

## 2.5 *Calendar of Events*

<b><u>Event</u></b>	<b><u>Date</u></b>
Advertise RFP and mail public announcements	January 13, 2006
Deadline for written notification of intent to submit	January 23, 2006
Pre-proposal conference	February 03, 2006
Beginning of Field Trials	February 06, 2006
Deadline for receiving Consultant inquiries	February 24, 2006
Issue responses to Consultant inquiries	March 03, 2006
<b>Deadline for completion of Field Trials</b>	<b>March 17, 2006</b>
Proposal submission deadline	March 20, 2006
Announce Award of "Successful Consultant"	March 31, 2006
Contract execution	May 01, 2006

NOTE: DOTD reserves the right to amend and/or change this schedule of RFP activities, as it deems necessary.

# **ATTACHMENT I SCOPE OF SERVICES**

## **SCOPE OF SURVEY**

A. Approximately 20,000 directional miles of pavement condition data will be collected during the data collection cycle. Both directions shall be collected on interstates and multi-lane, divided highways, and one direction shall be collected for two lane highways. The Consultant will also collect, for the opposite direction, only the right way images not specified for pavement condition analysis on approximately 15,000 miles of the state network.

B. The following data will be reported for every 0.100 mile of the surveyed length on all Control Sections:

- GPS Coordinates (longitude, latitude and elevation)
- International Roughness Index (IRI) (measured in inches per mile)
- Bridges (count)

C. The following data will be reported for every 0.100 mile of the surveyed length on all Control Sections that consist of Portland cement concrete pavements:

- Transverse cracking (measured in linear feet)
- Longitudinal cracking (measured in linear feet)
- Joint Faulting (measured in inches), (count of positive faulting), (count of negative faulting)
- Patching (measured in square feet) (count)
- Blowups (measured in square feet) (count)
- Punch outs (Continuously Reinforced Concrete only) (measured in square feet), (count)

D. The following data will be reported for every 0.100 mile of the surveyed length on all Control Sections that consist of asphalt-surfaced pavements:

- Alligator Cracking (measured in square feet)
- Random Cracking (measured in linear feet)
  - Block cracking
  - Longitudinal cracking
  - Transverse cracking
- Rutting (measured in inches)
- Patching (measured in square feet), (count)
- Blowups (measured in square feet), (count)
- Potholes (count)

## **DELIVERABLES**

A. Grayscale digital images shall be collected by one or more cameras oriented normal to the pavement for distress identification and shall provide coverage of greater than 12 feet of the survey lane. These images should contain minimal shadows. The resolution of the pavement images shall be sufficient to identify cracks of 0.125 inch in width when

traveling at survey speed. The pavement images shall be provided on USB 2.0 hard drives or other approved storage media.

B. The quantified pavement condition data shall be delivered using the database shell which will be provided for the Consultant. The structure of the data will be agreed upon with the Consultant prior to the beginning of the contract.

C. Color digital images of the right of way shall be collected by one camera and delivered in .jpg format. The collected images shall show the right of way and as much as possible of the left and right shoulder. The right of way images should be collected at a minimum of 0.002 miles (10.56 feet). The Consultant shall attach distinguishing information to each image specifically identifying District number, Parish number, Control Section, Route, Direction, Control Section Logmile, Speed, Date, and GPS Coordinates of Collection. The Consultant will be responsible for providing a means to simultaneously view and process (i.e., play) all associated images; the provided means should include the synchronization of the pavement and right of way images. The provided means should also be able to operate on most personal computers thus allowing virtually any user to review the images and data from an IBM compatible personal computer. The provided mean should include the necessary software licenses (if applicable) for DOTD Headquarters office and all District offices. The data should be summarized to 0.100 miles and also be synchronized with the pavement and right of way images. The images and data should use a location reference method such as by District, Parish, Route, Control Section and Direction. The right of way images shall be provided on USB 2.0 hard drives or other approved storage media.

D. The Consultant shall supply a workstation at DOTD offices in Baton Rouge, Louisiana for DOTD's use that shall duplicate the means the Consultant uses to evaluate digital images and distress data. The workstation shall include all necessary software licenses (as applicable) that do not expire. The workstation must allow DOTD to review and verify the quantity of distresses determined by the Consultant from pavement images. The workstation shall also have software that allows the user to automatically retrieve a specific segment of road and view its right of way and pavement images by entering the District, Parish, Route, Control Section Direction and Control Section Logmile. The Consultant shall provide training to DOTD personnel for operating the workstation and shall furnish copies of all manuals duration of the contract. The CONSULTANT shall maintain, repair, and update this workstation for the duration of the contract. After the end of the contract, DOTD will return the workstation to the Consultant. The workstation shall be configured with the ability to allow a minimum of four USB 2.0 drives, or other approved media, to be connected to the workstation at the same time. The workstation should also be configured to connect to DOTD's network using a Gigabit Ethernet connection. The Consultant shall also provide to DOTD the software used for viewing the Images and data. This software shall have the ability to access the digital images and pavement distress data via the DOTD statewide network and allow unlimited users. DOTD will retain user rights to this software after the project completion.

E. DOTD personnel will evaluate the pavement images and condition data summary. If discrepancies are found, the Consultant shall be required to re-rate the entire Control Section in which discrepancies were found. Failure to correct the Control Section and deliver the District(s) condition data as outlined in the master schedule will subject the Consultant to damages.

F. DOTD personnel will evaluate the right of way images for quality assurance. Any necessary corrections are to be made by the Consultant. Failure to correct the Control Section and deliver the District(s) condition data as outlined in the master schedule will subject the Consultant to damages.

G. The Consultant shall collect rutting data using a Laser Rut Measurement System (or similar product).

H. The Consultant shall provide a web-enabled viewer for the right of way images. This would allow anyone, using any web browser, to view the right of way images VIA an internet/intranet connection.

I. The Consultant shall deliver only the right of way images that were collected, on a weekly basis. The means provided by the Consultant shall allow DOTD to automatically retrieve a specific segment of road, using the workstation or any IBM compatible personal computer. The weekly delivery should also include the raw data from the Consultant's Data Collection Vehicle's electronic sensors (rutting, IRI, faulting and GPS data). All weekly equipment calibrations test results (i.e. DMI, rut measurement device, video foot print, etc.) and electronic sensor verification results should be included in the weekly delivery.

J. The Consultant shall provide a means of giving any user the ability to make measurements of highway features/assets from the right of way images.

K. The Consultant will provide a Storage Area Network (SAN) server for the DOTD Headquarters building, and nine Network-Attached Storage (NAS) type devices, one to each DOTD District office. Each of the NAS devices will be appropriate in size to house all the digital images and pavement condition data for that District. (Server specifications and vendor source and approximate cost will be provide by DOTD prior to proposal submittal).

L. The Consultant shall collect, for the opposite direction, only the right of way images not specified for pavement condition analysis on approximately 15,000 miles of the state highway network.

M. The Consultant shall provide all collected electronic data at the smallest possible interval.

**N. The Consultant has the option to provide separate pricing and detail of services provided for the following items. These services and prices will not be included in Attachment III – Price Proposal, and will not be used in the evaluation:**

- **Vertical Clearance Measurements**
- **These measurements shall be taken of all overhead obstructions.**
- **Geotechnical (Cross-slope) information**
- **Collection of pavement marking reflectivity from the surveyed lane.**
- **Collection of ROW digital images for Ramps along the State Highway network.**

### **OBLIGATION OF DOTD TO CONSULTANT**

DOTD will provide the base data items necessary for the data collection, including a Control Section map for each District and the approximate location of each multilane, divided highways. DOTD will designate the lane(s) and direction(s) of travel to be surveyed or rated based on management needs within the agency. In general, the following guidelines will be used to provide long-term uniformity:

- Survey the primary direction (south to north; west to east).
- For multi-lane, divided highways survey the outside lane in both directions.