109.03

SECTION 109 - MEASUREMENT AND PAYMENT

109.01 Schedule of Agreed Prices for Lump Sum Price Items. After the award of contract, the Contractor shall submit a schedule of prices for the various items of work paid for by a lump sum price. For projects involving more than a single building, structure, or facility, the breakdown cost shall reflect a separate schedule of prices for the various items of work for each building, structure, and facility. The sum of the prices submitted for the various items must equal the lump sum bid in the bidder's proposal. This schedule will be subject to acceptance by the Engineer who may require the bidder to submit another or several other schedules if in the Engineer's opinion the prices are unbalanced or not sufficiently detailed. This schedule of prices shall be used for the purpose of determining the value of monthly payments due the Contractor for work installed complete in place; and (2) may be used as the basis for determining cost and credit of added or deleted items of work, respectively.

As a condition of payment, the Contractor shall estimate at the close of each month the percentage of work completed under each of the various construction items during such month and submit the estimate to the Engineer for review and approval. The Contractor shall be paid the percentage of the price, as approved by the Engineer established for each item, less any permissible retention.

109.02 Payment is not Acceptance. No payment made to the Contractor prior to final acceptance is an acceptance by the State of the work or the portion of the work related to the payment; nor does a progress payment affect the State's rights to inspect, test or reject the work. A progress payment does not relieve the Contractor of the risk of loss or damage to the work for which payment is made. The Contractor still maintains the responsibility and duty with respect to the work for which payment is made, to protect against loss or damage, to insure the work, to insure and indemnify the State against claims, to maintain the required surety bonds, and to protect the work and the public.

109.03 Measurement of Quantities. The work will be measured in accordance with United States standard measure, or as otherwise stated in this contract. Final measurement shall be verified or determined by the Engineer. If the Contractor has a dispute about the measurement of the work, the Contractor must demonstrate the existence of an error by actual physical measurement before the work has progressed in a manner that would make a proper verification of the contested measurements impractical. If the Contractor's claim cannot be physically verified, the Engineer's measurements will be deemed as correct.

A station, when used as a definition or term of measurement, is 100 linear feet.
Longitudinal measurements for area computations of the various surfaces will be made in the horizontal projection of the actual surface. Transverse measurements for area computations will be the neat dimensions shown in the contract documents or the horizontal projection of the actual surface or as ordered in writing by the Engineer. No deductions in measurement for unit price payment purposes will be made for fixtures or structures in place having a combined area of nine square feet or less.

Work will be measured to the pay limits shown in the contract documents.

Measurement of items that are measured by the linear foot will be made parallel to the base or foundation.

The term "gage" refers to the U. S. steel wire gage or U.S standard gage for uncoated hot and cold rolled sheets.

The term "ton" will mean the short ton of 2,000 pounds avoirdupois weight. The Contractor shall weigh materials measured or proportioned by weight on properly certified scales.

Every vehicle hauling material specified for measurement and payment by "loose measurement" or "measurement by vehicle" shall be made available to the Engineer for verification of its load volume or capacity. A vehicle's full load shall be its water level capacity. The Engineer may direct that any load in a vehicle be leveled for purposes of measurement or payment.

The Contractor shall notify the Engineer 24 hours before hauling material, payment for which is based upon weight. Unless otherwise directed by the Engineer, the truck used to haul material paid by weight shall be weighed with no load on a properly certified scale before each load is added.

When identifying standard manufactured items by gage, unit weight, or section dimensions, such identification will be nominal weights or dimensions. Standard manufactured items shall be such items as fence, wire, plates, rolled shapes, and pipe conduit. Unless specific allowable tolerances are set by the contract documents, tolerances generally accepted or established by the industries involved in the manufacture of the product are acceptable.

**109.04 Full Compensation; Changes.** The contract price is full compensation for the work.

Change order work as defined in Subsection 104.04 – Contract Change Orders, shall be paid for in the manner established by the related change order.

The total price adjustment as specified in the field order or the change order shall be considered full compensation for all materials, labor, insurance, bonds, fees, taxes, equipment use or rental, profit and all overhead, and any delay impact costs.
109.05 Allowances for Overhead and Profit. In determining the cost or credit to the State resulting from a change, the allowances for all overhead and profit combined shall not exceed the percentages set forth below:

(1) 15 percent of the direct cost for any work performed by the Contractor’s own labor force.

(2) 15 percent of the direct cost for any work performed by each subcontractor’s own labor force.

(3) For the Contractor or any subcontractor for work performed by their respective subcontractor or tier subcontractor, 7 percent of the amount due to the performing subcontractor or tier subcontractor.

(A) Allowance Percentages. The allowance percentages will be applied to all credits and to the net increase of direct costs where work is added and deleted by the changes.

(B) Allowed Markup. Not more than three markup allowance line item additions not exceeding the maximum percentage noted in Subsections 109.05(1), 109.05(2), and 109.05(3) are allowed for profit and overhead, regardless of the number of tier subcontractors.

109.06 Force Account Provisions and Compensation. The contract documents may provide that certain work be compensated by force account method, or the Contractor may be directed to provide changes compensable under the price adjustment provision of paragraph (5) of Subsection 104.06 – Methods of Price Adjustment. When performing force account work, the Contractor and its subcontractor(s) shall comply with the provisions of this section. Compensation by force account will not alter any rights, duties, and obligations under the contract. The Contractor shall follow these procedures:

(A) The Contractor’s Duties; Engineer’s Authority. The Contractor has the duty to perform the work payable under this provision efficiently and economically. When the Engineer determines the Contractor is working inefficiently or uneconomically, the Engineer may direct the Contractor to stop, modify its means and methods, or the Engineer may specifically direct means and methods of doing the force account work. The Engineer will not pay for work that is unacceptable or for the cost of correcting work that fails to conform to contract requirements.

(B) Records. The Contractor shall maintain accurate daily records of all allowable costs. The records, as well as all work and costs are subject to review, audit, and approval by the Engineer.
The Contractor shall use the State’s Force Account Form and obtain the Inspector’s signature thereon each day the Contractor performs force account work. As the condition of payment of the force account work, the Contractor shall submit an original and two copies of the force account records, together with invoices, receipts and other backup data to the Engineer.

(C) Allowable Costs. Allowable costs include labor, equipment and machinery, trucks, insurance, taxes and bonds, overhead, profit, and reimbursable expenses all as described herein. Other costs or items not covered under this section are subject to the Engineer’s written approval.

(D) Labor. Allowable costs include Contractor and subcontractor(s) costs for hourly worker wages, and fringe benefits required by employment contracts, plus overhead and profit markup. The Contractor shall provide the information on the force account form regarding each worker and supervisor.

Overtime compensation, per diem costs and other reimbursable costs are not allowed unless approved in writing by the Engineer prior to incurring the expense. Overhead and profit markup will not be allowed for such costs. Costs and time for employees’ to travel to and from the project site are not allowed unless approved in writing by the Engineer prior to performing the work.

(E) Materials. Contractor and subcontractor(s) are allowed the actual cost of materials (excluding financing costs) delivered and incorporated into the work plus overhead and markup. The Contractor shall provide descriptions and quantities of materials, prices and extensions, and costs to transport materials if not included in the prices of the materials. The Contractor shall provide legible receipts and invoices for all materials used and transportation charges. The Contractor shall promptly inform the Engineer of any early payment discounts that are available, as well as scheduled or anticipated price increases.

If materials used are not specifically purchased for the force account work but are taken from the Contractor’s stock, then in lieu of the invoices, the Contractor shall certify that the materials were taken from stock and that the amount claimed represents the actual cost to the Contractor.

(F) Equipment and Machinery. For equipment and machinery necessary and actually used (other than small tools defined under Subsection 109.06(I) – Small Tools) that are owned or leased or rented, the Contractor is allowed costs for use of equipment or machinery at a per hour rate.
Hourly rates shall include costs for fuel, oil, lubricants, supplies, necessary attachments, repairs, maintenance, tire wear, depreciation, storage, and other incidentals. The allowable hourly rates shall be the Contractor’s actual customary charges e.g., shop rates or yard rates, or rental cost as verified by Contractor’s records or invoices, provided that the maximum rate shall not exceed the current rates published in the Blue Book, effective at the time of equipment use. Blue Book hourly rates are calculated based upon the following formula:

\[
\text{Hourly Rates} = [(\text{Blue Book Monthly Rate} ÷ 176) \times (\text{Regional Adjustment Factor}) \times (\text{Rate Adjustment Table Factor})] + \text{Hourly Operating Cost}
\]

Equipment and machinery costs are not subject to any additional overhead and profit markup.

Equipment and machinery shall be in good condition and suitable for the purpose for which the equipment and machinery are to be used.

For equipment and machinery that is not listed in the Blue Book, the Contractor shall obtain the Engineer’s written approval of the monthly and hourly rates prior to using the equipment or machinery. If there is no agreement on the rates, the Engineer will set the rate. Engineer may, prior the use of rental equipment, approve in writing rates that are higher than the published rates, if justified by special circumstance.

(G) Equipment Charges. The rental period for equipment and machinery brought to the work site specifically for the force account work, begins when the equipment or machinery reaches the work site, and continues each day the equipment or machinery is at the site and terminates at the end of the day when the equipment or machinery is no longer needed for the force account work, or when the equipment or machinery leaves the project site, whichever comes first.

Rental times for all other equipment and machinery used for force account are paid for the time actually used. Prior to the performance of work, the Engineer must approve any hours or operation in excess of 8 hours in any one day. No additional premium beyond the normal rates used will be paid for equipment or machinery over 8 hours per day or 40 hours per week.

The total of all force account rental charges minus the operating cost accrued over the duration of the contract for a specific item of equipment or machinery (same make, model or kind of equipment or machinery doing the same kind of force account work) shall not exceed the replacement cost of that equipment. The Contractor shall provide the cost of replacement to the Engineer prior to using the equipment or machinery. If the Engineer does not agree with the replacement cost
provided by the Contractor or if the Contractor does not provide the replacement cost, the Engineer shall set the replacement cost. The Contractor may contest the replacement cost set by the Engineer in accordance with Subsection 107.15 – Disputes and Claims. The Engineer will pay only the hourly operating cost should the replacement cost be reached. This provision shall not apply to the accrued rental charges for barricades and other traffic control devices, or while undergoing maintenance.

Rental times are not allowed or credited for any time during which equipment or machinery is inoperative due to its breakdown.

(H) Idle and Standby Equipment. In the event the equipment or machinery must stand-by due to work being delayed or halted by reasons beyond the Contractor’s control, the rental rate shall be: Standby/Idle Hourly Rental Rates = [(Blue Book Monthly Rate ÷ 176) X (Regional Adjustment Factor) X (Rate Adjustment Table Factor)] X 0.50 or the Contractor’s shop rates or yard rates, whichever is lower. The Engineer may order the demobilization of standby/idle equipment or, may direct that equipment that was located at the jobsite at the start of the force account work cease to be used for force account work.

Payment will be made only when:

(1) The Contractor has notified the Engineer in writing at the beginning of the standby/idle period that compensation is expected for the individual piece of equipment or machinery.

(2) The Contractor submits to the Engineer on each Monday a list of the equipment or machinery that was idle the past week. This list shall have all information necessary to determine the hourly rental rate and the date and time it became idle and the reason for the equipment or machinery being idle. The list shall also have the date and time when any maintenance was performed on the equipment or machinery during the period the equipment was idle.

With the written approval of the Engineer, the Contractor may store the idle equipment or machinery on the project site for its own convenience at no increase in contract price or contract time.

(I) Small Tools. Contractor and subcontractor(s) are not allowed costs for depreciation or use of small tools, even if the small tools are consumed by use. Small tools are individual pieces of equipment, tools or other terms having a purchase price for that new item or equivalent replacement value of $500.
(J) Trucks and Utility Items. The Contractor’s cost for utility vehicles and other items such as pickup trucks, van, flatbed trucks, storage trailers, containers, etc. that are already in use or planned for use on the entire project will not be allowed except for the time that, in the opinion of the Engineer, they: (1) are directly and necessarily used for the performance of the force account work; and (2) the use of such items has not been included within the Contractor’s total project overhead costs.

Allowable rental rates for trucks not owned or leased by the Contractor shall not exceed the listed rates in the Blue Book or those established under the Hawaii State Public Utilities Commission, whichever is less.

The Contractor shall provide points of origin, destinations, mileage, and hourly rates for each travel segment.

Payment for use of trucks shall be in accordance with the provisions of Subsection 109.06(F) – Equipment and Machinery.

(K) Transportation, Mobilization, and Demobilization. The Contractor shall obtain the Engineer’s approval of the location from which the equipment or machinery will be moved or transported.

Where the equipment or machinery must be transported to the work site, the Contractor will be paid the reasonable costs to mobilize and demobilize, load and unload, and transport the equipment or machinery, to and from its original location to the work site, or upon completion of the work to another location, whichever cost is less.

The cost to transport the equipment or machinery shall not exceed the rates established by the Hawaii State Public Utilities Commission. If the rates are nonexistent, then the rates will be determined by the Engineer based upon the prevailing rates charged by established haulers within the locale.

If the Contractor uses the equipment or machinery for other than force account work, the costs to mobilize and transport may be disallowed or prorated depending on the non-force account.

(L) Subcontractors. Subcontractor’s costs are allowed plus a markup limited under Subsection 109.05 – Allowances for Overhead and Profit, and applicable State excise tax. Costs for insurance and taxes shall comply with the provisions of Subsections 109.06(M) – Insurance and Taxes.

(M) Insurance and Taxes. Contractor and subcontractor(s) are allowed actual additional costs attributable exclusively to the force account work for property damage, liability, workers compensation insurance
premiums, State unemployment contributions, Federal unemployment taxes, social security and medicare taxes, plus an allowable markup of 6 percent.

**(N) Other Costs.** Any other costs or items not covered under this Subsection 109.06 – Force Account Provisions and Compensation are subject to the Engineer’s written approval and conditions.

**(O) Reimbursable Expenses.** All costs are subject to HAR §3-123 – Cost Principles. Reimbursable expenses are subject to the Engineer’s written approval and conditions. Overhead and profit markups are not permitted on reimbursable expenses.

Costs incurred by the Contractor for air transportation and associated ground transportation, and per diem or subsistence allowance costs (lodging and meals) are allowed as reimbursable expenses when the project conditions require special skilled workers not readily available on the island of the project site. Air transportation shall not exceed the actual cost of coach class airfare. Whenever possible, Contractor shall take advantage of advance purchase discount air fares. Ground transportation shall not exceed the actual cost of renting a compact-sized vehicle. Rental vehicles shall be shared among Contractor’s employees to the greatest extent possible. Insurance coverage is not a reimbursable expense.

Per diem or subsistence costs (lodging and meals) shall not exceed the applicable daily authorized rates for inter-island or out-of-state travel for State government employees. No per diem is allowed for leaving and returning the same day. The Contractor shall obtain prior written approval from the Engineer for other conditions.

**(P) State Excise Tax and Bond.** The Contractor will be reimbursed for State excise taxes paid or payable on the allowable force account work. The actual bond premium, not to exceed 1 percent is allowed on items covered by Subsections 109.06(D) - Labor, 109.06(E) – Materials, 109.06(F) – Equipment and Machinery, 109.06(J) – Trucks, 109.06(L) – Subcontractors, 109.06(M) – Insurance and Taxes, 109.06(N) - Other Costs, and 109.06(O) - Reimbursable Expenses when applicable. When the original contract price includes a bond premium for an allowance item to be paid by force account, no additional bond premium for such allowance items will be paid until the allowance amount is exhausted.

**109.07 Assignment of Payments.** The Contractor may not assign its right to receive monies due under the contract without the written consent of the State and the surety.

**109.08 Progress Payments.**
(A) Monthly Payment. The Contractor shall be paid progress payments monthly upon approval of a monthly payment estimate by the Engineer. The monthly payment estimate shall be based upon the value of the items of work that appear to be satisfactorily completed, including the value of materials incorporated in the work. Materials not yet incorporated in the work will be paid in accordance with Subsection 109.08(B) – Payment for Material On Hand. Monthly payments will be approximate only and shall be subject to correction before or in the final estimate and payment. Monthly shall mean the period between the 16th day of the month to the 15th day of the succeeding month. The Engineer and the Contractor may agree on a different monthly period.

The Engineer may withhold all or any part of a monthly payment due to the Contractor, without interest accruing to the contract, on account of:

(1) The failure of the Contractor to meet a requirement of law or the contract that is a condition precedent of payment.

(2) The exercise of any right granted the Engineer to withhold money due the Contractor established by law or the contract.

No monthly payment will be made if the total value of the work done since the last estimate is less than $2,000. If the monthly payment includes work from Sections 617 - Planting Soil, 618 - Grassed Surfaces, 619 - Planting and Transplanting and 641 - Hydro-Mulch Seeding, the Engineer will not make a monthly payment if the total value of the work done since the last estimate is less than $500.

(B) Payment for Material On Hand. The Contractor will be paid the manufacturer’s, supplier’s, distributor’s or fabricator’s invoice cost of materials not yet incorporated into the work on the following conditions:

(1) If acceptance of submittals of such materials are required by the contract documents, the submittal processes have been completed and the materials for which payment is requested conform to the accepted submittal.

(2) The materials shall be stored and handled in accordance with Subsection 105.23 – Storage and Handling of Materials and Equipment.

(3) Payments shall be made only if:

(a) All materials are acceptable to the Engineer.
(b) Contractor provides legible documentary evidence that all materials for which payment is requested have been paid in full.

(c) The materials are insured for their full replacement value to the benefit of the State against theft, fire, damages incurred in transportation to the site, and other hazards.

(d) In case of materials stored off the project site, the materials are clearly marked and identified for the project, and are not commingled with other materials not to be incorporated into the project.

The payment authorized in this subsection will not exceed the contract price of that item. Payment for the material under this subsection is not final acceptance of the material nor shall any such payment shift the risk of loss or damage from the Contractor to the State.

Payment for the material does not relieve the Contractor of its obligations to furnish material acceptable to the Engineer and to properly incorporate the material into the project in accordance with the contract documents.

The State will not make material payment on living or perishable plant material or any material that may deteriorate or is not insurable.

109.09 Prompt Payment.

(A) Contractor’s Duty.

(1) When any subcontractor has met all the terms and conditions of the subcontract, and there are no bona fide disputes, the Contractor, upon receiving payment from the State for the work, shall make full payment to the subcontractor of all monies due within 10 days from the receipt of an invoice from the subcontractor. This payment obligation applies to payments made to and payable to all tiers of subcontractors.

(2) Bona Fide Disputes. The existence of a bona fide dispute with a subcontractor or material supplier shall not release the Contractor of its prompt payment obligations as to all sums due that are not directly affected by such disputes.

The following are examples of 'bona fide disputes':

(a) When work done by a subcontractor is paid for and later found to be non-conforming or unacceptable and the
The amount previously paid by the State is deducted from the Contractor’s subsequent payment request.

(b) When the subcontractor fails to promptly correct any deficiencies or non-conforming work.

(c) When the subcontractor fails to fulfill any material term, condition or requirement of its subcontract.

(B) Filing Of Non-Payment Complaint And Verification Of Its Validity. Subcontractors and material suppliers may file in writing a complaint with the Engineer regarding non-payment by the Contractor. Such a complaint must state:

(1) The amount past due for work performed and already paid for by the State.

(2) The date the work was completed.

(3) The date payment was due from the Contractor.

(4) That all the terms, conditions or requirements of its subcontract have been met.

(5) That no bona fide dispute over its performance exists.

The Engineer will investigate, hear and receive evidence and determine the validity of the complaint and the Engineer's decision on the matter shall be final.

(C) Follow-Up Action. If the Engineer determines that the Contractor failed to make prompt payment required under the subcontract or these contract documents to a subcontractor or material supplier with whom the Contractor has no bona fide dispute within the time period specified above, the Engineer shall inform the Contractor of the findings and request the Contractor make payment accordingly.

If the Contractor does not act promptly, the Engineer may:

(1) Take appropriate action as allowed under this contract.
(2) Refer the matter to the Contractor Licensing Board for appropriate action.

(3) Initiate a petition for debarment.

The State may withhold from future progress payments amounts to cover any sums paid to the Contractor for work performed by a subcontractor if the State finds that the subcontractor’s complaint regarding non-payment by the Contractor has merit.

109.10 Withholding of Payment for Unsatisfactory Progress. If the Contractor is progressing or performing the work unsatisfactorily, the Engineer, upon written notice to the Contractor, may withhold sums not exceeding 5 percent of the total contract price from subsequent progress payments.

The Engineer may deduct from any amounts due to the Contractor sums assessed as liquidated damages as well as any other charges against the Contractor allowed by law or the contract documents.

If the Contractor refuses or fails to comply with the equal employment opportunity, affirmative action, non-discrimination, labor compliance, training, implementing and maintaining satisfactorily the BMP and NPDES standards and disadvantaged business enterprise requirements, the Engineer at its sole discretion and upon written notice to the Contractor may withhold any or all of the monthly progress payments that are due or to become due.

With the approval of the State, the Contractor may withdraw from time to time the whole or any portion of the sum withheld after endorsing over to the State and depositing with the State any general obligation bond of the State or its political subdivisions suitable to the State. But in no case will the bond have a face value less than the value of the amount to be withdrawn. The State may sell the bond and use monies directly withheld from progress payments or the final payment.

109.11 Final Payment. The Engineer will prepare the final estimate when the State accepts the project in accordance with Subsection 108.14 – Final Acceptance. Prior progress estimates and payments shall be subject to correction in the final estimate and payment.

Upon final settlement, the State will pay the entire sum due less all previous payments and less any sums that may have been or may be deducted in accordance with the provisions of the contract upon receipt of the following documents in a format acceptable to the Engineer:

(1) Consent of the surety to payment of the final estimate and certificate of release from the surety.
(2) Evidence by affidavit that the Contractor fully paid the debts resulting from the contract.

(3) Original tax clearance certificates from the State Director of Taxation and the Federal Internal Revenue Service. The clearance certificates must be certified by the appropriate agency not more than 60 days before delivery to the Engineer.

(4) Certification of Compliance for Final Payment (SPO Form-22), attached, will be required for final payment. A copy of the form is also available at www.spo@hawaii.gov. Select ‘Forms for Vendors/Contractors’ from the HRS Chapter 103D, pop-up menu.

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

109.12 Records, Accounts, And Documents. The Contractor shall retain and preserve its bid documents and estimates, contract records, accounts, data and documents of the Contractor and its subcontractors for not less than three years from the date of final payment or the final voucher of the project is submitted to FHWA which ever is longer. If any lawsuit or claim relating to the work is pending before the expiration of the three year period, the Contractor shall retain the documents until it is resolved. The Contractor shall provide written notice to the Engineer not less than 30 days of its intent to dispose of the contract records. The Engineer may direct in writing the Contractor to retain such records for an additional period of time at no increase in contract price or contract time. The documents shall be available for inspection and auditing by the State and other government agencies at the offices of the Contractor and its subcontractors upon 24 hours notice to the Contractor. The Contractor shall cooperate during such inspection and auditing of the documents at no increase in contract price or contract time.

END OF SECTION 109