pivot pin metallic bearings.
- m. Upper Boom - rectangular filament wound fiberglass, providing a minimum of 203mm (8 in.) of isolation when retracted and 889mm (35 in.) when extended.
- n. Upper Boom extension shall be extended and retracted by a double acting hydraulic extension cylinder installed within the booms.
- o. Platform is leveled by hydraulic leveling means, contained within the upper boom and designed to maintain the dielectric integrity of the aerial device. Controls for leveling and tilting the platform shall be located at the platform and at lower control. Leveling system shall include a system to lock the platform in the event of hydraulic line failure. System shall maintain a level platform throughout the full range of boom articulation.
- p. Dielectric rating, ANSI, Category C, 46 kV.
- q. ISO 9001 certification, this aerial device shall be manufactured in a facility that is certified to meet ISO 9001 requirements.
- r. The control system shall be a full pressure type, operating at 152 BAR (2,200 PSI) maximum. The upper control located at the platform shall consist of a single handle control. This control shall allow the operator to make simultaneous multiple boom

movements. An additional separate control shall activate the articulating arm, this control shall be mechanically locked to prevent accidental actuation and should not require the actuation of the trigger on the single hand control. Conventional multiple lever ground controls located at the turntable shall include an upper control override.

- s. A valve located at the boom tip and easily accessible by the operator without having to remove any covers, allows the lower boom to be lowered in the case of engine/hydraulic system failure.
- t. Hydraulic tool circuit control easily accessible to the operator activated the tool circuit to provide 18.9 LPM (5GPM) at 138 BAR (2,000 PSI). One set of HTMA quick disconnect couplings located within a protected location inside the control cover at the platform.
- u. Diagnostic pressure test, quick disconnect couplings located at turntable.
- v. Two (2) strobe LED lights Whelen Model No. MC40ED4A or equal, mounted one on each side of aerial pivot base arm.
- w. "Boom out of Stow" warning light in cab.
- x. Engine start/stop control at the platform, and toggle switch at the turntable.
- y. Emergency Operating System: Electrical powered, includes pump and motor operated from truck battery, captive air activated, automatic.
- z. Basket 159kg (350 lbs.) capacity with 180° platform rotator, and platform cover.
- aa. Vertical outrigger installed rear of chassis cab. Maximum of 2,171.7mm (85.5 in.) spread at maximum penetration. Controls located at right and left sides of tail-shelf. Shall have motion alarm switches. To include outrigger pads.

18. Other:

- a. Two (2) each large safety harness (fall protection), and positioning lanyards. To include proper fall protection training consistent to OSHA requirements.
- b. Electrical switch panel – coin box style to include truck/equipment switch; hour meter; boom out of stow; strobe flashers.
- c. Electrical inverter DC to AC static, 1,800 w with duplex (GFI protected outlets mounted at right rear. Two (2) deep cycle gel type batteries group 27,700 CCA, wired in isolation.

- d. Work lights, two (2) each 100,000 candle power, located at rear of cab and at platform. Battery powered.
- e. Hydraulic oil reservoir 56.7 L (15 gal.) minimum capacity, internally mounted suction filter and gate valve.
- f. Boom rest.
- g. Front bumper, manufacturer standard with single/dual tow hooks.
- h. First service kit shall include all required filters (oil, fuel, air, breather, transmission, etc.).
- i. Safety Inspection/PUC Certification, License, Registration and Certificate as required in General Provisions.
- j. Complete after factory rustproof with seven (7) year unlimited warranty (complete unit). Applied in accordance with Federal Specifications 297A at its latest revision.
- k. Electronic reverse alarm.
- l. Road safety triangle kit; and four pack PF200 Power Flare Safety Light, or equivalent, with carry bag. Power flare shall have yellow housing with red LED lighting. All housing shall be etched "STATE DOT HIGHWAYS".
- m. Technical resources - one (1) copy of repair manual, one (1) copy of parts catalog, two (2) copies of operations manual. Book format/CD/DVD.
- n. Color, white high gloss urethane, complete unit. Apply non-skid to all walking surfaces. Shall be outlined with conspicuity material (reflexite or equal) red and white.
- o. First Aid Kit (OSHA/ANSI recommended).
- p. Complete unit shall be designed to carry a minimum of 907.2 kg (2,000 lbs.) materials and supplies not including the driver, passengers and fluids.
- q. Upon "Notice to Proceed", Contractor shall submit "Application" (To State Motor Vehicle Safety Office) to meet the requirements of Section 286-202 (12), Hawaii revised statutes, for approval of a major modification. Construction, or reconstruction of a vehicle with a gross vehicle weight rating (GVWR) of 10,001 pounds and above. Application is available at:

State of Hawaii
Department of Transportation
Highways
Motor Vehicle Safety Office
601 Kamokila Boulevard, #511
Kapolei, Hawaii 96707

Copy of approved application shall be submitted at time of delivery.

19. Training:

Bidder shall provide manufacturer training syllabus at time of bid submittal.

Contractor shall provide manufacturer training for proper and safe operation, maintenance of equipment, and fall protection. This training shall include a minimum of one (1) hour classroom and one (1) hour per operator hands on training. This service shall be provided at no additional cost to the State. Contractor shall provide classroom site. Training shall be consistent to OSHA requirements.

20. Copy of attendance record showing class date, time, location, class type, instructor's name and attendees shall be submitted to:

State of Hawaii
Highways
Construction and Maintenance Branch
Attn: Equipment Superintendent/Safety Coordinator
869 Punchbowl Street
Honolulu, Hawaii 96813

21. Bidder(s) shall submit with their bid a certified letter(s), from the manufacturer(s) to certify the prospective bidder as the Factory Authorized Warranty Dealer (letter required for both chassis and equipment).

SECTION 21 — CAB/CHASSIS UTILITY BODY WITH 40 FOOT AERIAL

21.1- SCOPE OF WORK – The work consists of furnishing and delivering two (2) only, Cab/Chassis Utility Body With 40 Foot Aerial, to the Island of Oahu. The Contractor shall present the vehicles complete, ready to use, and fully operational.

21.2- CAB/CHASSIS UTILITY BODY WITH 40 FOOT AERIAL - The Specifications contained herein establish minimum standards (unless stated differently). Vehicle offered shall include any other standard features not listed but detailed in manufacturer's brochures and deemed necessary for proper and safe operation of vehicle.

DETAILED SPECIFICATIONS FOR A CAB/CHASSIS UTILITY BODY WITH 40 FOOT AERIAL

1. Model/Year: Model/Year: Cab/Chassis Utility Body with Aerial, 2026 or latest production.
2. GVW Rating: 8,845.2 kg (19,500 lbs.) capacity minimum.
3. Wheel Base: 3,860.8 mm (152 in.) minimum.
4. Cab to Axle: 2,133.6 mm (84 in.) maximum.
5. Engine:
 - a. Diesel powered, we sleeved engine or dry sleeved engine with seven (7) year unlimited mileage warranty. 2013 Emissions Certified, Tier 4.
 - b. Liquid cooled with deaeration system with tank and sight glass, full radiator guard.
 - c. Size (6) cylinder.
 - d. Net horsepower 1223.7 kW (300 HP) minimum, at rated RPM. With engine brake, exhaust brake shall not be accepted.
 - e. Fuel water separator (Racor Model 21000) or manufacturers equal. Fuel tank 151.4L (40 gal.) minimum. Including nine (9) gallon DEF tank.
 - f. Exhaust, single horizontal muffler with after treatment device frame mounted and short tail pipe or manufacturer standard. Two position exhaust switch to inhibit diesel particulate filter regeneration as long as switch is "on" position.
 - g. Hour meter and tachometer.
6. Differential: Locking/limited slip.

7. Frame:
 - a. Steel channel type.
 - b. 80,000 psi, minimum.
8. Transmission:
 - a. Allison 1000RDS, 6-speed or equal.
 - b. PTO/Clutch Pump for aerial unit operation.
 - c. Automatic transmission oil temperature gauge.
9. Electrical:
 - a. Twelve volt system with dual gel type batteries.
 - b. 150 AMP minimum alternator, capable of charging at low engine speeds.
 - c. Color coded wiring or continuously numbered.
 - d. Circuit breakers at main panel to replace all fuses except instrument cluster feed.
10. Steering: Powered.
11. Brakes:
 - a. Hydraulic system.
 - b. Antilock Brake System – full vehicle wheel control.
 - c. Parking Brake System.
 - d. Four wheel disc brake system. Shall comply with new reduced stopping distance NHTSA regulations.
12. Wheels/Tires:
 - a. Seven (7) each; single front, dual rear, spare.
 - b. Tires – 225/70 R 19.5 load rating G.
 - c. Wheels – 19.5 x 6.0, disc painted steel 10-stud with steel hubs.

13. Axle:

- a. Front —3,175.2 kg (7,000 lbs.) minimum.
- b. Rear — 6,123.6 kg (13,500 lbs.) minimum.

14. Springs:

- a. Front — 3,175.2 kg (7,000 lbs.) minimum with shock absorbers.
- b. Rear — 6,804 kg (15,000 lbs.) minimum.
- c. Manufacturer's standard auxiliary springs.
- d. Heavy duty front shock absorber (front and rear).

15. Cab:

- a. Aluminum conventional cab or steel conventional cab with ten (10) year unlimited warranty.
- b. Complete head lining.
- c. Clear safety glass on rear window (full width). Shall have manufacturer installed or custom built right door peep window and rear quarter/corner windows both sides of cab (these windows shall provide additional visibility for the operational safety of the vehicle).
- d. Full width bench seat or split bench and seat belts for three (3) people.
- e. Steps and grab handles located on both sides of cab, to allow for 3-point contact when entering or disembarking.
- f. Floor mats.
- g. Sun visor, driver and passenger.
- h. Factory installed air condition.
- i. Vinyl/cloth upholstery.
- j. AM/FM radio, factory installed.

- k. Dual exterior rear view mirrors (backs/brackets shall be aluminum/stainless steel, or non-corrosive composite type, 152.4mm x 406.4mm (6 in. X 16 in.) minimum. West Coast type or equal with convex bottom section.
- l. Rain guards on both doors.
- m. The lightbar system shall be a Whelen Model FCOHIDOT, part no. 01-0684294-72 or equal. The bar shall be sixty (60) inches long minimum. The main structure of the lightbar must be an extruded aluminum I-Beam design. The lightbar shall house all electronic components. The lightbar must have Hi/Low power control of all inboard LED modules. The lightbar shall contain one (1) control module I/O board which must control all internal light heads. The I/O board shall produce a minimum flash rate of 75 Comet flashes per minute with alternating corners, not an "x" pattern. There shall be ten (10) Scan Lock flash patterns to choose from. Each pair of LED lamps must be capable of operating in a different flash pattern. The lightbar shall have all linear LED modules and shall meet SAE-J845 Class I and SAE-J595 requirements. The lightbar shall have linear LED modules in the four corners.

Each linear 18 corner module shall consist of a minimum of eighteen (18) high output LED's permanently mounted within a single dual (over/under) "removable" highly mirrored parabolic reflector for maximum light output. The eighteen (18) LED's shall be mounted in two straight lines of 9 LED's each (over/under) for maximum light output. The linear reflector shall extend to the MR11 alley light with no appreciable open gap between the LED module on the alley light. The LED work light must be the same size module as used for the warning lights, but must consist of two staggered rows of six Super LED's and be able to flash and steady burn. All LED panels shall be the same design as the Linear 18 described above, and must contain 12 Super LED's (6 over 6). All inboard light heads must be 400 Series (this will allow for placement of this light head in any inboard position). All LED inboard modules must produce a minimum 180 degree light pattern. The I/O module shall be 100% solid state with built-in reverse polarity protection and output short protection. The I/O board shall operate from 10 — 16 VDC with no degradation in flash rate. The lightbar shall be designed to have up to eight (8) lamps to the front, eight lamps to the rear, and one (1) on each end. Each lamp module position shall have colored lens sections, independent of the others, that match the color of the LED module. For split modules, clear lenses must be used. The LED panel must be mounted within the lightbar. The corner Linear LED's must have a two-intensity cruise light mode. This provides a lightbar that has illuminated corners (no flashing), which are used for marker lights. The user shall have a choice of ten (10) Scan-Lock flash patterns to choose from the LED modules, and four (4) Scan-Lock flash patterns for the flashing work lights and flashing alleys. The pattern must be selected by an external connection, not requiring the user to open the lightbar to change flash patterns.

The light bar shall have: Front — Two (2) Corner Linear 18's (amber), Eight (8) inboard Linear12 LED's (6 amber / 2 white); Rear — Two (2) Corner Linear 18's (amber), Six (6) Inboard Linear12 LED's,(4 amber / 2 red), Two (2) Inboard

staggered white TIR12 Super-Led modules for use as work lights; Ends — Two (2) MR11 alley lights; Additional, two (2) spare MR11 halogen replacement bulbs.

The light bar shall be wired to function as follows: All Amber warning LED's; All white warning LED's and flashing LED work light; Left Alley; Right Alley; Flashing Alley; LED Work light, steady; Hi/Low power.

All switches shall be lighted type and mounted within a console attached to the dash or mounted as part of OEM console, with provisions to mount an external radio system. Lightbar power cable must be brought to the power source with a fuse (thermal circuit breakers shall be rejected). Power cable shall be labeled with a permanent label at the power source, marked "Lightbar". All cable and wiring shall be conduit protected and shall use grommets through sheet metal panels.

Note: The rear bar red LED's must be separately wired and switched for activation.

The four corner Linear18's must be identical and all other inboard light heads must be 400 series. All internal light heads must snap into sliding brackets that are mounted in the lightbar.

The lightbar must contain a maximum of eight (8) screws, four (4) for each end cap to access all internal light heads. Light heads that require the removal of more than eight screws to remove all internal light heads are unacceptable. Lightbars with modules mounted outside of the main lightbar are not acceptable. The lightbar shall contain a permanent mounting kit to prevent theft of the lightbar, and be laser etched "STATE DOT HIGHWAYS", lettering shall be 1.5 inches tall.

- n. Twelve (12) volt power accessory outlet.
- o. Rear window guard.
- p. Travel height placard, mounted on dash.
- q. Air bag protection for driver and passenger.

16. Body:

- a. Aerial Service Line/Step Body, Knapheide 6133HC or equal, suitable for installing on any chassis with a minimum CA dimension of 2,133.6mm (84 in.), built in accordance with standard specifications with dimensions and compartments as specified.
- b. Body fabricated from hot-dipped galvanized steel with 100% iron zinc alloy coating:
 - 1. Sixteen (16) gauge outside panels.
 - 2. Fourteen (14) gauge end panels.

3. Eighteen (18) gauge shelving.
4. Twenty (20) gauge double panel doors.
5. Twelve (12) gauge tread plate steel door.
6. Structural channel sub base with 76.2mm (3 in.) cross members.
7. Fourteen (14) gauge tread plate installed on top of body compartments.

c. Body dimensions: Minimum

1. 3,352.8mm (132 in.) overall length.
2. 2,362.2mm (93 in.) outside width.
3. 1,092.2mm (43 in.) body height.
4. 457.2mm (18 in.) compartment depth.
5. 1,447.8mm (57 in.) floor width (cargo area).

d. Compartments – left side (driver’s side)

1. First vertical – 762mm (30 in.) w. Two (2) adjustable shelves with removable dividers on 101.6mm (4 in.) centers.
2. Second vertical - 711.2mm (28 in.) w. Two (2) adjustable shelves with removable dividers on 101.6mm (4 in.) centers.
3. Horizontal - 1,168.4mm (46 in.) w. One (1) removable shelf with removable dividers on 203.2mm (8 in.) centers.
4. Rear vertical - 711.2mm (28 in.) w. Six (6) fixed material hooks.

e. Compartments – right side (passenger side)

1. First vertical - 762mm (30 in.) w. Six (6) fixed material hooks.
2. Second vertical - 711.2mm (28 in.) w. Six (6) fixed material hooks.
3. Horizontal - 1,168.4mm (46 in.). One (1) removable shelf with removable dividers on 203.2mm (8 in.) centers.
4. Rear vertical - 711.2mm (28 in.) w. Two (2) adjustable shelves with removable dividers on 101.6mm (4 in.) centers.
5. Through shelf, full length and rear door.

f. Standard Body features:

1. Wheel chock holders, installed one (1) each side in fender panels behind rear wheels, with rubber wheel chocks with metal handles.
2. All doors full double paneled self-sealed with built in drainage for maximum weather tightness. Stainless steel hinge rod extends entire length of door.
3. All doors shall have stainless steel flush type, single point locks with recessed handles, included keyed alike locks and two-stage strikers.
4. All edges either folded or rolled for strength and safety.
5. Door header drip rail at top for maximum weather protection.
6. Neoprene fenders.

7. Completely painted; all interior bases and walking surfaces shall be coated with non-skid.
8. LED lighting in all compartments, pressure switches on each door, compartment lights wiring through master switch in cab.

g. Custom Features:

1. Galvanized rear extension/bumper tail-shelf 736.6 mm (29 in.).
2. One (1) each cable step. Install curbside of rear platform extension.
3. Grab handles curbside of tail-shelf (shall be designed for 3-point contact).
4. Two (2) each large splash aprons, installed behind rear wheels.
5. Two (2) each large mud flaps/brackets mounted behind rear wheel.
6. One (1) 2.2 kg (5 lbs.) ABC Dry Chemical Fire extinguisher mounted in first left side compartment.
7. Lights and reflectors in accordance with FMVSS#108 modular lighting package, all wiring connections crimped with solderless connectors and enclosed in shrink tube with waterproof sealant. All wire ends are tinned before insertion into plugs. All plug connections are completely sealed and weather proof. Entire assembly is enclosed in a continuous plastic loom to form a one-piece harness.
Lighting package is complete with sealed polycarbonate lenses and housings, affording superior impact and heat protection, flush mounted in rubber grommets as follows:
two (2) clear back up lights; four (4) red stop/turn/tail lights; seven (7) 63.5 mm (2.5 in.) diameter red clearance lights; license plate light.
Lighting shall be LED type.

17. Aerial Unit:

- h. ALTEC AT-40P or approved equal, insulated articulating arm and continuous rotation. Installed rear of cab.
- i. Front torsion bar- front axle, under frame.
- j. Rear torsion bar- rear under frame.
- k. Ground to bottom of platform height 12,192 mm (40 ft.).
- l. Working height 13.7 m (45 ft.).
- m. Maximum reach to edge of platform 9.4 m (30.8 ft.).
- n. Post type pedestal design with large service openings.

- h. Continuous rotation provided by worm gear drive, equipped with extended shaft for manual rotation driving a shear ball bearing rotation gear. Provisions for adjusting backlash.
- i. Turntable shall have a steel bottom plate, minimum thickness of 25.4mm (1 in.). Bottom of plate shall be machined to insure flat mounting surface for rotation bearing.
- j. The articulating arm shall be designed so that the stress proof articulating arm and lower boom are compensating. Articulating arm shall remain within 457.2mm (18 in.) of side of truck.
- k. Lift cylinders shall be one-piece design cast steel on the blind end, which utilizes cartridge type bi-directional counter balance holding valves.
- l. Lower boom- fabricated, reinforced steel box structure. Pivot pin of high strength chrome plated steel with self-lubricating replaceable, non-pivot pin metallic bearings.
- m. Upper Boom - rectangular filament wound fiberglass, providing a minimum of 203mm (8 in.) of isolation when retracted and 889mm (35 in.) when extended.
- n. Upper Boom extension shall be extended and retracted by a double acting hydraulic extension cylinder installed within the booms.
- o. Platform is leveled by hydraulic leveling means, contained within the upper boom and designed to maintain the dielectric integrity of the aerial device. Controls for leveling and tilting the platform shall be located at the platform and at lower control. Leveling system shall include a system to lock the platform in the event of hydraulic line failure. System shall maintain a level platform throughout the full range of boom articulation.
- p. Dielectric rating, ANSI, Category C, 46 kV.
- q. ISO 9001 certification, this aerial device shall be manufactured in a facility that is certified to meet ISO 9001 requirements.
- r. The control system shall be a full pressure type, operating at 152 BAR (2,200 PSI) maximum. The upper control located at the platform shall consist of a single handle control. This control shall allow the operator to make simultaneous multiple boom movements. An additional separate control shall activate the articulating arm, this control shall be mechanically locked to prevent accidental actuation and should not require the actuation of the trigger on the single hand control. Conventional multiple lever ground controls located at the turntable shall include an upper control override.

- s. A valve located at the boom tip and easily accessible by the operator without having to remove any covers, allows the lower boom to be lowered in the case of engine/hydraulic system failure.
- t. Hydraulic tool circuit control easily accessible to the operator activated the tool circuit to provide 18.9 LPM (5GPM) at 138 BAR (2,000 PSI). One set of HTMA quick disconnect couplings located within a protected location inside the control cover at the platform.
- u. Diagnostic pressure test, quick disconnect couplings located at turntable.
- v. Two (2) strobe lights (Whelen Model No. MC40ED4A or equal) mounted one on each side of aerial pivot base arm.
- w. Shall have "Boom out of Stow" warning light in cab.
- x. Engine start/stop control at the platform, and toggle switch at the turntable.
- y. Emergency Operating System: Electrical powered, includes pump and motor operated from truck battery, captive air activated, automatic.
- z. Basket 181.4kg (400 lbs.) capacity with 180° platform rotator, and platform cover.
- aa. Vertical outrigger installed rear of chassis cab. Maximum of 2,171.7mm (85.5 in.) spread at maximum penetration. Controls located at right and left sides of tail-shelf. Shall have motion alarm switches. Including outrigger pad storage and pads.

18. Other:

- a. Two (2) each large safety harness (fall protection), and positioning lanyards.
- b. Electrical switch panel – coin box style to include truck/equipment switch; hour meter; boom out of stow; strobe flashers.
- c. Electrical inverter DC to AC static, 1,800 w with duplex (GFI protected outlets mounted at right rear. Two (2) deep cycle gel type batteries group 27,700 CCA, wired in isolation.
- d. Work lights, two (2) each 100,000 candle power, located at rear of cab and at platform. Battery powered.
- e. Hydraulic oil reservoir 56.7 L (15 gal.) minimum capacity, internally mounted suction filter and gate valve.

- f. Boom rest.
- g. Front bumper, manufacturer standard with single/dual tow hooks.
- h. First service kit shall include all required filters (oil, fuel, air, breather, transmission, etc.).
- i. Safety Inspection/PUC Certification, License, Registration and Certificate as required in General Provisions.
- j. Complete after factory rustproof with seven (7) year unlimited warranty (complete unit). Applied in accordance with Federal Specifications 297A at its latest revision.
- k. Electronic reverse alarm.
- l. Road safety triangle kit; and four pack kit AERVOR Super LED Road Flares, or equivalent, shall have yellow housing with red LED lighting. All housing shall be etched "STATE DOT HIGHWAYS".
- m. Technical resources - one (1) copy of repair manual, one (1) copy of parts catalog, two (2) copies of operations manual. Book format/CD/DVD.
- n. Color, white high gloss urethane, complete unit. Apply non-skid to all walking surfaces. Shall be outlined with conspicuity material (reflexite or equal) red and white.
- o. Complete unit shall be designed to carry a minimum of 907.2 kg (2,000 lbs.) materials and supplies not including the driver, passengers and fluids.
- p. First Aid Kit (OSHA approved).
- q. One (1) each per vehicles "Geotab G06" plug and play device with harness by Sprint with five (5) year "Pro Plan" to enhance vehicle safety and security. Report information shall be monitored by the Highways Construction and Maintenance Branch.
- r. Upon "Notice to Proceed", Contractor shall submit "Application" (To State Motor Vehicle Safety Office) to meet the requirements of Section 286-202 (12), Hawaii revised statutes, for approval of a major modification. Construction, or reconstruction of a vehicle with a gross vehicle weight rating (GVWR) of 10,001 pounds and above. Application is available at:

State of Hawaii
Department of Transportation
Highways
Motor Vehicle Safety Office
601 Kamokila Boulevard, #511
Kapolei, Hawaii 96707

Copy of approved application shall be submitted at time of delivery.

19. Training:

Bidder shall provide manufacturer training syllabus at time of bid submittal. Contractor shall provide manufacturer training for proper and safe operation, maintenance of equipment, and fall protection. This training shall include a minimum of one (1) hour classroom and one (1) hour per operator hands on training. This service shall be provided at no additional cost to the State. Contractor shall provide classroom site. Training shall be consistent to OSHA requirements.

20. Copy of attendance record showing class date, time, location, class type, instructor's name and attendees shall be submitted to:

State of Hawaii
Highways
Construction and Maintenance Branch
Attn: Equipment Superintendent/Safety Coordinator
869 Punchbowl Street
Honolulu, Hawaii 96813

21. Note:

Bidder(s) shall submit with their bid a certified letter(s), from the manufacturer(s) to certify the prospective bidder as the Factory Authorized Warranty Dealer (letter required for both chassis and equipment).

SECTION 22 — CAB/CHASSIS UTILITY BODY WITH 55 FOOT AERIAL

22.1- SCOPE OF WORK – The work consists of furnishing and delivering one (1) only, Cab/Chassis Utility Body with 55 Foot Aerial, to the island of Oahu. The Contractor shall present the vehicle complete, ready to use, and fully operational.

22.2- CAB/CHASSIS UTILITY BODY WITH 55 FOOT AERIAL - The Specifications contained herein establish minimum standards (unless stated differently). Vehicle offered shall include any other standard features not listed but detailed in manufacturer's brochures and deemed necessary for proper and safe operation of vehicle.

DETAILED SPECIFICATIONS FOR A CAB/CHASSIS UTILITY BODY WITH 55 FOOT AERIAL

1. Model/Year: Model/Year: Cab/Chassis Utility Body with Aerial, 2026 or latest production.
2. GVW Rating: 14,968.8 kg (33,000 lbs.) capacity minimum.
3. Wheel Base: 4,470.4 mm (176 in.) maximum.
4. Cab to Axle: 2,743.2 mm (108 in.) maximum.
5. Axle to Frame: 1,905 mm (75 in.) minimum.
6. Engine:
 - a. Diesel powered, wet sleeved engine or dry sleeved engine with seven (7) year unlimited mileage warranty. 2013 emissions compliant, Tier 4.
 - b. Liquid cooled with deaeration system with tank and sight glass, full radiator guard.
 - c. Six (6) cylinders.
 - d. Net horsepower 223.7 kW (300 HP) minimum, at rated RPM.
 - e. Fuel water separator (Racor Model 21000) or manufacturers equal. Fuel tank 189 L (50 gal.) minimum. Including nine (9) gallon DEF tank.
 - f. Exhaust, single horizontal muffler with after treatment device frame mounted and short tail pipe or manufacturer standard. Two position exhaust switch to inhibit diesel particulate filter regeneration as long as switch is "on" position.
 - g. Hour meter and tachometer.

7. Differential: Locking
8. Frame:
 - a. Double steel channel type. With full frame length C-channel reinforcement.
 - b. 120,000 psi yield, RBM (Resisting Bending Movement), 3,806,400 in.-lbs. Minimum.
9. Transmission:
 - a. Allison MD3500RDS 6-speed or equal.
 - b. PTO – Hot shift PTO with piggy back pump.
 - c. Automatic transmission oil temperature gauge.
10. Electrical:
 - a. Twelve volt system with dual gel type batteries.
 - b. 200 AMP alternator, capable of charging at low engine speeds.
 - c. Color coded wiring or continuously numbered.
 - d. Circuit breakers at main panel to replace all fuses except instrument cluster feed.
11. Steering: Powered.
12. Brakes:
 - a. Front Disc brakes, system shall comply with new reduced stopping distance NHTSA regulations.
 - b. Dual air system with 22.4 m³/H (13.2 CFM.) compressor, with air dryer, and pressure gauge with low air warning buzzer.
 - c. Antilock Brake System - full vehicle wheel control.
 - d. Parking - piggy back, spring adjusted, double diaphragm; anchor lock, MGM or equal, SCAM.
 - e. Safety spring loaded on rear axle. Cab controlled emergency air tank for release.

- f. Trailer hand control lever mounted on steering column, and tractor protection valve.
- g. Jacob driveline brake (electromagnetic) or equal.

13. Wheels/Tires:

- a. Seven (7) each; single front, tandem rear, spare.
- b. Tires – 11R 22.5, 16 ply rating load rating H.
- c. Wheels – 22.5 x 8.25, disc painted steel 10-stud with steel hubs.

14. Axle:

- a. Front — 5,443.2kg (12,000 lbs.) minimum.
- b. Rear — 9,525 kg (21,000 lbs.) minimum. Single reduction with 200 wheel ends.

15. Springs:

- a. Front — 5,443.2 kg (12,000 lbs.) minimum with shock absorbers.
- b. Rear — 9,525.6 kg (21,000 lbs.) capacity minimum, with 2,041.2kg (4,500 lbs.) auxiliary springs.
- c. Heavy duty front shock absorbers.

16. Cab:

- a. Aluminum conventional cab with tilt hood.
- b. Complete head lining.
- c. Clear safety glass on rear window (full width). Shall have manufacturer installed or custom built right door peep window and rear quarter/corner windows both sides of cab (these windows shall provide additional visibility for the operational safety of the vehicle).
- d. Seats — Driver air suspension, intermediate back, isolated, with two position front cushion adjustment, minus two degree to plus fifteen degree seat back adjustment. Mechanical lumbar support, adjustable head rest, 3-point lap/shoulder belt; Passenger seat shall be two man, low back with adjustable head rests and one (1) 2-point lap belt and one (1) 3-point shoulder belt.

- e. Non skid steps and grab handles located on both sides of cab, to allow for 3-point contact when entering and disembarking.
- f. Floor mats.
- g. Sun visor, driver and passenger.
- h. Factory installed air condition.
- i. Vinyl upholstery.
- j. AM/FM radio, factory installed.
- k. Dual exterior powered rear view mirrors (backs/brackets shall be aluminum/stainless steel, or non-corrosive composite type, 152.4mm x 406.4mm (6 in. x 16 in.) minimum. West Coast type or equal with convex bottom section.
- l. Rain guards on both doors.
- m. The lightbar system shall be a Whelen model FCOHIDOT, part no. 01-0684294-72 or equal. The bar shall be sixty (60) inches long minimum. The main structure of the lightbar must be an extruded aluminum I-Beam design. The lightbar shall house all electronic components. The lightbar must have Hi/Low power control of all inboard LED modules. The lightbar shall contain one (1) control module I/O board which must control all internal light heads. The I/O board shall produce a minimum flash rate of 75 Comet flashes per minute with alternating corners, not an "x" pattern. There shall be ten (10) Scan Lock flash patterns to choose from. Each pair of LED lamps must be capable of operating in a different flash pattern. The lightbar shall have all linear LED modules and shall meet SAE-J845 Class I and SAE-J595 requirements. The lightbar shall have linear LED modules in the four corners.

Each linear 18 corner module shall consist of a minimum of eighteen (18) high output LED's permanently mounted within a single dual (over/under) "removable" highly mirrored parabolic reflector for maximum light output. The eighteen (18) LED's shall be mounted in two straight lines of 9 LED's each (over/under) for maximum light output. The linear reflector shall extend to the MR11 alley light with no appreciable open gap between the LED module on the alley light. The LED work light must be the same size module as used for the warning lights, but must consist of two staggered rows of six Super LED's and be able to flash and steady burn. All LED panels shall be the same design as the Linear 18 described above, and must contain 12 Super LED's (6 over 6). All inboard light heads must be 400 Series (this will allow for placement of this light head in any inboard position). All LED inboard modules must produce a minimum 180 degree light pattern. The I/O module shall be 100% solid state with built-in reverse polarity protection and output short protection. The I/O board shall operate from 10 — 16 VDC with no degradation in flash rate. The

lightbar shall be designed to have up to eight (8) lamps to the front, eight lamps to the rear, and one (1) on each end. Each lamp module position shall have colored lens sections, independent of the others, that match the color of the LED module. For split modules, clear lenses must be used. The LED panel must be mounted within the lightbar. The corner Linear LED's must have a two-intensity cruise light mode. This provides a lightbar that has illuminated corners (no flashing), which are used for marker lights.

The user shall have a choice of ten (10) Scan-Lock flash patterns to choose from the LED modules, and four (4) Scan-Lock flash patterns for the flashing work lights and flashing alleys. The pattern must be selected by an external connection, not requiring the user to open the lightbar to change flash patterns.

The light bar shall have: Front — Two (2) Corner Linear 18's (amber), Eight (8) inboard Linear12 LED's (6 amber / 2 white); Rear — Two (2) Corner Linear 18's (amber), Six (6) Inboard Linear12 LED's (4 amber / 2 red), Two (2) Inboard staggered white TIR12 Super-Led modules for use as work lights; Ends — Two (2) MR11 alley lights; Additional, two (2) spare MR11 halogen replacement bulbs.

The light bar shall be wired to function as follows: All Amber warning LED's; All white warning LED's and flashing LED work light; Left Alley; Right Alley; Flashing Alley; LED Work light, steady; Hi/Low power. All switches shall be lighted type and mounted within a console attached to the dash or mounted as part of OEM console, with provisions to mount an external radio system. Lightbar power cable must be brought to the power source with a fuse (thermal circuit breakers shall be rejected). Power cable shall be labeled with a permanent label at the power source, marked "Lightbar". All cable and wiring shall be conduit protected and shall use grommets through sheet metal panels.

Note: The rear bar red LED's must be separately wired and switched for activation.

The four corner Linear18's must be identical and all other inboard light heads must be 400 series. All internal light heads must snap into sliding brackets that are mounted in the lightbar.

The lightbar must contain a maximum of eight (8) screws, four (4) for each end cap to access all internal light heads. Light heads that require the removal of more than eight screws to remove all internal light heads are unacceptable. Lightbars with modules mounted outside of the main lightbar are not acceptable. The lightbar shall contain a permanent mounting kit to prevent theft of the lightbar, and be laser etched "STATE DOT HIGWAYS", lettering shall be 1.5 inches tall.

- n. Twelve (12) volt power accessory outlet.
- o. Cab guard (to protect cab top, lightbar and hood area); and rear window guard.

- p. Travel height placard, mounted on dash.
- q. Air bag protection for driver/passenger.
- r. Dual air horn.

17. Body:

- a. Knapheide Aerial Service Line/Step Body, suitable for installing on any chassis with a minimum CA dimension of 2,743.2 mm (108 in.), built in accordance with standard specifications with dimensions and compartments as specified. Body shall have a six (6) year warranty.
- b. Body fabricated from hot-dipped galvanized steel with 100% iron zinc alloy coating:
 - 1. Fourteen (14) gauge outside panels.
 - 2. Twelve (12) gauge end panels.
 - 3. Eighteen (18) gauge shelving.
 - 4. Fourteen (14) gauge double panel doors.
 - 5. Twelve (12) gauge tread plate steel floor.
 - 6. Structural channel sub base with 76.2mm (3 in.) cross members.
 - 7. Fourteen (14) gauge tread plate installed on top of body compartments.
- c. Body Dimensions: Minimum
 - 1. 4,064 mm (160 in.) overall length.
 - 2. 2,362.2 mm (93 in.) outside width.
 - 3. 1,193.8 mm (47 in.) front of body height; 1,143 mm (45 in.) rear of body height.
 - 4. 457.2 mm (18 in.) compartment depth.
 - 5. 1,447.8 mm (57 in.) floor width (cargo area).
- d. Compartments – left side (driver’s side)
 - 1. First vertical — 609.6 mm (24 in.) w. One (1) plain fixed shelf 381 mm (15 in.) from top for inverter storage. Two (2) fixed shelves with removable dividers on 101.6 mm (4 in.) centers. Back of compartment louvered above inverter storage shelf.
 - 2. Second vertical — 558.8 mm (22 in.) with five (5) fixed material hooks (1-3-1).
 - 3. Third vertical — 558.2 mm (22 in.) with five (5) fixed material hooks (1-3-1).
 - 4. Horizontal — two (2) each, 2,053.2 mm (58 in.) with one (1) plain fixed shelf extending through rear vertical compartment.
 - 5. Rear vertical — 863.6 mm (34 in.) with top portion incorporated into horizontal compartment, lower portion vacant.

6. Through shelf. From second vertical to rear of left side with hot-stick brackets and rear door.

e. Compartments – right side (passenger side)

1. First vertical — 508 mm (20 in.) with five (5) fixed material hooks (1-3-1).
2. Second vertical — 508 mm (20 in.) with five (5) fixed material hooks, water cask and mounting bracket with drain spout.
3. Third vertical — 660.4 mm (26 in.) with access steps to cargo area (between second/third cabinets), hinged to provide storage for auxiliary battery. Lock to be keyed like compartments. Notch compartment to allow clearance for spring hanger.
4. Horizontal — 1, 524 mm (60 in.) with two (2) fixed shelves with removable dividers on 203.2 mm (8 in.) centers.
5. Rear vertical — 863.6 mm (34 in.) with three (3) fixed shelves with removable dividers on 101.6 mm (4 in.) centers.

f. Standard Body features:

1. Wheel chock holders, installed one (1) each side in fender panels behind rear wheels, with rubber wheel chocks with metal handles.
2. All doors full double panel, self-sealed with built in drainage for maximum weather tightness. Stainless steel hinge extends entire length of doors.
3. Stainless steel paddle activated rotary style latches, included keyed alike locks.
4. All edges either folded or rolled for strength and safety.
5. Door header drip rail at top for maximum weather protection.
6. Neoprene fenders.
7. Completely painted; all interior bases and walking surfaces shall be coated with non-skid.
8. Led lights in all compartments, pressure switches on each door, compartment lights wiring through master switch in cab.

g. Custom Features:

1. Galvanized rear extension shelf with recess for pintle hook, 25.4 mm (1 in.) lip welded on rear face to prevent materials from rolling off; 609.6 mm (24 in.) on right side and 28 inch on left side. Triplex wire reel racks mounted on rear extension right and left sides.
2. Raise floor level up to provide 139.7 mm (5.5 in.) rear face.
3. Two (2) each cable steps, one (1) each side at rear.
4. Two (2) each grab handles one (1) each side at rear.
5. Two (2) each compartment top access steps, installed behind right side and left side compartments in cargo area.

6. Two (2) each access steps, grip-strut, installed on top of rear right side and left side compartments for access to bucket.
7. Rigid grip-strut access step installed under right side body access.
8. Two (2) each grab handle at right side access step.
9. Four (4) each outrigger pad holders, 482.6 mm x 482.6 mm x 88.9 mm (19 in. x 19 in. x 3.5 in.), add 12.7 mm (.5 in.) lip at opening. Install one (1) under each corner of line body.
10. Two (2) each large splash aprons, installed behind rear wheels.
11. Two (2) each large anti sail mud flaps with brackets mounted behind rear wheels.
12. Triangle kit mounted in first left side compartment; and four pack PF200 Power Flare Safety Light with carry bag. Power flare shall have yellow housing with red LED lighting. All housing shall be etched "STATE DOT HIGHWAYS".
13. One (1) 2.2 kg (5 lb.) ABC Dry Chemical fire extinguisher mounted in first left side compartment.
14. Two (2) each bubble level indicators, with gauges. One (1) mounted to rear surface left side compartment. The other mounted on cargo area side of left side compartment near aft end.
15. Battery box, for gel type deep cycle battery, group 27.
16. Lights and reflectors in accordance with FMVSS#108 modular lighting package, all wiring connections crimped with solderless connectors and enclosed in shrink tube with waterproof sealant. All wire ends are tinned before insertion into plugs. All plug connections are completely sealed and weather proof. Entire assembly is enclosed in a continuous plastic loom to form a one-piece harness. Lighting package is complete with sealed polycarbonate lenses and housings, affording superior impact and heat protection, flush mounted in rubber grommets as follows: two (2) clear back up lights; four (4) red stop/turn/tail lights; seven (7) 63.5 mm (2.5 in.) diameter red clearance lights; license plate light. Lights shall be LED type. There shall be two additional amber warning LED lights (Whelen series 700 model SSN F106A single strobe plus) mounted at rear of utility boxes and wired to operate with the light bar.

18. Aerial Unit:

- a. ALTEC Model TA55; TECO Vanguard V5-55 or equal, articulating over center, installed over rear axle, built in accordance with standard specifications and to include the following features as specified.
- b. Ground to bottom of platform height: 16.5 m (54.4 ft.), minimum.
- c. Working height 18.1 m (59.4 ft.), minimum.
- d. Maximum reach from centerline to lip of platform 11.8 m (38.8 ft.).

- e. Insulated, lifetime platform leveling system.
- f. Pedestal and turntable, box structure design with large service openings and easy to remove covers.
- g. Rotation, continuous.
- h. Continuous rotation provided by worm gear drive, equipped with extended shaft for manual rotation driving a worm gear speed reducer and gear bearing.
- i. The articulating arm shall be designed so that the stress proof articulating arm and lower boom are compensating.
- j. Elevator section — Elevator link arms are mechanically compensated to provide a ten foot vertical lift to the aerial
- k. Lower boom- fiberglass insert isolation gap; Articulation 0 to 125 degrees (35 degrees beyond vertical).
- l. Upper Boom - round filament wound fiberglass; Articulation of 270 degrees in relation to lower boom.
- m. Upper Boom extension shall be extended and retracted by a double acting hydraulic extension cylinder installed within the booms. Upper boom hold down device.
- n. Platform leveled by positive mechanical system utilizing insulated fiberglass rods and a roller chain.
- o. Dielectric rating, ANSI, Category C, 69kV and below.
- p. ISO 9001 certification, this aerial device shall be manufactured in a facility that is certified to meet ISO 9001 requirements.
- q. The control system shall be a full pressure type. The upper control located at the platform shall consist of a insulated single handle control with an interlock to prevent inadvertent boom movement. This control shall allow the operator to make simultaneous multiple boom movements. An additional separate control shall activate the articulating arm, this control shall be mechanically locked to prevent accidental actuation and should not require the actuation of the trigger on the single hand control.

Conventional multiple lever ground controls located at the turntable shall include an upper control override.

- r. A valve located at the boom tip and easily accessible by the operator without having to remove any covers, allows the lower boom to be lowered in the case of engine/hydraulic system failure.
- s. Hydraulic tool circuit control easily accessible to the operator activated the tool circuit to provide 18.9 LPM (5GPM) at 138 BAR (2,000 PSI) minimum. One set of HTMA quick disconnect couplings located within a protected location inside the control cover at the platform.
- t. Diagnostic pressure test, quick disconnect couplings located at turntable.
- u. Two (2) strobe LED lights (Whelen Model No. MC40ED4A or equal) mounted one on each side of aerial pivot base arm.
- v. "Boom out of Stow" warning light in cab.
- w. Engine start/stop control at the platform, and toggle switch at the turntable.
- x. Emergency Operating System: Electrical powered, includes pump and motor operated from truck battery, captive air activated, automatic.
- y. Platform two man, 272.1 kg (600 lbs.) capacity with 180° platform rotator. Fiberglass Construction; Complete platform liner; Platform cover; Hydraulic circuits for hand tools (quick disconnect) two (2) each; Material lifting winch and jib mounted at platform area, fiberglass construction, minimum 453.6 kg (1,000 lb.) capacity rating.
- z. A-frame outriggers (primary and auxiliary), located aft of the pedestal through rear compartment; auxiliary outriggers shall be located between cab and body. Controls located at right and left sides of tail-shelf. Shall have motion alarm switches. Interlock switches (for primary and auxiliary) to prevent boom operation until outriggers are lowered. "Outrigger Down" warning light in cab; Switch to isolate warning alarm during tool circuit operations. Slope indicator located at operator dash area.

19. Other:

- a. Two (2) each; safety harness large; and positioning lanyards.
- b. Electrical switch panel - coin box style to include truck/equipment switch; hour meter; boom out of stow; strobe flashers.
- c. Electrical inverter DC to AC static, 2200 w, with duplex (GFI protected outlets mounted at platform and right rear.

- d. Work lights, three (3) each 200,000 candle power (swivel type), located at rear of cab, right rear of bed, and at platform. Battery powered. One (1) swivel spotlight mounted from below cab guard near right center just back of windshield area.
- e. Hydraulic oil reservoir 75.7 L (20 gal.) minimum capacity, internally mounted suction filter and gate valve.
- f. Sub-base installed between primary and auxiliary outriggers. Boom rest installed behind of cab.
- g. One (1) platform support mounted under stowed aerial platform.
- h. Four (4) each outrigger pads, aluminum, Sauber Model #1818 or equal 457.2 mm x 457.2 mm x 63.5 mm (18 in. x 18 in. x 2.5 in.).
- i. Ballast as required by manufacturer requirements.
- j. Towing package to include; Pintle hook (Holland #380) or equal, mounted 685.8 mm (27 in.) above ground, reinforced as required; Two (2) "D" rings; Provide and install electrical, glad hands, dust covers, to include all plumbing and connections.
- k. Air/electric to end of frame rails with 914.4 mm (36 in.) of extra line.
- l. Impact wrench, Stanley IW08 or equal, 3,657.6 mm (12 ft.) non-conductive hose assembly and quick connect coupler to match aerial tool circuits; chain saw, Stanley CS06 or equal, with non-conductive hose and quick connect coupler to match aerial tool circuits; Chain saw scabbard at platform. Tool circuits at tail shelf, indented section added to one of the outrigger valve section area. Two (2) sets of quick disconnects.
- m. Front bumper, manufacturer standard with single/dual tow hooks.
- n. First service kit shall include all required filters (oil, fuel, air, breather, transmission, etc.).
- o. Safety Inspection/PUC Certification, License, Registration and Certificate as required in General Provisions.
- p. Complete after factory rustproof with seven (7) year unlimited warranty (complete unit). Applied in accordance with Federal Specifications 297A at its latest revision.
- q. Electronic reverse alarm.

- r. Technical resources - one (1) copy of repair manual, one (1) copy of parts catalog, two (2) copies of operations manual. Book format/CD/DVD.
- s. Twenty (20) for each vehicle "Geotab G06" plug and play device by Sprint, with five (5) year "Pro Plan", to enhance vehicle safety and security. Report information shall be monitored by the Highways Construction and Maintenance branch.
- t. Color, white high gloss urethane, complete unit. Apply non-skid to all walking surfaces. Shall be outlined with conspicuity material (reflexite or equal) red and white.
- u. First Aid Kit (OSHA/ANSI recommended).
- v. Upon "Notice to Proceed", Contractor shall submit "Application" (To State Motor Vehicle Safety Office) to meet the requirements of Section 286-202 (12), Hawaii revised statutes, for approval of a major modification. Construction, or reconstruction of a vehicle with a gross vehicle weight rating (GVWR) of 10,001 pounds and above. Application is available at:

State of Hawaii
Department of Transportation
Highways
Motor Vehicle Safety Office
601 Kamokila Boulevard, #511
Kapolei, Hawaii 96707

Copy of approved application shall be submitted at time of delivery.

20. Training:

Bidder shall provide manufacturer training syllabus at time of bid submittal.

Contractor shall provide manufacturer training for proper and safe operation, maintenance of equipment, to include proper fall protection training. This training shall include a minimum of one (1) hour classroom and one (1) hour per operator hands on training. This service shall be provided at no additional cost to the State. Contractor shall provide classroom site. Training shall be consistent to OSHA requirements.

Copy of attendance record showing class date, time, location, class type, instructor's name and attendees shall be submitted to:

State of Hawaii
Highways
Construction and Maintenance Branch
Attn: Equipment Superintendent/Safety Coordinator
869 Punchbowl Street Room 404
Honolulu, Hawaii 96813

Bidder(s) shall submit with their bid a certified letter(s), from the manufacturer(s) to certify the prospective bidder as the Factory Authorized Warranty Dealer (letter required for both chassis and equipment).

SECTION 23 - HYDRAULIC EXCAVATOR WITH ATTACHMENTS

23.1- SCOPE OF WORK - The work consists of furnishing and delivering one (1) only, Hydraulic Excavator with Attachments to the Island of Kauai. The Contractor shall present the Excavator with necessary equipment complete, ready to use, and fully operational as specified.

23.2- HYDRAULIC EXCAVATOR WITH ATTACHMENTS - The Specifications contained herein establishes minimum standards for the Compact Excavator with Attachments. Equipment offered shall include other features not listed but detailed in manufacturer's brochures and deemed necessary for proper and safe operation of equipment.

DETAILED SPECIFICATIONS FOR HYDRAULIC EXCAVATOR, WITH ATTACHMENTS

1. Model/Year: Hydraulic Excavator, 2026 or latest production.
2. Weight: Operating weight shall be 24,600 kg (54,230 lbs.) minimum.
3. Tail Swing Radius: Maximum radius 1810 mm (71 in.). For working in restricted lane space.
4. Buckets and Thumb:
 - a. Operating bucket shall be .914 m (36 in.) width with rated capacity of .76 cu. yd. with thumb.
 - b. Spare bucket shall be .609 m (24 in.) capacity of .63 cu. yd. with thumb
 - c. 1.52m (60 in.) ditching bucket with hydraulic tilt, 45 degrees left and right, 1.02 cu. Yd capacity and bolt-on cutting edge.
 - d. 24 in. and 36 in. buckets shall be furnished with cutting edge and replaceable teeth (detachable).
 - e. Hydraulically operated thumb.
5. Engine:
 - a. Net power of 119 KW (160hp) minimum, at the flywheel when engine equipped with fan, air cleaner, muffler and alternator.
 - b. Shall be 4 cylinder, 4-cycle diesel powered, water-cooled, direct injection, turbocharged and air cooled, minimum.
 - c. Shall meet EPA Tier 4 (Interim)Emissions Standards.

- d. Provide Electronic Control Module system with sensors, to monitor and adjust the engine rpm, fuel consumption, air, coolant, and exhaust systems. Electronic Control Display shall be located in operator's cab.
- e. Electrical system twenty-four (24) volt, with heavy-duty 110-amp alternator, minimum. Two (2) AGM type batteries, 150 Ah minimum.
- f. Air filter, dry type cleaner with replaceable filter, minimum.
- g. Radiator, heavy duty, reduce-dust type, 25L (6.6 gal.) minimum.
- h. Engine operating system shall be equipped with alarms for high temperature; low lube oil pressure; hydraulic pump pressure. Operating system with alarm shall be located in operator's cab.
- i. Daily service for oil dipstick, fuel, hydraulic oil, oil filter, air filter, fuel filter, fuel/water separator and greasing points shall be accessible from ground level.

6. Hydraulic System:

- a. System Design: Manufacturer's design to meet the required (full time) total main pump flow and the required pressure for the proper and safe operation of the excavator; operating with bucket and thumb, or a hydraulic hammer, or tree mulcher.
- b. Hydraulic Pump(s): Manufacturer's required pressure for the proper and safe operation of the boom, arm, swing, travel circuits, and for during the operation of each attachment. One or two hydraulic motors shall be required to meet the hydraulic flow (gpm) and pressure (psi) for the proper and safe operation of the excavator with attachment. Certification shall be provided with bid proposal showing actual hydraulic operating maximum flow (gpm) and maximum pressure (psi) for each attachment in operation. Failure to submit certification will be sufficient grounds for non-acceptance of bid proposal.
- c. All buckets with thumb and a tree mulcher attachment shall have the proper operating hydraulic pressure to meet the manufacturers specifications for proper and safe operation; All attachments shall have a quick connect/disconnect hydraulic coupling.
- d. All hydraulic pump(s), control valves, anti-drift valves, and cylinders shall be from the same manufacturer of the excavator with a minimum three (3) years unlimited warranty.

- e. Hydraulic oil filtration: One (1) 10-micron full-flow return filter; inline pressure filters with bypass, minimum.
7. Swing System:
- a. Speed shall be not less than 11.0 RPM.
 - b. Torque shall be not less than 47,200 lb./ft.
 - c. Swing brake. Manufacturer standard.
8. Undercarriage:
- a. Each track; width 600 mm (24 in.) with rubber shoes/pads, Minimum.
 - b. Sealed and lubricated track rollers, carrier rollers, and idlers required.
 - c. One (1) carrier roller minimum, for each track.
 - d. Eight (7) track rollers minimum, for each track.
 - e. Track length- 4,470 mm (14ft.8in.) maximum. With hydraulic track adjuster.
 - f. Travel speeds-High 5.0 km/h (3.1 mph), Low 3.1 km/h (1.9 mph) minimum.
 - g. Ground Pressure: 5.37 psi minimum for operating weight.
 - h. Ground Clearance: 406.4 mm (16 in.) minimum.
 - i. Hydraulic dozer blade- 2,590 mm (8 ft. 6 in.) installed if available.
9. Boom/Arm Combination with operating bucket and power boost:
- a. Arm length - 2,500 mm (98 in.) minimum.
 - b. Cutting height 8670 mm (28 ft 6 in.) minimum.
 - c. Dumping height: 6,840 mm (27 ft. 6 in.) maximum
 - d. Digging depth: 5480 mm (22 ft..) maximum.
 - e. Vertical wall digging depth: 4600 mm (15.1 ft.) minimum.
 - f. Arm force (ISO Rating): 103 kN (33,500 lbs.) minimum.

- g. Bucket digging force (ISO Rating): 142 kN (31,800 lbs.) minimum.
- h. Lifting capacity at ground level at 15 ft. reach, 7,450 kg (16,420 lbs.) minimum.
- i. Two (2) LED type working lights; mounted each side of boom.
- j. Quick Coupler mounted for rapid change over of (work tools) attachments.
- k. Hydraulic piping - Attachment Management System - Programmable for up to eighteen (18) memories; Quick coupling piping and hydraulic couplers.

10. Cab:

- a. Closed cab with integrated ROPS meeting OSHA requirements.
- b. Cab mounted on viscous damping mounts to reduce vibration and noise (low noise design).
- c. Sliding entry door and roof skylight to easily communicate with people at work site.
- d. Front, rear and side windows shall be tinted polycarbonate/lexan safety type. Shall have cab falling object protective guard and structure safety net for front window.
- e. Factory air condition climate control with air intake system. Heater and defroster provided for front window.
- f. Inner rear-view mirror. Two (2) outer rear-view mirrors.
- g. Operator's seat: deluxe suspension, lumbar support, adjustable, backrest, armrests and 3 inch wide seat belt. Sun visors /sun screens; floor mat, twelve (12) volt power supply outlet.
- h. Shall be equipped with a horn; travel alarm; reverse warning alarm; Two (2) back up lights mounted at top rear of excavator; Two (2) travel lights mounted at front comers of excavator; Two (2) halogen work lights mounted at top of cab; intermittent windshield wiper/washer.
- i. Shall be equipped with multi-position controls to allow the operator to work in comfort for maximum productivity. All switches and controls shall be within reach of operator in seat.

- j. Electronic control for various work modes to match engine speed, pump speed and system pressure. Operator controls to adjust/match specific speed and pressure for all attachments productivity.

11. Tree Mulcher Unit: Fecon Bullhog BH80EXC-2V, 2026 or latest production or equal.

- a. Tree mulcher shall be mounted in line with stick and boom of excavator which provides for a 90-degree attachment to the stick. Mount shall be by quick coupler and coupling. All operating controls shall be in easy reach of the operator.
- b. Tree mulcher shall be able to mulch a tree with a 203.2 mm (8 in.) diameter trunk, minimum.
- c. Working width shall be a minimum of 1,422.4 mm (50 in.).
- d. FGT cutter drum 1,700 RPM, minimum.
- e. Minimum of thirty (30) fixed teeth double thick carbide type. To include a spare set of teeth and connecting accessories. Rotating teeth are acceptable providing the equipment meets the manufacturers (for both excavator and mulcher) specifications for proper and safe operation.
- f. Variable displacement hydraulic motor to include motor and hydraulic protection valves. Shall be mounted within limits of excavator. No add-on unit shall extend beyond the swing radius of the excavator.
- g. Operating weight shall be within manufacturers (both excavator and mulcher) specifications for proper and safe operation.
- h. Tree mulcher shall include all materials and attachments necessary to meet manufacturers (both excavator and mulcher) specifications for proper and safe operation.

12. Other:

- a. Complete vandalism protection package for all doors and service points and to be keyed alike.
- b. SMV emblem.
- c. Toolbox 12 in. X 12 in. X 30 in., with accessory tray mounted and lockable (coordinate mounting with user). Tool kit for pre-inspection, to include 10-ton hydraulic jack and refillable grease gun.

- d. Two (2) L360 Super LED Beacons (Whelen Model L32LAF4 or equal) including limb guard, mounted on top of cab. Wire to model LSK lighted switch kit or equal.
- e. One (1) 4.4 kg (10 lbs.) ABC dry chemical fire extinguisher (metal nozzle type), mounted on bracket in cab.
- f. Dome light in cab.
- g. Electric starter (heavy duty)
- h. Fixed drawbar and pin.
- i. First Service Kit to include all manufacturer required filters (oil, fuel, air, etc.).
- j. Two (2) copies each of owner/operator manual, service/repair manual, and parts manual (to include all attachments). List of factory trained and authorized personnel who will provide service for excavator and attachments.
- k. Heavy duty Hydraulic oil cooler.
- l. Hydraulic with quick connect/disconnect for use of other tool attachments.
- m. Manufacturer recommended counterweights for proper balance for use with all attachments.
- n. Manufacturer's training video for safe operation of equipment and attachments.
- o. First Aid Kit OSHA/ANSI recommended.

13. Color/Paint:

- a. The Excavator and all attachments shall be painted with Federal Safety School Bus Yellow.
- b. Excavator boom sides and the outer edge of upper structure to be lined with conspicuity materials (red/white reflective or equal)

14. Warranty, Service and Maintenance of Excavator with Attachments:

- a. Vendor receiving equipment award must furnish statement, listing number of factory trained and authorized personnel to install and provide service and maintenance support.

- b. Vendor must also provide statement identifying items and systems, which require factory authorized personnel to maintain.
- c. Local warranty, service and maintenance for all components shall be provided on the island of Hawaii. Warranty period for Excavator and Attachments shall be minimum of three (3) years. Service and maintenance shall be minimum of three (3) years for the Excavator and each Attachment. Warranty, service and maintenance work, including labor and parts, shall be provided at no additional cost to the State for a period of three (3) years after the acceptance of this equipment.

15. Training:

- a. Bidder shall provide manufacturer training syllabus at time of bid submittal.
- b. Contractor shall provide manufacture's training for proper and safe operation, maintenance of equipment and all attachments. This training shall include a minimum of three (3) days classroom and operator hands on training on the island of Hawaii. Training shall be provided at no additional cost to the State. Contractor shall provide classroom site. This training shall be consistent with OSHA requirements.
- c. Diagnostic Scan Tool with current diagnostic software installed including software licenses and operational training.

Copy of attendance record showing class date, time, location, class type, instructors name and attendees' shall be submitted to:

State of Hawaii
Department of Transportation
Highways
Construction and Maintenance Branch
Attn: Equipment Superintendent/Safety Coordinator
869 Punchbowl Street
Honolulu, Hawaii 96813

SECTION 24 - ONE TON CREW CAB PICK-UP TRUCK WITH ARROW BOARD

24.1- SCOPE OF WORK - The work consists of furnishing and delivering two (2) only, One Ton Crew Cab Pick-Up Truck with Arrow Board, to the island of Kauai. The Contractor shall present the vehicle complete, ready to use, and fully operational.

24.2- ONE TON CREW CAB PICK-UP TRUCK WITH ARROW BOARD - The Specifications contained herein establish minimum standards (unless stated differently). Vehicle offered shall include any other standard features not listed but detailed in manufacturer's brochures and deemed necessary for proper and safe operation of vehicle.

DETAILED SPECIFICATIONS FOR A ONE TON CREW CAB WITH ARROW BOARD

1. Model/Year: One Ton Crew Cab Pick-Up Truck 2026 or latest production
2. Type: 2-Wheel Drive. Single rear wheel.
3. GVW Rating: 4,536kg (10,000 lbs.) minimum capacity.
4. Wheel Base: 4,368.8 mm (172 inches) minimum.
5. Engine:
 - a. Diesel powered. 2016 Emissions compliant, Tier 4. Shall be B20 Bio-Diesel compatible.
 - b. Heavy duty cooling system.
 - c. Fuel water separator, DAVCO Fuel Pro 382, or equivalent, B20 Bio-Diesel compatible.
6. Transmission:
 - a. 6-speed automatic minimum.
 - b. Transmission oil cooler.
 - c. External Transmission oil cooler.
7. Axle: Rear locking or limited slip differential
8. Electrical System:
 - a. Twelve (12) volts with alternator capable of charging battery at low engine speeds.

- b. Dual battery system.
9. Steering: Power or power assisted.
10. Brakes:
- a. Power or power assisted. Four-wheel disc brakes.
 - b. Anti-lock brake system.
 - c. Roll stability control.
11. Cab/Interior:
- a. Crew cab.
 - b. Bench seats, with seat belts for six (6) people.
 - c. Upholstery of manufacturer's standard vinyl/cloth material.
 - d. Interior rear view mirror with glare control.
 - e. Power windows/locks.
 - f. Floor covering vinyl/rubber with insulation. With floor mats.
 - g. Dual outer mirrors with spot mirrors, on swing out or telescoping brackets.
 - h. AM/FM/Blue Tooth radio; Reverse Camera.
 - i. Factory installed air condition.
 - j. Twelve (12) volt accessory outlet.
 - k. Rain guards or vent shades on all doors. Step bars on both sides of vehicle.
12. Body: 2,438mm (8 ft.) bed; fleet side, style side, swept line or equal.
13. Bumpers:
- a. Standard front.
 - b. Step type rear.

14. Tires/Wheels:

- a. Tires and wheels shall meet manufacturer's and Federal GAWR requirements for GVW submitted; all terrain type.
- b. Full size spare mounted on under frame carrier.
- c. Jack and wheel wrench.
- d. No chrome/aluminum wheels, unless manufacturer standard.

15. Suspension: Heavy duty - Axles, springs, and shock absorbers shall meet manufacturer and Federal GAWR requirements for GVW submitted.

16. Color:

- a. White, Dupont 93-96923 High Gloss Urethane or manufacturer's equal.
- b. Reflective chevron markings (reflexite or equal) on tail gate, Omaha orange and white (comparable to existing State Highways Division Fleet). Spray-on bed liner

17. Other:

- a. Operator's Manual two (2) copies, Shop Repair Manual one (1) copy, Parts Manual one (1) copy. Book format/USB Flash Drive
- b. 2.2kg (5 lbs.) ABC fire extinguisher mounted in cab.
- c. Complete after factory rustproof, minimum of seven (7) years unlimited mileage requirement warranty, in accordance with Federal Specifications 297A or its latest revision.
- d. Two (2) bed side rail mounted 2,438.4mm (8ft.) toolboxes, keyed alike. Shall be aluminum type, heavy construction, full length of truck bed, with concealed hinges. Shall be painted to match vehicle color or be diamond plate aluminum (lockable).
- e. Complete factory towing/electrical. To include wire harness connector (vehicle and trailer end), under carriage tow receiver, (Type V), 907.2 kg (2,000 lbs.) 3inch pintle hook and 2inch ball combination receiver. Mounted with adjustable height adaptor.
- f. Reverse alarm. Gauge package.

- g. Water cooler, three (3) gallon minimum with holder to be mounted at rear.
- h. Safety Inspection, License, Registration, and Certificates as required in General Specifications. To include PUC certification (if over 10,000 lbs.).
- i. Complete after factory rust proofing, with minimum seven (7) years unlimited mileage requirement warranty, in accordance with Federal Specifications 297A or its latest revision.
- j. The light bar system shall be a Whelen Model HIDOTF4W0 with photocell or equal. The bar shall be sixty (60) inches long minimum. The light bar shall house all electronic components. The light bar must have Hi/Low power control of all inboard LED modules. The I/O board shall produce a minimum flash rate of 75 comet flashes per minute with alternating comers, not an "X" pattern. There shall be ten (10) scan lock flash patterns to choose from. Each pair of LED lamps must be capable of operating in a different flash pattern. The light bar shall have all linear LED modules and shall meet SAE-J845 Class I and SAE-j595 requirements. All LED inboard modules must produce a minimum 180degree light pattern. The I/O module shall be 100% solid state with built in reverse polarity protection and output short protection. The I/O board shall operate from 10 - 16 VDC with no degradation in flash rate.

Shall have a switch controller Whelen PCCI OW or equal.

The light bar shall be programmed/wired for a rear lower duplex traffic advisor function. Switching sequence as follows: #1 -Amber warning; #2 – White warning lights (flashing); #3 - Red rear warning lights (flashing); #4 - Left alley; #5 - Right alley; #6 - Rear working lights steady bum; #7 - Cruise light comer steady bum; #8 - traffic advisor left; #9 - Traffic advisor right; #IO-Front work lights steady bum; Note - #8 and #9 together can activate split traffic advisor by turning on both left and right traffic advisor buttons at the same time. All switches shall be lighted type and mounted within a console attached to the dash or mounted as part of OEM console, with provisions to mount an external radio system.

Light bar power cable must be brought to the power source with a fuse (thermal circuit breakers shall be rejected).

Power cable shall be labeled with a permanent label at the power source, marked "light bar". All cable and wiring shall be grommet protected and shall use grommets through sheet metal panels.

The four-comer linear 18's must be identical and all other inboard light heads must be 400 series. All internal light heads must snap into sliding brackets that are mounted in the light bar. The light bar shall contain a permanent mounting kit to

prevent theft of the light bar, and be laser etched "STATE DOT HIGHWAYS", lettering shall be 1.5 inches tall.

Etching shall be at top of light bar on both ends, lettering to face out.

- k. First Service Kit shall include all filters as required by manufacturer (oil, air, breather, transmission, etc.).
- l. Warranty shall be a minimum of 36 months/36,000miles (to include all attachments).
- m. First Aid Kit (OSHA/ANSI recommended).
- n. Road safety triangle kit; and self-charging four pack kit Aervoe Super LED, or equivalent.
- o. Road Flares, shall have yellow housing with red LED lighting. All housing and case shall be etched "STATE DOT HIGHWAYS".
- p. Fold down Arrow Board (MUTCD approved) thirty (30) inches by sixty (60) inches, with twenty-five (25) lamps, visibility .75 mile, to be mounted at the rear of the cab (front of pick-up box) to extend above cab roof height to include all wiring and controls mounted in cab within driver reach. In folded down position, Arrow Board shall not block view of light bar and third brake light. A travel height placard shall be mounted on the dash. Automated electrical/hydraulic.

18. Training:

Upon request by receiving agency, Contractor shall provide proper and safe operation and maintenance of vehicle/equipment. This training shall include a minimum on one (1) hour classroom and one (1) hour per operator hands on training. This service shall be provided at no additional cost to the State. Contractor shall provide classroom site. Training shall be consistent to OSHA requirements.

Copy of attendance record showing class date, time, location, class type, instructor's name and attendees shall be submitted to:

State of Hawaii
Department of Transportation
Highways
Construction and Maintenance Branch
Attention: Equipment Superintendent/Safety Coordinator
869 Punchbowl Street
Honolulu, Hawaii 96813

SECTION 25 - CAB/CHASSIS WITH UTILITY CRANE BODY

25.1- SCOPE OF WORK — The work consists of furnishing and delivering one (1) only, Cab/Chassis with Utility Crane Body, to the island of Kauai. The Contractor shall present the vehicle complete, ready to use, and fully operational.

25.2- CAB/CHASSIS WITH UTILITY CRANE BODY - The Specifications contained herein establish minimum standards (unless stated differently). Vehicle offered shall include any other standard features not listed but detailed in manufacturer's brochures and deemed necessary for proper and safe operation of vehicle.

DETAILED SPECIFICATIONS FOR A CAB/CHASSIS WITH UTILITY CRANE BODY

1. Model/Year: Cab/Chassis with Utility Crane Body, 2026 or latest production.
2. Type: 4-Wheel Drive. Dual rear wheel
3. GVW Rating: 6,804kg (15,000lbs.) minimum 8,164.6 kg (18,000 lbs.) maximum.
4. Wheelbase: 4,876.8mm (192 inches) maximum.
5. Cab to Axle: 2,137.6mm (84 inches) maximum.
6. Engine:
 - a. Diesel powered. 2024 Emissions compliant, Tier 4, shall be B20 Bio-Diesel compatible with no adverse effects.
 - b. Heavy duty cooling system.
7. Transmission:
 - a. 6-speed automatic minimum.
 - b. Transmission oil cooler.
 - c. Auxiliary External Transmission oil cooler.
8. Axle: Rear locking or limited slip differential
9. Electrical System:
 - a. Twelve (12) volt with alternator capable of charging battery at low engine speeds.

- b. Dual battery system.
10. Steering: Power or power assisted.
11. Brakes:
- a. Power or power assisted. Four--wheel disc brakes.
 - b. Anti-lock brake system.
 - c. Roll stability control/traction control.
12. Cab/Interior:
- a. Extended Cab.
 - b. Cab extension will be used for storage, no seating required.
 - c. Upholstery of manufacturer's standard vinyl/cloth material.
 - d. Interior rear-view mirror with glare control.
 - e. Power windows/locks on all doors.
 - f. Floor covering vinyl/rubber with insulation. With floor mats.
 - g. Dual outer mirrors with spot mirrors, on swing out or telescoping brackets.
 - h. AM/FM/Bluetooth radio. Reverse camera.
 - i. Factory installed air condition.
 - j. Twelve (12) volt accessory outlet; up-fitter switches.
 - k. Rain guards or vent shades on all doors. Sidestep bars (both sides).
13. Body: Utility Crane Body, Palfinger Pal Pro 43-11SSCS or approved equal.
- a. 1/8-inch tread plate floor, tops and backs. Full seam continuous welded.
 - b. A-40 Galvanneal compartments and doors.
 - c. 12-gauge bottom and end panels of compartments.
 - d. 14-gauge inner partitions of compartments.

- e. Doors shall be double panel with 14-gauge outside panels and hat section reinforcements. Automotive type neoprene door seals.
- f. Hinges shall be stainless steel continuous type.
- g. Street side compartments from rear of cab — 49.5in. x 60in. (width x height); 49.5in. x 17.5 in. (width x height); 19.5in. x 37.5in. (width x height).
- h. Curb side compartments from rear of cab — 49.5in. x 60in. (width x height); 17.5in. x 37.5in. (width x height); 49.5in. x 17.5in. (width x height); 19.5in. x 37.5in. (width x height).
- i. Six (6) cargo tie downs (D-rings) recessed in floor.
- j. LED type lights for stop/turn/tail/reverse/marker/compartments lighting. All wiring shall be harnessed.
- k. Class V rated tow package, including receiver/safety chain anchors/two-inch ball and three-inch pintle combination hitch; RV type 7 blade electric brake and trailer light connection. Hitch must be accessible with lift gate in stowed position.
- l. PSC 6025H 6000 LB. capacity service crane or equal. with protective cover.
- m. Vanair AIR-N-ARC 300 Diesel Rotary Screw Compressor/Welder/Generator/Battery Booster, or equivalent, to be mounted on rear of street side compartment, remote control panel mounted in rear curb side compartment via available extension harness, ½ inch and 3/8inch compressed air outlets at right rear of bed, 50 ft. welding cable set to include electrode holder and ground clamp, 25 ft. Battery booster cables with connection to remote control panel. Victor Pro Cut oxy/acetylene torch set with 125 c.f. oxygen and 75 c.f. acetylene cylinders mounted in truck bed, cutting and welding tips and 50 ft. oxy/acetylene hose.
- n. Tommy Gate G2-54-1642 TP38, (1,600lbs.) capacity or equal. Dual hydraulic cylinders fully enclosed. Lift shall be galvanized. In-cab shut off switch. Additional bolt on 3-light LED, one on each side lower of lift gate.

14. Bumpers:

- a. Standard front.
- b. Rear lift gate compatible.

15. Tires/Wheels:

- a. Tires and wheels 19.5 inch shall meet manufacturer's and Federal GAWR requirements for GVW submitted; all terrain type.
- b. Full size spare mounted on under frame carrier.
- c. Jack and wheel wrench.
- d. No chrome/aluminum wheels, unless manufacturer standard.

16. Suspension: Heavy duty — axles, springs, and shock absorbers shall meet manufacturer and Federal GAWR requirements for GVW submitted.

17. Color:

- a. White, Dupont 93-96923 High Gloss Urethane or manufacturer's equal.
- b. Reflective chevron markings (reflexite or equal) on rear of liftgate, Omaha orange and white (comparable to existing State Highways Division Fleet). Spray-on bed liner

18. Other:

- a. Operator's Manual two (2) copies, Shop Repair Manual one (1) copy, Parts Manual one (1) copy. Book format/CD/DVD.
- b. 2.2kg (5 lbs.) ABC fire extinguisher mounted in cab.
- c. Reverse alarm.
- d. Gauge package
- e. Safety Inspection, License, Registration, and Certificates as required in General Specifications.
- f. Complete after factory rust proofing, with minimum seven (7) years unlimited mileage requirement warranty, in accordance with Federal Specifications 297A or its latest revision.
- g. The light bar system shall be a Whelen Model HIDOTF4W0 with photocell or equal. The bar shall be sixty (60) inches long minimum. The light bar shall house all electronic components. The light bar must have Hi/Low power control of all inboard LED modules. The I/O board shall produce a minimum flash rate of 75 comet flashes per minute with alternating corners, not an "X" pattern. There shall be ten (10) scan

lock flash patterns to choose from. Each pair of LED lamps must be capable of operating in a different flash pattern. The light bar shall have all linear LED modules and shall meet SAE-J845 Class I and SAE-j595 requirements. All LED inboard modules must produce a minimum 180degree light pattern. The I/O module shall be 100% solid state with built in reverse polarity protection and output short protection. The I/O board shall operate from 10 — 16 VDC with no degradation in flash rate.

Shall have a switch controller Whelen PCC10W or equal. The light bar shall be programmed/wired for a rear lower duplex traffic advisor function.

Switching sequence as follows: #1 — Amber warning; #2 — White warning lights (flashing); #3 Red rear warning lights (flashing); #4 — Left alley; #5 — Right alley; #6 — Rear work lights steady bum; #7 — Cruise light corner steady bum; #8 — Traffic advisor left; #9 —Traffic advisor right; #10 - Front work lights steady bum; — Note, #8 and #9 together will activate split traffic advisor by turning on both left and right traffic advisor buttons at the same time.

All switches shall be lighted type and mounted within a console attached to the dash or mounted as part of OEM console, with provisions to mount an external radio system. Light bar power cable must be brought to the power source with a fuse (thermal circuit breakers shall be rejected).

Power cable shall be labeled with a permanent label at the power source, marked "light bar". All cable and wiring shall be grommet protected and shall use grommets through sheet metal panels.

The four-corner linear 18's must be identical and all other inboard light heads must be 400 series. All internal light heads must snap into sliding brackets that are mounted in the light bar. The light bar shall contain a permanent mounting kit to prevent theft of the light bar, and be laser etched "STATE DOT HIGHWAYS", lettering shall be 1.5 inches tall. Etching shall be at top of light bar on both ends, lettering to face out.

- h. First Service Kit shall include all filters as required by manufacturer (oil, air, breather, transmission, etc.).
- i. Warranty shall be a minimum of 36 months/36,000 miles (to include all attachments).
- j. First Aid Kit (OSHA/ANSI recommended).
- k. Road safety triangle kit; and self-charging four pack kit Aervoe Super LED Road Flares or equal, shall have yellow housing with red LED lighting. All housing and case shall be etched "STATE DOT HIGHWAYS".

19. Training:

Contractor shall provide initial training at time of delivery for proper and safe operation and maintenance of vehicle/equipment and refresher training one (1) year after initial delivery. This training shall include a minimum of one (1) hour classroom and one (1) hour per operator hands on training This service shall be provided at no additional cost to the State. Contractor shall provide classroom site. Training shall be consistent to OSHA requirements.

Copy of attendance record showing class date, time, location, class type, instructor's name and attendees shall be submitted to:

State of Hawaii
Department of Transportation
Highways
Construction and Maintenance Branch
Attention: Equipment Superintendent/Safety Coordinator
869 Punchbowl Street
Honolulu, Hawaii 96813

SECTION 26 - UTILITY TRACTOR WITH REAR ROTARY MOWER

26.1- SCOPE OF WORK - The work consists of furnishing and delivering one (1) only, Utility Tractor with Rear Rotary Mower, to the Island of Kauai. The Contractor shall present the equipment complete, ready to use, and fully operational.

26.2- UTILITY TRACTOR WITH REAR MOUNTED ROTARY MOWER - The Specifications contained herein establish minimum standards (unless stated differently). Equipment offered shall include any other standard features not listed but detailed in manufacturer's brochures and deemed necessary for proper and safe operation of equipment.

DETAILED SPECIFICATIONS FOR UTILITY TRACTOR WITH REAR ROTARY MOWER

1. Model/Year: Utility Tractor or latest production.
2. Type: Mechanical 4-Wheel drive.
3. Engine:
 - a. Diesel powered, liquid cooled. EPA Tier 4 and EU Stage III A compliant. Shall have capability of operating on a B20 blend of bio-diesel with no adverse effects.
 - b. 74 horsepower minimum.
 - c. Fuel water separator, DAVCO Fuel Pro 243, or equivalent, B20 Bio-Diesel compatible.
 - d. Combination pre-screener/pre-cleaner or turbo cleaner indicator.
4. Transmission:
 - a. Manufacturer's standard full synchromesh 12x12 hydraulic with shuttle and creep minimum, or equal.
 - b. Lock type differential.
5. Electrical:
 - a. Twelve (12) volt system.
 - b. Alternator capable of charging at low engine speeds.
6. PTO:
 - a. Rear PTO at 540 RPM.

- b. Independent PTO.
- 7. Steering: Powered.
- 8. Brakes: Manufacturer's standard service and parking brake system.
- 9. Tires:
 - a. All tires mounted on compatible rims.
 - b. Front – 12.5/80-18 16, F-2 (Industrial Sure Grip Tread) or manufacturers equal
 - c. Rear - 16.9 x 30, R-4 (Industrial Surge Grip Tread) or manufacturers equal R-1.
 - d. Spares - Front and rear, one (1) each.
- 10. Axles: Heavy duty, front/rear.
- 11. Hydraulic:
 - a. Open or closed center.
 - b. Suction line shall have a 100 mesh filter.
 - c. Main in tank filter to be 10 micron, full flow with restriction gauge.
- 12. Accessories:
 - a. ROPS and sunshade shall meet OSHA requirements – open cab, no cab enclosure.
 - b. Reverse warning alarm.
 - c. Horn.
 - d. Interior rear-view mirror; two (2) exterior mirror mounted right/left side of cab.
 - e. Working and traveling lights - headlights; LED hazardous flashing lights front/rear; LED directional signals front/rear; LED combination tail/brake lights; six (6) work lights, front - two (2) each on cab roof and two (2) each mounted at lower windshield area. Rear - two (2) each mounted to rear top of cab, to include limb guards.
 - f. Super LED Mini Light Bar, twelve (12) volt, clear dome (Whelen MC11PCA Class I or equal), mounted on top of cab.
 - g. Manufacturer front and rear fenders (if available).

13. Rear Mounted Rotary Mower:

- a. Heavy Duty Rear Rotary Mower (Bush Hog 326) or approved equal.
- b. Offset mount with return to center with 3 point hitch connection.
- c. Heavy duty gear box of 156.6 kw (210 HP) rating.
- d. Cutting width 1,828.8 mm (72 in.) minimum.
- e. Cutting height 50.8 mm to 304.8 mm (2 in. to 12 in.).
- f. Shall be able to shred brush/pruning up to 100.16 mm (4 in.).
- g. 7-gauge deck thickness
- h. Approximate weight of unit 635.04 kg (1,400 lbs.).
- i. Shall be able to shred brush as well as cut grass.
- j. Rear trash deflector shall be provided at rear of unit.
- k. Rear trash deflector shall have double row of safety chains to provide safety from flying material.
- l. Category 5 driveshaft with safety shielding.
- m. Slip clutch for driveline protection.
- n. Quick hitch attachment.

14. Other:

- a. Unit shall have cushioned, adjustable operators seat with backrest and seat belt.
- b. List of factory trained and authorized personnel who will provide service.
- c. Tractor shall have a five (5) year warranty on drive train, axles and cutter gear box.
- d. List of scheduled item/systems which require maintenance by factory authorized.
- e. Counterweight - manufacturer's recommended.
- f. SMV (Slow Moving Vehicle) emblem.

- g. Tool Box 254mm x 254mm x 508mm (10 in. x 10 in. x 20 in.) approximately, lockable.
- h. Operators Manual, two (2) copies. Service/Repair Manual, Parts Catalog; one (1) copy each (for tractor and rear flail). CD/DVD/Flash Drive.
- i. Color, Federal Safety School Bus Yellow, High Gloss urethane or manufacturer equal.
- j. First Service Kit to include all necessary filters, as required. (Oil, fuel, air, breather, etc.)
- k. Hour meter.
- l. Slope degree indicator, model 7489, R&B, Inc. Manufacturing or equal.
- m. Complete vandalism protection package at all service/cab/dash/fuel points and to be keyed alike.
- n. 2.2 kg (5lb.) ABC fire extinguisher mounted in cab.
- o. First Aid Kit OSHA/ANSI recommended.

15. Training:

Contractor shall provide initial training at time of delivery for proper operation and maintenance of equipment and refresher training one (1) year after initial delivery. This training shall include a minimum of one (1) hour classroom, and one (1) hour per operator hands on training. Contractor shall provide classroom site. This training shall be at no additional cost to the State. Training shall be consistent to OSHA regulations.

Copy of attendance record showing class date, time, location, class type, instructor's name and attendees shall be submitted to:

State of Hawaii
 Department of Transportation
 Highways
 Construction and Maintenance Branch
 Attention: Equipment Superintendent/Safety Coordinator
 869 Punchbowl Street, Room 404
 Honolulu, Hawaii 96813

SECTION 27 - FOUR-WHEEL DRIVE ONE TON CREW CAB/CHASSIS WITH UTILITY
BODY/LIFT GATE

27.2- FOUR-WHEEL DRIVE ONE TON CREW CAB/CHASSIS WITH UTILITY
BODY/LIFT GATE - The work consists of furnishing and delivering three (3) only, Four Wheel Drive One Ton Crew Cab/Chassis with Utility Body/Lift Gate to the Island of Maui. The Contractor shall present the vehicle complete, ready to use, and fully operational.

DETAILED SPECIFICATIONS FOR A FOUR-WHEEL DRIVE ONE TON CREW
CAB/CHASSIS WITH UTILITY BODY/LIFT GATE

1. Model/Year: One Ton Crew Cab/Chassis. 2026 or latest production
2. Type: 4-Wheel Drive. Single rear wheel axle.
3. GVW Rating: 5,216.4 kg (11,500 lbs.).
4. Wheelbase: 4,546.6 mm (179 inches) minimum.
5. Cab to Axle: 2133.6 mm (84 inches) minimum.
6. Engine:
 - a. Diesel powered, V-8 turbo, minimum 446 hp, minimum 580 foot pounds of torque.
 - b. Manual push-button engine-exhaust braking.
 - c. Emissions compliant, Tier 4, B20 Bio-Diesel compatible with no adverse effects.
 - d. Fuel/Water separator DAVCO Fuel Pro 382, or equivalent, B20-Diesel compatible.
 - e. Heavy duty cooling system.
 - f. Engine idle shut down, set at five (5) minutes. Engine shall not shut down when warning lights is operational.
 - g. Factory installed power steering.
 - h. Factory installed air condition.
 - i. Twelve (12) volt charging system, dual batteries, 410 amp alternator minimum, capable of charging battery at low engine speed.

7. Transmission:
 - a. Ten (10) speed automatic, minimum, with select shift.
 - b. Heavy duty transmission cooler.
 - c. Selectable drive modes.
8. Axles:
 - a. Front-manual locking hubs.
 - b. Rear- electronic locking
9. Suspension:
 - a. Extra Heavy Duty service suspension, required, front and rear.
10. Brakes:
 - a. Power or power assisted, four-wheel disc brakes.
 - b. Anti-skid brake system.
 - c. Roll stability control/traction control.
11. Cab/Interior:
 - a. Crew Cab.
 - b. Split bench front, full bench rear, seat belts for six (6) passengers.
 - c. Upholstery of manufacturer's standard vinyl/cloth material.
 - d. Interior rear-view mirror with glare control.
 - e. Power window/locks on all doors.
 - f. Floor covering vinyl/rubber with insulation, with floor mats.
 - g. Trailer tow mirrors, manually telescoping/folding with power/heated glass. Heated convex spotter mirror, integrated clearance lamps/turn signals.
 - h. AM/FM radio with hands free, reverse camera, factory installed.
 - i. Twelve (12) volt accessory outlet, up-fitter switches, gauge package.

- j. Rain guards or vent shades on all doors.
 - k. Platform running boards.
12. Body: Utility Body/Lift Gate, Knapheide Model 600 Series or equal
- a. 1/8-inch tread plate floor, tops and backs. Full seam continuous weld.
 - b. A-40 galvaneal compartments and doors.
 - c. 12-gauge bottom and end panels of compartments.
 - d. Six (6) cargo tie downs (D-Rings) recessed in floor.
 - e. 14-gauge inner partitions of compartments.
 - f. Doors shall be double panel with 14-gauge outside panels and have section reinforcements. Automotive type neoprene door seals.
 - g. Hinges shall be stainless steel continuous type.
 - h. Both street and curb side compartments from rear of cab- 35.25 inches x 40 inches (width x height), 44.75 inches (width), 27.25 inches x 40 inches (width x height).
 - i. All lathes shall be keyed alike.
 - j. LED type lights for stop/tail/turn/reverse/marker/compartments lighting. All wiring shall be harnessed.
 - k. G2 Tommy Lift Gate TP38, 589.6 kg (1,300 lbs.) capacity or equal. Dual hydraulic cylinders fully enclosed, lift shall be aluminum, with in cab shutoff switch, and additional bolt on 3-light LED, one (1) on each side lower of lift gate.
 - l. Power inverter 3,00 watts shall conform to UL458 Standards, NEMA 5-15R and OSHA requirements. Shall be wired in with four (4) GFCI outlets at rear of utility body. Shall include “battery saver” low voltage alarm/shutdown.
13. Bumpers:
- a. Standard front.
 - b. Rear ICC bumper with Class V rated tow receiver/safety chain anchors, two (2) inch ball/ three (3) inch pintle combination hitch, electric brake and trailer light connections.

14. Tires/Wheel:

- a. Tires and wheels shall meet manufacturer's and Federal GAWR requirements for GVW submitted, all terrain type tires.
- b. Full size spare mounted on under frame carrier.
- c. Jack and wheel wrench.
- d. No chrome/aluminum wheels, unless manufacturer standards.

15. Suspension:

- a. Extra Heavy-Duty axles, springs and shocks absorbers shall meet manufacturer and Federal GAWR requirements for GVW submitted.

16. Color:

- a. Oxford White or manufacturer's equal.
- b. Reflective chevron markings (reflexite or equal) on rear lift, Omaha orange and white (comparable to existing State Highways Division Fleet). Spray-on bed liner.

17. Other:

- a. Two (2) copies of operator's manual, one (1) copy each, shop repair manual, OEM part manual, book format/CD/DVD/Flash Drive.
- b. 2.2 kg (5 lbs.) ABC fire extinguisher mounted in cab.
- c. Reverse alarm.
- d. Fold down arrow board (MUTCD approved) thirty (30) inches by sixty (60) inches, with 25 lamps, visibility of .75 mile. To be mounted at rear of cab (front of utility body) to extend above cab roof to include all wiring and controls mounted in cab within drivers reach. In folded down position, arrow board shall not block view of warning lights and third brake light. A travel height placard shall be mounted on the dash. Automated by electric/hydraulic.
- e. Safety inspection, license, registration, and certificates as required in general specifications.
- f. Amber/White warning lights shall be mounted on center high stop light. No lights shall be mounted on top of cab. Four (4) additional, two (2) each amber/white warning lights shall be mounted in the front grill and on the rear of the utility body. Switching sequence as follows: #1- amber warning, #2 white warning lights

- (flashing). All switches shall be lighted type and mounted within console attached to the dash or mounted as part as part of OEM console with provisions to mount an external radio system.
- g. Two (2) work lights, one (1) on each rear corner, top of utility body. Lights shall be able to swivel. A lighted type switch shall be mounted within console attached to the dash or mounted as part of the OEM console.
 - h. First service kit shall include all filters required by manufacturer (oil, air, fuel, transmission, etc.).
 - i. Warranty shall be a minimum of 36 months/36,000 miles (to include all attachments).
 - j. First aid Kit (OSHA/ANSI recommended).
 - k. Road safety triangle kit and self-charging four pack kit, Aervoe Super LED Road flares, shall have yellow housing with red LED lighting. All housing and case shall be etched "STATE HIGHWAYS".
 - l. Two (2) sets, per vehicle, keys.

18. Training:

Upon request by receiving agency, contractor shall provide proper and safe operation and maintenance of vehicle. This training shall include a minimum of one (1) hour per operator hands on training. This service shall be provided at no additional cost to the State. Contractor shall provide classroom site. Training shall be consistent to OSHA requirements. Copy of attendance record showing class date, time, location, class type, instructor's name and attended shall be submitted to:

State of Hawaii
Department of Transportation
Highways
Construction and Maintenance Branch
Attn: Equipment Superintendent/Safety Coordinator
869 Punchbowl Street
Honolulu, Hawaii 96813

SECTION 28 - ONE TON CREW CAB, STAKE SIDE FLAT BED WITH LIFT GATE
AND ARROW BOARD

28.1- SCOPE OF WORK – The work consists of furnishing and delivering two (2) only, One Ton Crew Cab, Stake Side Bed with Lift Gate and Arrow Board, to the island of Maui. The Contractor shall present the vehicle complete, ready to use, and fully operational.

28.2- ONE TON CREW CAB, STAKE SIDE FLAT BED WITH LIFT GATE AND ARROW BOARD – The Specifications contained herein establish minimum standards (unless stated differently). Vehicle offered shall include any other standards features not listed but detailed in manufacture’s brochures and deemed necessary for proper and safe operation on vehicle.

DETAILED SPECIFICATIONS FOR A ONE TON CREW CAB, STAKE SIDE FLAT BED
WITH LIFT GATE AND ARROW BOARD.

1. Model/Year: One Ton Crew Cab, Stake Side Bed with Lift Gate, 2025 or latest production.
2. Type: 2-Wheel Drive. Dual Rear Wheels.
3. GVW Rating: 14,000 LBS. (6350 KG) minimum capacity.
4. Wheelbase: 172 inches (4368.8 mm) minimum.
5. Engine:
 - a. V8 Turbodiesel minimum
 - b. Common rail fuel system.
 - c. 470 HP (350 kW) @ 2800 rpm and 975 lb.-ft. (1322 Nm) @ 1600 rpm, minimum.
 - d. Heavy duty cooling system.
 - e. Engine exhaust brakes
6. Transmission: Eight (8) Speed minimum, Automatic Transmission with Selectable Drive Modes. Heavy Duty Transmission Cooler.
7. Axle: 3.73 gear ratio, Limited Slip Axle, minimum.
8. Electrical System: Dual Twelve (12) Volt Batteries, 220 Amp Alternator System, minimum.

9. Steering: Power

10. Brakes: Anti-lock, Power, Four Wheel Disc Brakes, minimum.

11. Cab/Interior:

- a. Crew Cab.
- b. Front Seat Black or Gray Cloth, 40/20/40 Split Bench, 20% Center Under Seat Storage, with Center Armrest, Cup Holder and Storage, Two-Way Adjustable Driver/Passenger Headrests, Manual Lumbar Seat.
- c. Rear Seat Full Bench Black or Gray Cloth, with Under Seat Storage Tray.
- d. Factory installed Air Conditioning
- e. Power front and rear power windows
- f. Interior rear-view mirror with glare control.
- g. Floor covering vinyl/rubber with installation, with All Weather Floor Mats.
- h. Trailer Brake Control.
- i. AM/FMMP3/Blue Tooth Capable Radio.
- j. 110V/400W Outlet

12. Exterior:

- a. Platform Running Boards
- b. Reverse Alarm
- c. Side Window Deflector Kit- Smoke
- d. Roof Marker/Clearance Lamps- Led
- e. Dual outer Mirrors with Spot Mirrors, on Swing out or Telescoping Brackets
- f. Complete Factory Towing Package. Type IV Under Carriage Tow Receiver, 3-inch Pintle Hook and 2- inch Ball Combination Receiver.

13. Stake Side Flatbed:

- a. Body Type: Ten (10) foot Stake Side Flatbed.
- b. Body Material: Steel
- c. Two (2) removeable 24" steel panels, one (1) per side on rear section of the flatbed.
- d. Two (2) Aluminum 48" x 16" x 13" (121.92 cm x 40.64 cm x 33.02 cm) above-body toolbox, one (1) per side mounted.
- e. Two (2) Aluminum 30" x 18" x 18" (76.2 cm x 45.72 cm x 45.72 cm) underbody toolbox, one (1) per side mounted.
- f. Floor Material: Steel Tread Plate
- g. Steel Headache Rack/Bulkhead
- h. Rub Rails
- i. Class 5 trailer hitch receiver, mounted

14. G2 Tommy Lift Gate TP38, 589.6 kg (1,300 lbs.) capacity or equivalent. Dual hydraulic cylinders fully enclosed, lift shall be aluminum, with in cab shutoff switch, and additional bolt on 3-light LED, one (1) on each side lower of lift gate.

15. Color:

- a. White, Dupont 93-96923 High Gloss Urethane or manufacturer's equal
- b. Chevron markings on lift gate, Omaha orange and white (comparable to existing State Highways Division Fleet).
- c. Vehicle shall be outlined with conspicuity material tape along the perimeter of bed. Conspicuity material shall be red and white (reflexite or equal).

16. Tire/Wheels:

- a. Wheels: 17 x 6.5-inch steel rims or manufacturer's standards
- b. Tire: all terrain type
- c. Full size spare mounted on under frame carrier
- d. Jack and wheel wrench, located in cab under rear seat.

17. Other:

- a. 5 lbs. (2.2 kg) ABC fire extinguisher mounted in cab
- b. First Aid Kit (OSHA/ANSI) recommended
- c. Road safety triangle kit, and self-charging four (4) pack kit, Aervor Super LED Road Flares, or equivalent, shall have yellow housing with red LED lighting. All housing and case shall be etched "STATE DOT HIGHWAYS".
- d. Reverse Alarm
- e. Operator's manual two (2) copies, Shop Repair manual one (1) copy, Parts manual one (1) copy. Book format/CD/DVD
- f. Complete after factory rustproof, minimum of seven (7) years unlimited mileage requirement, in accordance with Federal Specification 297A or its latest revision
- g. Complete factory towing/electrical. To include wire harness connector (vehicle and trailer end), under carriage tow receiver (Class 5), three (3) inch pintle hook and two (2) inch ball combination receiver. Shall have an electric trailer brake controller
- h. Complete factory gauge package
- i. Safety Inspection, License, Registration and Certificates as required in General Specifications. To include PUC certification (if over 10,000 lbs.)
- j. The lightbar system shall be a Whelen model FC0HIDOT, part no. 01-0684294-72 or equal. The lightbar shall be sixty (60) inches long minimum. The main structure of the lightbar must be an extruded aluminum I-Beam design. The lightbar shall house all electronic components. The lightbar must have Hi/Low power control of all inboard LED modules. The lightbar shall contain one (1) control module I/O board which must control all internal lightheads. The I/O board shall produce a minimum flash rate of 75 Comet flashes per minute with alternating corners, not an "X" pattern. There shall be ten (10) Scan lock flash patterns to choose from. Each pair of LED lamps must be capable of operating in a different flash pattern.

The lightbar shall have all linear LED modules and shall meet SEA-J845 Class 1 and SAE-J595 requirements. The lightbar shall have linear LED modules in four (4) corners. Each linear eighteen (18) corner module shall consist of a minimum of eighteen (18) high output LED's permanently mounted within a single dual (over/under) "removable" highly mirrored parabolic reflector for maximum light output. The eighteen (18) LED's shall be mounted in two (2) straight line of nine

(9) LED's each (over/under) for maximum light output. The linear reflector shall extend to the MR11 alley light with no appreciable open gap between the LED module on the alley light. The LED work light must be the same size module as used for the warning lights, but must consist of two (2) staggered rows of six (6) Super LED's and be able to flash and steady burn. All LED panels shall be the same design as the Linear eighteen (18) describes above, and must contain twelve (12) Super LED's (six (6) over six (6)). All inboard lighthoods must be 400 Series (this will allow for placement of this lighthouse in any inboard position). All LED inboard modules must produce a minimum 180 degree light pattern. The I/O module shall be 100% solid state with built-in reverse polarity protection and output short protection. The I/O board shall operate from 10-16 VDC with no degradation in flash rate. The lightbar shall be designed to have up to eight (8) lamps to the front, eight (8) lamps to the rear, and one (1) on each end. Each lamp module position shall have colored lens sections, independent of the others, that matches the color of the LED module. For split modules, clear lenses must be used. The LED panel must be mounted within the lightbar. The corner Linear LED's must have a two (2) intensity cruise light mode. This provides a lightbar that has illuminated corners (no flashing), which are used for marker lights.

The user shall have a choice of ten (10) Scan-Lock patterns to choose from the LED modules and four (4) Scan-Lock flash patterns for flashing work lights and flashing alleys. The pattern must be selected by an external connection, not requiring the user to open the lightbar to change flash patterns.

The lightbar shall have: Front-two (2) Corner Linear 18's (amber), eight (8) inboard Linear 12 LED's (six (6) amber/ two (2) white); Rear- two (2) corner Linear 18's (Amber), Six (6) inboard Linear 12 LED's (four (4) amber/ two (2) red), two (2) inboard staggered white TIR12 Super-LED modules for use as work lights; Ends- two (2) MR11 alley lights; additional, two (2) spare MR11 halogen replacement bulbs.

The lightbar shall be wired to function as follows: All amber warning LED's; all white warning LED's and flashing LED work light; left alley; right alley; flashing alley; LED work light steady; Hi/Low power. All switches shall be lighted type and mounted with a permanent label at the power source, marked "Light Bar". All cable and wiring shall be conduit protected and shall use grommets through sheet metal panels. Note: The rear bar red LED's must be separately wired for activation.

The four (4) corner Linear 18's must be identical and all other light heads must be 400 series. All internal light heads must snap into sliding brackets that are mounted in the light bar.

The light bar must contain a maximum of eight (8) screws, four (4) for each end cap to access all internal light heads. Light heads that require the removal of more than eight (8) screws to remove all internal light heads are unacceptable. Light

bars with modules mounted outside of the main light bar are not acceptable. The light bar shall contain a permanent mounting kit to prevent theft of the light bar and be laser etched "STATE DOT HIGHWAYS", lettering shall be 1.5 inches tall. Etching shall be at top of light bar on both ends, lettering to face out.

The light bar shall mounted on the headache rack and not on the roof of the truck, to prevent leaks.

- k. First Service Kit shall include all filters as required by manufacturer (oil, air, breather transmission, etc.)
 - l. Warranty shall be a minimum of 36 months/36,000 miles (to include all attachments).
 - m. Fold down arrow board (MUTCD approved) thirty (30) inches by sixty (60) inches, with 25 lamps, visibility of .75 mile. To be mounted at rear of cab (front of utility body) to extend above cab roof to include all wiring and controls mounted in cab within drivers reach. In folded down position, arrow board shall not block view of warning lights and third brake light. A travel height placard shall be mounted on the dash. Automated by electric/hydraulic, two (2) sets, per vehicle, keys.
18. Training:
Contractor shall provide proper and safe operation, maintenance of equipment. This training shall include a minimum of one (1) hour classroom and one (1) hour per operator hands- on training. This service shall be provided at no additional cost to the State. Contractor shall provide classroom site. Training shall be consistent to OSHA requirements.
Copy of attendance record showing class date, time, location, class type, instructors name and attendees shall be submitted to:
- State of Hawaii
Department of Transportation
Highways
Construction and maintenance Branch
Attn: Equip. Supt./Safety Coordinator
869 Punchbowl Street
Honolulu, HI 96813
19. Bidder(s) shall submit certified letter(s) from the manufacturer to certify the prospective bidder as the Factory Authorized Warranty Dealer (letter required for both chassis and equipment). Requested documents shall be submitted to the Project Manager within five (5) calendar days of the bid opening. Failure to submit certified letter(s) shall be sufficient grounds for rejection on bid.

SECTION 29 - THREE QUARTER (3/4) TON REGULAR CAB AND CHASSIS WITH
UTILITY BODY/LIFT GATE

29.1- SCOPE OF WORK - The work consists of furnishing and delivering one (1) only, Three Quarter (3/4) Ton Regular Cab and Chassis with Utility Body and Lift Gate, to the island of Maui. The Contractor shall present the vehicle complete, ready to use and fully operational.

29.2- THREE QUARTER TON (3/4) TON REGULAR CAB AND CHASSIS WITH
UTILITY BODY/LIFT GATE - The Specifications contained herein establish minimum standards (unless stated differently). Vehicle offered shall include any other standard features not listed but detailed in manufacturer's brochures and deemed necessary for proper and safe operation of vehicle.

DETAILED SPECIFICATION FOR A THREE QUARTER (3/4) TON REGULAR CAB
AND CHASSIS WITH UTILITY BODY/LIFT GATE:

1. Model/Year: Three Quarter (3/4) Ton Regular Cab and Chassis. 2026 or latest production.
2. Type: 4-Wheel Drive, Single Rear Wheel.
3. GVW Rating: 10,000 lbs. (4535.92 kg)
4. Wheelbase: 141.55-inches (3595.37 mm), minimum.
5. Engine:
 - a. Six (6) cylinder minimum turbo diesel.
 - b. Direct Injection with high-pressure common rail system, or equivalent.
 - c. Cast iron Block, Cast Aluminum, Overhead Valves, four (4) valves per cylinder, or equivalent.
 - d. Operate on Ultra-Low Sulfur Diesel.
 - e. Emissions system to include Exhaust Gas Recirculation (EGR), Diesel Particulate Filters (DPF), and Selective Catalytic Reduction (SCR) to meet emissions standards.
6. Transmission:
 - a. Eight (8) speed minimum automatic transmission
 - b. Transmission oil cooler.

7. Axle:
 - a. 3.42 Gear Ratio
 - b. Rear locking or Limited Slip
 - c. Four (4) Wheel Drive
8. Electrical:
 - a. Twelve (12) volt charging system
 - b. Dual 1100 CCA Batteries
 - c. 220-Amp Alternator, capable of charging at low engine rpm, minimum.
9. Steering: Power or Power Assisted.
10. Brakes:
 - a. Power Assisted, Four (4) Wheel Disc Brakes
 - b. Four (4) channel Anti-lock Braking System (ABS)
 - c. Integrated Trailer Brake Controller
 - d. Auto Grade Braking
11. Cab/Interior:
 - a. Regular Cab
 - b. Single Bench Seats to seat up to three (3) passengers with seat belts.
 - c. Vinyl seats
 - d. 12.3-inch Driver Information Center, reconfigurable digital gauge cluster.
 - e. AM/FM/Bluetooth Radio, Reverse Camera
 - f. 12-volt auxiliary power outlet, USB ports, Up-Lifter Switches, Gauge Package.
 - g. Power Windows and locks
 - h. Interior rear-view mirror with glare control

- i. Flooring cover vinyl/rubber with installation, with floor mats.
 - j. Dual outer mirrors with spot mirrors.
 - k. Rain Guards or vents shades on doors
 - l. Factory Installed AC
 - m. Side Steep Bars (both side of truck)
12. Knapheide Aluminum Service Body 600 Series or equal
- a. Raised Front compartment, passenger side of vehicle.
 - b. Modular cab guard
 - c. Compartment Lighting
 - d. Master Locking system
 - e. Aluminum Mechanic Drawers, drivers' side of vehicle.
 - f. Bottle Gas Retainer
 - g. All-In-One Mobile Power System
 - h. LED type lights for stop/turn/tail/revers/marker. All wiring shall be harnessed.
 - i. All locks keyed alike, two (2) spares.
 - j. Backup alarm
 - k. Truck bed liner
 - l. Service Body G2-54-1342-EA38 Series, capacity 1300 lbs. (589.6 kg) or equal. Dual hydraulic cylinder's enclosed unit. Lift shall be Aluminum. Curb-side fixed control, timer deactivates 90 seconds after last operation. Load Area of 49-inches by 38-inches.
13. Tires/Wheels:
- a. Tires and wheels shall meet manufacturer's and Federal GAWR requirements for GVW submitted, all terrain type.

b. Full size spare mounted on under frame carrier.

c. Jack and wheel wrench.

14. Color:

a. White, High Gloss Urethane or manufacturer's equal.

b. Reflective chevron markings (reflexite or equal) on rear lift, Omaha orange and white (comparable to existing State Highways Division Fleet). Spray on bed liner.

15. Other:

a. Operator's Manual two (2) copies, Shop Repair Manual one (1) copy, Parts Manual one (1) copy. Book format/CD/DVD/Flash Drive.

b. 5 lbs. (2.2 kg) ABC fire extinguisher mounted in cab.

c. Reverse Alarm

d. Safety Inspection, License, Registration and Certificates as required in General Specification.

e. Complete after factory rust proofing, with minimum seven (7) years unlimited mileage requirement warranty, in accordance with Federal Specifications 297A or its latest revision.

f. The light bar system shall be a Whelen Model HIDOTF4W0 with photocell or equal. The light bar shall be sixty (60) inches long, minimum and mounted on the Modular cab guard (not on the cab roof). The light bar shall house all electronic components. The light bar must have Hi/Low power control of all inboard LED modules. The I/O board shall produce a minimum flash rate of 75 comet flashes per minute with alternating corners, not an "X" pattern. There shall ten (10) scan lock flash patterns to choose from. Each pair of LED lamps must be capable of operating in a different flash pattern. The light bar shall have all linear LED modules and shall meet SAE-J845 Class 1 and SAE-J595 requirements. All LED inboard modules must produce a minimum 180-degree light pattern. The I/O modules shall be 100% solid state with built in reverse polarity protection and output short protection. The I/O board shall operate from 10-16 VDC with no degradation in flash rate. Shall have switch controller Whelen PCC10W or equal.

The light bar shall be programmed/wired for a rear lower duplex traffic advisor function. Switching sequence as follows: #1-Amber Warning; #2-White Warning Lights (flashing); #3- Red Rear Warning Lights (flashing); #4- Left Alley; #5- Right Alley; #6- Rear Work Lights (steady burn); #7- Cruise Light Corners (steady burn);

#8- Traffic Advisor Left; #9- Traffic Advisor Right; #10- Front Work Lights (steady burn); Note, #8 and #9 together will activate split traffic advisor by turning on both left and right traffic advisor buttons at same time.

All switches shall be lighted type and mounted within a console attached to the dash or mounted as part of OEM console, with provisions to mount an external radio system. Light bar cable must be brought to the power source with a fuse (thermal circuit breakers shall be rejected).

Power cable shall be labeled with a permanent label at the power source, marked "light bar". All cable and wiring shall be grommet protected and shall use grommets through sheet metal panels.

The four (4)-corner linear 18's must be identical and all other inboard light heads must snap into sliding brackets that are mounted in the light bar. The light bar shall contain a permanent mounting kit to prevent theft of light bar and be laser etched "STATE DOT HIGHWAYS", lettering shall be 1.5 inches tall. Etching shall be at top of the light bar on both ends, lettering facing out.

- g. First Service Kit shall include all filters as required by manufacturer (oil, air, fuel, transmission, etc.).
- h. Warranty shall be a minimum of 36 months/36,000 miles (to include all attachments).
- i. First Aid Kit (OSHA/ANSI recommended).
- j. Road Safety Triangle kit and self-charging four (4) pack kit, Aervoe Super LED Road Flares, or equivalent, shall have yellow housing with red LED lighting. All housing and case shall be etched "STATE DOT HIGHWAYS".

16. Training:

Upon request by receiving agency, Contractor shall provide proper, safe operation and maintenance of vehicle. This training shall include a minimum of one (1) hour classroom and one (1) hour per operator hands on training. This service shall be provided at no additional cost to the State. Contractor shall provide classroom site. Training shall be consistent to OSHA requirements. Copy of attendance record showing class date, time, location, class type, instructor's name and attendees shall be submitted to:

State of Hawaii
Department of Transportation
Highways
Construction and Maintenance Branch
Attention: Equipment Superintendent/Safety Coordinator
869 Punchbowl Street
Honolulu, HI 96813

SECTION 30 - CAB/CHASSIS WITH 12 CUBIC YARD DUMP BODY

30.1- SCOPE OF WORK - The work consists of furnishing, delivering, one (1) only, Cab/Chassis with 12 Cubic Yard Dump Body, to island of Molokai. The Contractor shall present the vehicle/equipment complete, ready to use and fully operational.

30.2- CAB/CHASSIS WITH 12 CUBIC YARD DUMP BODY - The Specifications contained herein establish minimum standards (unless stated otherwise). Vehicle/equipment offered shall include any other standard features not listed but detailed in manufacture's brochures and deemed necessary for proper and safe operation of vehicle/equipment.

DETAILED SPECIFICATIONS FOR CAB/CHASSIS WITH 12 CUBIC YARD DUMP BODY

1. Model/Year: Cab/Chassis with 12 Cubic Yard Dump Body, 2025 or Latest production.
2. GVW Rating: 66,000 lbs. (29,937.6 kg) maximum capacity.
3. Wheelbase: 172 in. (4,368.8 mm).
4. Cab to Axle: 108 in. (2,743.2 mm).
5. Axle to Frame: 53 in. (1,346.2 mm).
6. Engine:
 - a. Diesel powered, wet sleeved engine or dry sleeved engine with ten (10) year unlimited warranty. Current Emissions certified, tier 4.
 - b. Liquid cooled with deaeration system with tank and sight glass. Full radiator guard. Silicon cooling system hoses.
 - c. Six (6) cylinders.
 - d. 485 HP, 1,850torque lb. ft @1,200 RPM, minimum.
 - e. Fuel water separator with sight bowl. DAVCO Fuel Pro 483, or equivalent.
 - f. Magnetic engine oil drain pan.
 - g. Idle shut down timer.
 - h. Engine oil temperature gauge.
 - i. Throttle hand control, electronic mounted at instrument panel.

- j. Air cleaner restriction gauge.
 - k. Electronic governor.
 - l. Engine shutdown, key operated.
 - m. Full flow spin-on oil filter.
 - n. Fuel filter, engine mounted.
7. Exhaust:
- Single vertical muffler and exhaust pipe with protective shield (down to frame), and rain cap. After treatment device, frame mounted. Two (2) position exhaust switch to inhibit diesel particulate filter and regeneration as long as switch is “on” position.
8. Transmission:
- a. Automatic, Six (6) speed (Allison 4500RDS or equal); magnetic drain plug.
 - b. Heavy Duty Oil cooler.
 - c. Transmission shift control – push button with lockout.
 - d. PTO: Hot shift PTO with piggyback pump.
 - e. Transmission oil pressure gauge.
9. Axle:
- a. Front: 18,000 lbs. (8,164.8 kg) capacity, minimum.
 - b. Rear: 46,000 lbs. (20,865.6 kg) capacity, minimum tandem single reduction with 200-wheel end. Magnetic drain plugs. Air operated power divider lock, cab controlled with indicator light. Traction control.
 - c. Pucher: Neway Model LSZ13 Auxiliary Steerable Lift Axle Suspension System (Part No. LSZ1310AAEE) 13,500 lbs. (6,123.6 kg) capacity. In-cab air controlled (Part No. 90560171)
10. Suspension:
- a. Front: 20,000 lbs. (9,072.4 kg) heavy duty capacity, minimum.

- b. Rear: 46,000 lbs. (20,865.6 kg) capacity, minimum. Hendrickson HAULMAAX, HMX460 or Chalmers 800 series model 800-46, or equivalent, fifty-four (54) inch axle spacing.
- c. Note: Front and rear springs shall not bottom out at maximum vehicle load capacity set by the manufacture (the State carrier's various materials at various weights).

11. Shoch Absorbers: Heavy duty fronts and rears.

12. Wheels/Tires:

- a. Front: 22.5 x 9.00, hub piloted DC rims with steel hubs or similar.
- b. Front: 315/80R 22.5 L, 20 ply, load range L or similar.
- c. Rear: 22.5 x 8.25, hub piloted DC with steel hubs or similar. To include pusher axle.
- d. Rear: 1R 22.5 H, 16 ply, load range H, highway traction or similar. To include pusher axle. Dual rear wheels shall be able to accept any brand of tire; tires shall not touch when inflated and loaded.
- e. One (1) each spare tire and wheels for front and rear.

13. Brakes:

- a. Dual air system with minimum 18.0 cubic feet compressor, with air dryer and pressure gauge with low air warning buzzer.
- b. Retarder- Telma or Klam Retarder or equal, driveline mount with handle lever positioner and foot brake application.
- c. Parking- Piggyback, spring actuated, double diaphragm; Anchor lock, MGM or equal, S-cam.
- d. Safety spring loaded on rear axle, cab-controlled emergency air tank for release.
- e. Trailer hand control brake lever mounted on steering column and tractor protection valve.
- f. Anti-lock brake system; Traction control.
- g. Front and rear disc brake for severe duty application.

14. Steering: Powered

15. Electrical:

- a. Three (3), twelve (12) volt batteries. AMG type batteries shall have the rating of 2400 CCA, minimum.
- b. Alternator- 200 amp minimum, capable of charging at low engine speed.

16. Cab:

- a. Aluminum or steel conventional cab with tilt hood and ten (10) year warranty.
- b. Complete head lining.
- c. Clear safety glass on rear window (full width) shall have manufacture installed or custom-built right door peep window and rear quarter/rear windows both sides of cab (these windows shall provide additional visibility for the operator's safety of the vehicle.
- d. Individual seats for driver and passenger with safety belts, driver's seat shall be air suspension type (Bostrom Freedom XL or equal), with adjustable mechanical lumbar support, front cushion adjustment, vinyl material. Passenger seat shall be two (2) - man passenger, vinyl seat.
- e. Steps and grab handles located both sides of cab, to allow for three (3) point contact upon entering or disembarking from cab.
- f. Rubber floor mats.
- g. Sun visor, driver and passenger.
- h. Factory installed air condition, heater, defroster and vent system.
- i. AM/FM/Bluetooth radio, hands free system, reverse camera.
- j. Power windows and door locks.

17. Chassis Frame: Heat treated alloy steel (110,000 psi yield), double frame
2,594,000 RBM.

18. Dump Body:

- a. Rock Dump, 12 cubic yard, minimum.
- b. 15 ft. length x 87 in. width x 42 in. height (4,572 mm x 2,209.8 mm x 1,066.8 mm).
- c. Headboard, sides, floor and tailgate- ¼ in (6.35 mm), minimum.

- d. Headboard with half cab shield fully (continuous) welded between dump body and headboard.
- e. Grab bars on both sides front top of box, grab bar outside of box on both sides above rear tires.
- f. Horizontal and vertical bracing.
- g. Dump box shall be equipped with the following: 8 in. (203.2 mm) spreader apron, six (6) lashing hooks on each side of box and two (2) lashing hooks on tailgate. Flat (not angled) running board or catwalk to extend out along each bottom side of box with safety threads or a painted-on slip coating (no metal grating), 42 in (1,066.8 mm) high tail gate.
- h. Air tailgate release and power tailgate with controls in cab. Tailgate shall be multi-function (traditional dump through, sliding and high lift).
- i. Automated pull trap load cover, retractable, with steel protection cover.
- j. Safety step ladder slides out left and right side, ladders welded front and rear on both sides of dump box.
- k. Shall be lined inside with spray on liner minimum of ¼ in. (.25 mm) thickness. Liner shall be compatible with hot/cold asphalt.

19. Hoist:

- a. 42-ton minimum capacity, NTEA class 120, front mounted telescopic.
- b. Under-body mounted with safety locks and props.
- c. Control lever with safety lock mounted on floorboard of cab (right side of driver's seat).
- d. Six (6) in. diameter cylinder, three (3) stage, 138 in. stroke, minimum.

20. Bumper:

- a. Heavy duty front bumper.
- b. One (1) or two (2) hooks mounted on front bumper or chassis front frame.

- c. Pintle hook with two (2) “D” rings, a Holland Hitch PH300 with air operated plunger or equal. Mounted on rear “A” bracket frame. Center of hitch to be mounted approximately 26 in. (660.4 mm) from ground level with additional installation height of 30 in. (762 mm).

21. Preparation: All bare metal shall be treated with OSPHO and primed prior to application of finish coat on dump body.

22. Other:

- a. Dual step-type fuel tank, 50 gal. (189.3 L), minimum capacity each, with additional swing step.
- b. Full radiator gravel guard.
- c. Air horn.
- d. Glad hands and plumbing with electrical wire connection (Warner 13-281-001 or Equal) mounted at rear. To include electric trailer brake control.
- e. Instrument panel:
- f. Gauges: coolant temperature, fuel, tachometer, amp meter, oil pressure, air pressure and hour meter.
- g. Parking brake control dash mounted.
- h. Water in fuel warning light and buzzer, low oil pressure, low coolant level and high coolant temperature.
- i. Twelve (12) volt accessory outlet.
- j. Mirrors: Powered dual exterior rear view mirrors (aluminum or stainless-steel backs/brackets or no-corrosive composite type), 6 in. x 16 in. (152.4 mm x 406.4 mm) minimum, west coast type or equal, with convex bottom section. Shall have a down view mirror on passenger door.
- k. 18 in. x 18 in. x 42 in. (457.2 mm x 457.2 mm x 1,066.8 mm) frame mounted weatherproof aluminum lockable tool box.
- l. Clearance lights, reflectors, identification lights and directional lights shall conform with PUC regulations. Lights shall be LED type.
- m. Electronic reverse alarm.
- n. One (1) 5 lbs. (2.2 kg) ABC dry chemical fire extinguisher mounted in cab.

- o. Road safety triangle kit and four (4) pack kit Aervor Super LED Road flares shall have yellow housing with red LED lighting. All housing and case shall be etched “State DOT Highways”.
- p. LED light system Whelen Model DOT3710D, or equivalent, to include two (2) stainless steel Micro 400, installed on dump headboard shield, two (2) rectangular 7-gauge welded steel housings installed on rear of dump body, one (1) on each side, containing two (2) 700 series amber linear strobe light heads, one (1) on each side, two (2) 700 series red LED brake/turn/tail light heads, one (1) each side, two (2) 700 series clear back up lights, one (1) on each side, one (1) standard PCC4W lighted switch panel with diagnostic indicator installed in or under dash, within easy reach of driver. Waterproof, oil, and corrosion resistant TPR cables with waterproof connectors shall be installed with above system. AMECA certified to SAE standards and/or minimum specifications.
- q. Color- Shall be “State Buff” Sherwin Williams 62A-7603-00 high gloss urethane or equal. Chevron marking on tailgate- Omaha orange and white (comparable to existing State Highways Division fleet). Vehicle shall be outlined with conspicuity material tape along the perimeters. Conspicuity material shall be red and white (reflexite or equal).
- r. Complete after factory rust proofing with minimum seven (7) year, unlimited mileage requirement warranty. In accordance with Federal Specifications 297A at its latest revision.
- s. PUC Certification, License, Registration and Certificates as required in General Specifications.
- t. Vehicle shall conform to Code of Federal Regulations, Title 40, Part 85, Control of Air Pollution from NEW Motor Vehicle Safety Standards.
- u. Vehicle shall conform to all applicable State, Federal and OSHA requirements, necessary for licensing, registration and certification purposes.
- v. Technical Resources: One (1) copy of Repair Manual, one (1) copy of Parts Catalog, two (2) copy of Operator’s Manual. CD/DVD/Book Format.
- w. First service kit shall include all required filters (oil, fuel, air, breather, transmission, etc.).
- x. One (1) each DAVCO Shop Pro Model Part No. 782050DAV01-07, or equivalent, with regulator, filtration equipment. To include manufactures training for mechanics.
- y. First Aid Kit OSHA/ANSI recommended.

- z. Upon “Notice to Proceed”, Contractor shall submit “Application” (To State Motor Vehicle Safety Office) to meet the requirements of Section 286-202 (12), Hawaii revised statutes, for approval of a major modification. Construction or reconstruction of a vehicle with a gross weight rating (GVWR) of 10,001 pounds and above.

Application is available at:

State of Hawaii
Department of Transportation
Highways
Motor Vehicle Safety Office
601 Kamokila Boulevard, #511
Kapolei, Hawaii 96707

23. Training:

Contractor shall provide proper and safe operation, maintenance of equipment. This training shall include a minimum of one (1) hour classroom and one (1) hour per operator hands-on training. This service shall be provided at no additional cost to the State.

Contractor shall provide classroom site. Training shall be consistent to OSHA requirements. Training shall include manufacturer training for mechanics on the DAVCO filtration equipment.

Copy of attendance record showing class date, time, location, class type, instructors name and attendees shall be submitted to:

State of Hawaii
Department of Transportation
Highways
Construction and Maintenance Branch
Attn: Equipment Superintendent/Safety Coordinator
869 Punchbowl Street
Honolulu, HI 96813

24. NOTE:

The new unit shall be capable of carrying the factory rated capacity without adverse effects. The unit shall be designed for both highway and off-road hauling and dumping of various materials (density and weight).

Bidder(s) shall submit with their bid a certified letter(s) from the manufacturer(s) to certify the prospective bidder as the Factory Authorized Warranty Dealer (Letter required for both chassis and equipment). Failure to submit certified letter(s) shall be sufficient grounds for rejection of bid.

SECTION 31 - 30-TON TELESCOPIC CRANE

31.1- SCOPE OF WORK - The work consists of furnishing and delivering 1 (one), 30-Ton Telescopic Crane to the island of Maui. The Contractor shall present the vehicle complete, ready to use and fully operational.

31.2- 30-TON TELESCOPIC CRANE - The Specifications contained herein establish minimum standards (unless stated differently). Vehicle offered shall include any other standard features not listed but detailed I manufacturer's brochure's and deemed necessary for proper and safe operation of vehicle.

DETAILED SPECIFICATION FOR 30-TON TELESCOPIC CRANE

1. Model/Year: 30-Ton Telescopic Crane, 2026 or latest production.
2. Type: Flatbed/Platform Body with Lift/Pull Device/Crane.
3. Expected Front Axle(s) Load: 20,000 LBS. (9,071 KG.).
4. Expected Rear Drive Axle(s) Load: 40,000 LBS. (18,143 KG.).
5. Expected Gross Vehicle Weight Capacity: 60,000 LBS. (27,215 KG.).
6. Expected Gross Combination Weight: 80,000 LBS (36,287 KG.)
7. Wheelbase: 261-inches (662 cm) minimum, 270-inches (685 cm) maximum.
8. Cab to Axle: 195-inches (495 cm) minimum, 204-inches (518 cm) maximum.
9. Engine:
 - a. Diesel powered, Emissions compliant, Tier 4, shall be B20 Bio-Diesel compatible with no adverse effects.
 - b. 370 HP @2100 RPM, 1250 LB-FT @ 1200 RPM.
 - c. Heavy-Duty cooling system.
 - d. Turbocharged 18.7 CFM Air Compressor with Internal Safety Valve.
10. Transmission:
 - a. Allison 3000 RDS, or equivalent, Automatic Transmission with PTO provision.
 - b. Heavy-Duty water to oil transmission cooler.

- c. Synthetic Transmission Fluid (TES-295 Compliant).
- d. Push Button Electronic shift control, Dash Mounted.

11. Front Suspension:

- a. 20,000 LBS. Taperleaf Front Suspension.
- b. Graphite Bronze Bushing with Seals.
- c. Front Shocks.

12. Rear Axle:

- a. 40,000 LBS. R-Series Tandem Rear Axle.
- b. 5.86 Rear Axle Ratio.
- c. Iron Rear Axle Carrier with Optional Heavy-Duty Axle Housing.
- d. Driver Controlled Traction Differential, Both Tandem Rear Axle.

13. Rear Suspension:

- a. 40,000 LBS. Rear Suspension.
- b. Ride Height of 10.50-inches.
- c. Rear shock Absorbers, 2 (two Axles).

14. Brake System:

- a. Wabco 4S/4M ABS, or equivalent.
- b. Reinforced Nylon, Fabric Braid and Wire Braid Chassis Air Lines.
- c. Fiber Braid Parking Brake Hose.
- d. Relay Valve with 5-8 PSI Crack Pressure, No Rear Proportioning Valve.
- e. BW AD-9 Brake Line Air Dryer or equivalent.
- f. Pull Cable on Wet Tank, Petcock Drain Valves on all other air tanks.

15. Electrical Systems:

- a. 12-volt, 160-amp 28-SI Quadramount Pad Alternator, or equivalent, with Remote Battery Volt Sense.
- b. Singal Battery Box Frame Mounted Left-hand Side Back of Cab.
- c. Standard Battery Jumpers.

16. Tires/Wheels:

- a. Front- Continental, HAC3 425/65R22.5, 20 Ply Radial Tire, or approved equivalent.
- b. Alcoa LVL One 82462x22.5x12.25 10 Hub Pilot 4.68 Inset 10-Hand Aluminum Disc Front Wheels, or approved equivalent.
- c. Rear- Continental HDR2+ 11R22.5 14 Ply Radial Tire, or approved equivalent.
- d. Alcoa ULA18x 22.5x8.25 10-Hub Pilot Aluminum Disc Rear Wheels or approved equivalent.
- e. Front and Rear Mounting Nuts.
- f. 1 (one) each, Spare Tire for Both Front and Rear.

17. Steering: Power or Power Assisted.

18. Cab Exterior:

- a. 108-inch BBC Flat Roof Aluminum Conventional Cab.
- b. Left- and Right-Hand Grab Handles.
- c. No noise Shield-engine Compartment.
- d. Fiberglass Hood.
- e. Singal 14-inch Round Hadley Air Horn.
- f. Single Electric Horn.
- g. Rear license Plate Mount end of Frame.
- h. Front Headlights shall be Halogen. Front Turn, all Side and Clearance Marker Lights, Rear Stop, Turn, Tail and Reverse Lights shall be all LED.

- i. Door mounted, Bright Finish Mirrors with Convex mirrors with Left and Right remote.
- j. Composite Exterior Sun Visor.
- k. 2 Gallon (8 Liter) Windshield Washer Reservoir, Cab Mounted, Without Fluid Level Indicator.
- l. Electric Powered Windows.

19. Cab Interior:

- a. Factory Installed A/C and Heater.
- b. Basic High Back Air Suspension Driver Seat, with Dual Armrest, Mechanical Lumbar and Integrated Cushion Extension. Basic High Back Non-Suspension Passenger Seat, with No Armrest. Both Driver and Passenger Seat shall be covered in Black Vinyl.
- c. Premium LED Cab Lighting.
- d. Electric Door Locks.
- e. Black Seat Belts with Driver Indicator Light and Audible Alarm.
- f. Adjustable Tilt and Telescoping Steering Column.
- g. Black Floor Mats.
- h. Dash Mounted 12 Volt and Dual USB-C Outlet.
- i. Digital Alarm Clock in Driver Display.
- j. Electronic Accelerator control.
- k. Low Air Pressure Indicator Light and Audible Alarm.
- l. Dual Needle Primary and Secondary Air Pressure Gauge.
- m. Fully Configurable Center Instrument Panels.
- n. AM/FM/Bluetooth Radio. Reverse Camera.
- o. Electric Gauges- Fuel, Engine Coolant Temperature, Engine Oil Pressure, Transmission Oil Temperature.

- p. PTO Controls for Enhanced Vehicle Electric/Electronic Architecture.
- q. Engine and Trip Hour meters Integral within Driver Display.

20. Crane Specification:

- a. 30 Ton lifting Capacity, 30102C A-Frame Chassis, or equal.
- b. Front A-Frame Outrigger, Rear Out and Down Outrigger. Equipped with Double-Acting hydraulic Cylinders, large Pivoting Pads and Audible Alerts when Outriggers/Stabilizers are in motion.
- c. Dual operator Stations Equipped with Engine Start/Stop, Foot Throttle, Signal Horn, Boom Angle Indicator, load Chart and Range Diagram.
- d. 2 (two) Speed Planetary Hoist, Grooved Drum and Tapered Flanges.
- e. 102 ft. (31 m), 4 Section Proportional Boom.
- f. Front Bumper Stabilizer to allow 360-degree work.
- g. Main Winch Cable Diameter: 9/16 in. (14 mm) Rotation Resistant.
- h. Main Winch: Bent axis 2-Speed Hydraulic Motor (Activated Electrically).
- i. 2 Part Line, Single Sheave Block.
- j. Hydraulic Reservoir Capacity: 70 gal. (284 l).
- k. Weather-resistant Electrical System.
- l. Externally Wired LMI with Crane Function Cut-Offs for Overload Protection.
- m. Externally Wired Anti-Two Block System.
- n. Aluminum 2-Person Man Basket.
- o. Aluminum Toolbox: Length-48 in. (1219 mm) by Width-24 in. (610 mm) by Height-24 in. (610 mm).
- p. Steel Bed.

21. Paint:

- a. Cab Color: White, High Gloss Urethane or manufacturer's equal.
- b. Chassis Color: Black High Solid Urethane or manufacturer's equal.
- c. Crane Color: Manufacturer's standard.

22. Other:

- a. Operator's manual 2 (two) copies, Shop Repair and Parts Manual 1 (one) copy each. Book Format/CD/DVD.
- b. 5 LBS. (2.2 kg) Fire Extinguisher mounted in cab.
- c. First Aid Kit (OSHA/ANSI recommended)
- d. Road Safety Triangle Kit and Self-Charging Four Puck Kit. Aervoe Super LED Road Flairs shall have yellow housing with red LED lighting. All housing and case shall be etched "STATE DOT HIGHWAYS".
- e. Reverse Alarm.
- f. Safety Inspection, License, Registration and Certificates as required.
- g. Complete Factory Rust Proofing with Manufacturer Warranty.
- h. The light bar system shall be a Whelen Model HIDOTF4W0 with photo cell or equal. The bar be 60 (sixty) inches long minimum. The light bar shall house all electronic components. The light bar must have Hi/Low power control of all inboard LED modules. The I/O board shall produce a minimum flash rate of 75 comet flashes per minute with alternating corners, not an "X" pattern. There shall be 10 (ten) scan lock flashes patterns to choose from. Each pair of LED lamps must be capable of operating in a different flash pattern. The light bar shall have all linear LED modules and shall meet SAE-J845 Class I and SAE-J595 requirements. All LED inboard modules must produce a minimum 180 degree light pattern. The I/O module shall be 100 percent solid state with built in reverse polarity protection and output short protection. The I/O board shall operate from 10-16 VDC with no degradation in flash rate. Shall have a switch controller Whelen PCC10W or equal. The light bar shall be programmed/wired for a rear lower duplex traffic advisor function. Switching sequence as follows: #1- Amber warning, #2- White warning lights (flashing), #3- Red rear warning lights (flashing), #4- Left ally, #5- Right ally, #6- Rear work lights steady burn, #7- Cruise light corner steady burn, #8- traffic advisor left, #9- traffic advisor right, #10- Front work lights steady burn. Note, #8 and #9 will activate split traffic advisor by turning both left and right traffic advisor buttons at the same time.

All switches shall be lighted type and mounted within a console attached to the dash or mounted as part of OEM console, with provisions to mount an external radio system. Light bar power cable must be brought to the power source with a fuse (thermos circuit breaker shall be rejected). All cable and wiring shall be grommet protected and shall use grommets through sheet metal panels.

The four-corner linear 18's must be identical and all other inboard light heads must be 400 series. All internal light heads must snap into sliding brackets that are mounted in the light bar. The light bar shall contain a permanent mounting kit to prevent theft of the light bar, and be laser etched "STATE DOT HIGHWAYS", lettering shall be 1.5 inches tall. Etching shall be at top of light bar on both ends, lettering to face out.

- i. First Service Kit shall include all filters as required by manufacturer (oil, air, breather, fuel, transmission, etc.).

23. Training:

Contractor shall provide initial training at time of delivery for proper and safe operation and maintenance of vehicle/equipment and refresher training 1 (one) year after initial delivery. This training shall include a minimum of 1 (one) hour classroom and 1 (one) hour per operator hands on training. This service shall be provided at no cost to the State. Contractor shall provide classroom site. Training shall be consistent to OSHA requirements.

Copy of attendance record showing class date, time, location, class type, instructor's name and attendees shall be submitted to:

State of Hawaii
Department of Transportation
Highways
Construction and Maintenance Branch
Attention: Equipment Superintendent/Safety Coordinator
869 Punchbowl Street
Honolulu, HI 96813

SECTION 32 - UTILITY TRACTOR WITH REAR MOUNTED DITCH
BANK FLAIL MOWER

32.1- SCOPE OF WORK- The work consists of furnishing and delivering one (1) Utility Tractor with Rear Mounted Ditch Bank Flail Mowers to the island of Lana'i. The contractor shall present the equipment complete, ready to use and fully operational.

32.2- UTILITY TRACTOR WITH REAR MOUNTED DITCH BANK FLAIL MOWER- The specifications contained herein establish minimum standards for the Utility Tractor with Rear Mounted Ditch Bank Flail Mower and shall include any other standard features not listed but detailed in manufacture's brochures and deemed necessary for proper and safe operation of the equipment.

DETAILED SPECIFICATION FOR A UTILITY TRACTOR WITH REAR MOUNTED
DITCH BANK FLAIL MOWER

1. Model/Year: Utility Tractor, 2025 or latest production.
2. Type: 4-Wheel Drive
3. Engine:
 - a. 4-cylinder, Turbo diesel charged
 - b. Diesel powered, Emission compliant, Tier 4, shall be B20 Bio-Diesel compatible with no adverse effects.
 - c. Liquide cooled
 - d. Common Rail Direct Injection
 - e. Rated engine power HP: 92.5 HP (69.0 kw), minimum
4. Transmission:
 - a. Manufacturer's standard synchromesh 12 x 12 with shuttle, minimum, or equal
 - b. Differential Lock: Limited slip Front/Mechanical Rear
5. Electrical:
 - a. Twelve (12) volt system, 80 Amp Alternator
 - b. Alternator capable of charging at low engine speed

6. PTO: Live-independent PTO, electro-hydraulic clutch with brake, with a horsepower rating of 540HP, minimum.
7. Steering: Manufacturer's standard, Hydrostatic Power Steering
8. Brakes: Manufacturer's standard service and parking brake system
9. Tires:
 - a. Front- 11.2-24 R1, mounted on compatible rims
 - b. Rear- 18.4-28 R1, mounted on compatible rims
 - c. Spares- Same size front and rear, one (1) each
10. Hydraulic: Manufacturer's standard
11. Cab:
 - a. Enclosed cab shall meet OSHA requirements; with factory installed air conditioning
 - b. Front and rear safety approved glass with electric wiper motor and washer
 - c. Reverse warning alarm
 - d. Horn
 - e. Interior rear-view mirror: two (2) exterior mirrors mounted on the right and left side of the cab
 - f. Working and traveling lights- headlights, LED hazardous flashing lights front/rear, LED directional signals front/rear, LED combination tail/brake lights, four (4) LED work lights, Front- two (2) each on cab above front windshield. Rear- two (2) each mounted rear of cab above rear window.
 - g. Super LED Mini Light Bar, twelve (12) volt, clear dome (Whelen MC11PCA class I or equal) mounted on top of cab, to include limb guards (if available)
 - h. SMV (slow moving vehicle) emblem, mounted rear of equipment
 - i. Factory installed A/C
 - j. First Aid kit OSHA/ANSI recommended

- k. 5 lbs. (2.2 kg) ABC fire extinguisher mounted in cab
 - l. Factory installed Bluetooth AM/FM
 - m. Air suspension operators' seat with 15-degree swivel
 - n. Instructors seat
12. Rear Mounted OFM26 Series Offset Flail Mower or equal
- a. Mowing width: 60-inches
 - b. Overall Deck width
 - c. Overall Depth: 85-inches
 - d. Distance from centerline of 3-point to outer edge of deck: 22-1/2-inches
 - e. Electronically balanced rotor with 20 hammer style blades (3.5 lbs. each) capable of cutting 2" (5cm) brush and small saplings. With one (1) set of spare blades.
 - f. Flail head with floating Capabilities and the ability to rotate from horizontal to 65 degrees up or down to cut uneven slopes or ditches
 - g. Counter-blade to assist of shredding material into fine particles.
 - h. Replaceable skid shoes
13. Other:
- a. List of factory trained and authorized personnel who will provide service.
 - b. Tractor shall have a 5 (five) year warranty on drive train, axles and cutter gear box.
 - c. List of scheduled items/systems which require maintenance by factory authorized.
 - d. Counterweight: Manufacturer recommended; shall be provided to balance equipment at a 5 (five) degree slope when cutting unit is extended.
 - e. Operators Manual, 2 (two) copies. Service/Repair Manual, Parts Catalog; 1 (one) copy each (for tractor and rear flail mower). Book format/CD/DVD/Flash Drive.
 - f. First service kit to include all necessary filters as required. (Oil, Fuel, Air, Breather, etc.)

- g. 2 (two) sets of keys.
- h. Slope indicator.
- i. Complete vandalism protection package at all service/cab/dash/fuel points and to be keyed alike.

14. Training:

Contractor shall provide initial training at time of delivery for proper operations and maintenance of equipment and refresher training 1 (one year after initial delivery). This training shall include a minimum of 1 (one) hour classroom and 1 (one) hour per operator hands on training.

Contractor shall provide classroom site. This training shall be at no cost to the State. Training shall be consistent to OSHA regulations.

Copy of attendance record showing class date, time, location, class type, instructor's name and attendees shall be submitted to:

State of Hawaii
Department of Transportation
Highways
Construction and Maintenance Branch
Attention: Equipment Superintendent/Safety Coordinator
869 Punchbowl Street, Room 404
Honolulu, Hawaii 96813

SECTION 33 - UTILITY TRACTOR WITH DETACHABLE REAR MOUNTED FLAIL MOWER AND DETACHABLE REAR MOUNTED BOOM MOWER

33.1- SCOPE OF WORK- The work consists of furnishing and delivering one (1) each Utility Tractor Mower with Detachable Rear Mounted Flail Mower and Detachable Rear Mounted Boom Mower to the Island of Molokai. The Contractor shall present the equipment complete, ready to use and fully operational.

33.2- UTILITY TRACTOR WITH DETACHABLE REAR MOUNTED FLAIL MOWER AND DETACHABLE REAR MOUNTED BOOM MOWER- The Specifications contained herein establish minimum standards (unless stated differently). Equipment offered shall include any other standard features not listed but detailed in manufacturer's brochures and deemed necessary for proper and safe operation of equipment.

DETAILED SPECIFICATION FOR UTILITY TRACTOR WITH DETACHABLE REAR MOUNTED FLAIL MOWER AND DETACHABLE REAR MOUNTED BOOM MOWER

1. Model/Year: Utility Tractor Mower, 2026 or latest production.
2. Type: 4-Wheel Drive.
3. Engine:
 - a. Diesel powered; liquid cooled. EPA Tier 4 and EU Stage III A compliant. Shall have capability of operating on a B20 blend of biodiesel with no adverse effects.
 - b. 4 Cylinder in-line, Common Rail System, direct injection, w/intercooler, Diesel Oxidation Catalyst (DOC), Diesel Particulate Filter (DPF), Selective Catalytic Reduction (DPF).
 - c. Turbo charged.
 - d. Rated Engine HP- 105 HP (78.8 kW) minimum.
 - e. Engine net power (SAE J1349)- 100HP (74.6kW) minimum.
 - f. PTO power (at rated engine RPM)- 89HP (66.4kW) minimum.
 - g. Total displacement- 230 cu.in (3769 cc) minimum.
 - h. Rated engine RPM- 2600
4. Transmission:
 - a. F12/R12 (12 Forward and 12 Reverse) with Over Drive.

- b. Electrohydraulic Shuttle, column-mounted lever located next to the steering wheel.
 - c. Hydraulic Wet Disc Brake.
 - d. Multiple Wet Disc Clutch.
 - e. Limited Slip Differential.
 - f. Easy to shift 4WD Engagement.
5. Electrical:
- a. Twelve (12) volt system.
 - b. 130-amp alternator
 - c. Alternator capable of charging at low engine speed.
6. PTO:
- a. Type: live-independent PTO, electro-hydraulic clutch with brake.
 - b. Speed (RPM): 540/540E.
7. Hydraulics:
- a. Pump capacity: 17.0 gal/min. (64.3 l/min.)
 - b. 3-Point Hitch: Telescopic lower link ends, Telescopic Stabilizers
 - c. Category: II
 - d. Control system: Position, draft (top link sensing) & mixed control.
 - e. Lift capacity at 24 in. behind lift point (ISO): 6,000 lbs. (2750 kg) minimum.
 - f. Lift capacity at 24 in. behind lift point (ASAE): 7,200 lbs. (3300 kg) minimum.
 - g. Cylinder Type: 2 External cylinders
 - h. No. of standard remote valves: one (1), three (3) max.
8. Steering:
- a. Hydrostatic power steering.

- b. Tilt steering.
9. Brakes: Manufacturer's standard service and parking brake system.
10. Axles: Manufacturer's Heavy-Duty front and rear.
11. Dimensions & Weight:
- a. Overall Length: 155.9 in. (3960 mm).
 - b. Overall, Height-Top of Cab: 101.2 in. (2570 mm).
 - c. Overall Width (minimum): 79.1 in. (2010 mm).
 - d. Wheelbase: 88.6 in. (2250 mm).
 - e. Crop Clearance (Front Axle): 19.7 in. (500 mm) minimum.
 - f. Turning Radius (w/o brake): 13.8 ft. (4.2 m) maximum.
 - g. Tractor Weight Cab Models: 7,000 lbs. (3190 kg) minimum.
12. Tires:
- a. All tires mounted on compatible rims.
 - b. Front: 12.4-24 R1
 - c. Rear: 18.4-30 R1
 - d. Spares: Front and Rear, one (1) each.
13. Accessories:
- a. Enclosed cab shall meet OSHA requirements; with factory installed air condition.
 - b. Front safety approved windshield glass with electric wiper motor.
 - c. Rear wiper and washer.
 - d. Front and rear halogen work lights, with additional two (2) halogen work lights for front.
 - e. Interior dome light.
 - f. External left and right adjustable mirrors.

- g. Interior mirror
- h. Sun visor.
- i. Cup holder
- j. Power outlets
- k. Air ride suspension seat
- l. AM/FM, Radio with Bluetooth and CD
- m. Rear cab glass to have a removeable protective guard. Guard must protect the rear glass from any and flying debris and removeable to allow cleaning of rear glass.
- n. Horn
- o. Reverse warning alarm
- p. All traveling lights and warning lights shall be LED's. Headlight, turn/tail/brake, 4-way flashers.
- q. Super LED Mini Light Bar, twelve (12) volt, Whelen MC11PCA Class 1 or equal, mounted on top of cab.
- r. Tilt steering
- s. AC/Heater
- t. Driver's seat belt
- u. 5Lbs. (2.2kg) fire extinguisher mount inside of cab
- v. OSHA/ANSI recommended first aid kit mounted in cab
- w. SMV (Slow Moving Vehicle) emblem mounted on the outside rear of cab.

14. Rear Mounted Flail Mower:

- a. Extreme Duty Rear Mounted Flail Mower, Detachable.
- b. 75-inch fixed cutting unit, No side shift.
- c. Heavy duty gear box.

- d. Cutting width: 75-inches (1905 mm), minimum
- e. Cutting height: ½-inch to +7-inches (12.7mm-177.8mm), minimum.
- f. Knife swing circumference: 58 ½-inches (1,485.9 mm).
- g. Eight (8) inch (203.2 mm) ground roller
- h. Standard knife
- i. One (1) each spare set standard knife and attachment set.

15. Detachable Rear Mounted Boom Mower:

- a. Detachable Rear Mounted Tiger RBF-190, or equivalent, with a 50” (1,270 mm) cutting head or equal.
- b. Reach out: 18-feet 8-inches (5,283.2 mm) minimum.
- c. Reach up: 23-feet 4-inches (6,908.8 mm) minimum.
- d. Reach down @ 45 degree: 12-feet 8-inches (3,454.4 mm)
- e. Brush cutter head, cuts brush up to 4-inch with 360-degree rotating knives
- f. Mechanical/Hydraulic break away
- g. Independent cable controls
- h. Head rotation of 240 Degrees

15. Other:

- a. Counterweights- manufacturer recommended
- b. Operators’ manual, two (2) copies. Service/Repair Manual, Parts Catalog one (1) copy each, for tractor, rear flail mower and rear boom mower, Book format/CD/DVD/Flash Drive
- c. First service kit to include all necessary filters (oil, fuel, air, breather, etc.)
- d. Complete vandalism protection package at all service/cab/dash/fuel points and to be keyed alike

16. Furnish and deliver to the State of Hawaii, Department of Transportation, Highways, Maui District, Molokai Baseyard, located at 111 Ulili Street, Kaunakakai, Hawaii 96748.

17. Training:

Contractor shall provide initial training at time of delivery for proper operation and maintenance of equipment and refresher training one (1) year after initial delivery. This training shall include a minimum of one (1) hour classroom, and one (1) hour per operator hands on training.

Contractor shall provide classroom site. This training shall be at no additional cost to the State. Training shall be consistent to OSHA regulations.

Copy of attendance record showing class date, time, location, class type, instructor's name and attendees shall be submitted to:

State of Hawaii
Department of Transportation
Highways
Construction and Maintenance Branch
Attention: Equipment Superintendent/Safety Coordinator
869 Punchbowl Street, Room 404
Honolulu, Hawaii 96813

SECTION 34 - OPEN CAB UTILITY TRACTOR WITH
EXTENDED SIDE AND REAR FLAIL MOWER

34.1- SCOPE OF WORK- The work consists of furnishing and delivering four (4) each Open Cab Utility Tractor with Extended Side and Rear Flail Mower to the Island of Maui. The Contractor shall present the equipment complete, ready to use and fully operational.

34.2- OPEN CAB UTILITY TRACTOR WITH EXTENDED SIDE AND REAR FLAIL MOWER- The Specifications contained herein establish minimum standards (unless stated differently). Equipment offered shall include any other standards features not listed but detailed in manufacturer's brochures and deemed necessary for proper and safe operation of equipment.

DETAILED SPECIFICATION FOR AN OPEN CAB UTILITY TRACTOR WITH
EXTENDED SIDE AND REAR FLAIL MOWER

1. Model/Year: Open Cab Utility Tractor, 2025 or latest production.
2. Type: Bevel Gear Type, 4-Wheel Drive.
3. Engine:
 - a. 4 Cylinder In-Line, Common Rail System, Direct Inject, Turbocharged
 - b. Diesel powered, Liquid Cooled. EPA Tier 4 and Stage III A compliant.
 - c. 71 Engine HP (53.0kW), minimum.
 - d. Fuel/Water Separator
 - e. Combination pre-screener/pre-cleaner or turbo cleaner indicator.
4. Transmission:
 - a. Six (6) Speed Fully Synchronized
 - b. 12F/12R Speeds with Hydraulic Shuttle.
 - c. Front/Rear Differential Lock: Limited Slip Differential/Mechanical
 - d. Shuttle shaft: Hydraulic Shuttle
 - e. Main Clutch Type: Multiple Wet Disc

5. Electrical:
 - a. Twelve (12) Volt system
 - b. 60 Amp
 - c. Alternator capable of charging at low engine speeds
6. PTO:
 - a. RPM Speed: 540 rpm, minimum
 - b. Live Independent PTO
 - c. Electro-Hydraulic clutch with brake
7. Steering: Hydrostatic Power Steer
8. Brakes: Manufacturer's standard service and parking brake system
9. Tires:
 - a. All mounted on compatible rims
 - b. Front: 9.5-24 R1 Titan Tru Grip Lug, or equivalent.
 - c. Rear: 16.9-30 R1 Dura Torq 17mm hole, or equivalent.
 - d. Spares: Front and Rear, one (1) each
10. Axles: Heavy duty adjustable, front/rear
11. Hydraulic:
 - a. Open or Closed Center
 - b. Hydraulic reservoir manufacturer's recommended, with shut off valve on main hydraulic line
 - c. Suction line shall have a 100-mesh filter
 - d. Main in-tank filter to be 10-micron, full flow with restriction gauge
12. Accessories:
 - a. ROPS shall meet OSHA requirements

- b. Factory installed Fiberglass canopy and manufacturer recommended mounting bracket for canopy
- c. Safety Guard mounted on the left, right and rear of ROPS to protect operator of flying debris
- d. Reverse warning alarm
- e. Horn
- f. Interior rear-view mirror
- g. Work and traveling lights- headlights, hazard flashing lights (front and rear), directional signals (front and rear), combination tail/brake lights, four (4) work lights- two (2) each facing front and rear, mounted on top of cab to include limb guards
- h. Super LED Mini Light Bar, twelve (12) volt, clear dome (Whelen MC11PCA Class 1 or equal), mount on top of cab with limb guard
- i. Manufacturer front and rear mounted fenders (if available)

13. Side Extension Flail Mower:

- a. Sixty-two (62) inch Terrain Master Mid-Mount Flail Mower or equal
- b. Mounted on the right side of the mower
- c. Front mounted oil reservoir for greater visibility
- d. Self-contained hydraulic system, to allow tractor hydraulic system to be utilized for other equipment, while flail is in operation. Each section of the hydraulic system shall have pressure relief valve (to prevent damage to the unit in the event obstructions are encountered).
- e. Automatic wing shut-off in the raised position
- f. Positive wing transport lock system, easily engaged from the operator's station
- g. Full-width front metal guarding and rear debris deflector
- h. In-frame cooling system
- i. Integrated, ignition lock-out to prevent the tractor from starting with the wing cutting head(s) engaged

- j. Full length subframe mounted from the front bolster to the rear axle
- k. Hammer Type Blades

14. Rear Mounted Flail Mower:

- a. Sixty (60) inch rear mounted flail mower, hammer blade capable of cutting up to two (2) inch (5cm) small saplings
- b. Variable cutting height to allow operator to scalp the ground or leave a one (1) inch (2.54cm) to six (6) inch (15.2cm) cut
- c. Reverse rotor rotation, brings the cut material up and over which allows vegetation to be dispersed evenly
- d. Knife tip speed 12,046 fpm (61.2 mps) to provide a clean cut, creates a vacuum effect when using hammer blades
- e. Full width rear access door, allows for easy access to blades and rotor for replacing blades and cleaning out debris
- f. Three (3) “5V” Section powerband belt
- g. Accessible rotor
- h. Grease zerks on end caps of driveline cross journals
- i. Standard removable roller scraper mounted with only two (2) bolts
- j. Front safety chains, protects operator and bystanders from debris
- k. Replaceable skid shoes

15. Other:

- a. Unit shall have cushioned, adjustable operators seat with backrest and seat belt
- b. List of factory trained and authorized personnel who will provide on Island service. Tractor shall have a five (5) year warranty on drive train, axles and cutter gear box
- c. List of scheduled item/systems which requires maintenance by factory authorized personal
- d. Counterweight, manufacturer recommended

- e. SMV (Slow Moving Vehicle) placard
- f. Tool box 10-inch x 10-inch x 20-inch (254mm x 254mm x 508mm) approximately, lockable
- g. Operators Manual- two (2) copies; Service and Repair Manual, one (1) copy; Parts Manual, All manuals for both extended and rear mounted flail mowers. Book format/CD.DVD/Flash Drive
- h. Standard manufacturers color
- i. First Service Kit to include all necessary filters as required (oil, fuel, air, hydraulic, etc.)
- j. All manufacturer installed gauges to include hour meter and slope degree indicator
- k. Five (5) pound (2.2 kg) ABC Fire extinguisher mounted for easy access
- l. First Aid Kit, OSHA/ANSI recommended
- m. Real-time Monitoring, system provides real-time data on tractor's status, including fuel level, battery voltage, and hour meter readings
- n. Fault Code Display, system can display active fault codes and allow users to look up their meanings, aiding in troubleshooting

16. Training:

Contractor shall provide initial training at time of delivery for proper operation and maintenance of equipment and refresher training one (1) year initial delivery. This training shall include a minimum of one (1) hour classroom and one (1) hour per operator hands on training. Contractor shall provide classroom site. This training shall be at no additional cost to the State. Training shall be consistent to OSHA regulations

Copy of attendance record showing class date, time, location, class type, instructor's name and attendees shall be submitted to:

State of Hawaii
Department of Transportation
Highways
Construction and Maintenance Branch
Attention: Equipment Superintendent/Safety Coordinator
869 Punchbowl Street Room 404
Honolulu, Hawaii 96813

SECTION 35 – PROFILE THERMOPLASTIC APPLICATOR

35.1- SCOPE OF WORK – the work consists of furnishing and delivery of one (1) Profile Thermoplastic Applicator to the island of Maui. The contractor shall present the equipment complete, ready to use and fully operational.

35.2- PROFILE THERMOPLASTIC APPLICATOR – The specification contained herein establish minimum standards for the Profile Thermoplastic Applicator. Equipment offered shall include any other standard features not listed but detailed and deemed necessary/required for proper and safe operation of the equipment.

DETAILED SPECIFICATION FOR PROFILE THERMOPLASTIC APPLICATOR

1. Model/Year: Profile Thermoplastic Applicator, 2025 or latest production.
2. Dimensions:
 - a. Length: 54-inches (137 cm)
 - b. Width: 37-inches (94 cm)
 - c. Height: 52-inches (132 cm)
 - d. Weight: 600 Pounds (272 kg)
3. Self-Propulsion System:
 - a. Hydrostatically powered 5.5 H.P propane fired Honda Engine, or equivalent.
 - b. Capable of infinite forward and reverse up to 4 mph (7 kph)
 - c. Include unique steering system that allows for straight steering or preset curve.
4. Frame: Shall support minimum weight of 600 pounds (272 kg).
Constructed of steel.
5. Tires/Wheels:
 - a. Front: Airless type wheels, bolted to heavy duty hubs, with grease fittings and dust caps.
 - b. Rear: Heavy-duty swivel casters with foot actuated track locking mechanism.
Bearings shall be heavy duty type.

6. Material Container:
 - a. Holding tank storage capacity of 360 pounds (163 kg), vertical tank.
 - b. Top shall have 2 (two) hinged lids, 1 (one) for loading of material and 1 (one) for inspection of material with a locking mechanism to prevent splashing out of molten material.
 - c. Designed for rapid, safe and easy removal of tank for change of material or cleaning.
 - d. Shall include additional 15-gallon tank.
7. Agitation: Automatic agitation system.
8. Pointer Guide:
 - a. Front mounted, plated steel.
 - b. Adjustable for each die size used.
9. Heating System:
 - a. 1 (one), 5 (five) pound propane cylinder filled tank.
 - b. System regulator and related hoses rated for use with LPG (Liquide Propane Gases) system.
 - c. System shall provide propane fuel to the main burner and any other systems needing heat.
 - d. Minimum operating pressure shall be adjustable from 4-7 PSI.
 - e. Replaceable brass main burner with a minimum rating of 25,000 BTU for rapid heating of thermoplastic.
 - f. Shall be furnished with all necessary safety features, connections, fuel lines, regulators, etc. for connection to a propane cylinder.
 - g. Inspection door in material tank to allow for safe lighting of the burner. To include handheld torch for safe lighting.
 - h. Shall include additional 15 (fifteen) gallon material holding tank.

10. Controls:

- a. Adjustable steel handles for ease of operation and maneuverability (aluminum control handles not acceptable).
- b. The following shall be located for operator convenience: shut-off valve on the propane bottle, the LP gas regulator, the die control handle, control for the thermoplastic material gate, bead control lever for drop on beads and material agitator.

11. Glass Bead System:

- a. All steel (rust proof) glass bead hopper with a minimum 50 lbs. (22.68 kg) capacity of glass spheres. Mounted at rear of applicator. Connection between hopper and dispenser shall be with a flexible see through bead hose, with a positive on-off cut off valve.
- b. Glass bead dispenser shall be automatic with on-off lever. Adjustability for flow of beads shall be controlled without the use of additional tools.
- c. Bead system shall be independent of extrusion dies.
- d. Designed for variable widths of 4-inch, 6-inch, 8-inch and 12-inch lines.

12. Thermoplastic Extrusion Dies:

- a. Shall include dies from 4-inch, 6-inch, 8-inch and 12-inch lines.
- b. Die walls shall be construed of 3/16-inch (4.7 mm) heat treated steel plated. Aluminum will not be accepted.
- c. Shall have replaceable tungsten carbide runners. Include spare set of runners for each die.
- d. Dies shall be fully adjustable to apply extruded material from .000-inch to .150-inch thick.
- e. Dies shall be operated by a single handle convenient to operator. Handle shall have a safety stop to prevent accidental opening of the die. Systems using springs to assist in closing of the die shall not be accepted.
- f. Dies shall have its own set of stainless-steel jet burners to maintain constant die and material temperatures. Burners shall be individually controlled by control valves.
- g. Shall use quick disconnect fittings and flexible fuel lines.

13. Detachable Operator Ride-On:

- a. Shall have a Honda GX engine, or equivalent: 160 cc (5.5 hp), minimum.
- b. Shall have a manual pull starting system.
- c. Shall have a fuel capacity of 0.95 gallon (3.6 LTR).
- d. Forward operating speed up to 10 (ten) MPH (16 km/h).
- e. Reverse operating speed of 6 (six) MPH (10 km/h).
- f. Weight: 265 pounds (120 kg).
- g. Adjustable padded seat.

14. Other:

- a. Parking brake system, foot actuated.
- b. Shall include thermostatic temperature control adjustable to 550 degrees Fahrenheit, mounted in moisture proof enclosure.
- c. Shall include temperature gauge with readings to 550-degree Fahrenheit, mounted into material tanks.
- d. First Service Kit to include all necessary filters as required by manufacturer.
- e. List of factory trained and authorized personnel who will provide service.
- f. List of scheduled item/systems, which require maintenance by factory, authorized.
- g. Operator's manual 2 (two) copies, Service and Repair manual 2 (two) copies, Parts catalog 1 (one) copy. Book format/CD/DVD.

15. Training:

Contractor shall provide operator and maintenance training to demonstrate proper and safe operation of equipment. This training shall include a minimum of 1 (one) hour classroom and 1 (one) hour hands on training. Contractor shall provide classroom site. This training shall be provided at no cost to the State. This training shall be consistent to OSHA requirements.

Copy of attendance record showing class date, time, location, class type, instructors name and attendees shall be submitted to:

State of Hawaii
Department of Transportation
Highways
Construction and Maintenance Branch
Attention: Equipment Superintendent/Safety
Coordinator 869 Punchbowl Street
Honolulu, HI 96813

SECTION 36 – FRONT-END LOADER

36.1- SCOPE OF WORK- The work consists of furnishing and delivering one (1) Front-End Wheel Loader, to the island of Molokai. The contractor shall present the Front-End Wheel Loader complete, ready to use, and fully operational.

36.2- Front-End Wheel Loader- The specifications contained herein establish minimum standards for the Front-End Wheel Loader. Equipment offered shall include any other standard features not listed but detailed in manufacture's brochures and deemed necessary for proper and safe operation of equipment.

DETAILED MINIMUM SPECIFICATION FOR FRONT-END WHEEL LOADER

1. Model/Year: New and undemonstrated of current year or current production model, similar in size, capability, capacity, and general quality to the Caterpillar 950 Front-End Wheel Loader.

2. Dimensions:
 - a. Machine wheelbase shall be 11-feet 0-inches (3350 mm).
 - b. Machine operating weight shall be no less than 42,357 lbs. (19,213 kg) with a 3.75 cubic yard multi-purpose bucket with bolt-on edges.
 - c. Machine shall have an overall height to top of hood of 8-feet 9-inches (2678 mm).
 - d. The height to top of ROPS shall be 11-feet 4-inches (3446 mm).
 - e. B-Pin maximum height shall be at least 13-feet 3-inches (4027 mm).
 - f. Minimum ground clearance with 23.5R25-L3 tires shall be 1-foot 3-inches (385 mm).
 - g. Bucket design shall provide greater than or equal to 100% of rated material retention and have integrated spill guards.

3. Engine:
 - a. Engine maximum power according to SAE J1995 shall be at least 250 hp. (187 kw) at 2100 rpm.
 - b. Engine max net power according to SAE J1349 shall be at least 230 hp. (171 kw) at 2100 rpm.
 - c. Engine shall be configured to provide constant net horsepower at full parasitic load.

- d. Engine shall have displacement of 428 cubic inches (7.01 L).
 - e. Diesel powered C7.1 engine or equivalent, meeting or exceeding U.S EPA Tier 4 Final (Stage IV) Emission Standards.
 - f. Shall have the capability of operating on a B-20 Blend of Bio-Diesel with no adverse effect.
 - g. Engine net torque at 1300 rpm per SAE J1349 shall be 858 ft-lb (1,163 N-m).
 - h. Engine electronic control modules and sensors shall be completely sealed against moisture and dust.
 - i. Engine bore shall be 4.13-inches (105 mm) and stroke shall be 5.31-inches (135 mm).
 - j. Automatic engine regeneration allowing manual activation when required without affecting work ability.
 - k. Engine shall have four idle control settings to help maximize fuel efficiency: Hibernate allows idle speed to drop after a preset time, Work provides flexibility in working engine idle speeds, Warm up helps keep the engine from dropping below a set temperature in cold conditions, and Low Voltage mode prevents battery drain due to high electrical loads from attachments.
 - l. Engine shall provide low rpm idle feature to conserve fuel.
 - m. Engine shall have a 24-volt starting and charging system.
 - n. Engine air pre-cleaner shall remove at least 93% of particles from the air before reaching the primary filter.
 - o. Variable speed fan shall draw air in from the rear of the machine and exhaust it out the sides and top of the hood.
4. Exhaust Emission Control:
- a. Equipment must meet all Federal, State of Hawaii Requirements.
 - b. Emissions package shall be mounted on a platform bolted to the machine frame and allow access to top of the engine.
5. Transmission/Powertrain:
- a. Machine shall have an electronic power shift countershaft transmission.

- b. Machine shall have standard Lock-up Clutch Torque-Converter to allow increased speeds when on-boarding or when climbing ramps.
 - c. Machine shall have an Electronic Clutch Pressure Control to modulate clutch engagement individually to allow smoother speed and directional shifts.
 - d. Machine shall have a variable shift control that allows the transmission to upshift at lower engine RPM's.
 - e. Engine shall have 5 (five) speeds forward, capable of 24 mph (40 km/h), and 3 (three) speeds reverse, capable of 16 mph (25.7 km/h).
 - f. Machine shall have an electronically controlled, variable on-demand speed fan.
 - g. Torque based downshift from 2nd to 1st gear shall be standard as opposed to speed based.
 - h. Recommended transmission filter change interval shall be 2,000 hours.
6. Wheels/Tires:
- a. Manufacture's recommended, lug type industrial, spare included.
7. Steering:
- a. Steering shall be via Joystick. Operator must be able to articulate machine by operating a joystick at all operating speeds. Said joystick should be speed sensitive and articulate 40 degrees to either side.
 - b. A dedicated pump shall be standard for steering. When not steering, more engine power is available for rimpull, breakout force, and lift force and shall result in reduced fuel consumption.
8. Brakes:
- a. An integrated braking system shall reduce axle oil temperatures and improve transmission neutralizer smoothness.
 - b. An electro-hydraulic parking brake disk & caliper shall be standard for ease of service.
 - c. Brake wear indicators shall be standard for ease of inspection.
9. Electrical System:
- a. Machine shall have 2 (two) maintenance free 1400 CCA batteries.

- b. Alternator that has a minimum charging capacity of 145 amperes.
- c. A heavy -duty electric starter shall be standard.
- d. Battery disconnect switch (master switch) must be available which will provide a basic level of machine security and prevent battery drain during periods of inactivity.
- e. All wiring and harnesses shall be braided, color coded, and numbered for easy diagnostics, fuse block located in the cab.
- f. Machine shall be equipped with 3 (three) standard 12V electrical sockets.
- g. All pin connectors shall be sealed to prevent dirt and moisture infiltration.

10. Capacities:

- a. Engine cooling systems shall hold minimum of 15.6 gal (59 L).
- b. Engine crankcase shall hold minimum of 5.8 gal. (22 L).
- c. Fuel tank shall hold minimum 72.6 gal. (275 L).
- d. DEF tank shall hold minimum 4.2 gal (16 L).
- e. Hydraulic tank shall hold minimum 33 gal. (125 L).
- f. Transmission shall hold minimum 11.4 gal (43 L).
- g. Front and rear differentials and final drives shall each hold at minimum 11.4 gal (43 L).

11. Loader Linkage:

- a. Breakout force shall be a minimum of 40,690 lb. (181 kN) with a 4.1 cubic yard (3.1 cubic meter) general-purpose bucket with bolt-on edges.
- b. Linkage shall be a single-tilt optimized Z-bar design that incorporates parallel lift capabilities in one single linkages.
- c. Linkage shall maintain tilt forces throughout the entire lift range.
- d. Linkage shall provide line of sight visibility to pallet forks from the seated operator position at ground level and truck bed height.

- e. Linkage rack and dump straps shall be integrated at single interface points between the tilt lever the crossmember to eliminate induced torsion on linkage components due to uneven contact points.

12. Axles:

- a. Machine shall have a fixed front axle that is rigidly mounted to the frame.
- b. Rear axle shall oscillate +/- 8 degree and follow the contour of the ground to allow the cab to stay steady.

13. Work Tool Options:

- a. A quick coupler shall be available for ease of changing work tools without leaving the cab.
- b. A quick coupler system that has zero “offset” between coupler and tool shall be available from factory so there is no loss of performance on tipping load when using system.
- c. Machine shall be provided with a 3.75 cubic yard multipurpose bucket with bolt-on edges and bucket teeth.
- d. Machine shall be provided with a 96-inch fork carriage attachment for handling of standard pallet sizes, logs and lumber.

14. Hydraulic System:

- a. Hydraulic pump output shall be 76 gal per minute (286 L per minute).
- b. Total hydraulic cycle time shall be no more than 8.9 seconds.
- c. Machine shall feature load-sensing hydraulics to automatically adjust to operating conditions and provide only hydraulic flow required by the implement.
- d. A ride control system with 2 (two) accumulators shall be standard.
- e. Control of raise/lower and rack back/dump shall be able to be operated simultaneously.
- f. Electrohydraulic implement controls shall provide the operator with in-cab programmable kick-outs to prevent material spillage.
- g. Optional joystick hydraulic implement controls with integrated third and/or fourth function shall be available.

- h. Recommended hydraulic filter change interval shall be 500 hours.

15. Cooling System:

- a. Cooling system shall be isolated from the engine compartment by a non-metallic shield.
- b. Extended life coolant shall be standard.

16. Operator Cab and Interface:

- a. The operator sound pressure level for a standard machine configuration shall be a maximum of 70 dB(A) with the cooling fan speed net at maximum value, per ISO 6396:2008.
- b. Cab shall be attached to the frame with viscous mounts to reduce shock loads from the ground.
- c. An integrated ladder with aggressive-tread steps shall keep debris buildup to a minimum.
- d. Ladder shall be at a 15-degree incline for easy entry and exit.
- e. Full-length ladder shall be standard on the right side to facilitate safe exit if needed.
- f. Platforms shall be wide enough to allow ease of movement to the front or rear of the machine.
- g. Front hinged cab door shall be able to be opened and closed by the operator while seated and shall feature sliding windows on both sides that can be opened incrementally with 1 (one) hand operation.
- h. Front hinged door shall open automatically with the assistance of a gas strut.
- i. Pull type door handle shall be located on the lower right-hand corner of the door for easy access when standing on the ground or first step of the ladder.
- j. A door opening switch shall be available so operator can open door from ground level without having to climb the 1st step of the ladder.
- k. Convex windshield shall help enhance visibility, increase cab space, decrease sound levels in the cab, and offer greater durability than flat glass.
- l. Wet-arm wipers shall be on both front and back windows.

- m. Cab roof shall have channels to direct rain off the corners of the cab to keep the windows clear.
- n. Cab shall have an overhang on all sides to protect the operator from glare.
- o. Window access platform shall extend along the front of the convex windshield for fast, safe and more convenient cleaning access.
- p. Non-slip step near the A pin and horizontal folding (along a vertical axis) external mirrors shall be added to help assist operators when stepping onto the window cleaning platform.
- q. An operator tie-in point shall be provided standard on the top right-corner of the ROPS structure.
- r. Standard rear vision camera shall be located in a pocket on the grill to protect it from damage and the elements and help monitor movement behind the loader.
- s. A color touchscreen display that monitor machine condition and operator preference should be also used to display the rear view camera.
- t. Minimum of 2 (two) rear hood mounted LED type lights shall illuminate the area behind the machine in low light conditions.
- u. Minimum of 2(two) forward mounted LED type lights shall illuminate the area in front and side of the machine in low light conditions.
- v. Only 1 (one) main control panel shall be located on the right side of the ROPS post to keep everything in reach of the operator while maintaining visibility to the ground.
- w. Main control panels shall retain large membrane style switches which contain LED's to denote activation/mode and have a positive feel and "click" to signal activation.
- x. Climate control system shall automatically adjust the air temperature and fan speed to maintain the operator's preferred climate setting.
- y. Seat shall have 6-way adjustments and shall feature automotive-style lumbar support.
- z. Seat shall have a cast 1 (one) piece back and seat pan to prevent protrusion under the cushions.
- aa. Right and left armrest shall be mounted to the seat arms and have integrated controls that adjust for comfortable, convenient operation and must move with the seat.

- bb. External 12-inch by 9-inch mirrors shall contain an integrated spot mirror and have optional heated and remotely adjustable function.
- cc. Stop, tail and turn signal lights shall mount in a pocket for extra protection and are LED style.
- dd. Cab shall contain 3 (three) 12-volt outlets.
- ee. Right side of cab contain MP3 player jack, MP3 player/cell phone holder and 2 (two) cup holders.
- ff. A monitoring system shall be available for critical systems to alert the operator to potential need for service. 3 (three) levels of warning shall allow the operator to assess the situation more accurately.
- gg. The operator station shall be removeable within 45 minutes and shall use quick disconnects so no wire needs to be cut and no refrigerant lost.
- hh. Cab shall have channels in the cab floor and no threshold at the door for easy cleaning.
- ii. The machine shall be equipped with deep skid-resistant, self-cleaning steps.
- jj. Machine shall have GPS based tracking to collect and track information on machine location, service meter hours, productivity information and other relevant items.

17. Serviceability:

- a. Machine shall have well protected, easily visible sight gauges for transmission oil, hydraulic oil, and radiator coolant.
- b. A single mechanical lift cylinder with manual backup shall be standard to open the hood.
- c. If necessary, the entire hood shall be removable using the built-in lift points.
- d. With the hood closed, quick checks on engine oil and coolant sight gauges can be completed through the rear clamshell.
- e. Panels located behind the tires shall lift up and can be removed for additional access.
- f. Rooding fenders shall hinge from the rear and swing out, allowing easier access to the engine compartment.

- g. The clamshell hood shall provide access to the front and rear faces of the radiator and ATAAC cores for easy cleaning.
- h. A perforated and corrugated grill shall minimize debris buildup and shall swing out for easy cleaning and access to the cooling cores.
- i. Full width air conditioning condenser and oil cooler cores shall swing out to allow easy cleaning of the rear radiator faces.
- j. Cab air filters shall be easily accessible from the exterior of the cab.
- k. Ecology drains for simple and clean fluid drainage shall be provided for the engine, transmission and hydraulics.
- l. Grease fittings shall be grouped on the right side of the machine in 2 (two) locations: below the right-side service platform and just off the non-engine end frame.
- m. Transmission oil and hydraulic filters shall be located behind the hinged, right-side access platform. The hydraulic oil tank shall be drainable from this location.
- n. Auto-lube system shall be provided and available to provide precise, automatic lubrication of pins and bushing.
- o. Maintenance free batteries, relay panel, jump start receptacle and optional toolbox shall be located below the left-side access platform.
- p. Master shutdown switch shall be housed with the relay panel.
- q. Pressure taps for the steering, hydraulic systems, transmission and brakes shall be grouped behind an access panel just below the right-side service platform.

18. Gauges:

- a. Fuel level, hour meter, speedometer, tachometer, gear range indicator, DEF level, hydraulic temperature, engine coolant temperature, transmission oil temperature.

19. Operational Warning System Indicators:

- a. The machine shall have audible warning alarms for engine coolant temperature, engine oil pressure, DEF low level and hydraulic oil temperatures.
- b. The machine shall be equipped with sight gauges on the hydraulic tank and radiator.
- c. The machine shall be equipped with standard system pressure and fluid analysis test ports.

20. A/C Systems:

- a. Factory installed OEM system using R-134 type refrigerant with cab filters.
- b. Air conditioning condenser shall not be mounted on any other cooling core(s), and have independent electrical cooling fans, separate from the main cooling fan.

21. Loader Attachments:

- a. 96-inch-long fork with carriage.
- b. Quick coupler.

22. Miscellaneous Features:

- a. The equipment shall meet all applicable Federal, State of Hawaii safety requirements.
- b. 1 (one) 2lbs. ABC type, UL approved fire extinguisher mounted in cab.
- c. First aid kit OSHA/ANSI recommended.
- d. Back-up alarm.
- e. Super LED mini light bar, 12-volt, clear dome (Whelen MC11PCA class 1 or equal to allow for 360-degree lighting), mounted on top of cab.
- f. 4 (four) sets of keys will be provided upon delivery of equipment.
- g. SMV (slow Moving Vehicle) emblem.
- h. 2 (two) sets of operating manuals, 1 (one) set each OEM parts manual, OEM shop service and repair manual, book/CD/DVD/Flash Drive.
- i. Additional counterweight for use with other attachments (if required).
- j. Diagnostic Computer and software to be included. Any other standard items or equipment components and accessories listed in manufacture's brochure shall be included.
- k. Equipment body, hubs, axles, springs, welded seams, and non-painted or unprotected areas shall be coated with a Cosmoline type corrosion preventative to guard from rust and rust bleed from salt spray during shipping, any visible signs of rust will be cause for rejection. Treatment to be cleaned off during dealer prep on Maui or Oahu.

1. Equipment shall be delivered with 1 (one) full spare wheel and tire for critical spare to housed on-site.

23. Paint:

- a. Manufacturer's standard color provided in anticorrosion coating.

24. Shipping:

- a. Equipment body, hubs, axles, springs, welded seams and non-painted or unprotected areas shall be coated with a Cosmoline type corrosion preventative to guard from rust and rust bleed from salt spray during shipping, any visible signs of rust will be cause for rejection. Treatment to be cleaned off during dealer prep on Maui or Oahu.

25. Warranty For Chassis/Body:

- a. Manufacturer's standard warranty to be listed and furnished with bidder's proposal.

26. Optional Extended Warranty:

- a. Additional extended warranty coverage up to 4 years or 4,000 hours on the equipment all inclusive of Labor, Parts and Miscellaneous Charges.

27. Delivery:

- a. Furnish and deliver to the State of Hawaii, Department of Transportation, Highways, Maui District, Molokai Baseyard, located at 111 Ulili Street, Kaunakakai, Hawaii 96748.

28. Training:

Contractor shall provide initial training at time of delivery for proper and safe operations, maintenance of equipment and refresher training one (1) year after initial delivery. This training shall include a minimum of one (1) hour classroom and one (1) hour per operator hands on training. Training shall be provided at no additional cost to the State. Contractor shall provide classroom site. This training shall be consistent to OSHA requirements. Copy of attendance record showing class date, time, location, class type, instructor's name and attendees shall be submitted to:

State of Hawaii
Department of Transportation
Highways
Construction and Maintenance Branch
Attn: Equipment Superintendent/Safety Coordinator
869 Punchbowl Street, Room 404
Honolulu, HI 96813

SECTION 37 - BRUSH CUTTING ATTACHMENT

37.1- SCOPE OF WORK – the work consists of furnishing and delivery of one (1) closed front rotary brush cutting attachment, to the island of Maui. The contractor shall present the equipment complete, ready to use and fully operational.

37.2- BRUSH CUTTING ATTACHMENT – The specification contained herein establish minimum standards for the brush cutting attachment. Equipment offered shall include any other standard features not listed but detailed and deemed necessary/required for proper and safe operation of the equipment.

DETAILED SPECIFICATION FOR BRUSH CUTTING ATTACHMENT

1. Model/Year: Rotary Brush Cutter, 2025 or latest production.
2. Dimensions:
 - a. Cut Width: 66-inches
 - b. Overall Width: 72-inches
 - c. Overall Height: 20-inches
 - d. Overall Depth: 87-inches
 - e. Deck Height: approx. 8.8-inches
 - f. Deck Thickness: 0.25-inches with reinforced bracing
 - g. Approx. Weight: 1,300 Pounds
3. Performance:
 - a. Minimum Cut Height: 1.8-inches
 - b. Cutting Capacity: 4-inch diameter
 - c. Flow Rate: 14-18 gpm Under Deck Features:
4. Features:
 - a. Chain Curtain (front) to minimize flying debris.
 - b. Three (3) Updraft Blades, ½-inch x 4-inch single sided updraft blades
 - c. Pressure relief valves for hydraulic system

- d. Replaceable Skid Shoes
 - e. Dynamic Breaking
5. Accessories:
- a. Two (2) Spare Blade Kits, Takeuchi Model TCBK66, or equal
 - b. Rear Roller, Takeuchi Model TBCR66, or equal.
 - c. Rear: Heavy-duty swivel casters with foot actuated track locking mechanism. Bearings shall be heavy duty type.
6. Training:
- Contractor shall provide operator and maintenance training to demonstrate proper and safe operation of equipment. This training shall include a minimum of 1 (one) hour classroom and 1 (one) hour hands on training. Contractor shall provide classroom site. This training shall be provided at no cost to the State. This training shall be consistent to OSHA requirements.
- Copy of attendance record showing class date, time, location, class type, instructors name and attendees shall be submitted to:

State of Hawaii
Department of Transportation
Highways
Construction and Maintenance Branch
Attention: Equipment Superintendent/Safety Coordinator
869 Punchbowl Street
Honolulu, HI 96813

SECTION 38 - 4WD CAB/CHASSIS UTILITY BODY WITH 40 FOOT AERIAL

38.1- SCOPE OF WORK- The work consists of furnishing and delivering one (1) 4WD Cab/Chassis Utility Body with 40 Foot Aerial, to the island of Maui. The contractor shall present the vehicle complete, ready to use, and fully operational.

38.2- CAB/CHASSIS UTILITY BODY WITH 40 FOOT AERIAL- The Specifications contained herein establish minimum standards (unless stated differently). Vehicle offered shall include any other standard features not listed but detailed in manufacturer's brochures and deemed necessary for proper and safe operation of vehicle.

DETAILED SPECIFICATION FOR A CAB/CHASSIS UTILITY BODY WITH 40 FOOT AERIAL

1. Model/Year: Cab/Chassis Utility Body, 2025 or latest production.
2. GVW Rating: 8,845.2 kg (19,500 lbs.) capacity minimum.
3. Wheelbase: 4,292.6 mm (169 in.) minimum.
4. Cab to Axle: 2,133.6 mm (84 in.) maximum.
5. Engine:
 - a. Diesel powered, wet sleeved engine or dry sleeved engine with seven (7) year unlimited mileage warranty. 50 State emissions, Clean Idle Certification, and be B20 Bio Diesel compatible with no adverse effects.
 - b. Liquid cooled with deaeration system with tank and sight glass, full radiator guard.
 - c. V-8 turbo diesel minimum.
 - d. Net horsepower 246.1kW (330 HP) minimum, 317.5 kg (700 lbs.) of torque at rated RPM. With engine brake, exhaust brake shall not be accepted.
 - e. Fuel water separator DAVCO Fuel Pro 382, or equivalent, B20 Bio- Diesel compatible. Fuel tank 151.4L (40 Gal.) rear mounted minimum. Including seven (7) gal DEF tank Mid-Mounted minimum.
 - f. Exhaust, single horizontal right-side exhaust. Shall have two (2) position exhaust switch to inhabit diesel particulate filter regeneration as long as switch is "on" position.
 - g. Hour meter and tachometer.
 - h. No idle engine shutdown required.

6. Differential: Locking/limited slip.
7. Frame:
 - a. Steel channel type.
 - b. 80,000 psi, minimum.
8. Transmission:
 - a. 10 Speed Automatic or equal.
 - b. PTO/Clutch Pump for aerial unit operation.
 - c. Automatic transmission oil temperature gauge.
9. Electrical:
 - a. Twelve (12) volt system dual AGM type batteries.
 - b. 410 AMP minimum alternator, capable of charging at low engine speeds.
 - c. Color coded wiring or continuously numbered.
 - d. Circuit breakers at main panel to replace all fuses except instrument cluster feed.
10. Steering:
 - a. Power.
 - b. Tilt Steering Wheel.
11. Brakes:
 - a. Hydraulic system.
 - b. Antilock Brake System- full vehicle control.
 - c. Parking Brake System.
 - d. Four (4) wheel disc brake system. Shall comply with new reduced stopping distance NHTSA regulations.

12. Wheels/Tires:

- a. Seven (7) each; single front, dual rear, spare.
- b. Tires- 225/70 R 19.5 load rating of G.
- c. Wheels- 19.5 x 6.0, disc painted steel 10- stud with steel hubs.

13. Drive Train/Suspension:

- a. 4x4 drive train.
- b. Front-3,401.4kg (7,500 lbs.) minimum with heavy duty shocks.
- c. Rear-6.669.4 kg (14,706 lbs.) minimum with heavy duty shocks.
- d. 4.88 gear ratio for both front and rear minimum.
- e. Limited Slip Rear Axle.
- f. Aft axle frame extension.

14. Standard Cab:

- a. Aluminum or steel conventional cab with a ten (10) year unlimited warranty.
- b. Complete head lining with overhead console.
- c. Vinyl or cloth upholstery.
- d. Floor mats.
- e. Full width or split style bench seats with seat belts for three (3) people.
- f. Factory installed air conditioning.
- g. Factory installed AM/FM/Bluetooth radio with hands free capability.
- h. Factory installed reverse camera.
- i. Manually telescoping/folding mirror with power/heated glass, heated convex spotter mirror, integrated clearance lamps/turn signal.
- j. Power locks/windows with rain guards on both doors.
- k. 12 volt/120 volt/400-watt accessory outlet.

- l. Travel height placard mounted on dash.
 - m. Air bags for both driver and passenger.
 - n. Cruise control
 - o. Keyless entry.
 - p. Tilt steering wheel.
 - q. Factory installed trailer brake controller.
 - r. LED warning strobes Amber/White mounted with the center high stop lamp housing. A total of eight (8) warning strobes (four (4) each amber and white) rectangular with the measurement of three (3) inches long by one (1) inch wide shall be mounted in the front grill and on the rear of the utility box. Amber lights will be mounted diagonally across from each other, white lights will also follow the same pattern. All switches shall be lighted type and mounted within a console attached to the dash or mounted as part of the OEM console, with provisions to mount an external radio system. Power cables must be brought to the power source with a fuse (thermal circuit breakers shall be rejected). All cable and wiring shall be grommet protected and shall use grommets through sheet metal panels. Switching sequence as follows #1 wired for the warning lights mounted on the center high stop mount, #2 warning lights mounted in the grill and back utility lights, #3 front work lights, #4 rear work lights, #5 PTO.
 - s. Factory install drive lights.
15. Unit: Altec Model AT41M Articulating Telescopic Aerial Device with a fiberglass upper boom and fiberglass insulator in the articulating arm and proportional joystick upper controls, or equal. Built in accordance with ALTEC's standard specifications and to include the following features.
- a. Ground to bottom of platform height: 40.8 feet at 7.3 feet from centerline of rotation (12.45m at 2.21m)
 - b. Working height: 45.8 feet (13.9 m)
 - c. Maximum reach to edge of platform with upper boom non-over center: 30.1 feet (at 17.3 feet platform height)
 - d. Upper boom extension: 110 inches
 - e. Continuous rotation

- f. Articulating Arm: articulation is from -3 to 82 degrees. Insulator provides 19 inches of isolation.
- g. Compensation System: By raising the articulating arm only, the telescopic boom maintains its relative angle in relation to the ground. The work position is achieved through a single function operation.
- h. Upper Boom: Articulation is from -25 to 85 degrees. The fiberglass section provides a minimum of 10.9 inches of isolation in the upper boom (when retracted and 42.3 inches when extended).
- i. Platform leveling is achieved by a hydraulic master-slave leveling system. This lifetime system is very low maintenance.
- j. The dielectrically tested, insulating upper control system includes the following boom tip components that can provide an additional layer of secondary electrical contact protection.

Control Handle: A single handle controller incorporating high electrical resistance components that is dielectrically tested to 40kV AC with no more than 400 microampers of leakage. The control handle is green in color to differentiate it from other non-tested controllers. The handle also includes an interlock guard that reduces the potential for inadvertent boom operation.

Auxiliary Control Covers: Non-tested blue silicon covers for auxiliary controls.

Control Console: Non-tested non-metallic control console plate.

Boom Tip covers: non-tested non-metallic boom tip covers. The covers are not dielectrically tested, but they provide some protection against electrical hazards.

- k. Hydraulic system: Open center (full pressure), maximum flow 6 GPM, maximum operating pressure 3,000.
- l. Dielectric rating: Category C, 46 kV and below
- m. Unit is painted with a white powder coat paint process which provides a finish painted surface that is highly resistant to chipping, scratching, abrasion and corrosion. Paint is electrostatically applied to the inside as well as the outside of fabricated parts then high temperature cured prior to assembly ensuring maximum coverage and protection.
- n. Manuals: Two (2) operator's and two (2) Maintenance/Parts manuals containing instructional markings indicating hazards inherent in the operation of an aerial device.

- o. Unit meets or exceeds ANSI 92.2 standards.

16. Pedestal:

- a. Two (2) man end mounted platform with 180-degree platform rotation and up to 600 lbs. (272 kg) capacity
- b. Platform mounted single handle controls
- c. Material handling Jib/Winch, Hydraulically Articulating, top Mounted, Round (ARM Jib), Jib capacities to 1100 lbs. (499 kg)
- d. One (1) platform step located on the side of the platform nearest the elbow in the stowed position
- e. Platform Cover- soft vinyl
- f. Platform Liner 50kV rating
- g. Hydraulic Tool Circuit at Platform: One (1) set of disconnect couplings at the boom tip for open center tools
- h. Engine Start/Stop & Secondary Stowage System: 12 VDC powered motor and pump assembly for temporary operation of the unit in a situation wherein the primary hydraulic source fails. Electric motor is powered by the chassis battery. This feature allows the operator to completely stow the booms, platform or momentary switch at the lower control station and outriggers
- i. Jib Stick, 36 inches long, non-extension, non-certified, grey in color
- j. Slip Ring: Required for engine start/stop, secondary stowage system, and throttle control options
- k. Outriggers, primary, modified A-Frame with integrated subbase, 30 inches – 34 inches Chassis height, electric interlock, no valves on legs, 144-inch spread, fixed shoe
- l. Winch load line swivel hook
- m. Scuff Pad, No Step
- n. Electric Outrigger Controls for one (1) set of outriggers, drive hydraulic outrigger control valves. Durable weatherproof sealed electronic switches mounted in aluminum boxes located at the rear of the unit unless otherwise specified

- o. Steel Reservoir, 15-gallon capacity, triangular, 17" L X 17" W x 24" H, and includes breather caps and dipsticks
 - p. Temperature Sight Gauge
 - q. HVI-22 Hydraulic Oil
 - r. Standard Pump for PTO
 - s. Electric Shifted PTO
 - t. Standard PTO/Transmission Functionality for small ford and dodge chassis
17. Body: Altec LGSS-132-84 (81) Low-Side General Service Body with Step, or equal:
- a. Steel body
 - b. Steel structural channel crossmembers and smooth floor with ladder-style understructure
 - c. 132-inch body length
 - d. 94-inch body width
 - e. 40-inch body compartment height
 - f. 20-inch body compartment depth
 - g. 24-inch from body floor to compartment tops
 - h. Finish paint entire body white
 - i. Undercoat applied under the body
 - j. 5.5-inch drop-in wooden cargo retaining board at the rear of body
 - k. 5.5-inch drop-in wooden retaining board at top of side access stop
 - l. Stainless steel rotary paddle latches with locks
 - m. Gas props on all vertical doors
 - n. Chains on all horizontal doors
 - o. Standard master body locking system

- p. Hot stick shelf extending full length of body on streetside
- q. Two (2) hot stick brackets installed on streetside
- r. One (1) chock holder on each side of body with retaining lip in fender panel
- s. 1st Vertical (SS)- 34-inch wide – one (1) outrigger housing and two (2) adjustable shelves with removable dividers on 4-inch centers
- t. 2nd vertical (SS)- 24-inch wide- two (2) adjustable shelves with removable dividers on 4-inch centers
- u. 1st horizontal (SS)- 50-inch wide- One (1) fixed shelf with removable dividers on 4-inch centers on bottom of compartment
- v. Rear vertical (SS)- 24-inch wide- six (6) locking swivel hooks on an adjustable rail (1-4-1)
- w. 1st vertical (CS)- 34-inch wide- one (1) outrigger housing and two (2) adjustable shelves with removable dividers on 4-inch centers
- x. 2nd vertical (CS)- 24-inch wide- grip strut access step with two (2) sloped grab handles, vented battery storage
- y. 1st horizontal (CS)- 50-inch wide- one (1) adjustable shelf with removable dividers on 4-inch centers and one (1) fixed shelf with removable dividers on 4-inch centers on bottom of compartment
- z. Rear vertical (CS)- 24-inch wide- six (6) locking swivel hooks on an adjustable rail (1-4-1)
- aa. Body cut-out for AT41M/ME/P/PE arial device near front of body
- bb. Steel tail shelf, 29-inch-long x 94-inch wide, with rear cross storage and drop down doors

18. Body And Chassis Accessories:

- a. ICC (Underride Protection) bumper installed at rear
- b. Combination two (2) inch ball (10,000 lb. MGTW) and pintle hitch (16,000 lb. MGTW)
- c. Set of eye bolts for trailer safety chain, installed one (1) each side of towing device mount

- d. Rigid step mounted beneath side access steps (installed to extend approx. two (2) inches
- e. Platform rest, rigid with rubber tube
- f. Boom rest for a telescopic unit
- g. Wood outrigger pad, 19-inch x 19-inch x 2.5-inch, with rope handle
- h. Outrigger pad holder, 20-inch-long x 20-inch wide x 5-inch high, bolt-on, bottom washout holes, 3/4 -inch lip retainer
- i. Pendulum retainers for outrigger pad holders
- j. Mud flaps (Pair)
- k. Wheel chocks, rubber, 9.75-inch-long x 7.75-inch-wide x 5.00-inch high, with four-inch long metal hairpin style handle (pair)
- l. Slope indicator assembly (pair) for machine with outriggers
- m. Driveaway safety kit
- n. Vinyl manual pouch for storage of all operator and parts manual

19. Other:

- a. Factory installed brush guard
- b. Dual tone back-up with outrigger motion
- c. PTO hour meter, digital, with 10,000-hour display
- d. Six (6) way trailer receptacle (pin type) installed at rear
- e. Electrical inverter DC to AC static, 2500 watt with duplex (GFI protection outlets mounted at right rear
- f. First Aid Kit (OSHA approved)
- g. Road safety triangle kit; and self-charging four pack kit Aervoe Super LED Road Flares or equal, shall have yellow housing with red LED lighting. All housing and case shall be etched "STATE OF HAWAII DOT HIGHWAYS".

- h. Work lights, two (2) each 100,000 candle power, located at the rear of cab and one (1) each at platform. Twelve (12) volt battery powered.
- i. First service kit shall include all required filters (oil, fuel, air, breather, transmission, etc.).
- j. Safety inspection/PUC certification, license, registration and certificate as required in general provisions.
- k. Complete after factory rust proofing with seven (7) year unlimited mileage warranty (complete unit). Applied in accordance with Federal Specifications 297A at its latest revision.
- l. Two (2) sets of keys.
- m. Technical resources- one (1) copy of repair manual, one (1) copy of parts catalog, two (2) copy of operations manual. Book format/CD/DVD/Flash Drive.
- n. Color, white high gloss urethane, complete unit. Apply non-skid to all walking surfaces. Shall be outlined with conspicuity material (reflexite or equal) red and white.
- o. Upon "Notice to Proceed", Contractor shall submit "Application" (To State Motor Vehicle Safety Office) to meet the requirements of Section 286-202 (12), Hawaii revised statutes, for approval of a major modification. Construction, or reconstruction of a vehicle with a gross vehicle weight rating (GVWR) of 10,001 pounds and above. Application is available at:

State of Hawaii
Department of Transportation
Highways
Motor Vehicle Safety Office
601 Kamokila Boulevard, #511
Kapolei, Hawaii 96707

Copy of approved application shall be submitted at time of delivery.

20. Training:

Bidder shall provide manufacturer training syllabus at time of bid submittal. Contractor shall provide initial manufacturer training at time of delivery for proper and safe operation (including fall protection), and maintenance of equipment, and refresher manufacturer training one (1) year after initial delivery. This training shall include a minimum of one (1) hour classroom and one (1) hour per operator hands on training. This service shall be provided at no additional cost to the State. Contractor shall provide classroom site. Training shall be consistent to OSHA requirements. Copy of attendees shall be submitted to:

State of Hawaii
Department of Transportation
Highways
Construction and Maintenance Branch
Attn: Equipment Superintendent/Safety
Coordinator 869 Punchbowl Street
Honolulu, Hawaii 96813

21. Note:

Bidder(s) shall submit with their bid a certified letter(s), from the manufacturer(s) to certify the prospective bidder as the Factory Authorized Dealer (letter required for both chassis and equipment). Failure to submit certified letter(s) shall be sufficient grounds for rejection of bid.

SECTION 39 - CAB/CHASSIS WITH 7 CUBIC YARD DUMP BODY

39.1- SCOPE OF WORK – The work consists of furnishing and delivering, one (1) only, Cab/Chassis with 7 Cubic Yard Dump Body, to the island of Oahu. The Contractor shall present the vehicles complete, ready to use, and fully operational.

39.2- CAB/CHASSIS WITH 7 CUBIC YARD DUMP BODY - The Specifications contained herein establish minimum standards (unless stated differently). Vehicle/equipment offered shall include any other standard features not listed but detailed in manufacturer's brochures and deemed necessary for proper and safe operation to vehicle/equipment.

DETAILED SPECIFICATIONS FOR A CAB/CHASSIS WITH 7 CUBIC YARD DUMP BODY

1. Model/Year: Cab/Chassis with 7 Cubic Yard Dump Body, 2026 or latest production.
2. GVW Rating: 15,876 kg (35,000 lbs.) minimum capacity.
3. Wheel Base: 3,860.8mm (152 inches) minimum.
4. Cab to Axle: 2,108.2 mm (83 inches) minimum.
5. Axle to Frame: 1,600.2mm (63 inches) minimum.
6. Engine:
 - a. Diesel powered, wet sleeved engine or dry sleeved engine with seven (7) year unlimited mileage warranty.
 - b. Liquid cooled with deaeration system with tank and sight glass.
 - c. Net Horsepower: 223.7 kw (300 HP) minimum at rated RPM.
 - d. Fuel water separator (Racor Model 21000) or manufacturer's equal.
 - e. Heavy duty dry type air cleaner with pop-up restriction indicator.
7. Exhaust:
 - a. Single horizontal muffler and vertical exhaust pipe with protective shield, and rain cap.
8. Transmission:
 - a. Automatic Allison MD 3560P or equal, 935 lb. FT. Torque.

- b. Water/oil heat exchange.
 - c. PTO: Hot shift PTO with piggyback pump (Chelsea 230XKAJX-A3XE or equal).
 - d. Automatic transmission oil temperature gauge.
 - e. Transmission shift control - push button/lever.
 - f. Transmission oil cooler.
9. Axle:
- a. Front: 6,350.4 kg (14,000 lbs.) capacity, minimum.
 - b. Rear: 10,433 kg (23,000 lbs.) capacity, minimum single reduction with 200 wheel end (Spicer W-230S or equal).
10. Springs:
- a. Front: 6,350.4 kg (14,000 lbs.) heavy duty capacity, minimum.
 - b. Rear: 10,433 kg (23,000 lbs.) capacity, minimum.
 - c. Auxiliary Rear: 2,041.2 kg (4,500 lbs.) capacity, minimum.
 - d. Note: Front and rear springs shall not bottom out at maximum vehicle load capacity set by the manufacturer (the State carries various materials at various weights).
11. Shock Absorbers: Heavy duty front and rear (if available).
12. Wheels:
- a. Seven (7) each disc type, hub piloted; same size single front, dual rear, and spare.
 - b. 22.5 x 8.25, 10-stud DC rims; with steel hubs.
13. Tires:
- a. Seven (7) each, truck tubeless type, same size single front, dual rear, and spare. 11R 22.5, 16-ply, loading range H.
 - b. Dual rear wheels shall be able to accept any brand of tire; tires shall not touch when inflated and loaded.

14. Brakes:

- a. Dual air system with 22.4m³/H (13.2 cubic feet) compressor, anti-lock with air dryer, and pressure gauge with low air warning buzzer.
- b. Parking — Piggy back, spring actuated, double diaphragm: Anchor lock, MGM or equal, S-cam.
- c. Safety spring loaded on rear axle, cab controlled emergency air tank for release.
- d. Trailer hand control brake lever mounted on steering column and tractor protection valve.
- e. Non-asbestos material.
- f. Anti-lock brake system.
- g. Retarder — Thermal Retarder, driveline mount with handle lever positioner.

15. Steering: Powered.

16. Electrical:

- a. Dual, twelve (12) volt batteries. Maintenance free, batteries shall have the rating of 2775 CCA, minimum.
- b. Alternator: 200 amp minimum, capable of charging at low engine speed.
- c. Electrical brake controller wired to seven way receptacle at rear pintle hitch. Controller switch within view and reach of driver.

17. Cab:

- a. Aluminum conventional cab with tilt hood or steel conventional cab with tilt hood and seven (7) year warranty.
- b. Complete head lining.
- c. Clear safety glass on rear window.
- d. Individual seats for driver and passenger with safety belts, driver's seat shall be air suspension type (Bostrom Freedom XC or equal), with adjustable mechanical lumbar support, front cushion adjustment, vinyl material. passenger seat shall be two-man passenger, vinyl.
- e. Steps and grab handles located both sides of cab. Allow for 3-point contact.

- f. Floor mats.
- g. Sunvisor, driver and passenger.
- h. Factory installed air condition.

18. Chassis Frame: Heat treated alloy steel (110,000 psi yield).

19. Dump Body:

- a. Contractor's Type - 5.4m³ (7 cubic yards).
- b. 3.m length x 2,209.8mm width x 863.6mm height (10 ft. x 87 in. x 34 in.) with steel side board 3.m x 50.4mm x 203.2mm (10 ft. x 2 in. x 8 in.), to be installed on left and right sides atop dump box.
- c. Headboard and sides - minimum 10 gauge steel.
- d. Floor and Tailgate – minimum 4.76mm (3/16 in.) minimum eight (8) gauge steel.
- e. Head board with half cab shield fully welded between dump body and headboard.
- f. Grab bar on drivers side front, top of box; grab bar outside of box on both sides above rear tires.
- g. Horizontal bracing.
- h. Dump box shall be equipped with the following: 304.8mm (12 inches) spreader apron; four (4) lashing hooks on each side of box and two (2) lashing hooks on tailgate; flat (not angled) running board or catwalk to extend out along each bottom side of box with safety threads or a painted on non-slip coating (no metal grating).
- i. Safety step ladder slides out left and right side.
- j. Air tailgate release with controls in cab.
- k. Pull tarp load cover (one man operation), retractable, with steel protector shield.
- l. Shall be lined inside with spray on liner minimum of 6.35mm (¼ in.) thickness (liner shall be compatible with asphalt).

20. Hoist:

- a. 10,886.4 kg (12 ton) minimum capacity, class 60.

- b. Under-body mounted with safety locks.
- c. Control lever with safety lock mounted on floorboard of cab (right side of driver's seat).
- d. There shall be a stopper block designed to lock dump body and hoist in place in the event of a weld failure at dump box frame and hoist connection while dump is being operated.

21. Bumper:

- a. Heavy duty front bumper.
- b. One (1) or two (2) tow hooks mounted on front bumper or chassis front frame.
- c. Pintle hook with two "D" rings, 8,164.6 kg (9 ton) minimum tow capacity, Holland Hitch CP400H or equal. Mounted on rear "A" bracket frame. Center of hitch to be mounted approximately 711.12mm (28 inches) from ground level.

22. Preparation: All bare metal shall be treated with OSPHO and primed prior to application of finish coat on dump body.

23. Other:

- a. Dual step-type fuel tanks, 189.3 L (50 gal.) minimum capacity each, with additional swing step for both sides.
- b. Full radiator gravel guard.
- c. Air horn.
- d. Glad hands and plumbing with electrical wire connection (Warner 13-281-001 or equal) mounted at rear. Additional Cole Hersee #12063 six (6) prong socket trail hook-up or equal, shall also be mounted at rear. All electrical connectors to include both male and female connectors.
- e. Instrumental panel:
 - 1. Gauges; coolant temperature, fuel, tachometer, amp meter, oil pressure, air pressure, and hour meter.
 - 2. Parking brake control dash mounted.
 - 3. Water in fuel warm light and buzzer; low oil pressure, low coolant level, and high coolant temperature.
 - 4. AM/FM radio.
 - 5. Cigarette lighter.

- f. Mirrors: Dual exterior view mirrors aluminum or stainless- steel backs/brackets or non-corrosive composite type, 152.4mm x 406.4mm (6 in. x 16 in.) minimum, west coast type or equal, with convex bottom section.
- g. Clearance lights, reflectors, identification lights, and direction lights shall conform with PUC regulations.
- h. Anti-sail mud flaps, front and rear tire.
- i. Electronic reverse alarm.
- j. One (1) 2.2 kg (5 lbs.) ABC dry chemical fire extinguisher mounted in cab.
- k. Road Safety Triangle Kit, and ten (10) each Yellow Green Safety Glow Light Sticks, 10-inch size with bipod stand by Omni Glow.
- l. Three strobe light system, Whelen Model DOT3102D, DOT3 System 102D Three lighthouse system or equal, to include one (1) DOT6H strobe beacon lighthouse with optional DOT6HBG branch guard on beacon, installed on cab, two (2) Rectangular 7-gauge welded steel housings installed on rear of dump body, one on each side, containing two (2) 700 series amber linear strobe lighthouses, one on each side, two (2) 700 series red LED brake/tail/turn lighthouses, one (1) on each side, two (2) 700 series clear back-up lights, one on each side, one (1) Whelen Model ISP94, 90-watt output strobe power supply or equal, installed in cab behind seat, allowing for service access, one (1) standard lighted switch panel with Diagnostic indicator installed in or under dash within easy reach of driver. Waterproof, oil, and corrosion resistant TPR cables with waterproof connectors shall be installed with the above system. AMECA certified to SAE standards and/or minimum specifications. To include one (1) spare strobe flash tube for beacon strobe, two (2) spare strobe reflector modules for rear lighthouses, and two (2) spare bulbs for back-up lights, or equal.
- m. Color — State buff, Dupont 93-35686 high gloss enamel or equal; Chevron marking on tailgate — Omaha orange and white (comparable to existing State Highways Division fleet).
- n. Complete after factory rust proofing, with minimum seven (7) years unlimited mileage requirement warranty in accordance with Federal Specifications, 297A or its latest revision.
- o. PUC Certification, License, Registration, and Certificates as required in General Specifications.
- p. Vehicle shall conform to Code of Federal Regulations, Title 40, Part 85; Control of Air Pollution from New Motor Vehicles, Engines, Environmental Protection Agency; Federal Motor Vehicle Safety Standards.

- q. Vehicle shall conform to all applicable State, Federal, and OSHA requirements necessary for licensing, registration, and certification purposes.
- r. Technical Resources: One (1) copy of Repair Manual, one (1) copy of Parts Catalog, two (2) copies of Operator's Manual. Book format/CD/DVD.
- s. First Service Kit shall include all required filters (oil, fuel, air, breather, transmission, etc.).
- t. Vehicle shall be outlined with conspicuity material (tape along the perimeters). Conspicuity material shall be red and white (reflexite or equal).
- u. 457.2mm (18 inches) x 457.2mm (18 inches) x 1,066mm (42 inches) frame mounted lockable toolbox.
- v. First Aid Kit, OSHA/ANSI recommended.
- w. Upon "Notice to Proceed", Contractor shall submit "Application" (to State Motor Vehicle Safety Office) to meet the requirements of Section 286-202 (12), Hawaii Revised Statutes, for approval of a major modification. Construction or reconstruction of a vehicle with a gross vehicle weight rating (GVWR) of 10,001 pounds and above. Application is available at:

State of Hawaii
Department of Transportation
Highways Division
Motor Vehicle Safety
Office 601 Kamokila Boulevard, #511
Kapolei, Hawaii 96707

Copy of approved application shall be submitted at time of delivery.

24. Training:

Contractor shall provide proper and safe operation and maintenance of equipment. This training shall include a minimum of one (1) hour classrooms and one (1) hour per operator hands-on training. This service shall be provided at no additional cost to the State. Contractor shall provide classroom site. Training shall be consistent to OSHA requirements.

Copy of attendance record showing class date, time, location, class type, instructor's name and attendees shall be submitted to:

State of Hawaii
Department of Transportation
Highways
Construction and Maintenance Branch
Attn: Equipment Superintendent/Safety Coordinator
869 Punchbowl Street
Honolulu, Hawaii 96813

25. Note:

The new unit shall be capable of carrying the factor rated capacity without adverse effects. The unit shall be designed for both highway and off-road hauling and dumping of various materials (density and weight). Unit shall be able to ascend and descend roads such as Heleakala and Crater Road on the Island of Maui, with no adverse effects as to power and braking (loaded or unloaded).

Bidder(s) shall submit with their bid a certified letter(s) from the manufacturer(s) to certify the prospective bidder as the Factory Authorized Warranty Dealer (letter required for both chassis and equipment). Failure to submit certified letter(s) shall be sufficient grounds for rejection of bid.

SECTION 40 — ARTICULATED MOTOR GRADER

40.1- SCOPE OF WORK – The work consists of furnishing and delivering two (2) each, Articulated Motor Grader one (1) each to the Island of Hawaii and one (1) each to the Island of Oahu. The contractor shall present the equipment complete, ready to use and fully operational.

40.2- ARTICULATED MOTOR GRADER - The specifications contained herein establish minimum standards for the Articulated Motor Grader. Equipment offered shall include any other standard features not listed but detailed in manufacturer's brochures and deemed necessary for proper and safe operation of the equipment.

DETAILED SPECIFICATIONS FOR ARTICULATED MOTOR GRADER

1. Model/Year: Articulated Motor Grader or equal, 2026 or latest production.
2. Operating Weight: 13,608 kg (30,000 lbs.) minimum.
3. Engine:
 - a. Cummins or equal, Tier 4 Final diesel engine, water-cooled turbocharged.
 - b. 130 hp (97 kW) at 2,200 RPM.
 - c. Fuel Capacity: 45 gallon.
 - d. Hydraulic reservoir: 30 gallons.
 - e. Electric start.
 - f. Two twelve (12) volt batteries, 135 amp alternator.
 - g. Direct starting or glow plug starting.
 - h. Engine shall be equipped with a temperature, lube oil pressure alarm system.
 - i. Fuel/water separator.
 - j. Hour meter, engine oil pressure gauge, coolant temperature gauge.
4. Electrical:
 - a. Direct twelve (12) or twenty four (24) volt electrical/starting system.

- b. Two (2) twelve (12) volt maintenance free batteries. Total capacity of 100 amps hours and cold cranking of 950 amps.
 - c. Alternator minimum of 50 amps (heavy duty) for 24 volt system /100 amps for 12 volt system.
 - d. Circuit breaker/fused electrical system.
 - e. Twelve (12) volt DC power outlet.
 - f. Fuel gauge, volt meter, tachometer, hour meter.
5. Exhaust: Muffler with vertical exhaust pipe above top of cab height with rain cap.
6. Transmission:
- a. Direct drive/torque converter full power shift.
 - b. Six (6) forward, three (3) reverse speeds minimum, controlled by single lever for both.
 - c. Transmission temperature gauge, lube pressure gauge, transmission pressure gauge, transmission filter indicator.
 - d. Transmission guard.
 - e. Differential with lock and unlock.
7. Rear Drive:
- a. Rear wheels shall be tandem driven, Dana style and gear driven.
 - b. The drive to the tandem axle shall be through a differential assembly incorporating inboard planetary final drives or spur gears, double reduction.
 - c. A foot/hand operated hydraulic or mechanical differential lock, unlock will be included.
 - d. Variable volume hydrostatic drive using variable pump that drives motor connected to a 2-speed tandem axle.
 - e. Variable volume hydrostatic drive system with speed selection in each of the two-speed ranges.
 - 1. Working Range: 0-10 mph (0-16 kph) at 2,200 RPM.
 - 2. Travel Range: 0-20 mph (0-32 kph) at 2,200 RPM.

8. Front Axle:

- a. Front axle shall be pivot mounted, 40 degree oscillation.
- b. Front wheel lean angle 15 degree left or right (30 degrees total).
- c. Ground clearance: 14" at the center.

9. Brakes:

- a. Service brakes shall be wet disc type, fully enclosed and adjustment free, air/hydraulic actuated, operated by foot pedal, effective on the four tandem wheels. Operator warning system visual and audible.
- b. Low air pressure shall be indicated with both visual and audible indicators.
- c. Hydrostatic traction drive system secondary brakes.
- d. Shall have a parking brake system, hand or foot actuated and must be capable of locking grader in place. Operator warning system visual and audible.
- e. Control panel switch actuated parking brakes.
- f. Spring apply, hydraulic release parking brakes automatically apply when ignition is in "off" position or if system pressure is lost.

10. Tires/Wheels:

- a. Six (6) 15 x 19.5, TL, G-2, 8-ply pneumatic tires.
- b. To include spare tire.

11. Steering:

- a. Hydraulic actuated.
- b. Articulation indicator.
- c. Steering range of 50 degrees left and right/or a maximum steering radius of 8,053.4mm (24 ft. 4 in.).
- d. Main frame shall have the capability of articulating 20 degrees right or left.

12. Hydraulic System:

- a. Closed center; load sensing.
- b. Shall incorporate lock valves to prevent cylinder drift under loads in the following circuits: blade lift, moldboard tilt, circle shift, wheel lean, articulation and scarifier.
- c. Pump design features shall include cast iron end covers and center housing and a one-piece gear and shaft assembly/variable displacement piston type (to ensure reliability and a long service life).
- d. Hydraulic oil filter bypass, warning light.
- e. Hydraulic reservoir: 30 gallons.

13. Cab:

- a. Full height ROPS cab with sound suppression, all weather type, cab shall have roll-over protection, shall meet the SAE MIN performance criteria for rollover protective structure for motor grader (SAE J396).
- b. Tinted safety glass throughout.
- c. Heater, defroster and vent system. Factory air condition.
- d. Inside rear view mirror.
- e. Outer right and left side rear view mirrors.
- f. Two speed windshield wiper with washer front and rear.
- g. Adjustable suspension seat, fully cushioned adjustable operator pedestal, with seat belt.
- h. Two (2) 152.4mm (6 in.) Circulating fans mounted above operator.

14. Controls:

- a. Shall be hydraulically actuated by mechanical means. System shall let operator use more than one control without significant decrease in implement speed.
- b. All controls to be located in and operated from the operator's platform.

- c. Color display with digital readouts: coolant and hydraulic oil temperature, fuel level, volt meter, tachometer, hour meter, DEF level, percent engine load, and engine diagnostics.

15. Moldboard Assembly:

- a. Length x height x thickness – 3350mm x 533.4mm x 15.8mm (11 ft. X 21 in. X 5/8 in.) minimum. High carbon steel.
- b. Lift not less than 330.2mm (13 in.) above the ground level.
- c. To be furnished with hydraulic side shift, blade float, hydraulic tilting and hydraulic lift cylinders.
- d. Mold board cutting edges – carbide.

16. Circle:

- a. Shall have full 360 degree rotation.
- b. Powered by hydraulic motor/cylinders with a four point suspension.
- c. Shall be equipped with a power circle side shaft, capable of adjusting for wear, supported by a drawbar.
- d. Drawbar is 4 in. X 6 in. X 0.5 in. Tube.

17. Attachments:

- a. Front mounted scarifier assembly, “V” type with nine (9) shanks and teeth (replaceable teeth points).
- b. Complete vandalism protection, for all compartments, engine hood panels, and filler caps.
- c. Lights:
 - 1. Two (2) rear LED working lights.
 - 2. Two (2) front LED moldboard lights.
 - 3. Two (2) front headlights, signals, flashers.
 - 4. Two (2) rear LED tail lights, signals.
 - 5. Amber LED strobe beacon.
- d. Reverse warning alarm.
- e. Horn.

20. Training:

Contractor shall provide proper and safe operation and maintenance training of equipment. This training shall include a minimum of one (1) hour classroom and one (1) hour per operator hands on training.

Contractor shall provide classroom site. Contractor shall provide this training at no additional cost to the State. Training shall be consistent with OSHA requirements.

SECTION 41 — BRUSH CHIPPER TRAILER MOUNTED

41.1- SCOPE OF WORK – The work consists of furnishing and delivering, three (3) only, Brush Chipper Trailer Mounted, three (3) each to the island of Oahu. The Contractor shall present the vehicles complete, ready to use, and fully operational.

41.2- BRUSH CHIPPER, TRAILER MOUNTED - The Specifications contained herein establish minimum standards (unless stated differently). Vehicle/equipment offered shall include any other standard features not listed but detailed in manufacturer's brochures and deemed necessary for proper and safe operation of vehicle/equipment.

DETAILED SPECIFICATIONS FOR A BRUSH CHIPPER TRAILER MOUNTED

1. Model/Year: Brush Chipper Trailer Mounted 2026 or latest production.

2. Engine:
 - a. Diesel, water cooled.
 - b. 82.02 kw (110 HP) minimum.
 - c. Dry type air cleaner, heavy duty.
 - d. Instrument panel including tachometer.
 - e. Shall be equipped with temperature/low oil pressure shutdown hour meter.
 - f. Electrical system: twelve (12) volt with 650 CCA battery and 61-amp alternator minimum.
 - g. Full engine enclosure with side panels.
 - h. Fuel capacity, minimum 170.3 L (45 gals.).

- 3 Trailer:
 - a. Frame — 4.8mm (3/16 in.) solid steel plate with 50.8mm x 152.4mm (2 in. x 6 in.) rectangular tubing and support gussets on 152.4mm (6 in.) channel.
 - b. Axle — 2,721.6kg (6,000 lbs.) suspension with 3,175kg (7,000 lbs.) leaf springs and 3,175kg (7,000 lbs.) axle tube or torsional axle system rated for proper GVW.
 - c. Tires — LT 245/75 R16, 16 Ply with compatible wheels. To include spare.
 - d. Lighting – sealed LED type. All wiring to be concealed.

- e. 63.5mm (2.5 in.) I.D. pintle eye, adjustable for height.
 - f. 18-gauge steel fenders.
 - g. Dual safety chains with hooks. Must meet Federal DOT Transport Standard.
 - h. Vertical height adjustable trailer tongue plate.
 - i. Support jack (hydraulic stabilizer). Collapsible swivel caster trailer jack.
4. Feed System:
- a. Hydraulic motor.
 - b. Hydraulic oil tank. 98.41 L (26 gal.) with locking cap and sight glass.
 - c. Automatic feed with auto reverse. Emergency shut off switch.
 - d. Hydraulic discharge chute – rotatable.
 - e. Rubber in-feed curtains, brush guard.
5. Chipper Unit:
- a. Number of knives – four (4).
 - b. Knife type – double-edged, high carbon steel.
 - c. In-feed capacity – 457.2mm (18 in.).
6. Other:
- a. Automatic breakaway brake actuator.
 - b. Electric/hydraulic surge brakes.
 - c. 6-prong trailer electrical connector.
 - d. Lockable tool and battery boxes. Lockable engine compartment, fuel, and hydraulic tanks. All locks keyed alike.
 - e. Extra set Chipper Knives.
 - f. Color/Paint - Manufacturer's standard.
 - g. First Service Kit to include all necessary filters etc., as required by manufacturer.

- h. Stabilizer Package to include rear stabilizer.
 - i. Operation and safety video.
 - j. Two (2) copies each, Operator's Manual, Repair/Service and Parts Manual. Book format/CD/DVD.
7. Training:

Contractor shall provide operator and maintenance training to demonstrate proper and safe operation of equipment. This training shall include a minimum of one (1) hour classroom and one (1) hour per operator hands on training. Training shall be provided at no additional cost to the State. Contractor shall provide classroom site.

Copy of attendance record showing class date, time, location, class type, instructor's name and attendees shall be submitted to:

State of Hawaii
Department of Transportation
Highways
Construction and Maintenance Branch
Attention: Equipment Superintendent/Safety Coordinator
869 Punchbowl Street
Honolulu, Hawaii 96813

SECTION 42 - EQUIPMENT TRAILER WITH LOCKBOX

42.1- SCOPE OF WORK- The work consists of furnishing and delivering one (1) only, Equipment Trailer with Lockbox, to the island of Kauai. The Contractor shall present the vehicle complete, ready to use, and fully operational.

42.2- EQUIPMENT TRAILER- The Specifications contained herein establish minimum standards (unless stated differently). Equipment offered shall include any other standard features not listed but detailed in manufacturer's brochures and deemed necessary for proper and safe operation of equipment.

DETAILED SPECIFICATIONS FOR EQUIPMENT TRAILER WITH LOCKBOX

1. Model/Year: Equipment Trailer or approved equivalent, 2026 or latest production.
2. Type: Tilt Deck w/ tie down rings at front midship and rear on both sides.
3. Deck Length: 24 ft; Overall Length: 30.8 ft.
4. Deck Width: 102 in.
5. GVWR at 55 mph: 44,820 lbs.
6. Payload at 55 mph: 35,520 lbs.
7. Radial tires on disc wheels, spare tire/wheel assembly.
8. Lockable storage box.
9. Adjustable heavy duty Lunette eye.
10. Heavy duty quick-drop jack stand.
11. Painted in New CAT Yellow with white/red conspicuity tape on frame & deck rails.
12. Air Brakes on all wheels with glad hand connections and 7 pole lighting connector.
13. Training:

The contractor shall provide operator and maintenance training to demonstrate the proper and safe operation of equipment. This service shall be provided at no additional cost to the State. Training shall be consistent with OSHA requirements.

Copy of attendance record showing class date, time, location, class type, instructor's name and attendees shall be submitted to:

State of Hawaii
Department of Transportation
Highways
Construction and Maintenance Branch
Attention: Equipment Superintendent/Safety Coordinator
869 Punchbowl Street
Honolulu, Hawaii 96813

SECTION 43 - UTILITY TRUCK, REFUSE DUMP

43.1- SCOPE OF WORK- The work consists of furnishing and delivering three (3) each, Utility Truck, Refuse Dump to the Island of Kauai. The Contractor shall present the vehicle complete, ready to use, and fully operational.

43.2- UTILITY TRUCK, REFUSE DUMP - The Specifications contained herein establish minimum standards (unless stated differently). Vehicle offered shall include any other standard features not listed but detailed in manufacturer's brochures and deemed necessary for proper and safe operation of vehicle.

DETAILED SPECIFICATION FOR A UTILITY TRUCK, REFUSE DUMP

1. Model/Year: Utility Truck or equal, 2026 or latest production.
2. GVW Rating: 680.4kg (1,500 lbs.) capacity, minimum.
3. Wheelbase: 1,940.6mm (76.4 in.) minimum.
4. Engine:
 - a. Diesel powered. 2016 Emission Tier 4 compliant. Shall be capable of operating on a B20 blend of biodiesel, with no adverse effects.
 - b. Four-cycle.
 - c. Liquid-cooled engine. Spark arrester kit.
 - d. 16.4kW (22 HP), minimum, at rated RPM.
5. Transmission:
 - a. Continuously variable transmission (2) forward speeds, one (1) reverse speed (transmission must be capable of withstanding long highway driving conditions). 4X4.
 - b. Live hydraulic pump for dumping equipment (hydraulic dumping kit). Hand throttle kit.
 - c. Skid plate kit and CV guard kit.
6. Axle:
 - a. Front - manufacturer's standard for 4X4 minimum.

- b. Rear - manufacturer's standard for 4X4 minimum
7. Suspension:
- a. Manufacturer's heavy duty front independent MacPherson strut type or equal.
 - b. Manufacturer's heavy duty rear independent wishbone type or equal.
8. Electrical System:
- a. Twelve (12) volt system.
 - b. Alternator - capable of charging at low engine speeds.
9. Steering: Automotive rack and pinion.
10. Brakes:
- a. Service Brakes - hydraulic, disc.
 - b. Parking Brake - mechanical with warning alarm.
 - c. Non-asbestos material
11. Cab:
- a. Full size cab, with safety glass windshield, rear window, and door kit if available.
 - b. Standard bench seat with backrest, to include complete seat belt system.
 - c. Upholstery of manufacturer's standard vinyl material.
 - d. Dual outer mirrors.
 - e. Roll over protection to meet all State, Federal, OSHA and ANSI Requirements.
 - f. Right hand drive if available.
12. Body:
- a. Extended dump body on manufacturer's steel support frame with fiberglass or poly dump box with extended side rails. With vinyl/canvas cover mounted on dump box. Safety drop leg.
 - b. Dump Capacity - 453.6kg (1,100 lbs.) 2.0 cubic yard minimum.

c. Dump Hoist - Industrial type.

13. Tires/Wheels:

- a. Tires and wheels shall meet manufacturer's and Federal GAWR requirements for GVW submitted; all terrain type.
- b. Full size spare mounted on vehicle.
- c. Jack and wheel wrench.

14. Bumper: Front brush guard.

15. Color: Manufacturer standard.

16. Other:

- a. Amp meter, speedometer, fuel gauge, hour meter.
- b. Dual headlights; self-canceling turn signal; four-way flasher; fog lights; LED type lights where applicable.
- c. Horn.
- d. Windshield wiper and washer.
- e. Front tow hitch receiver.
- f. Slow moving vehicle emblem mounted at rear.
- g. Super LED Mini Light Bar, twelve (12) volt, clear dome (Whelen MCI IPCA); Class I or equal. Mounted on top of cab.
- h. Operator's Manual, two (2) copies. Book Format/CD/DVD/Flash Drive.
- i. Service/Repair Manual, Parts Catalog one (1) copy each. Book Format/CD/DVD/Flash Drive.
- j. Safety Inspection, License, Registration and Certificates as required in General Specifications (if applicable).
- k. First Service Kit shall include all required filters (oil, fuel, air, breather, transmission, etc.).

- l. Warranty shall be a minimum of 36 months/36,000 miles. (To include all attachments.)
- m. Mulching option.
- n. Whelen Super LED Beacon L10LAP with lighted switch or equal.
- o. 2.2kg (5 lbs.) ABC fire extinguisher mounted on mower.
- p. Slow moving vehicle sign mounted at rear of mower; light kit.
- q. Warranty shall be a minimum thirty-six (36) months.
- r. First service kit to include all filters as required (oil, fuel, air, breather, transmission, etc.).
- s. Custom mower cover.

17. Training:

Contractor shall provide proper operation and maintenance training; training shall be consistent to OSHA requirements; this training shall be at no additional cost to the State. Training shall include a minimum one (1) hour hands on training, to be arranged with the receiving district.

Copy of attendance record showing class date, time, location, class type, instructor's name and attendees shall be submitted to:

State of Hawaii
Department of Transportation
Highways
Construction and Maintenance Branch
Attn: Equipment Superintendent/Safety Coordinator
869 Punchbowl Street
Honolulu, Hawaii 96813

SECTION 44 - UTILITY TRACTOR WITH EXTENDED SIDE FLAIL AND REAR
ROTARY MOWER

44.1- SCOPE OF WORK - The work consists of furnishing and delivering one (1) Utility Tractor with Extended Side and Rear Flail Mower to the Island of Kauai. The Contractor shall present the equipment complete, ready to use, and fully operational.

44.2- UTILITY TRACTOR WITH EXTENDED SIDE FLAIL MOWER/ REAR ROTARY MOWER - The Specifications contained herein establish minimum standards (unless stated differently). Equipment offered shall include any other standard features not listed but detailed in manufacturer's brochures and deemed necessary for proper and safe operation of equipment.

DETAILED SPECIFICATIONS FOR UTILITY TRACTOR WITH EXTENDED SIDE
FLAIL AND REAR ROTARY MOWER

1. Model/Year: Utility Tractor, 2025 or latest production.
2. Type: 4-Wheel drive.
3. Engine:
 - a. Diesel powered, liquid cooled. EPA Tier 4 and EU Stage III A compliant. Shall be B20 Bio-Diesel compatible.
 - b. 52.1 kW (70 HP) minimum.
 - c. Fuel water separator, DAVCO Fuel Pro 382 or equal, B20 Bio-Diesel compatible.
 - d. Combination pre-screener/pre-cleaner or turbo cleaner indicator.
4. Transmission:
 - a. Manufacturer's standard full synchromesh 12x12 hydraulic with shuttle and creeper minimum, or equal.
 - b. Lock type differential.
5. Electrical:
 - a. Twelve (12) volt system.
 - b. Alternator capable of charging at low engine speeds.

6. PTO:
 - a. Rear PTO at 540 RPM, and front engine auxiliary pump.
 - b. Slip clutch.
7. Steering: Powered.
8. Brakes: Manufacturer's standard service and parking brake system.
9. Tires:
 - a. All tires mounted on compatible rims.
 - b. Front – 12.5/80-18, R-1 (Agricultural Tread) or manufacturers recommended equal
 - c. Rear - 16.9 x 30, R-1 (Agricultural Grip Tread) or manufacturers equal R-1.
 - d. Spares - Front and rear, one (1) each.
10. Axles: Heavy duty, Front -Mechanical Front Drive with limited slip
Rear- Inboard planetary final drive and flange axle
11. Hydraulic:
 - a. Open or closed center.
 - b. Hydraulic reservoir 47.1L (60 gal.) or manufacturer recommended, with shut off valve on main hydraulic line.
 - c. Suction line shall have a 100 mesh filter.
 - d. Main in tank filter to be 10 micron, full flow with restriction gauge.
12. Accessories:
 - a. ROPS and enclosed cab shall meet OSHA requirements; with factory installed air condition.
 - b. Front safety approved windshield glass with electric wiper motor.
 - c. Rear and right side of cab glass to have a protective shield (guard) from mower at rear, shield shall be removable to facilitate the cleaning of outer glass; or glass to be lexan type.
 - d. Reverse warning alarm.

- e. Horn.
- f. Interior rear view mirror; two (2) exterior mirror mounted right/left side of cab.
- g. Working and traveling lights - headlights; hazardous flashing lights front/rear; directional signals front/rear; combination tail/brake lights; six (6) work lights – front - two (2) each on cab roof and two (2) each mounted at lower windshield area. Rear - two (2) each mounted to rear top of cab, to include limb guards.
- h. Super LED Mini Light Bar, twelve (12) volt, clear dome (Whelen MC11PCA Class I or equal), mounted on top of cab.
- i. Manufacturer front and rear fenders (if available).

13. Side Extension Flail Mower:

- a. Super heavy duty, left side center mounted, articulated flail, Alamo Samurai or equal with high mount boom. Capable of mowing grass and brush cutting.
- b. Drive – Front pump hydraulically powered with optional pump/grill guard installed.
- c. Hydraulic system – Shall be separate from the tractor hydraulic system and the cutter head hydraulic circuit. To allow tractor hydraulic system to be utilized for other equipment, while flail is in operation. Each section of the hydraulic system shall have pressure relief valves (to prevent damage to the unit in the event obstructions are encountered).
- d. Valve to mower head: Two position electric solenoid controlled by direct acting relief valve, 31.8mm (1 ¼ in.) porting, 13,790 kPa (2,000 PSI). The outer boom to have metal lines fastened to inside of boom for protection against damage by brush. Hoses from boom to deck 31.8mm (1 ¼ in.) with flexible metal or manufacturer recommended shielding for added protection against damage by brush.
- e. Valve cylinder control: Four-spool, open center, tapered positive metering type, adjustable main relief valve. Boom movement cylinders (lift, swing and dipper) to have individual work port relief valves for breakaway protection. Hydraulic cable controls.
- f. Two piece boom: Inner boom 152.4mm x 152.4mm x 6.4mm (6in. x 6 in. x ¼) wall; Outer boom 127mm x 127mm x 6.4mm (5 in. x 5 in. x ½ in.) wall; Square tubing 344.8MPa (50,000 lbs/sq. in.) yield strength.
- g. Horizontal boom swing, manufacture manual/hydraulically operated. In a transport mode utility tractor with extended side flail mower shall be able to fit within the nine (9) foot width dimension of a lowboy trailer (no component shall stick out), must not

exceed legal height requirements for transporting on highways. Boom shall be stored on a boom rest for transporting purposes.

h. Boom reach capacities with 1,219.2mm (48 in.) Boom Axe Head:

Minimum up: 5,283.2mm (17 ft. 4 in.).

Minimum out: 5,486.4mm (18 ft.).

Minimum down: 3,022.6mm (9 ft. 11 in.) Boom Mower capable of mowing even with the rear tire.

Note: Measurements based on 2,438.4mm (96 in.) tire spread (outside measurement) with 18.4 x 30 tires.

i. Mounting – Entire extension mechanism shall be side mounted on a sub frame to the rear Axle and the front axle mounting frame. Main Boom of the cutter unit shall be mounted between the front and rear wheels and to the right side of the power unit. Cutter head shall be mounted on a sliding/bolt-on bracket in order for cutter head to be positioned at various angles or boom shall be articulated with rotational cutter head. No brackets shall interfere with service access areas.

j. Cutter Head – Alamo Flail Axe or equal.

1.2m (4 ft.) minimum width of cut.

5.4m (18ft.) reach maximum (2 piece).

Height of cut roller adjustable from 12.7mm to 152.4mm (1/2 in. to 6 in.).

Bearings, self-aligning, special roller bearings 50.8mm (2 in.) I.D. greaseable.

Knife lugs, welded with replaceable bushing.

Cutter shaft speed, 1,650 RPM at 1,800 RPM engine speed.

k. Knives:

Forged steel, double edged, anvil style blades, 360 degree swing.

Minimum of 16 knives.

Knife weight – 680.4g (24 oz.), special high strength alloy steel.

One (1) set spare blades and attachment accessories.

l. Design:

Roller, full span, sealed ball bearing equipped, steel constructed. Mounted rear of knives to prevent scalping.

Cutter shaft – solid steel, ball bearing mounted and balanced for smooth operation.

Cutter head – equipped with steel and rubber front and rear deflector (construction shall be heavy duty, thick wall square channel).

Hood – 10 gauge, formed 100,000 PSI steel.

Side Plates – 9.5mm (3/8 in.).

Full length replaceable shoes.

Added gussets on welded area as needed to prevent bucket and welds from cracking.

- m. Safety lock to prevent mower unit from lowering while traveling and a hydraulic auto return safety breakaway.

14. Rear Mounted Rotary Mower:

- a. Heavy duty Rear Rotary Mower (Bush Hog 326) or approved equal.
- b. Offset mount with return to center.
- c. Heavy duty gear box of 156.6kw (210 HP) rating.
- d. Cutting width 1,828.8 mm (72in) minimum.
- e. Cutting height 50.8 mm to 304.8 mm (2in to 12in).
- f. Shall be able to shred brush/pruning up to 88.9mm (3in), constant use of 63.5mm (2.5in).
- g. 7-gauge deck thickness.
- h. Approximate weight of unit 635.04 kg (1,400lbs).
- i. Shall be able to shred brush as well as cut grass.
- j. Rear mounted double row chain deflectors to provide safety from flying debris.
- k. Category 5 driveshaft.
- l. Slip clutch for driveline protection.

15. Other:

- a. Unit shall have cushioned, adjustable operators seat with backrest and seat belt.
- b. List of factory trained and authorized personnel who will provide service. Tractor shall have a five (5) year warranty on drive train, axles and cutter gear box.
- c. List of scheduled item/systems which require maintenance by factory authorized.
- d. Counterweight – manufacturer recommended.
- e. SMV (Slow Moving Vehicle) placard.

- f. Tool box 254mm x 254mm x 508mm (10in. x 10 in. x 20 in.) approximately, lockable.
- g. Operators Manual, two (2) copies; Service and Repair Manual, one (1) copy; Parts Manual, one (1) copy; All manuals for both tractor and extended side flail mower: Book format/CD/DVD.
- h. Color, Federal Safety School Bus Yellow, High Gloss Urethane or manufacturer equal.
- i. First Service Kit to include all necessary filters as required (oil, fuel, air breather, etc.).
- j. Hour Meter.
- k. Slope degree indicator, Model 7489, R&B Inc. Manufacturing or equal.
- l. 2.2 kg (5 lb.) ABC fire extinguisher mounted in cab.
- m. Complete vandalism protection package at all service/cab/dash/fuel points.
- n. First Aid Kit OSHA/ANSI recommended.

16. Training:

Contractor shall provide operator and maintenance training to demonstrate proper and safe operation of equipment. This training shall include a minimum of one (1) hour classroom and one (1) hour per operator hands on training. Contractor shall provide classroom site. This training shall be at no additional cost to the State. Training shall be consistent to OSHA regulations.

Copy of attendance record showing class date, time, location, class type, instructor's name and attendees shall be submitted to:

State of Hawaii
 Department of Transportation
 Highways
 Construction and Maintenance Branch
 Attention: Equipment Superintendent/Safety Coordinator
 869 Punchbowl Street Room 404
 Honolulu, Hawaii 96813

SECTION 45 - BACKHOE LOADER

45.1- SCOPE OF WORK - The work consists of furnishing and delivering one (1) only, Backhoe Loader to the Island of Kauai. The Contractor shall present the vehicle complete, ready to use, and fully operational.

45.2- BACKHOE LOADER - The specifications contained herein establish minimum standards (unless stated differently). Equipment offered shall include any other standard features not listed but detailed in manufacturer's brochures and deemed necessary for proper and safe operation of equipment.

DETAILED SPECIFICATIONS BACKHOE LOADER

1. Model/Year: Backhoe Loader; 2026 or latest production
2. Weight: Operating weight minimum: 18,000 lbs.
3. Engine:
 - a. Four-cylinder EPA tier 4 diesel powered, turbocharged, liquid cooled. Shall be capable of operating on a B20 blend of biodiesel with no adverse effects.
 - b. Minimum net horsepower: 105 HP
 - c. Twelve (12) volt starting system with a 95-amp (minimum) alternator.
 - d. Pre-cleaner plus dual stage dry type air cleaner with service indicator.
 - e. Heavy-duty pressure lubricating system with full flow oil filters, audible alarm.
 - f. High-capacity radiator; audible alarm.
 - g. Fuel/water separator. Fuel filter in-line strainer.
 - h. Spark arresting muffler with a 45-degree stack pipe, above top of cab height.
4. Transmission:
 - a. Fully Synchronized 5-speed forward w/ hydraulic reverser, minimum.
 - b. Hydraulically actuated clutches with de-clutch button.
 - c. 4-wheel drive (4WD).
 - d. Single stage torque converter.

5. Differential/Final Drive:
 - a. Manufacturer's standard differential shall incorporate a mechanical differential lock that can be engaged on the go in either forward or reverse.
 - b. The final drives to be either full-gear or planetary design located inboard next to the differential housing.
6. Steering: Hydrostatic powered by main hydraulic pump.
7. Brakes:
 - a. Wet disc and facings, fully enclosed and self-adjusting.,
 - b. Independent parking brake system; audible alarm.
8. Wheels and Tires: Manufacturer's recommended size, front and rear. To include one (1) each spare.
9. Axles and Tread width:
 - a. The minimum wheelbase that will be accepted is 84 in.
 - b. Front Axle - Oscillating with outboard planetary drives.
 - c. Rear Axle - Heavy-duty; differential lock.
 - d. Axles shall meet or exceed SAE J43 standards for load rating.
10. Loader:
 - a. Fully hydraulic
 - b. Multipurpose 4-in-1 bucket 1.25 cu. yd. minimum capacity. Consisting of rear bulldozer section with cutting edge (bolt on) and front bottom section with bolt on cutting edge.
 - c. Single handle loader control.
 - d. Bucket position indicator.
 - e. Shall have quick coupler for attachment changes.
 - f. Shall be equipped with auxiliary hydraulics for other attachments (quick disconnect type); shall include shock dampener in hydraulic circuit; hose guards; swivel connectors.

11. Backhoe

- a. Factory installed 2-lever backhoe controls. 4-lever shall not be accepted.
- b. One (1) heavy-duty 24 in. bucket with cutting edge and replaceable teeth (detachable).
- c. One (1) heavy-duty 18 in. bucket with cutting edge and replaceable teeth (detachable).
- d. Shall have quick coupler for attachment changes.
- e. Shall be sufficiently equipped with auxiliary hydraulics for other attachments (quick disconnect type).
- f. Fully hydraulic extendable dipper arm (Extend-A-Hoe) with independently controlled hydraulic thumb attachment with stowed position locking mechanism.

12. Outriggers: Individually controlled with lockout valve to prevent drift and combination pads.

13. Color: Federal Safety School Bus Yellow.

14. Other:

- a. Operator's Seat- air ride suspension type full cushion with high back, (adjustable height, forward, backward) with retractable seat belt.
- b. Fully enclosed cab with ROPS (rollover protection) meeting OSHA requirements and conforming to SAE J1040; windshield electric two speed wiper and washers (front and back). Factory air condition. Sun visor. Tinted glass. Maximum interior noise level shall be 75 decibels as per SAE J88.
- c. Anti-vandalism cover for dash and cab/all service points. Vandalism protection all keyed alike. Anti-theft device.
- d. Super LED Mini Light Bar, twelve (12) volt clear dome, Class I (Whelen MC11PCA or equal) Mounted on top of cab.
- e. Six (6) working LED lights. Front - 2 each mounted on cab roof and 2 each mounted at lower windshield area. Rear - 2 each mounted to rear top of the cab, to include limb guard. Traveling lights, hazardous flashing lights, directional turn signals, combination stop and taillights (all LED type to include limb guards).

- f. Interior mirror and two (2) exterior rear view mirrors mounted at left and right sides of cab.
- g. Gauges/warning lights - fuel gauge, AMP meter, hour meter, tachometer, coolant temperature, engine oil pressure, rear axle oil temperature, converter oil pressure, hydraulic system filter, alternator, air cleaner, parking brake, transmission temperature.
- h. One (1) 10 lbs. ABC dry chemical fire extinguisher mounted on brackets in cab.
- i. Manufacturer recommended counterweights for proper balance with all attachments.
- j. Dual heavy-duty batteries (360-minute reserve capacity).
- k. Horn and back up alarm.
- l. SMV (Slow Moving Vehicle) emblem.
- m. Fenders on all wheels (if available from manufacturer).
- n. Gauges for hoses, boom base, boom cylinders, stabilizer and stabilizer cylinders.
- o. Toolbox - minimum 10 in. X 10 in. X 20 in. with accessory tray, mounted and lockable (coordinate installation with user).
- p. Operator's Manual, Service and Repair Manual, Parts Catalog, on book format or memory stick.
- q. List of factory trained and authorized personnel who will provide service.
- r. First service kit to include all manufacturer required filters (oil, fuel, air, breather, etc.).
- s. Warranty, to include all attachments. Complete power train warranty for a period of five (5) years.
- t. Manufacturer "training video for safe operation of equipment and attachments".

15. Training:

Contractor shall provide proper and safe operation and maintenance training of equipment. This training shall include a minimum of (1) hour class and one (1) hour per operator hands on training on the island of Kauai. Contractor shall provide this training at no additional cost to the State. Training shall be consistent with OSHA requirements.

Copy of attendance record showing class date, time, location, class type, instructors name and attendees shall be submitted to:

State of Hawaii
Department of Transportation
Highways
Construction and Maintenance Branch
Attn: Equipment Superintendent/Safety Coordinator
Room 404
869 Punchbowl Street
Honolulu, HI 96813

SECTION 46 - EQUIPMENT TRAILER

46.1- SCOPE OF WORK - The work consists of furnishing and delivering one (1) only, Equipment Trailer to the Island of Kauai. The Contractor shall present the vehicle complete, ready to use, and fully operational.

46.2- EQUIPMENT TRAILER - The Specifications contained herein establish minimum standards (unless stated differently). Equipment offered shall include any other standard features not listed but detailed in manufacturer's brochures and deemed necessary for proper and safe operation of equipment.

DETAILED SPECIFICATIONS FOR EQUIPMENT TRAILER

1. Model/Year: Equipment Trailer or equivalent, 2026 or latest production.
2. Type: Tilt Deck, Triple axel with heavy duty tilt cylinders
3. Deck Length: 24+5 ft; Overall Length: 36.0 ft.
4. Deck Width: 102 in.
5. GVWR at 55 mph: 62,000 lbs.
6. Payload at 55 mph: 50,000 lbs.
7. Radial tires on disc wheels, spare tire/wheel assembly.
8. Heavy duty 1 in. "D" ring tie downs, six (6) per side.
9. Adjustable heavy duty Lunette eye.
10. Heavy duty quick-drop jack stand
11. Painted in New CAT Yellow with white/red conspicuity tape on frame & deck rails.
12. Air Brakes on all wheels with glad hand connections and 7 pole RV Style lighting connector.
13. Training:

The contractor shall provide operator and maintenance training to demonstrate the proper and safe operation of equipment. This service shall be provided at no additional cost to the State. Training shall be consistent with OSHA requirements.

Copy of attendance record showing class date, time, location, class type, instructor's name and attendees shall be submitted to:

State of Hawaii
Department of Transportation
Highways
Construction and Maintenance Branch
Attention: Equipment Superintendent/Safety Coordinator
869 Punchbowl Street
Honolulu, Hawaii 96813

SECTION 47 - CAB/CHASSIS WITH TRAFFIC CONTROL BODY

47.1- SCOPE OF WORK — The work consists of furnishing and delivering two (2) each, Cab/Chassis with Traffic Control Body, to the island of Kauai. The Contractor shall present the vehicle complete, ready to use, and fully operational.

47.2- CAB/CHASSIS WITH TRAFFIC CONTROL BODY - The Specifications contained herein establish minimum standards (unless stated differently). Vehicle offered shall include any other standard features not listed but detailed in manufacturer's brochures and deemed necessary for proper and safe operation of vehicle.

DETAILED SPECIFICATIONS FOR A CAB/CHASSIS WITH TRAFFIC CONTROL BODY

1. Model/Year: Cab/Chassis with Traffic Control Body. 2025 or latest production.
2. Type: 2-Wheel Drive. Dual rear wheel
3. GVW Rating: 6,804kg (15,000lbs.) minimum 8,164.8kg (18,000 lbs.) maximum.
4. Wheelbase: 5,257.8mm (207 inches) maximum.
5. Cab to Axle: 3,860.8mm (150 inches), Cab to end of frame: 194 inches
6. Engine:
 - a. Diesel powered. 2025 Emissions compliant, Tier 4, shall be B20 Bio-Diesel compatible with no adverse effects.
 - b. Heavy duty cooling system.
7. Transmission:
 - a. 6-speed automatic minimum.
 - b. Transmission oil cooler.
 - c. External Transmission oil cooler.
8. Axle: Rear locking or limited slip differential
9. Electrical System:
 - a. Twelve (12) volt with alternator capable of charging battery at low engine speeds.

- b. Dual battery system.
- c. LED type lights for stop/turn/tail/reverse/marker/. All wiring shall be harnessed

10. Steering: Power or power assisted.

11. Brakes:

- a. Power or power assisted. Four--wheel disc brakes.
- b. Anti-lock brake system.
- c. Roll stability control/traction control.

12. Cab/Interior:

- a. Crew Cab.
- b. Bench seats, seat belts for six (6) passengers.
- c. Upholstery of manufacturer's standard vinyl/cloth material.
- d. Interior rearview mirror with glare control.
- e. Power windows/locks on all doors.
- f. Floor covering vinyl/rubber with insulation. With floor mats.
- g. Dual outer mirrors with spot mirrors, on swing out or telescoping brackets.
- h. AM/FM/Bluetooth radio.
- i. Factory installed air condition.
- j. Twelve (12) volt accessory outlet; up-fitter switches.
- k. Rain guards or vent shades on all doors. Side-step bars (both sides).

13. Body: Royal Truck Equipment Class 4 Traffic Control Body

- a. Engineer designed heavy duty steel Traffic Control Body, 10 gauge flat plate floor with anti-skid coating applied to entire deck and side man baskets.
- b. Stake body dimensions: 14 ft. x 8 ft.

- c. 11 gauge solid steel integrated 54 inch bulkhead, rub rails and pockets.
- d. 36 in. high swinging racks on right, left and rear, removable center rack with grab handles, racks shall be powder coated safety yellow and all grab handles painted red.
- e. Left & right mounted 60 in. wide low-profile man-buckets with hinged entry gate.
- f. Side man-buckets shall have heavy duty locking lids to secure them when opened, engineered adjustable sliding safety hoop and aluminum storage box as shown on website.
- g. New 15-lamp LED Trafcon arrow board mounted between cab and bulkhead on vertically telescoping hydraulic mount, with dedicated pump and reservoir, solar charging system with dedicated deep cycle battery and in-cab controls.
- h. LED lighting package: 2 amber strobes on arrow board, 2 rear facing strobes in rear corner posts, 8 work lights: 2 on bulkhead, 2 on rear posts and 2 on left and right sides of the body. Centrally located weather tight junction box for all traffic control package lighting
- i. Royal traffic control camera system including 7 inch LCD Monitor, 2 hi-res rear view cameras with audio and IR illumination.
- j. Heavy duty hitch plate with ½ inch x 2-inch gussets tied to chassis, welded 2-1/2-inch receiver and D-Rings, 7 way RV connector with electric brake connection. Separate 12volt auxiliary power connection. 2000lb. max tow capacity pintle hitch mounted on 2-1/2 inch adjustable height pintle mount rated for Scorpion trailered attenuator.
- k. Driver's side mounted 18in.x18in.x24in. locking aluminum toolbox.
- l. Rear mounted lift gate.
- m. Trailer hitch must be accessible with lift gate in stowed position.

14. Bumpers:

- a. Front: Standard.
- b. Rear: Lift gate compatible.

15. Tires/Wheels:

- a. Tires and wheels 19.5 inch shall meet manufacturer's and Federal GAWR requirements for GVW submitted; all terrain type.

- b. Full size spare, unmounted
 - c. Jack and wheel wrench.
 - d. No chrome/aluminum wheels unless manufacturer standard.
16. Suspension: Heavy duty — axles, springs, and shock absorbers shall meet manufacturer and Federal GAWR requirements for GVW submitted.
17. Color:
- a. White, Dupont 93-96923 High Gloss Urethane or manufacturer's equal.
 - b. Reflective chevron markings (reflexite or equal) on rear of liftgate, Omaha orange and white (comparable to existing State Highways Division Fleet). Spray-on bed liner
18. Other:
- a. Operator's Manual two (2) copies, Shop Repair Manual one (1) copy, Parts Manual one (1) copy. Book format/CD/DVD.
 - b. 2.2kg (5 lbs.) ABC fire extinguisher mounted in cab.
 - c. Reverse alarm.
 - d. Gauge package.
 - e. Safety Inspection, License, Registration, and Certificates as required in General Specifications.
 - f. Complete after factory rust proofing, with minimum seven (7) years unlimited mileage requirement warranty, in accordance with Federal Specifications 297A or its latest revision.
 - g. The light bar system shall be a Whelen Model HIDOTF4W0 with photo cell or equal. The bar shall be sixty (60) inches long minimum. The light bar shall house all electronic components. The light bar must have Hi/Low power control of all inboard LED modules. The I/O board shall produce a minimum flash rate of 75 comet flashes per minute with alternating corners, not an "X" pattern. There shall be ten (10) scan lock flash patterns to choose from. Each pair of LED lamps must be capable of operating in a different flash pattern. The light bar shall have all linear LED modules and shall meet SAE-J845 Class I and SAE-j595

requirements. All LED inboard modules must produce a minimum 180degree light pattern. The I/O module shall be 100% solid state with built in reverse polarity protection and output short protection. The I/O board shall operate from 10 — 16 VDC with no degradation in flash rate.

Shall have a switch controller Whelen PCC10W or equal.

The light bar shall be programmed/wired for a rear lower duplex traffic advisor function.

Switching sequence as follows: #1 — Amber warning; #2 — White warning lights (flashing); #3 Red rear warning lights (flashing); #4 — Left alley; #5 — Right alley; #6 — Rear work lights steady bum; #7 — Cruise light corner steady bum; #8 — Traffic advisor left; #9 —Traffic advisor right; #10 - Front work lights steady bum; — Note, #8 and #9 together will activate split traffic advisor by turning on both left and right traffic advisor buttons at the same time.

All switches shall be lighted type and mounted within a console attached to the dash or mounted as part of OEM console, with provisions to mount an external radio system. Light bar power cable must be brought to the power source with a fuse (thermal circuit breakers shall be rejected).

Power cable shall be labeled with a permanent label at the power source, marked "light bar". All cable and wiring shall be grommet protected and shall use grommets through sheet metal panels.

The four-corner linear 18's must be identical and all other inboard light heads must be 400 series. All internal light heads must snap into sliding brackets that are mounted in the light bar. The light bar shall contain a permanent mounting kit to prevent theft of the light bar, and be laser etched "STATE DOT HIGHWAYS", lettering shall be 1.5 inches tall. Etching shall be at top of light bar on both ends, lettering to face out.

- h. First Service Kit shall include all filters as required by manufacturer (oil, air, breather, transmission, etc.).
- i. Warranty shall be a minimum of 36 months/36,000 miles (to include all attachments).
- j. First Aid Kit (OSHA/ANSI recommended).
- k. Road safety triangle kit; and self-charging four pack kit Aervoe Super LED Road Flares shall have yellow housing with red LED lighting. All housing and case shall be etched "STATE DOT HIGHWAYS".

19. Training:

Contractor shall provide initial training at time of delivery for proper and safe operation and maintenance of vehicle/equipment and refresher training one (1) year after initial delivery. This training shall include a minimum of one (1) hour classroom and one (1) hour per operator hands on training This service shall be provided at no additional cost to the State. Contractor shall provide classroom site. Training shall be consistent to OSHA requirements.

Copy of attendance record showing class date, time, location, class type, instructor's name and attendees shall be submitted to:

State of Hawaii
Department of Transportation
Highways
Construction & Maintenance Branch
869 Punchbowl Street
Honolulu, Hawaii 96813
Attn: Equipment Superintendent/Safety Coordinator

SECTION 48 – TRUCK TRACTOR

48.1 SCOPE OF WORK - The work consists of furnishing, delivering, one (1) only, Truck Tractor and to the Island of Kauai. The Contractor shall present the vehicle/equipment complete, ready to use, and fully operational.

48.1 TRUCK/TRACTOR - The Specifications contained herein establish minimum standards (unless stated differently). Vehicle/equipment offered shall include any other standard features not listed but detailed in manufacturer's brochures and deemed necessary for proper and safe operation of vehicle/equipment.

DETAILED SPECIFICATIONS FOR TRUCK TRACTOR

1. Model/Year: Truck Tractor, 2026 or latest production, or equal.
2. Wheelbase: 4,953mm (195 in.) minimum.
3. Cab to Axle: 2,667mm (105 in.) minimum.
4. Axle to Frame: 1,346.2mm (53 in.) minimum.
5. Engine:
 - a. Cummins X15 Performance Series, Diesel powered, wet sleeved engine. Emissions certified tier 4 or approved equal. Capable of operating on a B20 blend of biodiesel with no adverse effects.
 - b. Six (6) cylinders.
 - c. 525 hp; 1,850 torque lb. ft. @ 1200 RPM minimum.
 - d. Throttle, hand control electronic mounted at instrument panel.
 - e. Air cleaner restriction gauge.
 - f. Electronic governor.
 - g. Electric engine shutdown, key operated.
 - h. Spin-on type oil filter - full flow.
 - i. Water filter engine mounted.
 - j. Fuel filter engine mounted
 - k. Fuel-water separator with sight bowl. DAVCO Fuel Pro-48 or equal, Bio-Diesel compatible.

- l. Magnetic engine oil drain plug.
 - m. Idle shutdown timer. Shall be set at five (5) minutes. Engine shall not shutdown while warning lights are in operation.
 - n. Engine oil temperature gauge or digital cluster reading.
6. Cooling System:
- a. Heavy duty radiator core design and construction.
 - b. Deaeration system with tank and sight glass.
 - c. Automatic on/off fan drive system, with normally closed temperature control.
 - d. Premium rubber/silicone hoses.
7. Transmission:
- a. Manual transmission, 18-speed (Fuller RTLO-20918B) with double overdrive and double-lo, internal lube oil pump and air shift or approved equal.
 - b. Oil cooler - transmission.
 - c. PTO opening required.
 - d. Magnetic drain plug.
 - e. Aluminum gear case not acceptable.
 - f. Oil temperature gauge for manual transmission.
8. Clutch:
- a. Spicer 393.7mm (15.5 in.), two (2) plate pull type, ceramic faced, (Spicer EP 1552) or approved equal.
 - b. Manual quick-adjust.
 - c. Greaseable throw-out bearing.
9. Power Divider:
- a. Shall include lockout mechanism, driver controlled or automatic.
 - b. Magnetic drain plug.

- c. Aluminum gear case not acceptable.
- d. Shall have heavy duty interaxle shaft.

10. Electrical System:

- a. Twelve (12) volt system, standard.
- b. 200 amp alternator, minimum.
- c. Three (3) maintenance free AGM batteries, 1950 CCA total minimum.
- d. Circuit breakers, auto reset (main panel) to replace all fuses except instrument cluster feed.
- e. Chassis wiring shall be color coded and/or continuously numbered.
- f. Enclosed battery compartment, mounted under cab, left side.

11. Axle Front:

- a. Minimum 6,350.4 kg (14,000 lb.) capacity wide track axle for maximum turning angle.
- b. Designed for heavy duty service.
- c. Oil lubricated and sealed wheel bearing with visible oil supply.
- d. Ample tire clearance at maximum turning angle.

12. Axle Rear:

- a. Tandem assembly, minimum 20,865.6 kg (46,000 lbs.) capacity (Rockwell RT-46-164EPH) or approved equal. Single reduction with 200 wheel ends.
- b. Gear ratio manufacturer recommended for highway/off road conditions.
- c. Heavy duty, factory balanced drive line.
- d. Heavy duty radius/torque rods. Off highway articulation and oscillation characteristics.
- e. Positive accel alignment.
- f. Magnetic drain plug

13. Suspension:

- a. Front springs, minimum 6,350.4 kg (14,000 lbs.) capacity.

- b. Heavy duty shock absorbers
- c. Spring shackles and mounting brackets shall be designed for extreme service.
- d. Rear tandem suspension (Hendrickson HMX 460) or approved equal. 1,371 6mm (54 in.) axle spacing 20,865.6 kg (46,000 lb.) capacity

14. Wheels:

- a. 24.5 X 8.25, Heavy duty disc type, hub piloted to include spare, with steel hubs, 10-stud.
- b. Note: Tires and wheels shall provide tire chain clearance without the use of adaptors, spacers, spoke extensions, etc.; local modification not acceptable.

15. Tires:

- a. Front — three (3) 11R 24.5 unisteel G159 (Goodyear) 471 rev/mile, load range G, 14-ply or equal.
- b. Rear — eight (8) 11R 24.5 unisteel G177 (Goodyear) 471 rev/mile, load range G, 14-ply or equal
- c. Spare tire equal to model standard.

16. Steering:

- a. Heavy duty design.
- b. Steering gear power, Ross TAS-65 or equal.
- c. Stationary steering column.
- d. Manufacturer standard steering wheel

17. Brakes:

- a. Full air system, s-cam actuated drum type, 16.5 in.x6 in. front, 16.5 in.x8.625 in. rear.
- b. Minimum 18.7 CFM, air compressor lubricated via the engine lubrication system, including a means of filtering air inlet
- c. Reservoir shall meet requirements of FMVSS-121, shall include drain cocks with lanyard pull.
- d. Automatic low-pressure release setting.

- e. Rear service brake control.
- f. Bendix/Westinghouse air dryer system or approved equal.
- g. Brake pressure indicator, low air pressure warning light and audible alarm
- h. Auxiliary interrupter switch for cab and trailer clearance/marker lights, mounted at instrument panel.
- i. Hand control air valve.
- j. Color coded brake line.
- k. Parking brake valve - combination valve for tractor and trailer.
- l. Tractor protection valve.
- m. Spring-loaded, piggyback parking brake chambers on both rear axles.
- n. Auxiliary glad hand air connection at reservoir.
- o. Antilock brake system with automatic traction control.

18. Exhaust:

- a. Vertical exhaust system with protective guard and rain cap (all exposed areas shall include protective mesh covering, down to and including frame level). With after treatment device frame mounted. Two position exhaust switch to inhibit diesel particulate filter regeneration as long as switch is "on" position.
- b. Jacobs engine compression brake, with selector switch, exhaust brake shall be rejected.
- c. Discharge pipe with perforated muffler guard shall be located behind the cab, frame mounted, or side mounted.
- d. Shall keep noise level to lowest possible level, and in accordance with Federal regulations,
- e. Local modifications not acceptable with perforated muffler guard.

19. Frame:

- a. Bolted construction designed for heavy-duty service.
- b. Steel strength of at least 110,000 psi yield.

- c. Total rail RBM rating of at least 2.5 million inch-lbs., with or without channel reinforcements, local frame modifications not acceptable.

20. Fuel System:

- a. Single/Double tank(s), with total minimum capacity of 378 L (100 U.S. Gal.). Including DEF tank.
- b. Heavy duty plumbing.
- c. Auxiliary fuel filter shall be included.
- d. Tank(s) shall be vented and have non-skid steps.
- e. Fuel lines shall be high quality flexible wire braid or equal. Locking fuel tank cap.

21. Cab:

- a. Aluminum conventional cab or steel conventional cab with ten (10) year unlimited warranty.
- b. Front End - tilt type; aluminum/fiberglass construction.
- c. Bug screen mounted behind grille.
- d. Vinyl upholstery.
- e. Driver seat - air suspension type; isolated; with adjuster; with adjustable lumbar support; 3-point seat belt, lap and shoulder type (Bostrom Freedom XC or equal).
- f. Passenger seat - non-suspension type; isolated; with adjuster, adjustable back angle; seat cushion; lumbar support; 3-point seat belt, lap and shoulder type (Bostrom 900R or equal)
- g. Tinted safety glass. Safety glass on rear window (full width), shall have manufacturer installed or custom-built right door peep window and rear quarter/corner windows both sides of cab (these windows shall provide additional visibility for the operational safety of the vehicle).
- h. Full instrumentation including tachometer and engine hour meter, all illuminated. Digital instrumentation will be accepted.
- i. Power windows/locks.
- j. All switches and gauges shall be clearly identified.
- k. Insulated floor cover with floor mats.

- l. Headlights, parking lights, stop, turn, back-up, running lights (daytime), hazard, clearance/marker lights, and fog lights, to conform to PUC requirements. LED type.
- m. Dual windshield wipers and washer
- n. Two (2) sun visors.
- o. Dual air horn.
- p. Heater/Defroster/Vent system with independent motor(s) or control.
- q. Grab handles both sides of cab (shall allow for 3-point contact).
- r. Factory installed air condition.
- s. AM/FM/Bluetooth weather radio.
- t. Two (2) LED work lights (Whelen PCP2 or equal) at rear of cab.
- u. Powered dual exterior rear view mirrors west coast type 406.4mm X 177.8mm (16 in. X 7 in.), with stainless steel head and brackets or composite type material. Separate convex mirror, stainless steel or composite type material 203.2mm (8 in.) diameter to be mounted below primary mirrors. Passenger door down view mirror.
- v. Color: "State Buff, Dupont 93-35686 high gloss urethane or approved equal.

22. Other:

- a. Fog lights at front bumper.
- b. Front tow hook(s).
- c. Stainless Steel half fenders over rear wheels with rear anti-sail mud flaps mounted on spring loaded stainless steel 45degree slant brackets bolted to rear of frame rails.
- d. Electronic reverse alarm.
- e. 4.5 kg (10 lbs.) ABC fire extinguisher mounted in cab.
- f. Road safety triangle kit and self-charging four pack kit AERVOR Super LED Road Flares, shall have yellow housing with red LED lighting. All housings and case shall be etched "STATE DOT HIGHWAYS".
- g. Seven-way electrical plug and socket, 4,572mm (15 ft.) coiled lighting cable; 4,572mm (15 ft.) nylon coiled air line with glad hands, two (2) each one (1) for service, one (1) for emergency; pogo stick with necessary hose/cable mountings.

- h. Two (2) Warning lights (Whelen Stainless Steel Micro 400) or equal, with mirror mount brackets, cab switch, warning light, power supply and all necessary wiring.
- i. Fifth Wheel: 914.4mm (36 in.) diameter, heavy-duty fifth wheel, air-controlled sliding type, 914.4mm (36 in.) travel, minimum.
- j. Wet Line Kit: Shall include an air shift PTO, 45gpm pump, and 189.3 L (50 gal.), aluminum tank with dipstick/level gauge. The kit shall include all necessary hydraulic and pump valves, suction and pressure hoses, quick couplers and air controls in the cab.
- k. Two (2) each 2,721.5 kg (3 ton) come-along, 4.6m (15 ft.) pull, roller link type.
- l. Complete after factory rustproof (not applicable to aluminum or fiberglass) with minimum seven (7) year unlimited mileage requirement warranty. In accordance with Federal Specifications 297A at its latest revision.
- m. Truck tractor to be lined with conspicuity material (reflexite or equal) both sides of truck tractor (red/white). Shall be consistent with low-boy trailer
- n. PUC Certification, License, Registration, and Certificates as required in General Specifications.
- o. Two (2) each Operator's Manual, Two (2) each Service and Repair Manual, Two (2) each Parts Manual. Book format, USB Flash Drive. Complete diagnostic platform including semi-rugged laptop with Cummins Insight, anti-lock brakes, powertrain and vehicle diagnostic programs installed.
- p. Contractor shall provide a list of factory-trained and authorized personnel capable of providing installation and service support. Contractor shall provide a list identifying those items and systems, which require factory-authorized personnel to install and maintain. Contractor shall also stock all necessary parts for the same.
- q. First Service Kit to include all required filters (oil, fuel, Air, breather, transmission, etc.).
- r. First Aid Kit OSHA/ANSI recommended.

23. Notes:

- a. Vehicle and accessories offered shall comply with all applicable Federal and State of Hawaii laws.
- b. Truck Tractor shall be matched for proper connection/operation to Trail King TK80SA sliding axle trailer owned by the State.

24. Upon "Notice to Proceed", Contractor shall submit "Application" (To State Motor Vehicle Safety Office) to meet the requirements of Section 286-202 (12), Hawaii revised statutes, for approval of a major modification. Construction, or reconstruction of a vehicle with a gross vehicle weight rating (GVWR) of 10,001 pounds and above.

Application is available at:

State of Hawaii

Department of Transportation

Highways

Motor Vehicle Safety Office

339 Ponoana Place Aiea, Hawaii, 96701

Copy of approved application shall be submitted a time of delivery

25. Training:

a. Contractor shall provide operator and maintenance training and refresher training one (1) year after delivery to demonstrate proper and safe operation of vehicle and equipment. This training shall consist of a minimum of one (1) hour class and one (1) hour hands on training, per operator. Contractor shall provide classroom site. This service shall be provided at no additional cost to the State. Training shall be consistent to OSHA requirements.

b. Copy of attendance record showing class date, time, location, class type, instructor's name and attendees shall be submitted to:

State of Hawaii

Department of Transportation

Highways

Construction & Maintenance Branch

869 Punchbowl Street Room 404

Honolulu, Hawaii, 96813

Attn: Equipment Superintendent/Safety Coordinator

c. Note:

Bidder(s) shall submit with their bid a certified letter(s) from the manufacturer(s) to certify the prospective bidder as the Factory Authorized Warranty Dealer (letter required for both chassis and equipment). Failure to submit certified letter(s) shall be sufficient grounds for rejection of bid.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION

PROPOSAL

PROPOSAL TO THE STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS

Project: FURNISHING AND DELIVERING MOTOR VEHICLES
AND EQUIPMENT, ISLANDS OF OAHU, MAUI,
LANAI, MOLOKAI, HAWAII, AND KAUAI

PROJECT NO.: HWY-CM-26-01

CONTRACT TIME: Delivery of the above Motor Vehicles, Trailers, Utility
Tractors, and Equipment to agency indicated shall be
completed within 365 calendar days from the date indicated
in the Notice to Proceed from the Department.

LIQUIDATED DAMAGES: Refer to Section 8.2 Liquidated Damages, of the Special
Provisions.

NOTE: **NO BID, PERFORMANCE AND PAYMENT BONDS ARE
REQUIRED FOR THIS PROJECT**

ELECTRONIC SUBMITTAL: **Bidders shall submit and upload the complete proposal to
HiEPRO prior to the bid opening date and time. Any additional
support documents explicitly designated as confidential and/or
proprietary shall be uploaded as a separate file to HiEPRO. See
SPECIAL PROVISIONS 2.3 DELIVERY OF PROPOSALS for
complete details. FAILURE TO UPLOAD THE COMPLETE
PROPOSAL TO HIePRO SHALL BE GROUNDS FOR
REJECTION OF THE BID.**

Director of Transportation
Aliiainmoku Hale
869 Punchbowl Street
Honolulu, Hawaii 96813

Dear Sir:

The undersigned bidder declares the following:

1. It has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with this proposal.
2. It has not been assisted or represented on this matter by any individual who has, in a State capacity, been involved in the subject matter of this contract within the past two years.
3. It has not and will not, either directly or indirectly offered or given a gratuity (i.e. an entertainment or gift) to any State or County employee to obtain a contract or favorable treatment under a contract.

The undersigned bidder further agrees to the following:

1. If this proposal is accepted, it shall execute a contract with the Department to provide all necessary labor, machinery, tools, equipment, apparatus and any other means of construction, to do all the work and to furnish all the materials specified in the contract in the manner and within the time therein prescribed in the contract, and that it shall accept in full payment therefore the sum of the unit and/or lump sum prices as set forth in the attached proposal schedule for the actual quantities of work performed and materials furnished and furnish satisfactory security in accordance with Section 103D-324, Hawaii Revised Statutes, within 10 days after the award of the contract or within such time as the Director of Transportation may allow after the undersigned has received the contract documents for execution, and is fully aware that non-compliance with the aforementioned terms will result in the forfeiture of the full amount of the bid guarantee required under Section 103D-323, Hawaii Revised Statutes.

Matls. & Serv.
r12/2020

2. That the quantities given in the attached proposal schedule are approximate only and are intended principally to serve as a guide in determining and comparing the bids.
3. That the Department does not either expressly or by implication, agree that the actual amount of work will correspond therewith, but reserves the right to increase or decrease the amount of any class or portion of the work, or to omit portions of the work, as may be deemed necessary or advisable by the Director of Transportation, and that all increased or decreased quantities of work shall be performed at the unit prices set forth in the attached proposal schedule except as provided for in the specifications.
4. In case of a discrepancy between unit prices and the totals in said Proposal Schedule, the unit prices shall prevail.
5. Agrees to begin work within 10 working days after the date of notification to commence with the work, which date is in the notice to proceed, and shall finish the entire project within the time prescribed.
6. The Director of Transportation reserves the right to reject any or all bids and to waive any defects when in the Director's opinion such rejections or waiver will be for the best interest of the public.

Receipt is hereby acknowledged and complete examination is hereby expressly guaranteed of the following listed items: the specifications, the notice to bidders, the special provisions, if any, the proposal, the plans, if any, and the contract form.

The undersigned acknowledges receipt of any addendum, issued by recording in the space below the date of receipt.

Addendum No. 1 _____ Addendum No. 3 _____

Addendum No. 2 _____ Addendum No. 4 _____

The undersigned hereby certifies that the bid prices contained in the attached proposal schedule have been carefully checked and are submitted as correct, final and are net prices.

Bidder (Company Name)

By _____
Authorized Signature

Print Name and Title

Business Address

Business Telephone Email

Date

Contact Person (If different from above)

Phone: _____ Email: _____

*Hawaii General Excise Tax License No. _____

**State License (Automotive Dealer) No. _____

Matls. & Serv.
r12/2020

NOTE:

If bidder is a CORPORATION, the legal name of the corporation shall be set forth above, the corporate seal affixed, together with the signature(s) of the officer(s) authorized to sign contracts on behalf of the corporation. Please attach to this page current (not more than six months old) evidence of the authority of the officer(s) to sign on behalf of the corporation.

If bidder is a PARTNERSHIP, the true name of the partnership shall be set forth above with the signature(s) of the general partner(s) authorized to sign contracts on behalf of the partnership. Please attach to this page current (not more than six months old) evidence of the authority of the partner(s) to sign on behalf of the partnership.

If bidder is an INDIVIDUAL, the bidder's signature shall be placed in the space provided therefore on page PF-4.

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 prior to the opening of bids or submitted with the bid; otherwise, the bid may be rejected as irregular and unauthorized.

*Bidder will be considered an out-of-state vendor if Hawaii General Excise Tax License No. is not indicated. See Section 2.8 Out-of-State Bidders of the Specifications.

**See Special Provisions Section 2.11 State License on page SP-2.

FURNISHING AND DELIVERING MOTOR VEHICLES AND EQUIPMENT

PROJECT NO. HWY-CM-26-01

PROPOSAL SCHEDULE

HWY-CM-26-01 Equipment Summary					
ITEM NO.	ISLAND	QTY	SPEC SECTION	ITEM	PAGE NO.
11	HAWAII	2	11	SIX (6) MAN CREW CAB ONE (1) TON WITH UTILITY BOX AND LIFT GATE	PF-7
12	HAWAII	1	12	TRUCK TANK, 4,000 GALLONS	PF-8
13	HAWAII	2	13	CAB/CHASSIS WITH 7 CUBIC YARD DUMP BODY AND 17 TON HOIST	PF-9
14	HAWAII	1	14	CAB/CHASSIS WITH 2 ½ CUBIC YARD DUMP BODY	PF-10
15	HAWAII	1	15	SIX (6) MAN CREW CAB ONE (1) TON DUMP WITH LIFT GATE	PF-11
16.1	KAUAI	1	16	REGENERATIVE AIR SWEEPER, TRUCK MOUNTED	PF-12
16.2	HAWAII	1	16	REGENERATIVE AIR SWEEPER, TRUCK MOUNTED	PF-13
17	OAHU	4	17	ONE TON CREW CAB PICK-UP TRUCK WITH LIFT GATE AND ARROW BOARD	PF-14
18	OAHU	2	18	ONE TON PICK-UP TRUCK WITH LIFT GATE AND ARROW BOARD	PF-15
19	OAHU	1	19	CAB/CHASSIS WITH DIGGER DERRICK	PF-16
20	OAHU	1	20	CAB/CHASSIS UTILITY BODY WITH 35 FOOT AERIAL	PF-17
21	OAHU	2	21	CAB/CHASSIS UTILITY BODY WITH 40 FOOT AERIAL	PF-18
22	OAHU	1	22	CAB/CHASSIS UTILITY BODY WITH 55 FOOT AERIAL	PF-19
23	KAUAI	1	23	HYDRAULIC EXCAVATOR WITH ATTACHMENTS	PF-20
24	KAUAI	2	24	ONE TON CREW CAB PICK-UP TRUCK WITH ARROW BOARD	PF-21
25	KAUAI	1	25	CAB/CHASSIS WITH UTILITY CRANE BODY	PF-22
26	KAUAI	1	26	UTILITY TRACTOR WITH REAR ROTARY MOWER	PF-23
27	MAUI	3	27	FOUR WHEEL DRIVE ONE TON CREW CAB/CHASSIS WITH UTILITY BODY/LIFT GATE	PF-24
28	MAUI	2	28	ONE TON CREW CAB, STAKE SIDE FLAT BED WITH LIFT GATE AND ARROW BOARD	PF-25
29	MAUI	1	29	THREE QUARTER (3/4) TON REGULAR CAB AND CHASSIS WITH UTILITY BODY/LIFT GATE	PF-26
30	MOLOKAI	1	30	CAB/CHASSIS WITH 12 CUBIC YARD DUMP BODY	PF-27
31	MAUI	1	31	30-TON TELESCOPIC CRANE	PF-28
32	LANAI	1	32	UTILITY TRACTOR WITH REAR MOUNTED DITCH	PF-29
33	MOLOKAI	1	33	UTILITY TRACTOR WITH DETACHABLE REAR MOUNTED FLAIL MOWER AND DETACHABLE REAR MOUNTED BOOM MOWER	PF-30
34	MAUI	4	34	OPEN CAB UTILITY TRACTOR WITH EXTENDED SIDE AND REAR FLAIL MOWER	PF-31
35	MAUI	1	35	PROFILE THERMOPLASTIC APPLICATOR	PF-32
36	MOLOKAI	1	36	FRONT-END LOADER	PF-33
37	MAUI	1	37	BRUSH CUTTING ATTACHMENT	PF-34
38	MAUI	1	38	4WD CAB/CHASSIS UTILITY BODY WITH 40 FOOT AERIAL	PF-35
39	OAHU	1	39	CAB/CHASSIS WITH 7 CUBIC YARD DUMP BODY WITH 12 TON HOIST	PF-36
40	OAHU	1	40	ARTICULATED MOTOR GRADER	PF-37
41	OAHU	3	41	BRUSH CHIPPER, TRAILER MOUNTED	PF-38
42	KAUAI	1	42	EQUIPMENT TRAILER WITH LOCKBOX	PF-39

FURNISHING AND DELIVERING MOTOR VEHICLES AND EQUIPMENT

PROJECT NO. HWY-CM-26-01

PROPOSAL SCHEDULE

43	KAUAI	3	43	UTILITY TRUCK, REFUSE DUMP	PF-40
44	KAUAI	1	44	UTILITY TRACTOR WITH EXTENDED SIDE FLAIL AND REAR ROTARY MOWER	PF-41
45	KAUAI	1	45	BACKHOE LOADER	PF-42
46	KAUAI	1	46	EQUIPMENT TRAILER	PF-43
47	KAUAI	2	47	CAB/CHASSIS WITH TRAFFIC CONTROL BODY	PF-44
48	KAUAI	1	48	TRUCK TRACTOR	PF-45

**FURNISHING AND DELIVERING MOTOR VEHICLES AND EQUIPMENT
PROJECT NO. HWY-CM-26-01**

PROPOSAL SCHEDULE

ITEM NO. 11 – Hawaii

DESCRIPTION: two (2); SIX (6) MAN CREW CAB ONE (1) TON WITH UTILITY BOX AND LIFT GATE as described in SECTION 11

Make _____ Year _____ Model No. _____

Manufacturer _____ Model Name _____

Transmission _____ Motor Size _____

UNIT BID PRICE (Total Price for One) \$ _____

SUBTOTAL (Unit Price x 2) \$ _____

APPLICABLE TAXES \$ _____

TOTAL BID PRICE FOR QUANTITY OF TWO \$ _____

(Minus) For Trade-In

Trade in: \$ NO TRADE

TOTAL AMOUNT FOR COMPARISION OF BIDS - ITEM NO. 11

\$ _____

BIDDER CONTACT PERSON (Print Name) _____

CONTACT PHONE NUMBER _____

CONTACT EMAIL _____

**FURNISHING AND DELIVERING MOTOR VEHICLES AND EQUIPMENT
PROJECT NO. HWY-CM-26-01**

PROPOSAL SCHEDULE

ITEM NO. 12 - Hawaii

DESCRIPTION: One (1) TRUCK TANK, 4,000 GALLONS as described in SECTION 12

Make _____ Year _____ Model No. _____

Manufacturer _____ Model Name _____

Transmission _____ Motor Size _____

UNIT BID PRICE (Total Price for One) \$ _____

SUBTOTAL (Unit Price x 1) \$ _____

APPLICABLE TAXES \$ _____

TOTAL BID PRICE FOR QUANTITY OF ONE \$ _____

(Minus) For Trade-In

Trade in: \$ NO TRADE

TOTAL AMOUNT FOR COMPARISION OF BIDS - ITEM NO. 12

\$ _____

BIDDER CONTACT PERSON (Print Name) _____

CONTACT PHONE NUMBER _____

CONTACT EMAIL _____

**FURNISHING AND DELIVERING MOTOR VEHICLES AND EQUIPMENT
PROJECT NO. HWY-CM-26-01**

PROPOSAL SCHEDULE

ITEM NO. 13 – Hawaii

DESCRIPTION: Two (2) CAB/CHASSIS WITH 7 CUBIC YARD DUMP BODY AND 17 TON HOIST as described in SECTION 13

Make _____ Year _____ Model No. _____

Manufacturer _____ Model Name _____

Transmission _____ Motor Size _____

UNIT BID PRICE (Total Price for One) \$ _____

SUBTOTAL (Unit Price x 2) \$ _____

APPLICABLE TAXES \$ _____

TOTAL BID PRICE FOR QUANTITY OF TWO \$ _____

(Minus) For Trade-In

Trade in: \$ NO TRADE _____

TOTAL AMOUNT FOR COMPARISION OF BIDS - ITEM NO. 13

\$ _____

BIDDER CONTACT PERSON (Print Name) _____

CONTACT PHONE NUMBER _____

CONTACT EMAIL _____

**FURNISHING AND DELIVERING MOTOR VEHICLES AND EQUIPMENT
PROJECT NO. HWY-CM-26-01**

PROPOSAL SCHEDULE

ITEM NO. 14 – Hawaii

DESCRIPTION: One (1) CAB/CHASSIS WITH 2 ½ CUBIC YARD DUMP BODY as described in SECTION 14

Make _____ Year _____ Model No. _____

Manufacturer _____ Model Name _____

Transmission _____ Motor Size _____

UNIT BID PRICE (Total Price for One) \$ _____

SUBTOTAL (Unit Price x 1) \$ _____

APPLICABLE TAXES \$ _____

TOTAL BID PRICE FOR QUANTITY OF ONE \$ _____

(Minus) For Trade-In

Trade in: \$ NO TRADE _____

TOTAL AMOUNT FOR COMPARISION OF BIDS - ITEM NO. 14

\$ _____

BIDDER CONTACT PERSON (Print Name) _____

CONTACT PHONE NUMBER _____

CONTACT EMAIL _____

**FURNISHING AND DELIVERING MOTOR VEHICLES AND EQUIPMENT
PROJECT NO. HWY-CM-26-01**

PROPOSAL SCHEDULE

ITEM NO. 15 - Hawaii

DESCRIPTION: One (1) SIX (6) MAN CREW CAB ONE (1) TON DUMP WITH LIFT GATE
as described in SECTION 15

Make _____ Year _____ Model No. _____

Manufacturer _____ Model Name _____

Transmission _____ Motor Size _____

UNIT BID PRICE (Total Price for One) \$ _____

SUBTOTAL (Unit Price x 1) \$ _____

APPLICABLE TAXES \$ _____

TOTAL BID PRICE FOR QUANTITY OF ONE \$ _____

(Minus) For Trade-In

Trade in: \$ NO TRADE

TOTAL AMOUNT FOR COMPARISION OF BIDS - ITEM NO. 15.1

\$ _____

BIDDER CONTACT PERSON (Print Name) _____

CONTACT PHONE NUMBER _____

CONTACT EMAIL _____

**FURNISHING AND DELIVERING MOTOR VEHICLES AND EQUIPMENT
PROJECT NO. HWY-CM-26-01**

PROPOSAL SCHEDULE

ITEM NO. 16.1 - Kauai

DESCRIPTION: One (1) REGENERATIVE AIR SWEEPER, TRUCK MOUNTED as described in SECTION 15

Make _____ Year _____ Model No. _____

Manufacturer _____ Model Name _____

Transmission _____ Motor Size _____

UNIT BID PRICE (Total Price for One) \$ _____

SUBTOTAL (Unit Price x 1) \$ _____

APPLICABLE TAXES \$ _____

TOTAL BID PRICE FOR QUANTITY OF ONE \$ _____

(Minus) For Trade-In

Trade in: \$ NO TRADE

TOTAL AMOUNT FOR COMPARISION OF BIDS - ITEM NO. 16.1

\$ _____

BIDDER CONTACT PERSON (Print Name) _____

CONTACT PHONE NUMBER _____

CONTACT EMAIL _____

**FURNISHING AND DELIVERING MOTOR VEHICLES AND EQUIPMENT
PROJECT NO. HWY-CM-26-01**

PROPOSAL SCHEDULE

ITEM NO. 16.2 - Hawaii

DESCRIPTION: One (1) REGENERATIVE AIR SWEEPER, TRUCK MOUNTED as described in SECTION 15

Make _____ Year _____ Model No. _____

Manufacturer _____ Model Name _____

Transmission _____ Motor Size _____

UNIT BID PRICE (Total Price for One) \$ _____

SUBTOTAL (Unit Price x 1) \$ _____

APPLICABLE TAXES \$ _____

TOTAL BID PRICE FOR QUANTITY OF ONE \$ _____

(Minus) For Trade-In

Trade in: \$ NO TRADE

TOTAL AMOUNT FOR COMPARISION OF BIDS - ITEM NO. 16.2

\$ _____

BIDDER CONTACT PERSON (Print Name) _____

CONTACT PHONE NUMBER _____

CONTACT EMAIL _____

**FURNISHING AND DELIVERING MOTOR VEHICLES AND EQUIPMENT
PROJECT NO. HWY-CM-26-01**

PROPOSAL SCHEDULE

ITEM NO. 17- Oahu

DESCRIPTION: Four (4) ONE TON CREW CAB PICK-UP TRUCK WITH LIFT GATE AND ARROW BOARD as described in SECTION 17

Make _____ Year _____ Model No. _____

Manufacturer _____ Model Name _____

Transmission _____ Motor Size _____

UNIT BID PRICE (Total Price for One) \$ _____

SUBTOTAL (Unit Price x 4) \$ _____

APPLICABLE TAXES \$ _____

TOTAL BID PRICE FOR QUANTITY OF FOUR \$ _____

(Minus) For Trade-In

Trade in: \$ NO TRADE

TOTAL AMOUNT FOR COMPARISION OF BIDS - ITEM NO. 17

\$ _____

BIDDER CONTACT PERSON (Print Name) _____

CONTACT PHONE NUMBER _____

CONTACT EMAIL _____

**FURNISHING AND DELIVERING MOTOR VEHICLES AND EQUIPMENT
PROJECT NO. HWY-CM-26-01**

PROPOSAL SCHEDULE

ITEM NO. 18- Oahu

DESCRIPTION: Two (2) ONE TON PICK-UP TRUCK WITH LIFT GATE AND ARROW BOARD as described in SECTION 18

Make _____ Year _____ Model No. _____

Manufacturer _____ Model Name _____

Transmission _____ Motor Size _____

UNIT BID PRICE (Total Price for One) \$ _____

SUBTOTAL (Unit Price x 2) \$ _____

APPLICABLE TAXES \$ _____

TOTAL BID PRICE FOR QUANTITY OF TWO \$ _____

(Minus) For Trade-In

Trade in: \$ NO TRADE

TOTAL AMOUNT FOR COMPARISION OF BIDS - ITEM NO. 18

\$ _____

BIDDER CONTACT PERSON (Print Name) _____

CONTACT PHONE NUMBER _____

CONTACT EMAIL _____

**FURNISHING AND DELIVERING MOTOR VEHICLES AND EQUIPMENT
PROJECT NO. HWY-CM-26-01**

PROPOSAL SCHEDULE

ITEM NO. 19- Oahu

DESCRIPTION: One (1) CAB/CHASSIS WITH DIGGER DERRICK as described in SECTION 19

Make _____ Year _____ Model No. _____

Manufacturer _____ Model Name _____

Transmission _____ Motor Size _____

UNIT BID PRICE (Total Price for One) \$ _____

SUBTOTAL (Unit Price x 1) \$ _____

APPLICABLE TAXES \$ _____

TOTAL BID PRICE FOR QUANTITY OF ONE \$ _____

(Minus) For Trade-In

Trade in: \$ NO TRADE

TOTAL AMOUNT FOR COMPARISION OF BIDS - ITEM NO. 19

\$ _____

BIDDER CONTACT PERSON (Print Name) _____

CONTACT PHONE NUMBER _____

CONTACT EMAIL _____

**FURNISHING AND DELIVERING MOTOR VEHICLES AND EQUIPMENT
PROJECT NO. HWY-CM-26-01**

PROPOSAL SCHEDULE

ITEM NO. 20- Oahu

DESCRIPTION: One (1) CAB/CHASSIS UTILITY BODY WITH 35 FOOT AERIAL as described in SECTION 20

Make _____ Year _____ Model No. _____

Manufacturer _____ Model Name _____

Transmission _____ Motor Size _____

UNIT BID PRICE (Total Price for One) \$ _____

SUBTOTAL (Unit Price x 1) \$ _____

APPLICABLE TAXES \$ _____

TOTAL BID PRICE FOR QUANTITY OF ONE \$ _____

(Minus) For Trade-In

Trade in: \$ NO TRADE

TOTAL AMOUNT FOR COMPARISION OF BIDS - ITEM NO. 20

\$ _____

BIDDER CONTACT PERSON (Print Name) _____

CONTACT PHONE NUMBER _____

CONTACT EMAIL _____

**FURNISHING AND DELIVERING MOTOR VEHICLES AND EQUIPMENT
PROJECT NO. HWY-CM-26-01**

PROPOSAL SCHEDULE

ITEM NO. 21- Oahu

DESCRIPTION: Two (2) CAB/CHASSIS UTILITY BODY WITH 40 FOOT AERIAL as described in SECTION 21

Make _____ Year _____ Model No. _____

Manufacturer _____ Model Name _____

Transmission _____ Motor Size _____

UNIT BID PRICE (Total Price for One) \$ _____

SUBTOTAL (Unit Price x 2) \$ _____

APPLICABLE TAXES \$ _____

TOTAL BID PRICE FOR QUANTITY OF TWO \$ _____

(Minus) For Trade-In

Trade in: \$ NO TRADE

TOTAL AMOUNT FOR COMPARISION OF BIDS - ITEM NO. 21

\$ _____

BIDDER CONTACT PERSON (Print Name) _____

CONTACT PHONE NUMBER _____

CONTACT EMAIL _____

**FURNISHING AND DELIVERING MOTOR VEHICLES AND EQUIPMENT
PROJECT NO. HWY-CM-26-01**

PROPOSAL SCHEDULE

ITEM NO. 22- Oahu

DESCRIPTION: One (1) CAB/CHASSIS UTILITY BODY WITH 55 FOOT AERIAL
as described in SECTION 22

Make _____ Year _____ Model No. _____

Manufacturer _____ Model Name _____

Transmission _____ Motor Size _____

UNIT BID PRICE (Total Price for One) \$ _____

SUBTOTAL (Unit Price x 1) \$ _____

APPLICABLE TAXES \$ _____

TOTAL BID PRICE FOR QUANTITY OF ONE \$ _____

(Minus) For Trade-In

Trade in: \$ NO TRADE

TOTAL AMOUNT FOR COMPARISION OF BIDS - ITEM NO. 22

\$ _____

BIDDER CONTACT PERSON (Print Name) _____

CONTACT PHONE NUMBER _____

CONTACT EMAIL _____

**FURNISHING AND DELIVERING MOTOR VEHICLES AND EQUIPMENT
PROJECT NO. HWY-CM-26-01**

PROPOSAL SCHEDULE

ITEM NO. 23- Kauai

DESCRIPTION: One (1) HYDRAULIC EXCAVATOR WITH ATTACHMENTS as described in SECTION 23

Make _____ Year _____ Model No. _____

Manufacturer _____ Model Name _____

Transmission _____ Motor Size _____

UNIT BID PRICE (Total Price for One) \$ _____

SUBTOTAL (Unit Price x 1) \$ _____

APPLICABLE TAXES \$ _____

TOTAL BID PRICE FOR QUANTITY OF ONE \$ _____

(Minus) For Trade-In

Trade in: \$ NO TRADE

TOTAL AMOUNT FOR COMPARISION OF BIDS - ITEM NO. 23

\$ _____

BIDDER CONTACT PERSON (Print Name) _____

CONTACT PHONE NUMBER _____

CONTACT EMAIL _____

**FURNISHING AND DELIVERING MOTOR VEHICLES AND EQUIPMENT
PROJECT NO. HWY-CM-26-01**

PROPOSAL SCHEDULE

ITEM NO. 24- Kauai

DESCRIPTION: Two (2) ONE TON CREW CAB PICK-UP TRUCK WITH ARROW BOARD as described in SECTION 24

Make _____ Year _____ Model No. _____

Manufacturer _____ Model Name _____

Transmission _____ Motor Size _____

UNIT BID PRICE (Total Price for One) \$ _____

SUBTOTAL (Unit Price x 2) \$ _____

APPLICABLE TAXES \$ _____

TOTAL BID PRICE FOR QUANTITY OF TWO \$ _____

(Minus) For Trade-In

Trade in: \$ NO TRADE

TOTAL AMOUNT FOR COMPARISION OF BIDS - ITEM NO. 24

\$ _____

BIDDER CONTACT PERSON (Print Name) _____

CONTACT PHONE NUMBER _____

CONTACT EMAIL _____

**FURNISHING AND DELIVERING MOTOR VEHICLES AND EQUIPMENT
PROJECT NO. HWY-CM-26-01**

PROPOSAL SCHEDULE

ITEM NO. 25- Kauai

DESCRIPTION: One (1) CAB/CHASSIS WITH UTILITY CRANE BODY
as described in SECTION 25

Make _____ Year _____ Model No. _____

Manufacturer _____ Model Name _____

Transmission _____ Motor Size _____

UNIT BID PRICE (Total Price for One) \$ _____

SUBTOTAL (Unit Price x 1) \$ _____

APPLICABLE TAXES \$ _____

TOTAL BID PRICE FOR QUANTITY OF ONE \$ _____

(Minus) For Trade-In

Trade in: GMC Service Truck w/ Crane 9882-136 \$ 3,000

TOTAL AMOUNT FOR COMPARISION OF BIDS - ITEM NO. 25

\$ _____

BIDDER CONTACT PERSON (Print Name) _____

CONTACT PHONE NUMBER _____

CONTACT EMAIL _____

**FURNISHING AND DELIVERING MOTOR VEHICLES AND EQUIPMENT
PROJECT NO. HWY-CM-26-01**

PROPOSAL SCHEDULE

ITEM NO. 26- Kauai

DESCRIPTION: One (1) UTILITY TRACTOR WITH REAR ROTARY MOWER
as described in SECTION 26

Make _____ Year _____ Model No. _____

Manufacturer _____ Model Name _____

Transmission _____ Motor Size _____

UNIT BID PRICE (Total Price for One) \$ _____

SUBTOTAL (Unit Price x 1) \$ _____

APPLICABLE TAXES \$ _____

TOTAL BID PRICE FOR QUANTITY OF ONE \$ _____

(Minus) For Trade-In

Trade in: 2019 Kioti Utility Tractor w/ Rotary Mower 9884-171 \$ 2,000

TOTAL AMOUNT FOR COMPARISION OF BIDS - ITEM NO. 26

\$ _____

BIDDER CONTACT PERSON (Print Name) _____

CONTACT PHONE NUMBER _____

CONTACT EMAIL _____

**FURNISHING AND DELIVERING MOTOR VEHICLES AND EQUIPMENT
PROJECT NO. HWY-CM-26-01**

PROPOSAL SCHEDULE

ITEM NO. 27- Maui

DESCRIPTION: Three (3) FOUR-WHEEL DRIVE ONE TON CREW CAB/CHASSIS WITH UTILITY BODY/LIFT GATE as described in SECTION 27

Make _____ Year _____ Model No. _____

Manufacturer _____ Model Name _____

Transmission _____ Motor Size _____

UNIT BID PRICE (Total Price for One) \$ _____

SUBTOTAL (Unit Price x 3) \$ _____

APPLICABLE TAXES \$ _____

TOTAL BID PRICE FOR QUANTITY OF THREE \$ _____

(Minus) For Trade-In

Trade in: \$ NO TRADE

TOTAL AMOUNT FOR COMPARISION OF BIDS - ITEM NO. 27

\$ _____

BIDDER CONTACT PERSON (Print Name) _____

CONTACT PHONE NUMBER _____

CONTACT EMAIL _____

**FURNISHING AND DELIVERING MOTOR VEHICLES AND EQUIPMENT
PROJECT NO. HWY-CM-26-01**

PROPOSAL SCHEDULE

ITEM NO. 28- Maui

DESCRIPTION: Two (2) ONE TON CREW CAB, STAKE SIDE FLAT BED WITH LIFT GATE AND ARROW BOARD as described in SECTION 28

Make _____ Year _____ Model No. _____

Manufacturer _____ Model Name _____

Transmission _____ Motor Size _____

UNIT BID PRICE (Total Price for One) \$ _____

SUBTOTAL (Unit Price x 2) \$ _____

APPLICABLE TAXES \$ _____

TOTAL BID PRICE FOR QUANTITY OF TWO \$ _____

(Minus) For Trade-In

Trade in: \$ NO TRADE

TOTAL AMOUNT FOR COMPARISION OF BIDS - ITEM NO. 28

\$ _____

BIDDER CONTACT PERSON (Print Name) _____

CONTACT PHONE NUMBER _____

CONTACT EMAIL _____

**FURNISHING AND DELIVERING MOTOR VEHICLES AND EQUIPMENT
PROJECT NO. HWY-CM-26-01**

PROPOSAL SCHEDULE

ITEM NO. 29- Maui

DESCRIPTION: One (1) THREE QUARTER (3/4) TON REGULAR CAB AND CHASSIS WITH UTILITY BODY/LIFT GATE as described in SECTION 29

Make _____ Year _____ Model No. _____

Manufacturer _____ Model Name _____

Transmission _____ Motor Size _____

UNIT BID PRICE (Total Price for One) \$ _____

SUBTOTAL (Unit Price x 1) \$ _____

APPLICABLE TAXES \$ _____

TOTAL BID PRICE FOR QUANTITY OF ONE \$ _____

(Minus) For Trade-In

Trade in: \$ NO TRADE

TOTAL AMOUNT FOR COMPARISION OF BIDS - ITEM NO. 29

\$ _____

BIDDER CONTACT PERSON (Print Name) _____

CONTACT PHONE NUMBER _____

CONTACT EMAIL _____

**FURNISHING AND DELIVERING MOTOR VEHICLES AND EQUIPMENT
PROJECT NO. HWY-CM-26-01**

PROPOSAL SCHEDULE

ITEM NO. 30- Molokai

DESCRIPTION: One (1) CAB/CHASSIS WITH 12 CUBIC YARD DUMP BODY as described in SECTION 30

Make _____ Year _____ Model No. _____

Manufacturer _____ Model Name _____

Transmission _____ Motor Size _____

UNIT BID PRICE (Total Price for One) \$ _____

SUBTOTAL (Unit Price x 1) \$ _____

APPLICABLE TAXES \$ _____

TOTAL BID PRICE FOR QUANTITY OF ONE \$ _____

(Minus) For Trade-In

Trade in: \$ NO TRADE

TOTAL AMOUNT FOR COMPARISION OF BIDS - ITEM NO. 30

\$ _____

BIDDER CONTACT PERSON (Print Name) _____

CONTACT PHONE NUMBER _____

CONTACT EMAIL _____

**FURNISHING AND DELIVERING MOTOR VEHICLES AND EQUIPMENT
PROJECT NO. HWY-CM-26-01**

PROPOSAL SCHEDULE

ITEM NO. 31- Maui

DESCRIPTION: One (1) 30-TON TELESCOPIC CRANE as described
in SECTION 31

Make _____ Year _____ Model No. _____

Manufacturer _____ Model Name _____

Transmission _____ Motor Size _____

UNIT BID PRICE (Total Price for One) \$ _____

SUBTOTAL (Unit Price x 1) \$ _____

APPLICABLE TAXES \$ _____

TOTAL BID PRICE FOR QUANTITY OF ONE \$ _____

(Minus) For Trade-In

Trade in: \$ NO TRADE

TOTAL AMOUNT FOR COMPARISION OF BIDS - ITEM NO. 31

\$ _____

BIDDER CONTACT PERSON (Print Name) _____

CONTACT PHONE NUMBER _____

CONTACT EMAIL _____

**FURNISHING AND DELIVERING MOTOR VEHICLES AND EQUIPMENT
PROJECT NO. HWY-CM-26-01**

PROPOSAL SCHEDULE

ITEM NO. 32- Lanai

DESCRIPTION: One (1) UTILITY TRACTOR WITH REAR MOUNTED DITCH
BANK FLAIL MOWER as described in SECTION 32

Make _____ Year _____ Model No. _____

Manufacturer _____ Model Name _____

Transmission _____ Motor Size _____

UNIT BID PRICE (Total Price for One) \$ _____

SUBTOTAL (Unit Price x 1) \$ _____

APPLICABLE TAXES \$ _____

TOTAL BID PRICE FOR QUANTITY OF ONE \$ _____

(Minus) For Trade-In

Trade in: \$ NO TRADE

TOTAL AMOUNT FOR COMPARISION OF BIDS - ITEM NO. 32

\$ _____

BIDDER CONTACT PERSON (Print Name) _____

CONTACT PHONE NUMBER _____

CONTACT EMAIL _____

**FURNISHING AND DELIVERING MOTOR VEHICLES AND EQUIPMENT
PROJECT NO. HWY-CM-26-01**

PROPOSAL SCHEDULE

ITEM NO. 33- Molokai

DESCRIPTION: One (1) UTILITY TRACTOR WITH DETACHABLE REAR MOUNTED FLAIL MOWER AND DETACHABLE REAR MOUNTED BOOM MOWER as described in SECTION 33

Make _____ Year _____ Model No. _____

Manufacturer _____ Model Name _____

Transmission _____ Motor Size _____

UNIT BID PRICE (Total Price for One) \$ _____

SUBTOTAL (Unit Price x 1) \$ _____

APPLICABLE TAXES \$ _____

TOTAL BID PRICE FOR QUANTITY OF ONE \$ _____

(Minus) For Trade-In

Trade in: \$ NO TRADE

TOTAL AMOUNT FOR COMPARISION OF BIDS - ITEM NO. 33

\$ _____

BIDDER CONTACT PERSON (Print Name) _____

CONTACT PHONE NUMBER _____

CONTACT EMAIL _____

**FURNISHING AND DELIVERING MOTOR VEHICLES AND EQUIPMENT
PROJECT NO. HWY-CM-26-01**

PROPOSAL SCHEDULE

ITEM NO. 34- Maui

DESCRIPTION: Four (4) OPEN CAB UTILITY TRACTOR WITH EXTENDED SIDE AND REAR FLAIL MOWER as described in SECTION 34

Make _____ Year _____ Model No. _____

Manufacturer _____ Model Name _____

Transmission _____ Motor Size _____

UNIT BID PRICE (Total Price for One) \$ _____

SUBTOTAL (Unit Price x 4) \$ _____

APPLICABLE TAXES \$ _____

TOTAL BID PRICE FOR QUANTITY OF FOUR \$ _____

(Minus) For Trade-In

Trade in: Kioti Power Shuttle W/Rear Flail Mower 9584-207 \$ 1,000

TOTAL AMOUNT FOR COMPARISION OF BIDS - ITEM NO. 34

\$ _____

BIDDER CONTACT PERSON (Print Name) _____

CONTACT PHONE NUMBER _____

CONTACT EMAIL _____

**FURNISHING AND DELIVERING MOTOR VEHICLES AND EQUIPMENT
PROJECT NO. HWY-CM-26-01**

PROPOSAL SCHEDULE

ITEM NO. 35- Maui

DESCRIPTION: One (1) PROFILE THERMOPLASTIC APPLICATOR as described
in SECTION 35

Make _____ Year _____ Model No. _____

Manufacturer _____ Model Name _____

Transmission _____ Motor Size _____

UNIT BID PRICE (Total Price for One) \$ _____

SUBTOTAL (Unit Price x 1) \$ _____

APPLICABLE TAXES \$ _____

TOTAL BID PRICE FOR QUANTITY OF ONE \$ _____

(Minus) For Trade-In

Trade in: \$ NO TRADE

TOTAL AMOUNT FOR COMPARISION OF BIDS - ITEM NO. 35

\$ _____

BIDDER CONTACT PERSON (Print Name) _____

CONTACT PHONE NUMBER _____

CONTACT EMAIL _____

**FURNISHING AND DELIVERING MOTOR VEHICLES AND EQUIPMENT
PROJECT NO. HWY-CM-26-01**

PROPOSAL SCHEDULE

ITEM NO. 36- Molokai

DESCRIPTION: One (1) FRONT-END LOADER as described in SECTION 36

Make _____ Year _____ Model No. _____

Manufacturer _____ Model Name _____

Transmission _____ Motor Size _____

UNIT BID PRICE (Total Price for One) \$ _____

SUBTOTAL (Unit Price x 1) \$ _____

APPLICABLE TAXES \$ _____

TOTAL BID PRICE FOR QUANTITY OF ONE \$ _____

(Minus) For Trade-In

Trade in: \$ NO TRADE _____

TOTAL AMOUNT FOR COMPARISION OF BIDS - ITEM NO. 36

\$ _____

BIDDER CONTACT PERSON (Print Name) _____

CONTACT PHONE NUMBER _____

CONTACT EMAIL _____

**FURNISHING AND DELIVERING MOTOR VEHICLES AND EQUIPMENT
PROJECT NO. HWY-CM-26-01**

PROPOSAL SCHEDULE

ITEM NO. 37- Maui

DESCRIPTION: One (1) BRUSH CUTTING ATTACHMENT as described in SECTION 37

Make _____ Year _____ Model No. _____

Manufacturer _____ Model Name _____

Transmission _____ Motor Size _____

UNIT BID PRICE (Total Price for One) \$ _____

SUBTOTAL (Unit Price x 1) \$ _____

APPLICABLE TAXES \$ _____

TOTAL BID PRICE FOR QUANTITY OF ONE \$ _____

(Minus) For Trade-In

Trade in: \$ NO TRADE _____

TOTAL AMOUNT FOR COMPARISION OF BIDS - ITEM NO. 37

\$ _____

BIDDER CONTACT PERSON (Print Name) _____

CONTACT PHONE NUMBER _____

CONTACT EMAIL _____

**FURNISHING AND DELIVERING MOTOR VEHICLES AND EQUIPMENT
PROJECT NO. HWY-CM-26-01**

PROPOSAL SCHEDULE

ITEM NO. 38- Maui

DESCRIPTION: One (1) 4WD CAB/CHASSIS UTILITY BODY WITH 40 FOOT AERIAL
as described in SECTION 38

Make _____ Year _____ Model No. _____

Manufacturer _____ Model Name _____

Transmission _____ Motor Size _____

UNIT BID PRICE (Total Price for One) \$ _____

SUBTOTAL (Unit Price x 1) \$ _____

APPLICABLE TAXES \$ _____

TOTAL BID PRICE FOR QUANTITY OF ONE \$ _____

(Minus) For Trade-In

Trade in: \$ NO TRADE

TOTAL AMOUNT FOR COMPARISION OF BIDS - ITEM NO. 38

\$ _____

BIDDER CONTACT PERSON (Print Name) _____

CONTACT PHONE NUMBER _____

CONTACT EMAIL _____

**FURNISHING AND DELIVERING MOTOR VEHICLES AND EQUIPMENT
PROJECT NO. HWY-CM-26-01**

PROPOSAL SCHEDULE

ITEM NO. 39- Oahu

DESCRIPTION: One (1) CAB/CHASSIS WITH 7 CUBIC YARD DUMP BODY as described in SECTION 39

Make _____ Year _____ Model No. _____

Manufacturer _____ Model Name _____

Transmission _____ Motor Size _____

UNIT BID PRICE (Total Price for One) \$ _____

SUBTOTAL (Unit Price x 1) \$ _____

APPLICABLE TAXES \$ _____

TOTAL BID PRICE FOR QUANTITY OF ONE \$ _____

(Minus) For Trade-In

Trade in: \$ NO TRADE

TOTAL AMOUNT FOR COMPARISION OF BIDS - ITEM NO. 39

\$ _____

BIDDER CONTACT PERSON (Print Name) _____

CONTACT PHONE NUMBER _____

CONTACT EMAIL _____

**FURNISHING AND DELIVERING MOTOR VEHICLES AND EQUIPMENT
PROJECT NO. HWY-CM-26-01**

PROPOSAL SCHEDULE

ITEM NO. 40- Oahu

DESCRIPTION: One (1) ARTICULATED MOTOR GRADER as described in SECTION 40

Make _____ Year _____ Model No. _____

Manufacturer _____ Model Name _____

Transmission _____ Motor Size _____

UNIT BID PRICE (Total Price for One) \$ _____

SUBTOTAL (Unit Price x 1) \$ _____

APPLICABLE TAXES \$ _____

TOTAL BID PRICE FOR QUANTITY OF ONE \$ _____

(Minus) For Trade-In

Trade in: \$ NO TRADE _____

TOTAL AMOUNT FOR COMPARISION OF BIDS - ITEM NO. 40

\$ _____

BIDDER CONTACT PERSON (Print Name) _____

CONTACT PHONE NUMBER _____

CONTACT EMAIL _____

**FURNISHING AND DELIVERING MOTOR VEHICLES AND EQUIPMENT
PROJECT NO. HWY-CM-26-01**

PROPOSAL SCHEDULE

ITEM NO. 41- Oahu

DESCRIPTION: Three (3) BRUSH CHIPPER TRAILER MOUNTED as described in SECTION 41

Make _____ Year _____ Model No. _____

Manufacturer _____ Model Name _____

Transmission _____ Motor Size _____

UNIT BID PRICE (Total Price for One) \$ _____

SUBTOTAL (Unit Price x 3) \$ _____

APPLICABLE TAXES \$ _____

TOTAL BID PRICE FOR QUANTITY OF THREE \$ _____

(Minus) For Trade-In

Trade in: \$ NO TRADE

TOTAL AMOUNT FOR COMPARISION OF BIDS - ITEM NO. 41

\$ _____

BIDDER CONTACT PERSON (Print Name) _____

CONTACT PHONE NUMBER _____

CONTACT EMAIL _____

**FURNISHING AND DELIVERING MOTOR VEHICLES AND EQUIPMENT
PROJECT NO. HWY-CM-26-01**

PROPOSAL SCHEDULE

ITEM NO. 42- Kauai

DESCRIPTION: One (1) EQUIPMENT TRAILER WITH LOCKBOX as described in SECTION 42

Make _____ Year _____ Model No. _____

Manufacturer _____ Model Name _____

Transmission _____ Motor Size _____

UNIT BID PRICE (Total Price for One) \$ _____

SUBTOTAL (Unit Price x 1) \$ _____

APPLICABLE TAXES \$ _____

TOTAL BID PRICE FOR QUANTITY OF ONE \$ _____

(Minus) For Trade-In

Trade in: 2016 Zeiman Equipment Trailer \$ 1,500

TOTAL AMOUNT FOR COMPARISION OF BIDS - ITEM NO. 42

\$ _____

BIDDER CONTACT PERSON (Print Name) _____

CONTACT PHONE NUMBER _____

CONTACT EMAIL _____

**FURNISHING AND DELIVERING MOTOR VEHICLES AND EQUIPMENT
PROJECT NO. HWY-CM-26-01**

PROPOSAL SCHEDULE

ITEM NO. 43- Kauai

DESCRIPTION: Three (3) UTILITY TRUCK, REFUSE DUMP as described in SECTION 43

Make _____ Year _____ Model No. _____

Manufacturer _____ Model Name _____

Transmission _____ Motor Size _____

UNIT BID PRICE (Total Price for One) \$ _____

SUBTOTAL (Unit Price x 3) \$ _____

APPLICABLE TAXES \$ _____

TOTAL BID PRICE FOR QUANTITY OF THREE \$ _____

(Minus) For Trade-In

Trade in:	2018 Mechron Utility Refuse Dump 9884-167	\$ <u>100</u>
	2018 Mechron Utility Refuse Dump 9884-168	\$ <u>100</u>
	2014 Mechron Utility Refuse Dump 9884-158	\$ <u>100</u>

TOTAL AMOUNT FOR COMPARISION OF BIDS - ITEM NO. 43
\$ _____

BIDDER CONTACT PERSON (Print Name) _____

CONTACT PHONE NUMBER _____

CONTACT EMAIL _____

**FURNISHING AND DELIVERING MOTOR VEHICLES AND EQUIPMENT
PROJECT NO. HWY-CM-26-01**

PROPOSAL SCHEDULE

ITEM NO. 44- Kauai

DESCRIPTION: One (1) UTILITY TRACTOR WITH EXTENDED SIDE FLAIL AND REAR ROTARY MOWER as described in SECTION 44

Make _____ Year _____ Model No. _____

Manufacturer _____ Model Name _____

Transmission _____ Motor Size _____

UNIT BID PRICE (Total Price for One) \$ _____

SUBTOTAL (Unit Price x 1) \$ _____

APPLICABLE TAXES \$ _____

TOTAL BID PRICE FOR QUANTITY OF ONE \$ _____

(Minus) For Trade-In

Trade in: 4X4 Utility Tractor w/ Guardrail Mower \$ 2,000

TOTAL AMOUNT FOR COMPARISION OF BIDS - ITEM NO. 44

\$ _____

BIDDER CONTACT PERSON (Print Name) _____

CONTACT PHONE NUMBER _____

CONTACT EMAIL _____

**FURNISHING AND DELIVERING MOTOR VEHICLES AND EQUIPMENT
PROJECT NO. HWY-CM-26-01**

PROPOSAL SCHEDULE

ITEM NO. 45- Kauai

DESCRIPTION: One (1) BACKHOE LOADER as described in SECTION 45

Make _____ Year _____ Model No. _____

Manufacturer _____ Model Name _____

Transmission _____ Motor Size _____

UNIT BID PRICE (Total Price for One) \$ _____

SUBTOTAL (Unit Price x 1) \$ _____

APPLICABLE TAXES \$ _____

TOTAL BID PRICE FOR QUANTITY OF ONE \$ _____

(Minus) For Trade-In

Trade in: \$ NO TRADE

TOTAL AMOUNT FOR COMPARISION OF BIDS - ITEM NO. 45

\$ _____

BIDDER CONTACT PERSON (Print Name) _____

CONTACT PHONE NUMBER _____

CONTACT EMAIL _____

**FURNISHING AND DELIVERING MOTOR VEHICLES AND EQUIPMENT
PROJECT NO. HWY-CM-26-01**

PROPOSAL SCHEDULE

ITEM NO. 46- Kauai

DESCRIPTION: One (1) EQUIPMENT TRAILER as described in SECTION 46

Make _____ Year _____ Model No. _____

Manufacturer _____ Model Name _____

Transmission _____ Motor Size _____

UNIT BID PRICE (Total Price for One) \$ _____

SUBTOTAL (Unit Price x 1) \$ _____

APPLICABLE TAXES \$ _____

TOTAL BID PRICE FOR QUANTITY OF ONE \$ _____

(Minus) For Trade-In

Trade in: 2007 Zeiman 14 Ton Transport Trailer \$ 500

TOTAL AMOUNT FOR COMPARISION OF BIDS - ITEM NO. 46

\$ _____

BIDDER CONTACT PERSON (Print Name) _____

CONTACT PHONE NUMBER _____

CONTACT EMAIL _____

**FURNISHING AND DELIVERING MOTOR VEHICLES AND EQUIPMENT
PROJECT NO. HWY-CM-26-01**

PROPOSAL SCHEDULE

ITEM NO. 47- Kauai

DESCRIPTION: Two (2) CAB/CHASSIS WITH TRAFFIC CONTROL BODY
as described in SECTION 47

Make _____ Year _____ Model No. _____

Manufacturer _____ Model Name _____

Transmission _____ Motor Size _____

UNIT BID PRICE (Total Price for One) \$ _____

SUBTOTAL (Unit Price x 2) \$ _____

APPLICABLE TAXES \$ _____

TOTAL BID PRICE FOR QUANTITY OF TWO \$ _____

(Minus) For Trade-In

Trade in:	2016 Peterbilt Crew Cab Stake Body w/ Lift Gate 9882-143	\$ <u>2,000</u>
	2016 Peterbilt Crew Cab Stake Body w/ Lift Gate 9882-144	\$ <u>2,000</u>

TOTAL AMOUNT FOR COMPARISION OF BIDS - ITEM NO. 47
\$ _____

BIDDER CONTACT PERSON (Print Name) _____

CONTACT PHONE NUMBER _____

CONTACT EMAIL _____

**FURNISHING AND DELIVERING MOTOR VEHICLES AND EQUIPMENT
PROJECT NO. HWY-CM-26-01**

PROPOSAL SCHEDULE

ITEM NO. 48- Kauai

DESCRIPTION: One (1) TRUCK TRACTOR as described in SECTION 48

Make _____ Year _____ Model No. _____

Manufacturer _____ Model Name _____

Transmission _____ Motor Size _____

UNIT BID PRICE (Total Price for One) \$ _____

SUBTOTAL (Unit Price x) \$ _____

APPLICABLE TAXES \$ _____

TOTAL BID PRICE FOR QUANTITY OF TWO \$ _____

(Minus) For Trade-In

Trade in: \$ NO TRADE _____

TOTAL AMOUNT FOR COMPARISION OF BIDS - ITEM NO. 47

\$ _____

BIDDER CONTACT PERSON (Print Name) _____

CONTACT PHONE NUMBER _____

CONTACT EMAIL _____

**FURNISHING AND DELIVERING MOTOR VEHICLES AND EQUIPMENT
PROJECT NO. HWY-CM-26-01**

PROPOSAL SCHEDULE

NOTES:

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 HiePRO 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 HiePRO. 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 HiePRO.**
6. **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.
7. Bidder may enter a total cost of all items being bid on in the HiePRO line item, however, the contract award will not be based on the value input in HiePRO but will be evaluated based the proposals submitted and uploaded to HiePRO.
8. Bidder may bid on any item in this proposal, and the awarding of contract(s) will be made to the responsive and responsible bidder(s) submitting the lowest qualified total bid price per item. See Section 3.1 Award of Contract of the Special Provisions.
9. Bidder(s) shall submit the Service and Repair Facility Form to the Project Manager within five (5) calendar days of the bid opening. See Section 2.10 Bidder Qualification of the Special Provisions.
10. Bidder(s) shall submit current brochures and Specifications to the Project Manager within five (5) calendar days of the bid opening. See Section 2.11 Bid Preparation of the Special Provisions.

**FURNISHING AND DELIVERING MOTOR VEHICLES AND EQUIPMENT
PROJECT NO. HWY-CM-26-01**

PROPOSAL SCHEDULE

11. If there are any discrepancies between the unit prices and the totals in the Proposal Schedule, the unit prices shall prevail.
12. Bidder(s) shall comply with all applicable parts of Section 10 “General Specifications for Furnishing and Delivering Motor Vehicles and Equipment”.
13. Prospective Bidder(s) who plan to bid on Section Nos. 13, 14, 15, 16, shall submit certified letter(s) from their manufacturer(s) to certify the prospective bidder as their Factory Authorized Warranty Dealer for both the chassis and equipment offered. Requested document shall be submitted to the Project Manager by close of business, 4:30 P.M. Hawaii Standard Time (HST) within five (5) working days after bid opening. Failure to submit any of the certified letter(s) shall be sufficient grounds for rejection of bids.
14. The attention of out-of-state bidders is directed to Section 2.8 of the Specifications. An out-of-state bidder is required to answer the following statement:

State of Hawaii General Excise and Use Taxes are included in all bid prices.

Write “Yes” or “No”

If the above statement is left unanswered, it will be considered a “No” answer by the State.”

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

F O R M S

Contents:

Contract

C O N T R A C T

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 business and/or mailing address is «ADDRESS», hereinafter referred to as CONTRACTOR";

WITNESSETH: That for and in consideration of the payments hereinafter mentioned, the CONTRACTOR hereby covenants and agrees with the STATE to complete in place, furnish and pay for all labor and materials necessary for "«PROJECT_NAME_AND_NO»", or such a part thereof as shall be required by the STATE, the total amount of which labor, material and construction shall be computed at the unit and/or lump sum prices set forth in the attached proposal schedule and shall be the sum of «BASIC»-----DOLLARS (\$«BASIC_NUMERIC») as follows:

TOTAL AMOUNT FOR COMPARISON OF BIDS\$«BASIC_NUMERIC»

which sum shall be provided from STATE funds, all in accordance with the specifications, the special provisions, if any, the notice to bidders, the instructions to bidders, the proposal and plans for «PROJECT NO ONLY» and any supplements thereto, on file in the office of the Director of Transportation. These documents, together with all alterations, amendments, and additions thereto and deductions therefrom, are attached hereto or incorporated herein by reference and made a part of this contract.

The CONTRACTOR hereby covenants and agrees to complete such work from the date indicated in the Notice to Proceed issued by the STATE within «WORKING DAYS», subject, however, to such extensions as may be provided for in writing under the specifications.

For and in consideration of the covenants, undertakings and agreements of the CONTRACTOR herein set forth and upon the full and faithful performance thereof by the CONTRACTOR, the STATE hereby agrees to pay the CONTRACTOR the sum of «BASIC»-----DOLLARS (\$«BASIC NUMERIC») in lawful money, but not more than such part of the same as is actually earned according to the STATE's determination of the actual quantities of work performed and materials furnished by the CONTRACTOR at the unit or lump sum prices set forth in the attached proposal schedule. Such payment, including any extras, shall be made, subject to such additions or deductions hereto or hereafter made in the manner and at the time prescribed in the specifications and this contract. An additional sum of -----«EXTRAS»----- «STATE EXTRAS»DOLLARS (\$«EXTRA NUMERIC») is hereby provided for extra work and shall be provided from State funds.

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

SAMPLE