DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
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Flex your power!
Be energy efficient!

September 19, 2011

04-Ala-880-28.2/29.9
04-1A6824
Project ID 0400020137
ACIM-880-1(064)E

Addendum No. 1

Dear Contractor:

This addendum is being issued to the contract for CONSTRUCTION ON STATE HIGHWAY IN ALAMEDA COUNTY IN OAKLAND FROM 0.5 MILE NORTH OF THE HIGH STREET SEPARATION OVERHEAD TO 0.5 MILE SOUTH OF THE FIFTH AVENUE OVERHEAD.

Submit bids for this work with the understanding and full consideration of this addendum. The revisions declared in this addendum are an essential part of the contract.

Bids for this work will be opened on Wednesday, October 19, 2011.

This addendum is being issued to revise the Notice to Bidders and Special Provisions.

In the Special Provisions, Section 10-1.335, "HOT MIX ASPHALT PAVEMENT SMOOTHNESS," is added as attached.

To Bid book holders:

Inquiries or questions in regard to this addendum must be communicated as a bidder inquiry and must be made as noted in the Notice to Bidders section of the Notice to Bidders and Special Provisions.

Indicate receipt of this addendum by filling in the number of this addendum in the space provided on the signature page of the Bid book.

Submit bids in the Bid book you now possess. Holders who have already mailed their book will be contacted to arrange for the return of their book.

Inform subcontractors and suppliers as necessary.

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This addendum and attachment are available for the Contractors' download on the Web site:

http://www.dot.ca.gov/hq/esc/oe/project_ads_addenda/04/04-1A6824

If you are not a Bid book holder, but request a book to bid on this project, you must comply with the requirements of this letter before submitting your bid.

Sincerely,

for REBECCA D. HARNAGEL
Chief, Office of Plans, Specifications & Estimates
Office Engineer
Division of Engineering Services

Attachment

10-1.335 HOT MIX ASPHALT PAVEMENT SMOOTHNESS

GENERAL

Summary

This work includes measuring the top layer of hot mix asphalt pavement for smoothness with an inertial profiler and straightedge and correcting deficient smoothness. If top layer is Hot Mix Asphalt (OGFC), smoothness requirement must apply to pavement layer before placing HMA (OGFC).

Hot mix asphalt smoothness is based on inertial profiler measurements, reported as International Roughness Index (IRI), and the number of opportunities available to improve smoothness. One opportunity is counted:

1. For placing aggregate base, asphalt treated base, or cement treated base
2. For each separate layer of pavement
3. For a leveling layer if it is included as a contract bid item
4. For cold planning or grinding before paving

Submittals

At least 5 business days before the initial profiling, submit to the Engineer:

1. Certification of inertial profiler within the last year by Texas Transportation Institute (TTI)
2. Operator certification by TTI
3. Calibration results performed on project test section

Within 2 business days after the initial profiling of new or corrected sections, submit to the Engineer and by electronic mail to :

1. Profile traces and an electronic file in ".erd" format of the raw profile data or Proval 3.0 acceptable raw profile format
2. For each 0.1-mi section, a table showing each IRI in Proval software report for:
   2.1. The left wheel path
   2.2. The right wheel path
   2.3. The average of the two wheel paths

3. For each test section trace, cross correlation repeatability agreement score

Submitted profile traces and electronic data become the Department's property.
Label the profile trace with the following information:

1. Project number (District-EA or Project ID).
2. County and route number.
3. Stationing.
4. Operator's name.
5. Test date.
6. Test number.
7. Traffic direction.
8. Traffic lane (numbered from left to right in direction of travel).
9. Test wheel path (left or right in direction of travel).
10. Test direction.
11. Paving direction.
12. Filter Setting
13 Short wavelength cut off length
14.Long wavelength cutoff length

Equipment Quality Control and Assurance

At the time of testing, your inertial profiler equipment shall be certified by the Texas Transportation Institute within the last year and display a current decal on the inertial profiler equipment with the certification expiration date.

Perform inertial profiler verification testing in the Engineer's presence at least 10 days before inertial profiling operations begin. Give the Engineer 2 business days notice before verification testing.

Operate the inertial profiler according to the manufacturer's recommendations and AASHTO R 57-10. Verify the inertial profiler at least once before performing and testing. Run the inertial profiler equipment 5 times on a test section provided by the Department. The test section must be on an existing asphalt concrete pavement surface at least 0.1 mile long. Calculate a cross correlation to determine the repeatability of your device under Section 8.3.1.2 of AASHTO R56-10. The cross correlation must be a minimum of 0.92 or the equipment must be recalibrated and the test section rerun until verification is obtained.

The Department may perform independent inertial profiler testing. If your inertial profiler test results vary significantly from the Department's, the Engineer may order you to recalibrate your inertial profiler equipment and perform a retest. If your test results are inaccurate due to operator error, the Engineer may disqualify your inertial profiler operator.

CONSTRUCTION

General

For areas to be profiled and before any specified surface treatment is applied, determine the IRI for 0.1 mile sections. Profile each traffic lane's wheel paths (3 ft left of the right lane line and 3 ft right of the left lane line). Each lane's IRI in a section must be the average of the IRI values for the wheel paths within that lane within that section. A partial section (less than 0.1 mi) resulting from an interruption to continuous pavement surface must comply with the IRI specifications for a full section. Adjust the IRI for a partial section to reflect a full section based on the proportion of a section paved.

The Department does not require inertial profiler testing and tests the smoothness only with a 12 -ft straightedge at the following locations:

1. Within 12 ft of a transverse joint separating the pavement from an existing pavement not constructed under this contract
2. Within 12 ft of a transverse joint separating new pavement from a bridge deck or approach slab
3. Ramps and connectors with steep grades and superelevation rates greater than 6 percent
4. Sections of city or county streets and roads, turn lanes, collector lanes, and areas around manholes or drainage transitions
5. Acceleration and deceleration lanes for at-grade intersections
6. Shoulders and miscellaneous areas

For areas that do not require inertial profiler testing, the hot mix asphalt pavement top layer must not vary from the lower edge of a 12-ft long straightedge by:

1. More than 0.01 foot when the straight edge is laid parallel with the centerline
2. More than0.02 foot when the straightedge is laid perpendicular to the centerline and extends from edge to edge of a traffic lane
3. More than 0.02 foot when the straightedge is laid within 25 feet of a pavement conform

Each day inertial profiler testing is performed, notify the Engineer of the start location and verify there are no foreign objects on the pavement surface.

Note stationing on the profile trace in at least 0.1-mi increments. Use the stationing to identify localized roughness greater than 140 in/mi. The profile race stationing must be the same as the project stationing.

Retest sections where corrections were made.

On ground areas not to be overlaid with open graded hot mix asphalt, apply fog seal coat under Section 37-1, "Seal Coats."

Pavement Smoothness Evaluation

The Engineer evaluates your paving methods and equipment based on the profile testing, pavement smoothness, and whether the pavement meets or exceeds the limits specified.

The Engineer groups the average IRI for each section in ranges to determine sections requiring correction.

Pavement Smoothness Requirements

Number of Opportunities	Average IRI for Each 0.1-mi Section Acceptance	Localized Roughness Acceptance
3 or more	≤70	≤140
2	≤80	≤140

Corrective Actions

Correct pavement with an initial IRI exceeding 70 in/mi to 80 in/mi as specified in the above table.

Areas of localized roughness will be identified using a continuous IRI with a base length of 25 feet. Localized roughness greater than 140 in/mi must be corrected regardless of the IRI values. After correction, retest the wheel paths.

Use one of the following corrective methods:

1. Grinding under Section 42-2, "Grinding," of the Standard Specifications
2. Removing and replacing a minimum 2.36 in of the surface course

Perform the corrective action to the entire lane width. When completed, the lane width must have uniform texture and appearance. Square the corrected area's beginning and end normal to the paved surface's centerline.

If corrections are made by removing and replacing, test the new pavement surface for acceptance.

PAYMENT

Full compensation for certifying operators and equipment; performing inertial profiler testing and retesting, quality control, and verification testing; furnishing the profile traces, and providing electronic files to the Engineer, and for performing corrective work is considered as included in the contract price paid per ton for Hot Mix Asphalt and no additional compensation will be allowed therefore.