SCOPE OF SERVICES

The Consultant shall provide professional, and technical design services necessary for the preparation of detailed construction plans, construction specifications, and cost estimates for Job No. J9S3734 – ADA. This work will also include the collection of survey data necessary for the design of each location.

The general scope will also include, to research and document the limits of MoDOT owned right of way along the state-maintained route within each city and to design sidewalk and curb ramps in compliance with the American with Disabilities Act (ADA) at the following locations. Any sidewalk limits found to be outside of MoDOT owned right of way according to the required research will not require design. The project may be backfilled with additional towns to meet the overall construction budget to replace towns or sections found not to be contained within MoDOT right of way.

Here is a list of documents that are needed to complete ADA research and prepare the memorandums for any route.

- If right of way is owned by MHTC:
 - Copies of MHTC vesting deeds
 - o Copies of plans for specific section of route
- If right of way is not owned by MHTC:
 - Copies of original town plats along with any amended plats
 - Copies of adjoining owner vesting deeds. We usually try to get two on each end (one on either side of the route) and at least two from the middle section (one on either side). If the section of road is longer we may try to get a few more scattered along either side.

J9S3734 -, Communities included in the Scope of Work.

- Arbyrd Along Route 108 starting at Front St. running northeasterly to Eugenia St.
- Cabool Along BU 60 starting at Rogers Ave. running eastbound to Walnut St. and along Route 181 from BU 60 running southbound to approximately 100' south of Main St.
- Marble Hill Along Route 51 approximately 1100' from the north intersection
 of Route 34 running southbound to Phelps St. and along Route 34 from
 approximately 760' west of the south intersection of Route 51 running
 eastbound to the south intersection of Route 51.
 - Some research of ownership has been completed. MoDOT will provide maintenance agreements, Change in Route Status Reports, Urban Agreements, MHTC Plans, various maps and city plats. We do not have any copies of adjoining owner vesting deeds
- Morehouse Along Route 114 from Madison St. running eastbound to Bates St.
- Puxico Along Route 51 from Schumacher Ave. running southbound to approximately 225' south of Click Ave.
- Wardell Along Route A approximately 225' east of County Road 216 W running eastward to County Road 216 N.

 Ownership research is complete for Wardell. Complete field survey to establish the existing location of the sidewalks in Wardell in relation to MoDOT owned right of way within the above limits.

This scope of services is intended to be an accurate description of the elements and tasks required for completion of the design of this project. However, each project is unique and may require more or less effort in an individual task to complete the design. The following information will define, in general terms, the major design elements relating to this project. All elements of work that are necessary to satisfactorily complete the design of this project may or may not be listed. The lack of a specific element in the scope of services does not, itself, constitute the basis for additional services, supplemental agreements, and/or adjustment in compensation.

A more detailed description of the Commission's requirements for completion of the design may be found in the MoDOT Engineering Policy Guide (EPG). The Consultant is encouraged to review the appropriate sections of the EPG as a means to supplement the information contained in the scope of services and provide additional guidance for the requirements and expectations of the Commission for completion of the design services.

Preparation of a supplemental agreement is necessary prior to performance of any work that is considered additional services by the Commission. The Consultant will not be compensated for additional services performed prior to execution of a supplemental agreement. Only additional services that are required due to unforeseen conditions or due to a change in the specified end product will be considered for inclusion in a supplemental agreement.

The Consultant shall prepare all plans through use of a Computer Aided Drafting (CAD) program. The Consultant shall conform to MoDOT's Specifications for Computer Deliverable Contract Plans, as referenced in the EPG.

The Consultant will be required to produce and update the construction cost estimate for this project at the completion of each major milestone or at a minimum of every six months.

The Consultant shall review "as-built" plans, aerial imagery, engineering manuals, and other information provided by the Commission and make the necessary field investigations to ensure that there have been no significant changes since the information was recorded or obtained.

Any deviations from Commission established procedures for design, construction, or materials shall be approved through the MoDOT project manager or structural liaison engineer and documented by the Consultant. This documentation shall include a brief justification for the deviation and the signature of the Consultant project manager and/or structural project engineer. Any deviations from the project design criteria that require a design exception, as described in the EPG, shall be documented in accordance with the EPG design exception process.

Preliminary Design Phase

The CONSULTANT'S attention is directed to Section 200 of the MoDOT EPG for general guidelines and requirements for preliminary design. Other chapters may be applicable for preliminary design preparation. The purpose of the preliminary design phase is to obtain approval of the general plan format and content. It is anticipated that one project site will be developed during this phase.

- 1. Upon notice to proceed by the COMMISSION, the CONSULTANT shall undertake the following to develop the preliminary design phase:
 - A. Follow all ADA guidelines as established in the most recent version of the PROWAG and MoDOT EPG.
 - B. Evaluate all existing pedestrian facilities for compliance with ADA standards. Any sections in compliance that are found to not need replacement shall have an ADA Checklist completed.
 - C. Evaluate existing potential sidewalk obstructions.
 - D. Collect sufficient survey data to determine the location of existing facilities, utilities, and obstructions. Data should also be collected to complete all design aspects required in the preparation of preliminary and final plans.
 - E. Prepare on an aerial showing the preliminary layout of sidewalks and curb ramps.
 - F. Prepare a cost estimate. Right of way acquisition is not anticipated as part of the project.
- 2. A Preliminary Field Check will be arranged with the COMMISSION to discuss design features in the project area.

Final ADA Design

- 1. One bid package will be developed for each job number. Upon approval by COMMISSION, the CONSULTANT shall undertake the following to develop the final ADA design phase:
 - A. Design curb ramps at street intersections.
 - 1) Include Commission provided curb ramp detail standards.

- 2) Provide special details, as needed, for curb ramps, sidewalk, and driveways. Special details will be provided in highly complex areas.
- B. Design sidewalk through driveways.
 - 1) Include Commission provided driveway detail standards.
 - 2) Provide special details, as needed, for sidewalk transitions.
 - 3) Provide design of driveways to maintain 2% maximum cross slope for the sidewalk crossing.
- C. Provide signing and pavement marking plans.
- D. Provide a work zone management plan utilizing standard traffic control details conforming to the requirements of the MUTCD and the MoDOT EPG.
- E. Provide an erosion control plan.
- F. Prepare quantities and quantity sheets.
- G. Prepare plans, bid documents, and job special provisions for submittal to the COMMISSION.
- 2. The COMMISSION will secure execution of municipal agreements with the cities and/or county agreements if needed. A copy of the executed agreements will be furnished to the CONSULTANT for his information. The CONSULTANT shall conform to all design provisions of these agreements.
- 3. A final design field check will be held with CONSULTANT and COMMISSION representatives prior to completing final design plan quantities. The CONSULTANT shall make any necessary revisions to the final plans as determined by this design field check.

Plans, Specifications, and Estimate (PS&E)

- 1. The plans, specifications, and estimate shall be prepared in accordance with Section 237 of the EPG. The following list shall be considered as the minimum requirements for a complete set of detailed construction plans and specifications.
 - A. Title Sheet
 - B. Typical Section Sheets

- C. Quantities Sheets
- D. Plan Sheets (1"=20' for ADA, 1"=200' for Roadway)
- E. Special Sheets (for depth transitions, geometrics, staging, guardrail details, and/or other design details)
- F. Traffic Control Sheets
- G. Erosion Control Sheets
- H. Pedestrian Signal Sheets
- I. Highway Signing Sheets, including quantity sheets
- J. Job Special Provisions in a Microsoft Word document.
- K. Bid items, quantities, and unit prices in an electronic estimate file generated by the Commission's Bid Tabs.
- L. Workday study
- 2. Additional plans and information may be required to satisfactorily complete the detailed construction plans and specifications for the project. With the submittal of the PS&E package the Consultant shall also provide the Commission a statement that an internal quality control check has been conducted and to the best of the Consultant's knowledge the PS&E package is free of gross errors, misleading or confusing typos, and includes adequate information to construct the project.

Bidding and Construction Support

1. After the final design phase of the project is completed the Consultant shall be available to the Commission to discuss and interpret the plans and specifications during the bidding phase of the project. During this phase of the project the Consultant may also be required to attend a pre-construction meeting.

Drawing and Document Deliverables

- 1. The Consultant shall prepare all plans through use of a Computer Aided Drafting (CAD) program. Unless otherwise specified, all plan sheets, CAD plots, and other project documents shall be provided to the Commission in electronic format and shall conform to MoDOT's Specifications for Computer Deliverable Contract Plans and file naming convention outlined in Section 237 of the EPG.
 - 2. The Consultant shall furnish the Commission the following

completed sheets and documents, as applicable, for each separate project included in this contract:

A. Deliverables

- 1. Field check and core team meeting summaries.
- 2. Engineering calculations and analysis in a PDF document.
- 3. Summary of bid items and estimate of the construction costs. The estimate shall be prepared using the latest version of Bid Tabs.
- 4. 100% complete unsigned and unsealed final design plans and job special provisions.
- 5. 100% complete signed and sealed final design plans and job special provisions.

Design Standards & Specifications

- 1. The Consultant shall use the latest version of the following publications as acceptable to determine the design criteria and procedures which will be followed for development of the project:
 - A. MoDOT's Engineering Policy Guide (EPG)
 - B. MoDOT's Specifications for Computer Deliverable Contract Plans
 - C. Missouri Standard Plans
 - D. Missouri Standard Specifications for Highway Construction
 - E. AASHTO's Manual on Uniform Traffic Control Devices (MUTCD)
 - F. AASHTO's A Policy on Geometric Design of Highways and Streets and any other publications which the Engineer directs the Consultant to use.
 - G. PROWAG











