AMENDMENT NO. 2 AGREEMENT FOR PROFFESIONAL SERVICES

This is an amendment, AMENDMENT NO. 2, attached to and made a part of the AGREEMENT, dated November 13, 2012, between the Norman Tax Increment Finance Authority (OWNER) and Garver, LLC (CONSULTANT) for professional engineering services as necessary to conduct a feasibility study of possible improvements to the west side of the I-35 at Robinson Street Interchange (the Project).

WHEREAS, the Owner has determined the need for widening W. Robinson Street from the west end of the I-35 overpass to the east end of bridge over the Brook Creek and improvements to the SB On-ramp from W. Robinson Street per the previous feasibility study,

WHEREAS, all provisions of Contract No. K-1213-50 not in conflict with this amendment shall hereinafter remain in full force and effect,

WHEREAS, Engineer is prepared to provide additional services in support of the project;

NOW THEREFORE, in consideration of the promises contained in said AGREEMENT and this AMENDMENT NO. 2, Owner and Consultant agree as follows:

ARTICLE 3 - SCOPE OF SERVICES

CONSULTANT shall provide the additional services described in Attachment A, Scope of Services.

ARTICLE 4 - SCHEDULE

CONSULTANT shall exercise its reasonable efforts to perform the additional services described in Attachment A according to the Schedule set forth in Attachment B.

ARTICLE 5 – COMPENSATION

OWNER shall pay CONSULTANT <u>Three Hundred Ninety FourThousand Two Hundred and Twenty-five Dollars (\$394,225)</u> for additional services in accordance with Attachment C, Compensation. Invoices shall be due and payable upon receipt. OWNER shall give prompt written notice of any disputed amount and shall pay the remaining amount.

ARTICLE 6 – OWNER'S RESPONSIBILITIES

OWNER shall be responsible for all matters described in Attachment D, OWNER'S Responsibilities.

DATED thisth day of, 201	6.	
The Norman Tax Increment Finance Authority (OWNER)		Garver, LLC (CONSULTANT)
Signature		Signature Synnyalmer
Name		Name Glynn Fylmer
Title		Title Vice President
Date		Date 12-22-16
Attest:		Attest:
		their Zi
Secretary		3
Approved as to form and legality this	_day of	2016.
City Attorney	2	

IN WITNESS WHEREOF, OWNER and Garver, LLC have executed this Amendment No. 2.

ATTACHMENT A – SCOPE OF SERVICES

1. General

The Norman Tax Increment Finance Authority would like to amend the current *I-35 at Robinson Street Interchange Study* (March 2014) to include widening of W. Robinson Street, relocation of N. Interstate Drive, Ramp improvements to the I-35 SB On-Ramp, and signalization upgrades to W. Robinson Street at Rambling Oaks Drive/Crossroads Boulevard and at the relocated N. Interstate Drive. Garver will determine the turn bay lengths at the two intersections based on the *University North Park TIA Validation Study* (August 2015), prepare design plans, develop project specifications and bid package, and provide technical assistance throughout the construction. Generally, the scope of services consists of coordinating with the city and ODOT; preliminary analysis to determine turn bay lengths; an Access Justification Report (AJR); construction plans, and construction assistance.

The limits of the project are along W. Robinson Street from west end of the I-35 overpass to the east end of bridge over the Brook Creek, the SB On-ramp from W. Robinson Street to to the SB Off-ramp to Main Street and N. Interstate Drive north of Robinson Street to accommodate the relocation of the intersection. Some improvements to N. Interstate Drive south of Robinson may also be needed within the limits of the SB On-ramp improvements. Roadway and lighting improvements will be designed and constructed throughout the limits of the project.

Specific tasks will consist primarily of the following:

2. Preliminary Analysis

For the preliminary analysis, Garver will determine the turn bay lengths needed at the W. Robinson Street at Rambling Oaks Drive/Crossroads Boulevard and at the relocated N. Interstate Drive using the *University North Park TIA Validation Study*. The findings will be reported in a one-page summary.

2.1. Kick-Off Meeting

Immediately after receipt of a formal Notice to Proceed, we will request a kick-off meeting with the City of Norman to clearly define the project goals and reporting procedures, establish expectations and priorities, decide the needed level of involvement from other stakeholders (ODOT, FHWA, and adjacent property owners), and discuss the project schedule and submittal dates.

2.2. Site Visit/Field Observations

Garver will conduct a site visit, which can occur on the same day as the kick-off meeting. This visit will be coordinated with the city so that key issues such as location of the controller and power source can be determined. Some of the items noted during the site visit will include lane configurations, speed limits, signal phasing, and pedestrian facilities. Additionally, we will field verify that the previous conceptual plans.

2.3. GIS Information

Garver will collect information from the city's GIS model. This information will include parcel information, utilities, zoning, and existing buildings to get an idea of the potential impact of the proposed improvement alternatives.

2.4. Geometric Analysis

The length of all proposed turn lanes will be in accordance with ODOT criteria for auxiliary lanes and in conjunction with the results of the capacity analysis. The projected storage needed will be presented to the city for final approval.

2.5. Operational Analysis

Using the updated turn bay lengths, Garver will verify signal phasing to produce optimum operating conditions. Vehicle and pedestrian clearance intervals for the proposed configuration will be calculated.

2.6. Documentation

Documentation will consist of a one-page summary report noting any changes to turn bay lengths from the previous functional plans submitted in 2013. Once approval of the written analysis is received, we will be design.

3. Access Justification Report (AJR)

Garver will prepare an AJR to meet the needs of ODOT and the FHWA. The report will summarize the results of the no build and recommended build alternative along I-35 using results from the original *I-35 at Robinson Interchange Study* as well as data from the updated companion study, *University North Park TIA Validation Study*. In requirement with AJR regulations, supplemental data will be collected and analyzed at the adjacent Tecumseh Street and Main Street interchanges. The AJR will discuss the options considered and address the eight FHWA policy points mentioned in ODOT's AJR guidelines.

3.1. Traffic Data Development (Supplemental Study Area)

The City of Norman will provide the traffic counts for the Main Street ramp intersections. The I-35 data (from the current I-35 study) will be provided by the City. Garver will merge this information into previously developed volumes used during the preliminary analysis.

3.2. Field Observations and Inventory (Supplemental Study Area)

Garver will make field observations to gain an understanding of peak traffic characteristics and to quantify the extent/duration of vehicle delay and queuing for the supplemental study area of the adjacent interchanges. These observations will assist in producing an existing condition operational analysis in later tasks. Garver will also

inventory all pertinent roadway features such as traffic control devices, lane widths, intersection configurations, and acceleration/deceleration lengths of ramps.

3.3. Assess Historic Crash Data

Garver will analyze historic crash data at the adjacent interchanges and at Robinson Street ramps with I-35 and request new data at the Robinson Street ramps with I-35 and intersections. Crash diagrams will be produced to identify sensitive locations and crash patterns at the study interchange and compare the accident and injury rates to similar facilities within the state to determine any existing safety issues.

3.4. Capacity Analysis (Supplemental Study Area)

Garver will use the design traffic volumes and the observations made in the field to develop an assessment of the existing operational conditions at the two adjacent interchanges and update any mainline analysis relative to the I-35 mainline at the Robinson Street interchange. This will include freeway mainline, freeway ramp, and intersection capacity analysis using *Highway Capacity Manual (HCM)* methodology. The *Simtraffic* simulation package will be used to demonstrate the impact of short turn lanes and intersection spacing at the ramp intersections. The same method of analysis will be applied for 2040 conditions.

This AJR scope of work does not include freeway simulation for the corridor using *CORSIM* or *VISSIM*.

3.5. Produce AJR Documentation

With data and analysis for the supplemental study area and from the preliminary analysis, Garver will produce the AJR for the interchange. This will require analyzing the eight FHWA policy criteria and coordinating with stakeholders. The results will be documented in a written report complete with tables and graphics.

3.6. Summarize Prior Analysis

Garver will describe the existing and no build conditions at the Robinson Street interchange and describe the many options considered with focus on the selected alternative. Operational and safety benefits of the selected alternative will be explained and tables/graphics from the prior study will be summarized to support this option. A conceptual guide sign plan for the interchange will also be produced per AJR guidelines.

Transportation System Management (TSM) options, such as mass transit, ramp metering, and improvements to the side streets in lieu of modified access, will be considered only on a conceptual basis. Additionally, an option to justify the existence of the Robinson Street interchange via analyzing the expected traffic conditions if the Robinson Street interchange were closed is not requested by the City or ODOT and will only be considered on a conceptual basis.

3.7. Summarize Supplemental Study Area Analysis Results

The results of the prior tasks to study the adjacent interchanges at Main Street and Tecumseh Road will be integrated into the text, tables, and graphics when referring to the capacity and safety analysis for the Robinson Street interchange.

3.8. <u>Determine if Revised Interstate Access Options Meet FHWA Requirements</u>

Garver will apply the eight FHWA requirement criteria for revised interstate access to the proposed single "build" alternative. Garver's understanding of how the criteria apply to this project is as follows:

- 1. Existing Facilities Garver will demonstrate, on a conceptual basis only, how the revised access point is needed for regional traffic needs and cannot be adequately satisfied by other interchanges to the interstate.
- 2. Transportation System Management Garver will demonstrate, on a conceptual basis only, how improvements to the existing interchange beyond the proposed configuration are not possible to meet the stated purpose and need in lieu of revising access.
- 3. Operational Analysis Garver will discuss the operational analysis of the preferred "build" alternative and provide a comparison of how this alternative performs relative to the "no build" condition. In addition, the proposed geometric design features will be evaluated to determine if safety will be enhanced or diminished by the proposed option.
- 4. Access Connections and Design The proposed access will be located on a public road and offer full access thus, meeting this criterion is not expected to be problematic.
- 5. Transportation Land Use Plans Garver will coordinate with the City, ACOG, and ODOT to ensure that the project is consistent with the transportation planning activities for the area.
- 6. Comprehensive Interstate Network Study The AJR will discuss the on-going I-35 network study and describe how the proposed interchange at Robinson Street supports the goals of this on-going study.
- 7. Coordination with Transportation System Improvements The AJR will discuss the development potential and impact of the land surrounding the proposed Robinson Street interchange and describe how this project will coordinate with that potential development.
- 8. NEPA Processes Garver will confirm and report information relative to the status of NEPA processes, with regard to the access request (e.g., anticipated schedule dates, public hearing dates, public support or opposition, recent activities, future activities).

3.9. Coordination with Stakeholders

Garver will submit review plans to ODOT for distribution to FHWA Division Office and other stakeholders such as ACOG, Oklahoma County, Logan County, and the City of Edmond. Stakeholders will be invited to plan review meetings. At the Preliminary Plan Review Meeting, preliminary information regarding the AJR will be presented and the study area and scope of the project, the purpose and need of the project, performance objectives and measures, and technical analysis requirements, tools, and data collection plans will be addressed.

3.10. Submit ARJ

Garver will submit a draft AJR for review and then meet with ODOT and FHWA to discuss comments. Garver will then revise the AJR and submit to ODOT who will submit to FHWA for concept approval. Final approval will not be possible until after the NEPA process.

3.11. <u>Coordination and NEPA Support for Final Approval</u>

Garver will provide coordination, supplemental information, and review of any technical data needed for NEPA approval in order to get a final access approval from FHWA. Garver will prepare the NEPA document for the interchange under a separate contract.

4. Topographic Survey

A 27.0± acre tract of land lying west of the intersection of W. Robinson Street and Interstate 35 overpass as delineated on the attached Exhibit A. Said area being a part of Sections 23 & 26, Township 9 North, Range 3 West of the Indian Meridian (referred to herein as Project Area).

A Topographic Survey will depict existing above-ground features and marked underground utilities. The survey limits will extend from 15 feet outside of right-of-way on both sides of Robinson Street, beginning approximately at the east end of the bridge over Brookhaven Creek and extending approximately 2,000 feet east to the west end of the Interstate 35 overpass. The survey limits will extend an additional 100 feet minimum along each cross street and will include a portion of Interstate Drive and Interstate 35. The survey limits along Interstate Drive will extend from the existing sidewalk on the west to the east edge of the western most lane of the southbound portion of Interstate 35, beginning at the intersection of Robinson Street and the Interstate 35 overpass and extending approximately 4,200 feet south to the beginning of the Main Street off ramp. (See "Exhibit A" of the SURVEY SCOPE OF WORK.) The scope of services for topographic survey is provided as the attached SURVEY SCOPE OF WORK provided by Durham Surveying, Inc. note that Right of Way Acquisition Documents are not included but can be provided at the fee shown per parcel. During the research of these records, utility easements and landowners adjacent to the right-of-way will be identified and noted. The survey fee Includes subcontracting with a title company to provide existing plats, parcel deeds and any easements within the Project Area.

At the direction of the city's project manager, additional survey may be required for ROW

acquisition services.

5. Geotechnical Exploration, Testing, and Reporting

Geotechnical investigation, testing, and reporting will be in accordance with the "State of Oklahoma Department of Transportation Geotechnical Specifications for Roadway Design" (June 29, 2011) except as specifically indicated otherwise in the attached GEOTECHNICAL SCOPE OF WORK provided by Terracon. The scope of services for geotechnical investigation, testing, and reporting is provided as the attached GEOTECHNICAL SCOPE OF WORK provided by Terracon.

6. Right-of-Way Maps and Easements

Right-of-way plans will be prepared depicting the existing street centerlines and right-of-way lines, existing utility easements, and existing parcel lines of properties within the project limits. Proposed right-of-way lines will be included based upon information provided by the engineer.

Since the number of properties impacted by the project is not known at this time, our scope of services does not include the preparation of land acquisition documents consisting of legal descriptions and graphic exhibits for each of the proposed easement/right-of-way takes. This service can be added at a later date, if needed.

At the direction of the city's project manager, legal descriptions with exhibits for proposed right of way acquisition for up to ten parcels may be requested as additional services.

7. Coordination with Utilities

Prior to field surveys, our team will notify the "Call Okie" service to mark their utility lines. Additionally, we will request atlases from all of the known utility companies in the vicinity of the project. The field locates will be checked against the atlases to confirm that all known utilities will be picked up by the survey. These utilities as well as other visible utilities such as overhead power lines will be shown on the plans. As the plans are being developed, we will check for potential conflicts. When possible, we will design the proposed improvements around the utilities.

Garver will furnish plans to all known utility owners potentially affected by the project at each stage of development. Garver will attend coordination meetings among all known affected utility owners and facilitate the coordination efforts for any necessary utility relocation. Garver will include the surveyed locations of the observable and marked utilities in the construction plans. A composite utility drawing will be developed after the all utility relocations have been agreed upon. Garver will also include proposed and/or relocated utility information in the construction plans as provided by the utility companies.

Since the impact to City owned utilities by the project is not known at this time, our scope of services does not include the preparation utility relocation plans or relocation assistance. This service can be added at a later date, if needed.

Garver attend meetings and provide meeting minutes.

8. Lighting Design

Garver will utilize an LED light fixture previously used by the city to perform a lighting design for the improved areas of W. Robinson Street and N. Interstate Drive. Design will be conducted to Illuminating Engineering Society (IES) recommended light levels and uniformities, as well as city lighting requirements. Lighting performance will be modeled along the street using an industry accepted lighting modeling and analysis program. In addition, Garver will coordinate with the city to select a light pole to complement the aesthetic appearance desired for the area.

Design will include lighting the ramps necessary to connect to I-35, but will not include any modifications to I-35 lighting between the Robinson St. on ramp and the Main St. off ramp.

9. Construction Plans

The design and preparation of construction plans will include roadway modifications, drainage improvements, signalization, and roadway lighting. The roadway modifications will consist of provisions for widening W. Robinson Street and improvements to N. Interstate Drive per the attached functional plans with concrete pavement or asphalt in the widened/relocated roadway, demolition plans, permanent striping, a traffic control plan, and sidewalk/ramp improvements to accommodate crosswalks on all approaches. Impacted drainage inlets will be relocated along the new curb lines. For purposes of the scope of this project and the fee associated, storm sewer design will not include improvements to the downstream storm sewer network or hydraulic analysis of the bridge crossing at the beginning of the job. Should this be necessary it can be added at a later date. A drainage report will not be included. The traffic signal plan will consist of audible pedestrian signals, phasing diagram, wiring diagram, relocation of fiber optic interconnect, and street name sign details. The roadway lighting plans will extend through the limits of the project. This will include electric utility coordination, power distribution design, lighting design, and details. A Storm Water Pollution Prevention Plan will be included. The overhead signing will include be located on the west approach of the bridge with lane usage signing for the westbound direction prior to N. Interstate Drive. It is anticipated that the sign structure would be a mast arm pole. Quantities and pay item notes will also be included. The construction plans will be to City of Norman and ODOT standards.

9.1. 30% Preliminary Plans

The preliminary plan submittal will include 30% construction plans for review by the Owner. In particular, the 30% plans will include title, typical sections, horizontal and vertical alignments, storm sewer drainage, geometric layouts, survey data, right-of-way impacts, major utility conflicts, signal plans, roadway lighting, and an order of magnitude cost opinion. This submittal will not include technical specifications.

After submittal of the 30% preliminary plans, Garver will attend a preliminary plan

review meeting with the City of Norman and the Oklahoma Department of Transportation (ODOT).

9.2. 60% Right-of-Way and Utility Plans

Once Garver receives comments from the preliminary plan review meeting, the comments will be incorporated into the plan and 60% design will begin. In particular, the 60% plans will include the information provided in the 30% plans including any comments from the previous submittal and any specific Right-of-Way or utility needs. The plans will include final horizontal and vertical alignments, final utility ownerships, sizes and types, final driveway locations and types, final detour locations with horizontal and vertical alignments, and any final environmental commitments. Technical specifications will not be included in the submittal.

After submittal of the 60% Right-of-Way and Utility plans, Garver will attend a Right-of-Way and Utility (plan-in-hand) meeting with the City of Norman and the Oklahoma Department of Transportation (ODOT).

Once all comments have been received by all parties, the plans will be updated and submitted to the City for Right-of-Way acquisition and utility relocations.

9.3. Final Review Plans

Once Garver receives comments from the 60% Plan-in-Hand meeting, final design will begin. The final design phase submittal will include 100% (unsigned) construction plans for review by the City and ODOT

After submittal of the Final Review plans, Garver will attend a Final Plan Field Review meeting with the City of Norman and the Oklahoma Department of Transportation (ODOT). This meeting will provide stakeholders the opportunity to make minor plan changes, verify plans for accuracy with site conditions, verify pay items, quantities and notes, and discuss environmental and budget requirements.

Once all comments have been received by all parties, the plans will be updated and the final PS&E will be prepared.

9.4. Final PS&E Submittal

The final PS&E submittal will include the construction plans and specifications, quantity calculations, and the Engineer's Estimate for the Owner's use in letting and award of projectThe package may also be submitted to ODOT if necessary.

10. Construction Phase Services

Garver will attend the pre-bid meeting and issue addenda if needed. Minimal effort by the

Garver is anticipated during the City of Norman or ODOT bid process.

The construction contract will be administered and inspected by the City of Norman or ODOT with minimal effort required by Garver. During the Construction Phase the Garver will:

- Attend the preconstruction meeting.
- Issue necessary clarifications (respond to RFIs) regarding the construction contract documents.
- Participate in final project inspection.
- Prepare record drawings based upon red-line mark ups provided by the City of Norman.

11. Project Deliverables

The following will be submitted to the Owner, or others as indicated, by Garver:

- 1. PDF submittal of all Meeting Minutes.
- 2. PDF submittal of concept report prior to beginning construction plans.
- 3. PDF version of preliminary construction plans, quantity calculations, and opinion of probable cost.
- 4. PDF version of final construction plans, quantity calculations, opinion of probable cost, and special provisions. Electronic copies of final construction plans, quantity calculations, opinion of probable cost, and special provisions.
- 5. Deliverables to ODOT for review:
 - a. Preliminary Plan Field Review
 b. Right-of-Way and Utility Meeting
 c. Final Plan Review
 d. Final PS&E (if necessary)
 16 Half-Size, 2 CD of DGN & PDF
 15 Half-Size, 2 CD of DGN & PDF
 14 Half-Size, 3 CD of DGN & PDF
 TBD
- 6. Electronic copy of as-built plans.

12. Extra Work

The following items are not included under this agreement but will be considered as extra work:

- 1. Redesign for the Owner's convenience or due to changed conditions after previous alternate direction and/or approval.
- 2. Submittals or deliverables in addition to those listed herein.
- 3. 24-hour tube counts and peak hour turning movement counts
- 4. Additional traffic volume diagrams other than those needed along I-35
- 5. Participation in Public Meetings
- 6. Design of any utility relocations
- 7. Utility potholing
- 8. Retaining wall or other structural design.
- 9. Lighting analysis beyond one LED fixture
- 10. Coordination with the USACE and preparation/submittal of an Individual or Nationwide 404 permit.

- 11. Construction materials testing.
- 12. Construction administration and inspection.
- 13. Review and comment on construction material submittals.
- 14. Construction observation.
- 15. Front end sections of construction contract documents.
- 16. Environmental Handling and Documentation including wetlands identification or mitigation plans for other work related to environmentally or historically (culturally) significant items.
- 17. Services after construction, such as warranty follow-up, surety work, etc.
- 18. Analysis of existing I-35 lighting.
- 19. Design of modifications to existing I-35 lighting.

Extra Work will be as directed by the Owner in writing for an additional fee as agreed upon by the Owner and Garver.

ATTACHMENT B – SCHEDULE

The CONSULTANT shall begin work under this Agreement within ten (10) days of a Notice to Proceed (NTP) and shall complete the work in accordance with the schedule below:

Phase Description	<u>Calendar Days</u>
Kick-Off Meeting	10 days from NTP
Submit Written Preliminary Analysis	20 days from NTP
Surveys Completed	65 days from NTP
AJR	90 days from approval of
	Preliminary Analysis and receipt of
	data from ODOT's I-35 Study
Submit Preliminary (30%) Plans	120 days from receipt of completed
	surveys
Submit Preliminary (60%) Plans	30 days from receipt of preliminary
	plan review comments
Submit Final (90%) Plans	60 days from plan-in-hand meeting
Submit Final (100%) Plans	10 days from receipt of comments
	from 90% Plans
Construction Phase Services	As needed

ATTACHMENT C

CITY OF NORMAN AMENDMENT NO. 2 W. ROBINSON STREET WIDENING

PROJECT DESCRIPTION:

The Norman Tax Increment Finance Authority would like to amend the current I-35 at Robinson Street Interchange Study to include widening of W. Robinson Street, relocation of N. Interstate Drive, Ramp improvements to the I-35 SB On-Ramp, and signalization upgrades to W. Robinson Street at Rambling Oaks Drive/Crossroads Boulevard and at the relocated N. Interstate Drive.

FEE SUMMARY:

Labor	Man-Hours	Total
Preliminary Analysis	36	\$6,736.00
2. AJR Analysis	396	\$56,280.00
3. Construction Plans - Signalization & Signing	259	\$33,978.00
4. Construction Plans - Roadway Lighting	272	\$32,174.00
5. Construction Plans - Roadway	1,736	\$201,892.00
6. Utility Coordination	54	\$6,482.00
7. Construction Phase Services	33	\$4,432.00
8. Project Management	10	\$2,460.00
Total Labor	2,796	\$344,434.00

Expenses	Amount
Preliminary Analysis AJR Analysis	\$1,064.00 \$2,570.00
Construction Plans - Signalization & Signing Construction Plans - Roadway Lighting	\$3,622.00 \$826.00
4. Construction Plans - Roadway 5. Utility Coordination	\$1,225.80 \$168.00
Construction Phase Services Project Management	\$118.00 \$90.00
Total Expenses	\$9,683.80

Subconsultants	Amount
Durham Surveying Additional Work - Survey for ROW acquisition Additional Work - Legal descriptions with exhibits (\$300 per parcel - 10 maximum) Terracon	\$22,000.00 \$4,800.00 \$3,000.00
In-Place and Shoulder Soil Survey Pedological Survey	\$10,307.20 \$0.00
Total Subconsultants	\$40,107.20

GRAND TOTAL LUMP SUM FEE:

\$394,225.00



ATTACHMENT C - AMENDMENT NO. 2 W. Robinson Street Widening Garver Hourly Rate Schedule

	fication	_	Rat
Engine	eers / Architects		
	E-1	\$	99.0
	E-2	\$	114.0
	E-3	\$	138.0
	E-4	\$	161.0
	E-5	\$	197.0
	E-6	\$	246.0
	E-7	\$	324.0
lanne	ers / Environmental Specialist	_	
	P-1	\$	119.0
	P-2	\$	149.0
	P-3.		185.0
	P-4		210.0
	P-5		243.0
	P-6.	- :	277.0
		φ	211.
esigr			00.
	D-1	\$	92.0
	D-2	\$	108.0
	D-3	\$	128.0
	D-4	\$	149.0
echni	icians		
	T-1	\$	72.0
	T-2	\$	91.0
	T-3	\$	111.0
urvey	ors		
•	S-1	\$	44.0
	S-2	\$	58.0
	S-3.	\$	78.0
	S-4	\$	112.0
	S-5.	\$	149.0
	S-6.		
			169.0
	2-Man Crew (Survey)	Ψ	180.0
	3-Man Crew (Survey)		
	2-Man Crew (GPS Survey)	\$	200.0
	3-Man Crew (GPS Survey)	\$	244.0
onstr	uction Observation		
	C-1	\$	87.0
	C-2	\$	111.0
	C-3	\$	136.0
	C-4	\$	168.0
lanag	ement/Administration		
Ŭ	M-1	\$	324.0
	X-1	_	57.0
	X-2		77.0
	· · =·····	Ψ	
	X-3	\$	107
	X-3		
	X-4	\$	136.0
		\$	136.0 167.0

Garver Project No. XXXXXXX

Project Name

CITY OF NORMAN W. ROBINSON STREET WIDENING

PRELIMINARY ANALYSIS

WORK TASK DESCRIPTION	E-6	E-5	E-4	E-3	E-2	E-1	T-2
	\$246.00	\$197.00	\$161.00	\$138.00	\$114.00	\$99.00	\$91.00
	hr	hr	hr	hr	hr	hr	hr
1. Preliminary Analysis							
Site Visit/Field Observations						4	
Kick-Off Meeting	12			12			
Analysis Results		8		4			
Subtotal - Meetings	12	8	0	16	0	0	0
Hours	12	8	0	16	0	0	0
Salary Costs	\$2,952	\$1,576	\$0	\$2,208	\$0	\$0	\$0

SUBTOTAL - SALARIES: \$6,736.00

DIRECT NON-LABOR EXPENSES

Document Printing/Reproduction/Assembly	\$64.00
Postage/Freight/Courier	\$0.00
Office Supplies/Equipment	\$0.00
Communications	\$0.00
Survey Supplies Aerial Photography	\$0.00 \$0.00
GPS Equipment Computer Modeling/Software Use	\$0.00 \$0.00
Traffic Counting Equipment Locator/Tracer/Thermal Imager Equipment	\$0.00 \$0.00
Travel Costs	\$1,000.00

SUBTOTAL - DIRECT NON-LABOR EXPENSES: \$1,064.00

SUBTOTAL: \$7,800.00

SUBCONSULTANTS FEE: \$0.00

TOTAL FEE: \$7,800.00

CITY OF NORMAN W. ROBINSON STREET WIDENING

AJR ANALYSIS

	WORK TASK DESCRIPTION	E-6	E-5	E-4	E-3	E-2	E-1	T-2
		\$246.00	\$197.00	\$161.00	\$138.00	\$114.00	\$99.00	\$91.00
		hr	hr	hr	hr	hr	hr	hr
1.	Study Area)							
	locations and update prior documentation	0	0	12	0	6	6	0
2.	Area)							
	Field observations of existing traffic and delay for	0	0	2	0	0	16	0
3.	Safety Analysis (Supplemental Study Area)							
	Produce updated crash diagrams (including supp	1	0	4	0	24	24	0
4.	Capacity Analysis (Supplemental Study Area)							
	Develop HCS files for freeway LOS for suppleme	0	0	2	0	10	10	0
	Develop Synchro files for ramp intersections for	0	0	16		4	4	
5.	Produce AJR Documentation							
	Summarize prior traffic study, graphics, and table	0	0	36	0	12	12	0
	Summarize supplemental study area analysis res	0	0	12	0	4	4	0
	Develop conceptual guide sign plan for proposed	1	0	2	0	16	16	0
	Apply 8 FHWA Requirements and summarize in	2	0	40	0	6	6	0
	Coordination with Stakeholders	4	0	0	0	0	0	0
	Quality Control Review	6	0	0	0	0	0	0
	One Meeting Anticipated (AJR Review)	8	0	8	0	0	0	0
	Respond to Comments and Submit for Concept A	2	0	16	0	0	0	0
6.	Coordination and NEPA support for final appro	oval (ODOT	to perform N	EPA)				
	Review traffic elements of NEPA documentation	2	0	16	0	4	4	0
	One Meeting Anticipated	8	0	8	0	0	0	0
	Subtotal - Total Direct Salary Costs	34	0	174	0	86	102	0
	Hours	34	0	174	0	86	102	0

\$0

SUBTOTAL - SALARIES: \$56,280.00

\$8,364

DIRECT NON-LABOR EXPENSES

Salary Costs

Document Printing/Reproduction/Assembly	\$230.00
Postage/Freight/Courier	\$0.00
Office Supplies/Equipment	\$0.00
Communications	\$0.00
Survey Supplies	\$0.00
Aerial Photography	\$0.00
GPS Equipment	\$0.00
Computer Modeling/Software Use	\$0.00
Traffic Counting Equipment	\$0.00
Locator/Tracer/Thermal Imager Equipment	\$0.00
Travel Costs	\$2,340.00

SUBTOTAL - DIRECT NON-LABOR EXPENSES: \$2,570.00

SUBTOTAL: \$58,850.00

SUBCONSULTANTS FEE: \$0.00

TOTAL FEE: \$58,850.00

\$28,014

\$0

\$9,804

\$10,098

\$0

CITY OF NORMAN W. ROBINSON STREET WIDENING

SIGNALIZATION & SIGNING DESIGN

WORK TASK DESCRIPTION	E-6	E-5	E-4	E-3	E-2	E-1	T-2
	\$246.00	\$197.00	\$161.00	\$138.00	\$114.00	\$99.00	\$91.00
	hr	hr	hr	hr	hr	hr	hr
1. Preliminary Plans (30% & 60%)							
Signalization Plans	2				24		
Wheelchair Ramp Details	2				32		
Signing Plan	2				12	24	
Quantities & Opinion of Probable Cost	2				10	20	
30% Plan Review	4						
30% Plan Review Meeting	12						
60% Plan Updates					16	4	
60% Plan Review	2						
60% Plan-in-Hand Meeting					12		
Subtotal - Preliminary Plans	26	0	0	0	106	48	0
2. Final Plans (100% Review & PS&E)							
Special Provisions	1				2		
Update Signalization Plans	2				8		
Update Signing Plans	2				4	8	
Update Quantities & Opinion of Probable Cost	2				4	8	
Plan Review	4						
100% Review Plan Submittal	2				2		
100% Review Plan Submittal Meeting					12		
PS&E Plan Submittal and Corrections	2				4		
PS&E Plan Submittal Meeting					12		
Subtotal - Final Plans (90% & 100%)	15	0	0	0	48	16	0

Hours	41	0	0	0	154	64	0
Salary Costs	\$10,086.00	\$0.00	\$0.00	\$0.00	\$17,556.00	\$6,336.00	\$0.00

\$37,600.00

SUBTOTAL - SALARIES:		\$33,978.00
DIRECT NON-LABOR EXPENSES		
Document Printing/Reproduction/Assembly	\$122.00	
Postage/Freight/Courier	\$0.00	
Office Supplies/Equipment	\$0.00	
Communications	\$0.00	
Survey Supplies	\$0.00	
Aerial Photography	\$0.00	
GPS Equipment	\$0.00	
Computer Modeling/Software Use	\$0.00	
Traffic Counting Equipment	\$0.00	
Locator/Tracer/Thermal Imager Equipment	\$0.00	
Travel Costs	\$3,500.00	
SUBTOTAL - DIRECT NON-LABOR EXPENSE	S:	\$3,622.00

SUBCONSULTANTS FEE: \$0.00

SUBTOTAL:

TOTAL FEE: \$37,600.00

CITY OF NORMAN W. ROBINSON STREET WIDENING

ROADWAY LIGHTING

	WORK TASK DESCRIPTION	E-6	E-5	E-4	E-3	E-2	E-1	T-2
		\$246.00	\$197.00	\$161.00	\$138.00	\$114.00	\$99.00	\$91.00
		hr	hr	hr	hr	hr	hr	hr
1.	Preliminary Plans							
	Kickoff Meeting			1		2		1
	General Coordination			4		4		2
	Site Visit/Field Observations			12		12		
	Existing Lighting As-Built / Conditions Review			1		4		
	Model Lighting Layout			1		16		
	Utility Coordination			1		2		
	Electrical Calculations			1		8		
	Lighting Removal Plans			1		10		12
	Lighting Installation Plans			1		16		24
	Electrical Details			1		8		10
	Electrical Quantities			1		6		2
	Cost Estimate			1		2		
	Preliminary QA / QC			6		2		1
	•							
	Subtotal - Preliminary Plans	0	0	32	0	92	0	52
2.	Final Plans							
	General Coordination			8		2		
	Address Plan-In-Hand Meeting Comments			2		1		4
l	Lighting Removal Plans			1		4		4
	Lighting Removal Plans Lighting Installation Plans			1 2		4 8		
								4
	Lighting Installation Plans			2		8		4
	Lighting Installation Plans Electrical Details			2		8 4		4
	Lighting Installation Plans Electrical Details Electrical Quantities			2 2 1		8 4 4		4
	Lighting Installation Plans Electrical Details Electrical Quantities Cost Estimate			2 2 1 1		8 4 4 1		4 4 8
	Lighting Installation Plans Electrical Details Electrical Quantities Cost Estimate Address 90% Plans Meeting Comments			2 2 1 1 2		8 4 4 1 2		4 4 8
	Lighting Installation Plans Electrical Details Electrical Quantities Cost Estimate Address 90% Plans Meeting Comments Specifications			2 2 1 1 2 2		8 4 4 1 2 6		4 4 8
	Lighting Installation Plans Electrical Details Electrical Quantities Cost Estimate Address 90% Plans Meeting Comments Specifications Final QA / QC	0	0	2 2 1 1 2 2 8	0	8 4 4 1 2 6 8	0	4 4 8
	Lighting Installation Plans Electrical Details Electrical Quantities Cost Estimate Address 90% Plans Meeting Comments Specifications Final QA / QC Sign Plans / Compile Documents	0	0	2 2 1 1 2 2 8 1	0	8 4 1 2 6 8 2	0	4 4 8 2 2

Hours	0	0	62	0	134	0	76
Salary Costs	\$0.00	\$0.00	\$9,982.00	\$0.00	\$15,276.00	\$0.00	\$6,916.00
SUBTOTAL - SALARIES:		\$32,174.00	0				

DIRECT NON-LABOR EXPENSES \$110.00 Document Printing/Reproduction/Assembly Postage/Freight/Courier \$0.00 Office Supplies/Equipment \$0.00 Communications \$0.00 Survey Supplies \$0.00 Aerial Photography \$0.00

\$0.00 **GPS** Equipment Computer Modeling/Software Use \$0.00 \$0.00 Traffic Counting Equipment Locator/Tracer/Thermal Imager Equipment \$0.00 Travel Costs \$716.00

SUBTOTAL - DIRECT NON-LABOR EXPENSES: \$826.00

SUBTOTAL: \$33,000.00

SUBCONSULTANTS FEE: \$0.00

TOTAL FEE: \$33,000.00

ATTACHMENT C - AMENDMENT NO. 2 CITY OF NORMAN W. ROBINSON STREET WIDENING

ROADWAY PLANS

WORK TASK DESCRIPTION	E-6	E-5	E-4	E-3	E-2	E-1	T-2
	\$246.00	\$197.00	\$161.00	\$138.00	\$114.00	\$99.00	\$91.00
	hr	hr	hr	hr	hr	hr	hr
. Preliminary Plans							
Title Sheet						2	
Check and Convert Survey				8		4	
Creating Existing Ground Surface				8			
Cover Sheet				2		2	
Typical Sections				20		40	
Pavement Design Coordination				8		4	
Horizontal and Vertical Geometry				22		44	
Computer Modeling				28		48	
Drainage Area Map				28		56	
Plan and Profile Sheets (9 Roadway Sheets)				32	4	68	
Drainage Design				48	8	56	
Sequence of Construction				24	8	100	
Striping						16	
Cross Sections				28		64	
Quantities & Opinion of Probable Cost				8		20	
30% Plan Review	2	20	6	20		8	
30% Plan Review Meeting				2			
60% Plan Updates				4		16	
60% Plan Review	2	4	2				
60% Plan-in-Hand Meeting				2			
R/W Plan Submittal				8		16	
Subtotal - Preliminary Plans	4	24	8	300	20	564	0
. Final Plans							
Typical Sections				6		6	
Special Details				4		16	
Drainage Area Map				8		16	
SWPPP				16		4	
Erosion Control Sheets				10		28	
Summary of Drainage Structures				18		18	
Summary of Pay Quantities And Notes				24		40	
General Notes				16		24	
Survey Data Sheets				16		32	
Plan and Profile Sheets (9 Roadway Sheets)				20		32	
Final Drainage design				48		64	
Intersection Details (2 Intersections)				2		8	
Removal Sheets				12		24	
Joint Layout Sheet				8		24	
Sequence of Construction				28		56	
Striping Striping	 			20		16	
ROW Maps (excluding acquisition documents)	 			16		32	
Cross Sections				14		36	
Specifications and Special Provisions	 			4		"	
Opinion of Probable Cost	-			2		4	
Plan Review	-	24		20		 	
	2			20	2	 	
				2		 	
90% Review Plan Submittal		1					
90% Review Plan Submittal 90% Review Plan Submittal Meeting PS&E Plan Submittal and Corrections	2			2		8	
90% Review Plan Submittal Meeting PS&E Plan Submittal and Corrections	2			2		8	
90% Review Plan Submittal Meeting	2 4	24	0	2 298	2	488	0
90% Review Plan Submittal Meeting PS&E Plan Submittal and Corrections		24	0 8		2 22		0

SUBTOTAL - SALARIES:

\$201,892.00

DIRECT NON-LABOR EXPENSES		
Document Printing/Reproduction/Assembly	\$225.80	
Postage/Freight/Courier	\$0.00	
Office Supplies/Equipment	\$0.00	
Communications	\$0.00	
Survey Supplies	\$0.00	
Aerial Photography	\$0.00	
GPS Equipment	\$0.00	
Computer Modeling/Software Use	\$0.00	
Traffic Counting Equipment	\$0.00	
Locator/Tracer/Thermal Imager Equipment	\$0.00	
Travel Costs	\$1,000.00	
SUBTOTAL - DIRECT NON-LABOR EXPEN	ISES:	\$1,225.80
SUBTOTAL:		\$203,117.80
SUBTOTAL: SUBCONSULTANTS FEE: TERRACON		\$203,117.80
SUBCONSULTANTS FEE: TERRACON		,
SUBCONSULTANTS FEE: TERRACON In-Place and Shoulder Soil Survey		\$203,117.80 \$10,307.20 \$0.00
SUBCONSULTANTS FEE: TERRACON		\$10,307.20
SUBCONSULTANTS FEE: TERRACON In-Place and Shoulder Soil Survey	/EYING	\$10,307.20
SUBCONSULTANTS FEE: TERRACON In-Place and Shoulder Soil Survey Pedological Survey		\$10,307.20 \$0.00
SUBCONSULTANTS FEE: TERRACON In-Place and Shoulder Soil Survey Pedological Survey SUBCONSULTANTS FEE: DURHAM SURV	cquisition	\$10,307.20 \$0.00 \$22,000.00
SUBCONSULTANTS FEE: TERRACON In-Place and Shoulder Soil Survey Pedological Survey SUBCONSULTANTS FEE: DURHAM SURV Additional Work - Survey for ROW a	cquisition	\$10,307.20 \$0.00 \$22,000.00 \$4,800.00
SUBCONSULTANTS FEE: TERRACON In-Place and Shoulder Soil Survey Pedological Survey SUBCONSULTANTS FEE: DURHAM SURV Additional Work - Survey for ROW a	cquisition	\$10,307.20 \$0.00 \$22,000.00 \$4,800.00

CITY OF NORMAN W. ROBINSON STREET WIDENING

UTILITY COORDINATION

			I	I		l	
WORK TASK DESCRIPTION	E-6	E-5	E-4	E-3	E-2	E-1	T-2
	\$246.00	\$197.00	\$161.00	\$138.00	\$114.00	\$99.00	\$91.00
	hr	hr	hr	hr	hr	hr	hr
1. Utility Coordination							
Obtain Utility Atlases						3	
Identify Potential Utility Conflicts	1					8	
Forward preliminary plans to all Utilities						4	
Communication -Discuss relocation with Utility						3	
Plans	1					4	
Communication - Field review of Relocation						2	
Natural Gas -Discuss relocation with Utility						3	
Natural Gas -Review Utility Relocation Plans	1					3	
Natural Gas - Field review of Relocation						2	
Electric -Discuss relocation with Utility						3	
Electric -Review Utility Relocation Plans	1					4	
Electric - Field review of Relocation						2	
Water/Sewer -Discuss relocation with Utility		1		4		2	
Oversight	2						
Subtotal - Utility Coordination	6	1	0	4	0	43	0
Hours	6	1	0	4	0	43	0
Salary Costs	\$1,476.00	\$197.00	\$0.00	\$552.00	\$0.00	\$4,257.00	\$0.00

SUBTOTAL - SALARIES: \$6,482.00

DIRECT NON-LABOR EXPENSES

Document Printing/Reproduction/Assembly	\$142.00
Postage/Freight/Courier	\$0.00
Office Supplies/Equipment	\$0.00
Communications	\$0.00
Survey Supplies Aerial Photography	\$0.00 \$0.00
GPS Equipment Computer Modeling/Software Use	\$0.00 \$0.00
Traffic Counting Equipment Locator/ I racer/ I hermal Imager Equipment	\$0.00 \$0.00
Travel Costs	\$26.00

SUBTOTAL - DIRECT NON-LABOR EXPENSES: \$168.00

SUBTOTAL: \$6,650.00

SUBCONSULTANTS FEE: \$0.00

TOTAL FEE: \$6,650.00

CITY OF NORMAN W. ROBINSON STREET WIDENING

CONSTRUCTION PHASE SERVICES

WORK TASK DESCRIPTION	E-6	E-5	E-4	E-3	E-2	E-1	T-2
	\$246.00	\$197.00	\$161.00	\$138.00	\$114.00	\$99.00	\$91.00
	hr	hr	hr	hr	hr	hr	hr
1. Construction Phase Services							
Pre-Bid Meeting				2			
Preconstruction Meeting				2			
Respond to RFI's				8		8	
Submittal Reivew							
Final Project Inspection				2			
Record Drawings	1	1	1	8			
Subtotal - Construction Phase Services	1	1	1	22	0	8	0
Hours	1	1	1	22	0	8	0
Salary Costs	\$246.00	\$197.00	\$161.00	\$3,036.00	\$0.00	\$792.00	\$0.00

SUBTOTAL - SALARIES:	\$4,432.00

DIRECT NON-LABOR EXPENSES

Document Printing/Reproduction/Assembly	\$93.00
Postage/Freight/Courier	\$0.00
Office Supplies/Equipment	\$0.00
Communications	\$0.00
Survey Supplies	\$0.00
Aerial Photography	\$0.00
GPS Equipment	\$0.00
Computer Modeling/Software Use	\$0.00
Traffic Counting Equipment	\$0.00
Locator/Tracer/Thermal Imager Equipment	\$0.00
Travel Costs	\$25.00

SUBTOTAL - DIRECT NON-LABOR EXPENSES: \$118.00

SUBTOTAL: \$4,550.00

SUBCONSULTANTS FEE: \$0.00

TOTAL FEE: \$4,550.00

CITY OF NORMAN W. ROBINSON STREET WIDENING

PROJECT MANAGEMENT

WORK TASK DESCRIPTION	E-6	E-5	E-4	E-3	E-2	E-1	T-2
	\$246.00	\$197.00	\$161.00	\$138.00	\$114.00	\$99.00	\$91.00
	hr	hr	hr	hr	hr	hr	hr
1. Administration							
Invoicing & Proj. Management	10						
Subtotal - Administration	10	0	0	0	0	0	0
Hours	10	0	0	0	0	0	0
Salary Costs	\$2,460.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

SUBTOTAL - SALARIES: \$2,460.00

DIRECT NON-LABOR EXPENSES

Postage/Freight/Courier \$20.00 Office Supplies/Equipment \$0.00 Communications \$0.00 Survey Supplies \$0.00 Aerial Photography \$0.00
Communications \$0.00 Survey Supplies \$0.00
Survey Supplies \$0.00
3 11
Aprial Dhatagraphy
Aerial Photography \$0.00
GPS Equipment \$0.00
Computer Modeling/Software Use \$0.00
Traffic Counting Equipment \$0.00
Locator/Tracer/Thermal Imager Equipment \$0.00
Travel Costs \$0.00

SUBTOTAL - DIRECT NON-LABOR EXPENSES: \$90.00

SUBTOTAL: \$2,550.00

SUBCONSULTANTS FEE: \$0.00

TOTAL FEE: \$2,550.00

ATTACHMENT D - OWNER'S RESPONSIBILITIES

In connection with the project, the Owner's responsibilities shall include, but not be limited to, the following:

- 1. Owner will give thorough consideration to all documents presented by the Engineer and informing the Engineer of all decisions within a reasonable time so as not to delay the work of the Engineer.
- 2. Owner will make provision for the employees of the Engineer to enter public and private lands as required for the Engineer to perform necessary preliminary surveys and other investigations.
- 3. Owner will furnish the Engineer existing plans, previous studies, existing Synchro files, existing traffic data, available aerial photography, reports, surveys, or copies of the same, related to or bearing on the proposed work as may be in the possession of the Owner. Such documents or data will be returned upon completion of the work or at the request of the Owner.
- 4. Owner will furnish the Engineer a current boundary survey with easements of record plotted for the project property.
- 5. Owner will provide legal, accounting, and insurance counseling services necessary for the project and such auditing services as the Owner may require.
- 6. Owner will give prompt written notice to the Engineer whenever the Owner observes or otherwise becomes aware of any defect in the project or other events which may substantially alter the Engineer's performance under this Agreement.
- 7. Owner will not hire any of the Engineer's employees during performance of this contract and for a period of one year beyond completion of this contract.