#### City of Fayetteville Staff Review Form

2014-0396

Legistar File ID

9/16/2014

City Council Meeting Date - Agenda Item Only N/A for Non-Agenda Item

Sustainability & Resilience / Leif Olson 8/29/2014 **Chief of Staff Submitted Date Submitted By Division / Department** 

## **Action Recommendation:**

Staff recommends approval of a Resolution to contract with Kessler Consulting in the amount of \$264,890 to complete a Master Plan to achieve an efficient and cost effective solid waste system that maximizes solid waste reduction, diversion and recycling and puts the City on the path to achieve our goal of 80% waste diversion. Approval of a Budget Adjustment.

# **Budget Impact:**

5500.5080.5314.00	550	5500 - Solid Waste						
Account Number		Fund						
14019.1	Solid Waste Redu	Solid Waste Reduction/Recycling Master Plan						
Project Number		Project Title						
Budgeted Item? No	Current Budget	\$	-					
	Funds Obligated	\$	-					
	Current Balance	\$						
Does item have a cost? Yes	Item Cost	\$	264,890.00					
Budget Adjustment Attached? Yes	Budget Adjustment	\$	264,890.00					
	Remaining Budget	\$						
revious Ordinance or Resolution # 260-13	ENTERED LAY		V201					
iginal Contract Number:		proval Date:						
omments:	9/3/14							

\$ 9/3/14



# **CITY COUNCIL AGENDA MEMO**

## **MEETING OF SEPTEMBER 16, 2014**

TO:

Mayor Jordan and City Council

THRU:

Peter Nierengarten, Sustainability and Resilience Director  $p_{\mathcal{N}}$ 

CC:

Jeff Coles, Recycling and Trash Collection Director

FROM:

Leif Olson, Associate Planner

DATE:

August 28, 2014

SUBJECT:

Solid Waste Reduction, Diversion and Recycling Master Plan

#### **RECOMMENDATION:**

Approval of a Resolution to contract with Kessler Consulting in the amount of \$264,890 to complete a Master Plan to achieve an efficient and cost effective solid waste system that maximizes solid waste reduction, diversion and recycling and puts the City on the path to achieve our goal of 80% waste diversion.

#### **BACKGROUND:**

The City Council passed Resolution Number 260-13 in December 17, 2013 to develop a Request for Qualifications to hire a consultant to develop a 10 year solid waste master plan in order to attain a waste diversion rate of 80%. Staff developed a detailed project scope and received a total of five project proposals from qualified consulting firms. A selection committee made up of City Staff reviewed the proposals and interviewed the top three firms. Kessler Consulting Inc. was selected by the committee to be the most qualified to develop the master plan. Staff worked extensively with Kessler to develop a final scope of work that includes:

- · A baseline operational assessment of the current system,
- A waste audit and litter composition study with an option to partner with the University to assess their solid waste generation and composition,
- · An analysis of waste reduction and diversion options,
- Recovery scenarios modeling and financial evaluation,
- Policy recommendations,
- Development of the final solid waste master plan, and
- Master plan project coordination, community input process and final presentation.

The consultant will present the final master plan and recommendations to the City Council at the conclusion of the planning process.

#### **BUDGET/STAFF IMPACT:**

Kessler Consulting is proposing completing the master plan within a 12 month timeline at a total cost of \$249,930 to the City of Fayetteville. Inclusion of the University of Arkansas' waste composition study raises the total cost of the project to \$264,890. The University will reimburse the City \$14,960 for the cost of their waste composition study. This project will be paid for with Recycling and Trash Division Enterprise Funds.

RESOI	UTION	NO.	

A RESOLUTION TO AUTHORIZE A CONTRACT WITH KESSLER CONSULTING, INC. OF TAMPA, FLORIDA FOR THE DEVELOPMENT OF A TEN YEAR SOLID WASTE MASTER PLAN IN AN AMOUNT NOT TO EXCEED \$264,890.00, AND TO APPROVE A BUDGET ADJUSTMENT

# BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF FAYETTEVILLE, ARKANSAS:

Section 1: That the City Council of the City of Fayetteville, Arkansas hereby authorizes Mayor Jordan to sign a contract with Kessler Consulting, Inc. of Tampa, Florida for the development of a ten year solid waste master plan in an amount not to exceed \$264,890.00.

Section 2. That the City Council of the City of Fayetteville, Arkansas hereby approves a budget adjustment, a copy of which is attached as Exhibit "A".

PASSED and APPROVED this 16th day of September, 2014.

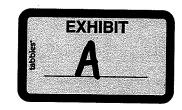
D	Dv.
By:	By:
LIONELD JORDAN, Mayor	SONDRA E. SMITH, City Clerk/Treasurer

Budget Year	Division:	Sustainability & Resilience	Adjustment Number	Page 5 of
001.4	Dept.:	Chief of Staff		
2014	Requestor:	Serina Tustin		

# **BUDGET ADJUSTMENT DESCRIPTION / JUSTIFICATION:**

\$264,890 for Solid Waste Reduction, diversion and Recycling Master Plan. Funds are adequate in Solid Waste fund balance for this adjustment.

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RESOLUTION/OR	DINANCE			GLD POS		
TOTAL	264,890	264,890				v.20140716
:	Increase / (		<u>Projec</u>	t.Sub#		
Account Number	Expense	Revenue	Project	Sub	AT	Account Name
5500.5080.5314.00	264,890		14019	1	EX	Professional Services
5500.0950.4999.99	-	- 264,890			RE	Use of Fund Balance
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#### Date: Requisition No.: City of Fayetteville - Purchase Order Request (PO) Kessler Consulting, Inc. (Not a Purchase Order) P.O Number: All PO Requests shall be scanned to the Purchasing e-mail: Purchasing@fayetteville-ar.gov. Purchase shall not be made until an actual PO has been issued. Legistar#: Vendor Vendor Kessler Consulting, Inc. 24798 Name: 2014-0396 FOB Point: Taxable 14620 N. Nebraska, Ave., Bldg. D Address: Yes No Expected Delivery Date: n/a Zip Code: Ship to code: Quotes Attached State: FL n/a Tampa City: ▼ Yes 「No 33613 Requester's Employee #: Extension: Leif Olson Requester: 8269 2364 Account Number Project.Sub# Fixed Asset # Inventory # Description Quantity Unit of Issue **Unit Cost Extended Cost** Item Solid Waste Reduction, Diversion and \$264,890.00 14019.1 1 each 264,890.00 5500.5080.5314.00 1 Recycling Master Plan \$0.00 2 \$0.00 3 \$0.00 \$0.00 5 \$0.00 6 \$0.00 7 \$0.00 8 \$0.00 9 \$0.00 10 \$0.00 Shipping/Handling Lot Special Instructions: \$264,890.00 Subtotal: \$0.00 Tax: \$264,890.00 Total: Approvals: Department Director:\_\_\_\_\_ Purchasing Manager: IT Director: Budget Director: Chief Financial Officer: \_\_\_\_\_ Other: Utilities Manager: Dispatch Manager:\_\_\_\_\_

# CONTRACT FOR SOLID WASTE CONSULTING SERVICES

THIS CONTRACT, made this \_\_\_\_ day of \_\_\_\_ 2014, is by and between the City of Fayetteville, Arkansas ("City"), whose address is 113 West Mountain Street, Fayetteville, Arkansas 72701, and Kessler Consulting, Inc. ("KCI"), a Florida corporation whose address is 14620 N. Nebraska Avenue, Building D, Tampa, FL 33613.

#### I. SCOPE

For and in consideration of timely payment by the City of the compensation set forth below, KCI shall provide the Scope of Services ("Services") specified in Exhibit A, which is attached hereto and incorporated herein by reference, subject to the other terms and conditions set forth in this contract. The Services to be provided may be changed by the mutual agreement of the parties hereto. The City shall promptly provide KCI with any and all documents and information needed by KCI to provide the Services. It is expressly agreed that KCI is an independent contractor of the City.

The City reserves the right to request additional services from KCI. When approved by the City as an amendment of the contract and authorized in writing prior to work, KCI shall provide such additional requirements as may become necessary.

Changes, modifications, or amendments in scope, price, or fees to the contract shall not be allowed without a prior formal contract amendment approved by the Mayor and the City Council in advance of the change in scope, cost, or fees.

#### II. TERM OF AGREEMENT

The initial contract period shall commence on the date this contract is executed by the City and KCI, whichever date is later, and shall terminate two (2) years after the commencement date, unless extended by mutual agreement of the parties hereto.

#### III. COMPENSATION

The compensation to be paid by the City to KCI for providing the Services shall be as stated in Exhibit B, which is attached hereto and incorporated herein by reference. The City shall pay KCI for completion of Services on a time-and-materials basis for an amount not to exceed that specified in Exhibit B without prior approval by the Mayor and City Council. Labor shall be invoiced based on the hourly rates specified in Exhibit B and expenses shall be invoiced at cost, without mark-up. Labor rates may be adjusted if the contract is extended beyond the initial two (2) years upon approval of a formal contract amendment by the Mayor and the City Council.

If requested to provide additional services pursuant to Section I, compensation for these additional services shall be as negotiated between the City and KCI, as approved by the Mayor and City Council.

#### IV. METHOD OF BILLING AND PAYMENT

KCI may submit monthly invoices to the City requesting payment for services accomplished during each calendar month. Monthly invoices will include breakdown of employees and hours worked, description of activities performed, and reimbursable costs and expenses incurred. All invoices shall be due and payable by the City to KCI within thirty (30) days of invoice receipt. Failure to pay compensation to KCI, as and when required, shall entitle KCI to immediately cease all services, and to terminate this

contract as set forth below. Any failure by the City to pay any sums due and owing KCI shall be a material breach of this contract.

#### V. RIGHT TO AUDIT

The City reserves the privilege of auditing KCI's records as such records relate to purchases between the City and KCI.

#### VI. FREEDOM OF INFORMATION ACT

City contracts and documents prepared while performing city contractual work are subject to the Arkansas Freedom of Information Act (FOIA). If a FOIA request is presented to the City, KCI will do everything possible to provide the documents in a prompt and timely manner as prescribed in the Arkansas FOIA (A.C.A §25-19-101 et. seq.). Only legally authorized photocopying costs pursuant to FOIA may be assessed for this compliance.

#### VII. JURISDICTION AND VENUE

Legal jurisdiction to resolve any disputes shall be Arkansas with Arkansas law applying to the case. Venue for any legal dispute shall be Washington County, Arkansas.

#### VIII. TERMINATION

- A. The City reserves the right to cancel this contract without cause by giving sixty (60) days prior notice to KCI in writing of the intention to cancel or with cause if at any time KCI fails to fulfill or aide by any of the terms or conditions specified.
- B. Failure of KCI to comply with any of the provisions of this contract shall be considered a material breach of contract and shall be cause for immediate termination of the contract at the discretion of the City.
- C. In addition to all other legal remedies available to the City, the City reserves the right to cancel and obtain from another source, any items and/or services which have not been delivered within the period of time from the date of order as determined by the City.
- D. In the event sufficient budgeted funds are not available for a new fiscal period, the City shall notify KCI of such occurrence and the contract shall terminate of the last day of the current fiscal period without penalty or expense to the City.
- E. If this contract is terminated for any reason, the City shall compensate KCI for all services completed through the date of termination, together with all reimbursable costs and expenses. Such payment to KCI shall be considered a payment on account, and shall not constitute payment in full of all sums owed to KCI pursuant to this contract or otherwise.

#### IX. INSURANCE

KCI shall procure and maintain throughout the term of this contract the following insurance limits and coverage and shall, upon executing this contract, provide the City with certificates of insurance evidencing same, showing other party as Additional Insured on all coverage except workers' compensation and professional liability. Such insurance shall include appropriate clauses and/or endorsements pursuant to which the insurance companies shall waive its right of subrogation against the City.

A. Workers' Compensation Insurance and Employer's Liability Insurance, in accordance with Chapter 440, Florida statutes, and/or any other applicable law requiring workers' compensation, of not less than the following:

Workers' Compensation

\$1,000,000.00 limit

each accident

Employer's Liability

\$1,000,000.00 limit

disease aggregate

\$1,000,000.00 limit disease each employee

B. Commercial General Liability Insurance, on forms no more restrictive than the latest edition of the Commercial General Liability policy (CG 00 01) of the Insurance Services Office, in the amount of not less than \$1,000,000.00 per occurrence to protect against claims for damages for bodily injury, including wrongful death, as well as from claims of property damages, which may arise from any operations under this contract, whether such operation be by KCI or by the City or anyone directly employed by or contracting with KCI or the City.

- C. Comprehensive Automobile Liability Insurance in the amount of not less than \$100,000.00 combined single limit for bodily injury and property damage liability to protect both parties from claims for damages for bodily injury, including the ownership, use, or maintenance of owned and non-owned automobiles, including rented automobiles whether such operations be by KCI or the City or by anyone directly or indirectly employed by KCI or the City.
- D. Professional Liability Insurance in the amount of not less than \$1,000,000 per occurrence.

Any subconsultants shall provide certificates of insurance evidencing coverage and terms in accordance with the insurance requirements outlined above.

# X. ASSIGNMENT, SUBCONTRACTING, ACQUISITIONS AND/OR MERGERS

- A. KCI and any subconsultants identified in KCI's proposal to the City shall perform services pursuant to this contract. No other assignment or subcontracting shall be allowed without prior written consent of the City.
- B. In the event of a corporate acquisition and/or merger, KCI shall provide written notice to the City within thirty (30) calendar days of KCI's notice of such action or upon the occurrence of said action, whichever occurs first. The right to terminate this contract, which shall not be unreasonably exercised by the City, shall include, but not be limited to, instances in which a corporate acquisition and/or merger represent a conflict of interest or are contrary to any local, state, or federal laws.

#### XI. DISPUTE RESOLUTION

If a dispute arises out of or relates to this contract, or the breach thereof, the parties will attempt to settle the matter through amicable discussion.

#### XII. ATTORNEY'S FEES

In the event of any demand, action or proceeding between the parties arising out of or relating to this contract, the prevailing party shall be entitled to recover any and all costs, including attorney's fees and court costs, incurred in any investigations, actions, trials, appeals, mediations, arbitrations, bankruptcy proceedings, collection proceedings, collection efforts, and supplementary proceedings.

#### XIII. UNCONTROLLABLE CIRCUMSTANCES

KCI will not be liable in any way to the City for any delay or non-performance resulting from or arising out of any act(s) of God, severe weather, strike, civil disorder, earthquake, any law, order, proclamation, regulation, ordinance, demand or requirement of any governmental agency, or any other condition or occurrence whatsoever beyond KCI's sole control.

#### XIV. SEVERENCE

In the event a portion of this contract is found by a court of competent jurisdiction to be invalid or unenforceable, the provisions not having been found by a court of competent jurisdiction to be invalid or unenforceable shall continue to be effective.

#### XV. ENTIRETY OF AGREEMENT

This contract embodies the entire agreement and understanding between the City and KCI, and there are no other agreements and understandings, oral or written, with reference to the subject matter hereof that are not merged herein and superseded hereby. No alteration, change or modification of the terms of the contract, or any attachments, shall be valid unless made in writing signed by both parties hereto.

IN WITNESS WHEREOF, the City and the KCI exe	ecute this contract as follows:
CITY OF FAYETTEVILLE	
	LIONELD JORDAN, Mayor
	Sondra E. Smith, City Clerk/Treasurer
	Date
KESSLER CONSULTING, INC.	MITCH KESSLER, President
	9/25/14 Date

#### **EXHIBIT A**

# City of Fayetteville, AR Solid Waste Reduction, Diversion, and Recycling Master Plan Scope of Work

Outlined herein is Kessler Consulting, Inc.'s (KCI) scope of work to assist the City of Fayetteville (City) in developing a Master Plan aimed at achieving an efficient, cost-effective solid waste system that maximizes waste reduction and recycling and puts the City on a path to attaining its goal of 80 percent waste diversion. Achieving this goal will require new and expanded programs, innovative policies, productive partnerships, and/or implementation of new technologies. It will require a fundamental shift from waste management to resource management.

KCI anticipates subcontracting with the University of Arkansas Applied Sustainability Center (ASC) to assist with discreet tasks and activities. In particular, we will seek to engage student participation in the project, primarily in assisting with the waste composition study and stakeholder meeting logistics. In addition, ASC will provide local knowledge and assist in exploring opportunities for collaboration between the City and the University.

# Scope of Services

#### Task 1 Baseline and Operational Assessment of Current System

#### Purpose:

In this initial task, KCI will examine, inventory, and benchmark for future comparison the City's existing solid waste programs and operations. We will review studies recently completed for the City to avoid duplication of efforts. KCI will also conduct operational assessments of the City's collection operations and the City-owned and operated transfer station, recycle center, and compost facility. We will review any existing information and performance metrics provided by the City, complemented by field observations as needed. Analyzing existing solid waste and recycling systems will lay the foundation for all future planning activities.

#### Activities:

- Participate in a kick-off call with City staff to initiate the project and clearly define project objectives.
- 2. Review and evaluate relevant information and data including, but not limited to, the following:
  - Tonnage of solid waste, recyclables materials, yard waste, construction and demolition debris (CDD), white goods, household hazardous waste, etc. generated by source (i.e., residential, commercial, etc.) and final disposition of these wastes and recycling streams, whether at public or private facilities.
  - Current solid waste contracts.
  - Current facility permits and operating plans.
  - Solid waste system budgets and actual revenues and expenditures.
  - Recordkeeping, data management, revenue assurance systems, and user fee structure.
  - Current bond covenants.
  - Current organizational chart of solid waste department.
  - City Ordinances and other policies pertaining to solid waste and any recent planning documents regarding solid waste.
  - Inter-local agreements with Washington County or other municipalities, if applicable.

- Existing education and outreach materials.
- 3. Develop population and waste generation projections for a 10-year period, and identify factors that will affect population growth and waste generation.
- 4. Conduct an onsite assessment, anticipated to last five days, to observe collection operations and operations at the transfer station, recycle center, and compost facility. The assessment will include the following:
  - Group meeting with operational employees to gain a clear understanding of operations and engage front-line staff in the evaluation process.
  - Field-level observations, ride-alongs, and route-based data collection in cooperation with front-line staff.
  - Use of proprietary wireless and web-based technology to collect real-time, on-route data and measure route performance and to estimate recycling participation.
- 5. Analyze labor requirements, production, and current workforce levels in order to develop staffing recommendations.
- 6. Analyze equipment replacement schedules.
- 7. Compare findings with industry standards.
- 8. Identify program components and options that could potentially lower costs, improve efficiency, or otherwise help the City meet its objectives.
- 9. Identify tools to assist the City in measuring improvement progress over time.
- 10. Prepare a summary of Task'1 results and findings.

Deliverable: Technical memorandum summarizing the current solid waste system, results and findings of the operational assessment, and 10-year population and waste generation projections.

#### Task 2 Waste and Litter Composition Study

Purpose:

KCI will conduct a study to determine the composition of waste generated within the City that is delivered to the City's transfer station for disposal. Understanding the types and quantities of materials contained in the waste stream is critical to developing effective systems to divert these resources for recycling or composting. Waste composition data also serves as a benchmark for comparing future system changes. Concurrently, KCI will conduct a study to determine the composition of litter collected from various locations throughout the City. The budget provided herein is for one sampling and sorting event lasting five days in duration. The City may wish to conduct additional sorting events to account for seasonal variability in waste composition.

The University of Arkansas (UA) has expressed interest in participating in the waste composition study while KCl's team is mobilized for the City's study. The option of including UA's waste as part of the study is discussed in Task 2A below.

#### Activities:

- 1. Request from the City and review four weeks of scale house data regarding inbound vehicles to the transfer station, including source, vehicle number, time of arrival, and tonnage.
- 2. Request from the City and review the windshield litter survey conducted by City staff.
- Develop a list of material categories into which waste will be sorted, ensuring that these
  categories are consistent with the City's existing recycling program and any previous
  composition studies.

- 4. Identify the generator sectors (e.g., residential, commercial, litter) that will be targeted in the waste composition study.
- 5. Develop a sampling schedule, sampling and sorting protocol, and site safety plan for review by City staff. KCI will work closely with City staff to develop the sampling schedule for litter since the City will be responsible for mobilizing staff or volunteers to collect the litter from specified areas, mark it, and deliver it to the sorting area.
- 6. Work with City staff to identify an appropriate sampling and sorting area. The City will be asked to provide a covered area (an existing structure or a tent) under which the sorting team will work and a loader and operator to pull samples, as directed by KCI's Sampling Supervisor, and deliver them to the sorting area.
- 7. Obtain the necessary equipment for conducting the sorting event. The City will be asked to provide four six-foot folding tables and recycling bins and other containers into which materials will be sorted. KCI will provide all other safety and sorting equipment and a calibrated platform scale
- 8. Mobilize for the sorting event. KCI will provide a Sort Supervisor, Sampling Supervisor, and up to seven sorters. KCI is working with ASC to hire students as the sorters, which will provide a rare hands-on learning opportunity for the students.
- 9. Execute the sorting event. KCl's Sampling Supervisor will work with the loader operator to pull representative samples from selected incoming loads of waste in accordance with the sampling schedule. Samples will be transferred to the sorting area and stored on tarps until sorted. All samples will be sorted into the defined material categories and weighed. KCl's Sort or Sampling Supervisor will conduct all data recording. To ensure quality and safety, KCl will conduct a training session, prior to starting work each day, to review safety and sorting procedures.
- 10. Analyze the data from the sorting event to calculate the percentage by weight of each material category for each generator sector, as well as for the City's overall waste stream. Data analysis will follow the ASTM Standard Test Method for Determination of the Composition of Unprocessed Municipal Solid Waste (D5231-92; reapproved 2008).
- 11. Prepare a technical memorandum summarizing the results and findings of the study.

#### Deliverables:

- Material categories list, sampling and sorting protocol, sampling schedule, and site safety plan.
- Technical memorandum providing the results of the waste composition study.

#### Task 2A UA Waste Composition Study (optional task)

Purpose:

This optional task will entail sampling and sorting waste generated on the UA campus. KCI anticipates adding three additional days of field work, which will enable the KCI team to sample and sort at least 24 samples of UA waste. To ensure the statistical validity of this data, no more than three separate UA generator sectors will be included. Specific generator sectors will be determined based on discussions with UA staff, but might include classrooms, dormitories, and food service areas.

#### Activities:

- 1. Request from UA staff and review waste tonnage data, collection schedules, and other relevant, available information needed to develop the sampling schedule.
- 2. Confirm with UA staff that the material categories list developed for Task 2 is acceptable.
- 3. Identify the generator sectors that will be targeted in the waste composition study.

- 4. Develop a sampling schedule and provide the schedule and sampling and sorting protocol developed in Task 2 to UA staff for review.
- 5. Work with UA staff to ensure the necessary loads of waste will be directed to the sorting area for sampling in accordance with the sampling schedule.
- 6. Execute the sorting event.
- 7. Analyze the data from the sorting event to calculate the percentage by weight of each material category for each generator sector, as well as for UA's overall waste stream (all generators combined).
- 8. Incorporate the results of the UA study into the Task 2 technical memorandum.

#### Deliverables:

- Material categories list, sampling and sorting protocol, and sampling schedule.
- Section of Task 2 technical memorandum providing the results of the UA waste composition study.

#### Task 3 Reduction and Diversion Options Analysis

Purpose:

The purpose of this task is to evaluate proven recovery technologies and programmatic approaches, and to identify those that offer the greatest potential material recovery and waste reduction/diversion opportunities to the City. For example, collection options might include wet/dry collection, dual stream recycling, cart-based single stream recycling, compressed natural gas (CNG) collection vehicles, incentive-based contracts, and rewards programs such as Recycling Perks. Processing technologies to capture or utilize material resources include single stream, mixed waste, and wet/dry material processing, organics processing technologies, and other emerging technologies that seek to minimize the disposal of waste.

#### Activities:

- Identify and conduct an initial evaluation of material recovery technologies and programs to identify those most viable or having the greatest materials recovery and waste reduction/diversion potential. Such evaluation will include reviewing recognized regional and national programs, analyzing the potential applicability to the City, and conducting an initial analysis of the economic feasibility.
- 2. Evaluate potential public and private strategic partnerships for leveraging expertise and economies of scale.
- Prepare a summary of this evaluation and identify material recovery technologies and programs that warrant further consideration. Scenarios for future consideration may include modifications to existing contracts and programs, as well as implementation of new technologies and programs.

Deliverable: Technical memorandum of this initial evaluation of technology and program options.

## Task 4 Recovery Scenarios Modeling and Financial Evaluation

Purpose:

KCI will use a proprietary spreadsheet-based model to conduct a more detailed analysis of high-recovery, integrated materials management system scenarios that the City desires to consider further. This interactive model takes into consideration that changes in one system component will have operational and financial impacts on other system components. Based on a set of City-specific assumptions, the model will estimate the

capital and operating cost of each scenario, potential revenues, potential waste diversion (material recovery), and site requirements. An appropriate fee structure will be linked to the anticipated costs and benefits of new or expanded services to ensure a healthy and sustainable enterprise fund. The scenario modeling and financial evaluation will also consider the intrinsic value of the selected scenarios as it relates to the triple bottom line so that the City has a comprehensive foundation for decision-making.

#### Activities:

- 1. Based on the results of Tasks 4, conduct a work session with City staff to identify material recovery scenarios for further analysis.
- 2. Develop and confirm assumptions that will be used in the model.
- 3. Evaluate the identified scenarios using KCI's comparative model.
- 4. Conduct a financial analysis of the implications of selected scenarios to the City's existing solid waste business model.
- 5. Prioritize the model results based on waste reduction/diversion potential and cost-effectiveness to the City.
- 6. Review the model results with City staff to identify selected scenarios for inclusion in the Master Plan.
- 7. Develop rate structure modifications for scenarios selected by the City that will ensure the long-term viability of the solid waste system and enterprise fund, as well as incentivize increased recycling or waste diversion.
- 8. Develop recommendations for inclusion in the draft Master Plan, including a consolidated rate structure and potential modifications to the City's solid waste business model.

Deliverable: Technical memorandum that includes the results of the detailed analysis of selected scenarios and associated rate structure as recommendations for inclusion in the draft Master Plan.

#### Task 5 Policy Recommendations

Purpose:

The purpose of this task is to identify policies to implement and support the various technology and program options selected in Task 5. Policies are the principles and guidelines by which the City will reach its solid waste and resource management goals. These policies will influence future decisions regarding the solid waste system, thereby translating these policies into compatible actions and programs. Examples of policies for consideration include residential and/or commercial recycling mandates, disposal bans on specific types of recyclable or compostable materials, bans of the use of certain types of products (e.g., plastics bags, polystyrene containers), source separation standards, minimum service standards, private sector participation, and regional cooperation.

#### Activities:

- 1. Define and evaluate policies that would encourage specific behaviors and/or complement the technologies and programs selected in Task 5.
- 2. Identify policy recommendations that will best help guide the City toward meeting its goals and objectives, while also ensuring the long-term financial viability of the solid waste system.
- 3. Review the draft policy recommendations with City staff and revise as needed.

Deliverable: Technical memorandum identifying policy recommendations.

#### Task 6 Solid Waste Master Plan Development

Purpose:

The results of the previous tasks and technical memoranda developed as part of these tasks will be incorporated into a Master Plan. Based on review and discussions with City staff, KCI will develop near-term and long-term recommendations deemed cost-effective and operationally feasible on the scale required by the City.

#### Activities:

Develop a draft Master Plan that includes or addresses the following:

#### 1. Baseline Summary:

- Summary of the City's current solid waste system, including waste and recyclables tonnage, flow, and management.
- Population and waste generation projections over a 10-year period and summary of factors that affect these projections.
- Operational assessments of City collection operations and City-owned and operated facilities, along with initial recommendations for improvements.

#### 2. Reduction and Diversion Options Evaluation:

- Evaluation of proven material recovery technologies and programs.
- Results of the more detailed analysis of selected scenarios, prioritizing scenarios based on waste reduction/diversion potential and cost-effectiveness.
- Potential opportunities for partnership.
- Discussion of impacts on the City's business model and recommended modifications.

#### 3. Short-, Medium- and Long-Term Recommendations:

- Policies: Policy recommendations that provide the framework that derives sustainable materials recovery and guides decision-making, program and facility development, stakeholder engagement, and systems financing.
- Programs: Program recommendations that are cost-effective and deemed most viable to substantially increase waste reduction and diversion, taking into account the availability of sustainable markets for the recovered resources.
- Facilities: Proven technology and facility recommendations that are effective in recovering material from the waste stream, have been demonstrated on a scale commensurate with the City, and are financially viable.
- Education: Recommended marketing strategy and programs that will complement and help ensure the success of the various policy, program, and facility recommendations.
   Emphasis will be placed on strategies for affecting changes in behavior. A summary of all community input (Task 8) will be included.

#### 4. Financial Analysis:

- Proposed business plan and financial implications (ranges from high to low) of the Master Plan recommendations.
- Proposed rate structure intended to preserve the health and sustainability of the enterprise fund.

Deliverable: Draft and final Master Plan integrating the technical memoranda from all other tasks.

#### Task 7 Project Coordination, Community Input, and Presentations

Purpose:

Throughout this project, KCI will maintain frequent communication with City staff regarding project status and technical aspects of the work. We also will seek stakeholder input through a variety of mechanisms including, but not limited to, workshops, meetings, and surveys. Whenever possible, we will include a web-based option for providing input, such as on-line access to town hall type meetings and on-line surveys. In addition, KCI will present the final Master Plan to elected officials, the public, or other stakeholders.

#### Activities:

- 1. Participate in monthly project team calls.
- 2. Prepare a monthly summary of activities.
- 3. Coordinate and participate in up to three days of workshops and/or meetings with stakeholder groups, the general public, and/or elected officials. KCI will arrange for stakeholders to have a web-based option to provide input whenever feasible.
- 4. Develop and execute a stakeholder survey in a variety of formats, including a web-based survey tool such as Survey Monkey.
- 5. Participate in up to two days of one-on-one and/or public meetings with City management and elected officials, as deemed appropriate, to present, review, and discuss the final Master Plan.

#### Deliverables:

- Monthly summary of activities.
- Participation in up to three stakeholder workshops, meetings, or focus groups.
- Survey instrument.
- Technical memorandum summarizing survey results and other stakeholder input.
- Presentation of Master Plan.

# **Budget and Timeline**

Because of the nature of this project and the potential variability in the level of effort required, KCI proposes to conduct this scope of work on a time-and-materials basis for an amount not to exceed \$249,930, excluding Task 2A. The budget for Task 2A is \$14,960. A detailed budget breakdown by task is provided in Attachment B. Services will be invoiced at the rates indicated, which include all overhead and direct and indirect costs. Expenses (travel, etc.) will be billed at cost without markup. KCI will submit monthly invoices with a written explanation of activities completed that month.

KCI will initiate work upon notice to proceed. A proposed timeline is provided herein, which may be modified as the project progresses.

KCI looks forward to assisting the City in developing a comprehensive Solid Waste Reduction, Diversion, and Recycling Master Plan that seeks to maximize waste diversion while maintaining the long-term financial viability of the City's solid waste and resource management system.

# **Proposed Timeline**

Tasks		Month											
		1	2	3	4	5	6	7	8	9	10	11	12
1	Baseline and Operational Assessment												
2	Waste and Litter Composition Study												
3	Reduction and Diversion Options Analysis												
4	Recovery Scenarios Modeling and Financial Evaluation												
5	Policy Recommendations												
6	Solid Waste Master Plan Development												
7	Project Coordination, Community Input, and Presentations												

# **EXHIBIT B**

# City of Fayetteville, AR Solid Waste Reduction, Diversion, and Recycling Master Plan Proposed Budget

		Task 1	Task 2	Task 2A	Task 3	Task 4	Task 5	Task 6	Task 7	With	Task 2A	Withou	t Task 2A
CATEGORY (NAME)	HOURLY RATE	Baseline & Operational Assessment	Waste & Litter Composition Study	Waste & Litter Waste Composition Composition	nal UA Reduction & ste Diversion I Options	Recovery Scenario Modeling & Financial Evaluation	Policy Recommend's	Solid Waste Master Plan Development	Project Coordination, Community Input & Presentation	TOTAL HOURS	TOTAL DOLLARS	TOTAL HOURS	TOTAL DOLLARS
LABOR	4405.00	40.0		l 0.0	100	40.0	8.0	20.0	50.0	114.0	<u> </u>	112.0	#00.700
Project Director	\$185.00	10.0	4.0	2.0	10.0	10.0					\$21,090		\$20,720
Project Manager	\$140.00	48.0	16.0	8.0	40.0	40.0	40.0	60.0	60.0	312.0	\$43,680	304.0	\$42,560
Senior Consultant	\$125.00	110.0	0.0	0.0	40.0	40.0	10.0	20.0	8.0	228.0	\$28,500	228.0	\$28,500
Consultant	\$100.00	0.08	20.0	10.0	170.0	170.0	72.0	110.0	0.00	692.0	\$69,200	682,0	\$68,200
Consultant	\$95.00	0.0	150.0	50.0	0.0	0.0	0.0	0.0	0.0	200,0	\$19,000	150.0	\$14,250
Consultant	\$85.00	140.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	140.0	\$11,900	140.0	\$11,900
Research Analyst	\$80.00	0.0	16.0	12.0	0.08	80.0	40.0	80.0	20.0	328.0	\$26,240	316.0	\$25,280
Office Manager/Technical Support	\$60.00	14.0	0.88	24.0	10.0	10.0	10.0	10.0	10.0	156.0	\$9,360	132.0	\$7,920
SUBTOTAL LABOR HOURS		402.0	274.0	106.0	350.0	350.0	180.0	300.0	208.0	2170.0	\$228,970	2064.0	\$219,330
SUBTOTAL LABOR DOLLARS		\$43,060	\$24,590	\$9,640	\$36,450	\$36,450	\$19,330	\$32,600	\$26,850		\$228,970		\$219,330
DIRECT COSTS													
TRAVEL		\$3,700	\$3,700	\$2,300	•	\$2,000			\$6,000		\$17,700		\$15,400
SUPPLIES			\$1,000	\$500							\$1,500		\$1,000
CONTRACTED LABOR			\$4,200	\$2,520							\$6,720		\$4,200
SUBCONTRACTOR		\$1,000	\$2,000		\$500		\$500	\$1,000	\$5,000		\$10,000		\$10,000
SUBTOTAL DIRECT COST		\$4,700	\$10,900	\$5,320	\$500	\$2,000	\$500	\$1,000	\$11,000		\$35,920		\$30,600
TOTAL PROJECT BUDGET													
LABOR + DIRECT COST		\$47,760	\$35,490	\$14,960	\$36,950	\$38,450	\$19,830	\$33,600	\$37,850		\$264,890		\$249,930