



City of Conway – Mayor’s Office
1201 Oak Street
Conway, AR 72032
www.cityofconway.org



Invitation and Bid 2009-39

INVITATION

TO THE VENDOR ADDRESSED:

Bidders are invited to furnish the items listed herein in accordance with the terms and conditions attached. Sealed bids must be in the Mayor’s office not later than **10:00 am Monday, September 21, 2009**, at which time all bids will be opened and read. After a technical review, the successful bidder will be notified by mail. The City of Conway reserves the right to reject any and all bids. **Unsigned bids will be rejected.**

**City of Conway Sanitation Department
2010 Automated Recycling System**

*****SPECIFICATION FOR 2010 AUTOMATED RECYCLING SYSTEM*****

GENERAL TERMS:

It is intended that the following set of bid specifications be used as a guideline for a 2010 new and unused automated recycling system for the City of Conway's existing Material Recycling Facility. The system shall be capable of sorting recyclable materials automatically with minimal physical labor involved.

The system must be delivered, installed, and ready to use on site. **Bidder must provide an itemized price list of all materials and labor performed including mechanical equipment, construction work and electrical work.**

Bidder must have trained technicians capable of installing, performing warranty work, and maintenance work on all pieces of equipment installed.

Bidder must provide the proper training necessary for our operators to operate and perform preventative maintenance on all equipment installed. Parts and service manuals shall also be provided with this unit.

Awarded bidder must deliver and install completed unit within 170 days after receiving notice of award via a City of Conway issued, signed, and dated Purchase Order.

All specifications are set at a minimum. Any exceptions must be listed and submitted to the City of Conway Sanitation Dept. within five business days before bid is awarded.

Minimum Bid Specifications:

SORTING LINE DESIGN:

- The material to be sorted shall be pushed onto a grade level in-feed conveyor.
- The in-feed conveyor shall feed the material into an automatic bag breaker.
- The material shall leave the bag breaker by way of a transfer conveyor to a sorting platform where the plastic bags, Styrofoam, and undesirables will be manually sorted and dropped into push through bunkers.
- Material shall then travel by way of transfer conveyors through an automatic OCC separator. OCC will leave the separator and travel to a push through bunker by a transfer conveyor. Remaining material will travel down a separate transfer conveyor through an automatic fiber separator.
- The fiber separator shall separate newsprint, office paper, and mixed paper. Those materials shall travel to push through bunkers by a transfer conveyor.
- The remaining material shall travel to an elevated sorting platform by a transfer conveyor where #3 - #7 plastics will be manually separated and dropped into push through bunkers.
- The material shall travel along a transfer conveyor under a ferrous metal magnet.
- Ferrous metal collected by the magnet shall be dropped onto a separate transfer conveyor and be dropped into a push through bunker.
- Remaining material shall travel along the transfer conveyor to a non-ferrous metal separator.
- Non-ferrous metals shall be transferred to a push through bunker by way of a separate transfer conveyor.
- Remaining materials shall travel along the transfer conveyor through an automatic optic separator. Optic separator shall separate #1 and #2 plastics by color and be dropped into push through bunkers.
- The remaining material shall travel along a transfer conveyor and be dumped into a trash compactor provided by the City of Conway.
- All sorted items excluding trash must be capable of being pushed onto the existing City of Conway's in-feed conveyor that feeds the City of Conway's existing horizontal baler.

INFEEED CONVEYOR #1:

HINGE PAN CHAIN ROLLER TYPE DESIGN:

1. The in-feed conveyor shall be a below grade pit type conveyor.
2. The conveyor shall be 60" wide with a ¼" thick hinge pan design.
3. Conveyor shall have 9" pitch chains with 3" diameter flanged rollers
4. Conveyor shall have 4" high interlocking side wings with 3" high cleats on 54 " centers
5. Construction shall be 3/16" formed frame design with 6" channel iron cross members.
6. Loading area shall be 15' long with a 35 degree incline. The pit section shall have 1" sides. The incline section shall have 3" sides. Full length belly pans and covers shall be installed.
7. Upper conveyor section shall return to a horizontal position before discharging the material.
8. Conveyor drive unit shall have a shaft mounted direct drive gear box with a minimum of a 7.5 HP electric motor.
9. The gear box ratio shall accommodate a belt speed of 11 to 33 fpm with variable frequency drive.
10. The belt sprockets shall be flame hardened and 18" in diameter. They shall have 6 teeth and mounted to the conveyor with heavy duty sealed pillow block bearings.
11. The belt adjusters shall be heavy duty screw type adjusters mounted to the tail end of the conveyor.
12. The conveyor shall be equipped with a solenoid controlled belt oiler. It shall also be Equipped with mechanical anti roll-backs and emergency stops on each side of conveyor.
13. Conveyor must be constructed of high quality materials for use in an industrial setting and comply with ASME conveyor safety standards.

DISCHARGE CONVEYORS #7 & #10:

COMBINATION BELT CHAIN ROLLER DESIGN:

1. Above grade conveyors shall be a minimum of 48" wide for conveyor # 7 and 36" wide for conveyor # 10.
2. The belt shall have 4" pitch chains, 2 ply rubber belt, 1 1/2 " diameter flange rollers, 2 ½" side wings, and 2" high cleats on 36 " centers.
3. Conveyor shall be 3/16" thick steel formed frame design with 3" x 3" x ¼" tubing cross members.

4. Loading area shall be a minimum of 23' long for conveyor # 7 and 6' long for conveyor # 10 to accommodate the discharge screen separators.
5. Conveyors #7 and #10 shall have a 35 degree incline, 1' 10" high sides in pit section, 2" high sides on the incline section, and full length belly pans with side covers.
6. The upper section of conveyor #7 shall transition to a horizontal position and extend 6' before discharging.
7. Conveyor drive units shall be a shaft mounted direct drive gear box with a 5 HP electric motor.
8. The gear box shall ratio to accommodate belt speeds of 11 to 33 fpm with a variable frequency drive.
9. Belt sprockets shall be 10 ½ "diameter, 8 tooth, flame hardened sprockets mounted to the conveyor with heavy duty sealed pillow block bearings.
10. The adjusters shall be heavy duty screw shaft design mounted to the tail shaft.
11. The conveyors shall be equipped with a solenoid operated belt oiler, mechanical anti roll-backs, and emergency stops on each side of the feed area of conveyor.
12. Conveyors must be constructed of high quality materials for use in an industrial setting and comply with ASME conveyor safety standards.

TRANSFER CONVEYORS #2,4,5,6,8,12,16,17,18,19,20,21, & 22 :

HEAVY DUTY SLIDER BED DESIGN:

1. These conveyors shall be above grade design with a belt width of 36"
2. The belts shall be a PVC rubber belt with 3" high cleats on 36" centers.
3. Conveyor shall be formed frame design from 1/8" thick steel plate with 4" channel cross members and a solid sheet bed design.
4. The side skirt height of conveyors shall be 1'11" above belt with full length belly pans.
5. Conveyor drive units shall be a shaft mounted direct drive gear box with a high efficiency electric motor.
6. The gear box shall have a ratio to accommodate a belt speed of 20 to 80 fpm with a variable frequency drive.
7. The conveyor pulleys shall be 9" diameter mounted to the conveyor with heavy duty sealed pillow block bearings.
8. The belt adjusters shall be heavy duty screw type mounted to both sides of the tail shaft with an extra adjuster mounted to the head shaft on the opposite side of the gear box to assist belt tracking.

9. The conveyors shall be equipped with emergency stops on each side at the feed areas.
10. Conveyors must be constructed of high quality materials for use in an industrial setting and comply with ASME conveyor standards.

TRANSFER CONVEYORS # 13, 14, & 15:

HEAVY DUTY SLIDER BED DESIGN:

1. These conveyors shall be above grade with a belt width of 24”.
2. The belt shall be a PVC rubber belt with 3” high cleats on 36” centers.
3. Conveyor shall be formed frame design from 1/8” thick steel plate with 4” channel cross members and a solid sheet bed design.
4. The side skirt height of conveyors shall be 1’11” above the belt with full length belly pans.
5. Conveyors shall have a shaft mounted direct drive gear box with a high efficiency electric motor.
6. The gear box shall have a ratio to accommodate a belt speed of 20 to 80 fpm with a variable frequency drive.
7. The conveyor pulleys shall be 9” diameter mounted to the conveyor with heavy duty sealed pillow block bearings.
8. The belt adjusters shall be heavy duty screw type mounted to both sides of the tail shaft with an extra adjuster mounted to the head shaft on the opposite side of the gear box to assist belt tracking.
9. The conveyor shall be constructed of high quality materials for use in an industrial setting and comply with ASME conveyor safety standards.

SORTING CONVEYORS #3, 9, & 11:

HEAVY DUTY SLIDER BED DESIGN:

1. These conveyors shall be above grade design with a belt width of 36”.
2. The belt shall be a PVC rubber belt.
3. Conveyor shall be formed framed design from 1/8” thick steel plate with 4” channel cross members and a solid sheet bed design.
4. The side skirts height of conveyors shall be 3 ½” above the belt with full length belly pans.
5. Conveyor shall have a direct shaft mounted drive gear box with a high efficiency electric motor.
6. The gear box shall have a ratio to accommodate a belt speed of 20 to 80 fpm with a variable frequency drive.

7. The conveyor pulleys shall be 9" diameter mounted to the conveyor with heavy duty sealed pillow block bearings.
8. The belt adjusters shall be heavy duty screw type mounted to both sides of the tail shaft with an extra adjuster mounted to the head shaft on the opposite side of the gear box to assist belt tracking.
9. The conveyors shall be constructed of high quality materials for use in an industrial setting and comply with ASME conveyor standards.

PLATFORMS 1,2,3,4,5,6,7:

1. Each platform shall be designed specifically to accommodate its suitable application.
2. The sorting platforms shall have 8' high x 8' wide bunkers with separation walls built to allow pushing through of materials being sorted.
3. Platform shall have a minimum of 3/16" diamond floor plate, 42" high hand rails, 4" toe boards, 2(two) sets of stairs with 3/16" diamond plate runners, and 24" x 36" x 42" high drop chutes.
4. All platforms and stairs shall be constructed of high quality steel designed for use in an industrial setting.
5. The platforms and stairs must comply with all OSHA safety standards and any other City of Conway codes and ordinances.

BAG BREAKER:

1. The bag breaker shall be of heavy duty construction. It shall be 72" wide with dual drums, stress welded to shafts, with 20 HP direct drive shaft mounted gear boxes, and heavy duty bearings.
2. The bag breaker shall have access doors on each side of machine for easy clean out and machine maintenance.

OCC SEPERATOR:

1. The OCC separator shall be of heavy duty construction. It shall have a 7 ½ HP direct drive shaft mounted gear boxes with heavy duty bearings.
2. Separator shall be double deck design with 17 rows of disks on 9" centers.
3. Disks shall be mounted inline and stress welded to shafts.

CONTAINER AND PAPER SEPERATORS:

1. The paper separator shall be of heavy duty construction. It shall have a 7 ½ HP direct drive shaft mounted gear boxes with heavy duty bearings.
2. Separator shall be single deck design with 12 rows of disks on 9" centers.

3. Disks shall be mounted in-line with a split rubber design, bolted together, and bolted to shafts.
4. Front of screen shall be mounted on a hydraulic cylinder for easy angle adjustability.

EDDY CURRENT NON FERROUS SEPERATOR:

1. The eddy current shall be a low profile 2(two) pulley design with permanent rare earth magnets encased with an extra wide shell.
2. Magnet assembly shall be protected by a stainless steel enclosure.
3. Rotor drive motor shall be a 7 ½ HP 3600 RPM motor.
4. The rotor shall be 7 ½" in diameter with polyester shell heads on rotor assembly.
5. The rotor assembly shall have a replaceable fiberglass outer shell with wear resistant ceramic tile covering in a staggered pattern.
6. Rotor bearings shall be heavy duty and self aligning.
7. Eddy current conveyor motor shall be a 3 HP 1800 RPM motor with a fixed belt speed of 400 fpm.
8. Belt shall have alternating ½" x ¾" high cleats evenly spaced around the belt.

FERROUS METAL SEPERATOR:

1. The metal magnet shall be an electro magnet that is suspended above the transfer conveyor in a cross belt design. Magnet must be capable of picking ferrous metals off of the transfer conveyor and dropping them onto a separate transfer conveyor.
2. The conveyor shall have a minimum belt width of 42".
3. The magnet mounting length shall be a minimum of 52".
4. The magnet mounting width shall be a minimum of 46".
5. The separator shall be capable of belt speeds up to 350 fpm.
6. The drive motor shall have a minimum of 3 hp.

OPTICAL PLASTIC SEPERATOR:

1. The optical sorter shall be of heavy duty construction with the ability to sort a variety of different types of materials and colors.

CONTROL SYSTEM:

1. The system shall be equipped with a PLC and a 7" color touch screen monitor with the ability to distribute I/O over Ethernet to all components.

2. The control system shall include a variable frequency drive for every conveyor, E stop for every piece of equipment, computerized status and diagnostics disconnect switch at every motor, and one button system start up.
3. The existing compactor shall be tied into control system.
4. The existing baler and baler feed conveyor shall stand alone.
5. All wiring shall meet state and city codes.

TRADE IN:

Bid prices must include these City of Conway existing items to be traded in.

1. In- feed conveyor.
2. Transfer conveyor.
3. Sorting line and sorting platform.
4. Eddy current magnet and conveyor.
5. Ferrous metal magnet.

Additional Information

The bidder shall include all charges, including taxes, fees, and shipping (if applicable)

The bidder needs to include an anticipated delivery date (if applicable)

In submitting this bid, it is understood by the undersigned bidder that the right is reserved by the City of Conway to reject any and all bids:

Contact Information:

Mitch Wilson

Conway Sanitation shop Manager

Email mitchell.wilson@cityofconway.org

Cell 501-733-6049

Office 501-450-6155

Fax 501-450-6157

Bid specifications can be obtained from our website:

www.cityofconway.org.

Please mail all bid specifications to:

Mayor's Office

Attn: Felicia Rogers

1201 Oak Street

Conway, AR 72032

****Please be sure to mark envelope:**

Bid Number 2009-39

Bid Opening Date: Monday, September 21, 2009



City of Conway Sanitation Department
Bid # 2009-39
2010 Automated Recycling System
Opening Date: Monday, September 21, 2009
City Hall - Downstairs Conference Room @
10:00am
www.cityofconway.org

Bid Price for 2010 Automated Recycling System: \$ _____

(Please feel free to submit your bid on a separate document; however this page must be signed and turned in with your bid.) In the blank above; just put see submitted bid.

Unsigned bids will be rejected:

Authorized Agent Bidding on this project:

Company Name

Company Representative Name

Representative's Signature

Address Email Address

City State Zip

Telephone Number Fax Number

Date

City of Conway
TERMS AND CONDITIONS

Important – Read Carefully

By Submission of bid, bidder certifies that he has read all terms and conditions and that bid is submitted in accordance therewith.

1. Prices quoted will be considered to be net prices unless otherwise stated by the bidder. Cash discounts requiring payments in less than 30 days will not be considered in making awards.
2. Prices quoted shall be FOB Conway unless otherwise specifically stated on proposal. In either case, delivery charges must be prepaid.
3. All fees and taxes shall be included in prices quoted.
4. Bidder certifies that he will make delivery of items for which he bids within 10 days after receipt of award – unless otherwise specifically stated. Time of delivery in excess of 10 days may be considered a factor in making awards.
5. In case of default of contractor in making deliveries as per contract, the City may procure the articles or services from other sources and hold the contractor responsible for all excess costs occasioned thereby. Bidder's record as to satisfactory performance under previous contracts will be considered a factor in making awards and retention on bid lists.
6. The City reserves the right to reject any or all bids, in part or in whole and to waive information in bids received.
7. If not otherwise specified, bidder must furnish brand names with catalog number, if any, on items which are offered as "equal." In all such cases the burden of establishing equality is upon the bidder and failure to do so within a reasonable time may result in rejection. Alternative bids will not be considered unless no other type bid for the item is received.
8. In the case of equal or tie bids, preference will be given to Arkansas bidders. Other than as stated in the first sentence, awards on tie bids will be made at the discretion of the purchasing official. In such cases, "splitting" will be avoided and awards of previous contract(s) to one or more of the bidders will not be a factor.
9. In the event that bidder is unable to furnish all of an item, bids on portions thereof may be considered.
10. Final inspections and acceptance or rejection will be made after delivery. Items rejected because of non-conformance shall be removed and replaced immediately with those which meet specifications, all at the expense of the contractor. In the event that necessity requires the use of non-conforming items, payment therefore will be made at a proper reduction in price which shall be not greater than contractor's actual cost by purchase, fabrication, manufacture or other production method plus transportation paid to carriers. All costs in connection with testing items that do not meet specifications shall be paid by contractor.
11. Quality, time of performance, probability of performance, and location of bidder will be factors in awards of all contracts.
12. The City reserves the right to purchase any, all or none of the items listed, in combinations thereof that may be in the best interest of the City of Conway.
13. The City reserves the right to change any specifications, terms and/or conditions at any time, with adequate notice in writing to bid invitees of those changes, if any.
14. The City is qualified for "GSA" pricing schedules, if available and applicable.
15. The City reserves the right to waive any informalities or minor defects, but this shall not be construed to indicate waiver of any specification, term and/or condition unless in the best interest of the City in the judgment of the City.
16. **CONSTRUCTION/INSTALLATION:** Any construction work that is worth \$20,000 or more must comply with Arkansas Code Annotated § 22-9-204.
17. **PROHIBITED INTEREST CONDITION:** No official of the City authorized on behalf of the City to specify, plan, design, negotiate, make, accept or approve, or take part in specifying, planning, negotiating, making, accepting or approving any construction or material purchase contract or any subcontract in connection with any purchase made by the City of Conway shall become directly or indirectly interested personally in the purchase in the purchase or any part thereof.
18. **EQUAL OPPORTUNITY IN EMPLOYMENT:** All qualified bidders will receive consideration without regard to race, color, religion, sex, age, disability or national origin.