

Work Order No. 4
For Professional Engineering Services
City of Norman

In accordance with the Agreement for On-Call Engineering Services between City of Norman (Owner) and Garver, LLC, (Engineer) dated August 25, 2009 ("Agreement"), Owner and Engineer agree as follows:

1. **Specific Project Title:** Traffic Signal Design – 24th Avenue SE/Reagan Elementary North Entrance
2. **Description:** The Owner is proposing to install a traffic signal at the intersection of 24th Avenue SE and Reagan Elementary North Entrance. The Engineer will be responsible for the design and preparation of detailed construction plans. The plans will be to City of Norman and Oklahoma Department of Transportation Standards.
3. **Services of Engineer:** In accordance with the Master Agreement; and as described in this Work Order, the basic services include design and preparation of construction plans which will include traffic signal plan, pedestrian signals, phasing diagram, wiring diagram, street name sign details, permanent pavement markings at the intersection, and traffic control plan.

More specifically, the Engineer will perform the following services:

- 3.1. **Site Visit** – Engineer will conduct a site visit with the Owner to determine key issues such as location of the controller, power source, and Owner preferences. Existing marked and visible utility locations will be noted so they can be incorporated into the plans.
 - 3.2. **Preliminary Plans** – The Preliminary design phase submittal will include 60% construction plans and an opinion of probable construction cost for review by the Owner. This submittal will not include technical specifications. Plans will be developed to City of Norman and Oklahoma Department of Transportation (ODOT) Standards.
 - 3.3. **Plan-in-Hand Meeting** – The Engineer will attend a plan-in-hand meeting with the Owner and ODOT. Comments from this meeting will be incorporated into the final plans and minutes of the meeting will be provided to the Owner.
 - 3.4. **Final Plans** – Once the Engineer receives comments from the Preliminary Plans and Plan-in-Hand meeting, final design will begin. The final plans will include the construction plans and specifications, quantity calculations, and opinion of probable construction cost. The Engineer will also make any needed plan changes as a result of the Owners review.
4. **Project Deliverables:** The following will be submitted to the Owner, or others as indicated, by the Engineer:
 - 4.1. Ten copies of preliminary construction plans, quantity calculations, and opinion of probable cost.
 - 4.2. Minutes of the plan-in-hand meeting.
 - 4.3. Ten copies of final construction plans, quantity calculations, opinion of probable cost, and special provisions.
 - 4.4. Electronic copies of final construction plans, quantity calculations, opinion of probable cost, and special provisions.

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5. **Extra Work:** The following items are not included within the scope of this agreement but such services are available from Engineer and will be considered as extra work:
- 5.1. Redesign for the Owner's convenience or due to changed conditions after previous alternate direction and/or approval.
 - 5.2. Submittals or deliverables in addition to those listed herein.
 - 5.3. Coordination or design of any utilities relocation.
 - 5.4. Preparation of a Storm Water Pollution Prevention Plan (SWPPP).
 - 5.5. Construction materials testing.
 - 5.6. Geotechnical testing.
 - 5.7. Surveying.
 - 5.8. Title II services.
 - 5.9. Construction administration and inspection.
 - 5.10. Front end sections of construction contract documents.
 - 5.11. Plans for temporary construction easement for the contractor's equipment and storage of material during construction.
 - 5.12. Environmental Handling and Documentation.

The scope for Additional Services may be authorized at a later time under separate work orders to the Master Agreement.

6. **Owner's Responsibilities:** As indicated in Master Agreement, and:
- 6.1. Furnish a copy of the traffic impact study showing turning movement counts
 - 6.2. Furnish base map and plans for the north driveway
 - 6.3. Contact one-call to locate utilities for the site visit
7. **Schedule:** Discounting unforeseen conditions and circumstances beyond the Engineer's control, and the time associated with Owner review, the Engineer shall complete the work in accordance with the schedule below:

<u>Phase Description</u>	<u>Calendar Days</u>
Site Visit/Meet with City	10 days from Notice to Proceed
Preliminary Plans	30 days from Notice to Proceed
Plan-In-Hand Meeting	Determined by Owner
Final Plans Plans	21 days after Preliminary Comments and Plan-In-Hand

8. **Payment to Engineer:**

The Owner will pay the Engineer, for time spent on the project, at the rates shown in the Master Agreement, adjusted for two years of inflation in accordance with Article 3 of the Agreement for

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On-Call Engineering Services executed the 25th day of August, 2009, for each classification of the Engineer's personnel plus reimbursable expenses including but not limited to printing, courier service, reproduction, and travel. The total amount paid to the Engineer under this agreement is estimated to be \$13,150. The actual total fee may exceed this estimate if authorized in writing by the Owner.

Expenses other than salary costs that are directly attributable to performance of our professional services will be billed as follows:

- Direct cost for travel, long distance and wireless communications, outside reproduction and presentation material preparation, and mail/courier expenses.
- Direct cost plus 10 percent for subcontract/subconsultant fees.
- Charges similar to commercial rates for reports, plan sheets, presentation materials, etc.
- The amount allowed by the federal government for mileage with an additional \$0.05 for survey trucks/vans.

The Owner will pay the Engineer on a monthly basis, based upon statements submitted by the Engineer to the Owner for the scope of services described in this agreement. Payments not received within 60 days of invoice date will be subject to a one percent monthly simple interest charge.

Any additional work beyond the scope of services defined in this Work Order, but requested by the Owner in writing, the Owner will pay the Engineer, for time spent on the project, at the rates shown in the Master Agreement, adjusted for two years of inflation, for each classification of the Engineer's personnel plus reimbursable expenses including but not limited to printing, courier service, reproduction, and travel.

9. **Subconsultants:** None.

10. **Other Amendments to Master Agreement:** None.

11. **Attachments:** Fee Estimate.

12. Approval and Acceptance

Approval and Acceptance of this Work Order, including attachments listed above, shall incorporate this document as part of the Agreement. Engineer is authorized to begin performance upon receipt of a copy of this Work Order signed by the Owner.

The Effective Date of the Work Order is _____, 2012.

Engineer:
GARVER, LLC

Signature

Glynn Fulmer

Vice President
Title

Owner:
CITY OF NORMAN

Signature

Shawn O'Leary

Director of Public Works
Title

Work Order No. 4 - Attachment
Traffic Signal Design
Garver Hourly Rate Schedule

Classification	Rates
Engineers / Architects	
E-1	\$ 90.00
E-2	\$ 111.00
E-3	\$ 133.00
E-4	\$ 154.00
E-5	\$ 186.00
E-6	\$ 239.00
Planners	
P-1	\$ 111.00
P-2	\$ 133.00
Designers	
D-1	\$ 93.00
D-2	\$ 133.00
Technicians	
T-1	\$ 77.00
T-2	\$ 101.00
Surveyors	
S-1	\$ 45.00
S-2	\$ 58.00
S-3	\$ 80.00
S-4	\$ 90.00
S-5	\$ 128.00
2-Man Crew (Survey)	\$ 160.00
3-Man Crew (Survey)	\$ 202.00
2-Man Crew (GPS Survey)	\$ 182.00
3-Man Crew (GPS Survey)	\$ 234.00
Construction Observation	
C-1	\$ 90.00
C-2	\$ 108.00
C-3	\$ 153.00
Administration	
X-1	\$ 53.00
X-2	\$ 69.00
X-3	\$ 101.00

Work Order No. 4 - Attachment

City of Norman

Traffic Signal Design

24th Avenue SE/Reagan Elementary North Entrance

FEE SUMMARY

<u>Title I Services</u>	<u>Estimated Fees</u>
Traffic Signal Design	\$13,150.00
Subtotal for Title I Services	\$13,150.00

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 City of Norman
 Traffic Signal Design
 24th Avenue SE/Reagan Elementary North Entrance

WORK TASK DESCRIPTION	E-6	E-5	E-4	E-3	E-2	E-1	X-2	MANHOUR SUBTOTALS
	Per	Per	Per	Per	Per	Per	Per	
1. Preliminary Design								
Analyze Data	0	1	0	4	0	0	0	
Incorporation Existing Utilities in Base Map	0	1	0	2	0	0	0	
Signalization Plans	0	1	0	2	0	20	0	
Quantities & Copies of Probable Cost	0	1	0	2	0	8	0	
Plan Review	0	4	0	2	0	1	0	
Plan Submittal and Corrections	0	1	0	2	0	8	0	
Subtotal - Preliminary Design	0	9	0	14	0	27	0	
2. Final Design								
Special Provisions	0	1	0	1	0	0	0	
Update Signalization Plans	0	1	0	1	0	2	0	
Update Quantities & Copies of Probable Cost	0	1	0	1	0	2	0	
Plan Review	0	2	0	1	0	1	0	
Plan Submittal and Corrections	0	1	0	1	0	2	0	
Subtotal - Final Design	0	6	0	5	0	7	0	
3. Meetings								
Site Visit, Meeting with City, Review Existing Utilities	0	5	0	0	5	0	0	
Plan-in-Hand Meeting	0	4	0	0	4	0	0	
Subtotal - Identify Critical Interactions	0	9	0	0	9	0	0	
4. Administration								
Contract Preparation, Invoicing & Project Management	0	2	0	0	0	0	3	
Subtotal - Administration	0	2	0	0	0	0	3	
Hours	0	26	0	19	9	44	3	101
Salary Costs	\$0.00	\$4,836.00	\$0.00	\$2,527.00	\$999.00	\$3,960.00	\$207.00	\$12,529.00
SUBTOTAL - SALARIES:		\$12,529.00						
DIRECT NON-LABOR EXPENSES								
Document Printing/Reproduction/Assembly		\$385.00						
Postage/Freight/Courier		\$20.00						
Office Supplies/Equipment		\$6.00						
Travel Costs		\$200.00						
SUBTOTAL - DIRECT NON-LABOR EXPENSES:		\$621.00						
SUBTOTAL:		\$13,150.00						
SUBCONSULTANTS FEE:		\$0.00						
TOTAL FEE:		\$13,150.00						