

**STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION**

**ADDENDUM NO. 3
for
INTERSTATE ROUTE H-1
SHOULDER WORK AND PORTLAND CEMENT
CONCRETE PAVEMENT REHABILITATION
VICINITY OF WAIMALU VIADUCT TO VICINITY OF HALAWA
F.A.P. NO. NH-H1-1(274)**

The following amendments shall be made to the Request for Proposal:

**CLARIFICATION QUESTIONS/REQUEST FOR INFORMATION AND HDOT
RESPONSE**

1. Question: "HDOT mentioned at pre-bid meeting that all long-term settlement has occurred. Therefore, does HDOT only expect only subgrade improvements be considered in design-builders proposal, considering the fact that any deep ground improvements required to stabilize the 57' deep fill area between station 102 + 60 to 111 + 00, and 120' deep fill between station 162 + 00 and 168 + 00 can be completed within the 180-calendar day duration or engineers estimate for the project?"

Response: As shown in the RFP V. Attachments, the AC core thickness taken at four (4) locations between Sta. 102 + 40 and Sta. 111 + 15 indicates that the settlement depth from 5 to 12 inches. The single AC core taken between Sta. 162 + 50 and Sta. 168 + 90 shows the AC thickness of about 4.50 inches. From this information, the HDOT believes that most of the ground consolidation underneath the pavements has taken place and no deep ground improvement is required to fully stabilize the underlying subgrade.

2. Question: "The RFP Geotechnical Report "Geotechnical Engineering Exploration, Interstate Route H-1 Rehabilitation, Eastbound Lanes, Waiau Interchange to Kaimakani Street, Ewa, Oahu, Hawaii, dated July 11, 2005:
 - a. Site Plan Plates 3.4 and 3.5 missing,
 - b. Plate A boring legend is missing.
 - c. Profile Plate 5 boring logs B-136 and B-137 is missing.
 - d. There is no consolidation test data for the 57' deep fill area between station 102 + 00 to 111 + 00 on the eastbound side.

Addendum No. 3
September 7, 2017

- e. There is only one consolidation test for the 120' feet deep fill area between station 162 + 00 TO 168 + 00 on the eastbound side.
- f. Please clarify if there is any other borings or testing done that has not been included in the Geotechnical report?
 - f.1. If there is additional test data such as consolidation test, sieve analysis, plasticity index/Atterberg limits, dry density, and moisture content for areas mentioned in items 4 and 5 above then please provide. The data will be used to estimate the degree of settlement remaining in both areas within the deep fill layers as well as the underlying "soft" layers.
 - f.2. If there is no other test data then we ask to discuss this further with HDOT because additional borings s& testing will be a considerable cost & require additional time. Therefore, it doesn't make sense for each design build team to have to bear this cost. Please provide direction."

Response for item nos. 2.a, 2.b and 2.c: Site Plan Plates 3.4 and 3.5; Plate A boring legend; and Profile plate 5 are included in this amendment.

Response for items nos. 2.d, 2.e, 2f, f.1 and f.2: Copy of additional boring and testing information in the general vicinity of the project area can be found from the "Geotechnical Engineering Exploration Report, Interstate route H-1 Widening, Waimalu Viaduct Westbound, Pearl city Off-ramp to Kaonohi Street" dated January 22, 2003 is downloaded in the attached CD and is part of this addendum.

- 3. Question: "Does HDOT have any other document that pertain to the existing subsurface conditions and/or settlement of pavement areas between sta. 87 + 00 to 180 + 00? Such as;
 - a. Surveys to measure settlement and/or differential settlement of the existing pavement specifically between station 102 + 40 to 111 + 15 eastbound, and between station 162 + 50 to 168 + 90 eastbound. If yes, then please provide copy.
 - b. Studies/investigation other than the RFP geotechnical report related to the causes of the existing pavement settlement specifically between station 102 + 40 to 111 + 15 eastbound, and between station 162 + 50 to 168 + 90 eastbound. If yes, then please provide copy.
 - c. Assessment, inspection, etc...of the existing culverts, drain pipes, conduits, etc...that traverse beneath the pavement/embankment fills between station 87 + 00 to 180 + 00. If yes, then please provide copy."

Response: HDOT does not have any document pertaining to the existing

Addendum No. 3
September 7, 2017

subsurface conditions for the above-mentioned areas.

4. Question: "Does HDOT know why the westbound pavement between station 162 + 50 to 168 + 90 has not experienced the same settlement as the eastbound pavement? If yes, then please elaborate so we can understand why only the eastbound pavement has settled."

Response: *HDOT does not have information on why the westbound pavement has not experienced the same settlement as the eastbound pavement.*

5. Question: "Does HDOT suspect or have any information that indicates that the embankment has slope stability issues such as creep, etc.... between eastbound station 162 + 50 to 168 + 90? If yes, then please provide."

Response: *HDOT does not have any information.*

6. Question: "Please provide a copy of National Environmental Policy (NEPA) for this project."

Response: *The National Environmental Policy Act (NEPA) permit documents will be provided to the winning proposer before the project NTP date.*

7. Question: "Please provide direction on coordinating access to the pavement work areas under the zip barrier."

Response: *The direction on coordinating access to the pavement under the zip barrier will be provided to the winning proposer before the project NTP date.*

8. Question: "Please provide a list of projects that will require lane closure coordination."

Response: *Contractor shall coordinate with other agencies for lane closure as part of the regional Maintenance of Traffic (MOT). HDOT do not presently have any projects within the limits of this project and will provide to the awarded contractor a list of HDOT projects for lane closure coordination purposes.*

9. Question: "Please confirm since this is a design-build project cost estimate does not need to be in HDOT's format for Federal Aid projects."

Response: *Please follow format as shown in page P-8 of the RFP package.*

10. Question: "If there is a "Landscape Master Plan" between station 87 + 00 to 180 + 00 then please provide."

Response: *HDOT does not have a Landscape Master Plan for this area.*

11. Question: "Is the "Master Guidelines for Landscaping and Maintenance"

Addendum No. 3
September 7, 2017

prepared by the State in 1999 applicable for the project?"

Response: *The Highway Manual for Sustainable Landscape Maintenance dated 2011 is applicable to this project.*

12. Question: "Please confirm that permanent irrigation is not required."

Response: *Permanent irrigation is not required.*

13. Question: "Is the ground stabilization indicated in the Technical Provisions (TP-1) intended to include ground stabilization below the embankment fills where the PCC pavement rehabilitation work is shown? The timeframe required to complete the PCC pavement rehabilitation work of 180 days from Design Notice to Proceed will not be adequate to include deep soil stabilization, such as jet grouting that was performed on the west end of the Waimalu Viaduct to stabilize the ground before the widening in that area. Please clarify that the ground stabilization indicated on Page TP- does not include the deep soil stabilization of the soft ground below the embankment fills below the PCC pavement rehabilitation work."

Response: *As shown in the RFP V. Attachments, the AC core thickness taken at four (4) locations between Sta. 102 + 40 and Sta. 111 + 15 indicates that the settlement depth from 5 to 12 inches. The single AC core taken between Sta. 162 + 50 and Sta. 168 + 90 shows the AC thickness of about 4.50 inches. From this information, the HDOT believes that most of the ground consolidation underneath these pavements have taken place and no deep ground improvement is required to fully stabilize the underlying subgrade.*

14. Question: "We understand jet grouted columns were installed for deep soil stabilization for the westbound lanes (two right lanes and shoulder between Sta. 102 + 40 and Sta. 111 + 15) on the west end of the Waimalu viaduct. We understand that there may have been some issues encountered during construction of the grouted columns. Was the installation of the grouted columns effective in stabilizing the roadway pavement for the highway widening? Please share more details of the issues."

Response: *The jet-grout columns did not achieve the full diameter that was anticipated, and its effectiveness is questionable.*

15. Question: "The RFP documents indicated that the scope of work of the project includes "ground stabilization". The RFP documents also noted on Page TP-15 (Note: For information only) that underlying soils are possibly still consolidating or highly consolidated. Does the term "ground stabilization" indicated in the scope of the project on Page TP-1 intended for the Design-Build team to study and mitigate this ongoing settlement of the fill embankment as part of this project. We understand the estimated project cost is between \$60 and \$80

Addendum No. 3
September 7, 2017

million. This project cost will not be adequate to address the ongoing settlement of the fill embankment as part of this project, unless the project budget is increased substantially. Please clarify as to the intent of the term "ground stabilization": in the scope of work and clarify that it is not HDOT's intent to mitigate the ongoing settlement of the fill embankment as part of this project due to budget constraints."

Response: As shown in the RFP V. Attachments, the AC core thickness taken at four (4) locations between station 102 + 40 and station 111 + 15 indicates that the settlement depth from 5 to 12 inches. The single AC core taken between station 162 + 50 and 168 + 90 shows the AC thickness of about 4.50 inches. From these information, the HDOT believes that most of the ground consolidation underneath the pavements have taken place and no deep ground improvement is required to fully stabilize the underlying subgrade.


16. Question: "The RFP document indicated on Page TP-15 that there are 72-inch CMPs between Sta. 86 + 00 and 89 + 00. Is there a scope of work relating to the 72-inch CMPs that the Design-Build team is supposed to fix and/or replace? Also, can you verify the number and size of any additional CMP culverts located between Sta. 86 + 00 and Sta. 89 + 00. The scope of work in the RFP does not have any requirements for the 72-inch CMPs between Sta. 86 + 00 and Sta. 89 + 00. Please clarify intent of the note relating to this item."

Response: There is only one CMP culvert that may need to be addressed between Sta. 86 + 00 and 89 + 00. The size of this CMP is 96-inch, and not 72-inch as originally indicated in the RFP TP-15. The voids below and around this CMP have been filled with grout in a previous project. However, there may be disturbed/soft soils and voids above the CMP that may need to be filled with grout or other means prior to placement of the proposed PCC pavements. Therefore, remedial work may be required prior to placement of the PCC above this CMP. Estimated location of this skew-placed CMP is Sta. 88 + 70 +/- . However, exact location and condition will be field-determined by the awarded contractor. Please add this potential cost for probing in that specific area and remedial measures to this CMP to your cost proposal.

17. Question: "In addition to the CMP's between Sta. 86 + 00 and Sta. 89 + 00, we understand that there are additional plate culverts at Sta. 148 + 08 and Sta. 167 + 13. Is rehabilitation of these pipes also included in the scope of work?"

Response: Only the 96-inch CMP between Sta. 86 + 00 and Sta. 89 + 00 shall be included in this project.

Please acknowledge receipt of this Addendum No. 3 by recording the date of its receipt in the space provided on page P-4 of the Proposal.


FORD N. FUCHIGAMI
Director of Transportation