

3.19.2019

TODD SLATIN - PURCHASING DIRECTOR

Lexington-Fayette Urban County Government Room 338, Government Center 200 East Main Street Lexington, KY 40507

Dear Mr. Slatin,

Resource Recycling Systems is pleased to present this response to RFP #10-2019 Program Management Services for Material Recovery Facility.

RRS draws on decades of experience in the actual business of running MRFs; this foundation is why we can speak with authority on the details of development, operating costs, optimization, maintenance planning, capital renewal and replacement, revenue tracking, revenue sharing and business risk/risk allocation for both the facility operator and the facility owner. RRS has conducted over 150 MRF procurements and over 30 MRF design/build projects in the last three decades. We understand the nuances of the changing waste and recycling streams, the cycles of the commodity value of the "market basket" of recyclables, and the future outlook for sustainable facility operations.

RRS' expertise is not limited to the design procurement and maintenance of MRFs. Our staff include experts who have implemented and administered comprehensive recycling, organics management, and waste reduction programs. We are leaders in understanding how the waste stream composition and characteristics are changing over time. We recognize that many of the challenges at the MRF are created by what residents put out at the curb. We would like to assist Lexington in improving recycling from one end to the other.

This proposal shall remain valid for a period of not less than 120 days from the date of submittal. The signature on this Cover Letter hereby provides Lexington-Fayette Urban County Government acknowledgment and acceptance of the RFP's Terms and Conditions and the execution of same during the discharge of any succeeding contract.

RRS has assembled an expert team including Lexington-based Paladin Engineering to develop a scope of work to provide dedicated program management services that we believe will be responsive to the needs and vision for Lexington-Fayette Urban County Government. We are available to discuss this proposal further at your earliest convenience. All communication regarding this work scope should be directed to our Project Manager, Kerry Sandford:

Kerry Sandford, Senior Consultant 416 Longshore Drive , Ann Arbor, MI 48105 734.996.1361 ext. 250 ksandford@recycle.com

Sincerely,

Brianne Haven

Vice President, Operations



QUALIFICATIONS/EXPERIENCE

RRS understands the broad range of responsibilities and priorities local government solid waste departments have in providing efficient and effective service to its citizens. To effectively deliver these services, we believe strong recovery programs need to incorporate the following best management practices: robust local infrastructure for collection, technologically advanced material recovery facilities (MRFs), diversified and resilient end markets, public and private partnerships between the public sector entities and private haulers, processors and markets, supportive policy, and dynamic and engaging education and outreach.

RRS has provided over 30 years of technical and best management practice support to local governments as they design, implement, evaluate and optimize their systems, programs and equipment. We have developed existing system profiles, routing efficiency models, volume projections, and models for hub and spoke collection systems. We have also evaluated waste and recycling set out rates in communities to understand how citizens are using the current services to find improvements in waste diversion through efficient collection systems. We have also profiled collection systems and evaluated best management practices to decrease operational costs while improving program performance.

Overall, RRS staff have provided a variety of services to over 500 MRFs around North America including 150+ MRF procurements and 30+ MRF design build projects focusing on expanding capacity (materials and volume), best practices, contracting, automation and equipment in the following locations and organizations: Ann Arbor (MI), Southeast Oakland County Resource Recovery Authority (MI), Resource Recovery and Recycling Authority of Southwest Oakland County (RRRASOC) (MI), Kent County Department of Public Works (MI), Emmet County Department of Public Works (MI), Milwaukee/Waukesha County (WI), Kent County (MI) Minneapolis (MN), Toledo/Lucas County (OH), Eureka Recycling/St. Paul, (MN), Cincinnati, (OH), Carton Council MRF Equipment Grant Program Management (National), Isabella County/Mt. Pleasant, (MI) Western Washtenaw Recycling Authority MRF, Muskegon County/White Lake Landco (now Republic) MRF, Delta County Department of Public Works MRF, and Saginaw ReCommunity MRF under contract with the Mid-Michigan Waste Authority (MI), Winnebago County MRF (WI), Portage County MRF (OH), Athens County/Ohio University MRF (OH) and many more partnerships with trade associations and private sector clients. Some project highlights are listed below.

city of milwaukee, wisconsin and waukesha county, wisconsin

MATERIALS RECOVERY FACILITY PROCUREMENT

CONTACT: Rick Meyers | Manager | <u>rmeyer@milwaukee.gov</u> | 414.286.2334

RRS assisted the City of Milwaukee, Wisconsin and Waukesha County, Wisconsin in preparing for the joint procurement of a single stream materials recovery facility and single stream transfer services to replace the facilities previously operated by the two units of government. RRS managed the entire procurement process, proposal evaluation, vendor interviews and facilitation of all selection committee meetings and documents. Our project approach was divided into the following three task groups:

- Program Implementation Process and Schedule
- Single Stream Processing RFP Preparation, Technical and Administrative Support
- MRF Equipment Installation Oversight



RRS developed the Request for Proposal (RFP) for a 35 ton per hour (TPH) single stream materials recovery facility for a jointly owned and operated facility by the two municipal partners. This included all project background, technical criteria, cost proposal criteria, contractual obligations, financial assurance and guarantees, evaluation criteria and process, and all of the required forms and documents. The RFP included three different technical options and three cost proposal options. RRS developed a 20-year project pro forma for each technical and cost proposal that included separate analyses for the City of Milwaukee and Waukesha County.

The project resulted in the selection of a vendor that proposed a state-of-the-art facility.

resource recovery and recycling authority of southwest oakland county

REGIONAL WASTE AND RECYCLING SERVICES ASSESSMENT OF NEED AND OPPORTUNITIES; MRF SERVICES CONTRACT RENEWAL/REBIDDING; PUBLIC/PRIVATE PARTNERSHIP RENEWAL

CONTACT: Mike Csapo, General Manager, 248.208.2270, mcsapo@RRRASOC.org

RRS assisted this solid waste authority (8 member units, 250,000 people, \$100 million in solid waste and recycling) for over three years in the procurement of over \$100 million in solid waste and recycling services. The step follows the expected expiration of a 15-year operating agreement with Waste Management that RRS assisted RRRASOC in establishing in 1992. This process included the selection of a vendor to take over its 15-year-old dual-stream MRF and upgrade it to single-stream capability. Proposals were taken from the following vendors: FCR (now ReCommunity), Waste Management Recycle America (WMRA), Veolia, Great Lakes Recycling and a neighboring solid waste authority proposing an intergovernmental partnership. RRS's "Market Informed Decision Making" and master planning tools were used to evaluate whether to convert the RRRASOC's MRF from dual to single-stream, or to transfer recyclables to more distant larger MRFs.

The winning vendor, FCR, now ReCommunity, was selected; since this time, Republic purchased that company and now manages the facility. RRS assisted in securing additional single-stream tonnage for the project through other area clients and in recruiting additional recovery enterprises into the industrial area with the MRF as a cornerstone in an expanded Eco-Industrial Park.

southeastern oakland county resource recovery authority (socrra)

SINGLE STREAM MRF CONVERSION AND PROCUREMENT

SOCRRA is a municipal corporation founded in the early 1950s consisting of 12 member municipalities in Michigan serving a total population of approximately 283,000. Member cities include Berkley, Beverly Hills, Birmingham, Clawson, Ferndale, Hazel Park, Huntington Woods, Lathrup Village, Oak Park, Pleasant Ridge, Royal Oak, and Troy. This project developed a design for the conversion of SOCRRA's existing dual stream materials recovery facility (MRF) to single stream operation and a detailed package used by the SOCRRA Board to decide how the MRF conversion will be funded. The goal of SOCRRA was to build a single stream facility which would enable the 100,000 households in the 12 SOCRRA communities the ability to conduct single stream recycling during a 20-year life span. The focus of the project was to develop, facilitate, review and evaluate the rebuild options at the SOCRRA MRF site.



416 LONGSHORE DRIVE, ANN ARBOR, MI 48105

recycle.com

- **Technical and Market Evaluation of MRF Rebuild** RRS developed the technical requirements for a new processing system at the existing facility. This included an evaluation of technical and marketplace risks as well as constraints that could affect this approach over a 20-year time-frame.
- Multi-Year Financial Model for Decision Analysis RRS developed a financial modeling tool for evaluating the financial aspects of vendor proposals. This tool is a forward looking initiative with a 10 year minimum and vendor financial submittals can be quickly interpreted.
- Development of RFP for 3 options; Design/Build, Design/Build/Operate and Single-Stream Transfer –
 RRS developed a program implementation process and RFP that resulted in a construction ready package
 for the rebuild of the SOCRRA MRF.
- RFP Technical and Administrative Support RRS provided support during the RFP administrative and evaluation process including attendance at pre-proposal meetings, answers to oral questions at the pre-proposal meeting, written responses to both oral and written questions submitted as part of the pre-proposal process and technical procurement support to SOCRRA staff.
- **Development of Recommendations to SOCRRA Board** The SOCRRA/RRS team used the results of the RFP process and budget impacts to prepare a recommendation for review by the SOCRRA Board.
- Construction Oversight Once a vendor was selected, RRS provided professional consulting services to oversee the efficient construction of the MRF building and equipment improvements and measured operations for the purpose of assuring SOCRRA and the Project Team that the building and its operators are capable of achieving the contractually defined objectives.
- Communications Support After 50 years of individual members managing their own collection of solid waste and recycling, the regional authority worked with its members to develop long-term contracts for services as a group, realizing a 17% savings in contract costs. With over 300,000 residents impacted by service changes such as set-out requirements and collection day changes, communicating the transition from old services to new was imperative. Through a comprehensive communications strategy developed by RRS, the client was able to develop new information pieces and increase its presence in the media through press releases and advertisements to ensure the transition of services was accurately communicated. In addition to the general public communications plan, RRS also assisted the client with development of training sessions for member community staff who interact with the public. As the front lines with residents, preparing staff with correct information and resources was essential to a smooth transition.

emmet county, michigan

MATERIAL RECOVERY FACILITY EXPANSION

RRS has a long history of partnering with Emmet County as they have developed a system of drop-off collection sites, curbside recycling programs and a Material Recovery Facility (MRF)/transfer station. Located at the "tip of the mitt" within the Lower Michigan peninsula, Emmet County is a small quaint community graced with amazing sand dunes overlooking beautiful Lake Michigan. It has long been considered home for the 34,000 residents that live there year 'round, but also a favorite resort and vacation location for tens of thousands of visitors each year. The County, which has been celebrated on several top "small towns," "best place to retire" and "golf resort" lists, is also celebrating over 20 years of effective rural and resort recycling. As the County's population has grown and recycling efforts have increased, the MRF needed updates to handle the future program growth and increased



recycling volumes. One goal of the process was to facilitate the new site expansions into their existing operation. RRS has worked with the County to plan and design the new equipment system, define the building footprint and oversee the refurbishing and installation of used equipment into the new site. The new system will provide two-stream processing with several enhancements over the original MRF equipment installation.

The upgraded facility, which came online in the summer of 2010, was modified to facilitate the processing of plastic film, plant plastics, mixed rigid plastics, mixed #1-#7 plastics, marine shrink-wrap and numerous other "hard to recycle" materials. The facility also has the capability for the secondary sorting and baling of mixed #1-#7 plastics depending on commodity market and other market conditions. Over our long tenure with the County, our team has assisted in the following efforts:

- Expand the list of materials to be processed at the MRF.
- Design facility to receive and process a two-stream commingled set of materials (but leave ability to upgrade to a single-stream facility).
- Expand tipping areas for mixed bottles and cans, mixed paper and corrugated cardboard.
- Throughput material assessment from surrounding areas.
- Loss of production analysis and temporary processing equipment layouts as facility was upgraded.

RRS has also helped Emmet County build and expand organics management capabilities.

RECYCLING PRODUCTIVITY DATABASE

RRS worked with Emmet County Recycling to create, maintain, and update a productivity database. The database helps the county to produce monthly and annual tables. RRS provided technical support by updating the existing software to FileMaker Pro to both make current productivity reports available and to allow easier, remote updates and assistance as well as room for added features in the future. These features allowed MRF staff to easily enter granular data daily such as labor allocation and costs, bales and tons produced per day, per hour, per employee, per shift, and per material, as well as down-time for maintenance or repairs, then allowing report generation and analysis by staff on a daily, weekly, monthly and annual basis to improve efficiencies, cost controls, staff allocation, increase productivity and reduce downtime.

RRS also assisted Emmet County in the procurement and implementation of a computer based asset management system that integrates computer maintenance management system (CMMS) functions.

MRF IMPROVEMENTS AND TRANSFER STATION FLOW OPTIONS

The Emmet County solid waste Transfer Station is a central place to take garbage to be loaded into semis for the trip to the landfill and was experiencing traffic and site congestion. RRS was hired to develop best options for improving Transfer Station traffic flow, eliminating traffic backup onto Pleasantview Road while improving traffic and material flow efficiencies on-site. RRS based this work on previous RRS traffic flow planning work at the Transfer Station and updated site drawings.

RRS also developed a design to improve the operation of the MRF container sort line. This work focused on the upgrade needs and options described in the 2015 MRF-TS Bi-Annual Equipment Status and Efficiency Assessment and in a RRS memo (Emmet County Long-Term Improvement Options) dated February 5, 2016. The goal of this work was to provide an optimized and cost-conscious upgrade design that provided the MRF with significant







improvements in processing efficiency and throughput capability on the container line while improving worker ergonomics and material sorting options.

RRS is currently designing a MRF Upgrade for the mixed container sort line, which will include cutting edge robotics sortation technology to improve through-put, increase flexibility for current and future sorts in response to market changes and container packaging designs, and provide Emmet County with a better ability to weather the labor shortages and peak demand cycles of the tourist season in their community.

PROGRAM MANAGEMENT SERVICES FOR MATERIALS RECOVERY FACILITY (MRF) LEXINGTON-FAYETTE URBAN CO. GOVERNMENT

MATERIALS RECYCLING CENTER

MEP DESIGN



Lexington Fayette and Urban County Government hired Paladin to provide mechanical and electrical engineering design services for the 9,000 sq. ft. expansion and improvements to the existing municipal recycling center (MRF). The project included the addition of a tension fabric structure as a temporary means to meet increased capacity. The project also added new process sorting and baling equipment including optical sorters, magnetic sorters, and additional conveyors.

Paladin's scope included engineering specifications and design drawings for electrical and mechanical systems required to support the expansion. The tension fabric structure addition is a temporary solution to expand capacity of the facility's tipping floor and new process equipment. Paladin's services also included increasing the electrical main service and distribution design for equipment as well as improvements such as automatic garage door openers, dock levelers, and new energy efficient lighting.

PROJECT DETAILS

Owner: Lexington Fayette Urban

County Government

Location: Lexington, KY

Size: 9,000 S.F.

Cost: \$2,000,000

OWNER CONTACT

Gary Gardner Lexington Fayette Urban County Government 250 East Main Street Lexington, KY 40507 (859) 425-2834



PROGRAM MANAGEMENT SERVICES FOR MATERIALS RECOVERY FACILITY (MRF) LEXINGTON-FAYETTE URBAN CO. GOVERNMENT

LEXTRAN HEADQUARTERS COMPLEX

WHOLE BUILDING COMMISSIONING



Paladin provided Design through Warranty Phase Commissioning for the Administration Building on the new Lextran Complex. The Transit Authority of Lexington-Fayette Urban County Government ("Lextran") is Lexington's public transportation facilitator, providing service to residents and visitors of Lexington-Fayette County. The approximately \$20,000,000 Complex was funded through local and federal funds and grants.

The Complex includes a 24,000 square foot Administration Building which includes office, dispatch, public gathering/reception, and conference spaces. The approximately 27,000 square foot Maintenance Building includes 7 high bay garages, training, and administrative facilities. Finally, the 5,400 square foot Fuel/Wash Building is an open structure with a fueling lane and washing lane.

Commissioned systems include fire suppression, plumbing, mechanical, electrical, and electronic safety and security. Paladin also performed building envelope air pressure testing.

PROJECT DETAILS

Owner: Lextran

Location: Lexington, KY

Size: 56,400 S.F.

Cost: \$20,000,000

OWNER CONTACT

Mr. Scott Rhodes Lextran Program Manager URS Corporation 1375 Euclid Avenue, Suite 600 Cleveland, OH 44115-1808 (216) 622-2400



SENIOR CITIZEN'S CENTER

COMMISSIONING



The Lexington Fayette Urban County Government's Senior Citizens Center is a 33,000 sq. ft. new construction facility. The new Center allows the city's senior programming to double in capacity. The center was also designed to meet the growth of the city's senior population. The facility contains a group exercise room, pickle ball courts outside, exterior and interior walking tracks and a separate exercise room with treadmills and other fitness equipment. The new center also boasts meeting rooms, a cafe and a fully-equipped kitchen.

Paladin was hired to provide Fundamental Commissioning for the HVAC, electrical, and plumbing systems. The project is certified LEED Gold under LEED-2009.

During Construction, Paladin performed submittal reviews and construction checklist verification to ensure that installed equipment matched the design and owner's project requirements. Significant findings included voids in the curtain wall, controls programming that did not match the design sequence, and limited or impeded access to above ceiling heat pumps.

PROJECT DETAILS

Owner: Lexington-Fayette Urban

County Government

Location: Lexington, KY

Size: 33,000 S.F.

Cost: \$13,000,000

OWNER CONTACT

Ms. Joyce Thomas 200 E Main St., 4th Floor Lexington, KY 40507 (859) 258-3054



PROGRAM MANAGEMENT SERVICES FOR MATERIALS RECOVERY FACILITY (MRF) LEXINGTON-FAYETTE URBAN CO. GOVERNMENT

KCTCS SERVICE CONTRACTOR SUPPORT

PROGRAM MANAGEMENT



Kentucky Community and Technical College System makes available to the sixteen colleges in the system two outsourced contractors: Service Contractor and Building Automation System Contractor. Each college has an option to engage the contractors as their staffing and their budgets dictate. The selection and evaluation of those contractors is made by the KCTCS Systems Office.

In support of the solicitation and selection of outsourced contractors, Paladin prepared for KCTCS request for proposal language and scoping guidance. Paladin provided select technical content on facilities inventory and task requirements. This support allowed KCTCS System Office Administrators the confidence that requirements for solicitation met the project need, met the desired outcomes, and accurately reflected the current conditions of facility infrastructure.

In addition to supporting solicitation, KCTCS also used Paladin's services to assist with increasing transparency and auditing of the service contractors. This was accomplished through Enterprise Building Automation System platform designed and installed by Paladin. Features such as audit logs, override limits, user permissions and access profiles, and the implementation of those measures increased accountability.

PROJECT DETAILS

Owner: Kentucky Community &

Technical College

Location: Kentucky

Size: 8,000,000 S.F. of inventory

OWNER CONTACT

Ken Marks KCTCS 300 North Main Street Versailles, KY 40383 (859) 256-3594



PROGRAM MANAGEMENT SERVICES FOR MATERIALS RECOVERY FACILITY (MRF) LEXINGTON-FAYETTE URBAN CO. GOVERNMENT

GREYSTAR RESIDENCE HALL SUPPORT

PROGRAM MANAGEMENT



Greystar Real Estate Partners owns and operates the Residence Halls at the University of Kentucky. Their operations and maintenance functions are performed in-house by a series of maintenance managers and maintenance technicians. Large maintenance needs are direct procured with qualified local contractors.

In support of the solicitation and selection of outsourced contractors, Paladin assists Greystar with identification and scoping of repair needs including investigating issues and making recommendations. Paladin recommends contractors for Greystar solicitation of proposals. For consideration, although not initiated, Paladin has prepared solicitations for preventative maintenance contracts.

PROJECT DETAILS

Owner: GreyStar Real Estate

Partners

Location: Lexington, Kentucky

Size: 2,500,000 S.F. of residence

halls

OWNER CONTACT

Rick Tripp Greystar 999 So. Shady Grove Road, Suite 600 Memphis, TN 38120





PROJECT PERSONNEL

Since its inception almost 30 years ago, RRS has been involved in the recovery sector, with extensive experience with material recovery facilities (MRFs) development, operations, and optimization. Our Team will draw on decades of experience in the actual business of running MRFs, where we can speak with authority to the details of operating costs, maintenance planning, capital renewal and replacement, revenue tracking, revenue sharing and business risk/risk allocation for both the facility operator as well as the facility owner. Our Team understands the nuances of the changing waste and recycling streams, the cycles of the commodity value of the "market basket" of recyclables and the outlook for the future for sustainable public private business arrangements for recycling facility operation. We can present and discuss key MRF and transfer station metrics, both from the deep technical and data resources RRS has developed over the years as well as from the "top of mind" understanding that our experts bring to any strategic conversation.

Some of the services we provide to our municipal clients include:

- Utilizing geo-location technology to identify optimum locations,
- Conducting feasibility studies and routing analyses,
- Developing financial analyses to provide business case justification for switching to single-stream programs,
- Using CADD to design material lines and full facility layouts,
- Generating revenue projects with cost/benefit analyses over a range of variables, and
- Generating and analyzing data on the flow of materials as they are processed through MRF equipment providing a thorough understanding of what materials are recyclable.

RRS has built relationships and industry networks over the past three decades giving us perspectives on best practices, innovative technologies, industry requirements, and national, regional, and state policies and regulations. Recently, our efforts on the behalf of other clients have created opportunities for us to visit nearly every MRF in the country, review operational characteristics, and in most cases, provide recommendations for capital improvement.

In addition to the deep waste and recycling expertise of the RRS staff, we are pleased to include the services of a project team from Paladin, Inc. Engineers, a Lexington-based, Certified Woman Owned Business Enterprise with a strong history of providing solid engineering and technical services in the public and private sectors. Paladin's client-centered project approach means that clients become partners in creating desired outcomes and making improvements that will last



Our Project Personnel list includes all staff designated for this project; however, not all staff will be engaged with Task 1 which is costed later in the proposal. RRS Senior Engineer Kerry Sandford will leverage his 30+ years of experience to manage this project wherein RRS and Paladin will provide a fully qualified suite of services leveraging the talents of the following team members.





KERRY SANDFORD

senior engineer

734.476.9923 •
KSANDFORD@RECYCLE.COM
OPERATES OUT OF ANN ARBOR, MICHIGAN

Kerry Sandford is a senior engineer at RRS with over 36 years of experience in recycling and waste management programs. His extensive knowledge of material recovery facilities and material processing include system design, waste stream composition, feasibility analyses, cost modeling, as well as MRF equipment audit, selection, testing and maintenance. Kerry has been a key contributor to material flow testing – onsite at MRFs and in equipment lab settings. Kerry is also a leader in the identification, vetting, and integration of cutting-edge technologies into recycling processes. This includes a wide range of separation and material processing/handling technologies including robotics, density separation, optical sorting, conveyance, compaction, and cleaning.

PROJECT HIGHLIGHTS

SOUTHEASTERN OAKLAND COUNTY RESOURCE RECOVERY AUTHORITY (SOCRRA)

Single-Stream MRF Development; Project Manager

Led team to develop technical specifications and requirements for a new publicly-owned single-stream material recovery facility (MRF). Developed and managed multi-option request for proposal (RFP) procurement process, proposal evaluation, project award, and construction contract negotiation. Project team also continued as owner's representative through the MRF construction and facility acceptance process. The project will allow the 12 communities that are part of SOCRRA to transition from dual-stream curbside recycling using bins to cart-based single-stream curbside recycling.

RENAISSANCE RECYCLING

Assistance in Processing Request for Proposal (RFP) Response and Improving Operations; Project Team

Provided technical assistance to Renaissance Recycling as the company developed a response to the City of Jamestown's RFP and worked to improve the company's current operations. Evaluated site options, economic feasibility, and process line configurations for a potential new facility to support a response the Jamestown, ND RFP and expansion into curbside recycling.

EXPERTISE

- Material Recovery Facility (MRF) & Line Design
- MRF Equipment
- Material Processing
- Single-/Dual-Stream & Mixed Waste Processing

FDUCATION

UNIVERSITY OF MICHIGAN, ANN ARBOR, MICHIGAN

Bachelor of Science, Electrical
Engineering; Electrical
Specialization Supplemental
Courses in Manufacturing
Technologies and Natural Resources

SELECTED SPEAKING ENGAGEMENTS

PLASTICS INDUSTRY TRADE ASSOCIATION

Refocus Recycling Summit & Expo, April 2016 Optical Sorting and Quality Assurance

WASTE360

WasteExpo, April 2014 Recovery of Food Residuals – Waste or Resource

INSTITUTE OF SCRAP RECYCLING INDUSTRIES, INC.

Annual Conference and Exposition, April 2012 Challenges with Plastics Baling

PUBLICATIONS

RESOURCE RECYCLING

Meet the Modern MRF, November 2014



CARTON COUNCIL

Building Carton Recycling Access Nationwide; Project Team

Provides oversight and strategic implementation as lead engineer and works with MRF owners and operators to assist in the development of efficient sorting systems for cartons utilizing various technologies as appropriate to the throughput and needs of each MRF, furthering the mission of the Carton Council to increase recovery of cartons. Carton Council achieved its goal of 60% carton recycling access nationwide in early 2017.

FOUNDATION FOR CHEMISTRY RESEARCH AND INITIATIVES

Materials Recovery for the Future (MRFF); Project Team

Led testing of current single-stream material recovery facility (MRF) equipment to recycle flexible plastic packaging as part of loose-in-the-cart collections. Defined technical specification for demonstration facility and assisted in the development of a cost model. Work continues to optimize MRF sorting, identify suitable end markets, and develop a full-scale pilot/demonstration facility.

WASTE DIVERSION ONTARIO, CANADA

Optimization of the Blue Box Material Processing System; Project Team

Evaluated public and private MRFs and transfer facilities for the Province of Ontario to optimize its processing network and capabilities and developed the processing cost models to demonstrate the economic benefits of MRF sizing and automation compared to the costs of hauling recyclables greater distances for processing. This work was critical in the development of a plan to move towards a more cost-effective recycling infrastructure.

EMMET COUNTY, MICHIGAN DEPARTMENT OF PUBLIC WORKS

Material Recovery Facility Expansion; Project Manager

Worked with the Emmet County Department of Public Works for more than 20 years to expand from a small drop-off collection program and improve the recycling and organics recovery programs that serve Emmet County and neighboring counties. Worked with the county to acquire and transport a dual-stream processing system from an out-of-state MRF and redesigned the Emmet County MRF, overseeing the new construction and assisting in the equipment customization, installation, and startup. Technical support of the Emmet County MRF is still provided on an on-demand basis. Work continues with the county to explore further improvements to processing throughput and efficiency while reducing per ton processing costs.

MONTGOMERY REGIONAL SOLID WASTE AUTHORITY, VIRGINIA

Engineer Review of Transfer Station Upgrade; Project Manager

Led team and provided MRF evaluation and recommendations for trans-recycling equipment including understanding the proposed process, the amount of pre-sorting, amount of sorting, labor requirements, and potential for recovery and associated costs.

OUTAGAMIE COUNTY, WISCONSIN

Mixed Plastic and Container Recovery Study; Project Manager

Led team in analyzing single-stream recycling facility for possible expansion of type and volume of materials collected. Conducted operational equipment needs assessment, detailed capital and operational cost analyses of recommended options, generated revenue projections, and developed cost/benefit analysis over a range of possible market conditions and recovery rates.





ELISA SELTZER

senior consultant

231.838.8032 ESELTZER@RECYCLE.COM **OPERATES OUT OF EMMET COUNTY, MI**

Elisa joined RRS in 2019 as a Senior Consultant after a long and successful career as a Public Works Director. She is a visionary and strategic leader experienced in recycling, composting, and solid waste policy and program development and project management. Her 30 years' experience in the public sector includes funding, implementing and overseeing comprehensive and cost-effective resource recovery programs including recycling collection, food scrap collection and compost operations, MRF operations, materials marketing. Elisa brings collaborative team management, skillful contract negotiation, RFP development, procurement, community outreach, and market development.

project highlights

EMMET COUNTY, MICHIGAN DEPARTMENT OF PUBLIC WORKS

Material Recovery Facility Expansion

Work performed as Director of Emmet County Department of Public Works Worked with the RRS team to expand MRF from a small drop-off collection program and improve the recycling and organics recovery programs that serve Emmet County and neighboring counties. Oversaw \$4 million MRF upgrade, on time and under budget: created and managed regional Material Recovery Facility, Solid Waste Transfer Station, Compost Facility, Super Drop-off, Household Hazardous Waste Program, and Curbside and Drop Site fleet operations with over 30 employees.

experience

EMMET COUNTY, MICHIGAN

1990-2019: Public Works Director

Collaborated with private haulers, city and county representatives to develop a Solid Waste Ordinance with flow control, hauler licensing, and PAYT provisions to fund recycling and develop incentives to reduce waste; designed, implemented and oversaw self-funded comprehensive resource recovery program; oversaw solid waste management planning process; successfully marketed over 60 recyclable material types, with a focus on regional market partners and emphasis on highest and best use; developed

- Municipal Solid Waste/ Recycling/ Composting
- Recycling Collection & Dual Stream Processing
- Composting & Food Scrap Collection
- Solid Waste Policy
- Cost-Effective Recovery **Programs**

UNIVERSITY OF MICHIGAN, ANN ARBOR,

Bachelor of Science in Natural Resource Management & Environmental Advocacy

MICHIGAN RECYCLING COALITION

MRC Conference, 2018 Sustainable Residential Recycling

NATIONAL RECYCLING COALITION

Resource Recycling Conference,

Hacking Recycling Tools & Tips

WASTE EXPO

May 2017 Food Scrap Commercial Collection

SWANA

Road To Zero Waste, 2017 Rockin' Rural Recovery

MICHIGAN RECYCLING COALITION

MRC Conference, 2016 The Art & Science of Recycling:



and oversaw residential & commercial curbside routes and drop-site recycling sites county-wide and in four partner counties; managed \$5 million annual operating budget and Enterprise Fund to finance all capital purchases, overhead, and operations; spearheaded successful bin-to-cart transition for six municipalities, leveraging market partner, foundation and industry funding; directed all RFPs, competitive bidding, contract development, construction and engineering projects for all solid waste, recycling and composting operations and capital projects; wrote and secured grant projects from state, federal, foundation, industry and other private sector sources; and developed and maintained successful public-private partnerships.

RECYCLE ANN ARBOR

1987-1989: Curbside Recycling Coordinator, Personnel Coordinator

Managed the largest curbside program in the state of Michigan; secured grant funding to expand curbside collection from monthly to weekly pick-up; developed specifications for truck fleet, hired and trained drivers, developed routes; coordinated employment, compensation, labor relations and employee relations; administered compensation, benefits, and performance management systems; and improved training and safety programs

award/honors

- 2017 Environmentalist of the Year, Northern Michigan Environmental Action Center
- 2017 National Recycling Conference recognition for Outstanding Government Program
- 2015 MI Dept Environmental Quality: Recycling Leadership Award for Excellence Across All Categories
- 2011 Michigan Recycling Coalition's Recycler of the Year Award
- 2011 Harbor Heroes Citizen Of the Year Award Harbor Springs Area Chamber of Commerce
- 2008 Petoskey Area Chamber of Commerce Mission Award
- 2000 Michigan Recycling Coalition's Recycler of the Year Award Resource Recycling's recognition for Outstanding Program

association work/volunteerism

STATE OF MICHIGAN

2014 - 2018: Governor's Recycling Council

NETWORK NORTHWEST'S SOLID WASTE ADVISORY COUNCIL

2008 - 2018: Chair

MICHIGAN RECYCLING COALITION

2017 - Current: Policy Committee member

MICHIGAN RECYCLING COALITION

2002-2004, 1990-1992: Board Member





CHRIS KING

field engineer

505.270.9945 • CKING@RECYCLE.COM OPERATES OUT OF BOULDER, CO

Chris King is a consultant and field engineer at RRS. His 10 years of experience have crossed several industries including environmental, aerospace, and automotive - but all have required an attention to detail and data specification to develop and design critical components for projects. Recently, Chris has been involved in on-site packaging material flow studies, MRF maintenance and design reviews, database development, and several data analyses for various projects. Chris holds bachelor and master degree in mechanical engineering.

project highlights

RESOURCE RECOVERY AND RECYCLING AUTHORITY OF SOUTHWEST OAKLAND COUNTY

Equipment Maintenance Review & Status Oversight; Project Manager Provides expert review of the maintenance work ReCommunity is performing on the processing equipment at the RRRASOC Material Recovery Facility (MRF). includes both the equipment currently owned by RRRASOC and the equipment that will be turned over to RRRASOC at the end of the operation contract with ReCommunity. Includes review of monthly maintenance reports provided by ReCommunity and on-site inspections to verify appropriate preventive maintenance and repairs have been completed as well as to monitor equipment condition including wear and damage.

GLOBAL FOODSERVICE PACKAGING MANUFACTURER

Product Recycling Feasibility Analysis; Project Team

Directed a material recovery facility sort and analyzed data to help the company understand if their new product could be successfully recycled and recovered in the Midwest region.

FOOD AND BEVERAGE COMPANY

Roadmap for Curbside Collection of Single Serve Packaging; Project Team Provided technical support to develop curbside recycling programs for client's single-serve packaging. Assisted with material flow testing and

EXPERTISE

- Materials Recovery Facility (MRF) Equipment
- MRF Material Flow
- Data Analytics
- CAD and PDM

FDUCATION

UNIVERSITY OF NEW MEXICO, ALBUQUERQUE, NEW MEXICO

Master of Science, Mechanical Engineering

UNIVERSITY OF NEW MEXICO, ALBUQUERQUE, NEW MEXICO

Bachelor of Science, Mechanical Engineering

SELECTED SPEAKING ENGAGEMENTS

NORTHEAST RECYCLING COUNCIL

Material Recovery For the Future: Can we Capture more Value from MRF Infeed?

SELECTED PUBLICATIONS

FLEXIBLE PACKAGING SORTATION AT MATERIALS RECOVERY FACILITIES RESEARCH REPORT

Commissioned by Materials Recovery for the Future (MRFF) Lead Researchers: Kerry Sandford and Christopher King



implementation of radio-frequency identification (RFID) testing, directed analysis of collected data, and contributed to the capital cost modeling to evaluate the feasibility for curbside recycling of the packaging.

UNIVERSITY OF SOUTHERN CALIFORNIA (USC)

Campus Waste and Recycling Assessment; Project Team

Participated in onsite waste assessment, analyzed collected data, developed cost model, and made recommendations to help USC identify improvements and investments to achieve their goal of 75% waste diversion by 2020.

FOUNDATION FOR CHEMISTRY RESEARCH AND INITIATIVES

Materials Recovery for the Future; Project Team

With the objective to understand and enhance recovery solutions for flexible packaging, served as engineering support for several materials recovery facility (MRF) and equipment tests, managed test material inventory and transportation logistic to test sites, and conducted data analysis and reporting.

HENRY FORD HEALTH SYSTEM

Hazardous Materials Program Management; Project Team

Worked with team to create an online database for the storage of waste audits for three major hospitals in the health system. Incorporated user feedback to improve functionality and user experience of the audit database.

past experience

AERNNOVA ENGINEERING US, INC.

2012 - 2015: Aerospace Design Engineer

Responsible for design and configuration of various aircraft components including rear wing spars, flap assemblies, retention brackets for cooling and electrical systems, machined frames, and composite elevators.

CHRYSLER GROUP LLC

2011 - 2012: Product Engineer

Responsible for meeting cost and timing requirements of components to support several vehicle programs, conducted friction assessment of V8 engine program components, and developed relationships with suppliers to bring new technology to the marketplace.

UNIVERSITY OF NEW MEXICO

2009 – 2010: Teaching Assistant

Directed the lab portion of ME260, the second class in a design series focusing on manufacturing technology where students utilized machine tools to complete design projects.

ECLIPSE AVIATION

2006 - 2007: Manufacturing Engineering Intern

Worked directly with aircraft technicians to design tooling.





SHAUN SPALDING

senior consultant

SSPALDING@RECYCLE.COM OPERATES OUT OF CAMBRIDGE, ONTARIO, CANADA

Shaun is a Senior Consultant with over 18 years of experience in policy and program developments designed to encourage public participation in waste reduction and diversion to improve the operational performance of municipal recycling programs. Shaun works with clients to prepare and implement waste management master plans and strategies as well as processing facility operational assessments. He is experienced in developing procurement documents and contracts, performing contract management activities, conducting waste stream composition studies, and creating and executing education and communication efforts. Shaun is a Civil and Engineering graduate from Humber College, Toronto and is a Certified Engineering Technologist (C.E.T.) and Environmental Professional (EP) in Waste Management. Prior to joining RRS, Shaun completed the following relevant projects:

project highlights

SUEZ NORTH AMERICA, EDMONTON, ALBERTA

Solid Waste Management Plan: Project Manager

Performed an in-depth operational assessment of the MRF production performance (including staffing and training) and developed a revised operational protocol to minimize operational downtime, increase product recovery, increase product quality.

CITY OF EDMONTON, ALBERTA

MRF Review and Retrofit Study, Project Manager

Prepared a 10-year operating strategy that provided direction for MRF operational and equipment modifications based on industry best practices and standards. The project examined the effectiveness and efficiency of the current MRF and made recommendations related to contract management activities, future contract specifications and operational requirements. Furthermore, the project delivered two future state scenarios related to operational performance metrics and equipment retrofits to ensure the MRF was capable at processing and producing quality recyclables and realize higher revenues. This work directly led into the Solid Waste Management Plan assignment.

EXPERTISE

- Waste Diversion & Recycling
- Waste Management Planning
- Policy & Program Assessments
- Operations Management
- RFP & Contract Development
- Contract Management
- Program Operations
- Performance Management

CERTIFICATION

- Certified Engineering Technologist (C.E.T.)
- Environmental Professional (EP) in Waste Management

FDUCATION

HUMBER COLLEGE, TORONTO, ONTARIO

Civil and Environmental Engineering

SELECTED PUBLICATIONS

RESOURCE RECYCLING MAGAZINE

Small Change or Big Bucks (MRF residue and opportunities for improvement), February 2009

STEWARDSHIP ONTARIO EFFECTIVENESS & EFFICIENCY FUND

York Region Collection and Processing Optimization Study (project #207, assessment of the impacts of compacting recyclables during collection and its implications on MRF processing efficiency), October 2006

WASTE DIVERSION ONTARIO

Continuous Improvement Fund



Solid Waste Management Plan: Project Manager and Operational Specialist

Led a diverse team of specialists on the redevelopment of operational and equipment upgrades to the City's MRF. Developed an implementation plan for updating the processing equipment to improve productivity, optimize output streams, reduce net operating costs and maintenance activities. Developed preliminary and detailed concepts for the upgrades including process flow, mass balance, equipment and performance expectations along with a procurement implementation plan.

CITY OF TORONTO, ONTARIO

Mixed Waste Processing Study: Technical lead

Developed costs, operational risks, challenges and opportunities to recover materials from the multi-family and other mixed wastes residential and commercial steams. Lead on jurisdictional scan for mixed waste processing systems in North America, development of procurement documents for pilot testing services, pilot testing oversight and reporting. Study results to determine how best to increase City waste diversion in support of the City's 2016 Long Term Waste Management Strategy.

NIAGARA REGION, ONTARIO

Contract Management and MRF Operational Training; Project Manager

Developed and delivered a practical in-person 'how-to' training program for a regional employee hired to manage the day-to-day operations of the region's MRF and its operating contractor. The program was structured on the region's recycling program, the job description of the employee and the MRF operating contract requirements as well as current best practices in data management, performance measurement and contract management.

SOLID WASTE AUTHORITY OF PALM BEACH COUNTY, FLORIDA

MRF Equipment Inspection; Field Engineer

Performed equipment condition assessment and facility inspections as part of the annual operating contract requirements for the County's dual stream MRF and recommended operational and capital upgrades / enhancements to ensure long-term viability and sustainability and to reduce maintenance costs.

MRF Operational Assessment; Project Manager

Performed an in-depth assessment of the MRF operators to identify opportunities for improvement / optimization and provided guidance related operational processing adjustments, equipment upgrades and contract management best practices.

CITY OF PHOENIX, ARIZONA

MRF Equipment Inspection; Field Engineer

Performed equipment condition assessment and facility inspections as part of the annual operating contract requirements for the City's two-100,000 ton per year single stream MRFs (27th Avenue and North Gateway facilities).

CITY OF SUNNYVALE, CALIFORNIA

SMaRT Equipment Inspection; Field Engineer

Performed equipment condition inspections for the City's SMaRT (Sunnyvale Materials and Recovery Transfer) Station. The facility processes 1,500 tons per day and consists of several operating components including: mixed waste processing system and adjoining recyclables recovery, composting and residual transfer.





DAVID STEAD

vice president

734.846.9638 • DSTEAD@RECYCLE.COM OPERATES OUT OF ANN ARBOR, MICHIGAN

David Stead is a principal and vice president at RRS, bringing over 30 years of professional experience in environmental, waste management, and finance projects, with skills ranging from technical analysis and project design, to communications and computer modeling. David has conducted many of the firm's planning and supply analysis studies that evaluate market trends and availability of targeted recoverable commodities, such as waste wood, paper, plastics, and other materials. He has managed procurement processes for municipalities to develop materials recovery facilities (MRFs) and collection and recyclable processing services. David has also assisted in the development of fuel quality implementation plans for independent power projects designed to assure that fuel availability and quality meets specifications for planned power stations. David is skilled in both technical and public policy analyses related to solid waste management and financial management that have been utilized in the decision-making process by elected officials and federal and state agency personnel. David has developed and published policy analyses in many areas, including solid waste management and recycling, low level radioactive waste disposal, and the impact of environmental liability on the regulated community.

project highlights

BURO HAPPPOLD, NEW YORK CITY

 80×50 Climate Action Plan; Project Manager (Sub-Contractor) Served as technical and planning resource for the strategic elements of the 80×50 plan and managed the analysis of the impact of different zero waste management strategies related to solid waste and recycling on greenhouse gas (GHG) emissions as a subcontractor.

PEORIA COUNTY, ILLINOIS RECYCLING AND RESOURCE CONSERVATION

Strategic Planning and Solid Waste Management Plan Update; Project Manager

Served as technical and planning resource for the strategic elements of the 20-year solid waste management plan and managed the review of earlier planning efforts, program data, waste reduction volumes, and program costs.

EXPERTISE

- Solid Waste and Recycling Programs
- Material Collection and Processing
- Financial Analysis and Economic Modeling
- Biomass Energy

FDUCATION

UNIVERSITY OF MICHIGAN, ANN ARBOR, MICHIGAN

Masters of Science, School of Natural Resources, Resource Policy, Economics, and Management Program

UNIVERSITY OF COLORADO, BOULDER, COLORADO

Bachelor of Environmental Design, College of Environmental Design, Regional Planning Program

UNIVERSITY OF COLORADO, BOULDER, COLORADO

Certificate of Continuing Engineering, Certification in Water Law and Applied Engineering

SELECTED SPEAKING ENGAGEMENTS

BIOCYCLE

BioCycle REFOR16 – Renewable Energy from Organics Recycling, October 2016 Exploring Economic Analysis of Centralized AD

MICHIGAN RECYCLING COALITION

Michigan Recycling Coalition Conference, May 2016



CITY OF MILWAUKEE, WISCONSIN AND WAUKESHA COUNTY, WISCONSIN

Material Recovery Facility Procurement; Project Manager

Managed the procurement process and contract negotiations with the select vendor for the City of Milwaukee, WI and Waukesha County, WI in the joint procurement of a single stream materials recovery facility and single stream transfer and processing services to replace the facilities previously operated by the two units of government.

CITY OF MINNEAPOLIS, MINNESOTA

Dual versus Single Stream Recycling Evaluation; Project Manager

With the goal of providing a cost-effective recycling collection program to increase the current recycling rate to meet the new target set by the county and state, managed the assessment of collection options, determined the associated impact on the value of marketable materials, and determined next steps through the use of comparative analysis, economic and material recovery analysis, enterprise fund development and analysis, and stakeholder focus groups.

CHIPPEWA COUNTY, WISCONSIN LAND CONSERVATION AND FOREST MANAGEMENT

Materials Recovery Facility (MRF) Study; Project Manager

Authored three primary evaluations including a market analysis report, a recyclable materials market analysis, and a MRF options analysis report. Provided the framework for recommendations including moving to single-sort system to achieve highest recovery rate at lowest cost. Currently working on the second phase of the project that is evaluating the options of county-wide contracting and managed competition.

MONTGOMERY REGIONAL SOLID WASTE AUTHORITY (MRSWA), VIRGINIA

MRSWA Evaluation for Converting to Single Stream Recycling; Project Manager

Provided the county with an understanding of the feasibility and economics of converting its existing dual-stream MRF to single-stream processing, estimated the projected program costs and revenues, and integrated the analysis into the MRSWA budget and financial programs to compare the current program to the proposed program options. Currently assisting the MRSWA in the procurement of services through a request for proposal for the processing of single-stream recyclables.

CITY OF ANN ARBOR, MICHIGAN

City-Wide Integrated Waste Management Services; Project Team

Provided solid waste planning and financial strategy and analysis during RRS' contributions to the city's waste management services over a ten-year period. Assisted with optimizing the city's funding strategy to ensure long-term viability and self-sufficiency of services in addition to performance-based contracting for recycling services.





MEGHAN WIEBE

analyst

303.579.3692 • MWIEBE@RECYCLE.COM OPERATES OUT OF BOULDER, COLORADO

Meghan is an analyst with RRS who provides research, data analysis and modeling, waste assessment experience, report writing, and project support to corporate and sustainable communities clients. Meghan's expertise is in efficient research, and effective translation of data into easily understandable analysis and actionable program recommendations.

project highlights

PUEBLO COUNTY, COLORADO

Waste Composition Study & Gap Analysis; Project Team

Helped design, conduct and analyze a survey on residential recycling behaviors, attitudes and program preferences. Organized logistics for two seasonal waste

sorts at a landfill, trained waste sort staff and evaluated waste characterization results, including developing summary graphics. Modeled generation tonnage for residential and commercial generators based on relevant county data, comparable counties' data, and business databases, and estimated county diversion rate. Conducted phone and web research to understand county-wide gaps and opportunities in county infrastructure, policy, and education efforts.

HIGH COUNTRY CONSERVATION CENTER, SUMMIT COUNTY, COLORADO

Review of County Solid Waste Funding Mechanisms; Project Team

Facilitated stakeholder meetings to gather feedback on potential funding options, including stakeholder assessment of local feasibility, public acceptance, and potential for county wide adoption. Assisted with detailed county wide material generation and disposal model. Reviewed potential diversion programs and outlined program setups, cost estimates as well as providing examples of other communities implementing similar programs.

AEROSPACE & DEFENSE COMPANY

Multiple On-site Waste Assessments with Program Recommendations; Project Team

Organized on-site visit logistics for multiday waste assessments. Conducted waste assessments for large and small commercial campuses (100 to 5000+ employees) that include walk through assessments of on-site infrastructure and programs, staff interviews of site barriers and opportunities, and waste sorts of representative trash and recycling samples. Compiled information from the three portions of the waste assessment to develop actionable

EXPERTISE

- Sustainability and Organics Research
- Datasets and QA/QC
 Protocols
- Data Presentation and Visualizations
- Field Ecology

FDUCATION

UNIVERSITY OF COLORADO, BOULDER, COLORADO

Bachelor of Arts, Ecology &
Evolutionary Biology, summa cum
laude

Bachelor of Arts, Environmental Studies, with distinction

Rainforest, Reef, and Cultural Ecology Independent Study, School of International Training, Australia



program recommendations. Modeled program recommendations including program set-up, labor, costs and potential diversion impact. Shared findings with sites through slide deck presentations.

NATIONAL RESOURCE DEFENSE COUNCIL

Landscape Assessment for Food Waste Recycling for City of Denver and City of Baltimore; Project Team Evaluated the food waste processing capacity for two cities, including surveying and summarizing permitted compost facilities, potential facilities, transfer station and other organics processors. Mapped food waste generation in each city by commercial generator type, such as universities and restaurants, highlighting zip codes with large quantities of food waste generated. Reviewed and recommended action steps for the cities to increase diversion of food waste based on identified barriers and expansion opportunities. Discussed findings during stakeholder round table meetings.

ISLAND GREEN LIVING

Business Plan Development for Recycling of 3 Material Streams on St. John, USVI; Project Team Investigated recycling programs on comparably sized places and islands to document recycling program options, given the challenges of smaller, more remote locations. Assisted with drafting program recommendations and based on those recommendations, developing a business proforma that detailed recommended equipment, staff time and costs, operations cost, maintenance of equipment, and revenue projections.

past experience

NATIONAL ECOLOGICAL OBSERVATORY NETWORK

2016: Seasonal Field Technician

Primary data quality control technician, troubleshooting backlogged and erroneous data, as well as developing more efficient methods of data entry. Field technician that conducted and led field sampling efforts for small mammal trapping and handling, soil sampling and insect collection.



LICENSURE AND CERTIFICATIONS

Certified Commissioning Professional, Building Commissioning Association

Certified Commissioning Authority, AABC Commissioning Group

LEED Accredited Professional, United States Green Building Council

CONTACT

P: 859.252.3047 x862 E: rogerc@paladinky.com W: www.paladinengineers.com

CANDICE ROGERS

PRINCIPAL-IN-CHARGE

ABOUT

Candice understands the business behind the buildings. She leads commissioning process development for Paladin's projects, defines project goals and performance criteria, manages the commissioning process, and works to assure that Owner's receive the best systems possible.

Candice serves on the International Board of Directors for the Building Commissioning Association. She promotes understanding of Commissioning through community and industry presentations.

RELATED EXPERIENCE

University of Kentucky Private Residence Halls | Preventative Maintenance Support | Greystar | Memphis, TN

Tension Fabric Structure Addition | MEP Design LFUCG | Lexington, KY

Senior Citizen's Center | Fundamental Commissioning LFUCG | Lexington, KY

LexTran Headquarters Building | Fundamental & Enhanced Commissioning | MEP and Envelope LexTran | Lexington, KY

Transportation Cabinet Office Building & Central Utility Plant | Post Commissioning & Energy Efficiency Improvements | Facility & Support Services | Frankfort, KY

Student Recreational Center | Fundamental & Enhanced Commissioning University of Louisville | Louisville, KY

Classroom and Student Services Building | Whole Building Commissioning | Bluegrass Community and Technical College | Lexington, KY

Centralized Laboratory | Existing Building Commissioning | MEP and Envelope Facility and Support Services | Frankfort, KY

Burlington Readiness Center | Fundamental & Enhanced Commissioning Department of Military Affairs | Burlington, KY

EDUCATION

MASTERS IN BUSINESS ADMINISTRATION, University of Kentucky

BACHELOR OF BUSINESS ADMINISTRATION, MARKETING & MANAGEMENT University of Kentucky





LICENSURE AND CERTIFICATIONS

Professional Chemical & Electrical Engineer: Commonwealth of Kentucky (#23685)

Certified Commissioning Professional, Building Commissioning Association

Six Sigma Green Belt, American Society of Quality

Tridium Ax - Niagara IV

CONTACT

P: 859.252.3047 x8860 E: burksd@paladinky.com W: www.paladinengineers.com

RICHARD T. BURKS

PROFESSIONAL ENGINEER

ABOUT

Dick's extensive background in the requirements of mechanical, plumbing, electrical and control systems operation enables him to perform high-level design reviews and prepare functional tests to verify sequence of operation consistency.

As a licensed Engineer and Certified Commissioning Professional, Mr. Burks has completed both engineering design and commissioning of systems and equipment for a variety of applications. Dick has developed and directed commissioning process activities for approximately twenty years. He has participated in mechanical, plumbing, electrical, and controls systems design for over thirty five years.

RELATED EXPERIENCE

Gatton College of Business Renovation & Expansion | Fundamental & Enhanced Commissioning | University of Kentucky | Lexington, KY

Patterson Hall Renovation | Fundamental and Enhanced Commissioning University of Kentucky | Lexington, KY

Classroom and Student Services Building | Whole Building Commissioning | Bluegrass Community and Technical College | Lexington, KY

Center for Applied Energy Research Building #2 | Fundamental Commissioning | University of Kentucky | Lexington, KY

New Science Building | Whole Building Commissioning Berea College | Berea, KY

Centralized Laboratory Building & Central Utility Plant | Existing Building Commissioning & MEP Design | Facility and Support Services | Frankfort, KY

Charles Y. Community Center | MEP Design LFUCG | Lexington, KY

Commonwealth Emergency Operations Center | Commissioning Department of Military Affairs | Frankfort, KY

Dr. Mark & Cindy Lynn Soccer Stadium | Commissioning University of Louisville | Louisville, KY

EDUCATION

BACHELOR OF SCIENCE, CHEMICAL ENGINEERING University of Kentucky





LICENSURE AND CERTIFICATIONS

Professional Mechanical Engineer: Commonwealth of Kentucky (# 29435)

Certified Energy Manager, Association of Energy Engineers

Certified Commissioning Authority, AABC Commissioning Group

LEED Accredited Professional, United States Green Building Council

Tridium Ax - Niagra IV

CONTACT

P: 859.252.3047 x8865 E: zollerm@paladinky.com W: www.paladinengineers.com

MARK ZOLLER

COMMISSIONING PROFESSIONAL

ABOUT

Mark's extensive background in the requirements of mechanical, plumbing, electrical and control systems operation enables him to perform high-level design reviews and prepare functional tests to verify sequence of operation consistency.

As a licensed Engineer and Certified Commissioning Professional, Mr. Zoller has completed both engineering design and commissioning of systems and equipment for a variety of applications.

RELATED EXPERIENCE

CHR Complex | Energy Improvements
Commonwealth of Kentucky | Frankfort, KY

Senior Citizens Center | Fundamental Commissioning Lexington Fayette Urban County Government | Lexington, KY

Georgetown Advanced Manufacturing Facility | MEP Design Bluegrass Community and Technical College | Georgetown, KY

Woodland Glen III, IV, & V Residence Halls | Fundamental and Enhanced Commissioning | EdR Trust | Lexington, KY

Process Chiller Replacement | MEP Design | Commonwealth of Kentucky Frankfort, KY

Commercial Bank Building | Fundamental and Enhanced Commissioning Commercial Bank | West Liberty, KY

Mountain Telephone | Existing Building Commissioning | Mountain Telephone | West Liberty, KY

Jackson District Office Building | Whole Building Commissioning | Department of Transportation | Jackson, KY

EDUCATION

BACHELOR OF SCIENCE, MECHANICAL ENGINEERING Georgia Institute of Technology





SCOPE OF WORK

project plan

TASK 1 - BUILDING PANEL REPLACEMENT

The goal of Task 1 is to develop specifications and assist staff in the procurement of a contractor to replace portions of the building's metal facade.

RRS has extensive experience in procuring and overseeing construction of facility, equipment and site improvements.

- Visit Facility to Assess Building Panel Needs: RRS is familiar with the portion of the building between the tipping floor and the production area where panels have been removed. RRS engineer will visit the facility and review needs with staff and if appropriate, other stakeholders. RRS's understanding is that the building panels are to be installed to block wind, improve building comfort and debris control, while maintaining or improving the ability to observe recycling operations from the elevated visitors' platform. RRS will also explore the need for ventilation during summer months. RRS will clarify goals with management and staff and submit estimated cost for this task. This sub task includes the kick off and scoping meeting.
- Work with Staff to Determine Appropriate Design: Before developing a design, RRS wants to be clear on
 intended future uses of the affected spaces and make sure that changes do not adversely affect future
 space uses. While the assumption is that:
 - o 5 panel slots will be filled with solid panels;
 - o 3 panel slots will be filled with sliding doors; and
 - o 2 panel slots will be filled with a clear view material,

RRS wants to make sure that the changes made fully address intended future use of the spaces on either side of the panels. This includes making sure that the views from the observation platform can be optimized for educational purposes and that future service access to equipment is not compromised. RRS will bring to this discussion its experience in implementing successful education programs and its knowledge of access needed for equipment service and replacement. RRS will explore the best way to install sliding doors in the indicated locations based on the type of access needed. This sub task includes meeting 2 and review of 60% plans and specifications.

- Prepare Drawing and Bid Specifications: Once the 60% specification sign off is complete, RRS will work
 with metal building component suppliers to identify appropriate material match for fit, function, and
 appearance. RRS will develop detailed design drawings and specifications. RRS will work with
 Lexington's Division of Central Purchasing to determine the needed format for bid request documents.
 Drawings and specifications will be reviewed in meeting 3 with Waste Management Project Manager and
 plant staff.
 - Once approved, RRS will assist Lexington's Division of Central Purchasing all aspects of the bid advertisement phase including:
 - Distributing Plans, Specifications and Contract Documents.



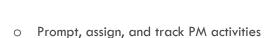
- Leading and coordinating non-mandatory pre-bid meeting, developing a written agenda and meeting suitable for public distribution by Central Purchasing.
- Issue addendum as necessary.
- RRS will review all submitted bids for completeness and accuracy and issue a written bid recommendation to the Division of Waste Management.
- AT the direction of Waste Management, RRS will coordinate with the Contractor to obtain all Bonds, executed Contract Documents, Asist Waste Management as directed, executing a valid contract between the Contractor and Urban County Government.
- **Direct the Construction Administration Phase:** RRS will provide technical assistance and expertise aligned with the direction provided in the RFP; this work will include:
 - a. Prepare two (2) 24-inch by 36-inch sets of plans and two (2) 8.5-inch by 11-inch contract document books for distribution to the Contractor. All plans and Contract Documents should be stamped as "For Construction".
 - b. Prepare two (2) 24-inch by 36-inch set of plans, one (1) 11-inch by 17-inch sets of plans and one (1) set of contract documents / specifications stamped as "For Construction" for distribution to the Waste Management Project Manager.
 - o c. Prepare and distribute one (1) pdf copy of the "For Construction" plans and Contract Documents to the Waste Management Project Manager.
 - d. Attend a maximum of three (3) monthly progress meetings, preparing meeting agendas and minutes as directed by the LFUCG Construction Manager. The selected consultant should allocate a maximum of 10 (ten) man-hours per month for all monthly progress meetings.
 - o e. Review and approve shop drawings.
 - o f. Advise the Waste Management Project Manager regarding requested field order changes and change orders.

TASK 2 - EVALUATING AND SELECTING PREVENTATIVE MAINTENANCE SOFTWARE

RRS provides maintenance oversight assistance to several MRFs and has assisted in evaluation, selection and setup of MRF PM software. RRS has also developed simpler computer data base and manual paper-based equipment status monitoring solutions where facility staff was not ready to adopt commercially available PM management software.

- Lead Division Staff in the Evaluation of Existing PM Software: RRS will work with Division staff, Central Purchasing and LFUCG's IT department to learn which computer PM management software programs are in use within LFUCG divisions and how these are being utilized. RRS will identify key personnel who work with the various software packages and as appropriate, contact these people to understand the current software use(s), program version and license arrangements (including number of seats licensed and used). RRS will also determine if each installation is web based, LFUCG server based, or operated only on local computers. RRS will work with staff and software vendors to develop an understanding of how well each package could be adapted to managing MRF equipment and PM programs. RRS will look at the ability of each package to manage the following MRF activities:
 - o Prompt, assign, and track equipment inspections and inspection flagged service needs





- O Schedule service activities based on manufacturer recommendations
- Generate service work orders for scheduled service, flagged inspection issues and other needed service activities
- Track work order progress
- o Generate and track parts orders
- Track parts inventory
- Track periodic equipment performance testing results
- Track maintenance labor, expenses and contracted services
- O Generate status reports and repair/service history for each component in system
- o Generate summary status, resource utilization, and cost reports for management
- Manage vendor and contractor lists and track history
- o Track equipment aging, replacement scheduling and performance history

RRS will share its findings and lead Division staff in evaluation of PM software existing within the LFUCG universe.

- OPTIONAL SUBTASK Prepare Software Bid Scope, if Required: If during the above evaluation process, it
 is determined that none of the PM management solutions already installed within LFUCG is suitable, RRS
 will develop a scope of services so LFUCG can solicit proposals from qualified PM software packages
 vendors.
- OPTIONAL SUBTASK RRS will assist the division, as directed via separate task order, in the evaluation, procurement and implementation of the selected PM software.
- RRS will coordinate the implementation phase of the PM software task by populating the new software
 with each piece of equipment along with its manufacturer specified PM tasks / frequencies. RRS will
 facilitate to complete coordination services by facilitating training for MRF management and maintenance
 personnel.

TASK 3 - IDENTIFICATION AND PROCUREMENT OF ON-CALL CONTRACTORS

RRS is familiar with the processing equipment at the LFUCG MRF. RRS will work with MRF management and maintenance staff to build a network of contractors that can perform timely preventative maintenance and emergency repairs. RRS has extensive experience in providing maintenance oversight in a number of MRFs. RRS staff is familiar with the way MRF equipment functions and how to identify service needs. RRS has assisted in the setup and augmentation of MRF maintenance services based on the specific needs of individual MRFs.

Building Understanding of Equipment and its Service History: RRS staff have examined the MRF equipment
on several occasions and are familiar with the system operation and some of its service history. RRS will
spend time with management and maintenance staff and review past service records to gain an
understanding of what maintenance and repair is being performed by various service providers and what
additional services are needed. RRS will clarify what additional services are needed and if any of the



current service providers are not meeting expectations. RRS will document what additional services are needed and what changes to existing contractor scopes of work are needed to achieve **Primary Goal** #1.

- RRS will draft descriptive written scopes of service documents for the proactive preventative maintenance, emergency maintenance and rapid response services for any motors, conveyors, sorters, bailers, etc. which are components of the overall MRF processing train. The written scopes must be submitted electronically in Microsoft Word format so that can be merged with LFUCG standard front end and contract language.
- RRS will assist division staff in the selection of qualified contractors / vendors capable of providing some or all of the requested services.
- As directed, RRS will assist the Division of Waste Management in effectively implementing proactive
 equipment maintenance and/or rehabilitation strategies. Assist the division in utilization of the PM software
 system to begin tracking life-cycle data on equipment ... with a long-term strategy geared toward
 accomplishing Primary Goal #1.

FUTURE WORK

As the project takes shape in the coming months, RRS and Paladin will foster a collaborative and cooperative plan with LFUCG's Division of Waste Management in order to anticipate and respond to emerging work. In this way, the Project Team will assist LFUCG's Division of Waste Management to shift from a reactive into a proactive operations management style.

value adds

RRS staff have extensive experience, not only in MRF construction and Preventative Maintenance, but also in operational assessments and performance reviews across America and Canada. In supporting LFUCG's Division of Waste Management with the stated Tasks, the RRS team will also be able to provide expert insights into improving the overall operational efficiency of the MRF. How the MRF is operated – in terms of feedstock, throughput, staffing as well as maintenance – all have direct impacts on the life expectancy of the facility. RRS and Paladin are eminently qualified to provide guidance on better/best practices related to the "means and methods" of optimal operations. Moreover, Primary Goal #1 seeks to improve maintenance, maximize equipment lifecycles and reduce preventable downtime; our extensive operational experience will be able to assist in the identification of practices and protocols that could serve to achieve this Goal.

project timeline

The RRS and Paladin team will work with LFUCG Division of Waste Management to set up a start date and develop a timeline for Task 1 and the overall project.



project budget

In preparing a budget for this scope of work, RRS has adhered to the direction specified in the RFP Solicitation to submit a total fee estimate for Task 1 and its subtasks described above. Additional task costs will be determined in connection with LFUCG project staff, assigned, and budgeted with future written Task Orders.

As noted above, not all project personnel listed earlier will have a role in Task 1. The following staff have been identified to do this work. Total fee estimate for Task 1 is \$24,855 based on the following calculation. This can be refined with further clarification about expectations for monthly meeting attendance from LFUCG. We want to caution that this is, as requested, an estimate, and we are willing to revise based on feedback from LFUCG about your needs.

Staff	Kerry Sandford	Candice Rogers	Richard T. Burks	Mark Zoller
Role	Project Manager	Principal	Senior Engineer	Commissioning
	Senior Engineer	Senior Engineer		Authority
Rate	\$142	\$150	\$150	\$125
Monthly Meetings (up to 10 hours)	4.5		4.5	
Kick-off, Inspect, Discuss w/Staff	8	4	8	
Determine Design Approach	8	4	8	8
Prepare Drawings and Bid Specs	4	4	8	20
Construction Admin	4	4	16	4
Project Management	20			
Travel Time (est. 3 trips to Lexington, bills at half rate)	33			
Task 1 Estimated Total Hours	81.5	16	44.5	32
Expenses	\$2,100		\$450	
Task 1 Estimated Cost	\$11,330	\$2,400	\$ 7 ,125	\$4,000



FINANCIAL CAPABILITY AND INSURANCE

RRS is wholly owned and operated by nine managing partners. The company currently employs a diversified workforce of over 40 people throughout the United States, Canada, and Europe. RRS is not involved with any current lawsuits, legal actions or governmental investigations against our company. In addition, RRS has not experienced a bankruptcy or reorganization due to financial hardship.

RRS employs a multi-layer financial control and reporting approach. Year-end reports are compiled annually and reported for income tax purposes by out outside accounting firm, WSR Certified Public Accountants. The results prepared by WSR Certified Public Accountants for the Internal Revenue Service (IRS) are reconciled at least quarterly with our staff accountant and our day to day accounting team.

licensure

RRS will obtain a Lexington-Fayette Urban County Government business license upon contract award.

insurance

RRS carries the following insurance coverage and can furnish this certificate upon project award:

- General Liability: \$2,000,000 (general aggregate); \$1,000,000 (each occurrence)
- Professional Liability: \$3,000,000 (general aggregate); \$2,000,000 (each occurrence)
- Automobile Liability: \$1,000,000
- Worker's Compensation: \$1,000,000



COMPANY PROFILES

about rrs

RRS is composed of strategists, engineers, economists, technical analysts, and communications specialists. We work with clients across the United States, Canada, and Europe.











project management approach

New projects are accepted only if the firm has the bandwidth to provide proper support and a quality deliverable. Projects are led by project managers who build a group of team members with core competencies from across several disciplines and areas of expertise. The project manager maintains the project work plan, schedule, quality review, and budget, and is responsible for acting as a clearinghouse for all client communication. For each project, the project manager transitions our scope of work to a work plan, where clearly defined roles and responsibilities of all project contributors and sub-contractors (if applicable) are outlined. Using a planning matrix, the work plan is translated into a detailed timeline with deliverables. The vice president of operations oversees the allocation of project hours across the firm to ensure proper capacity and workload.

RRS utilizes project- and data-management software to manage project task and resource allocation, timesheets, and budgets, as well as platforms for web conferencing, file-sharing, and co-editing. To ensure strength of data management, analysis, and deliverables, we utilize internal quality assurance and control protocols including extensive multi-level internal reviews of all work products. RRS has the demonstrated ability to nimbly adjust project approach as necessary and employs a change order process for work scope or funding adjustments to ensure transparency and clarity of the project.

FIRM PROFILE

Paladin, Inc. is not your typical Engineering firm. Our engineers focus on making systems, processes, and people work. The emphasis here is Operations, where we deploy what it takes to get the performance and achievement needed by our clients. That means that our services summaries don't fit in a nice little box on a shelf. They blur lines reflecting the needs and objectives of the Project. Comfortable with professional and technical roles, Paladin brings the team to the table to get the task accomplished whether that's process improvement, new build, verification testing, training, or even program design.

PALADIN'S EMPHASIS IS ON OPERATIONS.

For these reasons, Paladin adopted the tag line "Game changer in building systems." Never satisfied with the status quo, a game changer works tirelessly to surpass expectations by dramatically changing the course, strategy, and character of a project. Paladin changes the game as a matter of course, utilizing specific capabilities to transform projects, benefiting our client through innovative engineering and related services.



Service offerings include:

- MEP Design
- Controls Design
- Process Design
- Commissioning MEP
- Commissioning Building Envelope
- Monitoring Based Commissioning
- Controls Integration
- Enterprise Building Automation Systems Program Development
- Building Information Modeling (BIM) and 3-D Coordination Drawings
- MEP and Building Envelope Testing
- Building and Equipment Assessments
- Maintenance and Operations Assessments
- Operations Training and Documentation
- Operations Support and Management
- LEED Administration
- Technical Equipment Procurement
- Program Management



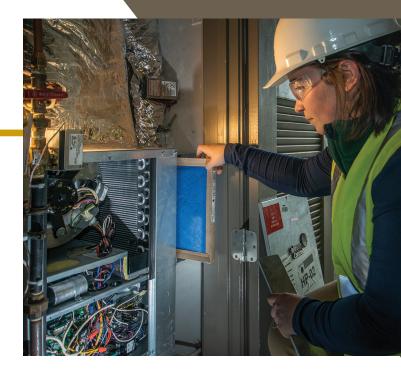
PROGRAM MANAGEMENT SERVICES FOR MATERIALS RECOVERY FACILITY (MRF EXINGTON-FAYETTE LIBBAN CO. GOVERNMENT



The building commissioning discipline has been transforming an increasing number of construction projects as owners realize the value of seamlessly integrated building systems. Diligently applied, commissioning consistently reduces construction change orders, overall construction costs, contractor call backs, and energy costs for new and existing buildings alike. It is impacting the entire span of building projects including:

- New Construction
- Existing Building/Retro-Commissioning
- Ongoing
- Whole Building
- Monitoring Based Commissioning
- Mechanical, Electrical, Plumbing
- Fire Suppression and Life Safety
- Security
- Controls
- Building Envelope





Commissioning work includes these facility leaders:

- 1. University of Kentucky
- 2. University of Louisville
- 3. Kentucky Community and Technical College Systems
- 4. Berea College
- 5. CHI Health
- 6. Rockcastle Hospital
- 7. Mortenson
- 8. The Webb Companies
- 9. CRM/DWW
- 10.Lexington Fayette Urban County Government
- 11. Louisville Metro Government
- 12. Louisville Free Public Library
- 13. Education Realty Trust, Inc.
- 14. University of Kentucky Healthcare
- 15. Commonwealth of Kentucky: Department of Mechanical Services
- 16. Commonwealth of Kentucky: Division of Military Affairs
- 17. US Army Corps of Engineers

PROGRAM MANAGEMENT SERVICES FOR MATERIALS RECOVERY FACILITY (MRF EXINGTON-FAYETTE LIRBAN CO. GOVERNMENT



Paladin's design engineering includes value added, technical solutions and construction administration. Consideration of the use and application of designed and installed systems is a hallmark of our projects. Attention to constructability and operability improves the transition from Construction to Warranty. Specializing in industrial and manufacturing related projects means that we understand the project is not finished until it is working.

Design services encompass:

- Industrial infrastructure
- Industrial process
- Industrial automation
- Process systems
- Building Automation Systems
- Existing Building Improvements
- Central Utility Plants
- Mechanical, Electrical, Plumbing





Design work includes these facility leaders:

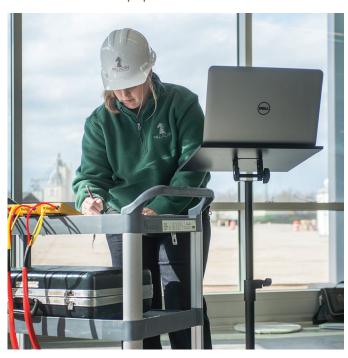
- 1. Cardinal Health
- 2. Daimler
- 3. FedEx
- 4. CMC/CLA
- 5. Washington Penn Plastics
- 6. SRC of Lexington
- 7. Mountain Telephone
- 8. Kentucky Community and Technical College Systems
- 9. Berea College
- 10. Rockcastle Hospital
- 11. Lexington Fayette Urban County Government
- 12. Louisville Metro Government
- 13. Commonwealth of Kentucky: Department of Mechanical Services
- 14. Commonwealth of Kentucky: Division of Military Affairs

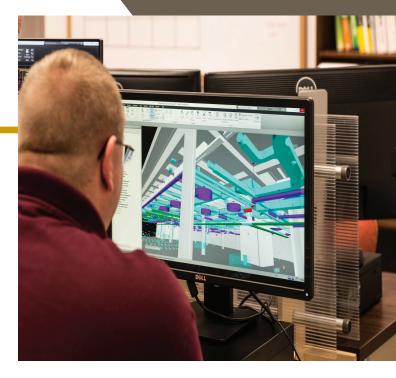
PROGRAM MANAGEMENT SERVICES FOR
MATERIALS RECOVERY FACILITY (MRF



Pursuing the Building Owner's strategy and end goals, Paladin's Technical Services seamlessly mesh the Designers' ideas and the Contractors' handiwork to fully optimize building value and profitability. These engineering related services help move initiatives and projects forward with support from our team of handson professionals on a vast array of technical systems including:

- Controls Integration
- Enterprise Building Automation Systems Program Development
- Building Information Modeling (BIM) and 3-D Coordination Drawings
- MEP and Building Envelope Testing
- Building and Equipment Assessments
- Maintenance and Operations Assessments
- Operations Training
- LEED Administration
- Technical Equipment Procurement





Clients who value these services include:

- 1. Kentucky Community and Technical College
- 2. Commonwealth of Kentucky Division of Facility Efficiency
- 3. Commonwealth of Kentucky Office for Workforce Development
- 4. Commonwealth of Kentucky Division of Military Affairs
- 5. Commonwealth of Kentucky Department of Mechanical Services
- 6. Berea College
- 7. Rockcastle Hospital
- 8. Lexington Fayette Urban County Government
- 9. Louisville Free Public Library
- 10. Education Realty Trust, Inc.
- 11. Wendy's
- 12. Tiffany's
- 13. Highland Cleaners
- 14. Energize Kentucky
- 15. DH Elliott
- 16. DW Wilburn
- 17. Besco
- 18.St. Joseph Hospitals
- 19. Fayette Co. Public Schools
- 20. WDJ Industrial Group



3.19.2019

Director, Division of Central Purchasing Lexington-Fayette Urban County Government 200 East Main Street, 3rd Floor Lexington, Kentucky 40507

To Whom It May Concern:

As requested in Lexington-Fayette Urban County Government RFP 10-2019, Resource Recycling Systems is submitting the following documents to your office:

- 1. Affirmative Action Plan for his/her firm
- 2. Current Work Force Analysis Form

These documents have also been included in our proposal package submitted to Todd Slatin, Purchasing Director Lexington-Fayette Urban County Government.

Please contact our office with any questions or concerns at the following phone number: 734.996.1361 or email info@recycle.com

Sincerely,

Erin Hachtel, Proposal Manager Resource Recycling Systems

ehachtel@recycle.com



Affirmative Action Plan

All vendors must submit as a part of the proposal package the following items to the Urban County Government:

- 1. Affirmative Action Plan for his/her firm;
- 2. Current Work Force Analysis Form;

Failure to submit these items as required may result in disqualification of the submitter from award of the contract. All submissions should be directed to:

Director, Division of Central Purchasing Lexington-Fayette Urban County Government 200 East Main Street, 3rd Floor Lexington, Kentucky 40507

All questions regarding this proposal must be directed to the Division of Central Purchasing, (859)-258-3320.



LFUCG MWDBE PARTICIPATION FORM Bid/RFP/Quote Reference # 10-2019

The MWDBE and/or veteran subcontractors listed have agreed to participate on this Bid/RFP/Quote. If any substitution is made or the total value of the work is changed prior to or after the job is in progress, it is understood that those substitutions must be submitted to Central Purchasing for approval immediately. **Failure to submit a completed form may cause rejection of the bid.**

MWDBE Company, Name, Address, Phone, Email	MBE WBE or DBE	Work to be Performed	Total Dollar Value of the Work	% Value of Total Contract
1. Paladin, Inc. 121 Old Lafayette Avenue Lexington, KY 40502 859-252-3047 rogersc@paladinky.com	WBE	Engineering and Commissioning Services	Task 1 estimated costs \$13,075	10% Please note: RFP 10-2019 asked for costs to be estimated only on Task 1.
2.				
3.				
4.				

The undersigned company representative submits the above list of MWDBE firms to be used in accomplishing the work contained in this Bid/RFP/Quote. Any misrepresentation may result in the termination of the contract and/or be subject to applicable Federal and State laws concerning false statements and false claims.

Resource Recycling Systems	Brianne Haven
Company	Company Representative
3/15/19	VP Operations
Date	Title



01/02/20

EXPIRATION DATE

WOSB183392

Certifies that:

Paladin, Inc.

has successfully met the requirements of the NWBOC a woman-owned and woman-controlled business. national certification program for certification as

The identified small business is an eligible WOSB for the WOSB Program, as set forth in 13 C.F.R. Part 127 and has been certified as such by NWBOC an SBA approved Third Party Certifier pursuant to the Third Party Certifier Agreement, dated 06/30/11, and available at www.sba.gov/wosb.

PHYLLIS HILL SLATER Board Chair, NWBOC

541330

NAICS Code(s)

Date

01/03/19

WWW.NWBOC.ORG

INFO@NWBOC.ORG | 800-794-6140 | 1101 East Cumberland Ave, Suite #301, Tampa, Florida 33602

TAMPERING OR ALTERING THIS CERTIFICATE IS, IN THE DISCRETION OF NWBOC, GROUNDS FOR TERMINATION OF CERTIFICATION.

WORKFORCE ANALYSIS FORM

Resource Recycling Systems Name of Organization:

Categories	Total	(N Hisp	hite Not panic or ino)	Hispanic or Latino Or Latino Black or African-American (Not Hispanic or Latino		Native Hawaiian and Other Pacific Islander (Not Hispanic or Latino			American Indian or Alaskan Native (not Hispanic or Latino		Two or more races (Not Hispanic or Latino		Total				
		М	F	M	F	М	F	M	F	M	F	М	F	M	F	M	F
Administrators		4	5													4	5
Professionals		11	13		2											11	15
Superintendents																	
Supervisors			2								1						3
Foremen																	
Technicians																	
Protective Service																	
Para-																	
Office/Clerical		1	5				1									1	6
Skilled Craft																	
Service/Maintenan																	
Total:		16	25		2		1				1					16	29

Prepared by: <u>Clizabeth Hughes</u> Team Resource Director Date: 03 1 12 1 2019

(Name and Title)

Revised 2015-Dec-15

AFFIDAVIT

Comes the Affian	nt <u>, Brianne Hav</u>	<u>en</u>			, and	after	being	first	duly
sworn, states under pena	lty of perjury as f	follows:							
1. His/her name is E	Brianne Haven_				_and he/	she is	the i	ndivid	lual
submitting the	proposal	or	is	the	authorize	∍d	repre	esent	ative
of_Resource Recycling S	Systems, Inc.			<u>.</u>		_, the	entity :	submi	itting
the proposal (hereinafter r	referred to as "Pi	roposer'').				-		

- 2. Proposer will pay all taxes and fees, which are owed to the Lexington-Fayette Urban County Government at the time the proposal is submitted, prior to award of the contract and will maintain a "current" status in regard to those taxes and fees during the life of the contract.
- 3. Proposer will obtain a Lexington-Fayette Urban County Government business license, if applicable, prior to award of the contract.
- 4. Proposer has authorized the Division of Central Purchasing to verify the above-mentioned information with the Division of Revenue and to disclose to the Urban County Council that taxes and/or fees are delinquent or that a business license has not been obtained.
- 5. Proposer has not knowingly violated any provision of the campaign finance laws of the Commonwealth of Kentucky within the past five (5) years and the award of a contract to the Proposer will not violate any provision of the campaign finance laws of the Commonwealth.
- 6. Proposer has not knowingly violated any provision of Chapter 25 of the Lexington-Fayette Urban County Government Code of Ordinances, known as "Ethics Act."

Continued on next page

7. Proposer acknowledges that "knowingly" for purposes of this Affidavit means, with respect to conduct or to circumstances described by a statute or ordinance defining an offense, that a person is aware or should have been aware that his conduct is of that nature or that the circumstance exists.

Further, Affiant sayeth naught.

Bianu D	_		
STATE OF Michigan			
COUNTY OF Washtenaw	<u> </u>		
The foregoing instrument was subscribed, sworn to and	acknowledge	ed before	me
by Melanie Rene Herron	on this the	11th	_day
of, 20 <u>19</u> .			
My Commission expires: 3/7/2023			

NOTARY PUBLIC, STATE AT LARGE

MELANIE RENE HERRON
Notary Public - State of Michigan
County of Washtenaw
My Commission Expires Mar 7, 2023
Acting in the County of Washtenaw

EQUAL OPPORTUNITY AGREEMENT

Standard Title VI Assurance

The Lexington Fayette-Urban County Government, (hereinafter referred to as the "Recipient") hereby agrees that as a condition to receiving any Federal financial assistance from the U.S. Department of Transportation, it will comply with Title VI of the Civil Rights Act of 1964, 78Stat.252, 42 U.S.C. 2000d-4 (hereinafter referred to as the "Act"), and all requirements imposed by or pursuant to Title 49, Code of Federal Regulations, U.S. Department of Transportation, Subtitle A, Office of the Secretary, (49 CFR, Part 21) Nondiscrimination in Federally Assisted Program of the Department of Transportation – Effectuation of Title VI of the Civil Rights Act of 1964 (hereinafter referred to as the "Regulations") and other pertinent directives, no person in the United States shall, on the grounds of race, color, national origin, sex, age (over 40), religion, sexual orientation, gender identity, veteran status, or disability be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity for which the Recipient receives Federal financial assistance from the U.S. Department of Transportation, including the Federal Highway Administration, and hereby gives assurance that will promptly take any necessary measures to effectuate this agreement. This assurance is required by subsection 21.7(a) (1) of the Regulations.

The Law

- Title VII of the Civil Rights Act of 1964 (amended 1972) states that it is unlawful for an employer to discriminate in employment because of race, color, religion, sex, age (40-70 years) or national origin.
- Executive Order No. 11246 on Nondiscrimination under Federal contract prohibits employment discrimination by contractor and sub-contractor doing business with the Federal Government or recipients of Federal funds. This order was later amended by Executive Order No. 11375 to prohibit discrimination on the basis of sex.
- Section 503 of the Rehabilitation Act of 1973 states:

The Contractor will not discriminate against any employee or applicant for employment because of physical or mental handicap.

- Section 2012 of the Vietnam Era Veterans Readjustment Act of 1973 requires Affirmative Action on behalf of disabled veterans and veterans of the Vietnam Era by contractors having Federal contracts.
- Section 206(A) of Executive Order 12086, Consolidation of Contract Compliance Functions for Equal Employment Opportunity, states:

The Secretary of Labor may investigate the employment practices of any Government contractor or sub-contractor to determine whether or not the contractual provisions specified in Section 202 of this order have been violated.

The Lexington-Fayette Urban County Government practices Equal Opportunity in recruiting, hiring and promoting. It is the Government's intent to affirmatively provide employment opportunities for those individuals who have previously not been allowed to enter into the mainstream of society. Because of its importance to the local Government, this policy carries the full endorsement of the Mayor, Commissioners, Directors and all supervisory personnel. In following this commitment to Equal Employment Opportunity and because the Government is the benefactor of the Federal funds, it is both against the Urban County Government policy and illegal for the Government to let contracts to companies which knowingly or unknowingly practice discrimination in their employment practices. Violation of the above mentioned ordinances may cause a contract to be canceled and the contractors may be declared ineligible for future consideration.

Please sign this statement in the appropriate space acknowledging that you have read and understand the provisions contained herein. Return this document as part of your application packet.

Bidders

mama. The	Resource Recycling Systems, Inc	
nature	Name of Business	_