

SECTION 104 - SCOPE OF WORK

Make the following amendments to said Section:

- (I) Delete the paragraph before **104.01(B) Voluntary Partnering**.
- (II) Amend **104.01(B) Voluntary Partnering** by adding the following before the first sentence of the first paragraph:

"This provision applies to non-resurfacing projects with a construction cost estimated at over one million dollars (\$1,000,000.00)."

- (III) Amend **104.02 Alterations of Plans or Type of Work** to read as follows:

"104.02 Alterations of Plans or Type of Work. The Department reserves the right to make during the progress of the work, such increase or decrease in the quantity of contract items. Also, the Department reserves the right to alter the details of the work as necessary or desirable. Such increases or decreases and alteration shall not invalidate the contract or release the surety. The Contractor agrees to accept the work as increased, decreased or altered.

Alterations of plans or nature of the work shall not involve work beyond the limits of the original proposed work except as may be necessary to complete the project according to the contract.

The Contractor shall do the altered work as part of the contract unless the altered work significantly changes the scope of work to be done. Also, the Department will pay the altered work at the same contract prices as for other parts of the work.

For purposes of this subsection, an altered work shall be an ordered change involving:

- (1) Work that is different in kind, nature or cost from items called for in the original contract; or
- (2) More than 15% increase or decrease in the quantity of a major contract item.

The Engineer will make an allowance on such agreed basis before the work starts if the altered work is significant. The Engineer will make an equitable adjustment in the contract price if there is no agreement.

The provisions of this subsection shall not apply to overruns and underruns on items which are estimated in the proposal.

The Contractor shall not make claims for loss of anticipated profits because of alteration or variation between the approximate quantities and the actual quantities.

The Department will make payment according to Subsection 109.03 - Compensation for Altered Quantities if the altered work is significant. The Department will make such time adjustment according to Subsection 108.07 - Determination and Extension of Contract Time if the altered work requires additional time to complete the project.

(A) Alterations in Quantities or Scope of Work for Contract Items with Unit Prices. The Engineer will make adjustment in the unit price only if the total quantity of that increased or decreased contract item is more than 15% of the original contract amount of that item. The total quantity includes quantity of previous orders.

The Engineer may base such adjustment on the increased or decreased actual cost to the Contractor per unit of said item. The Engineer has the option of making adjustment on a force account basis according to Subsection 109.04 - Extra and Force Account Work and the following:

(1) For increased quantities, the Engineer will apply such adjustment to the increased quantity over 15% of the original contract amount of that item.

(2) For decreased quantities, the Engineer will apply such adjustment to the decreased quantity over 15% of the original contract amount of that item.

(B) Alterations in Quantities or Scope of Work for Contract Items On Lump Sum Basis. If the Contractor makes the ordered alterations involving the quantity of lump sum items or portion of the lump sum work, the Engineer will make adjustment in payment only in work influenced by the alterations.

The Engineer will base the adjustment in lump sum price on a theoretical unit price when the increase or decrease does not exceed 15% of the original quantity. The Engineer will resolve the theoretical unit price by dividing the original contract lump sum price by the original quantity. The adjustment in the original lump sum price shall be the product of the theoretical unit price and the quantity involved not exceeding 15% of the original quantity for the item of work.

When the increase exceeds 15% of the original quantity, the Contractor and the Engineer will mutually agree on the adjustment in payment for the quantity over 15%. If failure to agree, the Engineer will

pay such increased work for on a force account basis according to Subsection 109.04 - Extra and Force Account Work.

When the decrease exceeds 15% of the original quantity, the adjustment in the original lump sum price shall be:

- (1) the lesser of
 - (a) the amount of the reduction in quantity multiplied by the theoretical unit price, or
 - (b) adding
 - 1. the amount of the reduction in quantity up to 15% multiplied by the theoretical unit price, and
 - 2. the amount of the reduction in quantity over 15% as computed as if the work done was on a force account basis according to Subsection 109.04 - Extra and Force Account Work, or
- (2) as mutually agreed to by the Contractor and the Engineer.

The Engineer will resolve the adjustment in lump sum price as if the increase or decrease was to be paid for on a force account basis according to Subsection 109.04 - Extra and Force Account Work, or as mutually agreed to by the Contractor and the Engineer when the lump sum item of work contains no quantity.

The following provision shall apply only to State and Federal-Aid projects:

- (C) Differing Site Conditions.** If the Contractor finds the following:
- (1) Subsurface or latent physical conditions that differ materially from that shown on the contract, or
 - (2) other physical conditions that are unusual in nature and differ materially from that ordinarily encountered in the type of project under contract, or
 - (3) other physical conditions that were not discoverable by the Contractor before commencement of the project or that portions of the project work, or
 - (4) other physical conditions that are not generally recognized in the construction industry as inherent in the type of work specified in the project contract, the Contractor shall immediately notify the

Engineer verbally of the above discovery. Within 24 hours, the Contractor shall inform the Engineer in writing of the above discovery. The affected work will stop immediately until the Engineer informs the Contractor to commence work in writing.

The Engineer will investigate, document and evaluate the site conditions found in the affected project area. The Engineer will determine and inform the Contractor if such conditions are materially different from the contract and if such conditions justify an adjustment to the project contract.

If an adjustment is warranted and cause an increase in the Contractor's cost of, or the time required for, performance of any part of the work under this contract, whether or not changed as a result of such conditions, 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 according to Subsection 104.09 - Price Adjustment.

The Department will not compensate the Contractor for loss of anticipated profits on deleted work.

If the Contractor fails to notify the Engineer as provided above, or commences or continues project work in or affecting that portion of the project area before receiving written authorization from the Engineer, the Department may refuse or deny contract adjustments for that portion of the project work."

(IV) Amend 104.03 Extra Work to read as follows:

"104.03 Extra Work. All changes will be set forth in a written order from the Engineer. Upon receipt of a written order, the Contractor shall proceed with the changes. If the Contractor does not agree with any of the terms or conditions or the adjustment or non-adjustment to the contract time and/or contract price set forth therein, the Contractor shall file with the Engineer, a written protest setting forth its reasons in detail within 30 days after receipt of the written order. In all cases, the Contractor shall proceed with the work as changed. The protest shall be determined as provided in Subsection 105.18 - Claims for Adjustment and Disputes. Failure to file such protest within the time specified shall constitute an agreement on the part of the Contractor with the terms, conditions, amounts and adjustment or non-adjustment to contract price and/or contract time set forth in the written order."

(V) Amend 104.04 Maintenance of Traffic to read as follows:

"104.04 Maintenance of Traffic.

(A) General.

The Contractor shall keep the road open to traffic during the progress of the work according to Section 645 - Work Zone Traffic Control.

The Contractor shall furnish, erect, and maintain lights, barricades, signs and other traffic control devices. Also, the Contractor shall take precautions for the protection of the work and safety of the public according to Subsection 107.14 - Barricades and Warning Signs.

Obstructions to a roadway attributable to construction, maintenance, or engineering survey on or near public streets and highways are a major hazard to motorists, pedestrians and workers at the work site. The Contractor shall take such safety and precautionary measures as may be required according to Chapter 286, HRS; the Hawaii Administrative Rules, Title 19, Subtitle 5, Chapters 127, 128 and 129; and the most current editions or revisions of the MUTCD.

Where so provided on the plans, the Contractor may bypass traffic over an acceptable detour route. Keep the portion of the project used by public traffic in passable condition. Also, provide and maintain temporary crossings with trails, roads, streets, businesses, parking lots, garages, residences, and farms.

If elimination of abutting owners' access occurs, do not close the existing access until the replacement access facilities are usable. The Contractor may obtain written permission from the abutting owners setting the conditions for closing the existing access. Submit a copy of this agreement with the abutting owners to the Engineer for acceptance before such work begins.

Provide a smooth and even surface for public traffic use when working on an existing facility kept open to traffic. Conduct such work on only portion of the roadway. Alternate construction from one side to the other while routing traffic over the opposite side. Place sufficient fill at culvert and bridge locations to permit traffic to cross. Conduct culvert installation on only portions of the roadway to permit safe passage of traffic.

During subgrade and paving operations, consider use of shoulders for public traffic. If using part-width paving methods, consider use of side of the roadbed opposite the one under construction for public traffic. Keep a passageway wide enough to make at least two lanes of traffic open when sufficient width is available. The Engineer will consider shaping or maintaining the shoulders as included in the contract price of

the various contract items and the Department will not make additional compensation.

Do not store material or equipment where the material or equipment will interfere with public traffic. Remove equipment and other obstructions to permit free and safe passage of public traffic when each day's work ends or if suspension of construction operations occurs.

Traffic incidental to other construction projects that abuts the principal routes of travel are part of the public traffic and shall be as required by contract.

The Contractor shall bear expenses of maintaining traffic over the section of road undergoing improvement or repair. Also, bear expenses of constructing, maintaining, removing, and furnishing approaches, crossings, intersections, and flaggers and their equipment, without direct compensation. Exceptions are as follows:

(1) **Special Detours.** The Department will cover payment for cost of constructing, maintaining, and removing such detour(s) when the proposal contains an item for "Construction and Maintenance of Detours". Also, the Department will include payment for the construction and removal of temporary bridges and accessory features. The Department will furnish right-of-way for temporary highways or bridges called for under this paragraph.

(2) **Maintenance of Traffic During Suspension of Work.** Provide safe passage for public traffic through the work site according to Subsection 108.06 - Temporary Suspension of Work.

(3) **Special Maintenance Specified by the Engineer.** The Engineer will pay the Contractor on the basis of unit prices or under Subsection 104.03 - Extra Work if the Engineer specifies the special maintenance. The Engineer will be the sole judge of work to be classified as special maintenance.

(B) **Traffic Maintenance Plans.** Submit in writing traffic maintenance plans and schedules, including plans and schedules for traffic detours, road or lane closures, lane switches and the placement of temporary traffic control devices, warning signs, barricades and other protective devices, to the Engineer for acceptance at least ten working days before the date such work is scheduled to begin.

Such plans and schedules shall contain:

(1) a brief description of the work,

- (2) dates of work,
- (3) times of day affected,
- (4) proposed public information sign, and
- (5) proposed news release.
- (6) detour layout plans.

If doing work in a city or town, give the Fire Department at least 24 hours notice in writing before blocking or closing off access to streets. Keep fire hydrants accessible to the Fire Department. Do not place material or other obstruction closer to a fire hydrant than permitted by ordinances, rules or regulations. If there are no ordinances, rules or regulations, do not place material or other obstruction within 5 feet of a fire hydrant.

Make arrangements according to the contract for emergency work that may be required when work is not in progress.

The Contractor shall do the cold planing, road reconstruction, and all paving work, including road resurfacing (leveling course and finish course) and driveway paving at night.

The Engineer will allow the Contractor to night work only as follows:

Sunday	10:00 P.M. - 12:00 Midnight
Monday thru Thursday	12:00 Midnight. - 6:00 A.M. 10:00 P.M. - 12:00 Midnight
Friday (Morning)	12:00 Midnight. - 6:00 A.M.

The Contractor shall not do work on Friday nights and Saturdays or as specified by the Engineer. Sunday's work will be part of Monday's working day.

The Contractor may do pavement markings, traffic signs, utility adjustments, centerline and reference survey monuments, standard street survey monuments, curbs, gutters and curbed islands, sidewalk and wheelchair ramps, guardrails, and dressing of shoulders and islands during daytime working hours.

All lanes of traffic shall be kept open during daytime work. Daytime work shall be conducted between the hours of 8:30 A.M. and 3:30 P.M. only.

During night work, the Engineer will permit the Contractor to close only one lane of traffic in each direction during its working hours. Keep the lanes open to traffic and allow traffic to flow at the normal posted speed limit during non-night-working hours .

Exceptions to the above hours shall require the Engineer's acceptance in writing.

Failure to open lanes to traffic beyond the above lane closure hours shall result in assessment of liquidated damages as specified in Section 108.08 - Liquidated Damages and Failure to Complete on Time.

Notify the State and County transportation agencies including Bus Systems Division, Police Department, Fire Department, Ambulance Service, and the Department of Health in writing at least five days before the start of construction.

Construct, install, maintain, and remove two advisory signs as specified by the Engineer. Place the signs within the project limits. The signs shall have black letters on orange background. The minimum size of the signs shall be four feet high by eight feet wide.

The sign message shall include the starting date, hours, limits and duration of construction. The height of the letters shall be 8 inches, Series D. If accepted by the Engineer, the Contractor may use a minimum height of 6 inches, Series D. The Engineer will review and accept the advisory sign wording before installing. Install the advisory sign two weeks before the start of construction.

Take measures necessary to insure that safe and easily accessible passage is provided for pedestrians who must travel in or near the construction zone.

The Engineer will consider payment for furnishing, placing, maintaining and removing the advisory signs and insuring safe and accessible passage for pedestrians included in the bid price of the various contract items. The Engineer will pay additional advisory signs as specified by the Engineer under Additional Police Officers and/or Additional Traffic Control Devices.

Submit requests for review and acceptance of detours and lane closures that will impact traffic during peak hours before scheduling the work to begin as follows:

- (1) detours - 8 weeks, and

- (2) lane closures - 6 weeks.

Also, these requests shall include:

- (1) An explanation of proposed changes to the existing traffic pattern;
- (2) A schedule of when installing informational and traffic control signs;
- (3) A schedule of when publishing advertisements;
- (4) A plan showing the proposed informational and traffic control signs; and
- (5) A plan showing the lane changes or detours. Plans for multi-lane highway lane changes and detours shall include details of the beginning of the lane changes or detours.

The Engineer will not make payment for reviewing request submittals.

(C) Advertisement. If requested by the Engineer, place an advertisement in the newspaper for the following traffic pattern changes in operation during peak hours or night work:

- (1) Detours;
- (2) Lane closure;
- (3) Permanent road closure; and
- (4) Permanent new route that changes a previous route.

The advertisement shall contain the following information:

- (1) Map of traffic pattern change limits;
- (2) Map showing lane(s) closure and detour pattern;
- (3) Notice of starting and ending dates and duration; and
- (4) Explanation of the lane(s) closure or detours "Notice To Motorist".

The quality of the map shall be as follows:

- (1) The Department will not allow free hand printing or pencil;
- (2) Highlight important feature in bold letters by darkening, cross-hatching, crossing-out or coloring;
- (3) Minimum size shall be five columns wide and four columns deep. Lesser width columns may be considered to balance against the size of the drawing.;
- (4) Text Specifications.
 - (a) Work being featured - 3/16 inch text
 - (b) Major roads and features - 1/8 inch text
 - (c) Other roads and features- first letter upper case
 - (d) "Notice to Motorists" in upper case
 - (e) Message - first letter upper case
- (5) Line Thickness.
 - (a) Important feature being advertised - thicker than rest of map
 - (b) Directional arrow - bolder than the rest of the lines shown on the map, when important, to show the route traffic should use.
- (6) Show reference direction such as "TO HILO, WAILUKU, HONOLULU, or LIHUE" with arrow.

The Contractor shall submit:

- (1) the "Notice to Motorists" for review and acceptance before placement in the newspaper 6 weeks before the start of work.
- (2) the actual size of the notice to be published in the newspaper for review and acceptance. The Engineer will not allow reduction of the notices once accepted. The final "Notice to Motorists" submittal shall be a good copy of the camera ready advertisement.

Place the advertisement for three consecutive days and within one week before the traffic pattern changes in the:

____ West Hawaii Today

____ Hawaii Tribune-Herald Ltd

Y Garden Island

____ Maui News

Y Honolulu Star-Bulletin and Honolulu Advertiser

Provide message boards as requested by the Engineer prior to lane or ramp closures.

The Contractor is directed to Section 645 - Work Zone Traffic Control for payment of advertisement.

(VI) Amend 104.05 Construction and Maintenance of Detour by deleting the second paragraph in its entirety.

(VII) Add the following:

"104.09 Price Adjustment. Any adjustment in contract price pursuant to a change or claim in this contract shall be made in one or more of the following ways:

- (1)** By agreement on a fixed price adjustment before commencement of the pertinent performance or as soon thereafter as practicable;
- (2)** By unit prices or other price adjustments specified in the contract or subsequently agreed upon;
- (3)** 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;
- (4)** In such other manner as the parties may mutually agree; or
- (5)** At the sole option of the Department, by the costs attributable to the event or situation covered by the change, plus appropriate profit or fee, all as specified in Subsection 109.04(A) Allowances for Overhead and Profit and the force account provision of 109.04 Payment for Additional Work;
- (6)** By a determination by the Department of the reasonable and necessary costs attributable to the event or situation covered by the change, plus appropriate profit or fee, all as computed by the generally accepted accounting principles and applicable sections of Chapter 3-123

and 3-126 of the HAR and Subsection 109.04(A)
Overhead and Profit herein."

Allowances for

(VIII) Move **Subsection 105.19 Value Engineering** to this Section and make it read as "**Subsection 104.10 Value Engineering**".

(IX) Amend **Subsection 105.19 Value Engineering** by revising the first sentence of the first paragraph to read as follows:

"Projects shall be eligible for Value Engineering Change Proposals (VECP). In accordance with Section 103D-411, HRS, on projects with contract amounts in excess of \$250,000 the following Value Engineering Incentive Clause shall apply to allow the Contractor to share in cost savings that ensue from cost reduction proposals, hereinafter referred to as Value Engineering Change Proposal (VECP), submitted by the Contractor."

END OF SECTION