

SA&I 1-4040 (2000)

Canadian \_\_\_\_\_ County, Oklahoma  
COUNTY PURCHASING OFFICE  
Canadian \_\_\_\_\_ County Court House  
El Reno \_\_\_\_\_, Oklahoma  
Phone: ( 405 ) 422-2441

INVITATION TO BID

DATE ISSUED  
August 5, 2013  
Page 1 of 2

PLEASE REVIEW TERMS AND CONDITIONS ON REVERSE  
SIDE RELATING TO SUBMISSION OF THIS BID.  
Notarized Affidavit completions and signature required on reverse side.

BID NUMBER Parking Lots / #2014-#04 County Commissioners  
BID CLOSING DATE AND HOUR Sept. 9, 2013 at 10:00 am  
REQUIRED DELIVERY DATE SEE SPECIFICATIONS  
\_\_\_\_\_ Days after award of Purchase Order

TERMS Net, FOB this bid will open Sept. 9, 2013 at 10:00am  
DATE OF DELIVERY: SEE SPECIFICATIONS

ITEM	QUANTITY	UNIT OF ISSUE	DESCRIPTION	UNIT PRICE	TOTAL
(1) or more			<p>Canadian County Commissioners are seeking bids for the construction of parking lots.</p> <p>See Specifications Attached.</p> <p>The Board of Canadian County Commissioners reserves the right to reject any and all bids or to award all or any portion of the items bid.</p> <p><u>The reverse of this sheet must be completed and returned or the bid will be rejected.</u></p> <p>Contact person: Dave Anderson, Chairman 200 N. Choctaw El Reno, OK 73036 (405) 205-8955</p>		<p>\$ _____</p> <p>Total</p>

APPROVED  
Date 8-1-13  
David Anderson  
Officer of Department Head

STATE OF OKLAHOMA  
CANADIAN COUNTY  
FILED OR RECORDED  
AUG - 1 2013  
5<sup>th</sup>  
SHELLEY DICKERSON  
COUNTY CLERK  
13647

**TERMS AND CONDITIONS**

1. Sealed bids will be opened in the Commissioner's Conference Room, Canadian County Courthouse, 201 N. Choctaw Avenue, El Reno, Oklahoma, at the time and date shown on the invitation to bid form.
2. Late bids will not be considered. Bids must be received in sealed envelopes (one to an envelope) with bid number and closing date written on the outside of the envelope.
3. Unit prices will be guaranteed correct by the bidder.
4. Firm prices will be F.O.B. destination.
5. Purchases by Canadian County, Oklahoma, are not subject to state or federal taxes.
6. This bid is submitted as a legal offer and any bid when accepted by the County constitutes a firm contract.
7. Oklahoma laws require each bidder submitting a bid to a county for goods or services to furnish a notarized sworn statement of non-collusion. A form is supplied below.
8. Bids will be firm until 10/09/2013  
(DATE)

AFFIDAVIT: I, the undersigned, of lawful age, being first duly sworn on oath say that he (she) is the agent authorized by the bidder to submit the above bid. Affiant further states that the bidder has not been a party to any collusion among bidders in restraint of freedom of competition by agreement to bid at a fixed price or to refrain from bidding; or with any state official or employee as to quantity; quality or price in the prospective contract or any other terms of said prospective contract; or in any discussions between bidders and any state official concerning exchange of money or other thing of value for special consideration in the letting of a contract; that the bidder/contractor has not paid, given or donated or agreed to pay, give or donate to any officer or employee of the State of Oklahoma (or other entity) any money or other thing of value, either directly or indirectly in the procuring of the award of a contract pursuant to this bid.

Subscribed and sworn before this \_\_\_\_\_ day

of \_\_\_\_\_, 20 \_\_\_\_\_

(SEAL)

Firm: \_\_\_\_\_

My commission expires \_\_\_\_\_

Signed by: \_\_\_\_\_ Title: \_\_\_\_\_  
(Manual Signature of Undersigned)

\_\_\_\_\_  
NOTARY PUBLIC (CLERK OR JUDGE)

Address: \_\_\_\_\_ Phone: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_

Zip: \_\_\_\_\_

Please mail sealed bids to:  
Canadian County Clerk's Office  
Attn: Purchasing  
PO Box 458  
El Reno, OK 73036

Street Address:  
201 N Choctaw Avenue  
El Reno, OK 73036



**Canadian County  
Purchasing**

**Bid Specifications**

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Date Issued: August 5, 2013  
Bid Number: **2014-#04**  
Closing Date: September 9, 2013 at 10:00am  
PO Box 458, 201 N. Choctaw Ave., El Reno, OK 73036  
Opening Date: September 9, 2013 at 10:00am  
Commissioner's Meeting Room, 201 N. Choctaw Ave., El Reno, OK 73036

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~ SPECIFICATIONS~

**Parking Lots / County Commissioners**

Canadian County Commissioners are seeking bids for the construction of parking lots.

See Contract Documents and Specifications attached.

For Information Contact:

Contact: Dave Anderson, Chairman

Phone: (405) 205-8955

Hours: Monday – Friday 8:00am to 4:30pm

Address: 200 N. Choctaw, El Reno, OK 73036

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If you have any questions or need additional information, please contact:  
**Sherry Murray**, Purchasing Agent, 405.295.6125 or 405.422.2441  
smurrav@okcana.cogov.net

**BOARD OF COUNTY COMMISSIONERS OF  
CANADIAN COUNTY**

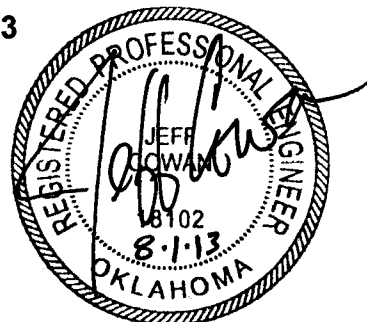


**CONTRACT DOCUMENTS AND SPECIFICATIONS  
FOR  
PARKING LOTS**

**BID NOTICE: 2014-04**

**BID CLOSING DATE: September 9, 2013**

**AUGUST 2013**



By:

**Cowan Group Engineering, LLC**  
437 W. Wilshire, Suite A  
Oklahoma City, OK 73116  
Phone: 405.463.3369  
CA # 6414 6/30/14

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**SPECIFICATIONS:**

**DIVISION 1 - GENERAL REQUIREMENTS**

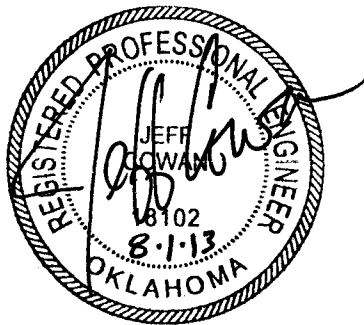
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**Responsible Registrant**

Cowan Group Engineering, LLC



CA No. 6414 (Expires 6/30/14)

\_\_\_\_\_  
Jeff Cowan, P.E.  
Project Manager

## SOLICITATION FOR BIDS

### BID NOTICE 2014-04

Sealed bids will be received by the Purchasing Agent of Canadian County, Oklahoma at the Canadian County Courthouse located at 201 N. Choctaw, El Reno, Oklahoma, 73036, until **10:00 am**, Central Local Time, on the **9<sup>th</sup> of September, 2013** for the construction of Parking Lots. Bids will be publicly opened and read aloud in the Commissioner's Conference Room, 201 N. Choctaw, El Reno, Oklahoma, on the **9<sup>th</sup> of September at 10:00 am**. This project consists of furnishing all required materials, supplies, equipment, tools, and plant to perform all necessary labor for the construction of Parking Lots.

The work shall be done in accordance with plans and specifications on file in the Engineer's Office. Plans, specifications, and other bidding documents are available for public inspection, and hardcopy or PDF on CD may be obtained by visiting the Engineer, Cowan Group Engineering, LLC, 437 W. Wilshire, Suite A, Oklahoma City, Oklahoma 73116. There will be a non-refundable charge for bidding documents and plans.

Complete hard copy or PDF on CD set of drawings and specifications for \$50.00.

No documents will be mailed until payment is received in full.

All blank spaces for bid prices must be completed, in ink or typewritten, and in both words and figures. Each bid must be submitted in a sealed envelope bearing on the outside the name of the bidder, his/her address, and the name of the project for which the bid is submitted. If forwarded by mail, the sealed envelope containing the bid must be enclosed in another envelope addressed as specified in the bid form.

Bids received more than ninety-six (96) hours, excluding Saturdays, Sundays and holidays, before the time set for opening the bids, as well as bids received after the time set for receipt of bids, WILL NOT be considered and will be RETURNED UNOPENED.

A cashier's check, a certified check, or a surety bond in the amount of five percent (5%) of the bid shall accompany the sealed proposal of each bidder. Deposits will be returned to the unsuccessful bidders. Each bid submitted is a legal offer and when accepted by the Owner, constitutes a FIRM AND BINDING CONTRACT. The Owner reserves the right to REJECT ANY or ALL BIDS. The Owner reserves the unconditional right to cancel all or any portion of this project within thirty (30) days from the date of opening of bids, for any reason and at its sole discretion.

## Instruction to Bidders

EXAMINATION OF SITE Each bidder by making his bid represents that he has visited the site and familiarized himself with all the conditions under which the work is to be performed. No extra compensation will be allowed by reason of any matters or things concerning which the bidder did not inform him prior to bidding.

EASEMENTS Work performed on, or use of, easements shall be subject to the provisions of the easement agreements on file and open to inspection in the office of the Owner.

EXAMINATION OF BIDDING DOCUMENTS Each bidder by making his bid represents that he has read and understands the bidding documents. The bidder shall include in his bid prices any and all costs that may be necessary to complete the work in accordance with the requirements of the contract documents.

SUBSURFACE EXPLORATION DATA Investigations of subsurface conditions at the site is the responsibility of the Contractor. The Owner assumes no responsibility whatsoever with respect to the sufficiency of the Contractor's investigations, or of their interpretation, and there is no guarantee, either expressed or implied, that the conditions found by the Contractor are representative of those existing throughout the work or any part of it, or that unforeseen developments may not occur. The Contractor shall plan his work based upon his own subsurface information and assume responsibility for conditions other than those he may find.

INTERPRETATION OF CONTRACT DOCUMENTS Questions regarding documents, discrepancies, omissions, or intent of the specifications or drawings shall be submitted in writing to the Owner through the Engineer at least seven (7) days prior to opening of bids to provide time for issuing and forwarding an addendum. Any interpretation of the contract documents will be made only by addendum duly issued or delivered by the Owner to each person receiving a set of documents. The Owner will not be responsible for any other explanations or interpretation of the contract documents.

MATERIAL SUBSTITUTION Each bidder shall base his bid upon the materials and equipment as described in the bidding documents. The successful contractor will not be allowed to make any substitutions on his own initiative, but in each instance will be required to obtain authorization from the Owner before installing any work in variance with the requirements of the contract documents.

APPROXIMATE QUANTITIES On all items on which bids are to be received on a unit price basis, the quantities stated in the bid will not be used in establishing final payment due the Contractor. The quantities stated, on which unit prices are invited, are approximate only and each bidder shall make his own estimate from the contract drawings of the quantities required on each item and calculate his unit price bid for each item accordingly. Bids will be compared on the basis of number of units stated in the bidding schedule. Payment on the contract or unit price items shall be based on the actual number of units installed in the completed work.

BID SECURITY No bid will be considered unless the original copy filed with the Purchasing Agent is accompanied by a Bidder's Bond, Certified Check, or Cashier's Check in the required amount, made payable to the Owner. The bid security shall be in the amount of five percent (5%) of the total amount of the bid. It shall be five percent (5%) of the highest amount in the event of an alternate or several bids. The bid security is required as evidence of good faith and as a guarantee that if awarded the Contract, the bidder will execute the Contract and furnish the required bonds and insurance within the required time and the guarantee will serve as liquidated damages in the event of failure to do so.

QUALIFICATIONS OF BIDDERS In determining the lowest responsible bid, the following elements will be considered: Whether the bidder involved (A) maintains a permanent place of business; (B) has adequate plant equipment to do the work properly and expeditiously; (C) has a suitable financial status

to meet obligations incident to the work; and (D) has appropriate technical experience.

Each bidder may be required to show that former work performed by him has been handled in such manner that there are no just or proper claims pending against such work. No bidder will be acceptable if he is engaged on any other work which impairs his ability to finance this contract or provide proper equipment for the proper execution of same. Each bidder shall demonstrate his ability of meeting all requirements herein stipulated, if asked for them.

**RETURN OF BID SECURITIES** The security of the three lowest bidders will be returned after the execution of the agreement with the successful bidder and the approval of his bonds and insurance. The security of all other bidders will be returned promptly after the bids have been opened and reviewed by the Owner. If all bids are rejected, the securities will be returned at the time of rejection.

**AGREEMENT, BONDS, INSURANCE** The attention of bidders is specifically directed to the forms of agreement and bonds to be executed and the types of insurance to be taken out in the event a contract award is made.

**BID SUBMITTAL** Each bid, properly signed, together with the bid security, affidavits, and qualification statements (if required), shall be enclosed in a sealed envelope addressed and entitled as specified in the Invitation to Bid. All addenda issued shall be signed and included with the documents at the time of bid submittal.

**Complete and submit one (1) original and two (2) copies of the following documents:**

- 1. Bid Proposal Form.**
- 2. Bid Bond, Cashier's Check, or Certified Check.**
- 3. Business Relationship Affidavit.**
- 4. Non-Collusion Affidavit.**
- 5. Qualification Statements if required.**

**WITHDRAWAL OF BID** Any bid may be withdrawn at any time prior to the hour fixed in the Invitation to Bid for the opening of bids, provided that a request in writing executed by the bidder or his duly authorized representative for the withdrawal of such bid is filed with the Owner prior to the time specified for the opening of bids. The withdrawal of a bid will not prejudice the right of a bidder to file a new bid, except that the new bid must be submitted prior to the date and time for submitting bids.

**PENALTY FOR COLLUSION** If at any time it shall be found that the person, firm, or corporation to whom the Contract has been awarded has, in presenting any bid or bids, colluded with any other party or parties, then the Contract so awarded shall be null and void, and the Contractor and his sureties shall be liable to the Owner for all loss for damage which the Owner may suffer thereby, and the Owner may advertise for new bids for said work.

**LICENSE** Each bidder shall possess state and local licenses as are required by law, and shall furnish satisfactory proof to the Owner upon request that the licenses are in effect during the entire period of the Contract.

**AWARD OF CONTRACT** The award of any contract or contracts will be made to the lowest responsible bidder or bidders. The Owner reserves the right to reject any or all bids, or to waive irregularities or informalities at its discretion. In the event that the approvals are not received or the Owner cannot award or reject said proposals within 90 days from the date of opening of bids, bidders shall have the right to withdraw their bids on written notice to the Owner.

**EFFECTIVE DATE OF AWARD** If a contract is awarded by the Owner, such award shall be effective when formal notice of such award, signed by the authorized representative of the Owner, has been



delivered to the intended awardee, or mailed to him at the main business address shown on his bid, by some officer or agent of the Owner duly authorized to give such notice.

EXECUTION OF AGREEMENT Copies of the agreement in the number stated in the form of agreement shall be executed by the successful bidder and returned, together with the required bonds and insurance, within fifteen (15) days from and after the date of the award of the Contract. Effective date of bonds shall be the same or later than the date of the agreement.

FAILURE TO EXECUTE AGREEMENT AND FILE BONDS AND INSURANCE Failure of a successful bidder to execute the agreement and file required bonds and insurance within the required time shall be just cause for the annulment of the award. On failure of a successful bidder to execute the agreement and file the required bonds and insurance within the required time, he shall forfeit his bid security as agreed herein above. Upon annulment of an award as aforesaid, the Owner may then award a contract to the next lowest responsible bidder.

PAYMENT FOR EXCESS COSTS AND LIQUIDATED DAMAGES The successful contractor will be required to pay for the excess cost of field engineering and inspection and liquidated damages as defined in the General Conditions of the Standard Specifications for Construction and the Contract Agreement, if extensions of time are not granted by Owner because of avoidable delays as therein defined.

WAGE DETERMINATION The Contractor shall comply with the current determinations, as required by law.

STANDARD SPECIFICATIONS FOR CONSTRUCTION The 2009 Standard Specifications for Highway Construction by the Oklahoma Department of Transportation and Standard Design Drawings shall be a part of these contract documents as if included herein. Each bidder shall have a copy in their possession to be eligible to bid on this project.

ADMINISTRATIVE MATTERS The Contractor shall obtain all permits and licenses required. The Contractor shall pay all fees associated with such permits, licenses and other.

This project is eligible for sales tax exemption.

**BID PROPOSAL FORM**

**BOARD OF COUNTY COMMISSIONERS OF CANADIAN COUNTY**

BID NUMBER 2014-04

THE UNDERSIGNED BIDDER, having examined the plans, specifications, the locations, arrangements, and conditions of roads, street, utilities and other facilities or appurtenances which affect or may be affected by the proposed work, the actual sites of the proposed improvements and being acquainted with and fully understanding: (1) the extent and character of the work covered by this proposal; (2) the locations and specified requirements of and for the proposed improvements and other items of work appurtenant thereto; and (3) the normal existing and probable construction difficulties, hazards or all other factors or conditions which may or may not be apparent, which may affect or be affected by the specified work.

HEREBY PROPOSES to furnish all required materials, supplies, equipment, tools, and plant; to perform all necessary labor; and to construct, erect, equip, and complete all work stipulated in, required by, and in accordance with the contract documents hereto attached and the specifications referred to therein (as altered, changed, or modified by any and all addenda thereto), for and in connection with the Contract for which this proposal is herein submitted for and in consideration of the prices set out herein.

The undersigned bidder hereby agrees to furnish the required Performance Bond, Statutory Bond, Maintenance Bond, and evidence of insurance and to enter into a contract within fifteen (15) days after the acceptance of this proposal, and further agrees to complete the work in 120 calendar days (stipulated in the Contract Agreement) from the date of the issuance by the Engineer/Owner of a Work Order authorizing commencement of work.

Attached hereto is a Certified Check, Cashier's Check or Bidder's Surety Bond in the amount of: \_\_\_\_\_ DOLLARS \$ \_\_\_\_\_ which the undersigned agrees is to be forfeited to and become the property of the Owner, as liquidated damages, should this proposal be accepted and the Contract be awarded to him, he fails to enter into a Contract in the form prescribed and to furnish the required bonds and evidence of insurance within fifteen (15) days as above stipulated, but otherwise the proposal guarantee shall be returned to the undersigned upon the signing of the Contract and delivery of the approved bonds and evidence of insurance to the Owner.

DATED this \_\_\_\_\_ day of \_\_\_\_\_ 20 \_\_\_\_\_.

If an Individual: \_\_\_\_\_,

doing business as: \_\_\_\_\_

**BASE BID**

PARKING LOTS BASE BID					
ITEM	DESCRIPTION	QTY	UNIT	UNIT PRICE	TOTAL COST
1.	EARTHWORK	1	LSUM		
2.	SOLID SLAB SODDING	612	SY		
3.	AGGREGATE BASE TYPE A	974	CY		
4.	STABILIZED SUBGRADE	5,846	SY		
5.	PRIME COAT	1,286	GAL		
6.	SUPERPAVE, TYPE S3 (PG 76-28 OK)	9	TON		
7.	P.C. CONCRETE PAVEMENT (6" THICK)	5,271	SY		
8.	REINFORCED P.C. CONCRETE PAVEMENT (6" THICK)	173	SY		
9.	CLASS C CONCRETE	1	CY		
10.	CONCRETE CURB (6" BARRIER-INTEGRAL)	3,101	LF		
11.	1'-8" COMB. CURB & GUTTER (6" BARRIER)	137	LF		
12.	2'-8" COMB. CURB & GUTTER (6" BARRIER)	382	LF		
13.	4" CONCRETE SIDEWALK	1,024	SY		
14.	TACTILE WARNING DEVICE-NEW	253	SF		
15.	REPLACEMENT OF MANHOLE FRAME & COVER	1	EA		
16.	MANHOLES ADJUST TO GRADE	1	EA		
17.	VALVE BOXES ADJUST TO GRADE	0	EA		
18.	METER BOXES ADJUST TO GRADE	1	EA		
19.	FIRE HYDRANT RESET	1	EA		
20.	REMOVAL OF EXISTING GRAVEL PARKING LOT & DRIVE	1,283	SY		
21.	REMOVAL OF CONCRETE PAVEMENT	19	SY		
22.	REMOVAL OF ASPHALT PAVEMENT	3,265	SY		
23.	REMOVAL OF CURB	427	LF		
24.	REMOVAL OF SIDEWALK	829	SY		
25.	REMOVE WATER METER AND METER CAN	1	EA		
26.	SAWING PAVEMENT	1,343	LF		
27.	REMOVE & RESET EXISTING SIGNS	14	EA		
28.	CONSTRUCTION STAKING	1	LSUM		
29.	MOBILIZATION	1	LSUM		
30.	(PL) REMOVE & RESET LIGHT POLE	2	EA		

**PARKING LOTS BASE BID (CONTINUED)**

ITEM	DESCRIPTION	QTY	UNIT	UNIT PRICE	TOTAL COST
31.	SHEET ALUMINUM SIGNS	43	SF		
32.	TRAFFIC STRIPE (PAINT) (4" WIDE)	4,209	LF		
33.	TRAFFIC STRIPE (PAINT) (ARROW)	6	EA		
34.	TRAFFIC STRIPE (PAINT) (SYMBOLS)	16	EA		
35.	TRAFFIC STRIPE (PLASTIC) (24" WIDE)	88	LF		
36.	PAVEMENT MARKING REMOVAL (TRAFFIC STRIPE)	500	LF		
37.	CONSTRUCTION TRAFFIC CONTROL	1	LSUM		
38.	TEMPORARY SILT FENCE	629	LF		
39.	(PL) TEMPORARY INLET SEDIMENT FILTER	7	EA		
40.	CONCRETE WHEELSTOP	31	EA		
41.	HANDRAILING	7	LF		
42.	RETAINING WALL	386	SF		

**BASE BID \$** \_\_\_\_\_

**BASE BID IN WORDS \$** \_\_\_\_\_

**ADDITIVE ALTERNATE**

PARKING LOTS ADDITIVE ALTERNATE					
ITEM	DESCRIPTION	QTY	UNIT	UNIT PRICE	TOTAL COST
43.	EARTHWORK	1	LSUM		
44.	SOLID SLAB SODDING	621	SY		
45.	AGGREGATE BASE TYPE A	394	CY		
46.	STABILIZED SUBGRADE	2,366	SY		
47.	PRIME COAT	521	GAL		
48.	SUPERPAVE, TYPE S3 (PG 76-28 OK)	1	TON		
49.	P.C. CONCRETE PAVEMENT (6" THICK)	2,229	SY		
50.	CONCRETE CURB (6" BARRIER-INTEGRAL)	743	LF		
51.	1'-8" COMB. CURB & GUTTER (6" BARRIER)	42	LF		
52.	2'-8" COMB. CURB & GUTTER (6" BARRIER)	56	LF		
53.	4" CONCRETE SIDEWALK	122	SY		
54.	TACTILE WARNING DEVICE-NEW	20	SF		
55.	MANHOLES ADJUST TO GRADE	1	EA		
56.	VALVE BOXES ADJUST TO GRADE	1	EA		
57.	REMOVAL OF ASPHALT PAVEMENT	17	SY		
58.	REMOVAL OF CURB	63	LF		
59.	REMOVAL OF SIDEWALK	2	SY		
60.	REMOVE WATER METER AND METER CAN	2	EA		
61.	SAWING PAVEMENT	215	LF		
62.	CONSTRUCTION STAKING	1	LSUM		
63.	MOBILIZATION	1	LSUM		
64.	SHEET ALUMINUM SIGNS	6	SF		
65.	TRAFFIC STRIPE (PAINT) (4" WIDE)	1,334	LF		
66.	CONSTRUCTION TRAFFIC CONTROL	1	LSUM		
67.	TEMPORARY SILT FENCE	592	LF		

**ADDITIVE ALTERNATE BID \$** \_\_\_\_\_

**ADDITIVE ALTERNATE BID IN WORDS \$** \_\_\_\_\_

**TOTAL BASE BID + ADDITIVE ALTERNATE \$** \_\_\_\_\_

**TOTAL BASE BID + ADDITIVE ALTERNATE BID IN WORDS \$** \_\_\_\_\_

\_\_\_\_\_

Company: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

Federal Tax I.D. \_\_\_\_\_

Company Representative: \_\_\_\_\_

Title: \_\_\_\_\_

Attest: \_\_\_\_\_

**NON-COLLUSION AFFIDAVIT**

STATE OF \_\_\_\_\_ )  
  ) SS.  
COUNTY OF \_\_\_\_\_ )

\_\_\_\_\_, of lawful age, being first duly sworn on oath that (s)he is the agent authorized by the firm of \_\_\_\_\_ to submit the above Contract to the Owner.

Affiant further states that such firm has not paid, given, or donated or agreed to pay, give, or donate to any officer or employee of the Owner, any money or other thing of value, either directly or indirectly, in the procuring of the Contract.

Affiant further states that the bidder has not been a party to any collusion among bidders in restraint of freedom of competition by agreement to bid at a fixed price or to refrain from bidding; or with any Canadian County, Oklahoma official or employee as to quantity, quality or price in the prospective contract, or any other terms of said prospective contract; or in any discussions between bidders and any state officials concerning exchange of money or other thing of value for special consideration in the letting of a contract.

\_\_\_\_\_  
Firm \ Contractor

Subscribed and sworn before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_

\_\_\_\_\_  
Notary Public

My Commission Expires:\_\_\_\_\_

(Seal)

**BUSINESS RELATIONSHIP AFFIDAVIT**

STATE OF \_\_\_\_\_ )  
 ) SS.  
 COUNTY OF \_\_\_\_\_ )

\_\_\_\_\_, of lawful age, being first duly sworn, on oath says that (s)he is the agent authorized by the bidder to submit the attached bid. Affiant further states that the nature of any partnership, joint venture, or other business relationship presently in effect or which existed within one (1) year prior to the date of this statement with the architect, engineer, or other party to the project is as follows:

\_\_\_\_\_  
 \_\_\_\_\_

Affiant further states that any such business relationship presently in effect or which existed within one (1) year prior to the date of this statement between any officer or director of the bidding company and any officer or director of the architectural or engineering firm or other party to the project is as follows:

\_\_\_\_\_  
 \_\_\_\_\_

Affiant further states that the names of all persons having any such business relationships and the positions they hold with their respective companies or firms are as follows:

\_\_\_\_\_  
 \_\_\_\_\_

(If none of the business relationships hereinabove mentioned exists, affiant should so state.)

\_\_\_\_\_  
 SUBSCRIBED AND SWORN TO before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_

\_\_\_\_\_  
 Notary Public

My commission expires: \_\_\_\_\_

(Seal)



**CONTRACT AGREEMENT**

THIS CONTRACT AND AGREEMENT, made and entered into this \_\_\_\_\_ day of \_\_\_\_\_  
\_\_\_\_\_, 20\_\_\_\_\_, by and between the Board of County Commissioners of  
Canadian County, party of the first part, hereinafter termed "Owner", and \_\_\_\_\_  
\_\_\_\_\_, party of the second part, hereinafter termed "Contractor".

**WITNESSETH:**

WHEREAS, the Owner has caused to be prepared, in accordance with law, certain specifications, plans, and other bidding documents for the work hereinafter described and has approved and adopted all of said bidding documents and has received sealed proposals for furnishing materials, labor, and equipment for either of the indicated works.

This project consists of furnishing all required materials, supplies, equipment, tools, and plant to perform all necessary labor for the construction of Parking Lots. A City of El Reno Right-of-Way permit is required for curb cuts and new sidewalk.

The work shall be done in accordance with plans and specifications on file in the Engineer's Office as outlined and set out in the bidding documents and in accordance with the terms, specifications, plans, and provisions of said Contract; and,

WHEREAS, Contractor, in response to request for bids, has submitted to the Owner in the manner and at the time specified, a sealed proposal in accordance with the terms of this Contract; and,

WHEREAS, the Owner, in the manner provided by law, has publicly opened, examined, and canvassed the proposals submitted and has determined and declared the above named Contractor to be the lowest responsible bidder on the above described project, and has duly awarded this Contract to said Contractor, for the sum named in the proposal to-wit:

\_\_\_\_\_ DOLLARS (\$)

NOW, THEREFORE, for and in consideration of the mutual agreements and covenants herein contained, the parties to this Contract have agreed, and hereby agree, as follows:

- (1) That the Contractor hereby agrees to furnish all tools, equipment, materials, and labor, and to build and complete the above described project in accordance with the specifications therefore on file with the Engineer and Owner.
- (2) That the Owner shall pay the Contractor for the work performed, as follows:
  - a. Payment for unit price items shall be at the unit price bid for actual construction quantities.
  - b. Construction items specified but not included as bid items shall be considered incidental and shall not be paid for directly, but shall be included in the bid price for any or all of the pay quantities.
  - c. At the end of each month the Engineer will make written estimates of the materials in place and accepted, and the amount of work performed in accordance with the

contract during the current period of time between estimates and the value thereof computed at the contract unit prices. Payment to the Contractor shall be in the amount of the estimate minus the retainage as permitted by law.

Should any defective work or materials be discovered or should a reasonable doubt arise as to the quality of any work completed, there will be deducted from the next estimate an amount equal to the value of the defective or questionable work and shall not be paid until the defects are remedied.

And that the Contractor's bid is hereby made a part of this Agreement.

- (3) That the Owner reserves the right to add to or subtract from the estimated quantities or amount of work to be performed. The work to be performed or deducted shall be at the unit price bid.
- (4) That the Contractor will not undertake to furnish any materials or to perform any work not specifically authorized under the terms of this Agreement unless additional materials or work are authorized by written work directive change; and that in the event any additions are provided by the Contractor without such authorization, the Contractor shall not be entitled to any compensation therefor whatsoever.
- (5) That if any additional work is performed or additional materials provided by the Contractor upon authorization by the Owner, the Contractor shall be compensated therefore at the unit price bid and as agreed to by both parties in the execution of the Change Order.
- (6) That the Contractor shall perform the work and provide the materials strictly in accordance with the specifications as to quality and kind and all work and materials shall be subject to rejection by the Owner through its authorized representatives for failure to meet such requirements, and in the event of such rejection, the Contractor shall replace the work and materials without compensation therefore by the Owner.
- (7) The Contractor shall complete the work in accordance with the terms of this Agreement within a period of time not to exceed 120 calendar days, following the issuance by the Engineer of a Work Order authorizing the Contractor to commence work on the project.
- (8) The Contractor shall furnish bonds and certificate of insurance as specified in the "Instructions to Bidders" and/or the "General Provisions", which must be approved by the Owner prior to issuance of the Work Order and commencement of the work on the project.
- (9) On completion of the work, but prior to the acceptance thereof by the Owner, it shall be the duty of the Engineer or other appropriate person to determine that said work has been completely and fully performed in accordance with said Contract Documents; and upon making such determination said official shall make his final certificate to the Owner.
- (10) Liquidated damages shall be paid by the Contractor at the rate of \$500 per each and every calendar day required by him to complete the contract in excess of the contract time.
- (11) APPROXIMATE QUANTITIES All items which bids are to be received on a unit price basis, the quantities stated in the bid will not be used in establishing final payment due the contractor. The quantities stated, on which unit prices are invited, are approximate only and each bidder shall make his own estimate from the contract drawings of the quantities required on each item and calculate his unit price bid for each item accordingly. Bids will be compared on the basis of number of units stated in the bidding schedule. Payment on the contract or

unit price items will be based on the actual number of units installed in the completed work. No increases or decreases in the approximate quantities shall exceed twenty (20%) percent without approval of the Engineer.

- (12) COST REDUCTION PROPOSALS The Contractor may submit to the Engineer, in writing, proposals for modifying the Plans, Specifications or other requirements of the Contract for the purpose of reducing the cost of construction. The cost reduction proposal shall not impair, in any manner, the essential functions or characteristics of the project, including but not limited to service life, economy of operation, and ease of maintenance, desired appearance or design and safety standards.

To best utilize the cost reduction incentive program, the Contractor may submit a cost reduction change proposal as follows:

In order for Owner to accept or reject a change proposal concept the Contractor should submit a "Conceptual Proposal." However, the Contractor does have the option to directly submit a Formal Proposal.

- I. The Conceptual Proposal shall provide the following minimum information:
  - a. A narrative describing both the existing contract requirements for performing the work and the proposed change.
  - b. A listing of work items affected by the proposed change, including any change in project time and/or traffic detour(s).
  - c. An initial (rough) estimate of the net savings which the change is expected to generate.
- II. The Contractor may proceed to the Formal Proposal upon approval of the Conceptual Proposal
- III. The Formal Proposal shall contain the following information:
  - a. A narrative describing both the existing contract requirements for performing work and the proposed change.
  - b. A detailed cost estimate of performing the work under the existing contract and under the proposed change (including all items affected).
  - c. A detailed analysis of the net savings to be generated from the change proposal, after all costs associated with the proposal, including road user costs where applicable, are deducted.
  - d. A date by which Owner must respond on the approval or disapproval of the Formal Proposal.

The Owner is not obligated to approve the Contractor's formal change proposal, even if the "Conceptual Proposal" is accepted. Furthermore, the decision of the Owner to approve/disapprove the change proposal will be final and will not be subject to any further action.

The provisions of this Subsection shall not be construed to require the Engineer to consider any cost reduction proposal which may be submitted hereunder; proposed changes in basic design of a bridge or of a pavement type will not be considered as an acceptable cost reduction proposal; the Owner will not be liable to the Contractor for failure to accept or act upon any cost reduction proposal submitted pursuant to this Subsection nor for any delays to the work attributable to any such proposal. If a cost reduction proposal is similar to a change in Plans or Specifications for the project under consideration by the Owner at the time said proposal is submitted, or if such a proposal is based upon or similar to the Standard Specifications, Special Provisions or Plans adopted by the Owner after the advertisement for the contract, the Owner will not accept such proposal. The Owner

reserves the right to make such changes without compensation to the Contractor under the provisions of this Subsection.

The Contractor shall continue to perform the work in accordance with the requirements of the Contract until an executed change order incorporating the cost reduction proposal has been issued. If an executed change order has not been issued by the date upon which the Contractor's cost reduction proposal specifies that a decision thereon should be made, or such other date as the Contractor may subsequently have specified in writing, such cost reduction proposal shall be deemed rejected.

In determining the estimated net savings, the right is reserved to disregard the contract bid prices, if, in the judgment of the Engineer, such prices do not represent a fair measure of the value of work to be performed or to be deleted.

The Owner reserves the right where it deems such action appropriate, to require the Contractor to share in the Owner's costs of investigating a cost reduction proposal submitted by the Contractor as a condition of considering such proposal. Where such a condition is imposed, the Contractor shall indicate his acceptance thereof in writing, and such acceptance shall constitute full authority for the Owner to deduct amounts payable to the Owner from any moneys due or that may become due to the Contractor under the Contract.

If the Contractor's cost reduction proposal is accepted in whole or in part, such acceptance will be by a contract change order, which shall specifically state that it is executed pursuant to this subsection. Such change order shall incorporate the changes in the Plans and Specifications which are necessary to permit the cost reduction proposal or such part of it as has been accepted to be put into effect, and shall include any conditions upon which the Owner approval thereof is based if the approval of the Owner is conditional. The change order shall also set forth the estimated net savings in the cost of performing the work attributable to the cost reduction proposal effectuated by the change order, and shall further provide that the Contractor be paid 10 percent of said estimated net savings amount.

Acceptance of the cost reduction proposal and performance of the work thereunder shall not extend the time of completion of the contract unless specifically provided for in the contract change order authorizing the use of the cost reduction proposal.

The amount specified to be paid to the Contractor in the change order which effectuates a cost reduction proposal shall constitute full compensation to the Contractor for the cost reduction proposal and the performance of the work thereof pursuant to the said change order. The amount specified to be paid the Contractor will be paid on the final estimate.

The Owner expressly reserves the right to adopt a cost reduction proposal for general use on contracts administered by the Owner when it determines that said proposal is suitable for application to other contracts. When an accepted cost reduction proposal is adopted for general use, only the Contractor who first submitted such proposal will be eligible for compensation pursuant to this Subsection, and in that case, only as to those contracts awarded to him prior to submission of the accepted cost reduction proposal. Cost reduction proposals identical or similar to previously submitted proposals will be eligible for consideration and compensation under the provisions of this Subsection if the identical or similar previously submitted proposals were not adopted for general application to other contracts administered by the Owner. Subject to the provisions contained herein, the Owner or any other public agency shall have the right to use all or any part of any submitted cost reduction proposal without obligation or compensation of any kind to the Contractor.

This Subsection of the Specifications shall apply only to contracts awarded to the lowest bidder pursuant to competitive bidding.

IN WITNESS WHEREOF, the parties hereto have caused this instrument to be executed, in four duplicate originals, the day and year first above written.

"OWNER"

BOARD OF COUNTY COMMISSIONERS OF CANADIAN COUNTY

By: \_\_\_\_\_  
Chairman

ATTEST

\_\_\_\_\_  
County Clerk

APPROVED as to form and legality this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

\_\_\_\_\_  
ATTORNEY

APPROVED by the Board of County Commissioners of Canadian County this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

ATTEST:

If an Individual: \_\_\_\_\_ doing business

as: \_\_\_\_\_

If a Partnership: \_\_\_\_\_

by: \_\_\_\_\_

Names of other partners:

If a Corporation: \_\_\_\_\_

by: \_\_\_\_\_

Title: \_\_\_\_\_

ATTEST:

\_\_\_\_\_  
Secretary  
(CORPORATE SEAL)

Business Address of Contractor:  
\_\_\_\_\_  
\_\_\_\_\_

**MAINTENANCE BOND**

KNOW ALL MEN BY THESE PRESENTS:

That we, \_\_\_\_\_, as principal, and \_\_\_\_\_, as surety, are held and firmly bound unto Board of County Commissioners of Canadian County (Owner) in the full and just sum of \_\_\_\_\_ DOLLARS (\$ \_\_\_\_\_), such sum being equal to the contract price and being in force for a period of ONE(1) years from the date of the acceptance of the below described improvements by the Owner, and thereafter for the sum of \_\_\_\_\_ Dollars (\$ \_\_\_\_\_), such sum being not less than fifteen percent (15%) of the total contract price of said improvements for a period of ONE(1) year(s) thereafter, for the payment of which well and truly to be made, we and each of us, bind ourselves, our heirs, executors and assigns, themselves, and its successors and assigns, jointly and severally, firmly be these presents.

DATED this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

The conditions of this obligation are such that whereas said principal, has by a certain contract between \_\_\_\_\_ dated the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_, agreed to construct for the Owner, Parking Lots as shown by the plans and specifications on file with the Engineer, and to maintain the said improvement against any failure due to defective materials or workmanship for a period of TWO(2) year(s) from the date of acceptance of the Parking Lots, by the Owner.

NOW, THEREFORE, if said \_\_\_\_\_ for the period of TWO(2) year(s) from and after the completion and acceptance of said improvements shall maintain against any failure due to defective materials or workmanship the said improvements, then this obligation to be void; otherwise, to remain in full force and effect.

It is further agreed that if said Principal or Surety herein shall fail to maintain said improvements against any failure due to defective materials or workmanship for the said period of TWO(2) year(s), and at any time repairs shall be necessary, that the cost of making such repairs shall be determined by the Engineer or person or persons designated by them to ascertain the same, and if, upon thirty ( **30** ) days' notice, the said amount ascertained, shall not be paid by the Principal or Surety herein, or if the necessary repairs are not made, that said amount shall become due upon the expiration of thirty ( **30** ) days, and suit may be maintained to recover the amount so determined in any court of competent jurisdiction. And that the amount so determined shall be conclusive upon the parties as to the amount due on this bond for the repair or repairs included therein, and that the cost of all repairs shall be so determined from time to time during the life of this bond, as the condition of the improvements may require.

Provided, Further, that the Surety, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or to the work to be performed thereunder or the specifications accompanying the same shall in any way affect its obligations on the bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the work or to the specifications.

DATED this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

ATTEST: \_\_\_\_\_  
SECRETARY: \_\_\_\_\_

\_\_\_\_\_  
PRINCIPAL  
By: \_\_\_\_\_  
\_\_\_\_\_  
Surety

ATTEST: \_\_\_\_\_  
\_\_\_\_\_  
SECRETARY

By: \_\_\_\_\_

APPROVED as to form and legality this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

\_\_\_\_\_  
ATTORNEY

APPROVED by Board of County Commissioners of Canadian County this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

ATTEST: \_\_\_\_\_  
County Clerk

\_\_\_\_\_  
Chairman

**PERFORMANCE BOND**

KNOW ALL MEN BY THESE PRESENTS:

That \_\_\_\_\_,

as Principal, and \_\_\_\_\_,

a Corporation organized under the laws of the State of \_\_\_\_\_,

and authorized to transact business in the State of Oklahoma, as Surety, are held and firmly bound unto \_\_\_\_\_

in the penal sum of \_\_\_\_\_ Dollars (\$ \_\_\_\_\_) in lawful money of the United States of America, such sum being equal to the contract price for the payment of which, well and truly to be made, we bind ourselves and each of us, our heirs, executors, administrators, trustees, successors, and assigns, jointly and severally, firmly by these presents.

DATED this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

The condition of this obligation is such that:

WHEREAS, said Principal entered into a written Contract with Board of County Commissioners of Canadian County, dated \_\_\_\_\_, 20\_\_\_\_\_, for:

**Parking Lots**

all in compliance with the specifications therefore, made a part of said Contract and on file in the office of the Engineer/Owner.

NOW, THEREFORE, if said Principal shall, in all particulars, will truly and faithfully perform and abide by said Contract and each and every covenant, condition, and part thereof and shall fulfill all obligations resting upon said Principal by the terms of said Contract and said specifications; and if said Principal shall promptly pay, or cause to be paid, all labor materials and/or repairs and all bills for labor performed on said work, whether by subcontract or otherwise; and if said Principal shall protect and save harmless said Owner from all loss, damage, and expense to life or property suffered or sustained by any person, firm, or corporation caused by said Principal or his or its agents, servants, or employees in the construction of said work, or by or in consequence of any negligence, carelessness or misconduct in guarding and protecting the same, or from any act or omission of said Principal or his or its agents, servants, or employees, and if said Principal shall protect and save Owner harmless from all suits and claims in infringement or alleged infringement or patent rights or processes, then this obligation shall be null and void, otherwise to be and remain in full force and effect.

It is further expressly agreed and understood by the parties hereto that no changes or alterations in said Contract and no deviations from the plan or mode of procedure herein fixed shall have the effect of releasing the sureties, or any of them, from the obligations of this Bond.

IN WITNESS WHEREOF, the said Principal has caused these presents to be executed in its name and its corporate seal to be hereunto affixed by its duly authorized officers, and said Surety has caused these presents to be executed in its name and its corporate seal to be hereunto affixed by its attorney-in-fact, duly authorized so to do, the day and year first above written.

ATTEST:

\_\_\_\_\_

Surety:

\_\_\_\_\_

By: \_\_\_\_\_  
Attorney-in-Fact

PRINCIPAL:

\_\_\_\_\_

BY: \_\_\_\_\_

Address of Surety or Agent:

\_\_\_\_\_

\_\_\_\_\_

Telephone No. \_\_\_\_\_

APPROVED as to form and legality this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

\_\_\_\_\_  
ATTORNEY

APPROVED by the Board of County Commissioners of Canadian County this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

ATTEST:

\_\_\_\_\_  
County Clerk

\_\_\_\_\_  
Chairman



**STATUTORY BOND**

KNOW ALL MEN BY THESE PRESENTS:

That \_\_\_\_\_,

as Principal, and \_\_\_\_\_,

a Corporation organized under the laws of the State of \_\_\_\_\_,

and authorized to transact business in the State of Oklahoma, a Surety,

are held and firmly bound unto \_\_\_\_\_

in the penal sum of \_\_\_\_\_ Dollars (\$\_\_\_\_\_) in lawful money of the United States of America, such sum being equal to the contract price for the payment of which, well and truly to be made, we bind ourselves and each of us, our hers, executors, administrators, trustees, successors, and assigns, jointly and severally, firmly by these presents.

DATED this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

The condition of this obligation is such that:

WHEREAS, said Principal entered into a written Contract with the Board of County Commissioners of Canadian County dated \_\_\_\_\_, 20\_\_\_\_\_, for:

Parking Lots

all in compliance with the specifications therefore, made a part of said Contract and on file in the office of the Owner/Engineer.

NOW THEREFORE, if said Principal shall fail or neglect to pay all indebtedness incurred by said Principal or subcontractors of said Principal who perform work in the performance of such contract, for labor and materials and repairs to and parts for equipment used and consumed in the performance of said Contract within thirty (30) days after the same becomes due and payable, the person, firm, or corporation entitled thereto may sue and recover on this bond, the amount so due and unpaid.

It is further expressly agreed and understood by the parties hereto that no changes or alterations in said Contract and no deviations from the plan or mode of procedure herein fixed shall have the effect of releasing the sureties, or any of them, from the obligations of this Bond.

IN WITNESS WHEREOF, the said Principal has caused these presents to be executed in its name and its corporate seal to be hereunto affixed by its duly authorized officers, and the said Surety has caused these presents to be executed in its name and its corporate seal to be hereunto affixed by its attorney-in-fact, duly authorized so to do, the day and year first above written.

ATTEST:

\_\_\_\_\_

Surety:

\_\_\_\_\_  
\_\_\_\_\_

By: \_\_\_\_\_  
Attorney-in-Fact

PRINCIPAL:

\_\_\_\_\_

BY: \_\_\_\_\_

Title: \_\_\_\_\_

Address of Surety or Agent:

\_\_\_\_\_  
\_\_\_\_\_

Telephone No. \_\_\_\_\_

APPROVED as to form and legality this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

\_\_\_\_\_  
ATTORNEY

APPROVED by Board of County Commissioners of Canadian County this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

\_\_\_\_\_  
County Clerk

\_\_\_\_\_  
Chairman

**INVOICE AFFIDAVIT**

STATE OF \_\_\_\_\_ )  
 ) SS.  
COUNTY OF \_\_\_\_\_ )

The undersigned (architect, contractor, supplier, engineer, or supervisory official), of lawful age, being first duly sworn, on oath says that this invoice is true and correct. Affiant further states that the (work, services, or materials) as shown by this invoice have been (completed or supplied) in accordance with the plans, specifications, orders, or requests furnished to the affiant. Affiant further states that (s)he has made no payment, given, or donated or agreed to pay, give, or donate, either directly or indirectly, to any elected official, officer, or employee of the Owner, of money or any other thing of value to obtain payment of this invoice.

\_\_\_\_\_  
Contractor or Supplier

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_

\_\_\_\_\_  
Notary Public

My Commission Expires: \_\_\_\_\_

(Seal)

\_\_\_\_\_  
Architect, Engineer, or other  
Supervisory Official

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_

\_\_\_\_\_  
Notary Public

My Commission Expires: \_\_\_\_\_

(Seal)

**APPLICATION AND CERTIFICATE FOR PAYMENT**

PROJECT: Parking Lots

ENGINEER: Cowan Group Engineering, LLC

TO: (OWNER): Board of County Commissioners of Canadian County

CONTRACTOR:

CONTRACT FOR:

APPLICATION DATE:

APPLICATION NO:

PERIOD FROM:

TO:

**CHANGE ORDER SUMMARY**

Application is made for Payment, as shown below, in connection with the Contract. The present status of the account for this Contract is as follows:

		ADDITIONS \$	DEDUCTIONS \$
Change Orders approved in previous months by Owner			
TOTAL			
<u>Subsequent Change Orders</u>			
No.	Approved (Date)		

ORIGINAL CONTRACT SUM	\$ _____
Net change by Change Orders	\$ _____
CONTRACT SUM TO DATE	\$ _____
TOTAL COMPLETED TO DATE	\$ _____
RETAINAGE <u>5</u> %	\$ _____
TOTAL EARNED LESS RETAINAGE	\$ _____
LESS PREVIOUS CERTIFICATES FOR PAYMENT	\$ _____

**TOTALS**

Net change by Change Orders \$ \_\_\_\_\_

CURRENT PAYMENT DUE \$ \_\_\_\_\_

The undersigned Contractor certifies that the work covered by this Application for Payment has been completed in accordance with the Contract Documents, that all amounts have been paid by him for work for which previous Certificates for Payment were issued and payments received from the Owner, and that the current payment shown herein is now due.

CONTRACTOR:

By: \_\_\_\_\_ Date: \_\_\_\_\_

In accordance with the Contract Documents, based on on-site observations and the data comprising the above application, the Engineer certifies to the Owner that to the best of the Engineer's knowledge, information and belief the Work has progressed as indicated, the quality of the Work is in accordance with the Contract Documents, and the Contractor is entitled to payment of the AMOUNT CERTIFIED. \$ \_\_\_\_\_

INSPECTOR:

By: \_\_\_\_\_

PROJECT MANAGER:

By: \_\_\_\_\_

OWNER:

By: \_\_\_\_\_

Item No.	Description of Item	Scheduled Quantities	Unit Price	<u>Quantities of Work Completed</u>				
				<u>Previous Applications</u>		<u>This Application</u>		Amount Completed to Date
				Quantities	Amount	Quantities	Amount	

Subtotal or Total

**CONTRACTOR'S AFFIDAVIT OF PAYMENT OF DEBTS AND CLAIMS**

THIS DOCUMENT HAS IMPORTANT LEGAL CONSEQUENCES; CONSULTATION WITH AN ATTORNEY IS ENCOURAGED WITH RESPECT TO ITS COMPLETION OR MODIFICATION.

TO OWNER: **Board of County Commissioners of Canadian County**  
201 N. Choctaw  
El Reno, Oklahoma 73036

PROJECT: Parking Lots

CONTRACT DATED:

---

STATE OF: \_\_\_\_\_  
COUNTY OF: \_\_\_\_\_

The undersigned hereby certifies that, except as listed below, payment has been made in full and all obligations have otherwise been satisfied for all materials and equipment furnished, for all work, labor and services performed, and for all known indebtedness and claims against the Contractor for damages arising in any manner in connection with the performance of the Contract referenced above for which the Owner or Owner's property might in any way be held responsible or encumbered against any property of the Owner arising in any manner out of the performance of the Contract referenced above:

EXCEPTIONS:

SUPPORTING DOCUMENTS ATTACHED HERETO:

*The following supporting documents should be attached hereto if required by Owner:*

1. Contractor's Release or Waiver of Liens, conditional upon receipt of final payment.
2. Separate Releases or Waivers of Liens from Subcontractors and material and equipment suppliers, to the extent required by the Owner, accompanied by a list thereof.
3. Contractor's Affidavit of Release of Liens.

CONTRACTOR:  
*(Name and address)*

BY: \_\_\_\_\_  
*(Signature of authorized representative)*

\_\_\_\_\_  
*(Printed name and title)*

Subscribed and sworn before me on this date:  
\_\_\_\_\_

Notary Public: \_\_\_\_\_

My Commission Expires: \_\_\_\_\_

## CONTRACT SPECIFICATIONS

### A. GENERAL

1. This Contract is intended to, and hereby does, provide for complete in place, Parking Lots, including all necessary work and material for a total job, whether or not such work and material is shown or implied in the plans and specifications.
2. All construction and materials shall conform to the 2009 Standard Specifications for Highway Construction by the Oklahoma Department of Transportation and the Standard Design Drawings. All work necessary to make for a complete and operable roadway system as intended by these plans and specifications for which bid items are not provided, shall be considered incidental work and the cost thereof shall be included in other appropriate bid items.
3. The sequence of construction shall be as follows:
  - a. Lots B and C shall be constructed first. Lot D, if the additive alternative is accepted, may be constructed at this time.
  - b. Lot E shall be constructed after the completion of Lots B and C. The south drive should not be constructed until the north lot area is completed.
  - c. Lot A shall be constructed after the completion of Lots B, C, and E. The proposed sidewalk and handicap restriping shall be completed before the demolition of the other parking areas to provide continuous nearby handicap parking.
4. The cost to include the furnishing and installation of all temporary sheeting, shoring, timbering and bracing required to maintain any excavation in a condition to furnish safe working conditions and to permit the safe and efficient installation of all items of contract work shall be included in other items of work. The Contractor shall further, at his own expense, shore up or otherwise protect all fences, buildings, walls, walks, curbs, or other property adjacent to any excavation which might be disturbed during the progress of the work. The Contractor will be held liable for any damage which may result to neighboring property from excavation or construction operations.
5. Whenever any excavation is carried beyond the lines and grades shown on the Contract Drawings, written in the Contract Documents, and/or given by the Engineer, the Contractor shall, at his own expense, refill all such excavated space with such materials and in such a manner as may be directed. Beneath and around concrete structures, space excavated without authority shall be thoroughly compacted when refilling, or if deemed necessary by the Engineer, shall be refilled with concrete at the Contractor's expense.
6. If the materials encountered on any excavation are not suitable for structural foundations, or if necessary, to go an additional depth or width from that designated on the contract drawings to provide proper bearing for pipe and concrete, the Contractor shall make such additional excavations outside the regular limits of the work as may be directed by the Engineer. The cost of such additional excavation shall be merged into the appropriate unit price.
7. Excavated material shall be deposited so as to interfere as little as possible with the execution of the whole work or its several parts. Such material as cannot be placed in its final position in fills and embankment shall be removed to a temporary spoil bank, from which it shall later be taken and placed in embankment or fills.

8. Unsuitable and surplus excavated material not incorporated in the improvement shall be disposed of by the Contractor at his own expense unless otherwise designated in the project specifications, or on the contract drawings.
9. If private land is used by the Contractor as a spoil site, the Contractor shall obtain written permission from the owner or agent of the land agreeing to its use for this purpose and provide the project owner with a certified copy of such agreement.
10. The Contractor shall notify residents and business owners of construction by distributing door hangers to each and every house, business, and /or occupied structure located on the street or alley where the construction shall occur, at least 48 hours in advance of the commencement of construction.

**B. SITE CONDITIONS**

The Contractor shall be responsible for familiarizing himself with surface and subsurface conditions. The base bid as shown in the proposal shall include cost for unclassified excavating of earth, rock, dewatering, stabilizing unsuitable soils such as quicksand or other unsuitable materials, or any hazard that may be encountered. The cost for such work shall be included in the appropriate bid item. No additional compensation shall be given for such work. The Contractor shall satisfy himself as to the accuracy of all measurements before constructing any permanent structure.

**C. SURVEYS**

The Contractor shall develop and make all detailed surveys needed for construction such as slope stakes, batter boards, stakes for construction location and other working points, lines and elevations. The Contractor shall carefully preserve all bench marks, reference points and stakes established by the Engineer and in case he causes damage or disturbance, he will be charged for the cost of replacement and shall be responsible for any mistakes that may be caused by their loss.

**D. UTILITY LOCATIONS**

The elevation and location of all utilities shown on the contract drawings were taken from public records. It shall be the duty of the Contractor to make final and exact determination of the location and extent of these utilities, and he will be liable for any expense resulting from damage to them. Unless otherwise indicated on the contract drawings or unless otherwise taken care of by the Owner thereof, all utilities and all structures of any nature, whether below or above ground, that may be affected by the work shall be protected and maintained by the Contractor and shall not be disturbed or damaged by him during the progress of the work. Should the Contractor disturb, disconnect or damage any utility or any structure, all expenses of whatever nature arising from such disturbance or the replacement or repair thereof shall be borne by the Contractor. This provision shall apply whether or not said utility or structure is shown on the plans. All utility locations shown or not shown on these plans shall be the responsibility of the Contractor prior to excavation. Utility location telephone numbers are:

1-800-522-6543	Statewide
1-800-654-8349	Out of State



E. AS-BUILT RECORDS

The Contractor is required to keep a current record of all field changes on jobsite at all times. They shall be legibly marked on his plan and shall become property of the Owner prior to completion for purposes of constructing an as-built record of this project.

F. ARRANGEMENT AND CHARGE FOR WATER FURNISHED BY THE CITY

If the Contractor desires to use City water, he shall pay the rate established by City Ordinance for such service and he shall make complete and satisfactory arrangements with the City Utility Department for so doing. Flush meters will be used and the Contractor shall deposit the cost of the flush meter with the Utility Department and will pay for repairs and maintenance of the meter for the period which he has the meter in use in his possession. Contractor shall be coordinate with City for charges related to the amount of water he uses, including any monthly minimum charge.

G. USE OF FIRE HYDRANTS

The Contractor or his employees shall not open, turn off, interfere with, attach pipe or hose to, or connect anything with any fire hydrant, stop valve or stop cock or tap any watermain belonging to the City unless duly authorized to do so by the City.

H. PROTECTION AND OPENING TO PEDESTRIANS AND TRAFFIC

The Contractor is required to receive permission from the Engineer to close any traffic lanes or alleys or roads during construction. No road shall be permanently or temporarily closed without prior approval by the Engineer. The Contractor shall conduct his work so as to interfere as little as possible with public travel, whether vehicular or pedestrian; whenever it is necessary to cross, obstruct, or temporarily close roads, driveways and walks, whether public or private. The Contractor shall, at his own expense, provide and maintain suitable and safe bridges, detours, barricades, signing, lighting, striping and/or other temporary expedients for the accommodation of public and private travel, and shall give reasonable notice to owners of private drives before interfering with them; provided, however, that such maintenance of traffic will not be required at any point where the Contractor has obtained permission from the owner and/or tenant of private property, or from the authority having jurisdiction over public property involved to obstruct traffic at any designated point thereon and for the duration of whatever period of time as may be agreed upon. All work pertaining to traffic control shall be in accordance with the latest revision of "The Manual on Uniform Traffic Control Devices."

I. MATERIALS & CONSTRUCTION

All construction and materials shall conform to the 2009 Standard Specifications for Highway Construction by the Oklahoma Department of Transportation and the Standard Design Drawings.

J. TESTING AND ACCEPTANCE REQUIREMENTS

The Contractor shall be responsible for paying the cost of all testing outlined in the Standard Specifications. All materials testing must be performed by and ODOT certified laboratory. The Engineer will field inspect progressive work and ensure the work is done in accordance with contract requirements and 2009 ODOT Standard Specifications.

K. PROTECTION AND PRESERVATION OF PROPERTY AND LANDSCAPE

The Contractor will be solely and completely responsible for conditions of the job site, including safety of all persons and property during performance of the work. This requirement will apply continuously and not be limited to normal working hours. The Contractor shall furnish such watchmen, guards, fences, warning signs, lights and walkways, and shall take all other precautions as shall be necessary to prevent damage to persons or property. All structures and improvements damaged by the Contractor, his employees, subcontractors, or agents, shall be restored to a condition as good as when he entered upon the work. The duty of the Engineer to conduct construction inspection of the Contractor's performance does not include any review of the adequacy of the Contractor's safety measures in, on, or near the construction site or sites. The Engineer has not been retained or compensated to provide design and construction review services relating to the Contractor's safety precautions or to means, methods, techniques, sequences, or procedures required for the Contractor to perform his work.

No trees shall be removed on the site of the work where outside of excavation limits, except where their removal is authorized by the Engineer. Where trees are on the line of the trench or adjacent thereto such trees and roots shall be removed and disposed of by and at the expense of the Contractor.

Trees remaining at the end of construction shall be adequately protected from permanent damage by reason of construction operations. Trimming of remaining trees shall be as directed by the Engineer.

All turf, shrubbery, and other landscaping, damaged or removed by the Contractor shall be replaced under the direction and to the satisfaction of the Owner, by and at the expense of the Contractor.

Any traffic signal loop wire, pull box, or conduit that is damaged or destroyed shall be replaced under the direction and to the satisfaction of the Owner, by and at the expense of the Contractor.

L. ADMINISTRATION MATTERS

All permits, fees, and licenses required under City Ordinance not regulated by state or federal law will be collected.

This project is eligible for state sales tax exemption for tangible personal property furnished by the Contractor which will be incorporated into this project

**DIVISION I – GENERAL REQUIREMENTS****SECTION 01000 - GENERAL CONDITIONS****PART 1     GENERAL**

The General Conditions (previous section) shall govern and control all work to which they apply; however, since these Specification are of a general nature, they may refer to work not found in this project, in which case such non-applicable stipulations will have no meaning in this Contract. In case of conflict between the General Conditions and the Special Conditions, the Special Conditions shall govern. In case of conflict with either the General or Special Conditions by Supplemental Conditions of a funding agency such as EPA, FmHA, EDA or HUD, the Supplemental Conditions will govern.

**PART 2     DEFINITIONS:**

DEFINITIONS: Whenever the words defined below, or pronouns used in their stead occur hereinafter, they shall have the meanings given as follows:

"Owner" and "County" shall mean Canadian County.

"Engineer" shall mean Cowan Group Engineering, LLC., who has been employed by the Owner for this work, or his duly authorized agent.

"Inspector" shall mean the engineering or technical inspector or inspectors duly authorized by the Engineer, limited to the particular duties entrusted to him or them.

"Contractor" shall mean the person, persons, partnership, company, firm or corporation entering into this contract for the performance of the work, or the agent appointed to act for such party.

"Specification" shall mean, collectively, all of the terms and stipulations contained in the written portion of information furnished.

"Drawings or Plan Sheets" shall mean, collectively, all of the drawings pertaining to the contract and made a part thereof, and also such supplementary drawings as the Engineer may issue from time to time in order to clarify the drawings, or for the purpose of showing authorized changes in the work, or for showing details which are not shown thereon.

The term "Grade" used in these Specification is understood to refer to and indicate the established elevations of the paving, flow line of sewers and other appurtenances as shown on the drawings.

Whenever in these CONTRACT DOCUMENTS the words "as ordered", "as directed", "as permitted", "as allowed", or words or phrases of like import are used, it shall be understood that the order, direction, requirements, permission, or allowance of the Owner and Engineer is intended.

Similarly the words "approved", "reasonable", "suitable", "acceptable", "properly", "satisfactory", or words of like effect and import, unless otherwise particularly specified herein, shall mean approved, reasonable, suitable, acceptable, proper, or satisfactory in the judgement of the Owner and Engineer.

Whenever the term "or equal" is used in the drawings and/or Specification it shall refer to a material which will adequately perform the same function, in the opinion of the Engineer, as the material specified or shown on the drawings.

### **PART 3      SCOPE OF WORK:**

The work to be covered under these contracts in accordance with the drawings listed herein and in these Specification consists of the furnishing of all materials, equipment, tools, labor, transportation and services necessary to complete the construction as outlined herein and as shown on the drawings. The complete installation shall not lack any part which can be reasonably implied as necessary to its proper functioning nor any subsidiary which is customarily furnished.

### **PART 4      EXAMINATION OF SITE OF WORK:**

It is the obligation of the bidder to examine carefully the site of the proposed work; to ascertain for himself all the facts concerning conditions therein, including all physical characteristics above, on and below the surface of the ground; to investigate the subsurface conditions and to determine for his information the character and proportionate quantities of soils, rock and other subsurface material which may be encountered in the work; to inform himself by independent research of the difficulties to be encountered and judge for himself the accessibility of the work and all other circumstances affecting the cost of doing the work or the time required for its completion; and the bidder agrees to this obligation in signing the proposal. When provided, the soils boring and testing report is attached to these Specification for the Contractor's information and is not a part of the contract. No guarantee is made as to their accuracy or completeness. The Owner assumes no responsibility whatsoever with respect to ascertaining for the bidder such facts covering physical characteristics at the site of the work. The bidder agrees that, if awarded the contract, he will make no claim for, and will have no right to, additional payment or extension of time for completion of the work or any other concession because of any failure on his part to fully acquaint himself with all conditions relating to the work. The bidder shall rely exclusively upon his own estimate, investigation and evaluation of site conditions.

**PART 5      SITE CONDITIONS:**

Where connections to existing utilities are shown on the drawings, the work may be required to be done at night or at a time which will least interfere with the operation of the existing facility.

The tie to existing utilities will be coordinated with personnel of the existing line's Owner and will be done at a time to least inconvenience their operation. The work may be required to be done at night or weekends or both.

Where possible the existing utilities (water, gas, etc.) have been noted on the drawings. There may be additional buried lines that are not shown and if such is encountered, said lines will be left in service. Contractor shall take all precautions available prior to construction to locate, identify, and verify utilities. If said lines are broken by the Contractor, they shall be repaired as soon as possible.

The work along or across state highways shall be done in accordance with the permit from Division Engineer, Department of Transportation. The right-of-way shall be maintained in a satisfactory manner at all times. All roads, streets, drives, etc., cut during construction shall be properly protected by barricades, flashing lights, etc., and shall be made passable as soon as possible after laying of lines during the day and always at night. Contractor shall maintain the above cut roads in a passable condition until the wearing surface is replaced and then kept in a satisfactory condition for five (5) years after job is completed.

**PART 6      EXPLOSIVES:**

In handling explosives used during the construction of the project, the Contractor shall adhere to all Federal and State laws and County ordinances regulating the purchase, transportation, storage, handling, and use of such explosives. No blasting shall be done without 12 hour notification of the Owner and Engineer, proof of insurance, and the presence of the Inspector. All equipment, tools, and materials used shall be of the correct type and in good condition for the operation. The Contractor shall take all necessary precautions to avoid damage to property resulting from the transportation, storage, handling and use of explosives. Before blasting, the Contractor shall take all necessary precautions to ensure that rock and debris will be confined to the excavation. Any blasting within 10 ft. of a water, sewer, gas or pipeline shall be done with very light charges, and utmost care shall be taken to avoid disturbance to these lines.

**PART 7      SUBMITTALS:**

Engineering data covering all equipment and fabricated materials to be furnished under this contract shall be submitted to the Engineer for review. These datum shall include drawings and operation of component materials and devices; the external connections; anchorages and supports required; performance

characteristics; and dimensions needed for installation and correlation with other materials and equipment. Data submitted shall include drawings showing essential details of any changes proposed by Contractor and all required structural layout and wiring diagrams.

**No work shall be performed in connection with the fabrication or manufacture of materials and equipment, nor shall any accessory or appurtenance be purchased until the drawings and data therefore have been reviewed, except at the Contractor's own risk and responsibility.**

At least five (5) copies of each drawing and necessary data with statement of approval by the Contractor, shall be submitted to the Engineer. Each drawing or data sheet shall be clearly marked with the name of the project, the Engineer's name, Contractor's name and references to applicable specification paragraphs and drawing sheets. When catalog pages are submitted, the applicable items shall be identified.

The Engineer's review of drawings and data submitted by the Contractor will cover only general conformity to the drawings and Specification, external connections and dimensions which affect the layout. The Engineer's review of drawings returned marked NO EXCEPTIONS NOTED or EXCEPTIONS NOTED does not indicate a thorough review of all dimensions, quantities and details of the material, equipment, device or items shown and does not relieve the Contractor from any responsibility for errors, omissions, or deviations from the contract requirements.

All drawings and data, after final processing by the Engineer, shall become a part of the CONTRACT DOCUMENTS and the work shown or described thereby shall be performed in conformance therewith unless otherwise authorized by the Owner or the Engineer.

After drawings and data have been accepted by Owner or Engineer, the Contractor shall submit three (3) additional copies of all data and one (1) set of reproducible of all drawings to Owner for file records. Also, Contractor shall keep accurate "record drawings" records of the work and turn these records over to the Owner at the completion of the work.

## **PART 8      SURVEYS:**

The Owner shall establish base lines or control points for the location of the principal component parts of the work together with bench marks adjacent to the work as shown or indicated on the Drawings. The Contractor shall develop and make all detail surveys necessary for construction. The Contractor shall be responsible for the accuracy of all lines and grades for all parts of the work. He shall do all field work necessary to lay out and maintain the work and shall make available to the Owner all facilities and information necessary for properly

checking the accuracy of such field work. Such checking shall in no way relieve the Contractor of his responsibility of the correctness of all field work.

The Owner will provide survey of property including reference points, property corners and bench marks where necessary in the opinion of the Engineer. If necessary, the Contractor shall transfer these reference points and bench marks to permanent locations where they will not be disturbed. If disturbed, the Contractor shall re-install them to Owner's satisfaction, at Contractor's cost.

**PART 9 PERMITS AND REGULATIONS:**

The Contractor shall secure and pay for all construction permits required to carry out the work unless otherwise specified and shall produce same upon demand of the Owner. The Contractor shall give all notices and pay all fees and shall, before starting work, ascertain whether the drawings and Specification are at variance with any codes or regulations applying at the site. The Contractor shall obtain completion survey, certificate of completion or occupancy if required by local regulations.

All features of design and construction shall comply with the local building regulations and/or other lawful or public regulations which apply at the site. If any features of construction as shown on the Owner's plan, do not conform to the regulations, the Contractor shall notify the Owner of such discrepancy, and shall base his quotation and work on features of construction which do conform to the regulations.

If the Contractor performs any work contrary to such laws, ordinances, rules and regulations and without such notice to the Owner, he shall bear all costs arising therefrom.

**PART 10 INSPECTION:**

The Contractor will provide access to the work site and facilities for representatives of the Environmental Protection Agency, Oklahoma Department of Environmental Quality and other agencies, as well as, Owner and Engineer, as required whenever the work is in progress.

**PART 11 SATURDAY, SUNDAY, HOLIDAY AND NIGHT WORK:**

No work shall be done between the hours of 7:00 p.m. and 7:00 a.m., nor on Saturday, Sunday or legal holidays without the written approval or permission of the Engineer in each case, except such work as may be necessary for the proper care, maintenance and protection of work already done, or of equipment, or in the case of an emergency.

**PART 12    PROTECTION OF PROPERTY:**

- A. The protection of City, State and Government monuments, street signs and other Owner's property is of prime importance, and if the same be damaged, destroyed or removed, they shall be repaired, replaced or paid for by the Contractor. Disturbance to this property must first be approved by the agency which controls it.
- B. No valves or other control on any utility main or building service line shall be operated for any purpose by the Contractor.
- C. At places where the Contractor's operations are adjacent to the plant of railway, telegraph, telephone, electric and gas companies, or water, sanitary sewers and storm sewers, damage to which might result in expense, loss or inconvenience, work shall not be commenced until all arrangements necessary for the protection thereof have been made.
- D. The Owner has attempted to locate all storm sewers, culverts, buried telephone or electrical conduits, sanitary sewers and water mains that might interfere with the construction of this project. The Contractor shall cooperate with the Owners of any underground or overhead utility lines in their removal and rearrangement operations in order that these operations may progress in a reasonable manner and duplication or rearrangement work may be reduced to a minimum and that services rendered by those parties will not be unnecessarily interrupted. The revision and crossings of the various types of lines shall be made as follows:
  - (1) Storm sewers and culverts may be removed at the time of crossing or may be adequately braced and held in position while the pipe is placed beneath them. If the storm sewer or culvert is removed, it shall be replaced with pipe of the same type and size as that removed and it shall be re-joined to the undisturbed line with a joint satisfactory to the Engineer. Backfill over the main up to and around the storm sewer shall be thoroughly compacted in order that no settlement will occur. The revision and crossing of said lines shall be at the expense of the Contractor.
  - (2) All overhead and buried telephone and electrical conduits, to be revised or crossed by the construction of this project shall be protected in accordance with the directions of the utility company owning the conduits and/or mains. The Contractor shall notify the companies and obtain their permission before making any crossing or revisions. The revision and crossing of said lines shall be at the expense of the Contractor. Any overhead cables or buried cables or conduits damaged by the Contractor shall be repaired at his expense to the satisfaction of the Engineer and of the Owner.



- (3) The Contractor shall not remove any water or sanitary sewer lines except as directed by the Engineer or as required by the Drawings and Specification, and shall adequately brace and protect them from any damage during construction. Any existing water main or sewer main or lateral damage caused by the Contractor's operations will be repaired by the Contractor. The repairs will be made at the Contractor's expense.
- E. The location of utility service lines serving individual properties may or may not be shown on the Drawings, but the Contractor shall assume that such service lines exist whether or not they are shown on the Drawings, and it shall be the responsibility of the Contractor to make any necessary changes in the line and/or grade of such services, or to secure the necessary changes therein to be made by the particular utility company involved or other Owner thereof, or by an agent or individual Contractor approved by such utility company or other Owner. Contractor shall pay the cost of all such revisions whether performed by Contractor, the utility company or other Owner, or an approved Contractor. In the event of interruption of a utility service as a result of accidental breakage, Contractor shall promptly notify the Engineer and the Owner of the utility, and shall repair or cause the same to be repaired, in the same manner as necessary changes above are provided for, the Contractor shall do all things necessary to see that the restoration of services are done as promptly as may be reasonably done. All sanitary sewer service lines damaged shall be replaced with cast iron pipe regardless of type or kind damaged.
- F. In the event the Contractor in any way fails to comply with the requirements of protecting, repairing and restoring of any utility or utility service, the Owner may, upon forty-eight (48) hours written notice proceed to protect, repair, rebuild or otherwise restore such utility or utility service as may be deemed necessary, and the cost thereof will be deducted from any money due or which may become due the Contractor pursuant to the terms of his contract.

**PART 13     FIELD OFFICE:**

Copies of the drawings, Specification, and other CONTRACT DOCUMENTS shall be kept at the site of the work available for use at all times.

**PART 14     ALTERATION OF QUANTITIES:**

The Contractor agrees that the quantities of work as stated in the Bid Schedule or indicated on the drawings are only approximate, and that the Owner shall have the right to omit portions of the work and to increase or decrease the

quantities of any item of work. Final payment will be based on the actual quantities used and installed in accordance with the drawings and Specification.

**PART 15 QUALITY CONTROL:**

When required in writing by the Engineer, the Contractor shall make such tests as may be necessary to show that the requirements of the Specification have been fulfilled.

All tests shall be made under the supervision and direction of the Engineer, and the Contractor provide all required materials, labor and apparatus, etc., or so directed, engage an approved testing laboratory for making same. Any work found defective shall be removed, replaced and retested until satisfactory to the Engineer, all at the Contractor's expense.

Should tests required by the Engineer, except those specifically called for elsewhere in these General Requirements or in the Specification show that the requirements of the Specification have been fulfilled, then the costs of such tests shall be paid for by the Owner.

**PART 16 MEASUREMENT AND FITTING OF PARTS:**

The Contractor, without extra charge, shall make such slight alterations as may be necessary to make adjustable parts fit the fixed parts, leaving all complete and in proper shape when done. The Contractor shall verify all dimensions given in the drawings, and shall report any error or inconsistency to the Engineer before commencing work.

**PART 17 CONTRACTOR'S SUPERINTENDENT:**

The Contractor shall keep a competent Superintendent and any necessary assistants at the site throughout the progress of the work. All directions given to said Superintendent shall be as binding as if given to the Contractor. Upon request, such directions will be confirmed, in writing, to the Contractor.

The Contractor's Superintendent and/or any of his assistants shall be promptly replaced in the event he or they shall prove to be incompetent and/or unsatisfactory to the Engineer.

**PART 18 ASSISTANCE BY ENGINEER:**

It is distinctly understood and agreed that such assistance as the Engineer may render to the Contractor in connection with the interpretation of drawings and Specification shall not relieve the Contractor from any responsibility for the work. Any work which proves faulty shall be made right by the Contractor without delay. The failure of the Engineer, or his Inspectors to call the Contractor's

attention to faulty work or work done which is not in accordance with drawings and Specification shall not prevent the Owner from insisting that the Contractor make all work right.

**PART 19 INCIDENTAL WORK:**

Work called for on the drawings and/or Specification and are not set forth in the Bid Schedule as pay items, shall be considered as incidental work and will not be paid for directly, but shall be included in the price bid for the various pay items.

**PART 20 TERMINATION OF CONTRACT:**

If the Contractor shall be adjudged bankrupt, or if he should make a general assignment for the benefit of his creditors, or if a receiver should be appointed on account of his insolvency, or if he should persistently or repeatedly refuse, or should fail, except in cases for which extension of time is provided, to supply enough properly skilled workmen, equipment or proper materials, or if he should fail to make prompt payment to subcontractor or for material or labor, or persistently disregard laws, ordinances or the instructions of the Engineer, or otherwise be guilty of a substantial violation of any provision of the Contract, then the Owner upon the certificate of the Engineer that sufficient cause exists to justify such action, may without prejudice to any other right or remedy and after giving the Contractor seven days written notice, terminate the employment of the Contractor and take possession of the premises and of all materials, tools and appliances thereon and finish the work by whatever method the Owner may deem expedient. In such case, the Contractor shall not be entitled to receive any further payment until the work is finished. If the unpaid balance of the Contract Price shall exceed the expense of finishing the work, including compensation for additional managerial and administrative services, such excess shall be paid to the Contractor. If such expense shall exceed such unpaid balance, the Contractor shall pay the difference to the Owner as herein provided, and the damage incurred through the Contractor's default shall be certified by the Engineer.

In the event of termination of Contract before completion of the work, due to abandonment of the project or discontinuance thereof, the Contractor will be paid in proportion to the work completed and in progress as per scope of work described in the drawings and Specification and in accordance with the unit price schedule.

**PART 21 ACCEPTANCE AND FINAL PAYMENT:**

Upon receipt of written notice from the Contractor that the work is ready for final inspection and acceptance, the Engineer shall promptly make such inspection and when he finds the work acceptable under the Contract and the Contract fully performed, he shall promptly issue a final certificate over his own signature,

stating that the work provided for in this Contract has been completed and is accepted by him under the terms and conditions thereof, and the entire balance found to be due the Contractor, including the retained percentage, shall be paid to the Contractor, as approved by the Owner, at the office of the Owner within 30 days after the date of said final certificate.

If, after receipt of written notice from Contractor requesting final inspection and the performance of said final inspection by Engineer, additional inspections are necessary in order for Engineer to issue a final certificate; the Owner shall withhold the cost associated with said additional inspections from the final payment due the Contractor.

Before issuance of final certificate, the Contractor shall submit evidence satisfactory to the Engineer that all payrolls, material bills, equipment rentals, and all other indebtedness connected with the work have been paid.

**PART 22     PLACING WORK IN SERVICE:**

If desired by the Owner, portions of the work may be placed in service when completed and the Contractor shall give prior access to the work for this purpose, but such use and operation shall not constitute an acceptance of the work.

**PART 23     SCHEDULES:**

The Contractor shall furnish the Engineer with a tentative schedule, in a format approved by the Engineer, setting forth in detail the procedure he proposes to follow, and giving the dates on which he expects to start and to complete separate portions of the work. If at any time, in the opinion of the Engineer, proper progress is not being maintained, such changes shall be made in the schedule of operations which will satisfy the Engineer that the work will be completed within the period stated in the proposal, or extension thereof made as herein provided.

Contractor is to prepare list of proposed subcontractors including material suppliers; submit to Engineer for approval before subcontracts are awarded. No subcontractor is to be employed on work unless approved by Owner and Engineer.

**PART 24     PROJECT SIGN:**

No project sign required.

**PART 25     INSURANCE:**

The Contractor shall refer to the County statutes for the latest edition for minimum insurance requirements.

**PART 26     SAFETY STANDARDS AND ACCIDENT PREVENTION:**

With respect to all work performed under this Contract, the Contractor shall:

1. Comply with the safety standards provisions of applicable laws, building and construction codes and the Manual of Accident Prevention in Construction published by the Associated General Contractors of America, the requirements of the Occupational Safety and Health Act of 1970 (Public Law 91-596), and the requirements of Title 29 of the Code of Federal Regulations, Section 1910 or 1926 as applicable.
2. Exercise every precaution at all times for the prevention of accidents and the protection of persons (including employees) and property.
3. Trench Excavation and Safety System: All work under this item shall be in accordance with the current edition of the OSHA Standard for Excavation and Trench Safety Systems, 29 CFR 1926 Subpart P.

The Contractor shall notify all utility companies and Owners in accordance with the OSHA requirements given in 29 CFR 1926.651 (b) (2) for the purpose of locating utilities and underground installations.

Where the trench or excavation endangers the stability of a building, wall, street, highway, utilities, or other facility, the Contractor shall provide support systems such as shoring, bracing, or underpinning to ensure the stability of such facility. The Contractor may elect to remove and replace or relocate such facilities with the written approval of the facility owner, the Engineer, and the Owner.

Payment for the work required by this item shall be included in the lump sum price bid. With each periodic payment request, Contractor shall submit a certification that the Contractor has complied with the provisions of the OSHA standards.

**PART 27     WAGE RATES:**

The Contractor shall comply with all the current requirements of the Oklahoma State Dept. of Labor and abide by their interpretations for this Contract. If applicable, a wage determination will be included in these documents or added by Addendum prior to the date set for procuring Bids. If applicable, a Federal wage determination will be included in these documents or added by Addendum

and the higher rate from either the Federal or State wage determination shall be used for each job classification.

The Contractor shall notify the Engineer in writing for any classification not shown on the wage determinations. The Engineer will then request a wage rate for that classification from the Oklahoma State Dept. of Labor and will issue an Addendum prior to the date of procuring Bids.

If additional wage classifications are required after the Bid date, the Contractor shall pay the wage rate determined by the Oklahoma State Dept. of Labor without additional cost to the Owner.

**PART 28     WORKMEN:**

The Contractor shall employ foreman and skilled laborers where necessary, and if any person employed on the work shall refuse or neglect to obey orders of the Engineer or Inspector when such orders are in keeping with the provisions of these Specification, or shall appear to the Engineer or his Inspector to be incompetent, disorderly or unfaithful, he shall, upon order of the Engineer, be at once discharged and not again employed upon any part of the work. It shall be the responsibility of the superintendent representing the Contractor to transmit all necessary orders and instructions. If requested by the Engineer the Contractor shall submit, in written form, qualifications including work experience of any workman used on the project.

**PART 29     NUMBER OF WORKING DRAWINGS AND SPECIFICATIONS:**

The Engineer will furnish to the Contractor not more than two (2) sets of blueprints and Specification for construction. The Contractor may procure additional copies of blueprints and Specification for construction at cost of reproduction. Such costs are reimbursable by the Engineer.

**PART 30     PRECONSTRUCTION CONFERENCE:**

Prior to the commencement of work at the site, a preconstruction conference will be held at a mutually agreed time and place. The conference shall be attended by:

1. Contractor and his superintendent.
2. Principal subcontractors.
3. Representatives of principal suppliers and manufacturers as appropriate.
4. Engineer and its Resident Project Representative.
5. Representatives of Owner.
6. Government representatives as appropriate.
7. Others as requested by Contractor, Owner, or Engineer.

Unless previously submitted to Engineer, Contractor shall bring to the conference a preliminary schedule for each of the following:

1. Progress.
2. Procurement.
3. Values for progress payment purposes.
4. Shop Drawings and other submittals.

The purpose of the conference is to designate responsible personnel and establish a working relationship. Matters requiring coordination will be discussed and procedures for handling such matters established. The agenda will include:

5. Contractor's preliminary schedules.
6. Transmittal, review, and distribution of Contractor's submittals.
7. Processing applications for payment.
8. Maintaining record documents.
9. Critical work sequencing.
10. Field decisions and change orders.
11. Use of premises, office and storage areas, security, housekeeping, and Owner's needs.
12. Major equipment deliveries and priorities.
13. Contractor's assignments for safety and first aid.

Engineer will preside at the conference and will arrange for keeping the minutes and distributing the minutes to all persons in attendance.

**PART 31     PROGRESS MEETINGS:**

Contractor shall schedule and hold regular progress meetings at least monthly and at other times as requested by Engineer or required by progress of the work. Contractor, Engineer, and all subcontractors active on the site shall be represented at each meeting. Contractor may at its discretion request attendance by representatives of its suppliers, manufacturers, and other subcontractors.

Contractor shall preside at the meetings. Meeting minutes will be prepared and distributed by Contractor. The purpose of the meetings will be to review the progress of the work, maintain coordination of efforts, discuss changes in scheduling, and resolve other problems which may develop.

**PART 32     SUBSTANTIAL AND FINAL COMPLETION:**

All work including site restoration shall be finished within the time called out on the Bid Form for final completion.

**PART 33    EXCAVATION:**

All excavation shall be unclassified. No additional payment shall be made for rock, groundwater, or other natural formations encountered. Payment for excavation shall be included in other items of work.

**PART 34    SUBCONTRACTORS:**

Contractor is to prepare a list of proposed subcontractors including material suppliers and submit to Engineer for approval before subcontractors are awarded. No subcontractor is to be employed on work unless approved by Owner and Engineer.

**PART 35    RIGHT-OF-WAY/PROJECT VIDEO:**

Contractor shall video the complete right-of-way of the project prior to initiating construction and deliver video tape to the Engineer at the pre-construction conference. The video shall be taken in such a way to document pre-construction conditions for use in documenting satisfactory right-of-way restoration and other issues relative to initial conditions prior to construction.

**PART 36    RECORD DRAWINGS****GENERAL:**

- A. The CONTRACTOR shall be responsible for accumulation and maintenance of a complete set of Project Record Documents and upon completion and acceptance of the project shall submit these documents to the ENGINEER, as the OWNER's representative, for a permanent record.
- B. The Project Record Documents shall consist of:
  - 1. One complete set of drawings, with revisions.
  - 2. One complete Project Manual with all addenda, field bulletins and Change Orders.
  - 3. Complete set of all field test data.
  - 4. Complete set of approved shop drawings, product data brochures and samples.
  - 5. Six complete sets of maintenance and operating instructions, parts lists and supplier identification on all operating fixtures and equipment.



MAINTENANCE OF RECORD DOCUMENTS:

- A. The CONTRACTOR shall maintain, on the site, one complete set of CONTRACT DOCUMENTS, other than those used for construction, throughout the life of the job.
1. This set of documents shall be marked "Record Set" and shall be maintained up-to-date at all times and available to the ENGINEER for inspection.
  2. The only notations or other markings to be made on this set are notations of field variations made from the work shown on the drawings for purposes of "Record Drawings" revisions when the project is complete. Failure to record revisions by each CONTRACTOR, shall be considered a breach of contract.
  3. This set of Documents will be turned over to the ENGINEER for preparation of "Record Drawings" prior to approval of final application for payment.

MAINTENANCE AND OPERATING INSTRUCTIONS:

- A. A complete set of maintenance and operating instructions on the project shall be prepared for the OWNER's continual use.
1. To be bound in booklet form, 8-1/2" x 11" in size, labeled "Operating Manual".
  2. To be indexed for quick reference use.
  3. To contain manufacturer's printed data, record forms, diagrams, parts lists, maintenance procedures, start-up procedures, operating procedures, service requirements and schedules, and names, addresses and phone numbers of subcontractor, manufacturer and local service agent.
  4. To contain all written warranties and guarantees.
- B. Each CONTRACTOR shall submit six complete copies of this "Operating Manual" material from his trade to the ENGINEER at the completion of the project.
- C. The ENGINEER shall assemble, bind, label and index this material for the OWNER as stated above. Failure to submit the data listed on the part of any CONTRACTOR may be considered cause to withhold final payment until all such information is received.

**PART 37    CHANGES IN THE WORK**

**ALL CHANGES SHALL BE MADE IN WRITING AND APPROVED BY THE OWNER OR ENGINEER. THIS INCLUDES CHANGES INVOLVING COST OR THOSE NOT INVOLVING COST. NO CHANGE WILL BE ACCEPTABLE UNLESS APPROVED IN WRITING.**

The Owner, without invalidating the Contract, may order extra work or make changes by altering, adding to or deducting from the work with the Contract Total being adjusted accordingly. All changes involving cost shall be made using a written modification order and shall be supported with necessary documentation as to the increase or decrease in cost and time. No increase or decrease in cost or time will be made without an approved modification order that is completed at or before the change is made. Increases in cost or time will not be allowed at the end of the job for work completed earlier without an approved change order. The Owner shall have authority to make minor changes in the work which do not involve extra cost and which do not significantly change the design. All such changes shall be made with a written field order.

**END OF SECTION 01000**

**SECTION 01010 - SUMMARY OF WORK****1. GENERAL**

The work covered by these specifications and drawings shall consist of all materials, transportation costs, equipment, and tools that are related to, or are to be incorporated in this contract and must be received, unloaded, stored, installed, erected, service connections provided, and coordinated with the construction by the Contractor under this contract. Installation of equipment and materials shall mean furnishing of all labor and materials as required to place the improvements in successful operation. The Contractor shall be responsible for all equipment and materials and shall replace at his own expense all such equipment and materials found defective in manufacture or damaged in handling after delivery by the manufacturer. The improvements are as listed:

**CANADIAN COUNTY  
PARKING LOTS**

Located Near: **Bounded by US 81, N. Admire, W. Hayes, to W. Foreman**

This contract shall include minor items not specifically mentioned herein but shown on the accompanying plans or obviously necessary to provide a complete job.

**The following description, while not intended to cover all details, outlines some items of work to be accomplished under this Contract:**

- | <b><u>ITEM NO.</u></b> | <b><u>DESCRIPTION</u></b>           |
|------------------------|-------------------------------------|
| <b>1.</b>              | <b>Site clearing and excavation</b> |
| <b>2.</b>              | <b>Concrete paving and base</b>     |
| <b>3.</b>              | <b>Concrete curb and gutter</b>     |
| <b>4.</b>              | <b>Pavement Removal</b>             |
| <b>5.</b>              | <b>Retaining Wall</b>               |
| <b>6.</b>              | <b>Signing and Striping</b>         |
| <b>7.</b>              | <b>Erosion Control</b>              |

The price named in the Proposal shall include the furnishing of all labor, material, transportation costs, equipment rental, etc., necessary to construct the project as herein specified and as shown on the accompanying plans.

This Contractor shall cooperate with the Owner during construction so as to place the improvements in operation at minimum inconvenience and without significant disruption of the Owner. The Contractor shall minimize his area of operation. Any areas disturbed will be restored to the Owner's satisfaction.

**END OF SECTION 01010**

**SPECIAL PROVISIONS****SECTION 02834 - MODULAR CONCRETE RETAINING WALL****PART 1: GENERAL****1.01 Description**

- A. Work shall consist of furnishing and construction of a KEYSTONE Standard Unit Retaining Wall System or equal in accordance with these specifications and in reasonably close conformity with the lines, grades, design, and dimensions shown on the plans.
- B. Work includes preparing foundation soil, furnishing and installing leveling pad, unit drainage fill and backfill to the lines and grades shown on the construction drawings.
- C. Work includes furnishing and installing geogrid soil reinforcement of the type, size, location, and lengths designated on the construction drawings.

**1.02 Related Sections**

- A. Section ODOT 202(H) - Earthwork

**1.03 Reference Documents**

- A. American Society for Testing and Materials (ASTM)
  - 1. ASTM C140 Sampling and Testing Concrete Masonry Units
  - 2. ASTM C1372 Specification for Dry-Cast Segmental Retaining Wall Units
  - 3. ASTM D422 Particle-Size Analysis of Soils
  - 4. ASTM D698 Laboratory Compaction Characteristics of Soil - Standard Effort
  - 5. ASTM D1557 Laboratory Compaction Characteristics of Soil - Modified Effort
  - 6. ASTM D3034 Polyvinyl Chloride Pipe (PVC)
  - 7. ASTM D4318 Liquid Limit, Plastic Limit and Plasticity Index of Soils
  - 8. ASTM D4475 Horizontal Shear Strength of Pultruded Reinforced Plastic Rods
  - 9. ASTM D4476 Flexural Properties of Fiber Reinforced Pultruded Plastic Rods
  - 10. ASTM D4595 Tensile Properties of Geotextiles - Wide Width Strip
  - 11. ASTM D5262 Unconfined Tension Creep Behavior of Geosynthetics

12. ASTM D5818 Evaluate Installation Damage of Geosynthetics
  13. ASTM D6637 Tensile Properties of Geogrids – Single or Multi-Rib
  14. ASTM D6638 Connection Strength - Reinforcement/Segmental Units
  15. ASTM D6706 Geosynthetic Pullout Resistance in Soil
  16. ASTM D6916 Shear Strength Between Segmental Concrete Units
- B. American Association of State Highway and Transportation Officials (AASHTO)
1. AASHTO M 252 Corrugated Polyethylene Drainage Pipe
- C. Geosynthetic Research Institute (GRI)
1. GRI-GG4 Determination of Long Term Design Strength of Geogrids
  2. GRI-GG5 Determination of Geogrid (soil) Pullout
- D. National Concrete Masonry Association (NCMA)
1. NCMA SRWU-1 Test Method for Determining Connection Strength of SRW
  2. NCMA SRWU-2 Test Method for Determining Shear Strength of SRW

**1.04 Submittals/Certification**

- A. Contractor shall submit a Manufacturer's certification, prior to start of work, that the retaining wall system components meet the requirements of this specification and the structure design.
- B. Contractor shall submit construction drawings and design calculations for the retaining wall system prepared and stamped by a Professional Engineer registered in the state of the project. The engineering designs, techniques, and material evaluations shall be in accordance with the Manufacturer's Design Manual, NCMA Design Guidelines For Segmental Retaining Walls, or the AASHTO Standard Specifications for Highway Bridges (whichever is applicable to designer).
- C. Contractor shall submit a test report documenting strength of specific modular concrete unit and geogrid reinforcement connection. The maximum design tensile load of the geogrid shall be equal to the laboratory tested ultimate strength of geogrid / facing unit connection at a maximum normal force limited by the "Hinge Height" of the structure divided by a safety factor of 1.5. The connection strength evaluation shall be performed in accordance with ASTM D6638 (NCMA SRWU-1).

**1.05 Quality Assurance**

- A. Contractor shall submit certification, prior to start of work, that the retaining wall system (modular concrete units and specific geogrid):
  - 1) Has been successfully utilized on a minimum of five (5) similar projects, i.e., height, soil fill types, erection tolerances, etc.; and
  - 2) Has been successfully installed on a minimum of 1 million (1,000,000) square feet of retaining walls.
  
- B. Contractor shall submit a list of five (5) previously constructed projects of similar size and magnitude by the wall installer where the specific retaining wall system has been constructed successfully. Contact names and telephone numbers shall be listed for each project.
  
- C. Contractor shall provide evidence that the design engineer has a minimum of five years of documentable experience in the design for reinforced soil structures. The design engineer shall provide proof of current professional liability insurance with an aggregate coverage limit of not less than \$2,000,000.
  
- D. Owner shall/may provide soil testing and quality assurance inspection during earthwork and wall construction operations. Contractor shall provide any quality control testing or inspection not provided by the Owner. Owner's quality assurance program does not relieve the contractor of responsibility for quality control and wall performance.

**1.06 Delivery, Storage and Handling**

- A. Contractor shall check all materials upon delivery to assure that the proper type, grade, color, and certification has been received.
  
- B. Contractor shall protect all materials from damage due to jobsite conditions and in accordance with manufacturer's recommendations. Damaged materials shall not be incorporated into the work.

**PART 2: PRODUCTS**

**2.01 Definitions**

- A. Modular Unit - a concrete retaining wall element machine made from Portland cement, water, and aggregates.

- B. Structural Geogrid - a structural element formed by a regular network of integrally connected tensile elements with apertures of sufficient size to allow interlocking with surrounding soil, rock, or earth and function primarily as reinforcement.
- C. Unit Drainage Fill - drainage aggregate, which is placed within and immediately behind the modular concrete units.
- D. Reinforced Backfill - compacted soil, which is placed within the reinforced soil volume as outlined on the plans.

**2.02 Modular Concrete Retaining Wall Units**

- A. Modular concrete units shall conform to the following architectural requirements:
  - 1. Face color - concrete gray, unless otherwise specified. The Owner may specify standard manufacturers' color.
  - 2. Face finish - sculptured rock face in angular tri-planer configuration. Other face finishes will not be allowed without written approval of Owner.
  - 3. Bond configuration - running with bonds nominally located at midpoint vertically adjacent units, in both straight and curved alignments.
  - 4. Exposed surfaces of units shall be free of chips, cracks or other imperfections when viewed from a distance of 10 feet under diffused lighting.
- B. Modular concrete materials shall conform to the requirements of ASTM C1372 - Standard Specifications for Segmental Retaining Wall Units.
- C. Modular concrete units shall conform to the following structural and geometric requirements measured in accordance with ASTM C140 Sampling and Testing Concrete Masonry Units:
  - 1. Compressive strength:  $\geq 3000$  psi (21 MPa);
  - 2. Absorption: 8 % (6% in northern states) for standard weight aggregates;
  - 3. Dimensional tolerances:  $\pm 1/8$ " (3 mm) from nominal unit dimensions not including rough split face,  $\pm 1/16$ " (1.5 mm) unit height - top and bottom planes;
  - 4. Unit size: 8" (203 mm) (H) x 18" (457 mm)(W) x 18" (457 mm)(D) minimum;

5. Unit weight: 100 lbs/unit (45 kg) minimum for standard weight aggregates.

D. Modular concrete units shall conform to the following performance testing:

1. Inter -unit shear strength in accordance with ASTM D6916 (NCMA SRWU-2): 1500 plf (21 kN/m) minimum at 2 psi (13 MPa) normal pressure;
2. Geogrid/unit peak connection strength in accordance with ASTM D6638 (NCMA SRWU-1): 900 plf (13 kN/m) minimum at 2-psi (13 MPa) normal force.

E. Modular concrete units shall conform to the following constructability requirements:

1. Vertical setback: 1/8" (3 mm) ± per course (near vertical) or 1" (25 mm) + per course per the design;
2. Alignment and grid positioning mechanism - fiberglass pins, two per unit minimum;
3. Maximum horizontal gap between erected units shall be ≤ 1/2 inch (13 mm).

### 2.03 Shear Connectors

A. Shear connectors shall be 1/2-inch (12 mm) diameter thermoset isophthalic polyester resin-pultruded fiberglass reinforcement rods or equivalent to provide connection between vertically and horizontally adjacent units with the following requirements:

1. Flexural Strength in accordance with ASTM D4476: 128,000 psi (882 MPa) minimum;
2. Short Beam Shear in accordance with ASTM D4475: 6,400 psi (44 MPa) minimum.

B. Shear connectors shall be capable of holding the geogrid in the proper design position during grid pre-tensioning and backfilling.

### 2.04 Base Leveling Pad Material

A. Material shall consist of a compacted crushed stone base or non-reinforced concrete as shown on the construction drawings.

### 2.05 Unit Drainage Fill



- A. Unit drainage fill shall consist of clean 1" (25 mm) minus crushed stone or crushed gravel meeting the following gradation tested in accordance with ASTM D-422:

<u>Sieve Size</u>	<u>Percent Passing</u>
1 inch (25 mm)	100
3/4-inch (19 mm)	75-100
No. 4	0 - 10
No. 50	0 - 5

- B. One cubic foot (0.028 m<sup>3</sup>), minimum, of drainage fill shall be used for each square foot (0.093 m<sup>2</sup>) of wall face. Drainage fill shall be placed within cores of, between, and behind units to meet this requirement.

**2.06 Reinforced Backfill**

- A. Reinforced backfill shall be free of debris and meet the following gradation tested in accordance with ASTM D-422:

<u>Sieve Size</u>	<u>Percent Passing</u>
2-inch (50 mm)	100
3/4-inch (19 mm)	100-75
No. 40	0-60
No. 200	0-35

Plasticity Index (PI) <15 and Liquid Limit <40 per ASTM D-4318.

- B. The maximum aggregate size shall be limited to 3/4 inch (19 mm) unless field tests have been performed to evaluate potential strength reductions to the geogrid design due to damage during construction.
- C. Material can be site-excavated soils where the above requirements can be met. Unsuitable soils for backfill (high plastic clays or organic soils) shall not be used in the backfill or in the reinforced soil mass.
- D. Contractor shall submit reinforced fill sample and laboratory test results to the Architect/Engineer for approval prior to the use of any proposed reinforced fill material.

**2.07 Geogrid Soil Reinforcement**

- A. Geosynthetic reinforcement shall consist of geogrids manufactured specifically for soil reinforcement applications and shall be manufactured from high tenacity polyester yarn or high-density polyethylene. Polyester

geogrid shall be knitted from high tenacity polyester filament yarn with a molecular weight exceeding 25,000 Meg/m and a carboxyl end group values less than 30. Polyester geogrid shall be coated with an impregnated PVC coating that resists peeling, cracking, and stripping.

- B.  $T_a$ , Long Term Allowable Tensile Design Load, of the geogrid material shall be determined as follows:

$$T_a = T_{ult} / (RF_{cr} * RF_d * RF_{id} * FS)$$

$T_a$  shall be evaluated based on a 75-year design life.

1.  $T_{ult}$ , Short Term Ultimate Tensile Strength shall be determined in accordance with ASTM D4595 or ASTM D6637.  $T_{ult}$  is based on the minimum average roll values (MARV).
  2.  $RF_{cr}$ , Reduction Factor for Long Term Tension Creep  
 $RF_{cr}$  shall be determined from 10,000-hour creep testing performed in accordance with ASTM D5262. Reduction value = 1.45 minimum.
  3.  $RF_d$ , Reduction Factor for Durability  
 $RF_d$  shall be determined from polymer specific durability testing covering the range of expected soil environments.  $RF_d = 1.10$  minimum.
  4.  $RF_{id}$ , Reduction Factor for Installation Damage  
 $RF_{id}$  shall be determined from product specific construction damage testing performed in accordance with ASTM D5818 (GRI-GG4). Test results shall be provided for each product to be used with project specific or more severe soil type.  $RF_{id} = 1.05$  minimum.
  5.  $FS$ , Overall Design Factor of Safety  
 $FS$  shall be 1.5 unless otherwise noted for the maximum allowable working stress calculation.
- C. The maximum design tensile load of the geogrid shall not exceed the laboratory tested ultimate strength of the geogrid/facing unit connection as limited by the "Hinge Height" divided by a factor of safety of 1.5. The connection strength testing and computation procedures shall be in accordance with ASTM D6638 Connection Strength between Geosynthetic Reinforcement and Segmental Concrete Units (NCMA SRWU-1).
- D. Soil Interaction Coefficient,  $C_i$

Ci values shall be determined per ASTM D6706 (GRI:GG5) at a maximum 0.75-inch (19 mm) displacement.

- E. **Manufacturing Quality Control**  
The geogrid manufacturer shall have a manufacturing quality control program that includes QC testing by an independent laboratory.  
The QC testing shall include:
  - Tensile Strength Testing
  - Melt Flow Index (HDPE)
  - Molecular Weight (Polyester)

### **2.08 Drainage Pipe**

- A. If required, the drainage pipe shall be perforated or slotted PVC pipe manufactured in accordance with ASTM D-3034 or corrugated HDPE pipe manufactured in accordance with AASHTO M252.

### **2.09 Geotextile Filter Fabric**

- A. When required, Geotextile filter fabric shall be 4.0 oz/sy, polypropylene, needlepunched nonwoven fabric.

## **PART 3: EXECUTION**

### **3.01 Excavation**

- A. Contractor shall excavate to the lines and grades shown on the construction drawings. Owner's representative shall inspect the excavation and approve prior to placement of leveling material or fill soils. Proof roll foundation area as directed to determine if remedial work is required.
- B. Over-excavation and replacement of unsuitable foundation soils and replacement with approved compacted fill will be compensated as agreed upon with the Owner.

### **3.02 Base Leveling Pad**

- A. Leveling pad material shall be placed to the lines and grades shown on the construction drawings, to a minimum thickness of 6 inches (150 mm) and extend laterally a minimum of 6" (150 mm) in front and behind the modular wall unit.

- B. Soil leveling pad materials shall be compacted to a minimum of 95 % Standard Proctor density per ASTM D-698 or 92% Modified Proctor Density per ASTM D1557.
- C. Leveling pad shall be prepared to insure full contact to the base surface of the concrete units.

**3.03 Modular Unit Installation**

- A. First course of units shall be placed on the leveling pad at the appropriate line and grade. Alignment and level shall be checked in all directions and insure that all units are in full contact with the base and properly seated.
- B. Place the front of units side-by-side. Do not leave gaps between adjacent units. Layout of corners and curves shall be in accordance with manufacturer's recommendations.
- C. Install shear/connecting devices per manufacturer's recommendations.
- D. Place and compact drainage fill within and behind wall units. Place and compact backfill soil behind drainage fill. Follow wall erection and drainage fill closely with structure backfill.
- E. Maximum stacked vertical height of wall units, prior to unit drainage fill and backfill placement and compaction, shall not exceed two courses.

**3.04 Structural Geogrid Installation**

- A. Geogrid shall be oriented with the highest strength axis perpendicular to the wall alignment.
- B. Geogrid reinforcement shall be placed at the strengths, lengths, and elevations shown on the construction design drawings or as directed by the Engineer.
- C. The geogrid shall be laid horizontally on compacted backfill and attached to the modular wall units. Place the next course of modular concrete units over the geogrid. The geogrid shall be pulled taut, and anchored prior to backfill placement on the geogrid.
- D. Geogrid reinforcements shall be continuous throughout their embedment lengths and placed side-by-side to provide 100% coverage at each level. Spliced connections between shorter pieces of geogrid or gaps between adjacent pieces of geogrid are not permitted.

**3.05 Reinforced Backfill Placement**

- A. Reinforced backfill shall be placed, spread, and compacted in such a manner that minimizes the development of slack in the geogrid and installation damage.
- B. Reinforced backfill shall be placed and compacted in lifts not to exceed 6 inches (150 mm) where hand compaction is used, or 8 - 10 inches (200 to 250 mm) where heavy compaction equipment is used. Lift thickness shall be decreased to achieve the required density as required.
- C. Reinforced backfill shall be compacted to a minimum of 95 % Standard Proctor density per ASTM D-698 or 92% Modified Proctor Density per ASTM D1557. The moisture content of the backfill material prior to and during compaction shall be uniformly distributed throughout each layer and shall be dry of optimum, + 0%, - 3%.
- D. Only lightweight hand-operated equipment shall be allowed within 3 feet (1m) from the tail of the modular concrete unit.
- E. Tracked construction equipment shall not be operated directly upon the geogrid reinforcement. A minimum fill thickness of 6 inches (150 mm) is required prior to operation of tracked vehicles over the geogrid. Tracked vehicle turning should be kept to a minimum to prevent tracks from displacing the fill and damaging the geogrid.
- F. Rubber tired equipment may pass over geogrid reinforcement at slow speeds, less than 10 MPH (15 KPH). Sudden braking and sharp turning shall be avoided.
- G. At the end of each day's operation, the Contractor shall slope the last lift of reinforced backfill away from the wall units to direct runoff away from wall face. The Contractor shall not allow surface runoff from adjacent areas to enter the wall construction site.

**3.06 Cap Installation**

- A. Cap units shall be glued to underlying units with an all-weather adhesive recommended by the manufacturer.

**3.07 As-built Construction Tolerances**

- A. Vertical alignment:  $\pm 1.5$ " (40 mm) over any 10' (3 m) distance.

- B. Wall Batter: within 2 degrees of design batter.
- C. Horizontal alignment:  $\pm 1.5$ " (40 mm) over any 10' (3 m) distance.  
Corners, bends & curves:  $\pm 1$  ft (300 mm) to theoretical location.
- D. Maximum horizontal gap between erected units shall be  $\leq 1/2$  inch (13 mm).

### **3.08 Field Quality Control**

- A. Quality Assurance - The Owner shall/may engage inspection and testing services, including independent laboratories, to provide quality assurance and testing services during construction. This does not relieve the Contractor from securing the necessary construction control testing.
- B. Quality assurance should include foundation soil inspection. Verification of geotechnical design parameters, and verification that the contractor's quality control testing is adequate as a minimum. Quality assurance shall also include observation of construction for general compliance with design drawings and project specifications. Quality assurance is best performed by the site geotechnical engineer.
- C. Quality Control – The Contractor shall engage inspection and testing services to perform the minimum quality control testing described in the retaining wall design plans and specifications. Only qualified and experienced technicians and engineers shall perform testing and inspection services.
- D. Quality control testing shall include soil and backfill testing to verify soil types and compaction and verification that the retaining wall is being constructed in accordance with the design plans and project specifications.



**Canadian County  
Purchasing**

**Affidavit / Proof of Mailing**

Date Issued: August 5, 2013  
Bid Number: **2014-#04**  
Closing Date: September 9, 2013 at 10:00am  
PO Box 458, 201 N. Choctaw Ave., El Reno, OK 73036  
Opening Date: September 9, 2013 at 10:00am  
Commissioner's Meeting Room, 201 N. Choctaw Ave., El Reno, OK 73036

~ AFFIDAVIT ~

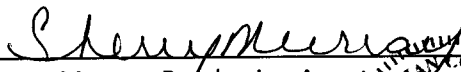
Parking Lots / County Commissioners

State of Oklahoma )  
County of Canadian ) §

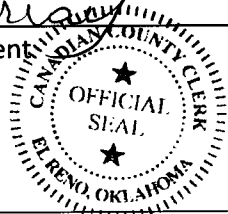
I, Sherry Murray, Purchasing Agent, in and for said County and State, do hereby certify that "Invitations to Bid" were sent to the following:

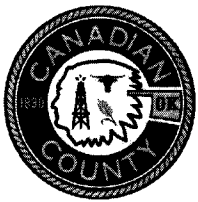
Atlas Paving Company PO Box 75727 Oklahoma City, OK 73147-0727	Asphalt Maintenance 604 S Main Coats, KS 67028	Bid News <a href="mailto:project@bidnews.com">project@bidnews.com</a>
Blaco Construction LLC 7700 NW 3 <sup>rd</sup> Street Oklahoma City, OK 73127	Bordwine Development Inc Attn: Terry W Jones 1102 Pikes Peak Road Chickasha, OK 73018	ePlan 4115 South Providence Columbia, MO 65203
Francis Tuttle Vo-Tech Center Attn: Bid Assistance – Judy Robbins 12777 N Rockwell Oklahoma City, OK 73142	Haskell Lemon Construction Co. PO Box 75608 Oklahoma City, OK 73147	J&S Stabilization Inc PO Box 750 Wheatland, OK 73097
Online Data Services 8460 Holcomb Bridge Road, Suite 100 Alpharetta, GA 30322	Schwarz Paving Company Inc 8251 W Reno Oklahoma City, OK 73127	TJ Campbell Construction Co PO Box 15129 Oklahoma City, OK 73155
Wood & Sons Paving Inc 200 E Interstate 35 Service Road Edmond, OK 73034		

Witness my hand and seal this 5<sup>th</sup> day of August, 2013.

  
Sherry Murray, Purchasing Agent

(SEAL)





**Canadian County  
Purchasing**

**Addendum**

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-----  
~ Addendum~

Parking Lots / County Commissioners

See Attached Addendum:

For Information Contact:

Contact: Dave Anderson, Chairman

Phone: (405) 205-8955

Hours: Monday – Friday 8:00am to 4:30pm

Address: 200 N. Choctaw, El Reno, OK 73036

-----  
If you have any questions or need additional information, please contact:  
**Sherry Murray**, Purchasing Agent, 405.295.6125 or 405.422.2441  
smurrav@okcana.cogov.net



# Addendum #1

September 3, 2013



**Project:** Canadian County Parking Lots

Bid Notice: 2012-04

Bid Closing Date: September 9, 2013

El Reno, Canadian County, Oklahoma

**Note:** Please fax or email Acknowledgement Page to Cowan Group Engineering, at (405)-463-3381 or [lynelle@cowangroup.co](mailto:lynelle@cowangroup.co), for your company to be included in the bid process.

The items below now become a part of the referenced contract documents and specifications. Please read the following items and acknowledge receipt of this addendum on the proposal form when submitting bids.

## General:

1. This project is tax exempt.
2. For the stabilized subgrade as shown on the typical sections, contractor shall provide subsurface testing and determine the type and quantity of subgrade treatment according to ODOT Specification, Section 307. Results shall be approved by the Engineer and County upon completion and prior to construction. Price to be included in the cost of Pay Item 4, STABILIZED SUBGRADE. Subsurface testing company shall be ODOT-certified.
3. Stabilized subgrade extents shall be as follows:
  - I. Lot A (Base Bid)
    - i. Where proposed pavement or proposed curb and gutter abuts existing pavement, stabilized subgrade extents shall match proposed pavement extents.
    - ii. Where proposed curb and gutter are to be installed, stabilized subgrade shall extend 1'-0" beyond the back of proposed curb.
  - II. Lots B and C (Base Bid)
    - i. Where proposed pavement or gutter abuts existing pavement, stabilized subgrade extents shall match proposed pavement extents.
    - ii. Where proposed curb abuts proposed sidewalk or sodded areas, stabilized subgrade shall extend 1'-0" behind back of proposed curb.
  - III. Lot E (Base Bid)
    - i. Where proposed pavement or gutter abuts existing pavement, stabilized subgrade extents shall match proposed pavement extents.
    - ii. Where proposed curb abuts proposed sidewalk or sodded areas, stabilized subgrade shall extend 1'-0" behind back of proposed curb.
  - IV. Lot D (Add. Alternate)
    - i. Where proposed pavement or gutter abuts existing pavement, stabilized subgrade extents shall match proposed pavement extents.

437 W. Wilshire, Suite A Oklahoma City, OK 73116 • 405.463.3369 o • 405.463.3381 f • www.cowangroup.co

- ii. Where proposed curb abuts proposed sidewalk or sodded areas, stabilized subgrade shall extend 1'-0" behind back of proposed curb.
- 4. Pay Item 17, ADJUST VALVE BOXES TO GRADE has no base bid quantity and a quantity of 1 each in the additive alternate.

Thank you for your attention and should you have any questions please contact the undersigned at 405.463.3369.

Sincerely,

**Cowan Group Engineering, LLC**

  
Jeff Cowan, P.E.  
Project Manager



CC: Canadian County  
File

# Acknowledgement Page

## Addendum #1

September 3, 2013

**Project:** Canadian County Parking Lots  
Bid Notice: 2012-04  
Bid Closing Date: September 9, 2013  
El Reno, Canadian County, Oklahoma

Company: \_\_\_\_\_

Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_



**Canadian County  
Purchasing**

**Affidavit / Proof of Mailing**

Date Issued: August 5, 2013  
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~ AFFIDAVIT ~

Parking Lots / County Commissioners

State of Oklahoma )  
County of Canadian ) §

I, Sherry Murray, Purchasing Agent, in and for said County and State, do hereby certify that "Addendum #1" was sent to the following:

Atlas Paving Company PO Box 75727 Oklahoma City, OK 73147-0727	Asphalt Maintenance 604 S Main Coats, KS 67028	Bid News <a href="mailto:project@bidnews.com">project@bidnews.com</a>
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Blaco Construction LLC 7700 NW 3 <sup>rd</sup> Street Oklahoma City, OK 73127	Bordwine Development Inc Attn: Terry W Jones 1102 Pikes Peak Road Chickasha, OK 73018	ePlan 4115 South Providence Columbia, MO 65203
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Francis Tuttle Vo-Tech Center Attn: Bid Assistance – Judy Robbins 12777 N Rockwell Oklahoma City, OK 73142	Haskell Lemon Construction Co. PO Box 75608 Oklahoma City, OK 73147	J&S Stabilization Inc PO Box 750 Wheatland, OK 73097
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Online Data Services 8460 Holcomb Bridge Road, Suite 100 Alpharetta, GA 30322	Schwarz Paving Company Inc 8251 W Reno Oklahoma City, OK 73127	TJ Campbell Construction Co PO Box 15129 Oklahoma City, OK 73155
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Wood & Sons Paving Inc 200 E Interstate 35 Service Road Edmond, OK 73034	MTZ Construction 3545 SW 37 <sup>th</sup> Street Oklahoma City, OK 73119	TTK Construction Co PO Box 3681 Edmond, OK 73083
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Witness my hand and seal this 3<sup>rd</sup> day of September, 2013.

Sherry Murray, Purchasing Agent

(SEAL)

