



January 28, 2016

Mr. Earl Smith, P.E.  
Director, Engineering  
City of League City  
1535 Dickinson Ave  
League City, Texas 77573

**RE:    *City of League City – SH 96 at South Shore Boulevard Intersection Improvements  
Professional Services Proposal***

Dear Mr. Smith,

We are pleased to submit this scope of services and fee schedule to develop intersection improvement designs for SH 96 at South Shore Boulevard in Galveston County, Texas. We have prepared the scope of services based on the improvement concepts that were developed by Kimley-Horn in December 2015 and our previous discussions and meeting on January 14, 2016.

We looking forward to working with you on this project. If you have any further questions regarding this scope or fee, please don't hesitate to contact me.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Manu Isaac".

Manu Isaac, P.E.  
Associate/ Project Manager

A handwritten signature in black ink, appearing to read "Steven Freeman".

Steven Freeman, P.E.  
Associate

## City of League City

### SH 96 at South Shore Boulevard - Intersection Improvements

Kimley-Horn and Associates, Inc. ("Kimley-Horn" or "the Consultant") is pleased to submit this scope of services to the City of League City ("the Client") for professional consulting services related to the above referenced project. Our project understanding, scope of services, schedule and fees are presented below.

### PROJECT UNDERSTANDING

This proposal is based on the improvement concept plans developed previously by Kimley-Horn for this intersection in December 2015 as well as our meeting with City staff on January 14, 2016. It is understood that the intersection improvements consist of adding one additional left-turn lane for each of the Eastbound, Westbound, and Southbound approaches, and one additional right-turn lane for the Northbound approach.

### INFORMATION PROVIDED BY THE CLIENT

The Client shall provide the following information requested by the Consultant during the project:

- Previous traffic studies completed for this intersection
- As-built plans available for this intersection and intersecting roadways
- Structural design plans for the bridge on South Shore Boulevard
- Any future development plans in the immediate vicinity of the intersection

The Consultant shall be entitled to rely on the completeness and accuracy of all information provided by the Client or the Client's consultants or representatives in the completion of their services under this work order.

### SCOPE OF SERVICES

#### Task 1: Topographic Survey (GeoSurv LLC)

The Consultant will engage a surveying sub-consultant (GeoSurv LLC) to obtain a topographic survey of the study intersection. Information gathered by the survey will include right-of-way, edge of pavement, curb lines, islands and medians, pavement markings, signs, sidewalks, trees, and other above ground features within the survey area. This will also include vertical survey at the intersection including ditch lines, if applicable to required design. The survey will provide project baselines, identify benchmarks, and identify and show above and underground utilities that can be reasonably determined via markings by a utility locator service. This survey will form the base sheets for the turn-lane and median improvement designs that will be performed. No deliverable is anticipated in performance of this task. The survey area consists of the following:

1. EB Approach SH 96 at South Shore Boulevard (~600 ft)

2. WB Approach SH 96 at South Shore Boulevard (~600 ft)
3. SB Approach SH 96 at South Shore Boulevard (~450 ft)
4. NB Approach SH 96 at South Shore Boulevard (~450 ft)
5. SH 96 Median at HEB Driveway Entrance (~300 ft)

If requested by the City, the Consultant can engage the survey sub-consultant to prepare the metes and bounds for the southeast corner of SH 96 at South Shore Boulevard in the instance that right-of-way (ROW) acquisition is required; however, metes and bounds survey and assistance with ROW acquisition is not included in this scope of services.

## Task 2: Turn Lanes and S-median Design Plans

Scope of this task consists of design of the following intersection improvements:

1. SH 96 at South Shore Boulevard – EB Left-Turn Lane
2. SH 96 at South Shore Boulevard – WB Left-Turn Lane
3. SH 96 at South Shore Boulevard – SB Left-Turn Lane
4. SH 96 at South Shore Boulevard – NB Right-Turn Lane
5. SH 96 at HEB Driveway Entrance – S-Median Design

The civil engineering design documents will be prepared in general accordance with published TxDOT and City of League City design standards and specifications.

- A. Data Collection: The Consultant will visit the project intersection for observation of existing conditions. The Consultant will perform a field reconnaissance of the intersection and collect the existing geometry and examine lane configuration, utilities, and traffic/pedestrian operations within the study area.

The Consultant will gather readily available existing record drawings and file information of the project intersection from Client files, including the existing record or construction roadway and traffic signalization plans, right-of-way information, and utility maps. The Consultant will prepare a base map of existing geometrics, apparent or known utilities from record drawings and the topographic survey.

- B. The Consultant will prepare 60% preliminary turn lane layout sheets showing the proposed improvements, typical sections and submit to the Client for review.
- C. The Consultant will incorporate Client review comments from the preliminary layout and prepare the final design plan set for the project intersection. The basic design parameters will be based on discussions with the Client. The final design plans will consist of the following items:

- Typical Sections
  - Consultant will prepare proposed typical sections for each of the right-turn lanes improvements, but detailed plan and profiles will not be included. The typical section will show the pavement and subgrade section, existing edge of concrete, proposed edge of concrete (or curb), existing right-of-way, travel lanes. The pavement section will match the existing roadway section. Pavement design is not included in this scope of services.

- Paving Plans
    - Consultant will prepare paving design showing plan view (no profile) of the proposed turn lane improvements. The plan will show the existing and proposed horizontal roadway improvements with tie-in elevations, existing and proposed (if needed) right-of-way and easements, existing driveways, proposed driveway modifications (if necessary), existing and proposed drainage structures, horizontal and vertical control data.
  - Pavement Markings and Signage
    - Consultant will prepare a pavement marking and signage design showing plan view of the proposed lane dimensions and lane designation arrows.
  - Storm Drain
    - Consultant will prepare design for storm drain adjustments due to the proposed right-turn lane improvements, where needed. Adjustments could include moving inlets, adding inlets, typical re-grading, and adjusting manhole elevations. No drainage analysis, drainage area map, or calculations will be performed. Relocation or adjustment of other utilities such as sanitary, water, and gas is not included in this design; these would be considered additional services.
  - Electric Poles
    - Consultant will coordinate with Centerpoint Energy and the Client to plan for new electric pole locations where needed. No electrical line calculations or design is included in this design, as this is in the Centerpoint Energy service area.
  - Traffic Control Plans (TCP)
    - Consultant will prepare TCP sheets that show the lane closures required for the construction of the turn lane improvements. Traffic control will show the temporary signing and striping required to provide flow of traffic during construction. TCP will follow Part VI of the TMUTCD, TxDOT standards (where applicable) and City of League City guidelines.
- D. The Consultant will perform general coordination with the Client including phone calls, emails and project status meeting. Up to two (2) meetings are included in this task.
- E. The Consultant will perform TxDOT coordination that will include a preliminary meeting with TxDOT Houston District traffic staff to convey details about the project and extent of signage and roadway modifications that could occur within TxDOT ROW. Design plans will be submitted to TxDOT for their review and approval as part of TxDOT coordination. Kimley-Horn will attend up to two meetings with TxDOT as part of project coordination.

**Deliverables:**

- Preliminary 60% - Three (3) 11"x17" drawings and plan set
- Final 100% - One (1) Signed and sealed 11"x17" drawings and plan set
- Quantity Listing
- Engineer's opinion of probable construction cost

### Task 3: Traffic Signal Modifications

The scope of this task consist of signal modification design for SH 96 at South Shore Boulevard associated with the intersection improvements. The traffic signal modification design will be prepared in general accordance with published TxDOT and City of League City design standards and specifications.

- A. Consultant will prepare traffic signal modification plans to relocate and modify vehicular signal heads, signal mast arms, and vehicular detection where needed. This could include relocating pull boxes, signal poles and pedestrian poles. The extent to the relocation will be determined after survey, field work and preliminary design is complete.
- B. The Consultant will perform TxDOT coordination that will include a preliminary meeting with TxDOT Houston District traffic staff to convey details about the traffic signal modifications. Design plans will be submitted to TxDOT for their review and approval as part of TxDOT coordination.

The traffic signal modification plans will include the following plan sheets.

- Traffic Signal Notes
- Existing Conditions Sheet (where applicable) showing existing intersection and roadway layout, signs, pavement markings, other notable above ground features, and the recorded utilities
- Traffic Signal Modification Layout Sheet including overhead signs and pedestrian elements
- Traffic Signalization Detail Sheet with tabulation of quantities, electrical chart, timing table, Loop detectors and/or with RPDD connection diagram, and general notes
- Standard Detail Sheets as may be applicable

#### Deliverables:

- *Preliminary 60% - Three (3) 11"x17" drawings and plan set*
- *Final 100% - One (1) Signed and sealed 11"x17" drawings and plan set*
- *Quantity Listing*
- *Engineer's opinion of probable construction cost*

### Task 4: Bid Phase Services

Kimley-Horn will prepare a project manual/bid document that includes the necessary technical documents and specifications required for bidding. This project manual/bid document will include the construction drawings prepared under Task 2 and 3 and specifications suitable for bidding and construction. Kimley-Horn will prepare the final bid document which will include drawings, specifications, bid tables and supporting documents for bidding purposes.

The services that are considered part of this task could include:

- Assist the City in the development of a Bid Schedule.
- Assist the City in responding to Bidder's questions.
- Attend one meeting with City Staff to review Bid Documents & Schedules.

It is expected that the City will solicit the bids. Kimley-Horn can be available during the bidding process to answer any questions that may arise and will assist the City with bid tabulation. However, selection of bidders is not considered part of this task.

## SCHEDULE

The work identified under Tasks 1 through 4 above is anticipated to be complete within 6 months from receiving notice to proceed. The timeline for completion of these tasks are contingent on City and TxDOT review times.

Times for performance shall be extended as necessary for delays due to circumstances that Kimley-Horn does not control. Kimley-Horn shall not be liable for or be deemed in breach because of delays caused by any factor outside of its reasonable control.

## FEE AND EXPENSES

Kimley-Horn will perform the scope of services under this work authorization as described above for a total lump sum fee of \$69,000.00. All project-related direct expenses are included in these values. The breakdown of fees for each task is detailed below:

Task 1- Topographic Survey:	\$ 11,000.00
Task 2- Turn Lanes & S-median Design Plans	\$ 45,000.00
Task 3- Traffic Signal Modifications:	\$ 8,000.00
Task 4- Bid Phase Services:	\$ 5,000.00
Total Fee	\$ 69,000.00 (Lump Sum)

Lump sum fees will be invoiced monthly upon the percentage of services completed or actual services performed. Payment will be due within 25 days of the date of the invoice.

## ADDITIONAL SERVICES

Any services beyond the Scope of Services described in the tasks above shall be considered additional services. The Consultant can provide these services, if needed, upon the City's issuance of a written Task Order. Any additional amounts paid to the Consultant as a result of the material change to the Scope of the Project shall be agreed upon in writing by both parties before the services are performed.

### **Additional Service #1 – Construction Phase Services (Fee Estimate - \$9,000)**

Construction Phase Services will be performed, if requested by the City. This task will involve the review of shop drawings, submittals and samples, as well as coordination with the Contractor and Client as needed through installation and final observation of the signal installation.

The major construction phase tasks that would be completed by the Consultant under this project are listed below with the scope of services following:

Visits to Site and Observation of Construction. Consultant will provide on-site construction observation services during the construction phase. Visits and observations by Consultant are not intended to be exhaustive or to extend to every aspect of Contractor's work in progress. Observations

are to be limited to spot checking, selective measurement, and similar methods of general observation of the Work based on Consultant's exercise of professional judgment. Based on information obtained during such visits and such observations, Consultant will evaluate whether Contractor's work is generally proceeding in accordance with the Contract Documents, and Consultant will keep Client informed of the general progress of the Work.

The purpose of Consultant's site visits will be to enable Consultant to better carry out the duties and responsibilities specifically assigned in this Agreement to Consultant, and to provide Client a greater degree of confidence that the completed Work will conform in general to the Contract Documents. Consultant shall not, during such visits or as a result of such observations of Contractor's work in progress, supervise, direct, or have control over Contractor's work, nor shall Consultant have authority over or responsibility for the means, methods, techniques, equipment choice and usage, sequences, schedules, or procedures of construction selected by Contractor, for safety precautions and programs incident to Contractor's work, nor for any failure of Contractor to comply with laws and regulations applicable to Contractor's furnishing and performing the Work. Accordingly, Consultant neither guarantees the performance of any Contractor nor assumes responsibility for any Contractor's failure to furnish and perform its work in accordance with the Contract Documents.

- Perform Site Visits and Construction Observations during construction. These shall be limited to twelve (12) visits. It is expected that the City will perform the majority of site inspections.

**Recommendations with Respect to Defective Work.** Consultant will recommend to Client that Contractor's work be disapproved and rejected while it is in progress if, on the basis of such observations, Consultant believes that such work will not produce a completed Project that conforms generally to Contract Documents.

**Clarifications and Interpretations.** Consultant will respond to reasonable and appropriate Contractor requests for information and issue necessary clarifications and interpretations of the Contract Documents to Client as appropriate to the orderly completion of Contractor's work. Any orders authorizing variations from the Contract Documents will be made by Client.

- Provide drawings and other materials to assist the contractor, and respond to questions regarding signal design.

**Change Orders.** Consultant may recommend Change Orders to Client, and will review and make recommendations related to Change Orders submitted or proposed by the Contractor.

- Respond to clarifications and request for information (RFI) by Contractor and issue Change Orders (CO), if needed. RFI's and CO's shall be limited to a total of six (6).

**Shop Drawings and Samples.** Consultant will review and approve or take other appropriate action in respect to Shop Drawings and Samples and other data which Contractor is required to submit, but only for conformance with the information given in the Contract Documents. Such review and approvals or other action will not extend to means, methods, techniques, equipment choice and usage, sequences, schedules, or procedures of construction or to related safety precautions and programs.



- Review shop drawings and sample submittals, layouts, and any other materials submitted by fabricators for approval.

Substitutes and "or-equal." Evaluate and determine the acceptability of substitute or "or-equal" materials and equipment proposed by Contractor in accordance with the Contract Documents, but subject to the provisions of applicable standards of state or local government entities.

Inspections and Tests. Consultant may require special inspections or tests of Contractor's work as Consultant deems appropriate, and may receive and review certificates of inspections within Consultant's area of responsibility or of tests and approvals required by laws and regulations or the Contract Documents. Consultant's review of such certificates will be for the purpose of determining that the results certified indicate compliance with the Contract Documents and will not constitute an independent evaluation that the content or procedures of such inspections, tests, or approvals comply with the requirements of the Contract Documents. Consultant shall be entitled to rely on the results of such tests and the facts being certified.

Disagreements between Client and Contractor. Consultant will, if requested by Client, render written decision on all claims of Client and Contractor relating to the acceptability of Contractor's work or the interpretation of the requirements of the Contract Documents pertaining to the progress of Contractor's work. In rendering such decisions, Consultant shall be fair and not show partiality to Client or Contractor and shall not be liable in connection with any decision rendered in good faith in such capacity.

Applications for Payment. Based on its observations and on review of applications for payment and accompanying supporting documentation, Consultant will provide limited assistance to the City in determining amounts for the Contractor to be paid. This will constitute Consultant's representation to the Client, based on such observations and review, that, to the best of Consultant's knowledge, information and belief, Contractor's work has progressed to the point indicated and that such work-in-progress is generally in accordance with the Contract Documents subject to any qualifications stated otherwise. In the case of unit price work, Consultant's recommendations of payment will include determinations of quantities and classifications of Contractor's work, based on observations and measurements of quantities provided with pay requests.

By recommending any payment, Consultant shall not thereby be deemed to have represented that its observations to check Contractor's work have been exhaustive, extended to every aspect of Contractor's work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Consultant in this Agreement. It will also not impose responsibility on Consultant to make any examination to ascertain how or for what purposes Contractor has used the moneys paid on account of the Contract Price, nor to determine that title to any portion of the work in progress, materials, or equipment has passed to Client free and clear of any liens, claims, security interests, or encumbrances, nor that there may not be other matters at issue between Client and Contractor that might affect the amount that should be paid.



**Substantial Completion.** Consultant will, promptly after notice from Contractor that it considers the entire Work ready for its intended use, in company with Client and Contractor, conduct a site visit to determine if the Work is substantially complete. Work will be considered substantially complete following satisfactory completion of all items with the exception of those identified on a final punch list. If after considering any objections of Client, Consultant considers the Work substantially complete, Consultant will notify Client and Contractor.

- Assist the City's Project Manager in the follow-up for a "punchlist" for completion of the project.

**Final Notice of Acceptability of the Work.** Consultant will conduct a final site visit to determine if the completed Work of Contractor is generally in accordance with the Contract Documents and the final punch list so that Consultant may recommend, in writing, final payment to Contractor. Accompanying the recommendation for final payment, Consultant shall also provide a notice that the Work is generally in accordance with the Contract Documents to the best of Consultant's knowledge, information, and belief based on the extent of its services and based upon information provided to Consultant upon which it is entitled to rely.

- Perform one (1) Final Completion walk-through.
- Prepare record drawing of the traffic signal layout based on Contractor redlines.

**Limitation of Responsibilities.** Consultant shall not be responsible for the acts or omissions of any Contractor, or of any of their subcontractors, suppliers, or of any other individual or entity performing or furnishing the Work. Consultant shall not have the authority or responsibility to stop the work of any Contractor.

Providing assistance during signal turn-on and/or preparation of traffic signal timing plans are not part of the Construction Phase Services, but can be performed as additional services.