SCOPE OF SERVICES

Dove Mountain Blvd & Moore Rd Traffic Signal Design

During the term of this Agreement, the engineering consultant, EPS Group (CONSULTANT), shall perform professional services for the Marana Unified School District under the 1GPA contract number **16-09PV-06** in connection with the newly constructed Dove Mountain CSTEM School. This scoping document shall be used to plan, conduct, and complete the CONSULTANT's work on the project.

I. BACKGROUND

The proposed project is located at the Dove Mountain Blvd and Moore Rd southern intersection. The current intersection is three-legged and does not include a signal. It operates with free-flow along the north-south Dove Mountain approaches and stop control on the eastbound Moore Rd approach. Modifications to the intersection are necessary per the MUSD Dove Mountain STEM School TIA (Traffic Impact Analysis) to alleviate congestion, improve safety and improve traffic operations at the intersection.

II. PROJECT DESCRIPTION

The traffic signal warrant analysis included in the TIA was performed as a part of the STEM School development review process in March 2018, which concluded a traffic signal was warranted for MUTCD warrant 3 (Peak-Hour). The proposed modifications include the following:

- A signalized/improved 3-legged intersection
- Sidewalks and ADA curb ramps at each quadrant
- Accommodations for bicyclist
- Intersection lighting
- Utility relocation / coordination
- Survey of existing conditions / utilities

Project activities include Conceptual Phase, Design Phase, and Post Design (Construction) Phase. Construction documents should be prepared in accordance with the PAG Standard Details and Specifications and other relevant Town of Marana guidelines and procedures.

III. PROJECT SCHEDULE

The overall project is estimated to be 6 months in duration. This allows for Town of Marana Department of Transportation (TOMDOT) reviews and meetings to take place during the design phases.

IV. WORK TASKS

1. Conceptual Phase

This phase consists of work activities related to completing project initiation, surveys and investigations as discussed in the meeting on July 29, 2019.

Project Initiation

The MUSD Dove Mountain CSTEM School will start its normal school year on August 5, 2019. Normal school operation times are described as follows:

School Times:

Mon-Fri -Morning: 8:15 am start time (all grades)

Afternoon: Mon-Thu -2:35 pm K-5 departure

3:20 pm 6-8 departure

Fri – 12:55 pm K-5 departure

1:40 pm 6-8 departure

LEAP: 6 am to 6 pm

During the first week of school, Marana Police Department will implement point control at the intersection. After the first week of school MUSD will provide point control via off-duty police involvement. The CONSULTANT shall be responsible for periodic monitoring of traffic operations at the intersection during morning and afternoon peak hours during the first 3 weeks of school and provide recommendations if necessary. If applicable, the CONSULTANT will identify and evaluate potential interim solution(s) for the intersection to accommodate the traffic until the signal can be constructed.

Survey and Investigation

The CONSULTANT will perform traffic counts and the field survey within the third week after school opening and process the data in the office for use on the project design. The CONSULTANT shall be responsible for performing the survey activities in accordance with the 2013 Roadway Design Manual (RDM) using the project vertical and horizontal controls. The level of detail shall be enough to confirm existing locations and conditions and support the subsequent detailed design activities.

Working with Town of Marana staff to obtain right-of-way and easement acquisitions is assumed to not be a part of this contract.

The CONSULTANT will prepare an addendum to the MUSD Dove Mountain STEM School TIA based on the findings from the investigation, which will provide recommendations for intersection improvements and identify a recommended preferred design concept. The recommended preferred design concept will be vetted through all involved stakeholders before final acceptance.

2. Design Phase

Initial (60%) Design

After the Project Initiation, Survey and Investigation activities, the CONSULTANT shall proceed with work activities related to developing the detailed Design based on an accepted recommended preferred design concept.

Design

EPS shall develop the detailed design, taking into account the input and guidance provided by the Town of Marana. The CONSULTANT shall develop the design to a minimum of 60% level of detail, but many features and elements shall be designed to a much higher level. Upon completion of the conceptual design, the Town staff will perform a detailed review of construction documents. Design details shall be developed and analyzed and project activities documented and communicated.

ROW maps and legal descriptions are assumed to be not included as part of this project.

The CONSULTANT shall coordinate with utilities so that utility conflicts are identified and relocated prior to construction. The CONSULTANT shall communicate and meet with utilities as needed to facilitate coordination. "Final Plans for Utilities" which are typically at 60% design plan level, shall be provided by the CONSULTANT to the CITY for distribution to the utilities.

Community Outreach

Community Outreach and / or Public Relations activities are assumed to not be a part of this contract.

Final (100%) Design

After the Initial has been submitted, plans distributed to the utilities, and review comments provided by TOMDOT, the CONSULTANT shall proceed with work activities related to completing Construction Documents (100% Plans, Specifications and Estimate).

Storm Water Pollution Prevention Plans are assumed to not be included as part of this contract.

3. Post Design (Construction) Phase

The CONSTULTANT will provide post design services to include Engineer of Record (EOR) observations and reporting as required by the Town of Marana, RFI request responses, submittal/shop drawing reviews, As-Built drawing preparations, and Project Closeout documents.

FEE MATRIX

| Task Phase | | Fee | | Type |
|------------|----------------------------------|-----|--------|------|
| 1 | Conceptual Phase | \$ | 6,800 | FF |
| 2 | Design Phase | \$ | 30,000 | FF |
| 3 | Post Design (Construction) Phase | \$ | 4,000 | FF |

Total: \$ 40,800

| Accepted By: Russell Federico | | Date: August 2 | 8,2019 | |
|-------------------------------|------------------------|--------------------|----------|--|
| For: | Marana Unified Schools | Title: Executive D | Director | |
