Scope of Work

US 190 Roundabout Study (3 Locations)
(RPC Task SL-1.16; FY-16 UPWP)

This project will consist of conducting Roundabout Studies for the New Orleans Regional Planning Commission (RPC) to satisfy the requirements of LADOTD EDSM VI.1.1.5, Roundabout Study and Approval, revised August 8, 2011, for 3 locations along US 190 between LA 433 and Camp Villere in Slidell, LA. These three (3) locations include the following.

1. US 190 at Northshore Boulevard
2. US 190 at Cherry Street
3. US 190 at Camp Villere

The following scope of work is based on LADOTD EDSM VI.1.1, Roundabout Study and Approval. The final deliverables will incorporate documentation and findings of the following tasks and the conceptual layout geometry and Auto Turn analyses. Traffic counts and roundabout conceptual geometric layouts developed in the Stage 0 Feasibility Study – US 190 (LA 433 to US 11) Interim Capacity / Widening Improvements – St. Tammany Parish (June, 2014) will be utilize in this project.

Task I: Project Management / Meetings

This task will include coordination of the study with RPC, LADOTD, St. Tammany Parish and the City of Slidell. The Consultant shall plan to attend a total of three (3) meetings (project kick-off meeting, interim (mid-point) project status meeting, and a preliminary deliverable meeting) with representative of the above entities. The purpose of these meetings will be to review project specific details related to the scope of services, data review and findings, and project schedule, etc. The RPC will be responsible for the coordination of the meeting logistics and the Consultant will be responsible for conducting the meetings, and preparing and distributing meeting minutes accordingly to all members.

Task II: Data Collection

The following data collection is provided by St. Tammany Parish.

Seven day, twenty four (24) hour intersection approach counts and speed studies are required for each of the study intersections. Additionally, peak period turning movement traffic counts during a typical weekday of the study intersections will also be required. The machine counts shall include FHWA Vehicle Classifications 1-14. The manual turning movement counts shall include demand volumes. The Consultant shall also collect queue observations during the peak periods.

Many of the above required counts are available from the Stage 0 Feasibility Study – US 190 (LA 433 to US 11) Interim Capacity / Widening Improvements – St. Tammany Parish.
However, these counts will need to be supplemented by the following counts being undertaken through the Parish.

1. 7 day, 24 hour approach counts (classification)
   a. Northshore Boulevard (SB approach only)
   b. Cherry Street (all approaches)
   c. Camp Villere (all approaches)

2. AM/Mid-day/PM Peak Turning Movement Counts
   a. US 190 at Cherry Street

St. Tammany Parish will also provide a speed study for each approach for these same three (3) locations.

The Consultant shall obtain and summarize the past 3 years of crashes at the following locations.

1. US 190 at Northshore Boulevard
2. US 190 at Cherry Street
3. US 190 at Camp Villere

**Task IV: Roundabout Operational & Crash Analyses**

The Consultant shall perform intersection traffic analyses as needed for the AM/Mid-day/PM peak hours for the following alternatives using Sidra Standard Intersection 6.0 (Akcelik & Associates).

   A. Stop Controlled Intersection (No-Build)
   B. Signalized Intersection
   C. Roundabout

Most of the above analyses are available from the Stage 0 Feasibility Study – US 190 (LA 433 to US 11) Interim Capacity / Widening Improvements – St. Tammany Parish. The additional analysis shall be performed according to LA DOTD’s EDSM VI.1.1.5 and LA DOTD’s “Roundabout Analysis: Required Settings and Standards for SIDRA 5.1”. Sidra analysis shall be performed for 15 year projected volumes.

For roundabout intersection alternatives, the 95th percentile queue shall also be reported for each approach.

In addition, the consultant shall perform crash analyses using the latest Highway Safety Manual Crash Modification Factors (CMFs) to determine how the use of roundabouts at these three (3) locations will impact safety.
Task V: Conceptual Roundabout Design

This task will develop conceptual roundabout layouts based on the findings from Tasks I-IV as well as conceptual roundabout geometry developed as part of the Stage 0 Feasibility Study – US 190 (LA 433 to US 11) Interim Capacity / Widening Improvements – St. Tammany Parish.

The consultant shall perform Auto Turns analysis on each of the three (3) roundabouts to assure the conceptual geometry can accommodate the design vehicle as per LA DOTD's EDSMs.

Task VI: Deliverables

This task will include providing a separate report and conceptual layout documenting Tasks I-V for each of the three (3) roundabout locations. These reports will provide all raw data and analyses for the proposed roundabouts. The reports will also incorporate the conceptual geometric layouts and Auto Turn analyses developed under Task VI.

The Consultant will provide RPC with ten (10) bound hard copies of the complete report including study data and appendixes and three disks of the entire report and appendixes in .pdf format.

Timeline: 4 months

Budget: $25,000