

**TECHNICAL PROVISIONS FOR:**  
**NAWILIWILI ROAD IMPROVEMENTS**  
**VICINITY OF KAUMUALII HIGHWAY TO KANANI ROAD**  
**FEDERAL-AID PROJECT NO. NH-058-1(006)**

**I. OVERVIEW**

The Nawiliwili Road Project, Federal-Aid Project No. NH-058-1(006) is a design-build project and will be awarded using the two-step process described herein and in the Request for Proposals (RFP).

The Proposer (Proposer) is defined as all participants involved in the design, preparation of the design-build proposal and construction of the Project. When the contract is awarded the term “contractor” may be used interchangeably with Proposer. The Proposer shall use the information contained in this package to:

- Obtain the scope of work and other information as determined necessary
- Prepare documents such as but not limited to construction drawings, specifications, calculations, shop drawings, estimates, permits, clearances, etc.
- Obtain the State Highway Division’s (HDOT) acceptance of the Proposer’s designed construction documents
- Provide quality control measures for both the design and construction stages
- Construct the Project in accordance with the accepted construction documents which upon the signing of the contract shall be consider as part of the contract documents.

The purpose of this package is to provide prospective Proposers with information and parameters so that a detailed proposal for the design and construction of this Project can be prepared and submitted to HDOT for evaluation and award in accordance with these Technical and Special Provisions. The Proposer shall note as stated elsewhere in this document that all information is not provided and it is the Proposer’s duty to obtain all information needed and incorporate it into the design proposal. HDOT will only accept and not approve design proposals, submittals, etc. At the end of HDOT’s review of the Proposer’s proposal HDOT will inform the Proposer of any discovered errors. However, this shall not be considered as accepting responsibility to find any errors, omissions, constructability problems, etc., during the review. That contractual duty is solely the Proposer’s responsibility and the Proposer’s team should have as part of its design quality control system in place controls that will detect such errors. HDOT’s intent is to have the Proposer combine engineering services, project management, and construction under one contract between HDOT and the Proposer and to establish a single point of responsibility for the work.

- HDOT will supply a Pavement Justification Report (PJR). The Proposer's contractual duty in regards to the PJR is to review and determine if the report has sufficient investigation, information and has arrived at the acceptable conclusions for the Proposer's purposes. If it does, the Proposer shall approve it in writing and accept all impacts that may result from it. The Proposer shall be responsible for the information contained in the HDOT PJR and to obtain and add any other information or design work as it sees fit. If the Proposer finds that the PJR is not sufficient, the Proposer shall modify the PJR or conduct further investigations until the Proposer can approve the Proposer modified PJR and have it accepted by HDOT. The Proposer may utilize the proposed pavement design in the PJR or develop one. Only concrete pavement will be acceptable as a wearing surface.
- HDOT reserves the right to revise these Technical and Special Provisions as well other documents listed herein up to the time of the final submittal of the design cost proposal. Such revisions, if any, will be in the form of written addenda issued by HDOT. HDOT will post a notification on the HDOT website that an addenda is being issued and notify all known RFP recipients that the addenda is available for pick up at the Contracts Office.

## **II. SIGNIFICANT DATES**

The following are some of the significant dates. The dates are approximate for the stated activity and are listed to provide an approximate timeframe the Proposer may use during its creation of the Proposal. HDOT reserves the right to upon notification to Proposers to change the stated date at no additional cost

- Non-Mandatory Pre-Qualification Conference February 21, 2013
- Submission of Qualification Proposal March 28, 2013
- Selection of Top Three Proposers April 18, 2013
- Submittal of Alternative Technical Concepts no later than May 13, 2013
- Requests for Information no later than June 3, 2013
- Submission of Design Concept Documents July 25, 2013
- Discussions with Proposers August 8, 2013
- Selection of "Best Value" Proposal August 22, 2013
- NTP Final Design work October 21, 2013
- NTP Construction work January 13, 2014
- Contract completion date July 31, 2014

## **III. DESIGN AND CONSTRUCTION CRITERIA AND PARAMETERS**

### **1. PROJECT DESCRIPTION**

A. The Project includes but shall not be limited to:

1. Design and construction services to install a new roadway consisting of but not limited to
  - a. Portland cement concrete pavement (PCC pavement), e.g., Ultra Thin White Topping, Unbonded Portland cement concrete pavement, etc. Minimum design thickness for UTW is four (4) inches and the Unbonded Portland cement pavement is nine (9) inches.
    - 1) PCC pavement design shall add an additional 3/8-inch thickness to the design thickness to allow for future pavement rehabilitation.
    - 2) Optimized surface characteristics for skid resistance, safe, quiet, and smooth pavement
    - 3) The Long Life design shall have a Service life of a minimum of 50 years and lower life-cycle cost
    - 4) Mixing of UTW and Unbonded Portland cement concrete pavement sections will not be allowed.
  - b. Goals are:
    - i. Eliminate “early” failures related to design or construction inadequacies
    - ii. Prevent workmanship and material-related distresses
    - iii. Control structural distresses below threshold levels over service life, e.g., cracking, curling, faulting, etc.
    - iv. Maintain effective functional performance, e.g., smoothness, noise, surface friction, etc., over the service life.
    - v. Have fewer maintenance closures and deferred rehabilitation activities, reduced construction times.
    - vi. Provide a compatible surface onto which the PCC pavement may be installed upon.
    - vii. Have a milled asphalt cement pavement surface, new aggregate base course or cement treated base using new or recycled material in areas requiring it.
  - c. If required, a subsurface drainage system.
    - i. In areas where the existing pavement is distressed, e.g., the existing asphalt cement pavement (AC pavement) is crack, rutted, patched, unraveling, etc. install an engineered remedial repair design to address the failure based on a civil and geotechnical investigation and analysis of the cause of the failure and provide support and compatible surface for the PCC Pavement.
    - ii. Where there are joints formed between PCC pavement and AC pavement, both transverse and longitudinal joints, provide a transition

joint piece.

2. Other work shall consist of the design and construction of:

- a. Replace concrete curbed grass median islands.
- b. Concrete sidewalk
- c. Drainage systems
- d. Pavement markings
  - 1) Replace all existing paving marking with pavement markings that have a long service life, have high visibility during the night, when the pavement is wet or it is raining, have the properties of retained visibility and reflectivity. Pavement markings shall be made more visible on the concrete pavement by utilizing a non-reflective black border around the stripe, i.e., use contrast pavement markings. The border around the pavement marking shall be approximately 2-inch wider than the retroreflective markings. If thermoplastic is used utilize means and methods that shall not allow the retroreflective markings to melt into the non-reflective black border.
  - 2) All pavement stripes that would normally be 4-inch wide shall be changed to 6-inch width.
  - 3) Retro-reflective pavement markers (RPM) shall be installed to supplement each centerline stripe and edge line stripe, spaced at 10 feet on center. RPMs for lane separation designation shall be installed at 20 feet on center.
- e. Traffic signs and post, permanent traffic signs shall utilize Type XI retro-reflective sheeting.
- f. Guardrails, end treatments upgrade, replace as needed. Design concrete curb in front of guardrail and end treatments as to meet current standards.
  - 1) All noses of the end treatment system shall be equipped with a chevron sign, a crash cushion object marker (CCOM) which shall be reversible to match the corresponding traffic direction
- g. Context sensitive landscape planting
  - 1) Utilize native plants as much as possible
  - 2) Ground cover and other plants shall be drought resistant, require minimal maintenance, e.g., cutting, trimming, fertilizing, etc., Shall have characteristics that will contribute to its ability to remove silt from runoff, prevent erosion, and stabilize the soil it is on. Resistant to vector and animal infestation
  - 3) Utilize soft erosion controls in swales and velocity dissipation

- 4) Test all soils and treat or amend soil as determined by the tests so as to create a soil that will promote healthy plant growth.
  - 5) Shall require little or no maintenance and have a low maintenance cost and is context sensitive provide evidence that this has been done.
  - 6) Does not require a permanent supplemental irrigation, i.e., a system that requires piped in water. However, design and use alternative methods or techniques that will provide sufficient moisture to promote healthy growth of the landscape. Provide a system that has minimal cost of furnishing, installation and maintenance.
- h. Relocation/installation of utilities as needed.
- 1) Design utility lines, e.g., conduits, including traffic signal lines, water lines etc., to a minimum of 12-inches below the subbase, i.e., road prism. Measure the above clearance from the top of the conduit or concrete jacket to the bottom of the installed roadway prism.
  - 2) Relocate utility poles as needed.
- i. Temporary work zone traffic control,
- 1) Create a traffic control plan (TCP) so as to:
    - i. Utilize NCHRP Report 500 Volume 17 – Reducing Work Zone Collision as a guideline in designing traffic control plan.
    - ii. Minimize the impact to the public going through the work site. Have an increase in travel time through the project due to the work of no more than 10 minutes.
    - iii. Create a community outreach program to keep the primary users of the roadway informed of impacts to the vehicular travel through the project site, e.g., detours, lane shifts, etc.,
    - iv. Where work temporarily disables traffic signals provide devices to provide the same level of service, inclusive of vehicle detection, e.g., if the traffic loops that were disabled had detected vehicles then a replacement device shall do the same. All such devices shall be installed and operational before the existing sensor is disabled, i.e., have minimal down time of the traffic signal system.
  - 2) Temporary pavement stripe use a stripe that is highly visible during periods of wet pavement, night and rain.
    - i. Pavement stripes shall be a minimum of six-inches wide, i.e., change all pavement stripes that would normally be 4-inch wide to 6-inch width.
- j. Upgrade traffic signal system.

- 1) Change all existing traffic signal heads to LED traffic signal heads if they are not already so.
  - 2) Install traffic signal head backplates for all traffic signal heads. Modify and/or replace traffic signal poles to accommodate the added load, if necessary. Install a yellow three inch wide retro-reflective border placed along the perimeter of the face of a signal back plate to project a rectangular appearance at night.
  - 3) Change all existing pedestrian signal heads to LED countdown pedestrian signal heads if they are not already so.
  - 4) Install ADA compliant pedestrian crossing button if not already so equipped.
  - 5) Saw cutting of PCC pavement for traffic loop detectors shall not be allowed; utilize pre-formed loop detector type system placed under or in PCC pavement.
- k. Replace existing traffic signal system. Replace all signs and their supports within project limits. All permanent edge pavement striping where striping is normally four-inches shall be a minimum of six-inches wide.
  - l. Address mitigation of archaeological and historic sites if they exist within the project limits
  - m. Provide temporary and permanent Best Management Practices (BMP) for erosion and sediment control where needed and required
  - n. Process permits required to complete the project in conformance with appropriate Federal, State, and local standards and laws.

#### **B. EXISTING ROAD DESIGN:**

1. General Description of Existing Roadway
  - a. The existing Nawiliwili Road is a four (4) lane divided highway
  - b. Lane widths along the highway are 12 feet. Shoulder widths generally vary from 0 feet to 10 feet.
  - c. Traveled way pavement consists of flexible asphalt concrete (AC), the highway contains drainage systems along one side.
  - d. Drainage facilities generally consist of swales, grated inlets, headwall, catch basins and underground pipe systems.

## **2. DESIGN AND CONSTRUCTION PROVISIONS**

- A. The Proposer shall regard the documents listed herein including the Technical and Special Provisions (Documents) as the requirements to which the Proposal is based upon.
- B. Upon award of the contract to the Proposer the Documents will become part of the

contract documents along with the Proposer's accepted proposal.

C. The Proposer may specifically request a variance to the requirements of the Documents.

1. The request for a variance shall be clearly marked as a request for variance.
2. The request shall state the reason why the variance is needed and the benefit to HDOT should the variance be accepted.
3. Variance requests shall be submitted no later than 10 working days before the cutoff date for the submittal of the Proposal.
4. The Proposer shall not consider the variance acceptable unless HDOT accepts the variance in writing. HDOT not responding to the variance request shall be regarded as a rejection of the request for the variance.

D. If the proposal in the opinion of HDOT deviates from the requirements of the Documents using the unaccepted variance is at the Proposer's risk.

1. HDOT solely will determine if a proposal deviates from the Documents as well if the proposal is responsive. If considered responsive the proposal will be scored with respect to all the stated requirements and the deviation's benefit or detriment to the project.
2. HDOT reserves the right to enforce the requirements of the Document should the submitted proposal have variances not accepted in writing by HDOT or if the variance does not perform as stated by the Proposer.

E. One 11-foot wide lane of traffic in both directions with a two foot "shy line" clearance shall be provided at all times through the project area unless an exception is accepted by HDOT. In areas of the project where the existing road will be maintained, the lane width shall match the existing traffic lane width. In areas where there are turn lanes the Proposer shall at all times maintain the through lane as well as the turn lane unless an ATC exception is accepted by HDOT.

F. New and temporary facilities shall be designed and constructed to the following:

1. Design Designation:

- a. Existing 2011 ADT        10,200
- b. Projected 2021 ADT     11,400
- c. DHV                    1080
- d. Directional Distribution % (DES) 55/45
- e. Trucks % (DES)    6.0
- f. V    40 MPH
- g. Classification:        Principal Arterial

2. Design Parameters

a. Newly rehabilitated roadway

- 1) Four (4) lane divided highway; Eleven (11) foot minimum wide travel lanes;
- 2) Five (5) foot bike lane;
- 3) Two (2) foot gutter;
- 4) Eight foot wide sidewalk with ADA compliant ramps along the Kukui Grove Shopping Center side of Nawiliwili Road from vicinity of Kaumualii Highway to Kanani Road;
- 5) Crosswalks;
- 6) Median width – 0 to 20 feet;
- 7) The pavement for new roadways shall be concrete to blend in with the newly constructed concrete sections. If Ultra Thin Whitetopping is used provide a transition from PCCP to UTW.
- 8) Areas where the concrete changes from asphalt concrete pavement to concrete pavement or vice versa shall include a transition piece at the interface area. Construction shall follow detail in plan sheets;
- 9) Provide NCHRP 350 TL 3 end treatment to all ends of the barriers, guardrails with crash cushion object marker (CCOM);
- 10) Other design criteria items contained in the Special Provisions;
- 11) The project limits shall be:
  - i. The transition area between the Kaumualii Highway Widening project Sta. 2+43 to Sta. 26+06 in the vicinity of Kanani Road.
  - ii. Rehabilitated pavement and other improvements shall extend to the pavement returns on side streets and driveways. On side streets and driveways in which traffic signal loops are present, concrete pavement for all lanes shall extend a minimum of 5 feet beyond the last traffic signal loop.
- 12) The Proposer shall develop a Work Zone Mobility Traffic Management Plan for review and acceptance by the HDOT.
- 13) The Proposer is responsible for coordinating construction activities with other work being done in the vicinity of this project.
- 14) All temporary improvements shall be located in existing State ROW, permanent acquisition parcels, or construction parcels.
- 15) All permanent improvements shall be located within existing State ROW or permanent acquisition parcels.
- 16) It is the responsibility of the Proposer to verify ROW and obtain additional easements or construction parcels.
- 17) Median breaks shall only occur at signalized intersections or as accepted by HDOT.
- 18) Appropriate pavement markings, signage, and signals shall be provided by



the Proposer.

19) Documentation for Design Exceptions shall be prepared by the Proposer and submitted to HDOT for review and acceptance processing. Do not assume that the design exception will be approved.

i. Design exception acceptance submittal cutoff dates will be accordance with the Alternative Technical Concepts Provisions.

20) Install new guardrails in areas where new guardrails are warranted and replace existing guardrail to be consistent with the project improvements and current standards. Work shall include if needed the raising or replacement of existing guardrails and their end treatments to meet current standards. The Proposer shall perform a warrant for guardrail assessment.

21) The improvements shall be designed based on a design speed of 40 miles per hour.

22) The improvements shall be designed based on a design vehicle SU, WB-50.

23) Utility Corridor and Utility Company Systems

i. The work shall include, when conditions warrant, but is not limited to, the following

- Relocate existing utilities affected by proposed work in coordination with Utility Companies having jurisdiction, as necessary.

ii. Except for minor and isolated areas, relocate all utilities impacted by the project's new work in accordance with the directive, if any, provided in this document and HAR Chapter 19-105, "Accommodation and Installation of Utilities on State Highways and Federal Aid County Highways" the requirements of the utility company or government agency involved

24) Other requirements:

i. If a conflict should arise, the Proposer shall submit to HDOT all information needed to arrive at a decision.

- The submittal shall discuss the "pros and cons" of the conflict and the repercussions of each action.
- HDOT will solely make the final decision.

ii. In accordance with HDOT's Pipeline Removal Policy, all segments of

existing utility rendered inactive as a result of any relocation work shall be removed and disposed of. Some pipes may be considered hazardous waste and shall be removed and disposed of as such.

- iii. Prepare construction plans and detailed cost proposal for the utility relocation and obtain plan and cost proposal acceptance from the affected utility or government agency and from the HDOT.
- iv. Utility relocation will be paid for in accordance with the terms of the approved Utility Agreements.
  - Utility companies are responsible for all betterment costs (direct and indirect), and will be required to provide funds in advance of construction.
  - If the utility company does not comply with these requirements, no betterment work will be considered by the HDOT in this project.
- v. Existing utilities no longer in use due to relocation shall be removed.
- vi. Utility Agreements or MOUs for the following utilities, if affected by the Project, are required and shall be prepared by the Proposer with the assistance of HDOT.
  - Kauai Island Utility Cooperative
  - Hawaiian Telcom Utilities
  - Oceanic Time-Warner Utilities
  - Department of Water County of Kauai
  - Others

25) Temporary work required for incremental work:

- i. Design, install and remove from the project all temporary work necessary to tie in a completed increment(s) to the existing or new roadway.
- ii. This work may include but is not limited to:
  - Pavement striping and markers
  - Traffic signs
  - Traffic signals
  - Utilities
  - Drainage
  - Other work

- 26) HDOT will consider all work necessary to complete the project as described in the RFP as included in the contract prices of the various contract items and will not pay for the temporary work separately.

a. Maintenance of Completed Increments:

- 1) The Proposer shall be responsible to maintain any work on the project.
- 2) Completed work opened for public use shall also be maintained in accordance with Standard Specifications Subsection 105.13 Maintenance.
- 3) HDOT will consider this maintenance work, including repairs to damaged work, as included in the contract prices for the various contract items and will not pay for this work separately.

b. Miscellaneous Work:

- 1) Any and all additional work necessary to complete the Project not specifically described or included in the scope of the RFP.
  - i. HDOT, at its sole discretion, may compensate the Proposer for any HDOT directed changes that it regards as additional work.

c. Codes and Design Standards to be used in design

- 1) A Policy on Geometric Design for Highways and Streets, 5<sup>th</sup> edition by AASHTO (Green Book)
- 2) AASHTO LRFD Bridge Design Specifications, US Units 5<sup>th</sup> edition (2010) and subsequent interim revisions
- 3) AASHTO AWS D1.5M D1.5:2008 Bridge Welding Code, with 2009 AASHTO Interim
- 4) Hawaii Statewide Uniform Design Manual for Streets and Highways, State of Hawaii Division, October 1980
- 5) Roadside Design Guide including Chapter 6 (2006), including latest revisions. ASHTO 2002
- 6) Guide for the Development of Bicycle Facilities, AASHTO, 1999.
- 7) NCHRP Report 350
- 8) Manual on Uniform Traffic Control Devices, 2009 edition including revision 1 and 2 (MUTCD)
- 9) Manual For Assessing Safety Hardware, (MASH) AASHTO
- 10) Guide for the Planning, Design and Operation of Pedestrian Facilities, AASHTO
- 11) Design Criteria for Highway Drainage, HDOT Highways Division, dated 10/1/2010
- 12) Evaluating Scour at Bridge, Second Edition, HEC #18, U.S. Department of Transportation Federal Highway Administration, April 1993
- 13) Stream Stability at Highways Structures, HEC #20, U.S. Department of Transportation Federal Highway Administration
- 14) Other Applicable Hydraulic Engineer Circulars (HEC) and Hydraulic

- Design Series (HDS), U.S. Department of Transportation, Federal Highway Administration
- 15) State of Hawaii, Department of Transportation, Design Criteria for Bridges and Structures, 10/20/2010
  - 16) State of Hawaii, Department of Transportation, Highways Division, Statewide Policy for Permanent Highway Safety Hardware, March 1, 1999 (HWY-TD2.2822)
  - 17) Required Data for Consultant Design Projects or Design-Built Project, dated November 24, 1999
  - 18) HDOT, Bridge. Roadway Lighting Design Guide, AASHTO, 2005.
  - 19) Pavement Design Manual by the Materials Testing and Research Branch, Highways Division, Department of Transportation, March 2002
  - 20) Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signal, 5<sup>th</sup> Edition, 2009 including interim revisions; Published by the American Association of State Highway and Transportation Officials
  - 21) National Electric Code, 2002 Edition, NFPA 70
  - 22) Applicable sections of 23 CFR 650
  - 23) FEMA/ National Flood Insurance Program requirements
  - 24) Standard Details for Public Work Construction, Sept. 1984
  - 25) Standard Specifications for Public Work Construction, Sept. 1986
  - 26) Standard Plans, HDOT, Highways Division, 2008 (STANDARD PLANS, 2008)
  - 27) Standard Specifications for Road and Bridge Construction, including Special Provisions, HDOT, Highways Division, 2005 (Standard Specifications)
  - 28) Water System Standards, Department of Water Supply, 2002 as amended
  - 29) Storm Water Permanent Best Management Practices Manual, March 2007
  - 30) Clean Water Act Section 401 404 MOU, July 2003
  - 31) Pipeline Removal Policy, April 2005
  - 32) Design Exception Policy
  - 33) Statewide Work Zone Safety and Mobility Process, October 4, 2007 (HWY-TD 2.5931)
  - 34) Construction Best Management Practices Field Manual, HDOT, Highways Division, January 2008
  - 35) Checklist and Guidelines for Review of Geotechnical Reports and Preliminary Plans and Specifications, Publication No. FHWA ED-88-053
  - 36) FHWA Memorandum Subject: ACTION: Roadside Design: Steel Strong Post W-beam Guardrail dated May 17, 2010
  - 37) FHWA Memorandum Subject: Information: Request For Interpretation: "Official Ruling Number: 1-41--Conformance with the MUTCD" dated April 9, 2004
  - 38) NCHRP Report 537 Recommended Guidelines for Curb and Curb-Barrier Installation

- 39) Accommodation and Installation of Utilities on State Highway and Federal Aid County Highway, Hawaii Administrative Rules, Title 19, Chapter 105
- 40) Updated Operating and Inventory Rating Using Load Factor Design (LFD) (HWY-DB 2.6272)
- 41) Basic Wind Speed: 105 mph
- 42) Mean Recurrence Interval: 100 years
- 43) Standards for Fiber Optic Outside Plant Communications Cable, ANSI/ICEA S-87-640-1992
- 44) Americans with Disabilities Act
- 45) American Disabilities Act - ADAAG reference manual, Designing Sidewalks and Trails for Access Part I and II, 7/99
- 46) 2010 ADA Standard for Accessible Design
- 47) AASHTO Style Manual for AASHTO Publications, July 2005
- 48) Any other applicable codes and standards used for the design of highway projects. If there is a conflict between documents, the more stringent shall apply. Where it is unclear, HDOT will make the determination as to which document will apply.
- 49) Complete Streets Policy dated March 09, 2012

### 3. AVAILABLE DRAWINGS AND/OR REFERENCES

#### A. AS-BUILT DRAWINGS

1. The following drawings are available for on-line viewing at the Department of Transportation, Highways Division, Kauai District. Please contact Mr. Michael Hinazumi at (808) 241-3022 or by email at [Michael.K.Hinazumi@hawaii.gov](mailto:Michael.K.Hinazumi@hawaii.gov) to arrange an appointment. Viewing stations are limited.

Project Title	Project Number	Date
Nawiliwili Road Resurfacing	NH-058-1(3)	3/15/2000
Traffic Signal Modernization	CMAQ-700(45)R	12/16/2004
Pedestrian Facilities and ADA Compliance	CMAQ-0700(50)R	12/16/2004

### 4. PROJECT OBJECTIVES

#### A. HDOT is seeking the following characteristics:

1. Minimize Project Cost – project cost shall be within the estimated budget of \$5M to \$10M.
2. Effective Traffic Management

- a. Utilize a combination of efficient construction traffic control and project duration.
- b. Utilize innovated means and methods when possible to achieve this goal.
- c. Balance the effect of construction impact to the traveling public and safe work zones for highway users and workers with the scales tilting toward safety.
- d. Incorporates the Complete Streets Principles.

### 3. Technical Approach

- a. Maximizes conformance to the specified requirements
- b. Establish a cooperative work process which allows the HDOT an opportunity within the design process to collaborate and offer input.
- c. Variances from any requirements require HDOT acceptance prior to implementation.

### 4. Aesthetics of Design and Context Sensitivity

- a. Provide a balance of aesthetics with principles of sustainability.

- 5. Design for low maintenance so public will not be impacted by maintenance work and HDOT will have minimal maintenance cost.
- 6. Limit and mitigate soil erosion, dust erosion and siltation as best as possible.
- 7. Provide a design to encourage safe bicycle and pedestrian use of the project area.
- 8. Include permitting submittal, review, acceptance, rejection, redesign activities in project schedule.
- 9. QC plan - the Proposer provides quality control (QC) for both the design and construction elements of the project, and coordinates design review and quality control activities with HDOT or other affected agencies.

- a. Perform for the duration of the project tests for project construction quality control, provide inspection, and exercise management control to ensure that work conforms to the contract requirements.

- B. Provide for all needed material, time, labor, equipment, data, schedules, etc. needed by HDOT and other affected agencies to conduct their QA activities.

## 5. PROPOSER'S SCOPE OF WORK AND SERVICES

- A. Prepare construction drawings and specifications as well as all other needed documents to be used by the Proposer to construct the project, and by HDOT to conduct the HDOT's QA program of the project.

- 1. Provide a design team to ensure:

- a. All needed engineering consultants and sub consultants, e.g., Civil, Structural, Geotechnical, Environmental, Electrical, Traffic, Surveying, Landscape, etc., to complete the work.
  - b. All design documents including but not limited to drawings, calculations and basis of design submitted by the Proposer shall be stamped and signed by a State of Hawaii licensed engineer, surveyor or architect.
    - 1) All discipline(s) that contributed to the making of the design/document shall stamp and sign the document, page, etc. The person(s) stamping and signing shall be licensed in the State of Hawaii in the discipline used to make the submitted document.
  - c. A topographic study has not been performed and is not available from HDOT. The Proposer shall be responsible for performing its own topographical study obtaining the information needed for its design.
2. The Proposer is solely responsible for the design and successful construction of the project using the Proposer prepared construction drawings and specifications.
- a. Do not regard HDOT as part of the Proposer's design QC team.
  - b. HDOT is not responsible to find any design errors or omissions, constructability problems, non-conformity to design requirements, etc.
  - c. HDOT's review is solely for the benefit of HDOT.
  - d. No claims shall be made by the Proposer for any items that HDOT may have reviewed in the Proposer's submittals, that may have contained design errors or omissions, changes, scheduling conflicts, improper material, or other conflicting information that HDOT did not comment on or specifically accept in previous submittals.
  - e. Additional compensation and contract time for changes shall only be claimed for by the Proposer if all of the following is met:
    - 1) The original Proposer's design could be constructed without change and still meet all the requirements of the contract as solely determined by HDOT.
    - 2) It is a directed HDOT accepted change.
    - 3) HDOT has determined merit in a claim and will allow additional compensation or time.
3. The Proposer shall determine the elements of work which may be included but shall not be limited to:

- a. Additional topographic surveys
  - b. Design work.
  - c. Design coordination with the Kauai County projects or known private projects.
  - d. Additional geotechnical investigations
  - e. Temporary and permanent Best Management Practices.
  - f. Drainage studies
  - g. Utilities coordination, utility relocations, construction of County utility improvements
  - h. Obtaining and complying with all applicable clearances and permits.
  - i. Temporary and permanent traffic control and maintenance, temporary and permanent pavement markings
  - j. Dewatering provisions
  - k. Temporary and permanent roadway lighting
  - l. Construction of all temporary and permanent features
  - m. Obtaining additional construction parcels or easements if needed
  - n. Public notifications, public meetings and consultations
  - o. Paying for permit application fees, and all other necessary incidental items for a complete project
  - p. A Categorical Exclusion (CATEX) has been prepared. All design and construction work shall conform to all commitments contained in these documents. Electronic copies of the Categorical Exclusion (CATEX) can be requested from HDOT and are available from the Highways Division Kauai District Office. Call Michael Hinazumi at (808) 241-3022 to check for availability.
4. This scope of work and services is intended to clarify the starting point of the scope that the Proposer must assume. It shall not be considered a complete statement of work. As stated previously, the intent of this design/build contract is to combine all work and services for the project into one contract and point of responsibility.
- a. The Proposer is tasked to assist HDOT as much as possible to improve the clarity of RFP's intent, e.g., make design suggestions and alternate work methods, etc.
5. Any design modification that is determined by HDOT during construction to be needed so that the requirements of the RFP are met shall be done by the Proposer and shall be at no additional cost to HDOT or increase contract time.
- a. The Proposer shall have a system where detailed checks of the proposal are done before submittal since the Proposer will be held solely responsible for all construction problems, e.g., errors and omissions, constructability problems, non-conforming material or work, etc. The thoroughness and proactive



measures to be taken to achieve a good QC design program, i.e., a goal of having a well designed, constructible, error-free project, will be taken into account during the ranking process.

6. When the Project is done in increments or phases, the construction drawings for each increment or phase shall be complete and “stand alone” incremental plans.
  - a. Cross referencing between incremental plans shall not be used.
  - b. Cross referencing between incremental plans shall be mitigated by the issuance of additional plans that eliminates the cross referencing so that the incremental plans shall be complete and “stand alone.”
- B. The Special Provisions, both attached to the RFP and found on HDOT’s website are part of the RFP unless otherwise noted or modified. They are one part of the specifications governing the construction management of the Project.
  1. Add or modify the sections in Division 200 to 700 of the Standard Specifications and Special Provisions to suit the final design.
  2. The Standard Specifications and Special Provisions shall be considered as minimal standards and any addition or modification or change shall
    - a. Provide additional benefit to HDOT
    - b. Add to the value of the project
    - c. Provide equal or greater product life, durability, strength and function
    - d. Submit a compilation of all changes made that indicates
      - 1) What the change is and what part of the Standard Specifications or Special Provisions it changes and what work it will be used in.
      - 2) The additional benefit it provides.
      - 3) The added value to the project
      - 4) The equal or greater product life, durability, strength and function
      - 5) A change that is equal in product life, durability, strength and function shall have a benefit or added value to the project otherwise shall not be used.
      - 6) Show how the change will accomplish all of the claimed attributes.
      - 7) Failure to provide information required in this subsection will be reflected in the ranking score.
  3. Alternative Technical Concepts (ATCs)
    - a. To promote innovation by the Proposers and to maintain flexibility of design and construction, HDOT will allow Proposers to submit for consideration Alternative Technical Concepts (ATCs) that provides a variation in the Scope of Improvements.

- b. The Proposer shall be responsible for any adverse impacts accepted ATCs may be responsible for and shall be responsible for all remedial repairs and impacts due to the ATCs at no additional cost to the State or increase in contract time.
- c. At its sole discretion HDOT may take, but is not limited to, the following actions in the review process of ATCs
  - 1) ATCs as having an adverse effect on project quality or objectives; reject the ATCs.
  - 2) ATCs determined as unacceptable; and reject the ATCs.
  - 3) Require that the ATCs be revised and resubmitted.
  - 4) HDOT may request additional information regarding an ATCs.
    - i. If additional information is required to be supplied the entire ATCs package shall be resubmitted with the required additional information contained in the submittal. Include HDOT's request for additional information and have a point to point summary as to how each request for information was satisfied.
    - ii. All new or additional information shall be tabbed and highlighted for ease of review. HDOT may also choose to conduct meetings with the Proposer of ATCs to clarify what is needed or to better understand the ATCs.
    - iii. The Proposer may supply a resubmittal of ATCs at their sole discretion. Failure to resubmit a revision of ATCs within 5 working days or at a requested cutoff date accepted by HDOT will be considered a withdrawal by the Proposer of the ATCs. HDOT reserves the right to not be allowed the ATCs withdrawn in this manner to be submitted at a later date.
  - 5) Incomplete ATCs submittal packages will be returned by HDOT without review or comment except that HDOT considers the ATCs incomplete.
    - i. In the event an incomplete ATCs is received by HDOT but the Proposer fails to complete all revisions prior to the ATCs submittal cutoff date; ATCs will be considered unacceptable.
    - ii. If resubmitted ATCs did not address all of HDOT's comments, the ATCs will be considered incomplete and returned without review or comment.
  - 6) If an ATC is received before (on a day such that HDOT's review time will be completed after the cutoff date) or on the cutoff date, HDOT may at its sole discretion request clarification or additional information if needed.
    - i. In this situation only, the Proposer shall:

- If additional information is requested by HDOT after the cutoff date, submit the information within two days of notice or the ATC will be rejected.
  - HDOT may allow more time but is not obligated to do so.
- d. HDOT will return a determination to the Proposer submitting the ATCs within 10 working days of receipt, provided HDOT has received all needed information including requested information regarding the ATCs.
- e. HDOT's determination will indicate one of the following:
- 1) The ATC is acceptable;
  - 2) The ATC is not acceptable;
  - 3) The ATC is not acceptable in its present form, but may be acceptable upon addressing certain identified conditions that must be met or certain clarifications or modifications that must be made. HDOT will solely determine if the Proposer's resubmitted ATCs are acceptable.
  - 4) The submittal does not qualify as an ATCs, but is eligible to be included in the Proposal without an ATCs, i.e. concept conforms to the basic scope of improvements and is consistent with other contract requirements;
  - 5) The submittal does not qualify as an ATC and shall not be included in the Proposal.
- f. Proposed ATCs most likely to receive favorable consideration are those that are:
- 1) Consistent with HDOT's project objectives:
    - i. Maximize efficiency
    - ii. Incorporate technical innovation.
    - iii. Minimize project cost
    - iv. Minimize traffic impacts
    - v. Have a long duration of maintenance free use before the need for the first incidence of maintenance work.
    - vi. Reduce maintenance
    - vii. Frequency of maintenance
    - viii. Duration of the maintenance work
    - ix. Cost of the maintenance
    - x. Impact to the public due to maintenance
    - xi. Incorporate context sensitive solutions
    - xii. Incorporate complete streets policy
  - 2) Increase service life

- 3) Improve the quality of the project
- 4) Reduce the contract time
- 5) Reduce impact to the public

g. HDOT will not consider any change that would require:

- 1) Excessive time or cost for review, evaluation, investigation,
- 2) Does not result in increased benefits or savings to HDOT or to the public

h. ATCs shall be submitted to the Department of Transportation Contracts Office, 869 Punchbowl Street Honolulu, Hawaii 96813. Have the project and ATCs information on the ATCs' container and transmittal sheet when submitting the ATCs package.

#### 4. Pre-Proposal submittal of ATCs

a. ATCs' cutoff date for submittal to HDOT shall be no later than 28 days prior to the proposal (Design and Price Proposal) submittal date.

- 1) This cutoff date applies to both initial ATCs and ATCs that have been revised for resubmittal in response to HDOT's comments. The exception to this is stated above for ATCs submitted near the deadline.

b. Each ATC submittal package shall consist of 10 copies and shall address all of the following elements:

- 1) Description – A detailed description of the ATCs and schematic drawings of the configuration of the ATCs and other appropriate descriptive information including, if appropriate, product details (i.e. specifications, special provisions) All technical information needed by HDOT to determine its acceptability.
- 2) Usage – A description of where and how the ATCs would be used on the project. Provide exact locations where it will be used;
- 3) Variations – Reference the requirements in the RFP documents the ATCs are not compliant with. Provide an explanation of the nature of the variation from said requirements, and a request for acceptance of such deviations;
- 4) Analysis – An analysis justifying use of the ATCs and demonstrating why the requested variation from the requirements of the RFP documents should be allowed, e.g., benefits of the ATCs; indicate also what drawbacks the ATCs may have.
- 5) Impacts caused by the use of the ATCs

i. Traffic study needed for changes to roadway alignment, traffic patterns,

etc.

6) Case Histories:

- i. Provide a detailed description of three similar projects where the ATC has been used.
- ii. Illustrate how it was used successfully on projects under comparable circumstances or demonstrate the reliability and efficiency of the proposed ATCs.
- iii. Indicate any problems that may have occurred and the remedial actions taken,
- iv. Should include project costs, lengths, and over run percentage,
- v. Include names and telephone numbers of project owners, manager, supervisors that have detailed knowledge of the project and the impact the ATC had on the project and can confirm such usage and provide further information.;

7) Benefit:

- i. Clearly state the benefit of the ATCs and how it will be accomplished by the ATCs.
- ii. An estimate of cost savings and added value likely to result if the ATCs were accepted and implemented;

- c. Goals – Discussion on how the ATCs are consistent with or exceeds HDOT's Project Goals and Objectives.

C. Traffic Engineering Plan

1. Submit a Traffic Engineering Plan which addresses in detail how construction traffic control and traffic engineering design shall be addressed.
  - a. Use NCHRP Report 500 Volume 17 as a design guideline.
  - b. State perceived problems or negative impacts to the traveling public.
    - 1) Specifically and in detail state how these conditions will be resolved or mitigated. If a negative impact still remains after mitigation action is implemented give the expected amount and the level of the remaining negative condition. State what steps, if any, beyond the initial mitigation action will be taken to decrease the magnitude or duration of the condition,
- c. Construction phasing and traffic control around the work areas shall consider:

- 1) Traffic flow;
  - 2) Pedestrians and bicycle traffic;
  - 3) Work zone mobility safety;
  - 4) Impact to stores, churches, and other facilities
  - 5) Night work
- d. Work zone traffic control during non-working hours.
2. HDOT reserves the right to impose revisions, at the sole discretion of HDOT. These revisions shall be at no additional cost or increase in contract time.
- a. It is recommended a traffic/transportation engineer be part of the Proposer's team for the duration of the project.
  - b. The traffic/transportation engineer may help with:
    - 1) Providing the traffic operation functions in support of construction activities including but not limited to:
      - i. Managing messages posted on portable variable message signs.
      - ii. Remedial solutions to work zone mobility problems
      - iii. Provide construction management support as it relates to work zone traffic control and the observed impact to traffic.
    - 2) Traffic impacts or solutions may not be limited to the physical project limits, the Proposer's traffic/transportation engineer should not limit the analysis of traffic impacts or the resolution of traffic impacts caused by the project to the limits of the project.
  - c. Traffic Engineering Design
    - 1) The Proposer should complete a traffic study for the project area.
      - i. The traffic study should take into consideration future background traffic growth in addition to impact from all applicable surrounding developments.
      - ii. Intersection location shall be considered for acceptable line-of-sight and lane configuration.
      - iii. Safety and level of service operations analysis at new and existing intersections Warrant analysis per MUTCD 2009 for traffic controls
      - iv. Channelization design parameters
      - v. Build consensus on the assumptions for existing and future roadways, anticipated competed development projects, and operational analyses documented in a technical memorandum Update FEA traffic analysis

#### D. Landscape Design Services

##### 1. Construction Documents for landscaping improvements.

###### a. Landscaping Design Criteria

- 1) Landscaping shall be designed by a State of Hawaii licensed landscape architect
- 2) Native, drought resistant, durable, and sustainable plant palette accepted by HDOT Highways. In addition, ground cover should aid in the removal sediment from water flow and prevent erosion.
- 3) No permanent irrigation that require county water.
- 4) Improvements shall retain a Kauai sense-of-place and shall consider public input provided prior to final design.
- 5) Low maintenance
- 6) Ground cover should have a low maximum height
- 7) Landscape scope to include complete restoration of all existing improvements removed during construction.
- 8) Proposer shall include conceptual planting plans
- 9) List of plants to install
  - i. Including Picture of plant
  - ii. Plant name,
  - iii. Quantity,
  - iv. Width, height, brown trunk height and trunk caliper size.

##### 2. Conceptual planting plan shall include projected cost estimate for annual contracted maintenance.

###### a. Prepare conceptual design plans for the landscaping.

- 1) The plans shall be drawn to HDOT Standards and in coordination with the HDOT Highways Division's Landscape Architect.
- 2) The plans shall include the following minimum information:
  - i. Limits of landscaping
  - ii. Planting Plan
  - iii. Landscape Maintenance Specifications

###### b. Using the HDOT format the Landscape Maintenance Specifications shall include the following:

- 1) Introduction and Summary;
- 2) Operating Guidelines

- i. Irrigation and watering schedule;
- ii. Landscape Maintenance Specifications;
- iii. Invasive Species Management
- iv. Grass cutting, weeding, tree and bush pruning,
- v. Pest eradication and control,
- vi. Fertilizing, showing determination of type needed, type, application amount and frequency
- vii. Root Pruning,
- viii. Chemical Storage,
- ix. Waste Disposal,
- x. Removal of temporary appurtenances,
- xi. Drainage facilities,
- xii. All applicable sections of the Standard Specifications,
- xiii. Maintenance Plan showing tasks and required frequency;
- xiv. Plant Material Inventory and Maintenance requirements,
- xv. Estimated water usage (gpd),
- xvi. Other maintenance costs,
- xvii. Representative Plant Material Photographs illustrating desired appearance.
- xviii. Submit the conceptual design as part of the design package for review and acceptance.
- xix. The successful Proposer shall submit the final design for review and acceptance to HDOT prior to planting and significantly ahead of time as to not delay the project due a lack of planting material.
- xx. No additional compensation or contract time will be allowed by HDOT for any changes in the landscaping plans not due to HDOT.

#### E. Archaeological and Historic Preservation Services

- 1. The Proposer shall be responsible for providing archaeological and historic preservation services as needed or directed.
- 2. SHPD consultation:
  - a. The Proposer will conduct SHPD consultation during the design to determine if additional field inspection services are required.
  - b. If determined necessary by SHPD, the Proposer will coordinate the new design with SHPD for review and acceptance.
- 3. Present the design to Kauai Historic Preservation Review Commission (KHPRC) at the conceptual and pre-final stage. KHPRC shall be given the opportunity to provide comments and Proposer will be responsible to address all comments to the satisfaction of the KHPRC.



## F. Utilities

1. Furnish the design, materials, labor and equipment for the installation/relocation of utilities/facilities within the project limits or to the limits of the impact the change to the utility would make, e.g., to the nearest pull box or manhole or connection point outside the project limits etc.
2. Investigate the location of utilities and determine which utilities, if any, are impacted by the project and take appropriate action in design and construction to rectify the problem.
3. Coordinate with the respective utility company and executing a utility agreement.
  - a. Prepare the utility agreement with the assistance of HDOT. The following utility companies may be impacted, but shall not be limited to the following:
    - Kauai Island Utility Cooperative
    - Hawaiian Telcom Utilities
    - Oceanic Time-Warner Utilities
    - Department of Water County of Kauai
  - b. In addition to the previously mentioned utilities take into account the need to install or relocate utilities during the investigation of utilities all traffic signal lights and street lights

## 6. PROJECT MANAGEMENT AND COORDINATION

- A. Be responsible for the overall project management and coordination of all professional design consultants and subconsultants, construction subcontractor, government agencies, landowners and tenants, and utility companies.
  1. Includes but not limited to:
    - a. Process and pay consultants' and subcontractors' payment requests,
    - b. Settle disputes within the Proposer,
    - c. Participate in disputes with HDOT
    - d. Provide all information requested by HDOT related to that dispute,
    - e. Distribute required documents,
    - f. Provide submittals to HDOT,
    - g. Coordinate all work on site,
    - h. Provide project schedule development and updates,
    - i. Document control, mimic HDOT File number system
    - j. Material control,
    - k. Organize and conduct project related meetings,

- l. Resolve public complaints,
- m. Handling of endangered species
- n. All other coordination related to the Proposer's responsibilities required to complete the project.
- o. All activities and decisions of the Proposer relating to the project where the following are involved will be subject to the review and acceptance by HDOT and FHWA:
  - 1) The quality or quantity of materials,
  - 2) The utilities cost or utilities schedule,
  - 3) The project schedule,
  - 4) Permit requirements or changes that require revisions to permits,
- 2. The HDOT is not responsible for delays and/or associated costs due to:
  - a. Additional public notices or hearings
  - b. Review by all affected agencies and processing an amendment to the FEA.
  - c. Decisions or activities where landowners or tenants are be affected,
  - d. Decisions or activities where the traveling public or community members are affected,
  - e. Decisions or activities that require additional land acquisition, rentals or occupancy

B. The project completion time will not be extended due to the review as a result of the Proposer's actions or inactions.

## **7. PERMITS AND CLEARANCES**

- A. Determine the need for, prepare, submit, and obtain approval of all permits necessary to construct and complete the project, which may include but is not limited to:
  - 1. NPDES Permits for discharge of storm water associated with Construction Activities, Hydrotesting Activities, and discharge of effluent from dewatering operations.
  - 2. Stream Channel Alteration Permit (SCAP),
  - 3. Water Quality Certification (Section 401),
  - 4. US Army Corps of Engineers Permit (Section 404),
  - 5. CZM Federal Consistency Determination,
  - 6. County Stockpiling, Grading, Disposal and Excavating Permits,
  - 7. Assist the HDOT and the FHWA as needed with the National Historic Preservation Act (Section 106),
  - 8. Assist the HDOT and the FHWA as needed with Section 4 (f) and 6 (f) Department of Transportation Act of 1966, as applicable,
  - 9. Assist HDOT and FHWA as needed with Section 7 Endangered Species Act as applicable,

10. Work to Perform Upon County Highway Permit,
  11. Noise Permit for Construction activities,
  12. Noise variance permit for any nighttime work,
  13. Underground Injection Control (UIC) permit,
  14. Other permits as required.
- B. Obtain all permits and clearances prior to the start of any construction pertaining to permit activities.
  - C. All design and construction work shall comply with all permit conditions and commitments made with environmental and other agencies.
  - D. Permit fees shall be included in the contract prices for the various contract items and HDOT will not pay for permit fees separately.
  - E. No time extensions will be granted for delays due to the permitting process as a result of the Proposer's actions or inactions.
    1. Delays due solely to permitting agency actions may qualify for only a no cost time extension.
      - a. A time extension will only be granted if there has been an impact to the critical path solely due to the permitting process.
      - b. Sufficient time had been allowed in the project schedule for the permitting process and the start dates were met.
      - c. Provide compelling evidence that the delay was solely due to the permitting agency's actions such as:
        - 1) Review took over 30 days and did not require any modification to the submittal or permit application etc,
        - 2) The proposer had met all required deadlines of Subsection 108.03 of the Standard Specifications.
    - d. Permits not applied for in a timeframe allowing a reasonable, normal processing time; before it is needed and not obtained thereby causing a delay will be considered a delay caused by the Proposer and non-compensatable in any manner.
    - e. Any other delay related to permitting will be considered to be a Proposer's delay and non-compensatable in any manner.
    - f. A time extension will be the exclusive relief granted on account of such justifiable permit agency delays.

## **8. CODES AND DESIGN STANDARDS**

- A. All permanent and temporary features of the project shall be designed and constructed according to the specified codes and guidelines; according to accepted new or amended specifications; other codes, design standards, laws or rules and regulations

not listed may also apply to the Project.

- B. When a publication is specified, it refers to the most recent date of issue, including interim publications, before the bid opening date for the project, unless otherwise noted.
- C. The Proposer shall be solely responsible to determine the applicability of required documents and adhere to them. See the list of referenced standards technical provision section titled "Codes And Design Standards To Be Used In Design" for potential standards that will need to be used in the design.

## **9. CONSTRUCTION WORK DURING DESIGN**

- A. HDOT may, at its sole discretion, authorize the Proposer to start construction on utility relocations, mass grading, and installation of traffic control/traffic detours and other work during design.
  - 1. No work shall start until the Proposer receives a written authorization from HDOT.
  - 2. Authorization to start work before completion of the design may be given by HDOT when:
    - a. The Proposer requests to start work in writing,
    - b. A complete design package, for the specific increment of work, has been submitted presenting information needed to allow the start of construction that satisfactorily, in the sole opinion of HDOT, completed the 50% design plans, including horizontal and vertical alignment for the highway and intersections. The submittal also is determined to have the minimum elements of the design package that may be considered by HDOT in arriving at this decision. HDOT will review the Proposer's design documents (design package) to determine if the Proposer may start work. Failure to submit a complete design package may result in HDOT returning the submittal and rejecting the request to start work.
    - c. Attests that the construction drawings and other design documents completely and satisfactorily address all RFP requirements, comments made on different aspects of the design, e.g., utilities, drainage, access, and archaeology, traffic control, etc..
    - d. The Proposer agrees to make modifications to its work at no additional cost or time should the modification be determined by HDOT necessary to make the work compliant to the Project's requirements.
    - e. The Proposer has submitted copies of approved applicable permits to HDOT for all phases of work prior to start of any construction work,
    - f. The Proposer has obtained written DOH approval of site-specific pollution Best Management Practice plan for all phases of work if disturbed area is greater than one acre, or obtained written HDOT acceptance of the of site-specific pollution Best Management Practice plan for all phases of work if

- disturbed area is an acre or less,
- g. The Proposer has obtained acceptance of all solid waste disposal documents for all phases of work.
  - h. The Proposer has obtained written approval from all utility companies for all phases of work,
  - i. The Proposer has obtained written approval from the County of Kauai for all phases of work,
  - j. The Proposer has completed the furnishing and installing of the State Field Office, State Laboratory, including but not limited to their utility connections, furniture, test equipment and calibration of test instruments.
  - k. The Proposer has submitted to HDOT and obtained written acceptance of all proposed materials to be used at this stage,
  - l. The Proposer has held public meeting, publish notices in the newspaper to apprise the public of construction and anticipated impacts, and project status.
  - m. The Proposer has met all of the concerns of Engineer.
3. The Engineer's refusal to grant the start of construction work for the project shall not be cause or have merit to file a claim for additional compensation or contract time.
- B. When HDOT authorizes the Proposer in writing, to start construction on a portion of the Project's work; the Proposer shall in addition to the submittal of the design package mentioned above complete the following before any other construction works begins,
1. Submit to HDOT and obtain written acceptance of all proposed materials to be used,
  2. Submit to HDOT and obtain acceptance of shop drawing and other document that are required to be submitted by the Standard Specifications prior to construction work starting.
  3. The first work activity on the project site shall be the installation of site-specific erosion and siltation BMPs.
  4. Construct all work in accordance with the HDOT accepted construction drawings and specifications. Limit work to the limits established in the work authorization letter.
  5. Submit to HDOT for review and acceptance far enough in advance as to not delay the project and prior to performing any work all drawings and applicable calculations including all revisions or deviations from the accepted construction drawings. All of these submittals shall be stamped and signed by a Hawaii licensed engineer.
  6. Provide copies of all communications, e.g., letters, memorandums, e-mails, etc., that pertain to any corrections or clarifications to the shop drawings and specifications.

## 10. HDOT AND FHWA REVIEW OF CONSTRUCTION DOCUMENTS

- A. FHWA will take part in the reviews when they deem necessary.
- B. Prior to commencing with the construction documents, the Proposer shall meet with HDOT's Project Manager to confirm:
  - 1. The drawing requirements such as
    - a. Sheet size
    - b. Content of drawings
    - c. Special Provision requirements.
    - d. Drawing requirements may vary due to proposed concepts.
  - 2. HDOT would be available to meet weekly during the design phase after the award of the contract.
    - a. Submit a schedule for review and acceptance to HDOT, of proposed meeting dates a minimum of 40 working days before the first scheduled meeting to allow coordination of key HDOT personnel schedules and to make travel arrangements.
    - 1) With the proposed meeting schedule provide a tentative agenda, anticipated duration of the meeting and who from HDOT should attend each meeting. HDOT and FHWA may add items to agenda.
    - b. Five working days before all meeting dates confirm that the meeting will be held and submit the final agenda and requested attendees.
    - c. Failure to provide proper notification that certain HDOT personnel needs to attend the meeting may result in that person not being able to attend due to scheduling conflicts or HDOT travel restrictions.
    - d. Provide meeting facilities for all meetings.
    - e. Prepare meeting minutes in Microsoft Word 2003.
    - f. Send draft of meeting minutes' electronic file to meeting participants within 3 days after the meeting.
    - g. Allow 7 working days for review and comments of the minutes.
    - h. Send final version of meeting minutes to meeting participants within 3 working days after comment review deadline.
    - i. All cost of all submittals and meetings, with the exception of HDOT's travel and personnel cost shall be borne by the Proposer.
  - 3. Address questions and comments in discussions with HDOT during preparation of Design and Cost Proposals.

- a. Maintain close communications with HDOT throughout the Design Proposal submittal period, and during the design and construction of the project.
    - 1) It is anticipated that this close communication will serve to expedite submittal review;
    - 2) Help the Proposer better understand the intent of the RFP by clarifying what is required. The Proposer is tasked with the duty to fully understand the needs and intent of the RFP.
    - 3) Written clarifications as the result of the meetings will be sent to all holders of the RFP.
  - b. Failure to fully understand the intent of the RFP during the Design Proposal submittal period may result in lower scoring in the design portion of the grading of the design score.
  - c. Facilitate the incorporation of innovative project solutions that will enhance the project
  - d. Facilitate final acceptance of the project.
- C. At no time shall the Proposer consider HDOT or FHWA as any part of its design QC review team, i.e., the HDOT and FHWA review is not responsible to find design or omission or constructability errors or lack of conformance to standards, changes, scheduling conflicts, improper material, or other conflicting information, etc. HDOT's and FHWA's review may only be a cursory check and may not find any or all defects in the Proposer's submittals that duty is solely the Proposer's.
- D. HDOT and FHWA will review all scheduled submittals within 15 working days after the date on the letter that HDOT uses to notify the Proposer that a "complete" submittal was received
- 1. A "complete" submittal will be solely determined by HDOT during a cursory review of the submittal.
  - 2. HDOT will be afforded an additional 15 working days each time a submittal is resubmitted.
  - 3. The Project's completion time will not be extended due to any review time required by HDOT.
- E. Scheduled submittals shall be as follows:
- 1. 50% Design Submittal:
    - a. Develop conceptual design clearly document the complete scope of improvements.
      - 1) The conceptual design shall at a minimum; allow the Proposer to

determine the required permitting, plan acceptances, and construction parcels necessary to accomplish the work.

- 2) Provide conceptual construction drawings for all of the highway improvements, temporary construction including traffic control plans,
- 3) Additional documents may include, but shall not be limited to

- i. Proposer's Implementation Plan,
- ii. Prefinal structural design report, as needed,
- iii. Prefinal drainage report,
- iv. Site specific best management plan (BMP), and details,
- v. Prefinal geotechnical report, as needed,
- vi. Landscape installation and maintenance specifications,
- vii. The review and approval or modification of HDOT's pavement justification report,
- viii. Basis for design for elements not covered by a specific report,
- ix. Request for Utility Agreement, Utility Relocation plan(s) and estimate(s),
- x. Highway lighting and voltage drop calculations as needed,
- xi. Construction parcel requirements,
- xii. Log of submittals needed to be made to other government agencies and utility companies and status of coordination and approvals,
- xiii. Log of permit applications needed to be made in conjunction with the work proposed and copies of draft permit applications,
- xiv. TSLD schedules
- xv. Schedule and copies of public announcements, in coordination with HDOT,
- xvi. New special provisions section (Division 200-700) with acceptance log, as needed,
- xvii. Quality Control and Assurance Plan,
- xviii. Operational and Maintenance Plan and detail breakdown of estimated O&M costs,
- xix. Detailed breakdown of contract payment items with schedule of values and theoretical quantities, broken down by increments and in smaller more measurable units,
- xx. Design Exceptions, as needed,
- xxi. Prefinal Traffic Control Plan,
- xxii. Prefinal Safety Plan,
- xxiii. Prefinal Permanent Best Management Practice Report, as needed,
- xxiv. Any ATC submittals; as needed,

b. 100% Design Submittal (Final Design):

- 1) Develop all final plans and any documentation required (i.e. permitting, etc.) for construction of the proposed improvements. This may include,



but may not be limited to:

- i. Design and construction phasing schedule (updated as necessary),
- ii. Construction drawings,
- iii. Finalized calculations,
- iv. Finalized cost estimate (including Operation & Maintenance costs),
- v. Finalized Geotechnical Report,
- vi. Finalized Drainage Report,
- vii. Compilation of RFP Special Provisions, Proposal, Contract and Bond. Accepted additions or modifications to Division 200 to 700 specifications,
- viii. Completed "Permanent BMP Consideration Checklist and Project Record",
- ix. Finalized "Request for Utility Agreement" document,
- x. Finalized Easement documentation,
- xi. CAD files for construction drawings,
- xii. Finalized Design Exceptions,
- xiii. Finalized Traffic Control Plan,
- xiv. Finalized Safety Plan,
- xv. Final Permanent Best Management Practice Report,
- xvi. Finalized ATC submittals,
- xvii. Tabulation of how each comment from the 50% submittal was addressed and the resolution implemented.
- xviii. Any other submittals needed to complete the requirements, design and construction of the Project.

c. End of Project Submittal.

1) At the completion of the construction work:

- i. Furnish metes and bounds description of the utility corridor for power and communication cables, as required;
- ii. As-built drawings on vellum prepared and submitted within 90 days of the substantial completion of construction work. As-built drawings shall be in accordance with:
  - Standard Specifications 108.13(B)(2)
  - Standard Specifications Section 648
  - State Drafting Protocol
- iii. Any other submittals needed to complete the requirements, design and construction of the Project.

#### F. Submittal Formats

1. All electronic files shall be usable in Microsoft Word 2003 and Microsoft Excel 2003 and be on DVD-R write once discs with gold reflective layering a labeled plastic jewel case. Pdf files will be also acceptable for catalog cuts and similar supporting documents.
2. All electronic files shall be “keyword” searchable with the exception of Time Scaled Logic Diagram (TSLD) schedules and CAD files.
3. TSLD schedules and CAD files shall be usable in the program stated elsewhere in this document and in addition to copies submitted on paper be on DVD-R write once discs with a gold reflective layer.
4. TSLD schedules shall conform to requirements in Section 108 of the Standard Specifications unless otherwise stated herein.
  - a. All TSLD schedules shall be in multicolor.
  - b. Critical path shall be indicated in red and use a line that can be easily differentiated from other lines when copied in black and white.
  - c. TSLD schedules for the design stage shall show all activities the Proposer must do to complete the design portion of the project and the manpower needed to accomplish it. Indicate the total workload on the Proposer, i.e., include non-project related work that may occur during the period for the design portion of the Proposer.
  - d. TSLD schedules shall be produced using Primavera P6 professional Project Management or alternative software accepted by HDOT. The balance of the TSLD package shall be as required by Section 108 and shall be in Microsoft Word 2003 or Microsoft Excel 2003.
  - e. TSLD schedule plots shall be on construction drawing size sheets; minimum size.
    - 1) HDOT may ask for additional smaller copies of the construction TSLD schedule plots. Coordinate final sizes and quantities with HDOT.
  - f. The method statement for each TSLD schedule shall be on 8½x11 inch paper and included on the DVD.
  - g. TSLD schedules shall be printed on paper, size and type that are acceptable to HDOT.
5. Detailed cost estimates shall follow HDOT’s format used for Federal Aid projects.

#### G. Copies per Submittal to HDOT and FHWA

1. All design submittals shall be stamped and signed by a Hawaii licensed engineer,
2. Submit each time the proposal is submitted

- a. Submit five copies each time a proposal is submitted
    - 1) Full size construction drawing sheets
    - 2) Calculations
  - b. 20 copies of half-size construction drawings.
  - c. 12 sets of design reports
  - d. 12 sets of detailed cost estimates,
  - e. 12 sets of special provisions specifications, along with copies of cited standards or methods.
  - f. Five copies of permit applications or fully processed permits, state anticipated date of receiving fully processed permit
  - g. 12 sets of any other document required to be submitted but not mentioned above.
3. The number TSLD schedule packages to be submitted each time a proposal is made during the proposal period
- a. 12 sets of the design TSLD schedule plots
    - 1) HDOT may ask for additional smaller copies of the design or TSLD schedule plots. Coordinate final sizes and quantities with HDOT.
  - b. Submit 12 copies of the method statement for the design schedule.
  - c. 12 sets of the construction TSLD schedule plots.
    - 1) HDOT may ask for additional smaller copies of the construction TSLD schedule plots. Coordinate final sizes and quantities with HDOT.
    - 2) Submit 12 copies of the method statement for the construction schedule.
  - d. When construction starts and HDOT accepts the proposal change the quantity of the TSLD schedule submittals; the quantity and frequency of the construction TSLD schedule may follow the requirements in Section 108 of the Standard Specifications.
  - e. When the design of the project is complete and accepted by HDOT: the submitting of the individual TSLD design schedule packages may stop. All remaining design work shall be incorporated into one TSLD schedule package to form one TSLD schedule. Submittal of the TSLD package as required in Section 108 of the Standard specifications shall start. Incorporate all data from previous design and construction schedules into the new TSLD schedule.
  - f. No PERT chart, cash flow chart is needed to be submitted during the proposal stage.
  - g. Print hardcopies on 20 pound bond and bind with the exception of the TSLD schedules.
4. CAD files.

- a. CAD files shall not be combined with other electronic files.
  - b. CAD files are required for final submittal, i.e., end of project submittal only.
  - c. Submit CAD files for construction drawings in:
    - 1) Microstation V8.0 or AutoCAD 2009 using the Protocol for Line Weight, Color, Level, Size, Grid Reference, Standard Units, Fonts, and Symbology for Microstation Produced Contract Plans ("State Drafting Protocol"), dated December 1999
  - d. Plot tracings on vellums (20 lb) or alternative media accepted by HDOT.
- 5. Other electronic files.
  - 6. Organize the content of both CAD and electronic files. Provide an index that has a detailed description of each submitted document.
  - 7. Submit twelve DVD copies of all electronic files in individual plastic "jewel box" cases containing
    - a. All DVD media shall be write once discs with a gold reflective layer and of top quality, designed to archive data with minimum lost of data. In addition to the CAD files being submitted on DVDs all final CAD files shall be submitted on a USB flash or jump drive.
    - b. Check or verify data, visually and electronically, on all submitted discs before submittal.
  - 8. The Proposer will be responsible for making the necessary submittals to other government agencies and utility companies and secure the required acceptances independent of HDOT's review and acceptance.

## **11. INSURANCE AND BOND REQUIREMENTS**

- A. Maintain for the entire duration of the Project for any design and construction work within State Right-of-Way and construction parcels and areas where work is indicated or needed to be perform to complete the work required by the contract documents, a policy or policies of commercial general liability and automobile liability insurance with an insurance company licensed to do business in the State of Hawaii,
  - 1. The State of Hawaii and its officers and employees as additionally insured,
  - 2. The County of Kauai and its officers and employees as additionally insured,
  - 3. Kukui Grove Shopping Center and its officers and employees as additionally insured,
  - 4. Have a limit of Excess Liability of not less \$2,000,000 for each occurrence covering what is stated in Section 107 of the Standard Specifications and

- a. All of the Proposer's operations,
- b. Operations of the Proposer's subcontractors,
- c. Proposer's completed operations,
- d. Motor vehicles of every description for which the Proposer is legally responsible, and pedestrian and other non-motor vehicular traffic of every description.
- e. Minimum coverage for Personal Injury and Property Damage Liability and Automobile Bodily Injury and Property Damage Liability shall be as specified in Section 107 of the Standard Specifications.
- f. Provide three copies of a certificate of insurance to HDOT and new certificates if insurance expires in advance of any activities.

## 12. PLANS, SPECIFICATIONS, AND ATTACHMENTS

- A. In addition to the items covered in this Technical Provisions document and other CODES AND DESIGN STANDARDS referenced in Section II.8, the following is a listing of Project Plans and Specifications that shall be used as applicable for the preparation of Construction Drawings, Project Specifications, and Estimates.

<u>Plans Sheet</u>	<u>Description</u>
1	Title Sheet
2	Standard Plans and Summary
3	General Notes and Legend
4	Water Pollution and Erosion Control Notes
5	Typical Sections
6	Typical Details
7	Roadway Plans
8	Drainage and/or Grading Plans
9	Utility Plans
10	Traffic Control/Construction Phasing Plans
11	Traffic Plans
12	Traffic Signal Plans
13	Landscaping Plans
14	Electrical and Highway Lighting Plans
15	Guardrail Details
16	Guardrail Schedule
17	Cross Sections
18	Other sheets as necessary

All applicable sheets of State of Hawaii, Department of Transportation Highways Division STANDARD PLANS, 2008, and subsequent revisions. The Proposer shall include for usage the latest revisions at project award.

## B. HDOT Standard Specifications and Special Provisions

1. The Proposer shall use applicable portions of the DOT/Federal projects Special Provisions for 2005 Standard Specifications found at <http://hidot.hawaii.gov/highways/s2005-standard-specifications/special-provisions-for-2005-standard-specifications/>.
2. See this RFP for possible applicable specification sections which are included in the attached special provisions.
3. All sections from 200 to 600 that are used shall have the measurement and payment subsections modified to reflect lump-sum payment for all items except for force-account items listed in the attached Proposal. Latest versions of the specifications shall be used from the HDOT's websites: <http://hawaii.gov/dot/highways/specifications2005/specifications/spectble.htm> as modified by standard special provisions for 2005 Standard Specifications for DOT/ Federal projects.
4. The Special Provisions attached to the RFP shall supersede the standard special provisions on HDOT's website.
5. The Proposer may modify the Specifications and Special provisions as it sees fit to accommodate its needs with the exception of specifications or special provisions in Sections 101 to 109, 209, 620, 645 and any other part of the specifications or special provisions required by law. Changes, additions or modifications to the excepted sections may be made by contract change order or using the ATC format. All changes, additions modifications, etc, requires the explicit acceptance by HDOT.

## 13. DESIGN-BUILD QC PLAN REQUIREMENTS

### A. General Description

1. For construction work, the Proposer does Quality Control (QC), but not Quality Assurance (QA). The Proposer will be responsible for preparation of a QC Plan acceptable to the HDOT. The QC plan is required to address both Design and Construction portions of the Proposal. The Proposer will not be allowed to commence with design or construction until their QC Plan has been accepted in writing by HDOT.
2. The plan shall detail how the Proposer's Team shall provide designs and quality control (QC) for all the design and construction elements of the project. The QC plan shall address critical work activities or areas of concern that should have closer scrutiny of materials and work methods to ensure the meeting of QC goals. The QC plan shall also state how it will allow HDOT to perform quality assurance during construction (QA) and how it shall coordinate design reviews with HDOT or other affected agencies.
3. Persons performing any quality control function, e.g., design or construction

QC, shall not be influenced by any impact that may be caused by their implementation of quality control measures on the project, e.g., delays in the project schedule, lost performance, increased cost, etc.. In addition, none of the Proposer's team shall exert their influence to override the QC measures. In cases where the QC portion of the Proposer's team is in conflict with other portions of the Proposer's team HDOT shall be included in the discussions and will make a decision after all points of view are presented to HDOT. The QC plan shall show how QC will be accomplished and not be influence by any condition or unauthorized entity.

4. At what level the ranking scores are awarded will depend on all elements of the QC plan as well as the absence or insufficiency of the plan. The scoring will depend on the ability of the Proposer to present their QC plan in a way that will convince the Judging Panel it will perform its QC at the highest level of all presented.
5. The Proposer's QC Plan should include a description of the design quality control organization, including the number of full-time equivalent employees with specific quality control responsibilities and a chart showing lines of authority and reporting responsibilities. The persons and organizations performing quality control functions should have sufficient authority and organizational autonomy to identify quality and other problems. The plan should also show the procedure it will use to initiate, recommend, and verify implementation of solutions when a problem occurs.
6. Design and Construction Document procedures for each type of design shall be organized by engineering discipline (such as structural, civil and utilities). These procedures shall specify measures to be taken by the Proposer's Design Team:
7. No deviations or change from standards shall be made unless they have been previously accepted by HDOT. Acceptance of a deviation or change is at HDOT's sole discretion and it is not obligated to accept any deviation or change. Acceptance of a deviation by HDOT will be based on the deviation's ability to exceed the RFP's requirements or provided added benefit to the HDOT
8. Show how the Proposer shall ensure that appropriate quality standards are specified and included in the Design Documents and Construction Documents and how it will control intentional and unintentional deviations or changes from such standards.
9. Show how it will control the suitability of materials, and elements of work that are included in the Project.
10. The design QC plan shall show at a minimum
  - a. Quality control procedures for preparing and checking all plans, calculations, drawings and other items submitted.
  - b. QC procedures in place to ensure that they are independently checked in accordance with generally accepted architectural and engineering practices,

- 1) Checking shall be by experienced architects and engineers, respectively who are experienced in the type of design and construction methods to be used. Illustrate the methods or procedures to be used.
  - 2) The originator of the document and all checkers shall be clearly identified on the face of all submittals.
  - 3) Specific procedures for verifying computer programs' output used shall also be included.
  - 4) Plans, reports and other documents shall be stamped, signed and dated by the responsible Hawaii registered architect or engineer where required under the Contract Provisions, under generally accepted architectural or engineering practices or by applicable laws.
- c. The plan shall show the level, frequency and methods of review of the adequacy of the design of the Project.
- d. The plan shall set forth the means and methods to be used to ensure that conflicts, omissions or misalignments, etc. do not occur between drawings or between the drawings and the specifications, and to coordinate the review, approval, release, distribution and revision of documents involving such persons.
- e. The Design QC plan shall identify those elements of the Contract Provisions, Design Documents or Construction Documents, if any, requiring special Quality Control attention or emphasis, including applicable standards of quality or practice to be met, level of completeness and/or extent of detailing required or on-site training of the Proposer's staff and HDOT.
- f. The plan shall identify in a table the discipline, the name, qualifications, duties, responsibilities and authorities for all persons proposed to be responsible for QC.
- g. The QC plan shall state the need for experts that are needed for a short time, i.e., external technical experts. These experts are necessary to ensure the quality of the design of the Project. State the activity and the reason for the expert, the name, qualifications, duties, responsibilities and authority, the anticipated timeframe of use, the expected availability and any coordination required with respect to any such experts.
- h. The QC plan shall describe the required design quality control and assurance functions, including scheduled activities for Design QC identifying the Design Documents and Construction Documents to be delivered to HDOT for its review, at what stage of the design, work phase, activity, etc. of the Project it will be submitted.
- i. The Proposer's Design Team will be responsible for maintaining all documents for the duration of the Contract and those documents shall be organized, indexed and delivered to HDOT upon Final Acceptance unless required to be delivered earlier pursuant to the Contract Provisions, or even if incomplete, within seven days of receipt of request from HDOT. Utilize, the



format of HDOT's filing procedure.

- 1) These documents shall include, but not be limited to, the following items: design criteria, reports and notes, calculations, drawings, schematics, supporting materials, etc.

#### B. HDOT Review of Design Work

1. Design Work shall be completed in accordance with the Proposer's Design Concept Proposal, except as noted below
  - a. Requests for deviations from the RFP,
  - b. Deviations due to 3<sup>rd</sup> party requirements.
2. HDOT will reach agreement with the Proposer's Design Team on dates and times for design reviews
3. HDOT will comment on Design Work, but will not require comment responses unless specifically requested or if work is deemed to be outside the provisions of the contract or has omissions.
4. If HDOT at any time determines that the Design Work is not conforming to Contract or plan requirements, HDOT reserves the right to suspend work for cause until resolution of the issue.
5. Proposer's Design Team will be responsible for submitting to the County, if required or applicable, all applicable reviews and shall be responsible for obtaining approvals to satisfy County requirements.
6. All submissions shall be done in a timely manner so that the review and acceptance process will not cause a delay. No extension of time will be granted for review delays.

#### C. Proposer's Final Design Quality Review

1. Prior to the release of final Design Documents and Construction Documents, the Proposer's Design Team will be responsible for completing reviews with architects and engineers experienced in the appropriate disciplines(s) and type of work and design.
2. The review shall verify that the Design Documents and Construction Documents were prepared in such a manner as to ensure that they will be acceptable to HDOT, as well as the Proposer. The criteria used in such review shall include
  - a. conformity of the final Design Documents and Construction Documents with the Contract Provisions,
  - b. assurance that all materials, equipment and elements of the Work provided for in such documents which will be incorporated into the Project have been

- provided for and designed to perform satisfactorily for the purpose intended,
- c. the appearance, organization, technical and grammatical accuracy of all documents to be submitted,
- d. verification that such documents have been checked and signed by the drafter, designer, checker and reviewers,
- e. where required under the contract, generally accepted architectural or engineering practices or applicable law, verification that such documents have been stamped, signed and dated by the responsible Hawaii registered civil engineer or architect; and,
- f. Assurance that such documents fully provide for constructability, compatibility of materials and conformity to acceptance criteria for inspections and tests as provided in the Contract.

D. Plan acceptance by HDOT and Other Agencies

1. Permit drawings and utility construction drawings shall be developed to the appropriate design standards as specified.
2. HDOT or the appropriate agency will accept these drawings after a review has determined that they are acceptable. HDOT will return all non-conforming drawings to the Proposer's Design Team for corrective action.

E. Plans Distribution

1. The Proposer's Design Team will be responsible for providing to HDOT the following documents
  - a. All Design and Construction Documents
  - b. All shop or fabrication drawings which have been approved by the Proposer's Design Team
  - c. All forming plans which have been approved by the Proposer's Design Team
  - d. All traffic control plans which have been approved by the Proposer's Design Team
  - e. All submitted documents shall be with all design changes and revisions shown.
  - f. All submitted documents shall be stamped "Released for Construction".

F. QC of Design Changes

1. Changes, including field changes, in the design of the project shall be subject to design QC measures and procedures commensurate with those applied to the original design of the portion of the Project being changed.
2. All changes be approved in writing by the organization that performed the original Proposer design, then the changes shall be submitted to HDOT to obtain a review and acceptance. Changes shall not be used until a written

acceptance of HDOT is obtained.

3. Documents containing design or field changes shall be distributed according to the requirements set forth in the section entitled "Plans Distribution".

**G. Submittals for Review and/or Acceptance by HDOT**

1. Design and Construction Documents relating to the following construction phases shall be submitted to HDOT for review.
2. The Proposer shall be fully responsible for the schedule impacts and costs of revisions arising from Proposer's non-compliance with RFP and Contract requirements.
3. Any review comments made by HDOT will be provided, in writing, to the Proposer's Design Team within 15 days, or as agreed to in writing. The following table indicates the submittals for review but is not to be taken as a definitive listing of submittals to be submitted

<b><u>Construction Phase</u></b>	<b><u>Documents</u></b>
Environmental	All required permits*
Earthwork	Roadway Geometrics (Plan and Profile) Channelization Plan Intersection Plan Traffic Control Plan* Erosion Control Plan* Clearing & Grubbing Roadway Quantities Geotechnical Report Construction Specifications*
Geotechnical	Draft Geotechnical Report Final Geotechnical Report
Surfacing and Pavements	Pavement Justification Report Roadway Geometrics Roadway Sections Superelevation diagrams Paving Quantities Paving Plan Construction Specifications*
Drainage Structures & Hydraulics	Hydraulics Report Design calculations Drainage Plans & Profiles Drawing & Special Details* Construction Specifications*

Landscaping	Planting Plan* Construction Specifications*
Safety and Traffic Items	Phasing and Construction Sequence Report* Sign Inventory Traffic Markings and Delineation* Guardrail Highway Lighting Permanent Signing Transportation Management Plan* Work Zone Traffic Control* Construction Specifications* Traffic Study
Misc. Construction	Plans and Plan Details* Construction Specifications*

\*Documents which require written acceptance by HDOT.

#### H. Construction QC plan requirements

1. The plan shall at a minimum address the following:
  - a. Describe the Proposer's quality control organization, including the designation of a Quality Control Manager, number of full-time equivalent employees with specific Quality Control responsibilities and including a chart showing lines of authority and reporting responsibilities;
  - b. List by discipline the name, qualifications, duties, responsibilities and authorities for all persons proposed to be responsible for Construction Quality Control;
  - c. Project progress schedule which shall indicate the testing that will be done.
  - d. Submittal schedule;
  - e. Proposer's inspection requirements
    - 1) Quality control sampling, testing, and analysis plan with material, frequencies, location and methods;
    - 2) Identify the QC testing laboratory(s) to be used;
    - 3) Specify documentation for QC activities, including control charts;
    - 4) Requirements for corrective action when quality control and/or acceptance results indicate nonconformance;
    - 5) Communication procedures with HDOT inspection staff
    - 6) Other Proposer inspection requirements
  - f. The work may need to utilize specific quality control measures for certain materials or work methods. The Proposer shall be responsible for providing all personnel, equipment, supplies, calibration and certification of testing

equipment and testing facilities necessary to perform quality control, obtain samples, and perform tests needed. All personnel, equipment, supplies, and testing facilities shall meet the RFP's applicable requirements and advance notification requirements.

- g. If the engineer feels that the Proposer is deficient in its QC for any of the work the engineer may require additional QC work at any time and at no additional cost or contract time. The engineer may direct a suspension of work if it finds the Proposer's QC deficient. Such a suspension will be considered given due to Standard Specification Subsection 108.10(A)(4)(c).

## 2. Proposer's QC Responsibilities

- a. The Proposer shall be responsible for the workmanship/quality of construction and materials incorporated into the project. The Proposer's Quality Control plan shall ensure that operational techniques, methods and activities provide finish work of acceptable and contract compliant quality. Proposer sampling and testing shall be performed to control the processes and determine the degree of material compliance with the RFP/Contract Provisions. The plan shall detail how the Proposer shall provide quality control (QC) for all construction elements of the project, e.g., perform material tests for quality control, provide inspection, and exercise management control to ensure that work conforms to the contract requirements, etc.
- b. The Proposer should in addition to QC sampling have its own quality assurance testing program (qa) in order to assure itself that the QC testing is providing verifiable, consistent results, using the correct testing procedures in accordance with the appropriate testing standards. The Proposer's qa program should be proactive and any flaws in the Proposer's QC testing that may affect accurate assessment of good quality via its QC program, Perform a minimum QC sampling and testing as shown in the HDOT Material Acceptance Sampling and Testing Guidelines for Acceptance Sampling and Testing. It is not necessarily the rate of sampling the Proposer is to perform to ensure a high quality QC sampling program. The Proposer shall determine how much sampling, what needs to be sampled, etc, is required as well as when increased sampling is required for quality dependent activities.
- c. The Proposer is advised that the listing of HDOT's Sampling/Testing Guide for Acceptance and Verification, mentioned in Subsection 106.04, is the approximate rate that HDOT will test material.
- d. See also TP-50, Proposers Sampling and Testing requirements.

## 3. The Proposer's part in HDOT's QA program

- a. As stated previously only HDOT shall be allowed to perform QA testing for acceptance. It will also conduct an Independent Assurance Program. The Proposer's contribution to HDOT's QA program and Independent Assurance

Program is to provide aid, assistance and information so HDOT will be able to conduct their programs. The Proposer shall also upon request by the engineer to submit within 24 hours or the next business day any testing data, calculations, etc. relating to the Proposer's sampling of material in addition to the normal QC submittals.

- b. The Proposer's QC Team will be responsible for supplying material testing equipment for HDOT's use. This includes, but shall not be limited to, all necessary materials to test Portland concrete cylinders and beams, with all needed material, molds, neoprene caps and other attachments and devices needed to perform the tests in accordance with testing standards including curing cabinets of sufficient size for initial and final curing of all specimens to be tested.
- c. The Proposer shall be responsible for calibrating all testing equipment yearly by an independent firm accepted by the engineer. The Proposer shall provide help to the engineer as requested. The Proposer shall also be responsible for disposing of all waste material created due to the testing of material.

#### 4. HDOT's Responsibilities

- a. Acceptance sampling and testing (QA) will be performed by HDOT to validate the Proposer's sampling and testing as well as the quality of the material produced.
- b. HDOT will sample and test materials following the guidelines of the minimum sampling of material as shown in Subsection 106A of the DOT/Federal projects Special Provisions for 2005 Standard Specifications. HDOT reserves the right to increase the sampling rate from the amounts listed as necessary or develop a different sampling rate if the engineer determines the need for it at no additional cost. The sampling of material (time, unit, location) and testing for verification purposes will be controlled by HDOT or its agent.
- c. All samples that will be used for acceptance testing by HDOT will be stored and transported to the testing laboratory by HDOT or its agent. Samples not meeting these requirements will not be used for HDOT's QA.
- d. An Independent Assurance Program will also be conducted by HDOT to evaluate all sampling and testing used in the acceptance of materials.
- e. The Proposer will be responsible for providing a schedule to the engineer in order for the engineer or its agent to conduct material testing.
- f. Acceptance testing, Independent Assurance Program as well as all inspections are for the benefit of HDOT.
- g. The Proposer's QC plan shall be responsible for ensuring the quality of the work and material complies with contract requirements by using its own QC/qa program only. The Proposer shall not rely on HDOT's QA program or inspections.
- h. HDOT will solely determine the acceptability of materials incorporated into

the project. Disputes in the acceptability of a material will be addressed in accordance with HDOT's current "Quality Assurance Manual for Materials, Highways Division, Materials Testing and Research Branch" Dated October 2001.

#### 5. Pre-Activity Meetings

- a. Prior to the start of any work activity, the Proposer will be responsible for holding an Pre-Activity Meeting to ensure that all project personnel have a thorough understanding of work to be done.
- b. HDOT shall be invited to attend the meeting seven (7) days prior to the meeting date. The invitation shall inform HDOT of what work activity will be covered. HDOT will decide if it will attend.
- c. Work activities generally correspond to the sections of the Standard Specifications, e.g., clearing and grubbing, earthwork, etc. or a definable feature of work such as a pre-paving conference.
- d. The Pre-Activity Meeting shall include discussions related to what will be accomplished, by whom it will be performed, and where, when, and how the work will be done.
- e. The Pre-Activity Meetings are to ensure that all parties have the same understanding of the design intent, have the appropriate plans, specifications and any special details. It may be used to inform personnel of safety regulations and procedures that need to be followed.
- f. At this time the QC inspection checklist for this activity shall be presented and reviewed.
- g. Pre-Activity Meetings shall be scheduled several weeks in advance of the actual work beginning on an activity to allow for additional preparation if necessary.
- h. The Pre-Activity Meetings shall be planned and conducted by the Proposer's Construction QC Manager or a person who can do the presentation and is acceptable to the engineer.
- i. Minutes of the meeting shall be taken to document any clarifications and understandings related to the construction of the item that are not documented elsewhere. Pre-Activity Meetings are classified as activity milestones in the TSLD and shall be identified in the Proposer's QC plan.

#### 6. Proposer's Sampling and Testing

- a. The Proposer's field and laboratory sampling and testing methods shall be as specified and comply with in the Standard Specifications and HDOT's "Quality Assurance Manual for Materials, Highways Division, Materials Testing and Research Branch" Dated October 2001, HDOT Materials Quality Control Manual, including any updated addendums, or as specified in the Proposer's proposal and accepted by HDOT. The Proposer shall use HDOT's

- “Sample Card” file numbering system to number each test report.
- b. QC Sampling and testing shall be performed by qualified testing personnel, as defined in the HDOT Highways Division Quality Assurance Manual for Materials, and shall be performed in a laboratory that is AMRL-certified in the test method they will be performing for the project. If there is no AMRL-certified laboratory in the test method on the island where the project is to take place; HDOT may allow the Proposer to utilize an uncertified laboratory that is acceptable to HDOT. However, HDOT is under no obligation to do this and the Proposer should be diligent in obtaining the use of a certified laboratory or require a laboratory to obtain acceptable certification. Representative samples shall be randomly obtained by the Proposer within the Proposer’s timeframe specified in its schedule which specified frequencies and locations. Sampling shall also occur when the material properties change. The Proposer shall furnish copies of all test results to HDOT within 24 hours of acquiring the sample test results or the next business day. HDOT may at any time observe the Proposer’s testing.
  - c. The Proposer shall provide to HDOT a testing plan for each material. The testing plan shall be submitted prior to the beginning of production or placement of the material. The Proposer shall maintain a material summary of quantities of each specific material incorporated into the work with dates and results of quality control testing associated with the material usage and compliance to contract requirements. This Summary shall meet the minimum sampling and testing frequencies shown as “Acceptance Tests” in the HDOT’s Sampling and Testing Guidelines. The summary shall be made available to HDOT when requested.
  - d. All of the Proposer’s testing equipment shall be calibrated by an independent certified calibration company within 1 year of use and calibrated every 12 months and be continually checked with verification tests as required by AMRL. Prior to being accepted for testing of the project’s material, the equipment proposed for use needs to be listed and submitted to the engineer for review and acceptance. HDOT may inspect and test the testing equipment and testing lab prior to use. The concrete testing apparatus shall utilize either neoprene caps or sulfur caps that fit the cylinder ends.
  - e. All Proposer’s laboratory aggregate and soil tests and field density tests shall be performed by the Proposer’s Geotechnical Engineering firm. If the Proposer’s Geotechnical Engineering firm does not have a laboratory on the island test may be done at a certified laboratory with the Proposer’s Geotechnical Engineering firm observing.
  - f. All concrete tests shall be conducted to failure and data shall include the strain rate.
  - g. The Proposer is responsible for providing HDOT a complete acceptance and testing plan for all foundation types if the work involves them. This plan shall be submitted and accepted by the HDOT before any work commences. HDOT shall be allowed 20 working days to review the plan.



## 7. Material Certification

- a. When the project is completed, the Proposer shall be responsible for completing a thorough final review of the documentations of material compliance to Contract/Proposal requirements by verifying that all test reports, inspection reports and other pertinent information and reports have been recorded and that such documents contain the required information.
- b. The Proposer will be responsible for preparing and submitting a letter of material certification to the Engineer. The letter shall include the following statement:

“This is to certify that: The results of quality control tests indicate that the materials incorporated into the construction work and construction operations, controlled by sampling and testing were in conformity to the Contract requirements.

Explanations for exceptions to the Contract requirements are as follows:”(If there are exceptions)

- c. The material certification letter shall list any exceptions after the above sentence and shall state how they were resolved, which includes any explanation for justification of material compliance or usage. The letter shall be signed by the highest member of the Proposer’s team and the Project Quality Control Manager.

## 8. Quality Control Inspections

- a. Coordination and Notification
  - 1) The Proposer shall designate a primary point of contact to notify HDOT of their construction activity schedule in a timely manner, a minimum of one working day before the activity starts, so that HDOT may conduct an inspection if it chooses. An alternate individual may be designated to function in this capacity in his/her absence. HDOT will also designate one individual to handle responses to the Proposer.
- b. Quality Control Inspection
  - 1) The QC Plan shall contain the inspection plans for each construction work activity included in the project whether performed by the Proposer or a subcontractor or vendor. Work activities may be definable features or items of work defined by the Contract Documents.
  - 2) Inspections shall be performed during all phases and work activities of the

project from start to completion in order to assure that the work meets, and is being performed in accordance with the Contract Provisions, plans, specifications, accepted submittals, and any other requirements, etc., i.e., the contract documents.

c. Inspection Documentation

- 1) Each of the Proposer's QC inspectors shall summarize their daily inspections, test and material sampling activities in a daily inspection report. Copies of the inspector's daily reports (IDR) shall be provided to HDOT daily, no later than the next work day after the day the report is being written for.
- 2) Each month all IDRs for that month shall be submitted on a DVD and all the documents shall be electronic key word searchable. IDRs shall be in chronological order for the day then in subsets based on work activity for that day. Submit 5 key word searchable DVDs no later than 5 working days after the end of the month the diaries were written for.

#### **14. PUBLIC RELATIONS AND PUBLIC COMPLAINTS**

A. HDOT's goal is to minimize the emotional and physical impact on highway users, businesses and neighborhoods that abut, or are serviced by, the roadways that comprise this project. It shall be the responsibility of the Proposer to provide the following services for the well-being of the affected highway users, residents, and businesses.

1. The Proposer will be responsible for providing a representative (PIR) who will be responsible for managing public information and public involvement activities outlined below. The PIR should be experienced in all aspects of providing the public with information on public works projects, including newsletter writing, design and production, direct mailing, telecommunications, news release writing, webpage management and public speaking. The PIR shall work with HDOT staff in a team effort to help promote public satisfaction with the project and minimize the project's impacts to the public. All information released shall be submitted in advance by HDOT for review and acceptance.
2. The PIR shall have "real-time" access to all project details that may be relevant to the public, public agencies, emergency service providers, businesses, and other interested groups. The PIR shall provide that "real-time" information to HDOT's project manager on a weekly basis at a minimum, and more frequently if deemed necessary by HDOT. All work zone information, e.g., lane closures, detours, etc., shall be submitted the Wednesday preceding the week of implementation. Changes to this information shall be submitted to the engineer immediately when determined.
3. Although media interviews will mainly be the responsibility of HDOT, the

Proposer or the PIR may be asked to provide the media with an interview or other information on short notice. In such a case, the Proposer or the PIR will be responsible for delivering a message consistent with HDOT's message. The Proposer or designee shall inform and coordinate this activity with HDOT prior to the interview.

4. In addition, all written, audio and video materials produced by the Proposer's staff for public dissemination shall comply with HDOT's standards. A copy of all such materials shall be provided to HDOT for review and acceptance at least seven days prior to scheduled distribution.
5. The goal of written, audio or video materials shall be to increase stakeholder satisfaction of the project by educating and informing the public about the project, including long-term, short-term and daily disruptions or changes to traffic conditions, project benefits, project staging when appropriate, and other relevant issues.
6. At least three weeks before construction activities begin, HDOT's staff will meet with the Proposer and PIR to review the following requirements. Give HDOT three weeks' notice of the meeting.

a. Public Meetings

- 1) The Proposer will be responsible for having well-trained and informed speakers, familiar with local issues, available for public meetings, community and civic organizations, neighborhoods associations, private businesses, and other stakeholders.
- 2) The Proposer will be responsible for organizing, preparing, attending, and conducting, a minimum of 4 Public Informational Meetings (PIM). Two PIMs will be conducted during design to provide project status and information to the community. A third PIM will be conducted just prior to construction to advise the community of temporary construction impacts and schedule. A fourth PIM will be conducted after the start of construction to address any public complaints received by HDOT or the Proposer. Additional PIM's may be required if due to the Proposer's actions the public or others stakeholders demand or warrant additional PIM's. The additional PIM's shall at no additional cost and regard as part of the remedial action needed to address Proposer's caused problems.
- 3) If required and as solely determined by HDOT, any additional PIMs conducted by the Proposer may be considered as extra work and compensable by change order. However, HDOT will not pay for the cost of public meeting(s) associated with permits separately, if required. HDOT will consider the cost of the public meeting(s) associated with the permits as included in the contract prices for the various contract pay items.
- 4) For each meeting, the Proposer will be responsible for providing technical assistance, data and information necessary to produce display boards,

printed materials, video graphics, and other forms of information necessary for dialogue with the public per NCHRP 407. The Proposer will also be responsible for providing the necessary staffing and video equipment to present the information. The Proposer shall find a suitable venue (government facilities, ADA accessible) to conduct the PIM and make arrangements to reserve the meeting facility. The Proposer shall make accommodations for disabled or disadvantaged people. The Proposer will be responsible for submitting a newspaper notice to HDOT for review and acceptance, and after obtaining HDOT's acceptance, the Proposer will publish the notice in The Garden Island News and the Honolulu Star Advertiser. The notice shall be published no later than 14 days prior to the PIM date. This newspaper notices shall not be confused with the ones required by Section 645 of the Standard Specifications and are in addition to those newspaper notices.

- 5) In addition to the general public attending the PIM, the Proposer shall submit a list of organizations that should be notified of the PIM. Some of the organizations may be, but are not limited to the following

- State Department of Land and Natural Resources, CWRM
- State Historic Preservation Division, SHPD
- Office of Hawaiian Affairs, OHA
- Kauai Island Burial Council,
- Kauai Visitors Bureau,
- Kauai Historic Preservation Review Commission,
- Lihue Business Association,
- Hawaiian Telcom,
- Kauai Police Department,
- Kauai Fire Department,
- Owners/lessees within 500-feet, or will be impacted by the work
- Kauai Department of Water,
- Kauai Department of Public Works,
- Kauai Island Utility Cooperative,
- Grove Farm Properties, Inc.,
- Kauai Community College,
- Kauai Humane Society,
- Kauai Outdoor Circle,
- Lihue Public Cemetery Association,
- Mayor, Kauai County,
- Council Members of Kauai County Council
- Legislative delegation for the district. For Kauai they are currently Senator Ronald Kouchi, Representative Danette

Morikawa, Representative James Tokioka, Representative  
Derick Kawakami

- 6) The Proposer shall be responsible for preparing a list of attendees, meeting minutes, handouts, AV equipment, etc. The meeting minutes shall accurately record all discussions in the PIM and identify all action items and responsible parties for each action item. Twenty (20) copies of the list of attendees and meeting minutes shall be provided to HDOT within seven calendar days from the PIM date.

b. Bi-Weekly Progress Reports

- 1) The Proposer shall be responsible for providing Project Traffic Work Zone updates every two weeks to the engineer. That information shall specify details of the period's closures, detours, accidents, general project status and other information relevant to the motoring public.
- 2) The Proposer will be responsible for providing the engineer a summary of public inquiries, complaints and comments every two weeks that includes general categories and trends of comments and an explanation of how the Proposer has responded to those comments and how they were resolved or why they were not resolved.

## **15. CONTRACT TIME**

- A. The Contract Time shall be 300 calendar days from the date of Design Notice to Proceed to completion of all construction work items, or the duration shown in the Project Schedule submitted as part of the Design and Price whichever is less. For any work beyond the established Contract Time, the Proposer will be subject to Liquidated Damages in accordance with Section 108.08 of the Special Provisions.
- B. The above contract time will be exclusive of plant establishment period specified in the Special Provisions Section 617 and 619

## **16. SHORT SUPPLY MATERIALS – MATERIAL PRICE ESCALATION**

HDOT will not make additional payment to any contract item due to any price increase of material that occurred during the duration of the project. HDOT will consider such price increases included in the price stated in the price proposal.

## **IV. QUALIFICATIONS PROPOSAL**

### **1. QUALIFICATIONS PROPOSAL ITEMS**

- A. Each Proposer interested in being considered for this project shall submit a Qualifications Proposal, limited to 100 pages, no later than the date and time

specified in the Request for Proposals. Qualification Proposals shall be submitted at the Department of Transportation Contracts Office, 869 Punchbowl Street Honolulu, Hawaii 96813.

B. The Qualification Proposal shall contain the following

1. Proposer list experience and qualifications relevant to the Project and to the Design Build process. Proposer is defined as the team of the prime contractor, subcontractors, consultants and others participating in the design and construction of the project. Documentation showing 2 years experience by prime or subcontractor in the type of construction that will be performed. If proposed construction means and methods require special skills the experience using those means and methods shall be listed.
2. Provide list of previous projects where the Contractor and the Designer has worked on project together.
3. Past performances on highway projects of similar scope. Provide a list of specific projects, owner, owner's personnel who Proposer's personnel worked with on a daily basis and client contracts. Indicate which projects, if any were design build. Indicate the quantity of work activities that are similar to the work activities that will be on the proposed project. Indicate approximate dimensions of work in addition to the quantity, e.g., two 12-foot lanes, 8-inch thick minimum concrete pavement 2,000 linear feet long.
4. Capacity to accomplish the work in the required time (Proposer's proposed staffing plan showing the organizational structure proposed to accomplish the management, design and permitting, construction, quality control, and administrative services in addition to the duration of major activities).
5. Proposer's understanding of the project scope of work and the Proposer's proposed approach to accomplishing the work; indicating major activities, pitfalls and how it will address it.
6. Draft Quality Control Plan, which at a minimum shall provide an organizational chart identifying the personnel, the name of the laboratory(s), and the flow chart of the documentation that will be required to comply with the requirements of the contract documents. Relevant portions of the Hawaii Department of Transportation Highway Division Quality Assurance Manual For Materials October 2001 and ensure a compliant acceptable work/project. List key activities that require increased QC to ensure a quality product.
7. Demonstration of financial capability. This may include a certification or letter from a financial institution attesting that the Proposer is financially capable of undertaking the project. If balance sheets, consolidated statements of income or consolidated statements of cash flow are included, the Proposer shall enclose one copy of these documents and the letter from a financial institution in a separate sealed envelope marked "CONFIDENTIAL". These financial documents in the separate sealed envelope will not be counted towards the 100 page qualification proposal limitation. The separately sealed financial documents, COI forms and tabs will not count against the Qualification Proposal 100-page limitation.

8. In addition to the items contained in the six categories above, a completed CONFLICT OF INTEREST (COI) DISCLOSURE FORM shall be included as a separate tabbed appendix to the Qualification Proposal. A blank form is provided after the Technical Provisions. All known potential conflicts of interest which shall also include having a relationship with persons on committees or organizations that other Proposers would have disclose Proposal information to prior to the selection of the "Best Value" proposal shall be disclosed in the COI Disclosure Form. The Proposer may include a conflict mitigation plan as described in the COI disclosure form. If the Proposer was aware of an organizational COI as defined in the COI form and above prior to award of the contract and did not disclose the conflict or potential COI to HDOT, HDOT may delay contract execution or rescind award, or may terminate the contract for default if discovery is made after contract execution and the COI is not addressed. Any delay to the project due to contract execution caused by a failure of the Proposer to disclosed information shall be considered delay caused by the Proposer. A delay caused by the Proposer is not cause for a claim for additional contract time or increase in contract amount or price.
  - a. The COI forms shall be used throughout the term of the contract to disclose any conflicts that may arise (i.e. new contract awards, replacement of subcontractors/subconsultants, etc.).
9. Submit 10 hard copies of the Qualification Proposal in a bound volume on 8 ½" x 11" letter size paper. Drawings, charts, or exhibits may be of larger size up to 11" x 17" and optionally "Z" folded down to letter size. To facilitate HDOT's review, the Proposer shall include a Table of Contents and tab each of the above six items clearly.
10. Submit a key word searchable pdf copy of the Qualification Proposal, including the COI disclosure forms, on DVD disc in labeled plastic jewel box. Only copies of documents that were submitted as the Qualification Proposal shall be on the DVD disc.

## **2. PRE-QUALIFICATIONS PROPOSAL MEETING**

- A. HDOT has scheduled a mandatory pre-qualifications proposal meeting for all interested Proposers at the time, date, and location specified in the Request for Proposals. The purpose of this meeting will be to present a summary of the information contained in the technical provisions related to the Project scope of work and guidelines, and to discuss the proposal, selection and award process. HDOT will give all attendees an opportunity to pose questions to HDOT. Meeting minutes will be taken and these minutes will be issued as an addendum before the qualifications proposals are due. HDOT does reserve the right to change or clarify a response or comment made during the meeting should HDOT discover that what was stated during the meeting is in need of revision.

### 3. QUALIFICATIONS PROPOSAL EVALUATION CRITERIA

A. HDOT's Review Committee will review the Qualifications Proposal and a Qualifications Score will be based on the following criteria items tabulated below:

	CRITERIA ITEM	MAXIMUM POINTS	ACTUAL POINTS
1	Experience and qualifications of the Proposer's staff (engineers and construction members to be assigned to the Project), relevant to the Project and to the Design Build process. Joint experience of design-build team working together. Experience of key personnel assigned to the project	20	
2	Past performance on highway projects of similar scope for public agencies or private industry. Provide a list of specific project titles, project owners, and current contacts. Indicate which projects were Design-Build.	25	
3	Capacity to accomplish the work by the required contract completion date (Proposer's proposed staffing plan showing the organizational structure proposed to accomplish the management, design and permitting, construction, quality control and administrative services.) Current work load.	15	
4	Proposer's understanding of the project scope of work and the Proposer's proposed approach to accomplishing the work.	20	
5	Draft Quality Control Plan, which at a minimum shall include an organizational chart identifying the personnel, and the flow chart of the documentation that will be required to comply with the requirements of HDOT's Quality Assurance Manual for Materials, October 2001.	15	
6	Demonstration of financial capability	5	
	QUALIFICATIONS PROPOSAL SCORE:		<hr/> Pts

Total Qualification Points Possible = 100 Points

1. Concurrently with the submittal of the qualifications proposal, the Proposer shall submit a list of all projects that the Proposer's General Contractor has done with HDOT-Highways in the past five years. State for each HDOT-Highways project



cited the initial contract amount, final contract amount and the amount of cost overrun if any and the reason for the over run. This information will be considered under Criteria 2. Failure to submit the list concurrently with the qualifications proposal would classify the Proposer as nonresponsive and shall be deemed ineligible to be selected as one of the top three qualified teams or at the very least result in a reduced ranking score.

2. The total number of pages including the introductory letters, evaluation criteria items, exhibits, and references shall not exceed 100 pages. As stated previously the "Demonstration of financial capability" portion will not be counted as well as the COI. Tabs will also not be counted as a page. A penalty of five points will be deducted from the total score for each page exceeding the 100 page total limit. If double-sided pages are used, each printed face will count as one page. (Example, 2 sheets of paper with one sheet double sided print and one sheet single sided print will count as three pages.) All pages shall be sequentially numbered. Minimum font size shall be 10 pts for text, with the exception of the TSLD schedule. For information submitted on the DVD that is not part of the submitted proposal or has multiple versions of submitted documents 5 points shall be deducted for each item.
3. All information required for HDOT to properly evaluate the Proposer for each criteria item contained in six categories identified shall be submitted in the Qualifications Submittal for HDOT to assign a credible score. Failure to provide complete information in the Qualifications Proposal may automatically result in a reduced score for a given Criteria Item where complete information is not provided. If no information is provided for a given criteria item, this will automatically result in a score of zero points for the criteria item. In addition, HDOT, at its sole discretion, may deem the Qualifications Submittal as non-responsive if the information submitted is incomplete and HDOT is unable to assign a credible Qualifications Proposal score due to the incomplete submittal.
4. The maximum Qualifications Proposal score is 100. Any score of 60 or less will be considered as a Proposal not qualified for the project.

#### **4. DETERMINATION OF TOP THREE QUALIFIED PROPOSERS**

- A. HDOT will use the three highest Qualifications Proposal Total Scores to determine the top three qualified Proposers. The top three qualified Proposers will be invited to move to the next level of qualification evaluation and submit a Design and Price proposal. In the event of a tie, for this stage, the tie breaker shall be the higher score combination awarded for the grading categories. The first tie breaker shall be the combination of the scores from category 2 and 5. If still tied then category then the higher combined score when category 1 is added, then 3, 4 and finally category 6. If there is still a tie then the tie breaker will be a flip of a coin with the Proposer having the earliest timestamp on the Proposal having the choice of making the call.

For Example:

Proposer	Qualifications Total Score	Proposal	Total Sum of 2 and 5	Rank
Proposer A	75		30	3*
Proposer B	75		25	4
Proposer C	78		30	2*
Proposer D	80		35	1*
*Proposers invited to submit Design and Price Proposal				

- B. When HDOT's determination of the top three qualified Proposers is made, HDOT will notify the selected and non-selected firms in writing within the time frame outlined in the Request for Proposals. HDOT will invite the top three qualified Proposers to submit a Design concept and Price Proposal as described in the Section below.
- C. In the event only one qualified Proposer remains after all Qualifications Proposals are evaluated, HDOT reserves the right to cancel this Request for Proposals and re-advertise the project.
- D. The non-successful Proposers may request a debriefing in writing, emailed to the following address: [michael.k.hinazumi@hawaii.gov](mailto:michael.k.hinazumi@hawaii.gov) Requests shall be made within 10 working days from the date the Proposer was notified of not being selected. Requests received after the 10<sup>th</sup> working day will not be accepted.

## **V. DESIGN CONCEPT DOCUMENTS AND PRICE PROPOSAL**

### **1. DESIGN CONCEPT DOCUMENTS**

- A. The Design Concept Documents shall be received no later than the date and time specified in the Request for Proposals at the Department of Transportation Contracts Office, 869 Punchbowl Street Honolulu, Hawaii 96813.
- B. By submitting a Design and Price Proposal, the Proposer acknowledges
  - 1. The Proposer is fully qualified to complete the Project
  - 2. That the allocated time was sufficient to collect the necessary information and to prepare designs to base its price proposal.
  - 3. The Proposer agrees the allocated time was sufficient to fully construct the project in accordance with the contract documents.
- C. Design Concept Documents from the top three qualified Proposers shall be submitted separately from the Price Proposal in a separate box(es) or envelope(s). The Price Proposal shall be submitted in a separate sealed envelope as described in the

subsection below.

1. A \$20,000.00 stipend will be paid to the Proposers who receive the second and third highest scores. When the stipend is paid to the Proposer, HDOT shall become the owner of the design.
2. HDOT has not provided a topographic survey in this package.
3. All teams shall submit complete DBE documentation as stated in Section VI of the Disadvantaged Business Enterprise (DBE) Requirements for Federal-Aid Projects Regarding Disadvantaged Business Enterprises (DBE) form within five working days of selection date.

## **2. REQUESTS FOR INFORMATION**

- A. HDOT will accept Requests for Information (RFI) related to preparing the Design Documents up to 25 working days prior to the Proposal (Design and Price Proposal) submittal date specified in the Request for Proposals (deadline date). All RFIs will be received by HDOT in writing, by FAX, letter, or email by 4:00 pm of the deadline date. RFIs shall be emailed to the following address: michael.k.hinazumi@hawaii.gov or faxed to the following number: 808-241-3011, attention: Mr. Michael Hinazumi. No verbal inquiries will be accepted by HDOT.
- B. HDOT's responses to the RFIs related to the preparation of the design documents will be issued by Addendum no later than 15 working days prior to the Proposal submittal date. After the Addendum is received, the Proposers shall finish their design documentation according to their best understanding of the project given all information received in this Request for Proposal Documents, in the pre-qualifications proposal meeting, and any addenda documents received.

## **3. DESIGN CONCEPT DOCUMENTS REQUIREMENTS**

- A. The Design Concept Documents shall contain the following
  1. An itemized, written statement of conformance affirming all technical provisions that the Proposer will comply with
    - a. List all technical provisions that the Proposer will deviate from along with where and what work it will be used in and a detailed description explaining how and why the deviation will add value to the project.
    - b. List all variations from the Scope of Improvements or any other section of this RFP, including Alternative Technical Concepts (ATC)
    - c. Any variations, either perceived or noted by the Proposer shall not necessarily cause a proposal to be considered non-responsive and shall not be grounds for filing a protest. HDOT will assess such variations during the evaluation process and score the proposal accordingly.

2. Schematic drawings using 20 or 40 scale showing items of work such as but not limited to; temporary and final roadway alignments, roadway sections, traffic control phasing and management scheme, temporary and final utilities alignment and locations. Other drawings at appropriate scales shall include: structure plan and elevations, foundations schematic drawings, drainage plans, and other details at a scale and level of detail necessary to effectively present the design concept to HDOT.
3. Landscape plans and/or renderings and estimated annual maintenance costs.
4. Project Schedule - A TSLD schedule showing the sequence of design, permitting and construction work leading to the completion of each increment and the Project. The TSLD schedule shall indicate that the project shall be completed by the required contract completion date or within the contract time. See section on Contract Time. The TSLD schedule shall show a separate path for each increment outlining the sequence of design, permitting and construction work leading to the completion of an increment and the relationship of that increment to other increments. Include in a separate narrative work hours, e.g., number of shifts per 24 hour period, number of days per week that work will be done etc. the TSLD schedule shall reflect the proposer's work hours. The TSLD schedule shall include milestones of all important deadlines and events critical to the timely completion of the project. Such events are but are not limited to
  - a. Conceptual Design Submittal,
  - b. 100% Design Submittal,
  - c. End of Job Design Submittal,
  - d. HDOT design reviews,
  - e. Value Engineering,
  - f. Permitting activities,
  - g. Public meetings,
  - h. Scheduled public events,
  - i. Special conditions or deadlines that require close scrutiny
  - j. Ordering of "long lead" material
  - k. Installation of BMPs
  - l. Start of Construction,
  - m. Mass Grading
  - n. Relocation of utilities,
  - o. Construction Phasing Plan,
  - p. Retaining walls,
  - q. Intersection Improvements
  - r. Landscaping
  - s. Critical testing of material or work
  - t. Completion of All Work Items, and
  - u. Plant Establishment Period
5. Provide sufficient documentation with the schedule.

6. Updated Quality Control Plan containing all materials or elements known at the Design Concept stage.

#### **4. DESIGN CONCEPT DOCUMENT SUBMITTAL**

##### **A. The submittal shall contain the following**

1. 15 bound sets of State of Hawaii registered engineer stamped schematic drawings and renderings (half-size prints)
2. Five bound sets of State of Hawaii registered engineer stamped calculations,
3. 15 copies of a listing of anticipated permits and clearances to be obtained with the anticipated timeline indicating the durations of the writing of the permit, its submittal to the agency, duration of review by the agency, total permit processing time. Based timeline on past experience. State the possibility of having to resubmit the permit request and include the time into processing time estimate. Failure to provide an opinion of what the Proposer considers a reasonable duration for permit processing may result in reduction of ranking scores.
4. 15 copies of the summary of benefits the Design Proposal, construction methods has, etc. that makes the Design proposal a best value technically. Provide evidence that will backup the claims. Lack of evidence, exaggeration or similar actions that may make scoring difficult or have an unjustified raising of scores is cause for reduction of ranking scores
5. 15 plots of the Project Schedule neatly folded to 8 ½ x 11" size, minimum size of paper that shall be used 11 x 17".
6. 15 bound sets of proposed materials list and draft Quality Control Plan,
7. 15 copies key word searchable copies (pdf, word, excel format are acceptable) of the Design Concept Document Submittal on DVD.

#### **5. HDOT INTERVIEWS WITH PROPOSERS**

- A. Each of the three remaining Proposers shall present their design concept to HDOT's Review Committee after HDOT has received the Design Concept Document submittals and had an opportunity to review it. These interviews will be held to allow HDOT to clarify any questions it may have.
- B. Any oral clarification by the Proposer shall be reduced to writing by the Proposer. HDOT will consider all information presented in this meeting before determining a final Design Concept Score.
- C. The winning Proposer shall incorporate into their design and construction, any items presented in this interview that were not reflected in the Design Concept Documents. HDOT may take meeting minutes and audio, video records. All items discussed and in the written clarification offered by the Proposer shall be incorporated into subsequent design submittals. Such addition of items shall be at no additional cost or increase in contract time
- D. The Proposer shall be permitted to submit a new proposal or amend those submitted

- if, and only if, HDOT issues an addendum following these interviews.
- E. Each interview will be limited to a maximum of 75 minutes. The Proposer will be given 30 minutes for its presentation. This will be followed by a 45-minute questions and answers session. The Proposer is responsible for all equipment needed for its presentation.
  - F. HDOT will contact each Proposer to set the final time, date, and location of the interview and will provide a minimum 7 working days notice.
  - G. HDOT reserves the right to have another meeting with the three Proposers should it have additional questions.
  - H. Proposers will not be permitted to ask questions of the HDOT except to ask the meaning of or to clarify a question posed by HDOT. No additional time will be allowed to research answers.
  - I. Within one five working days of the interview, the Proposer shall submit to HDOT a written clarification letter summarizing the answers and clarifications provided during the interview. Failure to meet this deadline may be cause for HDOT to consider the Proposer's Design Concept Document non-responsive or reduce the score by five points. Even if the deadline is missed the Proposer shall submit the document. Written clarifications shall be e-mailed to the following address: [michael.k.hinazumi@hawaii.gov](mailto:michael.k.hinazumi@hawaii.gov) or faxed to the following number: 808-241-3011, attention: Mr. Michael Hinazumi.
  - J. The interview will be considered in the scoring.
  - K. The Proposers shall submit their Price Proposal to HDOT Contract Office no later than 2:00 P.M., August 15, 2013, the fifth working day after the Discussion with Proposers.

## **6. DESIGN-BUILD SCORING**

- A. Evaluation of the Design Concept Documents will be conducted by a review committee consisting of a three member scoring panel (Evaluation Committee) and a non-scoring Technical Advisory Committee (TAC) comprised of personnel from the various disciplines covered within the proposal.
  - 1. The Evaluation Committee will convene and review the proposals as a group for duration of approximately 5 working days. During this initial review, the group will post their comments on a group spreadsheet evaluating the pros and cons of each proposal on a relative basis for comparison.
  - 2. Upon completion of the initial review, HDOT will schedule the interview stated above in "HDOT interviews with Proposers" with each Proposer that is invited to submit a proposal. Each Proposer will be given an opportunity to present their design concept to HDOT's Review Committee and members of the TAC after HDOT establishes an initial Design Concept Score but before the Price Proposals are opened. These interviews will be held to allow HDOT to clarify any questions it may have.

3. After the deadline of the submittal of the written clarification letter for the HDOT/Proposer interviews and had an opportunity to review the documents the HDOT's Review Committee will reconvene to finalize their comments to the Proposer proposals.
4. Once the comments have been finalized, the Evaluation Committee will score the proposals.
5. The Evaluation Committee will evaluate each Design Concept Proposal based on the following rating criteria
  - a. Engineering Concepts (20 points)
    - 1) Portland Cement Concrete Pavement Design -Credit will be given for a design that meets the requirements of the RFP, and that minimizes periodic and routine maintenance. Credit will be given for a design that makes maintenance when needed easier to perform and minimizes the inconvenience to the public. Credit will be assigned for exceeding minimum material requirements to enhance durability of structural components or other items of work.
    - 2) Design of Other Improvements - Credit shall be given for the design of improvements to intersections, traffic signals, drainage systems, guardrails, sidewalks, and shoulder areas that are appropriate to the area while improving or maintaining safety, mobility, and infrastructure conditions. Credit will be given for a design that makes maintenance when needed easier to perform.
    - 3) Design and Construction Elements - Credit will be given based on the quality and quantity of design resources. Credit will be given for quality of plans to do geotechnical and site investigation
    - 4) Construction Methods - Credit will be given for construction methods that minimize impacts to the traveling public and the environment, reduces costs, improves worker safety, and minimizes contract duration. Credit will be given for exceeding minimum material requirements to enhance durability of structural components.
    - 5) Public Coordination - Credit will be given for a coordination plan/effort that includes coordination with stakeholder groups during the design and construction process.
  - b. Project Management /Coordination/Schedule (15 points)
    - 1) Quality Management Plan - Credit will be given for a timely, complete and comprehensive quality management plan, which incorporates effective peer reviews for all phases of the project as well as the monitoring of construction to ensure it is being built in conformance with the Proposer's accepted design. Credit will be given for plans that demonstrate the ability to maintain a high level of workmanship and quality.

- 2) Design and Construction Coordination - Credit will be given for plans that emphasize the coordination of design and construction elements to minimize the amount of design changes.
  - 3) Project Schedule - Credit will be given for a comprehensive and logical schedule that minimizes contract time duration. Credit will be given for the minimizing of delays the public must endure due to construction work.
  - 4) built in conformance with the Proposer's accepted design.
  - 5) Credit will be given for plans that demonstrate the ability to maintain a high level of workmanship and quality.
- c. Maintenance of Traffic (10 points)
- 1) Credit will be given for a work zone traffic control plan that minimizes disruption of roadway traffic, e.g., minimization of: lane closures, minimizes the delay the public incurs going through the project, visual obstructions, and drastic reductions in speed limits. Also, minimizes the amount of people impacted by the disruption of roadway traffic.
  - 2) Credit will be given for a work zone traffic control plan that effectively addresses the project site's accessibility and the safety of the public traveling through the project using automobiles, trucks, motorcycles, bicycles, etc. as well as pedestrians and the public that will require ADA compliant facilities.
  - 3) Public Relations Plan - Credit will be given for an effective and comprehensive, proactive public relations plan that provides information on the project's Traffic Management Plan, informs the public of the current status of the project, and provides the public with advanced notice of road closures or major traffic changes.
- d. Environmental/Aesthetics/Public Involvement (5 points)
- 1) Environmental Considerations - Credit will be given for minimizing impacts to the environment during all phases of design/construction and ensure that all environmental commitments are honored. Credit shall be provide for ensuring that all permitting is incorporated into the design and construction of the project ; and that permit applications, submittals, agency reviews, and other requirements do not delay the overall project schedule
  - 2) Landscaping - Credit will be given for the quality of the landscaping elements presented, how well it meets the requirements of the RFP
  - 3) Aesthetics, Context Sensitivity and Complete Streets Principals - Credit will be given for utilizing these principles in the design and construction of the project.

Example of calculation of Design Concept Score



<b>Proposer # 1</b>						
	CRITERIA ITEM	MAX POINTS	EVALUATION COMMITTEE MEMBER 1	EVALUATION COMMITTEE MEMBER 2	EVALUATION COMMITTEE MEMBER 3	TOTAL POINTS FOR CRITERIA
1	Engineering Concepts	20.0	18	18	17	53.0
2	Project Management/Coordination Schedule	15.0	11	12	13	36.0
3	Maintenance of Traffic	10.0	10	9	8	27.0
4	Environmental/Aesthetics/Public Involvement	5.0	4	5	4	13.0
Total Points for Design Concept						129.0
Design Concept Score						43.0

Total Points for Design Concept divided by 3 = Design Concept Score

Design Concept Score round up to the nearest tenth of a point. 0.05 of a point and above rounded up to the nearest tenth of a point. Below 0.05 of a point will be rounded down to the nearest tenth of a point.

Design Concept Score -- Maximum Possible = 50.0 points

#### 6. Price Proposal

- a. The envelopes containing the sealed Price Proposal will be opened after the Design Concept Documents have been evaluated and scored.
- b. The adjusted price proposal (the total of all Proposal Schedule lump sum prices with force account items not included) contained in the sealed Price Proposal will be used in the calculation of the final total design-build score.
- c. The Project is a design build project that is to be priced as a total of all lump sum prices plus force account work items. The itemized lump sum prices in the Proposal Schedule are intended principally to serve as a guide for HDOT to, when needed, determine and compare the price proposals. The Proposal Schedule shall not use the "unit price" pricing method for work traditionally itemized as such on other HDOT projects. Instead only lump sum prices for

the work activity shall be used except for items listed in HDOT's Price Proposal as a force account item. The Proposer's price shall be the price for the total scope of work necessary to complete the Project.

- d. The Price Proposal shall consist of the completed Proposal Schedule and the required contract documentation.
- e. HDOT will consider this Price Proposal to be the Proposer's Best and Final offer unless HDOT issues addendum(s) to the Request for Proposal after receiving the Design and Price Proposals.
- f. After the Design Concept Document scores have been finalized, the Project Manager will open the Price Proposals to calculate each Proposer's Total Adjusted Design-Build Score.

#### 7. Total Adjusted Design-Build Score

- a. Total adjusted design-build score will be calculated in the following manner

Price Proposal

The sum of all lump sum items plus force account items = Price Proposal

Adjusted Price Proposal

Price Proposal plus any statutorily required additional amounts, e.g., use of foreign steel, non-Hawaii company, etc. = Adjusted Price Proposal

Total Adjusted Design-Build Score

Adjusted Price Proposal divided by the Design Concept Score = Total Adjusted Design-Build Score

Example of calculation of Total Adjusted Design-Build Score

Firm	Design Concept Score	Adjusted Price Proposal	Total Adjusted Design-Build Score	Ranking
A	90.0	\$6,700,000	74,444	1
B	85.0	\$7,000,000	82,353	3
C	78.0	\$6,000,000	80,769	2

#### 7. DETERMINATION OF PROJECT AWARD AND CONTRACT EXECUTION

- A. The project will be awarded to the Proposer who has the Lowest Total Adjusted Design-Build Score, i.e., the Proposer with the apparent best value.
- B. Scores will be rounded to the nearest point. 0.5 of a point and above will be rounded up to the nearest point. Below 0.5 of a point will be rounded down to the nearest point.

- C. In the event of a tie, the Proposer with the lower Price Proposal will prevail.
- D. After HDOT completes its review of the completed Proposal Documents and determines the documents are in order and verifies that sufficient funds are available, HDOT will issue an award letter to the Proposer with the apparent best value.
- E. For the two non-successful Proposers who are not awarded the Project and who submitted complete Design Concept Documents as described in this document, HDOT will execute a \$20,000.00 purchase order for the stipend amount only. After the contract is executed, the unsuccessful Proposer shall submit a \$20,000.00 payment request for the stipend amount.
- F. The winning Proposer shall, for monthly payment and measurement purposes, break down all of the lump sum contract items contained in the Proposal Schedule to smaller, more easily measurable elements as required in SECTION 109 of the Standard Specifications. The winning Proposer shall provide a schedule of values and the theoretical quantities associated with each value item, and shall clearly indicate which contract item and specification section(s) it applies to. This shall be done to the satisfaction of the engineer.
- G. Once Price Proposals are opened and the Total Adjusted Design-Build Score is calculated, the winning Proposer as determined by the process specified above who submitted a responsive proposal will not be allowed to withdraw from the project.
- H. In the event after evaluation of the Design Concept Documents and Price Proposal there is less than two responsive Proposers or if the construction cost for the apparent successful Proposer substantially exceeds HDOT's project budget, the HDOT may at its sole discretion, cancel this Request for Proposal and re-advertise the project or reduce the scope of work in the case of the Price Proposal exceeding the amount of available funds.

#### **END OF TECHNICAL PROVISIONS**