

WORK ORDER NO. 2

This Work Order No. 2 is made as of this September day of 19th, 2024, under the terms and conditions established in the Master Agreement between Client and Professional Consultant dated May 22nd, 2023 (the "Master Services Agreement" between The City of Arkansas City (Client) and Professional Engineering Consultants, P.A. (PEC). Except to the extend modified herein, all terms and conditions of the Master Services Agreement shall continue with full force and effect.

A. **Project Description**

- 1. The Project shall consist of the East Pressure Zone Improvements as recommended in the Water Master Plan. This includes a new 0.15 MG elevated storage tower, a 12" waterline along Highway 77 and Madison Avenue, and new pumps with VFDs in the Chestnut Pump Station. The existing Chestnut groundwater storage tank will be rehabilitated and the existing hydropneumatic tank will be removed. In addition, a new 12 Inch waterline will be installed along Chestnut from the BPS to the proposed water tower. Reference the conceptual drawing included as Exhibit B.
- 2. The Project delivery method is design-bid-build.

B. Anticipated Project Schedule

- 1. PEC shall commence its services on the Project within 10 days after receiving CLIENT's notice to proceed.
- 2. PEC and CLIENT anticipate that the design duration to complete construction documents will be approximately 24 weeks after receiving Notice to Proceed.
- 3. CLIENT acknowledges that directed changes, unforeseen conditions, and other delays may affect the completion of PEC's services. PEC will not have control over or responsibility for any contractor or vendor's performance schedule.

C. Project Deliverables

- 1. This Project Deliverables shall consist of the following sealed by an Engineer licensed in the State of Kansas where applicable:
 - a) Preliminary Plans and Specifications
 - b) Final Plans and Specifications

D. Scope of Services

- 1. Topographic Field Survey:
 - a) Set inter-visible control points in area of construction. Obtain reference ties.
 - b) Set benchmark within building area for construction.
 - c) Recover sufficient monumentation as required to enable drafting of boundary information.
 - d) Collect topographic survey data, including surface locations sufficient to provide 1' contours for survey limits covering the scope of work.
 - e) Recover sufficient monumentation as required to enable drafting of road right-of-way.
 - f) Locate all above and below grade utility improvements. PEC will not be responsible for searching for utilities beyond utilizing the One Call System.



- g) Compare record information received from utility providers to actual utilities flagged in the field. Notify locating service of any discrepancies and make a reasonable effort to resolve in the field. Utilities identified in record information that cannot be resolved in the field will be drafted in the general alignment show in the record information and will be specifically identified as "RECORD" on the deliverable drawing. PEC is not responsible for the accuracy of utility information not physically identified on-site.
- h) Locate all points of egress for any structures within the survey limits, including a Finished Floor Elevation (FFE) at each doorway.
- i) Locate all sanitary and storm sewer structures, such as area inlets, curb inlets, junction boxes, manholes, etc., the top of structure information will be collected as well as all flowlines in and out, and pipe size/material.
- j) Locate all buildings and substantial features, including parking stripes, sidewalks, paving limits/type, playground areas/equipment, landscape areas, etc.
- k) Tree limits, groups of trees and specimen trees will be identified and shown in the drawing.
- l) Survey limits that extend into the adjacent street right of way shall include all improvements/utilities within the half width of right of way.
- m) The coordinate base will be Kansas Regional Coordinate System Zone-18 Arkansas City and the elevations will be referenced to the NAVD 88 datum.

2. Geotechnical Engineering Services:

- a) PEC will use an appropriate One-Call utility locate system prior to arriving onsite.
- b) (1) subsurface borings to depths 40 feet below existing grade
- c) SPT sampling at the following intervals:
 - i. 1.5, 3.0, 6.0, 8.5, and at 5.0 intervals thereafter
- d) Relatively undisturbed soil samples (Shelby Tubes) will also be obtained.
- e) Grab/bulk samples from auger cuttings will be obtained depending on site conditions.
- f) Laboratory testing will be performed to determine the following index and engineering properties:
 - i. Moisture Content
 - ii. Density
 - iii. Atterberg Limits
 - iv. Percent Passing #200 sieve
 - v. Swell/Consolidation
 - vi. Unconfined compressive strength
- g) Geotechnical report, including boring logs, soil descriptions and classifications, groundwater elevations at the time of drilling, and laboratory test results.
- h) Geotechnical recommendations, including deep and shallow foundation design parameters, earthwork, excavation, soil stabilization, and controlled fill.
- i) Boreholes will be plugged with sodium bentonite, auger cuttings (spoils) and capped with similar materials.
- j) General cleanup of the site.

3. General Scope Items for Civil Services:

- a) Conduct one pre-design site visit to assess existing conditions.
- b) Participate in a kickoff meeting to discuss project improvements.



- c) Attend up to *two* progress design meetings with CLIENT.
- d) Provide bidding assistance including response to Contractor's questions and preparation of items for inclusion in Addenda.
- e) Provide Engineer's opinion of probable construction cost.

4. Civil Design Services:

- a) Produce alternative design concept plans for review with City Staff.
- b) Review Elevated Water Storage Tank volume selection with CLIENT.
- c) Coordinate with OWNER's staff to confirm the desired location of the proposed 150,000-gallon elevated water storage tank.
- d) Coordinate review of selected site with FFA requirements.
- e) Review available drawings and equipment information for the existing pump station.
- f) Review inspection report recommendations, coating requirements, water distribution system and storage tank operations. Review water distribution system operating pressures maintained by the booster pump station and storage tank to provide recommendations for operations during the project with water tower out of service.
- g) Prepare surface preparation requirements, coating system requirements, timeline for construction activities, and construction sequencing for taking the water tower out of service.
- h) Coordinate with City Staff on exterior lettering and logo options and include in bid package as separate or alternate costing items.
- i) Provide a complete set of construction drawings and details, including Cover Sheet, key map, plan/profiles, coordinate geometry data, erosion control plans, and associated details.
- j) Provide project specifications including front-end bidding/contract documents and technical specifications. City Standard Specifications will be utilized where applicable.
- k) Summarize project quantities and estimate probable construction costs.
- 1) Identify all utilities within the project limits and coordinate resolution of potential conflicts with each company.
- m) Develop a Storm Water Pollution Prevention Plan (SWPPP) and supporting documentation for the preparation of a Notice of Intent (NOI) permit application for submission by the City to the Kansas Department of Health and Environment (KDHE), if required.
- n) Submit drawings and specifications to the Kansas Department of Health and Environment (KDHE), with Waterline System permit applications as applicable, for approval.
- o) Prepare legal descriptions and exhibits for necessary property acquisition associated with the proposed water tower.

5. Electrical Engineering Design:

- a) Design electrical power, lighting, and SCADA for proposed water tower.
- b) Coordinate with utility to provide new electrical service.
- c) Prepare electrical power & lighting plans, one-lines, SCADA architecture and electrical details and specifications.

6. Structural Design:

a) Provide design criteria and performance specifications for the water tower designed by a specialty structural engineer (SSE).



7. KDHE Public Water Supply Loan Fund Process:

- a) Assist the CLIENT in completing the KPWSLF Project Submittal Form.
- b) Prepare a concept project cost estimate to be utilized with the KPWSLF Project Submittal Form.
- c) Complete the KDHE SRF Contract Provisions for Consultant Contracts (attached).
- d) Prepare an information request and review outstanding items with the CLIENT.
- e) Provide information to the CLIENT as required to complete the application process.
- f) Prepare environmental review letters and submit to the required regulatory agencies. Track responses and inform the CLIENT of any comments that may impact the project.
- g) Prepare the required farmland conversation documentation.
- h) Submit the loan application to KDHE and coordinate between KDHE and the CLIENT on any comments or questions.
- i) Prepare a Preliminary Engineering Report sealed by a licensed engineer registered in Kansas. Report shall include all criteria required by KDHE, including description of existing conditions, problem description, discussion and evaluation of alternative solutions, review of potential environmental impacts of the alternatives, selection of and justification of the selected alternative, and probable cost of the improvements.
- j) Assist the CLIENT in identifying and gathering property documentation (plats, easements, etc.) to verify the CLIENT has legal access to complete all project improvements.
- k) Incorporate the KDHE SRF Provisions in Construction Contract Documents into the project documents.
- 1) Submit all project documents to KDHE for review of approval prior to project advertisement.
- m) Provide letter for recommendation of project award.
- n) Complete the Preliminary Plan of Operation.
- o) Complete the Final Plan of Operation.
- p) Submit disbursement requests to KDHE.
- q) Verify Contractor payrolls meet Davis Bacon wage rates.

8. Civil Engineering Construction Administration Services including:

- a) Review shop drawings for systems and elements designed by PEC. Review period will be 14 calendar days after received by PEC office unless other terms are agreed to by PEC and CLIENT.
- b) Review Contractor's shop drawings and material test certifications for compliance with plans and specifications.
- c) Respond to RFIs generated by the contracting team. Response will be provided in 7 working days after received by PEC office unless other terms are agreed to by PEC and CLIENT.
- d) Consult with the Resident Inspector regarding interpretations or clarifications of the plans and specifications.
- e) Provide decisions in accordance with the Contract Documents on questions regarding this work
- f) Prepare Change Orders covering modifications or revisions necessitated by field conditions.



- g) Visit the PROJECT site if needed to determine Contractor's progress and general character of the work.
- h) Meet with the CLIENT as requested during construction to review progress on each part of the PROJECT.
- i) Perform one final construction observation site visit following substantial completion and develop written punch list of remaining items required for final acceptance.
- 9. Specialized Construction Observation Services (PEC will help facilitate Construction Observation services through KLM Engineering.):
 - a) Provide specialized construction observation of the storage tanks repairs, preparation, and coating systems.
 - b) Preconstruction meeting with the client and contractor to clearly define the role of the Engineer and Specialized Inspector, to discuss the intent of the specifications, and to ensure all parties agree to the scope of work and expectations regarding the quality of work.
 - c) Monitor and approval of the storage tank structural repairs and modifications to conformance to the specifications.
 - d) Inspection of the abrasive blasting media and equipment for conformance to the specifications and to prevent contamination of surfaces during surface preparation with moisture and oil or other contaminants.
 - e) Monitor the paint removal and disposal process for conformance to the specifications and environmental regulations.
 - f) Monitor the contractors mixing and application of the coatings for conformance to the specifications and the coating manufacturer's recommendations.
 - g) Approve surface preparation samples.
 - h) Record the contractor's progress for adherence to the construction schedule.
 - i) Submit daily and weekly inspection reports. Prepare and file copies of the reports on construction activities.
 - j) Coordinate and review testing of materials for conformance to the specifications and environmental regulations.
 - k) Monitor punch list items and subsequent corrective action by the contractor.
 - 1) Final inspection, substantial completion, and project acceptance.

E. Additional Responsibilities of CLIENT

The CLIENT agrees to provide the following pursuant to PEC accomplishing the Scope of Services outlined herein.

- 1. Drawings, studies, reports, and other information available pertaining to the existing site.
- 2. Perform in-field wage rate interviews with the Contractor.

F. Additional Services

The following services can be provided by PEC at an additional cost by Supplemental Agreement:

- 1. Production of record drawings, as-builts, or release of electronic files.
- 2. Meetings in excess of the number above will be performed on an hourly basis.
- 3. Analysis of existing utility systems.



- 4. Plan revisions, as necessary, to reduce the cost of construction after issue of Construction Documents. (Typically referred to "Value Engineering" or "VE".)
- 5. Landscape Design.
- 6. Platting and/or Zoning change processes.
- 7. Construction Testing and Inspection, Construction Staking.
- 8. Alternate designs not specifically listed in the Scope of Services.
- 9. Maps and legal descriptions for property acquisitions not associated with the proposed water tower site.
- 10. Perform in-field wage rate interviews with the Contractor.

G. Exclusions

The following shall be specifically excluded from the Scope of Services to be provided by PEC.

- 1. Permitting/Application/Review Fees
- 2. Filing Fees
- 3. Franchise Utility Design.

H. PEC's Fees & Reimbursable Expenses

- 1. PEC will invoice CLIENT one time per month for services rendered incurred in the previous month. CLIENT agrees to pay each invoice within 30 days after receipt.
- 2a. PEC's Fee for its Scope of Design Services will be on a lump sum basis in the amount of \$357,000. An estimated breakdown of the total aggregate fee is outlined below.
- 2b. PEC's fees for its Specialized Construction Observation Scope of Service will be on a standard hourly basis, at the rates established on the attached Rate Schedule, plus reimbursable expenses not to exceed \$116,000.

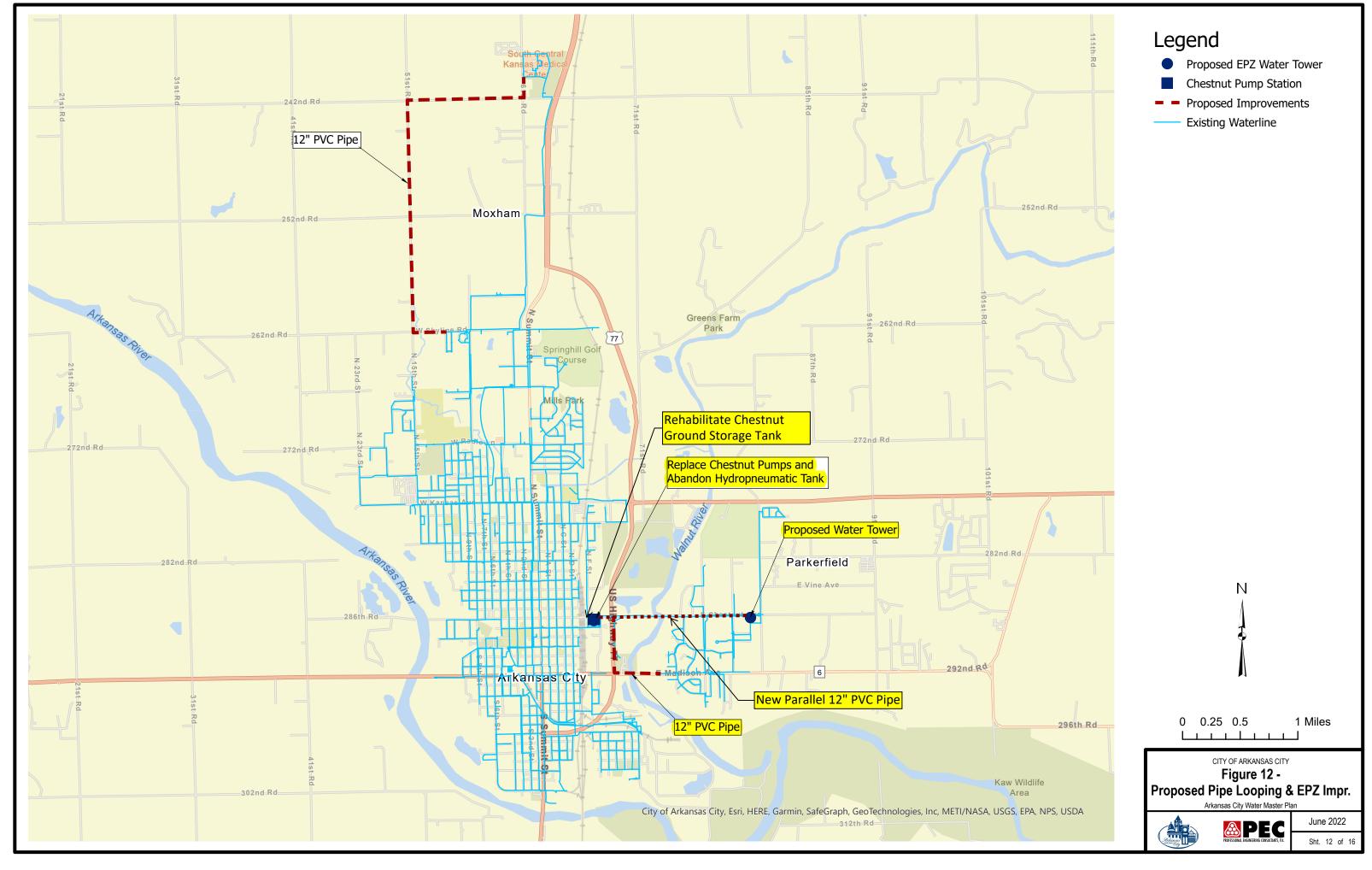
Discipline	Design (Lump Sum)	CA (Lump Sum)	Subtotal
Survey	\$ 54,400.00	\$ 0	\$ 54,400.00
Geotech	\$ 4,500.00	\$ 0	\$ 4,500.00
New Tower	\$ 60,500.00	\$17,000.00	\$ 77,500.00
Pump Station Improvements	\$ 23,750.00	\$ 3,500.00	\$ 27,250.00
Chestnut Waterline	\$ 82,750.00	\$ 5,500.00	\$ 88,250.00
Madison Waterline	\$ 57,100.00	\$ 4,500.00	\$ 61,600.00
Chestnut Tank Rehab	\$ 7,500.00	\$ 2,000.00	\$ 9,500.00
Loan Process	\$ 25,000.00	\$ 9,000.00	\$ 34,000.00
Construction Observation – Standard Hourly	\$ 0	\$ 0	\$116,000.00
Totals (Not to Exceed)	\$315,500.00	\$41,500.00	\$473,000.00

- 3. Reimbursable Expenses shall include digital scanning and printing by outside firms, deliveries made by outside services, vehicle mileage or vehicle rental and fuel, vehicle parking and tolls, travel fares (air/land/water), lodging, meals, and review/application/filing/permit fees.
- 4. Taxes are not included in PEC's Fees. CLIENT shall reimburse PEC for any sales, use, and value added taxes which apply to these services.

WO #2 Exhibit A Page 6 of 7



CLIENT	CONSULTANT	CONSULTANT	
Ву:	By:		
Printed Name:			
Title:	Title:		
Date:	D .		



KDHE SRF CONTRACT PROVISIONS FOR CONSULTANT CONTRACTS

STATE OF KANSAS ACT AGAINST DISCRIMINATION CONTRACT PROVISION CERTIFICATION FORM

During the performance of this contract, the contractor agrees as follows:

- (1) The contractor shall observe the provisions of the Kansas Act Against Discrimination and shall not discriminate against any person in the performance of work under the present contract because of race, religion, color, sex, disability, national origin, or ancestry;
- (2) In all solicitations or advertisements for employees, the contractor shall include the phrase "equal opportunity employer" or a similar phrase to be approved by the Commission;
- (3) If the contractor fails to comply with the manner in which the contractor reports to the Commission in accordance with the provisions of K.S.A.44-1031 and amendments thereto, the contractor shall be deemed to have breached the present contract and it may be cancelled, terminated, or suspended, in whole or in part, by the contracting agency;
- (4) If the contractor is found guilty of a violation of the Kansas Act Against Discrimination under a decision or order of the Commission which has become final, the contractor shall be deemed to have breached the present contract and it may be cancelled, terminated or suspended, in whole, or in part, by the contracting agency;
- (5) The contractor shall include the provisions of (1) through (4) in every applicable subcontract or purchase order so that such provisions will be binding upon such subcontractor or vendor.

PROJECT/CONTRACT NAME AND NO. East Pressure Zone Improvements MUNICIPALITY City of Arkansas City	CONTRACTOR'S SIGNATURE
	TITLE Principal
SRF PROJECT NO. 3343	DATE_09/20/2024



3343		
KDHE	PROJECT#	

CERTIFICATION REGARDING LOBBYING

CERTIFICATION FOR CONTRACTS, GRANTS, LOANS AND COOPERATIVE AGREEMENTS

The undersigned certifies, to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including sub-contracts, sub-grants, and contracts under grants, loans, and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31 U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

Sarah C. Unruh, Principal
Typed Name & Title of Authorized Representative

Signature and Date of Authorized Representative

Contract Provisions for Equal Opportunity

- 1. The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause.
- 2. The contractor will, in all solicitations or advancements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex or national origin.
- 3. The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency contracting officer, advising the labor union or workers' representative of the contractor's commitments under Section 202 of Executive Order No. 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- 4. The contractor will comply with all provisions of Executive Order No. 11246 of Sept. 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- 5. The contractor will furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- 6. In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of such rules, regulations, or orders, this contract may be cancelled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order No. 11246 of Sept. 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order No. 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided bylaw.
- 7. The contractor will include the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order No. 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as may be directed by the Secretary of Labor as a means of enforcing such provisions including sanctions for noncompliance: Provided, however, that in the event the contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction, the contractor may request the United States to enter into such litigation to protect the interests of the United States." [Sec. 202 amended by EO 11375 of Oct. 13, 1967, 32 FR 14303, 3 CFR, 1966-1970 Comp., p. 684, EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

Contract Provisions for the Kansas Act Against Discrimination

- (a) Except as provided by subsection (c), every contractor for or on behalf of the State and any county or municipality or other political subdivision of the State, or any agency of or authority created by any of the foregoing, for the construction, alteration, or repair of any public building or public work or for the acquisition of materials, equipment, supplies, or services shall contain provisions by which the contractor agrees that:
 - (1) The contractor shall observe the provisions of the Kansas Act Against Discrimination and shall not discriminate against any person in the performance of work under the present contract because of race, religion, color, sex, disability, national origin, or ancestry;
 - (2) In all solicitations or advertisements for employees, the contractor shall include the phrase "equal opportunity employer" or a similar phrase to be approved by the Commission;
 - (3) If the contractor fails to comply with the manner in which the contractor reports to the Commission in accordance with the provisions of K.S.A.44-1031 and amendments thereto, the contractor shall be deemed to have breached the present contract and it may be cancelled, terminated, or suspended, in whole or in part, by the contracting agency;
 - (4) If the contractor is found guilty of a violation of the Kansas Act Against Discrimination under a decision or order of the Commission which has become final, the contractor shall be deemed to have breached the present contract and it may be cancelled, terminated or suspended, in whole, or in part, by the contracting agency;
 - (5) The contractor shall include the provisions of subsections (a)(1) through (4) in every subcontract or purchase order so that such provisions will be binding upon such subcontractor or vendor.
- (b) The Kansas Human Rights Commission shall not be prevented hereby from requiring reports of contractors found to be not in compliance with the Kansas Act Against Discrimination.
- (c) The provisions of this section shall not apply to a contract entered into by a contractor:
 - (1) Who employs fewer than four employees during the term of such contract; or
- (2) Whose contracts with the governmental entity letting such contract cumulatively total \$5,000 or less during the fiscal year of such governmental entity.

Contract Provisions for Restrictions on Lobbying

The Contractor agrees to comply with Title 40 CRF Part 34, New Restrictions on Lobbying. **A Certification form must be submitted with the bid documents.**

Contract Provisions for the Trafficking Victims Protection Act of 2000

The Contractor, its employees, sub-contractors, and sub-contractors employees under any SRF Loan Agreement, may not engage in severe forms of trafficking in persons during the period of time that the award is in effect; procure a commercial sex act during the period of time that the award is in effect; or use forced labor in the performance of the award or sub-awards under the award.

Contract Provisions for Suspension and Debarment

The Contractor certifies that it is not suspended or debarred from participating in federal assistance and benefit programs and further agrees to fully comply with Subpart C of 2 CFR Part 180 and 2 CFR Part 1532, entitled "Responsibilities of Participants Regarding Transactions." The Contractor must ensure that any lower tier covered transaction, as described in Subpart B of 2 CFR Part 180 and 2 CFR Part 1532, entitled "Covered Transactions," includes a term or condition requiring compliance with Subpart C. The Contractor agrees that failing to disclose the required information in 2 CFR 180.335 may result in the delay or negation of this assistance agreement, or pursuance of legal remedies, including suspension and debarment.

Contract Provisions for Non Discrimination

The contractor must comply with Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, Title IX of the Education Amendments of 1972, the Age Discrimination Act of 1975, and a variety of program-specific statutes with nondiscrimination requirements.

Other civil rights laws may impose additional requirements on the contractor. These laws include, but are not limited to, Title VII of the Civil Rights Act of 1964 (prohibiting race, color, national origin, religion, and sex discrimination in employment), the Americans with Disabilities Act (prohibiting disability discrimination in employment and in services provided by State and local governments, businesses, and non-profit agencies), and the Fair Housing Act (prohibiting race, color, national origin, age, family status, and disability discrimination in housing), as well as any other applicable civil rights laws.

Contract Provisions for Non Segregated Facilities

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensuring that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. This obligation extends to all contracts containing the equal opportunity clause regardless of the amount of the contract. The term "facilities," as used in this section, means waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, wash rooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees; *Provided*, That separate or single-user restrooms and necessary dressing or sleeping areas shall be provided to assure privacy between the sexes.