

October 13, 2016

Ms. Candace Blalock  
Project Manager  
500 W. Walker St.  
League City, Texas 77573

Re: Proposal for N. Kansas Avenue Reconstruction Project  
City of League City, Galveston County, Texas

Dear Ms. Blalock:

We appreciate the opportunity to present this proposal (Exhibit "A") for the Civil-Engineering and Land-Surveying services in connection with the N. Kansas Avenue Project for League City.

## **PROJECT UNDERSTANDING**

The City of League City (the CITY) desires to reconstruct N. Kansas Avenue from 4<sup>th</sup> Street to Clear Creek due to the ongoing project for the Dallas Salmon Outfall Relocation project. A portion of N. Kansas Avenue will be affected for the installation of the 84" pipe. The CITY requested that N. Kansas Avenue, which was in the 2012 CIP Program, be reconstructed from 4<sup>th</sup> Street to Clear Creek. The limits of the roadway may change if additional funding is secured.

Based on our understanding of your project, the review and approval process, and the site characteristics, we prepared the following scope of services and fee proposal for your consideration.

## **SCOPE OF SERVICES**

### **I. Basic Services**

#### **A. Preliminary Engineering Phase**

##### **i. Preliminary Design**

1. Consult with CITY to define and clarify the CITY's requirements for the Project and available data not identified within the Capital Improvement Plan (CIP) or other planning material.
2. Identify, consult with, and analyze requirements of governmental and private authorities having jurisdiction to approve the portions of the Project designed or specified by the ENGINEER.
3. Attend a Preliminary meeting with CITY and CITY's consultants, designated boards commissions, and/or city council to receive input into CITY's requirements for the Project and evaluate potential solutions available to CITY. This is estimated as a maximum of two (2) meetings at the CITY's location.

4. Perform or provide the following Preliminary Engineering Phase tasks or deliverables:

ENGINEER will evaluate the roadway and drainage and provide a letter report that includes the costs and conceptual typical sections for the project. It is our understanding that the proposed reconstruction will be within existing right-of-way, so no property acquisition services are deemed necessary at this time and are not included in this proposal. Typical Sections will not include any sidewalk or trail amenities.

ENGINEER will visit the proposed alignment of the roadway to identify visible utilities, request and review dry utility maps, review available CITY construction documents for existing public utilities facilities, coordinate and add information provided by the "one-call" systems, communicate with other public agencies regarding planned infrastructure improvements that may conflict with the location of the proposed outfall, and determine if any sub-surface explorations are deemed necessary. ENGINEER will discuss the project with the CITY; arrange and coordinate surveys, arrange and coordinate sub-consultant services, conduct site investigations, and review existing plans as required. ENGINEER will prepare preliminary drawings showing the horizontal and vertical alignments and recommended typical section of the proposed facility along with preliminary construction costs. ENGINEER will also make recommendations to the CITY for any easements that may need to be acquired to construct this project. ENGINEER will include this information in the *letter report* documenting the roadway recommendations.

**B. Design Phase**

After completion of the Preliminary Engineering Report Phase, and when authorized by the CITY, ENGINEER will prepare the following Design Phase tasks or Deliverables:

ENGINEER will utilize data collected from Sub-Consultants, determine product material options, accessibility, constructability, the impact of construction on the project area, and any potential conflicts with the proposed construction. ENGINEER will prepare contract drawings and specifications for the proposed work at 30%, 70%, and 90% completion milestones. ENGINEER will make submissions for necessary approvals from applicable federal, state, and local agencies with the 90% construction set and provide a summary of comments and responses. ENGINEER will finalize plans and specifications and provide an updated cost estimate. ENGINEER will also prepare the necessary bidding documents.

**C. Construction Phase**

After completion of Design Phase, and when authorized by the CITY, ENGINEER will assist the CITY in securing and analyzing bids, and recommend award of construction contracts. ENGINEER will consult with the CITY during construction to respond to contractor's Request for Information, review shop drawings, review material and equipment tests, and review Contractor's monthly pay estimates. Upon final project completion, the ENGINEER will prepare Record Drawings using red-lined drawings received from the Contractor.

## **II. Additional Services**

### **A. Drainage Analysis and Report**

The Historic District Drainage Study by LAN, Inc., dated November 2013, prepared for the City of League City described a detailed evaluation of the drainage in the Historic District and proposed drainage improvements to meet City standards. The analysis of the drainage system was performed using InfoWorks ICM 2-dimensional models. Since the LAN Study was completed, there have been changes to the proposed improvement project along N. Kansas Avenue and the effective FEMA study for Clear Creek that require updates to the storm water models.

ENGINEER will provide services including:

1. Obtain the InfoWorks ICM 2-dimensional storm water models for the existing and proposed conditions and validate the results.
2. Analyze the tailwater conditions using the latest FEMA study of Clear Creek. The 2-year and 25-year water surface elevations of Clear Creek were used as the tailwater conditions for the InfoWorks model. Since those elevations have changed since the LAN Study was completed, we will run the models with the latest tailwater elevations from the FEMA study and evaluate the results.
3. Adjust the proposed models based on the revised project. The revised proposed project will extend the storm sewer along N. Kansas Avenue to Clear Creek instead of ending at the existing stream near 7<sup>th</sup> Street. The storm sewer will also capture flow from 7<sup>th</sup> Street due to a conflict with the existing stream east of Kansas Ave and the proposed wastewater treatment plant effluent pipe.
4. Evaluate Phasing of the proposed improvements. Phase 1 of the drainage improvements will now consist of constructing the box culvert from 7<sup>th</sup> Street to Clear Creek and the wastewater treatment plant effluent pipe. Phase 2 of the project will consist of storm sewer from 7<sup>th</sup> Street to 4<sup>th</sup> Street. Other phases as described in the original LAN Study will be included in the revised model but will not be evaluated for their effectiveness.
5. The scope does not include a re-evaluation of the other phases of the project that may be impacted by the extension of the storm sewer and capturing additional flow into the system at 7<sup>th</sup> Street.
6. The revised models will be completed for the City of League City and will not be submitted to any other regulatory entity for review or approval.

### **B. Topographic Survey**

ENGINEER will perform an on-the-ground topographic survey to establish existing ground elevations and locate visible improvements within a 60-foot wide corridor along the 2,500-foot existing N. Kansas Avenue alignment. Using the survey data, we will prepare a topographic map

of the route showing elevation contours at one-foot intervals. A tree survey will be performed identifying all 4" or larger caliper trees along the route. We propose to work alongside the City's Arborist in performing the tree survey. It is intended that this work will be completed at the same time field crews are collecting other topographic data.

### **C. Public Meetings**

ENGINEER will provide services including but not limited to attending the public meeting, preparing meeting exhibits, documents, and presentations. The CITY will be responsible for determining the meeting venue, audio/visual display equipment, determining the date(s) and advertising the public meeting.

#### **1. Initial Public Meeting**

An initial public meeting will be held with the residents of the roadway project to describe the project and collect resident input.

#### **2. Existing Conditions Stakeholder Meeting**

A stakeholder meeting will be held with select residents within the limits of the roadway project, to be identified by the CITY, following the existing data collection and development of conceptual typical sections. The meeting will provide the stakeholders and opportunity to develop the roadway cross-section to keep the historic district unique style.

#### **3. Initial Improvement Concepts Public Meeting**

A public meeting will be held with the residents within the roadway project limits following the development of the conceptual typical section and roadway layout. This meeting will convey the potential improvement alternatives and allow for public input on the concept.

### **D. Geotechnical Services**

Terracon Consultants, Inc. will prepare a geotechnical engineering report to be utilized for engineering design of the proposed alignment. Please see the attached proposal from Terracon Inc. dated 10/3/2016 for a detailed breakdown of the scope of services provided.

### **E. Environmental Services**

Terracon Consultants, Inc. will prepare an Environmental Site Assessment Phase 1 report to be utilized for engineering design of the proposed alignment. Please see the attached proposal from Terracon Inc. dated 10/3/2016 for a detailed breakdown of the scope of services provided.

EcoLogic, Inc. will provide the Cultural Resources Evaluation services for the project. Please see the attached proposal from EcoLogic, Inc. dated 10/4/2016 for a detailed breakdown of the scope of services provided.

### **F. Urban Forestry Consultation**

C.N. Koehl Urban Forestry, Inc. will provide the following urban forestry consultation services for the project:

- 1) Preliminary Tree Inventory/Site Visit
- 2) Preliminary Tree Preservation Plan
- 3) Final Tree Preservation Plan and Specifications

Please see the attached proposal from C.N. Koehl Urban Forestry, Inc. dated 10/3/2016 for a detailed breakdown of the scope of services provided.

#### **G. Reimbursable Expenses**

ENGINEER will provide drawings, exhibits, charts, graphs, etc. as necessary for all of the above listed Engineering Services.

#### **PROPOSED FEE**

We propose to accomplish the Services described herein in accordance with the City's standard *Professional Services Agreement (PSA)*. Our Schedule of Hourly Rates is enclosed as Exhibit "C", our Schedule of Reimbursable Expenses is enclosed as Exhibit "D"; and a summary of our proposed fee Exhibit "E" along with a proposed schedule for completion.

#### **SPECIAL CONSIDERATIONS**

This proposal is based on the following special considerations:

1. JC shall perform the above scope based on easement acquisition prior to construction. It is not anticipated at this time that the City will need any easements, but if easements are necessary JC will coordinate this work on behalf of the City based on terms outside of this proposal.
2. JC shall coordinate design efforts on the project through our Bellaire office and shall work closely with the Client and other consultants to prepare plans appropriate for construction of the proposed work.
3. Any review or permit fees associated with the project shall be paid by the Client, or if paid by JC, shall be considered as a reimbursable expense not included in any lump sum or not-to-exceed fees proposed.
4. Hourly Services shall be provided in accordance with the enclosed Schedule of Hourly Rates.
5. This proposal shall be subject to the enclosed Professional Services Agreement to be executed by both parties.
6. The City is sales tax exempt.
7. The proposed fees shall be considered in their entirety for the scope of services. Should you wish to contract with us for only a portion of the work, we reserve the right to negotiate individual scope items on their own merits.

8. This proposal shall be valid for sixty days from this date and may be extended upon approval by this office.

We thank you for the opportunity to submit this proposal and look forward to working with you again. An executed copy of this proposal and the enclosed Professional Services Agreement will serve as our notice to proceed. Please return of one copy to our office. Should you have any questions, please call.

Sincerely,



B. Andrea Cheng Ranft, P.E.  
Transportation Division Manager



James C. Jones, P.E.  
Vice President

BACR/dch  
Enclosure(s)

**APPROVED BY:**

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name and Title (Printed)

\_\_\_\_\_  
Date

V:\Opportunity Documents\OP001-0304-00 North Kansas Avenue Street Reconstruction (from 4th Street to Clear Creek)\Proposal-League City  
Kansas St\_20161003.docx

# EXHIBIT "B"

## Preliminary Opinion of Cost for

N. Kansas Avenue Trunk Line and Roadway Reconstruction (4th Street to Clear Creek)

### CITY OF LEAGUE CITY

October 5, 2016

<u>Description</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Quantity</u>	<u>Total Cost</u>
PREPARING ROW	AC	\$ 5,000.00	3.54	\$ 17,676.77
REMOVING STAB BASE AND ASPH PAV (6")	SY	\$ 4.00	5,378	\$ 21,511.11
EXCAVATION (ROADWAY)	CY	\$ 8.00	6,233	\$ 49,860.00
EMBANKMENT (FINAL) (ORD COMP) (TY C)	CY	\$ 16.00	1,575	\$ 25,200.00
FL BS (CMP IN PLC)(TY A GR 1)(6")	SY	\$ 20.00	7,300	\$ 146,000.00
LIME	TON	\$ 165.00	90	\$ 14,850.00
LIME STABILIZED SUB BASE	SY	\$ 4.00	7,300	\$ 29,200.00
D-GR HMA TY-D SAC-A PG76-22	TON	\$ 80.00	550	\$ 44,000.00
D-GR HMA TY-D SAC-A PG76-22 (LEVEL-UP)	TON	\$ 80.00	550	\$ 44,000.00
CONC BOX CULV (10 FT X 6 FT)*	LF	\$ 550.00	1,570	\$ 863,500.00
RC PIPE (CL III)(24 IN)	LF	\$ 60.00	79	\$ 4,725.00
RC PIPE (CL III)(36 IN)	LF	\$ 90.00	217	\$ 19,507.50
RC PIPE (CL III)(48 IN)	LF	\$ 150.00	45	\$ 6,750.00
INLET	EA	\$ 4,000.00	15	\$ 60,000.00
SET (TY II) (24 IN) (RCP) (4: 1)	EA	\$ 1,200.00	8	\$ 9,600.00
SET (TY II) (36 IN) (RCP) (4: 1)	EA	\$ 2,400.00	8	\$ 19,200.00
SET (TY II) (48 IN) (RCP) (4: 1)	EA	\$ 5,400.00	8	\$ 43,200.00
BARRICADES SIGNS AND TRAFFIC HANDLING	MO	\$ 3,773.55	6	\$ 22,641.30
INTERSECTIONS (ACP)	EA	\$ 2,100.00	3	\$ 6,300.00
DRIVEWAYS (ACP)	EA	\$ 1,169.00	20	\$ 23,380.00
<b>SUBTOTAL</b>				<b>\$ 1,471,101.68</b>
EROSION CONTROL & LANDSCAPING	%		3	\$ 44,133.05
SIGNING/STRIPING	%		2	\$ 29,422.03
Water Line Adjustment	EA		1	\$ 100,000.00
Sanitary Sewer Adjustment	EA		1	\$ 100,000.00
<b>TOTAL</b>				<b>\$ 1,744,656.76</b>
CONTINGENCY	%		25	\$ 436,164.19
<b>GRAND TOTAL</b>	<b>indu</b>			<b>\$ 2,180,820.95</b>

#### Notes:

This estimate represents my best judgement as a design professional familiar with the construction industry. Jones & Carter, Inc. has no control over the cost of labor, materials, or equipment; over the Contractor's methods of determining bid prices; or over competitive bidding or market conditions. Accordingly, we cannot and do not guarantee that bids will not vary from this cost estimate.

\* Storm Sewer ties into box culverts installed in Dallas Salmon WWTP project. This quantity does not include the WWTP box culvert.

This Document is Released for the Purpose of:

**General Financial Planning**

Under the Authority of:

Engineer: B. Andrea Cheng Ranft, P.E.

License No: 86219

It is Preliminary in Nature and not to be Used for Feasibility of Land Purchases, Bond Applications, Loans or Grants.



# EXHIBIT "C"

## JONES | CARTER

### SCHEDULE OF HOURLY RATES

Effective January 2016 - Subject to Annual Revision in January 2017

#### ENGINEERING PERSONNEL

Engineer I	\$ 86
Engineer II	\$ 92
Engineer III	\$104
Engineer IV	\$110
Engineer V	\$120
Engineer VI	\$135
Engineer VII	\$155
Sr. Project Engineer	\$170
Sr. Project Manager	\$190
Division Manager	\$200
Senior Manager/Practice Leader	\$225
Corporate Manager	\$250

#### ELECTRICAL ENGINEERING PERSONNEL

Electrical Engineer I	\$ 90
Electrical Engineer II	\$100
Electrical Engineer III	\$110
Electrical Engineer IV	\$120
Electrical Engineer V	\$130
Electrical Engineer VI	\$135
Electrical Engineer VII	\$155
Sr. Electrical Project Engineer	\$170
Sr. Electrical Project Manager	\$190

#### CONSTRUCTION PERSONNEL (Includes

Project Representative I	\$ 53
Project Representative II	\$ 60
Project Representative III	\$ 70
Project Representative IV	\$ 80
Project Representative Coordinator	\$ 85
Construction Engineer I	\$ 84
Construction Engineer II	\$ 89
Construction Engineer III	\$100
Construction Engineer IV	\$110
Construction Engineer V	\$120
Construction Engineer VI	\$135
Construction Manager	\$170

#### OFFICE PERSONNEL

Office Assistant	\$ 35
Engineer's Assistant I	\$ 45
Engineer's Assistant II	\$ 60
Engineer's Assistant III	\$ 75
Admin I	\$ 40
Admin II	\$ 50
Admin III	\$ 60
Admin IV	\$ 73
Contract Coordinator	\$ 60
Staff Assistant	\$ 80
Assistant Controller/ Chief Accountant	\$100
Corporate/Project Acct. I	\$ 70
Corporate/Project Acct. II	\$ 85

#### SURVEYING PERSONNEL

4-Man Field Crew	\$155
3-Man Field Crew	\$145
2-Man Field Crew	\$125
4-Man Field Crew w/Robotic Survey	\$180
3-Man Field Crew w/Robotic Survey	\$170
2-Man Field Crew w/Robotic Survey	\$150
1-Man Field Crew w/Robotic Survey	\$125
4-Man Field Crew w/GPS System	\$210
3-Man Field Crew w/GPS System	\$200
2-Man Field Crew w/GPS System	\$170
1-Man Field Crew w/GPS System	\$150
Survey Technician I	\$ 55
Survey Technician II	\$ 70
Survey Technician III	\$ 90
Project Surveyor I	\$ 67
Project Surveyor II	\$ 80
Project Surveyor III	\$ 92
Project Surveyor IV	\$108
Chief of Survey Crews	\$ 98
Registered Prof. Land Surveyor	\$135
Survey Manager	\$150

#### DESIGNERS/DRAFTING PERSONNEL

CAD Operator I	\$ 43
CAD Operator II	\$ 50
CAD Operator III	\$ 60
CAD Operator IV	\$ 70
CAD Operator V	\$ 84
CAD Manager	\$ 92
Designer I	\$ 84
Designer II	\$ 94
Designer III	\$100
Designer IV	\$108
Designer V	\$115
Designer VI	\$130
GIS Operator I	\$ 65
GIS Operator II	\$ 80
GIS Operator III	\$ 90
GIS Operator IV	\$105
GIS Operator V	\$120
Computer Tech	\$ 60
Computer Manager	\$100

#### PLANNING PERSONNEL

Planner I	\$ 70
Planner II	\$ 85
Planner III	\$100
Planner IV	\$120
Planner V	\$150

# EXHIBIT "D"

## PROPOSED FEE

Our estimate of the N. Kansas Avenue reconstruction cost is \$ **2,180,820.95**. The following is a breakdown of JC's fees based on this preliminary estimated construction cost. This fee will not be adjusted should actual construction cost come in higher, or lower than estimated but will be adjusted if a different alternative is selected.

### A. BASIC SERVICES:

JC will perform the following BASIC services on a LUMP SUM basis:

<u>TASK</u>	<u>ENGINEERING FEE</u>
Preliminary Engineering Phase (35%)	\$ 70,000
Design Phase (50%)	\$ 104,000
Construction Phase Services (15%)	\$ 25,000
<b>TOTAL ESTIMATED BASIC SERVICES FEE SHALL NOT EXCEED</b>	<b>\$ 199,000</b>

### B. ADDITIONAL SERVICES:

JC will perform the following ADDITIONAL SERVICES on a LUMP SUM or HOURLY or COST + 10% basis:

<u>TASK</u>	<u>ESTIMATED FEE</u>
<u>Additional Services (Lump Sum)</u>	
<u>Drainage Analysis and Report</u>	\$ 50,000
Total Lump Sum Services	\$ 50,000
<u>Additional Services (Hourly)</u>	
Topographic Survey and Tree Survey	\$ 7,500
Public Meetings and Project Coordination	\$ 20,000
<u>Storm Water Pollution Prevention Plan</u>	\$ 3,000
Total Hourly Services	\$ 30,500
<u>Estimated Sub-Consultant Fees (Cost +10%):</u>	
Geotechnical Engineering Report (Terracon Consultants, Inc.)	\$ 5,170
Environmental Phase I Report (Terracon Consultants, Inc.)	\$ 3,135
Environmental Services (EcoLogic, Inc.)	\$ 5,500
<u>Urban Forestry Consultation (C.N. Koehl Urban Forestry, Inc.)</u>	<u>\$ 6,589</u>
Total Sub-Consultant Costs	\$ 20,394



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**TOTAL ESTIMATED ADDITIONAL SERVICES FEE SHALL NOT EXCEED      \$100,894**

**TOTAL ESTIMATED PROJECT FEE SHALL NOT EXCEED      \$299,894**

**PROPOSED SCHEDULE**

The proposed schedule is based on days from receipt of the notice to proceed with work.

	<u>Start Day</u>	<u>Duration</u>	<u>End Day</u>
Notice to Proceed	0	1	1
Survey	1	10	11
Data Collection	5	10	15
Drainage Report (Draft)	11	60	71
Preliminary Design	71	30	101
Concept Public Meeting	101	5	106
Design	106	90	196
Reviews	196	30	226
Revisions & Drafting	226	30	256
Approvals:	256	45	301
City Approval			
County & Private Entities			
Advertise & Bid	301	30	331
Award & Prepare Contracts	332	45	377
Construction	387	180	567