



INVITATION FOR SEALED BID

BID 01-724 (Re-Bid #2)

Description: Air Test System

Department: PUBLIC WORKS

NIGP Commodity Code(s): 890-64-00-000-0

Total pages including this page is 18

FAXING OF BID WILL NOT BE ACCEPTED

Important Instruction – Read Carefully:

If you have obtained these bid specifications from either of:
City of Tulsa's Fax-on-Demand (918-596-1171) or
City of Tulsa's Website : <http://www.cityoftulsapurchasing.org/>

you must notify the buyer **Patricia Cummings** of your intent to bid by e-mail at pcummings@ci.tulsa.ok.us in order to receive addenda. The buyer will always acknowledge your e-mail for your records. All addenda will be posted on fax-on-demand and the website.

TABLE OF CONTENTS

Pay special attention to those pages with a reference to the following notes:

Note #1: Signature of authorized agent required

Note #2: Signature of an authorized agent and notarized required

Table of Contents		2
Invitation for Sealed Bid	(Note #1)	3
General Terms and Conditions		4
Interest Affidavit	(Note #2)	5
Bidder Affidavit	(Note #2)	6
Contractor Information Sheet		7
Summary Price Sheet		8
Specifications		9-18

Your bid response should follow the same format listed above plus any additional format requested in the body of the bid invitation.

**INVITATION FOR SEALED BIDS
TO
City of Tulsa**

200 CIVIC CENTER, ROOM 109, TULSA, OKLAHOMA 74103

Bid number and date of bid opening must appear on the lower
left outside corner of bid envelopes and all related containers.

DATE OF OPENING: December 27, 2001

BID NUMBER: **BID 01-724 (Re-Bid#2)**

**BID MUST BE IN THE CITY CLERK'S OFFICE AT THE ABOVE ADDRESS BY 5:00 P.M. THE DAY
PRECEDING THE "DATE OF OPENING" SHOWN ABOVE.**

BIDS WILL BE OPENED AT 8:30 A.M. IN THE CITY COUNCIL ROOM ON THE DAY SPECIFIED UNDER "DATE OF OPENING."

PUBLISHED IN THE TULSA DAILY COMMERCE AND LEGAL NEWS: December 10, 11, 12, 13, 14, 2001

Bid must be accompanied by bidder's bond, cashier's check or certified check in the amount of: NONE

PLEASE READ TERMS AND CONDITIONS ON THE NEXT PAGE BEFORE COMPLETING BID DOCUMENTS

THE FOLLOWING SECTION MUST BE COMPLETED BY BIDDER

Delivery will be made in not more than _____ days after receipt of order.

Payment terms _____% _____ days.

City of Tulsa may increase quantity of order at the unit price bid for _____ days. (Bidder to Specify Days) I have examined the terms and specifications and the instructions to bidders herein and agree, provided I am awarded a contract, to provide the above described items for the sum shown in accordance with the terms and specifications stated herein. All deviations are in writing and attached hereto.

Enclosed is a BID BOND ; CASHIER'S CHECK; Certified Check in the amount of \$ _____, which I agree the City of Tulsa may retain as liquidated damages in the event of my failure to comply with the terms of this bid.

MUST BE SIGNED BY AUTHORIZED AGENT TO BE VALID

FIRM NAME _____ by _____
SIGNATURE OF AUTHORIZED AGENT

STREET _____ TITLE _____

CITY STATE _____ ZIP CODE _____ PHONE NUMBER _____ DATE _____

GENERAL TERMS AND CONDITIONS OF SEALED BIDS

THESE ITEMS APPLY TO AND BECOME A PART OF THE BID.

NO EXCEPTIONS TO THESE TERMS & CONDITIONS WILL BE CONSIDERED.

1. **BIDS MUST BE SUBMITTED ON THIS FORM ONLY INCLUDING A SIGNATURE OF AN AUTHORIZED AGENT.** Each bid shall be placed in a separate envelope. Be sure envelope is completely and properly identified and sealed, showing the bid number and date in the lower left hand corner. Bids must be time stamped in the office of the City Clerk by 5:00 P.M. on the day before date of opening.
2. No bidder may withdraw his proposal for a period of thirty (30) days after the date and hour set for the opening of bids.
3. All prices shall be quoted F.O.B. Tulsa, Oklahoma, and delivery to City of Tulsa location shall be without additional charge.
4. The bidder shall attach the manufacturer's name of the equipment or material to be furnished, type, model numbers, manufacturer's descriptive bulletins and specifications. All guarantees and warranties should be clearly stated. This data shall be in sufficient detail to describe accurately the equipment or material to be furnished. Manufacturer's specifications, in respect to the successful bidder, shall be considered as part of his contract with the City of Tulsa.
5. The bidder shall show in the proposal both the unit prices and total amount, where required, of each item listed. In the event of error or discrepancy in the mathematics, the unit prices shall prevail.
6. Any exceptions or deviations from written specifications shall be shown in writing and attached to the bid form.
7. Each bidder agrees to comply with the terms of Title 5, Chapter 1, of Tulsa, Oklahoma Charter and revised ordinances relating to equal employment opportunity.
8. **THE ENCLOSED FORMS REGARDING NON-COLLUSION AND FINANCIAL INTEREST MUST BE SIGNED, NOTARIZED, AND RETURNED WITH THE BID.**
9. The City of Tulsa reserves the right to reject any and all bids, to waive any technicalities in the bidding, and to award each item to different bidders or all items to a single bidder.
10. All bids must be accompanied by bidders bond, cash, certified or cashier's check in the amount shown on the face of the bid form. This amount shall be retained by the City of Tulsa as liquidated damages in the event the successful bidder (or bidders) fails to execute a contract, if required. The bidder agrees that said amount is presumed to be the damages sustained by the City due to the impracticability and extreme difficulty in fixing the actual damages. The office of the City Clerk will return the bid deposits to the unsuccessful bidders, after a contract has been awarded or all bids have been rejected.
11. In the event cash discounts are offered by the bidder, the discount date shall begin with the date of invoice, the date of receipt of all material covered by the purchase order, or the date of receipt by the City of Tulsa of the original copy of the purchase order with properly executed Affidavit of Claimant, whichever is the later date.
12. Direct purchase of certain items of equipment or material by the City of Tulsa are exempt from Federal Excise Tax and Oklahoma Sales Tax. In such cases the bidder shall quote prices which do not include Federal Excise Tax and Oklahoma Sales Tax. The City of Tulsa will furnish executed exemption certificates upon presentation by the bidder at the time of purchase.
13. Bid must show number of days required for delivery under normal conditions. Failure to state delivery time obligates bidder to complete delivery in fourteen (14) calendar days. Unrealistically short or long delivery promises may cause bid to be disregarded. Contractor must keep Purchasing Department advised at all times of status of order. Default in promised delivery or failure to meet specifications authorizes the Purchasing Agent to purchase supplies elsewhere and charge full increase of cost and handling to defaulting contractor. Consistent failure to meet delivery promises without valid reason may cause removal from bid list.
14. Bidder agrees to defend and save City of Tulsa from and against all demands, claims, suits, costs, expenses, damages and judgments based upon infringement of any patent relating to goods specified in this order or the ordinary use or operation of such goods by City or use or operation of such goods in accordance with bidders direction.
15. If the bid requires a written contract, the successful bidder shall execute a written contract with the City of Tulsa and return the required bonds and insurance certificates within ten (10) days after submission of contracts to said bidder by the City.

BIDDER AFFIDAVIT - TITLE 74 O.S. (1974 SUPP.) 85.22-85.25

STATE OF _____ COUNTY OF _____

_____, of lawful age, being first duly sworn on oath says
Authorized Agent

1. (s)he is the duly authorized agent of _____, the bidder submitting the competitive bid which is attached to this statement, for the purpose of certifying the facts pertaining to the existence of collusion among bidders and between bidders and municipal officials or employees, as well as facts pertaining to the giving or offering of things of value to government personnel in return for special consideration in the letting of any contract pursuant to the bid to which this statement is attached.
2. (s)he is fully aware of the facts and circumstances surrounding the making of the bid to which this statement is attached and has been personally and directly involved in the proceedings leading to the submission of such bid; and
3. neither the bidder nor anyone subject to the bidder's direction or control has been a party;
 - a. to any collusion among bidders in restraint of freedom of competition by agreement to bid at a fixed price or to refrain from bidding,
 - b. to any collusion with any municipal official or employee as to quantity, quality or price in the prospective contract, or as to any other terms of such prospective contract, nor
 - c. in any discussions between bidders and any municipal official concerning exchange of money or other thing of value for special consideration in the letting of a contract.

SIGNATURE OF AUTHORIZED AGENT

Subscribed and sworn to before me this _____ day of _____, 20_____.

Signature of Notary Public

MY COMMISSION EXPIRES

The Bidder Affidavit must be completed, signed by an authorized agent, and notarized.

CONTRACTOR/BIDDER INFORMATION SHEET

To be completed by all Bidders
For Contracts with the City of Tulsa
(Please print or type)

Project No. or Description _____

Full Name of Bidder _____

Legal Identity
(Corporation, Partnership,
Individual, etc.) _____

Address _____

Telephone No. _____

FAX No. _____

Taxpayer Identification Number _____

Contact Person _____

Phone No. _____

Fax No. _____

E-mail address _____

Webpage Address _____

Price Sheet Summary

You will be able to obtain a copy of the Bid Summary on the City of Tulsa's Purchase-Net Fax-on-Demand and Website shortly after bid opening.

BID 01-724 (Re-Bid #2) Air Test System Public Works Department

<u>Item</u>	<u>Qty.</u>	<u>Description</u>	<u>Price (ea.)</u>	<u>Total</u>
1	1 or more	Air Test System	\$ _____	\$ _____

To include:

- Trailer, Control Panel
- Air Compressor
- 500 Ft. Triple Hose Reel
- Manual Winch Assembly
- Tool Kit
- Panel to Filter Hose Assembly
- Front & Back Plugs
- Cable/hose Manhole Roller Assembly
- 30 Ft. Ply Lift/Inflation Line
- Deluxe Tire Pump
- 50 Ft. Triple Hose Assembly
- Panel to Reel Hose Assembly
- 22 Ft. Hose
- Atmosphere Monitor.

Note any exceptions to specifications in bid submittal

TOTAL BID: \$ _____

Vendor Name: _____
Signature: _____ Date: _____

BID 00-724 (Re-Bid #2)
Air Test System
Public Works Department

INTENT:

THE INTENT OF THESE SPECIFICATIONS IS TO SECURE, ON A COMPETITIVE BASIS, A SOURCE TO **SUPPLY ONE (1) AIR TEST SYSTEM** FOR THE CITY OF TULSA'S UNDERGROUND COLLECTIONS DIVISION OF PUBLIC WORKS.

BIDDER'S AFFIDAVIT:

EACH BIDDER SHALL ACCOMPANY THEIR BID WITH A FULLY EXECUTED AND NOTARIZED COPY OF THE ATTACHED **NON-COLLUSION AFFIDAVIT** AND THE **INTEREST AFFIDAVIT**. FAILURE TO DO SO MAY BE CAUSE FOR REJECTION OF THE BID.

METHODS OF SAMPLING, INSPECTIONS & TESTS:

1. AFTER BID RESULTS ARE TABULATED, THE CITY OF TULSA PURCHASING DIVISION RESERVES THE RIGHT TO REQUIRE SAMPLES OF SELECTED EQUIPMENT AND/OR PRODUCTS FOR INSPECTION AND EVALUATION.
2. UNLESS OTHERWISE SPECIFIED IN THE CONTRACT OR PURCHASE ORDER, THE SUPPLIER SHALL BE RESPONSIBLE FOR THE PERFORMANCE OF ALL INSPECTION AND TEST REQUIREMENTS NECESSARY TO INSURE COMPLIANCE WITH REQUIREMENTS FOR THIS SPECIFICATION. THIS DOES NOT PRECLUDE SUBSEQUENT INSPECTION AND TESTIMONY BY THE CITY OF TULSA TO FURTHER DETERMINE CONFORMANCE WITH SPECIFICATION REQUIREMENTS OF QUALITY STANDARDS OF WORKMANSHIP, MATERIAL AND CONSTRUCTION TECHNIQUES.

ADDENDA AND INTERPRETATIONS:

IF IT BECOMES NECESSARY TO REVISE ANY PART OF THIS BID, A WRITTEN ADDENDUM WILL BE PROVIDED TO ALL THE BIDDERS. THE CITY OF TULSA IS NOT BOUND BY ANY ORAL REPRESENTATION, CLARIFICATIONS OR CHANGES MADE IN THE WRITTEN SPECIFICATIONS BY CITY OF TULSA EMPLOYEES UNLESS SUCH CLARIFICATION OR CHANGE IS PROVIDED TO BIDDERS IN WRITTEN ADDENDUM FORM FROM THE PURCHASING DIVISION.

ALTERING BIDS:

BIDS CANNOT BE ALTERED OR AMENDED AFTER SUBMISSION DEADLINE. ANY INTERLINEATION, ALTERATION, OR ERASURE MADE BEFORE OPENING TIME AND DATE MUST BE INITIALED BY THE SIGNER OF THE BID, GUARANTEEING AUTHENTICITY. BIDS MUST BE SUBMITTED IN INK OR TYPEWRITTEN, PENCILING WILL NOT BE ACCEPTED.

RIGHT TO AUDIT:

BIDDER FULLY UNDERSTANDS AND HEREBY AGREES BY THE SUBMISSION OF THIS BID THAT SHOULD BIDDER BE AWARDED THIS BID AND SUBSEQUENTLY ENTER INTO CONTRACT WITH THE CITY TO FURNISH THE GOODS, SERVICES, MATERIALS AND/OR SUPPLIES CALLED FOR HEREUNDER, THE BIDDER SHALL, UPON ANY REASONABLE REQUEST BY CITY AND DURING BIDDER'S NORMAL BUSINESS HOURS, GRANT CITY STAFF INGRESS ONTO BIDDER'S PREMISES WHERE BIDDER'S BOOKS AND RECORDS ARE KEPT AND FURTHER AGREES THAT BIDDER SHALL PROVIDE CITY STAFF PERSONNEL REASONABLE ACCESS TO AND SUCH CLERICAL ASSISTANCE AS CITY'S STAFF MAY REQUIRE FOR EXAMINATION AND AUDIT OF BIDDER'S BOOKS AND RECORDS AS RELATE TO GOODS, SERVICES, MATERIALS AND/OR SUPPLIES FURNISHED CITY DURING THE TERM OF ANY CONTRACT RESULTING BETWEEN BIDDER AND CITY PURSUANT TO THIS BID.

TESTS:

THE CITY RESERVES THE RIGHT TO SUBJECT ALL PRODUCTS OFFERED, PRIOR TO AWARD OF BID, TO WHATEVER PHYSICAL AND OR CHEMICAL TESTS ARE DEEMED NECESSARY TO SATISFY THE PURPOSE FOR WHICH THEY ARE REQUIRED.

IF ADDITIONAL SAMPLES ARE REQUIRED TO COMPLETE SUCH TESTS, THEY SHALL BE SUPPLIED BY THE BIDDER AT NO ADDITIONAL COST.

DESCRIPTIVE LITERATURE:

EACH BIDDER IS REQUIRED TO FURNISH WITH THEIR BID, CATALOG CUTS AND/OR DESCRIPTIVE LITERATURE, PROPERLY LABELED WITH THE BID NUMBER AND BIDDER'S NAME, WITH FULL ILLUSTRATIONS AND DETAILED SPECIFICATIONS FOR EACH ITEM OFFERED AS EQUAL TO THE BRAND NAME SPECIFIED. IN ADDITION, **ALL DIFFERENCES IN SPECIFICATIONS FROM THE SPECIFICATIONS STATED HEREIN MUST BE SO MARKED.** DESCRIPTIVE LITERATURE IS REQUIRED TO ESTABLISH, FOR THE PURPOSE OF BID EVALUATION AND AWARD, DETAILS OF THE PRODUCT(S) THE BIDDER PROPOSES TO FURNISH AS TO DESIGN, MATERIALS, METHOD OF MANUFACTURE, CONSTRUCTION, ASSEMBLY OR OPERATION, AS APPROPRIATE. **FAILURE TO SUBMIT THE DESCRIPTIVE LITERATURE MAY BE CAUSE FOR REJECTION OF YOUR BID.**

AMERICANS WITH DISABILITIES ACT:

THE CONTRACTOR SHALL TAKE THE NECESSARY ACTIONS TO ENSURE ITS FACILITIES AND EQUIPMENT ARE IN COMPLIANCE WITH THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT. IT IS UNDERSTOOD THAT THE PROGRAM OF THE CONTRACTOR IS NOT A PROGRAM OR ACTIVITY OF THE CITY OF TULSA. THE CONTRACTOR AGREES THAT ITS PROGRAM OR ACTIVITY WILL COMPLY WITH THE REQUIREMENTS OF THE ADA. ANY COSTS OF SUCH COMPLIANCE WILL BE THE RESPONSIBILITY OF CONTRACTOR. UNDER NO CIRCUMSTANCES WILL CONTRACTOR CONDUCT ANY ACTIVITY WHICH IT DEEMS TO NOT BE IN COMPLIANCE WITH THE ADA.

EMPLOYMENT DISCRIMINATION BY CONTRACTOR PROHIBITED:

A. DURING THE PERFORMANCE OF THIS CONTRACT, THE CONTRACTOR AGREES AS FOLLOWS:

- (1) THE CONTRACTOR WILL NOT DISCRIMINATE AGAINST ANY EMPLOYEE OR APPLICANT FOR EMPLOYMENT BECAUSE OF RACE, RELIGION, COLOR, SEX OR NATIONAL ORIGIN, EXCEPT WHERE RELIGION, SEX OR NATIONAL ORIGIN IS A BONA FIDE OCCUPATIONAL QUALIFICATION REASONABLY NECESSARY TO THE NORMAL OPERATION OF THE CONTRACTOR. THE CONTRACTOR AGREES TO POST IN CONSPICUOUS PLACES, AVAILABLE TO EMPLOYEES AND APPLICANTS FOR EMPLOYMENT, NOTICES SETTING FORTH THE PROVISION OF THIS NON-DISCRIMINATION CLAUSE.
- (2) THE CONTRACTOR, IN ALL SOLICITATIONS OR ADVERTISEMENTS FOR EMPLOYMENT PLACED BY OR ON BEHALF OF THE CONTRACTOR, WILL STATE THAT SUCH CONTRACTOR IS AN EQUAL OPPORTUNITY EMPLOYER.
- (3) NOTICES, ADVERTISEMENTS AND SOLICITATIONS PLACED IN ACCORDANCE WITH FEDERAL LAW, RULE OR REGULATION SHALL BE DEEMED SUFFICIENT FOR THE PURPOSE OF MEETING THE REQUIREMENTS OF THIS SECTION.

B. THE CONTRACTOR WILL INCLUDE THE PROVISION OF THE FOREGOING PARAGRAPHS OF THIS SECTION IN EVERY SUBCONTRACT OR PURCHASE ORDER OF OVER \$10,000, SO THAT THE PROVISIONS WILL BE BINDING UPON EACH SUBCONTRACTOR OR VENDOR.

AWARD OF BID:

THE BID SHALL BE AWARDED TO THE FIRM WHOSE PROPOSAL IS RESPONSIVE TO THE BID AND IS MOST ADVANTAGEOUS TO THE CITY, CONSIDERING THE FACTORS IDENTIFIED IN THE BID AND SECTION 406E OF TITLE 6, THE PURCHASING ORDINANCE SET FORTH BELOW:

E. AWARD OF CONTRACT.

- 1. AUTHORITY OF MAYOR. THE MAYOR SHALL HAVE THE AUTHORITY TO AWARD CONTRACTS WITHIN THE PURVIEW OF THIS CHAPTER.

2. LOWEST SECURE BIDDER. CONTRACTS SHALL BE AWARDED TO THE LOWEST SECURE BIDDER MEETING SPECIFICATIONS. IN DETERMINING "LOWEST SECURE BIDDER", IN ADDITION TO PRICE, THE FOLLOWING FACTORS SHALL BE CONSIDERED:

A. THE ABILITY, CAPACITY AND SKILL OF THE BIDDER TO PERFORM THE CONTRACT OR PROVIDE THE SERVICE REQUIRED;

B. WHETHER THE BIDDER CAN PERFORM THE CONTRACT OR PROVIDE THE SERVICE PROMPTLY OR WITHIN THE TIME SPECIFIED, WITHOUT DELAY OR INTERFERENCE;

C. THE CHARACTER, INTEGRITY, REPUTATION, JUDGMENT, EXPERIENCE AND EFFICIENCY OF THE BIDDER;

D. THE QUALITY OF PERFORMANCE OF PREVIOUS CONTRACTS OR SERVICES;

E. THE PREVIOUS AND EXISTING COMPLIANCE BY THE BIDDER WITH LAWS AND ORDINANCES RELATING TO THE CONTRACT OR SERVICE;

F. THE SUFFICIENCY OF THE FINANCIAL RESOURCES AND ABILITY OF THE BIDDER TO PERFORM THE CONTRACT OR PROVIDE THE SERVICE;

G. THE QUALITY, AVAILABILITY AND ADAPTABILITY OF THE SUPPLIES OR CONTRACTUAL SERVICES TO THE PARTICULAR USE REQUIRED;

H. THE ABILITY OF THE BIDDER TO PROVIDE FUTURE MAINTENANCE AND SERVICE FOR THE USE OF THE SUBJECT OF THE CONTRACT, AND;

I. WHERE AN EARLIER DELIVERY DATE WOULD BE OF GREAT BENEFIT TO THE REQUISITIONING AGENCY, THE DATE AND TERMS OF DELIVERY MAY BE CONSIDERED IN THE BID AWARD, AND;

J. THE NUMBER AND SCOPE OF CONDITIONS ATTACHED TO THE BID.

K. IF A POINT SYSTEM HAS BEEN UTILIZED IN THE BID SPECIFICATIONS, THE NUMBER OF POINTS EARNED BY THE BIDDER.

BID DOCUMENTS:

BIDDER SHALL RETURN ALL BID DOCUMENTS INTACT EXACTLY AS FURNISHED IN ITS ORIGINAL FORM. ALL BID DOCUMENTS REQUIRING SIGNATURE MUST BE SIGNED BY AN AUTHORIZED AGENT OF THE COMPANY BIDDING. PRINTING YOUR NAME IN LIEU OF SIGNATURE WILL NOT BE ALLOWED. **FAILURE TO COMPLY WILL RESULT IN REJECTION OF YOUR BID.**

SCOPE:

TRAILER

THE TRAILER SHALL BE CONSTRUCTED OF HEAVY GAUGE STEEL WITH SUPPORTS FOR THE TOP COVER TO FULLY ENCLOSE TRAILER EQUIPMENT FROM THE ELEMENTS.

THE TRAILER SHALL INCLUDE:

- SWING AWAY TELESCOPE SCREW JACK ON THE TRAILER TONGUE.
- BREAK LIGHTS AS WELL AS AMBER AND RED FRONT AND SIDE MARKERS FOR SAFE AND POSITIVE IDENTIFICATION DURING NIGHT TIME USE. UNIT MUST MEET ODOT REQUIREMENTS.
- A BALL TYPE TRAILER HITCH FOR 2 5/16" TRAILER BALL.
- TWO INCH DIAMETER DRAINAGE HOLE LOCATED ON THE FLOOR OF THE TRAILER BENEATH THE AIR COMPRESSOR IS TO SERVE AS AN OUTLET FOR MOISTURE THAT ACCUMULATES IN THE COMPRESSOR TANK.
- TRAILER DIMENSIONS SHALL BE A MINIMUM OF 115 INCHES LONG BY 69 INCHES WIDE BY 54 INCHES HIGH WITH BOX DIMENSIONS OF 72 INCHES LONG BY 50 INCHES WIDE.
- MUST PROVIDE A MANUFACTURER'S STATEMENT OF ORIGIN AND OKLAHOMA APPLICABLE TITLE.

CONTROL PANEL

MUST INCLUDE PORTABLE CONTROL PANEL THAT ALLOWS THE OPERATOR TO MONITOR AND REGULATE LINE ACCEPTANCE AND LEAK LOCATION TESTING FROM VARIOUS LOCATIONS. THE CONTROL PANEL SHALL BE EQUIPPED WITH TWO MECHANICAL VALVES. THESE ARE PROVIDED TO CONTROL THE AIRFLOW THROUGHOUT THE SYSTEM.

-THREE AIR PRESSURE GAUGES TO MONITOR THE PRESSURES OF THE AIR COMPRESSOR, TEST CHAMBER AND THE PNEUMATIC PLUGS AS FOLLOWS:

COMPRESSOR GAUGE	-0 TO 160PSIG
TEST GAUGE	-0 TO 15 PSIG
PNEUMATIC PLUG	-0 TO 60 PSIG

-TIMER: THIS IS PROVIDED FOR TIMING INDIVIDUAL TESTS.

AIR COMPRESSOR

THE AIR COMPRESSOR SHALL PROVIDE AIR FOR ALL AIR TESTING OPERATIONS. IT SHALL BE POWERED BY A MINIMUM 14 HP GASOLINE ENGINE, WITH A CAST IRON CYLINDER AND A TWO-STAGE PUMP. A THROTTLE GOVERNOR TO AUTOMATICALLY MAINTAIN OPERATING PRESSURE TO THE COMPRESSOR TANK AND A 20 GAL TANK SHALL BE INSTALLED. THERE SHALL BE A QUICK DISCONNECT FITTING WITH REGULATOR INSTALLED SO THAT UNIT CAN PROVIDE AIR FOR OTHER PURPOSES.

REEL/500 FT. TRIPLE HOSE

USED FOR LEAK LOCATION, THE 500' TRIPLE HOSE REEL SHALL BE MOUNTED IN THE REAR OF THE TRAILER FOR EASY ACCESS AND USE. THE HOSE REEL SHALL BE CONSTRUCTED OF HEAVY GAUGE STEEL AND CAST ALUMINUM. IT SHALL BE CHAIN DRIVEN WITH AN AIR MOTOR TO ASSIST IN THE REWINDING PROCESS AND FOR MOVING THE PLUGS WITHIN THE SEWER LINE. A HAND CRANK IS TO BE PROVIDED FOR MANUAL USE. THE REEL IS TO HOLD 500 FEET OF TRIPLE HOSE AND SHALL HAVE A ROTARY UNION TO ALLOW A CONTINUOUS CONNECTION BETWEEN THE REEL AND THE CONTROL PANEL. EACH OF THE HOSES ARE 3/8" I.D. AND ARE WELDED TOGETHER TO FORM A TRIPLE HOSE ASSEMBLY. A CABLE RESTRAINT IS ATTACHED TO THE BALL END OF THE HOSE ALLOWING FOR THE RETRIEVAL OF PLUGS. MUST INCLUDE QUICK DISCONNECT FITTING ON THE END OF THE HOSES.

MANUAL WINCH ASSEMBLY

SHALL BE CONSTRUCTED OF HEAVY GAUGE STEEL. THE MANUAL WINCH SHALL FACILITATE OPERATION FROM THE STREET SURFACE ATOP THE MANHOLE. IT IS USED TO PULL THE PLUGS THROUGH THE SEWER LINE USING A 500 FT. (1500 LB. TEST) STEEL CABLE. MANUAL WINCH FEATURES SHALL INCLUDE:

- MEASURE METER ASSEMBLY MONITORS THE FOOTAGE LOCATION OF THE PLUGS WITHIN THE SEWER LINE.
- HAND OPERATED HIGH TORQUE 5:1 DIRECT MECHANISM.
- A DIRECT DRIVE MECHANISM ALLOWING FOR QUICK CABLE RETRIEVAL.
- REMOVABLE LEGS AND CRANK HANDLE FOR COMPACT STORAGE OR MOVEMENT OF THE WINCH FROM ON LOCATION TO ANOTHER.

PANEL TO FILTER ASSEMBLY HOSE-ASSEMBLY

THE PANEL TO FILTER ASSEMBLY-HOSE ASSEMBLY SHALL CONNECT TO THE CONTROL PANEL TO THE AIR COMPRESSOR BY WAY OF THE FILTER ASSEMBLY. THE HOSE ASSEMBLY SHALL CONSIST OF 3/8" I.D. AIR HOSE THAT MEASURES 11.3 FT. IN LENGTH. THE HOSE SHALL BE CONNECTED TO THE FILTER ASSEMBLY BY A 3/8" SWIVEL BALL FITTING AND A 3/8" QUICK DISCONNECT TO THE CONTROL PANEL.

FRONT AND BACK PLUGS 8-12"

SHALL INCLUDE 4 FRONT AND BACK PLUGS SHALL BE USED TO SEAL OFF THE PIPELINE TO TEST SECTIONS OF PIPE. THE MULTI-SIZE FEATURE ALLOWS TESTING MULTIPLE SIZES OF PIPE WITH THE SAME PLUG.

TOOL KIT

THE TOOL KIT CONSISTS OF A METAL TOOLBOX AND CONTAINS ALL THE NECESSARY TOOLS AND FITTINGS FOR MINOR REPAIRS AND ADJUSTMENTS OCCURRING IN THE FIELD.

<u>QUANTITY</u>	<u>DESCRIPTION</u>
1	TOOL BOX
SET OF 4	QUAD RINGS
9	HOSE CLAMPS 3/8" I.D.
2	Q.D COUPLER X 3/8" HOSE BARB
1	10" ADJUSTABLE WRENCH
2	HOSE BARB REPAIR CONNECTOR
1	9/16" COMBINATION WRENCH
1	11/16" COMBINATION WRENCH
1	3/4" COMBINATION WRENCH
1	SAFETY INSTRUCTION AND DATA BOOKLET
2	3/8" MPT X 1/4" SWIVEL BALL ADAPTER
1	1/4" HEX COUPLING
1	1/4" MPT BRASS HEX PLUG
2	1/4" Q.D. NIPPLE
1 ROLL	TEFLON TAPE 1/2" WIDE

CABLE /HOSE MANHOLE ROLLER ASSEMBLY

A CABLE/HOSE MANHOLE ROLLER ASSEMBLY SHALL BE INCLUDED TO GUIDE THE TRIPLE HOSE AND CABLE INTO THE INVERT AT THE MANHOLE INSURING IT OF A LOW FRICTION ENTRY. THE MANHOLE ROLLER FRAME SHALL BE MADE OF HEAVY DUTY ALUMINUM AND THE EXTENSION POLE ASSEMBLIES SHALL BE ZINC-PLATED CONDUIT. ONE (1) 4 FT. AND THREE

(3) 5 FT. EXTENSION POLE ASSEMBLIES SHALL BE INCLUDED WITH EACH MANHOLE ROLLER ASSEMBLY FOR VARYING MANHOLE DEPTHS.

30-FOOT POLY LIFT/INFLATION LINE

A 30FT. COMBINATION RUBBER INFLATION HOSE AND BRAIDED POLY LINE, TO LOWER INFLATE AND REMOVE A PLUG FROM THE SEWER LINE WITHOUT PUTTING TENSION ON THE INFLATION HOSE.

DELUXE TIRE PUMP

DELUXE TIRE PUMP USED TO INFLATE THE PLUG THAT IS USED FOR BLOCKING IN LINE ACCEPTANCE TEST. THE TEST PUMP SHALL HAVE A LARGE CAPACITY AIR CHAMBER, PRESSURE GAUGE, CORROSION RESISTANT BRASS FITTING, AND A QUICK DISCONNECT VALVE.

50 FT TRIPLE HOSE ASSEMBLY

SHALL INCLUDE A 50 FT. TRIPLE HOSE USED IN CONJUNCTION WITH THE PORTABLE PANEL FOR TESTING IN LINE ACCEPTANCE OPERATION. THE HOSES ARE TO BE INDIVIDUALLY COLORED (RED, BLUE, YELLOW) FOR IDENTIFICATION. A CABLE RESTRAINT IS ATTACHED TO THE BALL END OF THE HOSE ASSEMBLY TO ELIMINATE THE NEED FOR A SEPARATE TOW CABLE.

PANEL TO REEL HOSE ASSEMBLY

THE PANEL TO REEL HOSE ASSEMBLY SHALL CONSIST OF 3 INDIVIDUAL 4 FOOT (COLOR CODED) AIR HOSES THAT ARE USED TO CONNECT THE CONTROL PANEL TO THE REEL DURING AIR TESTING. EACH HOSE SHALL EQUIPPED WITH A 3/8" SWIVEL BALL ADAPTER ON ONE END OF EASY CONNECTION TO THE REEL, AND A 3/8" QUICK DISCONNECT ON THE OTHER END FOR EASY CONNECTION TO THE CONTROL PANEL.

HOSE

A 22 FOOT HOSE SHALL BE PROVIDED AND IS USED TO CONNECT THE PLUGS TOGETHER DURING LEAK LOCATION TESTS. THIS HOSE SHALL BE EQUIPPED WITH QUICK DISCONNECT FITTINGS AT BOTH ENDS AND A STEEL CABLE EMBEDDED INTO ITS WALL TO PREVENT STRETCHING AND BREAKING OF HOSE.

ATMOSPHERE MONITOR

SYSTEM SHALL INCLUDE A GAS DETECTOR TO MONITOR ATMOSPHERE DURING TESTING. DETECTOR SHALL BE PORTABLE, AND SHALL BE DESIGNED FOR ROUGH FIELD CONDITIONS. IT SHOULD BE RKI

INSTRUMENTS MODEL #GX-86A OR EQUAL. IT SHALL HAVE SIMULTANEOUS AND CONTINUOUS FOUR GAS MONITORING, DATA LOGGING CAPABILITIES, HIGH IMPACT PLASTIC OR STAINLESS STEEL CASING, AND EASY CALIBRATION. THE MONITOR SHALL HAVE AN INTERNAL LOGGER FEATURING USER ADJUSTABLE INTERVALS AND A CAPACITY OF UP TO 90 HOURS. DATA LOGGER INFORMATION SHALL BE ABLE TO BE DOWNLOADED TO A PC OR PRINTER. THE MONITOR SHALL HAVE A BATTERY THAT INDEPENDENTLY POWERS THE DATA LOGGER AND PROVIDES MEMORY RETENTION.

THE SAMPLING METHOD SHALL BE CONTINUOUS. THE RESPONSE TIME SHALL BE NEAR 90% FULL SCALE IN 30 SECONDS.

THE MONITOR SHALL BE ABLE TO DETECT OXYGEN, COMBUSTIBLES, HYDROGEN SULFIDE, AND CARBON MONOXIDE. THREE SENSORS SHOULD BE USED IN THE MONITOR. THE CATALYTIC SENSOR SHALL DETECT COMBUSTIBLES, THE ELECTROCHEMICAL SENSOR SHALL DETECT HYDROGEN SULFIDE AND CARBON MONOXIDE, AND THE GALVANIC CELL SENSOR SHALL DETECT OXYGEN. REPLACEMENT SENSORS MUST BE SUPPLIED AT AN AVERAGE MARKET PRICE.

CONTROLS SHALL BE TOUCH OPERATED. THE DISPLAY SHALL BE SELF-ILLUMINATING LCD. SHALL BE VISUAL AND AUDIO: LOW AND HIGH, TIME WEIGHTED AVERAGE (TWA), SHORT TERM EXPOSURE LIMIT (STEL), PEAK AND CEILING. MUST HAVE A REMOTE REPEATER ALARM WITH A MINIMUM OF A 10 FOOT REACH.

RECHARGEABLE NICKEL CHROMIUM BATTERIES AND ALKALINE BATTERIES WITH AC BATTERY CHARGER. RS-232 OR EQUIVALENT; SWITCHABLE FOR PRINTER OR COMPUTER. IMPACT AND CORROSIVE RESISTANT, STAINLESS STEEL OR COMPARABLE DURABLE MATERIAL

COMPLETE WITH CARRYING CASE AND STRAP.

PROVIDE EIGHT HOURS OF ON-SITE FACTORY AUTHORIZED TRAINING. TRAINING SHALL INCLUDE INSTRUCTION ON OPERATION AND CALIBRATION.

FUNCTIONS SHALL INCLUDE A DOSIMETER THAT INDICATES THE TIME WEIGHTED AVERAGE (TWA) AND THE SHORT TERM EXPOSURE LIMIT (STEL); A PEAK HOLD THAT INDICATES THE HIGHEST VALUE ENCOUNTERED; A DELAYED TURN-OFF TIME OF 5 SECONDS; A DATA LOGGER MEASURING FROM 5 TO 300 SECOND INTERVALS WITH A 90 HOUR CAPACITY AT 60 SECOND INTERVALS; AND AN AUTO ZERO.

THE MONITOR SHALL COME WITH A SHOULDER STRAP, THE NECESSARY BATTERIES FOR OPERATION, A REMOTE REPEATER ALARM, A DATA CONNECTOR, CPU ADAPTER WITH SOFTWARE, A 10' PROBE WITH DUST FILTER, A MOTORIZED SAMPLE DRAWING PUMP, A WATERPROOF

CARRYING CASE WITH ACCESSORIES, AND A 10' POLYURETHANE HOSE.

PARTS BOOK AND OPERATING AND MAINTENANCE MANUAL AND COMPLETE CIRCUIT BOARD SCHEMATICS.

FACTORY STANDARD WARRANTY WITH A MINIMUM ONE (1) YEAR FOR PARTS AND LABOR.

PAINT

UNIT SHALL BE PRIMERED AND BE GLOSS WHITE IN COLOR. PAINT SHALL HAVE A MINIMUM OF 2 COATS.

THE BIDDER SHALL DELIVER EQUIPMENT FULLY ASSEMBLED AND OPERATIONAL WITH ALL FLUIDS SUCH AS OIL AND FUEL, BATTERIES, FENDERS, WHEELS, ETC. INSTALLED UPON DELIVERY. NO CRATED OR NON-OPERATIONAL EQUIPMENT REQUIRING ASSEMBLY OR ADJUSTMENT OF ANY KIND SHALL BE ACCEPTED. BIDDER WILL BE REQUIRED TO OPERATE THE EQUIPMENT AND DEMONSTRATE ALL FEATURES AND OPERATIONAL MODES TO CITY OF TULSA PERSONNEL. BIDDERS SHALL SUPPLY ADDRESSES AND TELEPHONE NUMBERS OF THE LOCAL QUALIFIED DEALER THAT WILL PERFORM WARRANTY AND SERVICE. THOSE DEALERS SHALL BE CONTACTED FOR VERIFICATION PRIOR TO AWARDING THE BID. FAILURE TO COMPLY WILL AFFECT THE AWARD OF THE BID.