

NOTICE TO CONTRACTORS

Sealed bids will be received by the City of Thomas, 122 West Broadway Thomas, Oklahoma 73669, until 6:00 pm on the 14th day of May 2024, Bid number 24-1 at which time they will be opened and read aloud for Street Repaving on South 1st Street, to wit:

CONTRACT SOUTH 1ST STREET CONCRETE REPAVING

1	<u>1</u>	LS	MOBILIZATION
2	<u>327</u>	YDS ³	PORTLAND CEMENT CONCRETE
3	<u>17,552</u>	LBS	Grade 60 #4 REINFORCING STEEL GRID
4	<u>265</u>	TONS	CRUSHER RUN PAD ROCK (4" THICKNESS)

All bids will include materials and labor to install. The successful bidder will within ten (10) days from the date of notice of award, enter into contract and file the required bonds, and furnish a certificate of Workman's Compensation and General Contractors Liability Insurance. The City of Thomas reserves the right to reject any and all bids, waive any irregularities or technicalities without assigning any reason therefore, and to make the awards in the best interest of the Owner. The City of Thomas reserves the right to withhold any contract awarded subject to the availability of funds. Non-Collusion form and Business Relationship Affidavit must be signed, notarized and returned with bid or bid will not be accepted.

The City of Thomas reserves the right to reject any of all bids, waive any irregularities or technicalities without assigning any reason therefore, and to make the awards in the best interest of the Owner. (Bid shall be awarded to the lowest, responsive and responsible bidder). No Bidder may withdraw his bid within 60 days after the actual date of the opening thereof. Bids are solicited and a contract award will be made pursuant to the Public Competitive Bidding Act of 1974 as amended (Title 61, O.S. Sections 101et seq.).

A pre-bid conference will be held for this project on the 18th day of April 2024, at 11:00 a.m., at City Hall Council Room located at 122 West Broadway, Thomas, Oklahoma 73669. Attendance is not mandatory but information about the City and the Project will be provided and an addendum may be provided to all known bidders after the conference.

Bid packets with all required forms and specifications are on file in the office of the City Clerk at the above listed address or can be emailed to you by calling 580-661-3685. Additional inquiries can also be made to the mayor at 580-661-1400

BIDDER'S PROPOSAL
South 1st Street Concrete Repaving Project
FOR THE CITY OF THOMAS
BID NUMBER 24-1

Date _____

Mr. Jeff Gose, Mayor
Ms. Taffy Rigsby, City Clerk
The City of Thomas, Oklahoma
122 West Broadway
Thomas, Oklahoma 73669

Quotation of _____
(Hereinafter called "Bidder"), organized and existing under the laws of the State of _____ and doing Business as _____*.

Gentlemen,

Bidder hereby proposes to perform all work for the repaving of South 1st Street as designated in the bid documents, in strict accordance with the Contract Documents, within the time set forth therein, and at the prices stated below.

By submission of the Bid, each bidder certifies, and in the case of the joint bid, each party thereto certifies as to his own organization, that this Bid has been arrived at independently, without consultation, communication, or agreements to any matter relating to this Bid with any other bidder or with any competitor.

Bidders must satisfy themselves by personal examination of the location of the proposed work, the Plans and Specifications and requirements of the work and the accuracy of the estimate of the quantities of the work to be done, and shall not at any time after the submission of a bid, dispute or complain of such estimate nor assert there was any misunderstanding in regard to the nature or amount of work to be done.

Bidder hereby agrees to commence work under this contract on or before a date to be specified in the Notice to proceed and to fully complete the project within **90** calendar days thereafter. Bidder further agrees to pay as liquidated damages **\$500.00** for each consecutive calendar day thereafter.

A pre-bid conference will be held for this project on the 18th day of April 2024, at 11.00 a.m., at City Hall Council Room located at 122 West Broadway, Thomas, Oklahoma 73669. Attendance is not mandatory but information about the City and the Project will be provided and an addendum may be provided to all known bidders after the conference.

Bidder acknowledges receipt of the following addenda:

Bidder agrees to perform all the work described in the Contract Documents for the following unit prices:

BIDDER’S PROPOSAL FOR THE CITY OF THOMAS 1ST STREET CONCRETE REPAVING PROJECT

Bidder agrees to perform all the work described in the Contract Documents for the following unit prices:

ESTIMATED QUANTITY	UNIT	DESCRIPTION	UNIT PRICE	ITEM TOTAL
<u>1</u>	<u>LS</u>	MOBILIZATION	_____	_____
<u>327</u>	<u>CU YDS</u>	PORTLAND CEMENT CONCRETE (575’LONG x 23’WIDE x 8”THICK)	_____	_____
<u>17,552</u>	<u>LBS.</u>	Grade 60 #4 REINFORCING STEEL GRID	_____	_____
<u>265</u>	<u>TONS</u>	CRUSHER RUN PAD ROCK (4” THICKNESS)	_____	_____

THE COSTS OF LAYING A 4” THICK ROCK CRUSHER RUN PAD, INSTALLATION OF #4 REINFORCING STEEL GRID AT 12” CENTERS EACH DIRECTION, AND A CONCRETE SURFACE COURSE AT A MINIMUM 8” THICKNESS FOR THE LENGTH OF SOUTH 1ST STREET FROM THE INTERSECTION OF EAST BROADWAY/HWY 33 GOING SOUTH TO THE RAILROAD TRACKS. ALL OTHER WORK RELATED TO INSTALL CONCRETE PAVING IN THIS SECTION OF SOUTH 1ST STREET INCLUDING LABOR AND MATERIALS. All removal (including hauling off) of current asphalt will be completed by the Custer County Commissioner prior to above described concrete paving work.

TOTAL BID \$ _____

NAME OF BIDDER: _____

ADDRESS; TELEPHONE NUMBER; FAX; E-MAIL: _____

PRINCIPAL REPRESENTATIVE: _____

CELL OR OTHER IMPORTANT INFORMATION: _____

LIST SIMILAR WORK PERFORMED IN OKLAHOMA OR ADJOINING STATES ON A SEPARATE PAGE, INCLUDING SIZE OF PROJECT; TIMING AND ANY NOTEABLE OCCURENCES.

ATTACH EXECUTED BUSINESS RELATIONSHIP AFFIDAVIT

ATTACH EXECUTED NON-COLLUSION AFFIDAVIT

LIST ALL KNOWN DEVIATIONS FROM THE PLANS AND SPECIFICATIONS ON A SEPARATE PAGE

All bidder questions, remarks and issues must be provided in writing to Jeff Gose, Mayor by May 7, 2024, at 2:00 p.m.

**SOUTH 1ST STREET CONCRETE REPAVING
FOR THE CITY OF THOMAS
BIDDER'S PROPOSAL**

*Insert (a corporation), (a partnership), (an LLC, limited liability corporation), (a PLC, a private limited corporation) or (an individual) as applicable.

Amounts are to be shown in both words and figures. In case of discrepancy the amount shown in words will govern.

It is understood that this is to be a unit price contract based on plans and specifications and that in considering the lowest and best bid, the Owner shall have the right to change the estimated quantities of any item or to eliminate any item in full and to award the contract in the best interest of the Owner.

Bidder understands that the Owner reserves the right to reject any or all bids and to waive any informalities in the bidding.

The bidder agrees that this bid shall be good and may not be withdrawn for a period of 60 calendar days after the scheduled closing time for receiving bids.

Upon receipt of written notice of the acceptance of this bid, bidder will execute the formal contract within 10 days and deliver a Surety Bond, Maintenance Bond, and Performance Bond.

Respectfully submitted,

FIRM (PRINT): _____

SIGNATURE: _____

NAME (PRINT): _____

TITLE (PRINT): _____

ADDRESS: _____

PHONE: _____

FIRM ID NO.: _____

**SOUTH 1ST STREET CONCRETE REPAVING
FOR THE CITY OF THOMAS
BIDDER'S PROPOSAL**

BUSINESS RELATIONSHIPS AFFIDAVIT

STATE OF OKLAHOMA)ss.
COUNTY OF _____)

_____, of lawful age, being first duly sworn upon oath, states 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 exist, Affiant should so state.)

Affiant

Subscribed and sworn to before me this _____ day of _____, _____.

Notary Public

My Commission Expires:

NOTE: This form is to be submitted with the bid

NONCOLLUSION 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 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 government 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 government official concerning exchange of money or other value for special consideration in the letting of a contract; that the bidder/contractor had not paid, given or donated or agreed to pay, give or donate to any officer or employee of the _____ (or other entity) any money or other thing of value, either directly or indirectly in the procurement of a contract or pursuant to this bid.

Subscribed and sworn to before me this _____ day of _____, 2024.

Notary Public

My Commission Expires:

**AGREEMENT BETWEEN THE CITY OF THOMAS, OKLAHOMA, AND CONTRACTOR FOR THE SOUTH 1ST STREET
CONCRETE REPAVING PROJECT**

THIS AGREEMENT is made by and between the City of Thomas, Oklahoma (hereinafter referred to as the "Owner") and _____ (hereinafter referred to as the "Contractor") for the installation of an automated water meter reading system in the City of Thomas ("Project"), the Owner and the Contractor hereby agreeing as follows:

ARTICLE I: THE CONTRACT AND THE CONTRACT DOCUMENTS

1.1 THE CONTRACT

1.1.1 The Contract between the Owner and the Contractor, of which this Agreement is a part, consists of the contract documents. It shall be effective on the date this Agreement is executed by the last party to execute it.

1.2 THE CONTRACT DOCUMENTS

1.2.1 The contract documents consist of this Agreement, and

- (A) Advertisement for Bids
- (B) Information for Bidders
- (C) Bid Proposal
- (D) Bid Tabulation
- (E) Business Relationships Affidavit
- (F) Noncollusion Affidavit
- (G) Agreement
- (H) Certificate of Insurance
- (I) Notice of Award
- (J) Notice to Proceed
- (K) Specifications
- (L) Addenda A: Paving Map

all change orders and field orders issued hereafter, any other amendments hereto executed by the parties hereafter (the "Contract"). The terms contained in this Contract shall supersede all other parts of this contract in the event of a conflict. The Contractor shall execute a non-collusion affidavit which shall be attached as Exhibit C to this Contract.

1.3 ENTIRE AGREEMENT

1.3.1 This Contract, together with the Contractor's insurance, constitutes the entire and exclusive agreement between the Owner and the Contractor with reference to the project. Specifically, but without limitation, this Contract supersedes all prior written or oral communications, representations and negotiations, if any, between the Owner and Contractor.

1.4 NO PRIVITY WITH OTHERS

1.4.1 Nothing contained in this Contract shall create, or be interpreted to create, privity or any other contractual agreement between the Owner and any person or entity other than the Contractor.

1.5 INTENT AND INTERPRETATION

1.5.1 The intent of this Contract is to require complete, correct and timely execution of the work. Any work that may be required implied or inferred by the contract documents, or any one or more of them, as necessary to produce the intended result shall be provided by the Contractor for the contract price.

ARTICLE II: THE WORK

2.1 PERFORM THE WORK. The Contractor shall perform all of the work required, implied or reasonably inferred from this Contract.

2.2 THE WORK. The term "work" shall mean whatever is done by or required of the Contractor to perform and complete its duties under this Contract, including the following: construction of the project; furnishing the required insurance; and the provision or furnishing of labor, supervision, services, supplies, equipment, facilities, tools, transportation, storage, power, permits and licenses required of the Contractor, fuel, heat, light, cooling and all other utilities as required by this Contract. The work to be performed by the Contractor shall be to provide for the following as provided in the bid and specifications to be installed in a good and workmanlike manner.

The purpose is for Owner to have a concrete paved street as detailed in the specifications. The work shall be totally turn-key and when the work is completed the concrete street paving shall meet basic ODOT requirements.

The Contractor shall provide safety and warning signs during all times of construction to warn the public that the work is taking place.

A

ARTICLE III: CONTRACT TIME

3.1 TIME AND LIQUIDATED DAMAGES

3.1.1 The Contractor shall commence the work within ninety (90) days of the execution of this Agreement ***with a start date which will be after the annual wheat harvest***, and shall achieve substantial completion of the work no later than ninety (90) days thereafter. The number of calendar days from the date on which the work is permitted to proceed, through the date set forth for substantial completion, shall constitute the "contract time".

3.1.2 The Contractor shall pay the Owner the sum of \$500.00 per day for each and every calendar day of unexcused delay in achieving substantial completion beyond the date set forth herein for substantial completion of the work. Any sums due and payable hereunder by the Contractor shall be payable, not as a penalty, but as liquidated damages representing an estimate of delay damages likely to be sustained by the Owner, estimated at or before the time of executing this Contract.

3.2 SUBSTANTIAL COMPLETION

3.2.1 "Substantial completion" shall mean that stage in the progression of the work when the work is sufficiently complete in accordance with this Contract that the Owner can enjoy beneficial use or occupancy of the work and can utilize the work for its intended purpose.

3.3 TIME IS OF THE ESSENCE

3.3.1 All limitations of time set forth in the contract documents are of the essence of this Contract.

ARTICLE IV: CONTRACT PRICE

4.1 THE CONTRACT PRICE

4.1.1 The Owner shall pay, and the Contractor shall accept, as full and complete payment for all of the work required herein the total of \$_____. These amounts shall constitute the contract price which shall not be modified except by change order as provided in this Contract.

ARTICLE V: PAYMENT OF THE CONTRACT PRICE

5.1 PAYMENT AND ACCEPTANCE

5.1.1 When the work is completed the Contractor shall submit its bill. Within ten (10) business days, the Owner shall inspect the bill and the work for accuracy and if the work and billing is in compliance with the plans and specifications and this agreement, immediately make payment for the work. Payment for such work shall not be deemed to constitute acceptance unless the work is in material compliance with the plans and specifications.

5.2 WITHHELD PAYMENT

5.2.1 The Owner may decline to make payment, may withhold funds, and, if necessary, may demand the return of some or all of the amounts previously paid to the Contractor, to protect the Owner from loss because of:

- (a) Defective work not remedied by the Contractor nor, in the opinion of the Owner, likely to be remedied by the Contractor;
- (b) Claims of third parties against the Owner or the Owner's property;
- (c) Failure by the Contractor to pay subcontractors or others in a prompt and proper fashion;
- (d) Evidence that the balance of the work cannot be completed in accordance with the contract for the unpaid balance of the contract price;
- (e) Evidence that the work will not be completed in the time required for substantial or final completion;
- (f) Persistent failure to carry out the work in accordance with the contract;
- (g) Damage to the Owner or a third party to whom the Owner is, or may be, liable.

ARTICLE VI: THE OWNER

6.1 RIGHT TO STOP WORK

6.1.1 If the Contractor persistently fails or refuses to perform the work in accordance with this Contract, the Owner may order the Contractor to stop the work, or any described portion thereof, until the cause for stoppage has been corrected, no longer exists, or the Owner orders that work be resumed. In such event, the Contractor shall immediately obey such order.

6.2 OWNER'S RIGHT TO PERFORM WORK

6.2.1 If the Contractor's work is stopped by the Owner under Paragraph 6.1, and the Contractor fails within seven (7) days of such stoppage to provide adequate assurance to the Owner that the cause of such stoppage will be eliminated or corrected, the Owner may, without prejudice to any other rights or remedies the Owner may have against the Contractor, proceed to carry out the subject work. In such a situation, an appropriate change order shall be issued deducting from the contract price the cost of correcting the subject deficiencies. If the unpaid portion of

the contract price is insufficient to cover the amount due the Owner, the Contractor shall pay the difference to the Owner.

ARTICLE VII: THE CONTRACTOR

7.1 The Contractor shall perform no part of the work at any time without adequate contract documents or, as appropriate, approved shop drawings, product data or samples for such portion of the work. If the Contractor performed any of the work knowing it involves a recognized error, inconsistency or omission in the contract documents, the Contractor shall bear responsibility for such performance and shall bear the cost of correction.

7.2 The Contractor shall perform the work strictly in accordance with this Contract.

7.3 The Contractor shall supervise and direct the work using the Contractor's best skill, effort and attention. The Contractor shall be responsible to the Owner for any and all acts or omissions of the Contractor, its employees and others engaged in the work on behalf of the Contractor.

7.4 SUPERVISION

7.4.1 The Contractor shall employ and maintain at the project site only competent supervisory personnel. Absent written instruction from the Contractor to the contrary, the superintendent shall be deemed the Contractor's authorized representative at the site and shall be authorized to receive and accept any and all communications from the Owner.

7.4.2 The key supervisory person assigned by the Contractor to this project is: _____
So long as the individual named above remain actively employed or retained by the Contractor, he/she shall perform the functions indicated unless the Owner agrees to the contrary in writing.

7.5 CLEANING THE SITE AND THE PROJECT

7.7.1 The Contractor shall keep the site reasonably clean during performance of the work. Upon final completion of the work, the Contractor shall clean the site and the project and remove all waste, together with all of the Contractor's property therefrom.

7.6 ACCESS TO WORK

7.8.1 The Owner shall have access to the work at all times from commencement of the work through final completion. The Contractor shall take whatever steps necessary to provide access when requested.

7.7 INDEMNITY

7.7.1 To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Owner from and against liability, claims, damages, losses and expenses, including attorneys' fees, arising out of or resulting from performance of the work, provided that such liability, claims, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the work itself) including loss of use resulting therefrom, but only to the extent caused in whole or in part by negligent acts or omissions of the Contractor, a subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, regardless of whether or not such liability, claim, damage, loss or expense is caused in part by a party indemnified hereunder.

7.7.2 In claims against any person or entity indemnified under this Paragraph 7.9 by an employee of the Contractor, a subcontractor, any one directly or indirectly employed by them or anyone for whose acts they may be

liable, the indemnification obligation under this Paragraph 7.9 shall not be limited by a limitation on amount or type of damages, compensation or benefits payable by or for the Contractor or a subcontractor under workers' compensation acts, disability benefit acts or other employee benefit acts.

ARTICLE VIII: CONTRACT TERMINATION

8.1 TERMINATION BY THE CONTRACTOR

If the Owner shall persistently or repeatedly fail to perform any material obligation to the Contractor for a period of fifteen (15) days after receiving written notice from the Contractor of its intent to terminate hereunder, the Contractor may terminate performance under this Contract by written notice to the Owner.

8.2 TERMINATION BY THE OWNER

8.2.1 FOR CONVENIENCE

8.2.1.1 The Owner may for any reason whatsoever terminate performance under this Contract by the Contractor for convenience. The Owner shall give written notice of such termination to the Contractor specifying when termination becomes effective. Owner shall pay to Contractor all amounts due for the work on the project to the time of termination.

8.2.1.2 The Contractor shall incur no further obligations in connection with the work and the Contractor shall stop work when such termination becomes effective. The Contractor shall also terminate outstanding orders and subcontracts. The Contractor shall settle the liabilities and claims arising out of the termination of subcontracts and orders. The Owner may direct the Contractor to assign the Contractor's right, title and interest under terminated orders or subcontracts to the Owner or its designee.

8.2.1.3 The Contractor shall transfer title and deliver to the Owner such completed or partially completed work and materials, equipment, parts, fixtures, information and contract rights as the Contractor has.

ARTICLE IX: INSURANCE

9.1. INSURANCE

9.1.1 The Contractor shall have in full force and effect during the term of this Agreement: The limits of liability for the insurance required by paragraph 5.03 of the General Conditions shall provide coverage for not less than the following amounts, or greater where required by law:

Worker's Compensation under the General Conditions.

- (1) State - Statutory
- (2) Applicable Federal - Statutory
- (3) Employer's Liability - \$100,000.00

Comprehensive General Liability of the General Conditions:

(1) Bodily Injury:
\$500,000.00 Each Occurrence

\$1,000,000.00 Annual Aggregate
Products and Completed Operations

\$500,000.00 Each Occurrence
1,000,000.00 Annual Aggregate

Comprehensive Automobile Liability:

Bodily Injury:

\$500,00.00 Each Person

\$1,000,000.00 Each Accident

Property Damage

\$500,000.00 Each Occurrence

Contractual Liability:

(1) Bodily Injury: \$500,000.00 Each Occurrence

(2) Property Damage

\$ 500,000.00 Each Occurrence

\$1,000,000.00 Annual Aggregate

Unless otherwise provided in these Supplementary Conditions, CONTRACTOR shall purchase and maintain property insurance upon the Work at the site to the full insurance value thereof. This insurance shall include the interest of OWNER, CONTRACTOR, and Subcontractors in the work, shall insure against the perils of fire and extended coverage, shall include 'all-risk' insurance for physical loss and damage including theft, vandalism and malicious mischief, collapse and water damage, and such other perils as may be provided in these Supplementary Conditions, and shall include damages, losses, and expenses arising out of or resulting from any insured property (including fees and charges of engineers, architects, attorneys and other professionals). If not covered under the 'all-risk' insurance or otherwise provided in these supplementary Conditions, CONTRACTOR shall purchase and maintain similar property insurance on portions of the work stored on and off the site or in transit when such portions of the work are to be included in an Application for Payment. The policies of insurance required to be purchased and maintained by CONTRACTOR in accordance with paragraphs 5.06 and 5.07 shall contain a provision that the coverage afforded will not be canceled or materially changed until at least thirty days prior written notice has been given to OWNER."

The Owner shall be named as an additional insured on such general liability insurance policy.

ARTICLE X: MISCELLANEOUS

10.1 GOVERNING LAW

10.1.1 The Contract shall be governed by the law of the State of Oklahoma. Jurisdiction and venue shall be permitted only in the District Court of Canadian, Oklahoma.

10.2 ATTORNEY FEES

10.2.1 In the event of litigation, the prevailing party shall be entitled to reasonable attorney fees and costs.

10.3 SUCCESSORS AND ASSIGNS

10.3.1 The Owner and Contractor bind themselves, their successors, assigns and legal representatives to the other party hereto and to successors, assigns and legal representatives of such other party in respect to covenants, agreements and obligations contained in this Contract. The Contractor shall not assign this Contract without written consent of the Owner.

Executed this ____ day of _____ 2024.

"Owner"

THE CITY OF THOMAS, OKLAHOMA

By: _____
MAYOR

[Seal]
ATTEST:

CITY CLERK

Executed this ____ day of _____ 2024.

By: _____

"Contractor"

AUTHORIZED REPRESENTATIVE

Date of Execution)

[Seal]
ATTEST:

SECRETARY

SPECIFICATIONS AND PROJECT DESCRIPTION

1. Scope of the Work:

The work described in these specifications consists of furnishing all labor, materials, tools, equipment and services and performing all work required to, (1) “pull” the ditches where necessary to establish proper drainage; and (2) lay crusher run rock at a depth of 4” (3) place #4 reinforcing steel grid at 12” centers in all directions (4) place a uniform wearing surface (i.e., 8 inches of concrete) in accordance with these specifications on the following street:

*** All removal (including hauling off) of current asphalt will be completed by the Custer County Commissioner prior to items described below.**

ITEM #1 PLACE A 4” LAYER OF CRUSHER RUN ROCK, THEN INSTALL #4 REINFORCING STEEL GRID AT 12” CENTERS IN ALL DIRECTIONS, NEXT OVERLAY 8” OF PORTLAND CEMENT CONCRETE FROM THE NORTHERN EDGE OF THE RAILROAD TRACKS ON SOUTH 1ST STREET TO THE SOUTHERN EDGE OF BROADWAY STREET/HIGHWAY 33 FOR APPROXIMATELY 575 LINEAR FEET AT A STREET WIDTH OF 23 FEET WITH A TOTAL VOLUME OF 327 CUBIC YARDS. CLEAN ALL AREAS TO BE PAVED

- **REMOVE WASTE MATERIALS OFF SITE**

The quantities of work identified in the information above are estimated and may vary with actual field applications. The contractor is responsible for verifying quantities to prepare their bid. Bid will be total for a complete surface course of the designated portions of the designated streets and contractors assume all responsibility for ensuring that they have field verified the quantities that they will need to satisfactorily complete the work when they submit their bid. The work described shall be in accordance with the *Oklahoma Department of Transportation (ODOT) Standard Specifications Book*.

2. Specifications:

2.1. All work under this contract shall conform to these contract specifications and the applicable Sections of the latest edition of the *ODOT Standard Specifications Book*.

2.2. Preparation

2.2.1 Surfaces on which the new paving is to be placed shall be swept and/or blown clean and dry, and be free of loose foreign materials (other than required reinforcing steel grid).

2.2.2 Any base course or sub grade repairs shall be conducted as needed prior to paving operations. Work shall be properly saw cut, over excavated, etc. as necessary to connect replacement material to sound base or sub grade.

2.3. **PRODUCTS**

2.3.1 **PORTLAND CEMENT CONCRETE A.** Portland cement concrete for pavements and slabs shall be air-entrained type with a maximum water-

cement ratio of 0.50 conforming to ACI 325.9R. Minimum compressive strengths at 28 days shall be 4,000 psi. 1. Concrete shall be air-entrained type, conforming to ASTM C 94. Air content by volume shall be 6% + 1%, and shall be tested in accordance with ASTM C 231. 2. Concrete slump shall be no less than 2 in. nor greater than 4 in., determined in accordance with ASTM C 143. 3. Cement shall be Portland cement, conforming to ASTM C 150, Type IL or II. Only one color of cement, all of the same manufacturer, shall be used for the work. Type III cement shall be used only with the prior approval of the Owner. 4. Fine and coarse aggregates shall conform to ASTM C 33. 5. Concrete shall contain a water reducing agent to minimize cement and water content of the concrete mix at the specified slump. Water reducing agent shall conform to ASTM C 494. 6. No calcium chloride or admixtures containing calcium chloride shall be added to the concrete. No admixtures other than those specified shall be used in the concrete without the specific written permission of the Owner in each case.

2.3.2 **AGGREGATE BASE COURSE** Material for aggregate base course shall be Crusher Run.

2.3.3 **STEEL REINFORCEMENT** Reinforcing steel grid at 12" centers in all directions.

2.3.4 **CHEMICAL ADMIXTURES** Chemical Admixtures: Provide admixtures certified by manufacturer to be compatible with other admixtures and to contain not more than 0.1 percent water-soluble chloride ions by mass of cementitious material. 1. Water-Reducing Admixture: ASTM C 494/C 494M, Type A. 2. Retarding Admixture: ASTM C 494/C 494M, Type B

2.3.5 **EXPANSION JOINTS** The contractor shall submit a Jointing Plan to the project engineer for review, prior to paving.

2.4 **EXECUTION**

2.4.1 **AGGREGATE BASE COURSE**

A. Aggregate base course for paving and the spreading, grading, and compaction methods employed shall conform to the *ODOT Standard Specifications Book*.

B. Subgrade and base course shall be kept clean and uncontaminated. Less select materials shall not be permitted to become mixed with gravel. Materials spilled outside pavement lines shall be removed and area repaired.

C. Portions of subgrade or of construction above which become contaminated, softened, or dislodged by passing of traffic, or otherwise damaged, shall be cleaned, replaced, and otherwise repaired to conform to the requirements of

the *ODOT Standard Specifications Book* before proceeding with next operation.

2.4.2 STEEL REINFORCEMENT

- A. General: Comply with the *ODOT Standard Specifications Book* for fabricating, placing, and supporting reinforcement.
- B. Before being placed in position, reinforcing for reinforced concrete shall be thoroughly cleaned of loose mill and rust scale, dirt, ice, and other foreign material which may reduce the bond between the concrete and reinforcing. Where there is delay in placing concrete after reinforcement is in place, bars shall be reinspected and cleaned when necessary.
- C. Any bar showing cracks after bending shall be discarded.
- D. Unless otherwise indicated, reinforcing shall extend within 2 in. of formwork and expansion joints. Reinforcing shall continue through control joints.

2.4.3 PORTLAND CEMENT CONCRETE PAVING

- A. Paving mix, equipment, methods of mixing and placing, and precautions to be observed as to weather, condition of base etc., shall meet the requirements of ACI 325.9R. Pavement shall be constructed as detailed in Section 1, Scope of the Work.
 - B. The Owner shall be notified of concrete placement sufficiently in advance of start of operation to allow his representative to complete preliminary inspection of the work, including subgrade, forms, and reinforcing steel, if used.
 - C. Normal concrete placement procedures shall be followed. Concrete shall arrive at the jobsite so that no additional water will be required to produce the desired slump. When conditions develop that required addition of water to produce the desired slump, permission of the Owner must be obtained. The concrete shall be transported from the mixer to its place of deposit by a method that will prevent segregation or loss of material.
 - D. Work shall not be performed during rainy weather or when temperature is less than 40° F. (4.4° C).
 - E. Adjacent work, etc., shall be protected from stain and damage during entire operation. Damaged and stained areas shall be replaced or repaired to equal their original conditions.
 - F. Existing concrete, earth, and other water-permeable material against which new concrete is to be placed shall thoroughly damp when concrete is placed. There shall be no free water on surface.
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- G. Concrete which has set or partially set before placing shall not be employed. Retempering of concrete will not be permitted.
- H. Concrete shall be thoroughly spaded and tamped to secure a solid and homogeneous mass, thoroughly worked around reinforcement and into corners of forms.
- I. When joining fresh concrete to concrete which has attained full set, latter shall be cleaned of foreign matter, and mortar scum and laitance shall be removed by chipping and washing. Clean, roughened base surface shall be saturated with water, but shall have no free water on surface. A coat of 1:1 cement-sand grout, approximately 1/8 in. thick, shall be well scrubbed into thoroughly dampened concrete base. New concrete shall be placed immediately, before grout has dried or set.

2.4.4 FINISHING

- A. Concrete flatwork surfaces shall be screeded off, bullfloated, troweled and finished true to line and grade, and free of hollows and bumps. Surface shall be dense, smooth, and at exact level and slope required. 1. Finished concrete surface for exposed concrete walks, ramps and pads shall be woodfloated and steel troweled to a smooth surface. Surface shall not deviate more than 1/8 in. in 10 ft.
- B. Unless otherwise indicated, horizontal surfaces of pedestrian concrete surfaces which will be exposed shall be given a light broomed finish, with direction of grooves in concrete surface perpendicular to direction of travel. After concrete has set sufficiently to prevent coarse aggregate from being torn from surface, but before it has completely set, brooms shall be drawn across it to produce a pattern of small parallel grooves. Broomed surface shall be uniform, with no smooth, unduly rough or porous spots, or other irregularities. Coarse aggregate shall not be dislodged by brooming operation.
- C. Immediately following finishing operations, arrises at edges and both sides of expansion joints shall be rounded to a 1/4 in. radius.
- D. Where finishing is performed before end of curing period, concrete shall not be permitted to dry out, and shall be kept continuously moist from time of placing until end of curing period, or until curing membrane is applied.

2.4.5 CURING

- A. It is essential that concrete be kept continuously damp from time of placement until end of specified curing period. It is equally essential that water not be added to surface during floating and troweling operations, and
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not earlier than 24 hours after concrete placement. Between finishing operations surface shall be protected from rapid drying by a covering of waterproofing paper. Surface shall be damp when the covering is placed over it, and shall be kept damp by means of a fog spray of water, applied as often as necessary to prevent drying, but not sooner than 24 hours after placing concrete. None of the water so applied shall be troweled or floated into surface.

- B. Concrete surfaces shall be cured by completely covering with curing paper or application of a curing compound.

- 1. Concrete cured using waterproof paper shall be completely covered with paper with seams lapped and sealed with tape. Concrete surface shall not be allowed to become moistened between 24 and 36 hours after placing concrete. During curing period surface shall be checked frequently, and sprayed with water as often as necessary to prevent drying, but not earlier than 24 hours after placing concrete.

- 2. If concrete is cured with a curing compound, compound shall be applied at a rate of 200 sq. ft. per gallon, in two applications perpendicular to each other.

- 3. Curing period shall be seven days minimum.

2.4.6 CONSTRUCTION JOINTS

- A. Set construction joints at side and end terminations of pavement and at locations where pavement operations are stopped for more than one-half hour unless pavement terminates at isolation joints. 1. Continue steel reinforcement across construction joints, unless otherwise indicated. Do not continue reinforcement through sides of pavement strips, unless otherwise indicated. 2. Provide tie bars at sides of pavement strips where indicated. 3. Butt Joints: Use epoxy bonding adhesive at joint locations where fresh concrete is placed against hardened or partially hardened concrete surfaces.

2.4.7 EXPANSION JOINTS

- A. Expansion joints (isolation joints) shall be 1/2 in. wide and unless otherwise indicated on the Drawings, shall be located 30 ft. o.c. and at places where pavement meets other structures. Expansion joint shall be formed in the concrete to required width with preformed joint filler in place. Joint filler shall extend the full width and depth of the slab. Joint filler shall extend the full length of the expansion joint.

- 1. Depth of joint filler shall form a 1-1/4 in. deep sealant and backer rod recess below finished concrete surface.

2. Doweled Joints: Install sleeves and dowel bars at expansion joints as indicated. Lubricate or asphalt-coat one-half of dowel length to prevent concrete bonding to one side of joint.

2.4.8 CONTROL JOINTS

- A. Control joints indicated to be sawn shall be sawn by using a diamond blade soff-type early entry cut saw. Joint shall be made after concrete is finished and when the surface is stiff enough to support the weight of workmen without damage to the slab. Saw shall cut into slab at least 1 in., but in no case less than 25% of slab depth.

2.4.9 COLD WEATHER CONCRETING

- A. Materials for concrete shall be heated when concrete is mixed, placed, or cured when the mean daily temperature is below 40o F. or is excepted to fall to below 40o F. within 72 hours, and the concrete after placing shall be protected by covering, heat, or both.
- B. Details of handling and protecting of concrete during freezing weather shall be subject to the approval and direction of the Owner. Procedures shall be in accordance with provisions of the *ODOT Standard Specifications Book*.

2.4.10 HOT WEATHER CONCRETING

- A. Concrete just placed shall be protected from the direct rays of the sun and the forms and reinforcement just prior to placing shall be sprinkled with cold water. Every effort shall be made to minimize delays which will result in excessive mixing of the concrete after arrival on the job.
- B. During periods of excessively hot weather (95o F., or above), ingredients in the concrete shall be cooled insofar as possible and cold mixing water shall be used to maintain the temperature of the concrete at permissible levels all in accordance with the provisions of ACI 305. Any concrete with a temperature above 95o F., when ready for placement will not be acceptable, and will be rejected.
- C. Temperature records shall be maintained throughout the period of hot weather giving air temperature, general weather conditions (calm, windy, clear, cloudy, etc.) and relative humidity. Records shall include checks on temperature of concrete as delivered and after placing in forms. Data should be correlated with the progress of the work so that conditions surrounding the construction of any part of the structure can be ascertained.

2.4.11 PROTECTION OF CONCRETE SURFACES

- A. Concrete surfaces shall be protected from traffic or damage until surfaces have hardened sufficiently. If necessary 1/2 in. thick plywood sheets shall be used to protect the exposed surface.
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- B. Drill test cores, where directed by Owner, when necessary to determine magnitude of cracks or defective areas. Fill drilled core holes in satisfactory pavement areas with portland cement concrete bonded to pavement with epoxy adhesive.

2.5 COORDINATION

Depending on the start date for the project, it may be required that the concrete paving of this street be done in coordination and cooperation with an asphalt paving contractor who will be responsible for paving the street from the railroad tracks south.

2.6 TRAFFIC CONTROL

Traffic shall be directed through or around the project with such signs, barricades, devices, flagmen, and pilot vehicles, which shall conform to the latest edition of the *Manual of Uniform Traffic Control Devices*.

2.7 SAFETY

Safety precautions shall be used at all times during the progress of the work. As appropriate, workmen shall be furnished with hard hats, safety shoes, asbestos gloves, respirators, and any other safety apparel that will reduce the possibility of accidents. All Occupational Safety and Health Act requirements shall be observed.

2.7 OTHER

Any incidental drainage work necessary to facilitate a completed project shall be performed by the contractor, as incidental to the paving.

Shoulders shall be dethatched and graded to a proper cross-section profile below the level of the edge of pavement while establishing a proper drainage profile.

2.8 METHOD OF MEASUREMENT

Upon completion and acceptance of work performed in accordance with the specifications, payment shall become due and payable on a lump sum basis. Payment shall constitute full compensation for furnishing, transporting, placing, shaping, compacting and finishing the Portland cement concrete surface course and for all labor, tools, equipment and incidentals necessary to complete the work in full accordance with the specifications.

Method of payment shall be unit price.

2.9 Testing and Inspection

The Owner reserves the right to inspect and test paving and associated work in accordance with the *ODOT Standard Specifications Book*.

Addenda A
Concrete Paving Map



Key:

Blue = Concrete paving area