

**SPECIFICATIONS
FOR
2015 – 2016 TASK ORDER CONTRACT
FOR
TRAFFIC SIGNAL MODIFICATIONS**

CITY OF SAN ANTONIO

CITY MANAGER

DIRECTOR/CITY ENGINEER

**TRANSPORTATION AND
CAPITAL IMPROVEMENTS**

Sheryl L. Sculley

Mike Frisbie, P.E.

TRANSPORTATION AND CAPITAL IMPROVEMENTS

P.O. BOX 839966

SAN ANTONIO, TEXAS 78283-3966



Elidia Banda

11-18-14

DECEMBER 2014

Set No.

Project Description

Project Scope

The City of San Antonio is soliciting bids from qualified contractor(s) to install, replace or remove components of existing traffic signals located throughout the City of San Antonio. Unless otherwise noted elsewhere, the City of San Antonio will furnish equipment to be installed.

Services will include, but are not limited to, the installation, removal or replacement of vehicle detectors (VIVDS and/or radar), vehicle signal heads, pedestrian signal heads, pedestrian detectors (push buttons and/or audible pedestrian signals), LED signal lamp units, CCTV's, and traffic signal controller cabinets. Upon completion of each task order, fully operational systems will be required.

This contract is intended to provide installation assistance for various programs designed to upgrade specific equipment at existing traffic signals. This contract is not intended to be used to provide response maintenance assistance. Typical work orders may be as follows:

1. Changing out all LED lamp units for vehicle and pedestrian signal heads at several intersections along a corridor.
2. Install traffic vehicle detection devices, including cabling, at various locations citywide.
3. Install Audible Pedestrian Signals (APS), including cabling, at various locations citywide.

The contractor will be required to install and make fully operational equipment furnished by the City. Any ancillary items needed by the contractor for a fully functional installation are the responsibility of the Contractor and shall be subsidiary to the applicable bid item.

These services are required by the Transportation & Capital Improvements Department Traffic Operations and Safety Section.

Project Duration and Amount

This contract is a Task Order contract and task orders will be provided based on requested projects and available funding. The contract shall be terminated 365 calendar days after the first task order's notice to proceed. The construction time for each task order will be determined by the Project Manager.

Important Notes

1. All work shall follow the latest edition of the “City of San Antonio Standard Specifications for Construction” published by the City of San Antonio and any Special Provisions for this contract.
2. No direct payment will be made for the following items all associated costs shall be subsidiary to the various applicable items:
 - A. Insurance and Bond
 - B. Item 100 - Mobilization
 - C. Item 101 - Preparing of Right of Way
 - D. Item 530 - Barricades, Signs and Traffic Handling
 - E. Item 540 - Storm Water Pollution Prevention Plans (SW3P)
3. Unit prices established shall remain valid throughout the duration of the contract.
4. **The quantities shown are estimated quantities used for budgetary purposes only. There is no minimum guarantee on the amount of work shown on the proposal with the awarding of this contract.**
5. The projects will be assigned as they become available through the individual task orders. Specific project information including project limits, work required time allotted for task order and estimated quantities will be provided with each Task Order. Task Orders will be coordinated with Contractor prior to issuance.
6. Workers exposed to traffic will be attired in bright, highly visible clothing at all times and all work zone safety rules shall be adhered to.
7. **The City of San Antonio expects “priority” service regarding the scheduling, timely completion and quality assurance of all work being completed under this contract.**
8. Task Orders will be coordinated with Contractor prior to issuance; however Contractor is expected to be sufficiently staffed to complete up to 5 task orders, if needed, at one time.
9. The Contractor shall continuously execute work until all work required by each Task Order is complete.
10. Before beginning work, contractor shall provide a written schedule of work for each Task Order. Work for each task order shall be scheduled to comply with the time allowance defined in each Task Order. Any deviation from this

schedule will require approval from the City of San Antonio's Project Manager prior to implementation of the schedule change.

11. Final adjustment of any equipment installed, as required by the Engineer, shall be done by the Contractor and shall be subsidiary to the applicable bid items.
12. All traffic signal equipment installed shall maintain a minimum clearance of 3' radius from neutral overhead electrical lines and 10' radius from primary overhead electrical lines. Additional clearance requirements shall be as directed by the electrical utility company.
13. Any damage done by the contractor while performing the work under this contract will be corrected by the contractor at his expense. The decision to repair or replace items damaged will be at the Engineer's discretion.
14. The contractor shall present to the City of San Antonio a QA/QC plan that will be implemented to ensure all work performed under this contract is of the highest quality. Quality work is expected at all times. Work that does not meet the specifications and is deemed non-quality by the City will be re-done at the Contractor's expense.

SPECIAL PROVISIONS

All work shall conform to the 2008 Edition of the "Standard Specifications for Construction" published by the City of San Antonio and these Special Provisions.

Item 100: Mobilization

Mobilization will not be paid for directly, but will be subsidiary to the various bid items.

Item 103: Remove Concrete

Breaking up, removal and disposal of existing concrete associated with the modification of traffic signal equipment shall be executed in accordance with this item.

When only a portion of the existing concrete is to be removed, care shall be exercised to avoid damage to the portion that is to remain in place. The existing concrete shall be cut to neat lines shown on the plans or as established by the Engineer, by sawing with an appropriate type circular concrete saw to a minimum depth of ½-inch. Any existing concrete which is damaged or destroyed beyond the neat lines so established shall be replaced at the Contractor's expense. Where reinforcement is encountered in the removed portions of the concrete, a minimum of 1-foot shall be cleaned of all old concrete and left in place to tie into the new concrete construction.

Item 101: Preparing Right – of – Way

The contractor will be responsible for obtaining all permits required to complete the assigned task orders. This item will not be paid directly, but will be subsidiary to the various bid items.

Item 502: Concrete Sidewalks

Replacement of incidental concrete required by traffic signal equipment modification activities shall be in accordance with this item except for measurement. Replacement of concrete will be measured by the square foot of surface area regardless of depth and reinforcing steel needed to match existing conditions. Concrete to be replaced or repaired shall be as indicated on the plans or as directed by the Engineer.

Item 530: Barricades, Signs & Traffic Handling

The contractor will be responsible for furnishing and installing all signs, barricades, and other incidentals necessary for proper traffic control, in accordance with Part VI of the Texas MUTCD, the attached Work Zone Standards and as directed by the engineer. All warning signs shall be factory made and in satisfactory condition.

In the event of non-compliance with the TMUTCD, the ROW user shall be notified in writing on the violation. In the event of continued non-compliance, the Director of Public Works may revoke the Permit, in addition to any other remedies available to the City.

Traffic control setup and maintenance will not be paid for directly, but will be subsidiary to the various bid items.

Lane closures will require prior approval and shall be coordinated with the City's Row of Way Management Office.

Normal working hours will be 9 a.m. to 4 p.m., Monday through Friday. When directed, high traffic volumes in urban areas will require work during non-peak hours, weekends, and nights. No work to be performed on National holidays or State observed holidays unless otherwise shown on plans or approved.

Item 531: Signs

Signs to be installed will be provided by the City of San Antonio. The City of San Antonio will provide signs and posts for task orders requiring installation of ground mounted signs. The contractor shall provide the necessary hardware for mounting on the signal pole, post, mast arm, span wire or other traffic signal component as directed. All mounting hardware necessary for a complete sign installation will not be paid for directly, but will be subsidiary to the various items.

Item 540: Temporary Erosion, Sedimentation, and Water Pollution Prevention and Control

Cost associated with this item, if necessary, will not be paid for directly, but will be subsidiary to the various bid items.

Item 600: Traffic Signal General Conditions

Contractor shall refer to this item accordingly for additional information. All work shall comply with the City of San Antonio Right of Way Ordinance.

Contractor will pick up City supplied materials at and deliver salvageable materials to the City of San Antonio Traffic Signal Shop at 223 S. Cherry St. Contractor will call Tracey Smith at 207-7771 one week prior to beginning work to coordinate equipment pick-up.

Contractor will return to the City any equipment removed and deemed salvageable by the Engineer. At his expense and with no additional payment, the contractor will appropriately dispose of any items removed and deemed not to be salvageable by the Engineer.

Item 615: Traffic Signal Controller Cabinet

For task orders requiring the replacement of traffic signal controller cabinets, the City of San Antonio will furnish cabinets to be installed by the contractor. The contractor shall be responsible for removing existing traffic signal controller cabinets and installing City of San Antonio issued cabinets on existing foundation. The contractor shall furnish all additional materials and equipment necessary to ensure a complete installation.

The Contractor shall ensure equipment inside the cabinet and all wiring is not damaged during the cabinet replacement. The contractor shall demonstrate to the Engineer's satisfaction that field wiring and the equipment has been properly reinstalled in the new cabinet. City of San Antonio forces will connect the field wiring to the controller and set up and turn on the controller.

Item 624: Ground Boxes

Removal of ground boxes will be measured as each ground box removed. Price is full compensation for removal of ground box, apron, if any, and any other items associated with the existing ground box installation as directed by the Engineer. If existing ground box is not to be replaced, payment will be full compensation for removing the ground box, apron and all equipment, labor, tools and incidentals required to blend location with the existing finished ground.

For task orders that include installation of ground box(es), the City of San Antonio will furnish the ground box(es) to be installed by the Contractor.

Item 625: Zinc-Coated Steel Wire Strand

For task orders requiring the installation of guy wires with anchors, 3/8" messenger cable shall be used. Installation of a standard guy or sidewalk guy shall be as indicated on the plans or as directed by the Engineer and in accordance with TxDOT San Antonio District Standard FBTP(1)-06. Measurement will be for each guy wire installation complete in place including anchors, cable, guards and all incidentals.

Task orders requiring the installation of traffic signal span wire shall be in accordance with this item except for measurement and payment. Span wire installations shall be measured and paid by the linear foot of span wire installed. All incidentals required for a complete installation shall be subsidiary to this item.

Item 628: Electrical Service

For task orders requiring the installation of an electrical service disconnect, measurement will be for each fully functioning electrical service disconnect complete in place. Payment is full

compensation for all materials, including but not limited to risers and conduits, fees and incidental costs in accordance with the payment clause of this item.

Item 655: Controller Foundation and Pedestal Posts

Controller foundations shall be in accordance with the latest City of San Antonio Traffic Signal Controller Foundation Standard Detail. The City of San Antonio will furnish ground boxes required by the plans or standard detail. Contractor shall furnish and install ground rods as shown on the plans or standard detail. The price for this item shall be full compensation for a complete foundation in place including installation of controller foundation ground boxes and ground rods.

Task orders for installation of ground rods will be measured as each ground rod furnished and installed by the contractor complete in place. Contractor shall furnish 5/8 inch X 8' copper weld ground rods installed in the traffic signal controller foundation ground box or as directed by the Engineer. Acceptance of ground rod installation will depend on verification of depth of installation by the City of San Antonio representative.

Item 656: Foundations For Traffic Control Devices

For task orders including this bid item, contractor shall ensure materials and construction methods conform to the requirements of this items and the pertinent requirements of the items referenced within this specification except for the Measurement and Payment clauses.

Foundations installed under this bid item will be 24-A foundations and shall comply with TxDOT's Traffic Signal Pole Foundation detail standard sheet. Concrete used shall be Class "C".

Measurement of the 24-A drilled shaft foundation will be by the linear foot of acceptable shaft in place. Payment for 24-A drilled shaft foundation installed shall be unit price per linear foot. Unit price shall be full compensation for a complete foundation in place including furnishing and placing all concrete and reinforcing steel. Unless otherwise noted on the task order, typical roadside flashing beacon foundation depth shall be 5'.

Anchor bolts will be provided by the City of San Antonio.

Item 682: Vehicle and Pedestrian Signal Heads

For task orders requiring the installation of vehicle signal heads, the City of San Antonio will furnish vehicle signal heads with LED lamp units, backplates and mounting assemblies.

For task orders requiring the installation of pedestrian signal heads, the City of San Antonio will furnish pedestrian signal heads with LED lamp units and mounting arms.

For task orders requiring the replacement of vehicle signal head lamp units, the Contractor will remove existing lamp units and install LED lamp units furnished by the City of San Antonio. Measurement for replacement of lamp units will be for each lamp unit replaced. The contractor can expect task orders for replacement of lamp units to be for replacement of all vehicle signal head lamp units at each location assigned.

Some vehicle signal heads may have incandescent bulbs. In these instances, the contractor shall remove all the components required by the incandescent bulb and replace with the appropriate LED lamp unit provided at no additional cost to the City of San Antonio.

Contractor shall furnish any additional materials needed to ensure a complete, fully functional installation.

Item 683: LED Countdown Pedestrian Signal Module

For task orders requiring the replacement of pedestrian signal indication lamps, the Contractor will remove existing lamp units and install LED countdown pedestrian signal modules furnished by the City of San Antonio. Measurement for replacement of lamp units will be for each lamp unit replaced. The contractor can expect task orders for replacement of lamp units to be for replacement of all pedestrian signal head lamp units at each location assigned.

Some pedestrian signal heads may not have the LED countdown pedestrian signal modules. In these instances, the contractor shall remove all the components required by the existing pedestrian signal indication lamp and replace with the appropriate LED lamp unit provided at no additional cost to the City of San Antonio.

Contractor shall furnish any additional materials needed to ensure a complete, fully functional installation.

Item 684: Traffic Signal Cables

All proposed signal cable shall be #14 a.w.g. solid copper.

Item 688: Pedestrian Detectors and Vehicle Loop Detectors

For task orders requiring the installation of pedestrian detectors (push buttons), the City of San Antonio will furnish pedestrian push button/sign assemblies.

For task orders requiring the installation of audible pedestrian signals, the City of San Antonio will furnish the APS unit to be installed.

For task orders requiring the replacement of existing pedestrian detectors, the Contractor will remove existing equipment and replace with ADA complaint pedestrian push button/sign assemblies furnished by the City of San Antonio.

The contractor shall furnish all additional materials and equipment necessary to ensure a complete, fully functional installation.

Item 693: Internally Lighted Street Name Sign Assemblies

For task orders requiring the installation of internally lighted street name signs (ILSN), the City will furnish the ILSNs, legend, and mounting hardware.

The contractor shall furnish all additional materials and equipment necessary to ensure a complete installation.

Item 694: Video Imaging Vehicle Detection System

For task orders requiring the installation of video imaging vehicle detection systems (VIVDS), the City of San Antonio will furnish the VIVDS camera assemblies, mounting hardware, and cable. The contractor shall focus and zoom the cameras as directed by the Engineer to ensure a complete, fully functional VIVDS installation.

The camera assemblies shall be mounted above the roadway on the mast arms and/or luminaire arms, as directed by the Engineer. Camera assembly height shall be a minimum of 25 feet above the roadway or in accordance with manufacturer recommendation to obtain optimum detection, as determined by the Engineer.

For installations requiring a luminaire arm, the City of San Antonio will furnish the luminaire arm. The contractor shall furnish any ancillary items needed to mount the luminaire arms to the wood or steel strain poles.

Payment of processor unit installations will be full compensation for the installation of all items required for a fully operational system including but not limited to installation of power distribution panel, surge arrestor and related wiring.

The contractor shall furnish all additional materials and equipment necessary to ensure a complete, fully functional installation.

Item 696: Radar Vehicle Detection Devices (RVDD)

For task orders requiring the installation of Radar Vehicle Detection Devices (RVDD), including: Radar Advance Detection Devices (RADD) and/or Radar Presence Detection Devices (RPDD), the City of San Antonio will furnish the radar sensor, power and surge protection panel or module, mounting hardware and communication and power cable(s).

The contractor can expect installation of these devices to be on existing poles. The contractor shall make field adjustments as necessary and as directed by the Engineer to ensure a fully functional RVDD installation.

The contractor shall furnish all additional materials and equipment necessary to ensure a complete, fully installation.

Item 697: Closed Circuit Television (CCTV) Cameras

For task orders requiring the installation of Closed Circuit Television (CCTV), the City will furnish the camera, mounting hardware and communication and power cable(s).

The contractor can expect installation of these devices to be on existing poles. The contractor shall make field adjustments as necessary and as directed by the Engineer to ensure a fully functional CCTV camera installation.

The contractor shall furnish all additional materials and equipment necessary to ensure a complete installation.