

Submitted By: Solid Waste Department
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Project Classification: Environmental Protection
Project Focus: Basic Facilities & Infrastructure
Project Type: Facility, New (Building or Park)

Previously Submitted and Rejected: No
Continuation Project: No

Project Total Cost: \$ 16,181,000

Total Operating Cost: \$ (150,000)

Project Description: Republic operates the current Athens-Clarke County Recovered Material Processing Facility (RMPF) for Athens-Clarke County at 699 Hancock Industrial Way. The facility is nearly 25 years old, 22,000 square feet on just over 5 acres and owned by Athens-Clarke County. The facility currently processes approximately 20,000 tons per year of recyclables - residential and commercial single stream, pre-sorted cardboard, and pre-sorted shredded paper. The current facility was constructed to handle paper (specifically, increased newsprint, mixed paper and some cardboard) and bottles/cans. The material stream has evolved over the last 25 years to include increased cardboard, plastic and new hybrid materials that need to be properly sorted. If this project is approved, the current RMPF will be repurposed into a Creative Reuse Space and new home for the Center for Hard to Recycle Materials (CHaRM), Teacher Reuse Store and Toolshed through a separate SPLOST 2020 proposal (Project #48 - ACC Recycling Creative Reuse Space and Facility Relocation). This would condense all ACC Solid Waste Department activities to two locations creating efficiency and potential for shared staffing and other synergies.

The proposed new RMPF will be located on the ACC Landfill property and include an approximate 40,000 square feet facility with more space for covered tipping floors, bale storage to maximize potential revenues from end-markets and new sortation technology to better sort incoming tonnage. A new RMPF is needed to provide the necessary space for increased incoming tonnage, evolving ton (new packaging) and contamination minimization. Additionally, public education is critical to a robust waste reduction program. The current RMPF has a very small space for educational activities (including tours, events and on-going programs). An improved educational resource space will be included in the new facility that will be a larger, safer interactive space. A new RMPF will capitalize on improved technology to better separate material and remove contamination. Technology and space to optically sort plastics into resin specific streams; color sortation of glass, carton separation from mixed paper, and opportunity to clean residue to meet specifications of waste-to-energy facility and send zero waste to the ACC Landfill.

As in the current operation, it is anticipated that a contracted operator will run the new RMPF and that operator will be responsible for most operating expenses including facility utilities expenses.

Project Mission Statement/Goals & Objectives: ACC Solid Waste Department Vision Statement - To be a leader in sustainable material management by creating a culture of zero waste.

ACC Solid Waste Department Mission Statement - To efficiently deliver integrated material management through comprehensive and innovative collection, disposal, waste reduction and education services.

Goals - Waste Diversion Goals set by the Mayor and Commission on November 3, 2010: 40% by 2015, 60% by 2018, 75% by 2020.

Projected Useful Life of Project: Projected useful life 30 years.

To meet the Project Goals & Objectives, when should this project be completed? Until this facility is build we will struggle achieving our 75% waste diversion goal.

The Leadership in Energy and Environmental Design (LEED) Green Building System compliance: LEED certification will not be financially viable for this project except in the office and classroom space.

How will this project help meet the Public Safety, Basic Facilities/Infrastructure, and/or Quality of Life needs in Athens-Clarke County? The current RMPF is nearly 25 years old (nearing its useful life) and is landlocked between the privately owned Bulldog RV Park, ACC Solid Waste Department maintenance facility and ACC Solid Waste Department Administration facility. There is no room to grow the facility to protect commodity values and increase incoming tonnage. Additionally, if the new RMPF was approved as a SPLOST 2020 project the Center for Hard to Recycle Materials (CHaRM), Teacher Reuse Store, Toolshed and Creative Reuse Space could be established in the old RMPF site. This would release the current CHaRM site to be used for a higher/better use site. This would allow the ACC Solid Waste Department to operate in only two locations instead of three - gains efficiencies and staff synergies.

How is this Project recommended/included in any approved ACCGOV Land Use Plan, Master Plan, Study, Service Delivery Plan, Envision Athens, etc.? Waste Diversion Goals set by the Mayor and Commission on November 3, 2010: 40% by 2015, 60% by 2018, 75% by 2020.

Triple Bottom Line Impacts

Positive Benefits for the Prosperity of Athens-Clarke County: Recycling infrastructure is the cornerstone of robust waste reduction programs. According to the Environmental Protection Agency the benefits of recycling to any community are as follows: reduces the amount of waste sent to landfills and incinerators; conserves natural resources such as timber, water and minerals; increases economic security by tapping a domestic source of materials; prevents pollution by reducing the need to harvest, manufacture or mine new

raw materials; saves energy; supports American manufacturing; and helps create jobs in the recycling and manufacturing industries in the United States. According to the national Recycling Economic Information (REI) Study in 2016 in a single year, recycling and reuse activities in the United States accounted for: 757,000 jobs nationwide, \$36.6 billion in wages and \$6.7 billion in tax revenues. This equates to 1.57 jobs, \$76,000 in wages, and \$14,101 in tax revenue for every 1,000 tons of materials recycled.

Georgia has the second largest infrastructure for "end use" of recovered materials in the United States with over 100 manufacturers in the state using recovered materials for manufacturing. Georgia has one of the largest pulp/paper industries in the nation - 15 mills use recycled content; 8 of those are 100% recycled. Novelis, one of the largest aluminum manufacturers in the world is headquartered in Atlanta with a mill in Greensboro recycling used beverage cans. Georgia is touted as the carpet capital of the world with multiple mills in north Georgia - using 1/3 of all PET plastic bottles generated in the United States to make new carpet products. Recycling is good business for Georgia.

In Athens, over 100 jobs are provided directly by the recycling industry. The RMPF provides 20 private sector jobs to the local community. The jobs include sorters, scale attendants, equipment operators, mechanics and professional staff. Last year (FY18), the RMPF recycled 19,721.87 tons of material. This equates to approximately \$267,919 in tax revenue in FY18. Recycling creates jobs for the ACC community which contributes to the prosperity of ACC.

Detrimental Impacts to the Prosperity of Athens-Clarke County: None

Positive Benefits for our Citizens and Visitors: Above benefits to prosperity and the following contribute to benefits for our citizens and visitors. A new RMPF will provide citizens and visitors with the newest technology to better reduce waste in ACC. Recycling is an act that can bring a community together. Many people have used recycling efforts as the base of their sustainability programs. The simple act of recycling can make a community stronger. Adding programs for a clean and healthy community can be built from the foundations of a strong solid waste reduction/recycling program.

Many national and international companies/organizations will not host their conferences in cities that lack waste reduction/recycling infrastructure.

Detrimental Impacts for our Citizens and Visitors: Recycling collection and processing cost money. End-market cost and revenue fluctuation can create challenging environments for financial planning for ACC Solid Waste Department and local haulers. But it must be stated that the cost avoidance from using the landfill and the environmental liability that all landfills inherently have outweigh the cost of recycling. Lastly, truck traffic and the corresponding increased possibility for litter on Lexington Road will increase with the relocated RMPF.

Environmental Benefits, including but not limited to Positive impacts on existing Infrastructure/Systems: Above benefits to prosperity and citizens/visitors and the following contribute to the environmental benefits of a new RMPF. Benefits from recycling are as follows: reduce the size and quantity of landfills (e.g.: every cubic yard of material recycled is one less cubic yard of landfill space required); conserve natural resources;

reduce greenhouse gas emissions; reduce and/or prevent pollution; saves energy - more energy security; stimulates the use of more sustainable technologies; and helps prevent the loss of biodiversity.

A new RMPF will have the latest processing technology to contribute cleaner materials shipped to market, equating to higher commodity values and less recyclable materials sent to the landfill. Contamination rates at the current RMPF have been as high as 20% due to education issues, illegal dumping in containers, and wishful recyclers. Additionally, lack of cover (meaning exposure to the elements) for unprocessed single stream material and inadequate covered bale storage have contributed to high contamination rates and landfilling of recyclables. The new RMPF will eliminate the latter reasons for decreased commodity value, increased contamination and possible market rejection through a properly sized facility for incoming single stream tonnage.

Lastly, staff hopes to capitalize on the landfill gas to energy facility or possible solar installation on a closed Existing Disposal Area (EDA) to provide power to the new RMPF.

Detrimental Impacts for the Environment, including but not limited to Negative impacts on existing Infrastructure/Systems: Recycling should not be used as a crutch for reduction and reuse. Recycling does consume energy and fuel. Not everything can be recycled nor should be recycled if it contributes to increased environmental pollution/liability. Recycling is a manufacturing process that when coupled with a broader waste reduction program can have overall positive impacts on the prosperity, citizens, visitors and the environment of the Athens area.

Positive/Negative Impacts on ACCGOV Departments, Agencies, or other Organizations, if not covered in one of the above questions: Positive impacts listed above in all categories applicable to other departments, agencies and organizations, including some recycling revenues that contribute to local organizations. Approximately, \$10,000 per year is donated to the UGA Cooperative Extension program to fund 4H. Agriculture Extension Agent, Amanda Tedrow, stated without the recycling revenue from the ACC Solid Waste Department, the local 4H program would have no funds to use for programming and events. Recycling fully funds the local 4H.

Additionally, consolidating the ACC Solid Waste Department to two locations in the community, ACC Solid Waste Department (with Administration, Collections, Maintenance, relocated CHaRM) and the ACC Landfill (with the new RMPF), will create efficiencies for other Departments using the facilities; less trips to different locations. Also, provides Solid Waste staffing synergies and less travel time or trips between Solid Waste facilities.

Project Costs

Detailed project capital budget costs (to be funded from SPLOST 2020 only):

Project Costs (round to thousand)	Amount
1. Land Acquisition / ROW / Easement:	\$ -
2. Design Fees: (Min.12% of New Const.; 14% of reno,; 16% for LEED proj.)	\$ 500,000
3. Miscellaneous Fees: (Min. Minimum of 3% of Construction Costs – used for permitting, etc. Utilize minimum of 10% if land acquisition if necessary.	\$ 500,000
4. Fixtures, Furniture, and Equipment (for a facility): A detailed estimate is preferred – but dependent upon the specific project, utilize at a minimum \$15 to \$20 per square foot.	\$ 40,000
5. Construction:	\$ 5,170,000
6. Construction Contingency: (10% of the Construction line item)	\$ 517,000
7. Acquisition of Capital Equipment:	\$ 6,908,000
8. Testing:	\$ 50,000
9. Project Management: (4% of the total budget line items above)	\$ 548,000
10. Project Contingency: (10% of the total budget line items above)	\$ 1,424,000
11. Public Art: Calculated at 1% of the Construction line item.	\$ 52,000
12. Other 1:	\$ -
13. Other 2:	\$ -
Project Subtotal:	\$ 15,709,000
14. Program Management (3% of Project Subtotal):	\$ 472,000
SPLOST 2020 Project Total:	\$ 16,181,000

Operating Cost

Total Annual Net Operating Costs when Project is complete:

Only identify additional or net operating costs to be paid by ACCGOV. Identify the additional or net costs needed above ACCGOV's current operating budget to operate the requested project and any additional project related revenues that would be generated. Provide budget costs for each identified category below.

Operating Costs (round to thousand)	Estimated Impact for Annual Operating Expenditures
TOTAL PROJECTED REVENUES FROM PROJECT	200,000
PROJECTED EXPENDITURES	
1. Personnel Costs: from Appendix A	-
2. Annual Utilities:	
• Gas:	-
• Electrical:	-
• Water:	-
• Sewer:	-
• Phone:	-
• Solid Waste Collection:	-
• Other:	-
3. Operating Supplies:	-
4. Equipment Maintenance:	-
5. Facility Maintenance:	50,000
6. Fuel:	-
7. Other:	-
8. Other:	-
9. Other:	-
TOTAL EXPENDITURES	50,000
NET OPERATING COSTS OF PROJECT:	\$ (150,000)

Project Financing

Is the proposed Project to receive funding from source(s) other than SPLOST 2020? No

Project Site

Will the proposed Project require any land, whether existing sites, new site, easements, or Rights of Way? Yes

Will the proposed Project be on a site currently owned by ACCGOV? Yes

Approximately how many acres is available or will be needed for the new facility or Park? _Eight acres

Project Location/Address (Existing or Proposed):

ACC Landfill

Will the Project require fee simple additional land acquisition? Unsure

Will the Project require Rights-of-Way or Easement acquisition? No

Site Criteria and Standards

Current Property Owner (if applicable): No

Minimum acreage necessary for Project. 8 acres

Topography: Landfill property - has some grading done in the past.

Estimated cost per acre: Uncertain

Location/Accessibility

Define location relative to the Project's service area that best meets the Goals and Objectives.

Site is six miles outside Loop 10 on Lexington Road at the ACC Landfill property. Easy to access but in far east Athens on the Oglethorpe County line. Service area is the entire county; currently private and public haulers already go to the ACC Landfill with garbage not different to go to the same location with recyclables.

If necessary to meet the Goals and Objectives, describe what types of vehicular access will be required.

Site is six miles outside Loop 10 on Lexington Road at the ACC Landfill property. Easy to access but in far east Athens on the Oglethorpe County line.

If necessary to meet the Goals and Objectives, describe what types of pedestrian access will be required.

Not easily accessible to pedestrians. No sidewalks to the ACC Landfill property.

If necessary to meet the Goals and Objectives, describe what types of Bicycle access will be required.

Not easily accessible to bicycle traffic. No bike lanes on Lexington Road to the ACC Landfill property.

Proposed RMPF Capital Cost

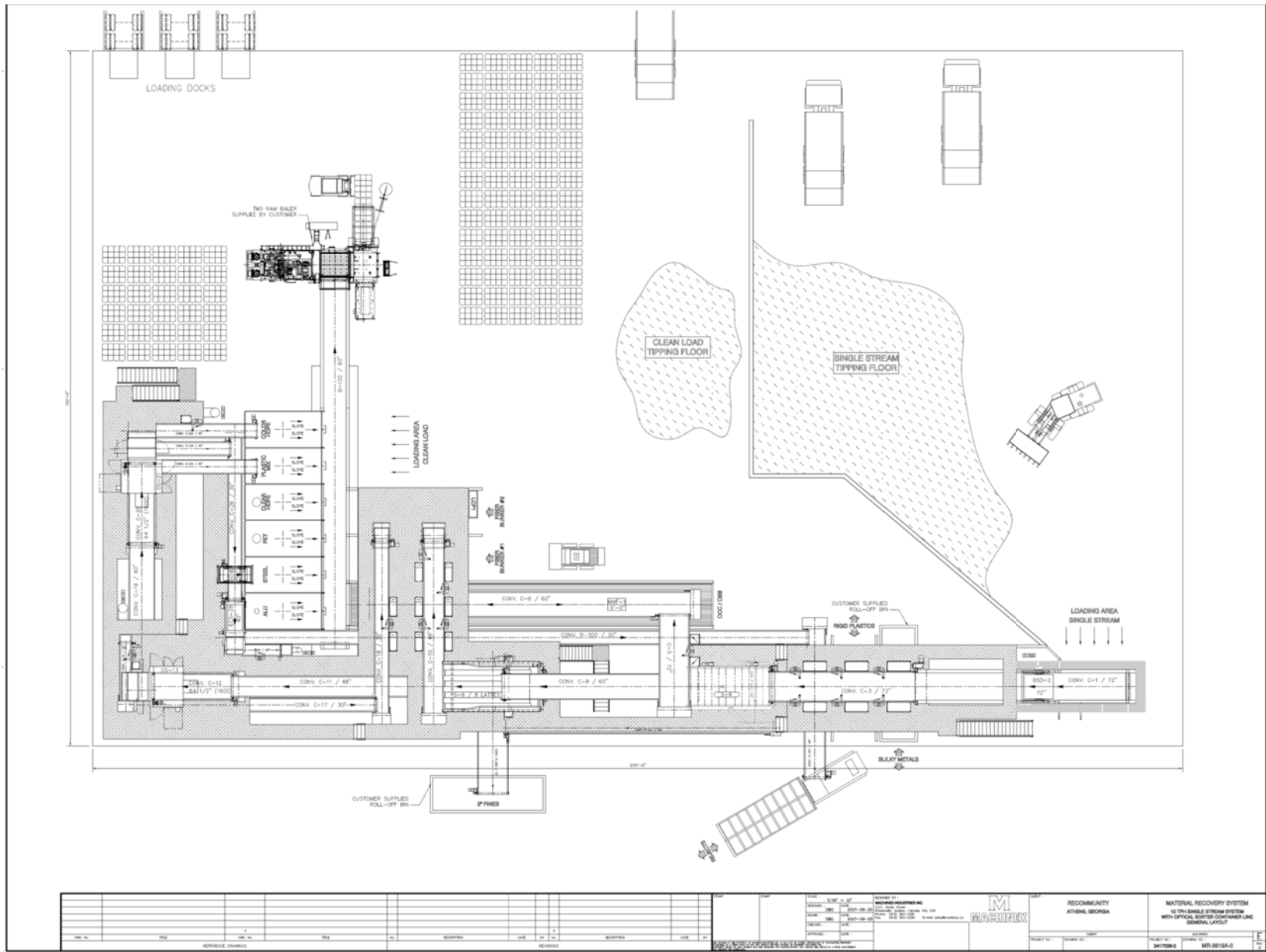
Process Equipment

<i>Item</i>	<i>Description</i>	<i>Equipment Cost</i>	<i>Installation Cost</i>
Processing Equipment	10 tph processing equipment (conveyors, screens, Eddy current, magnet, optical sorters)	\$4,000,000	\$800,000
Structure & Controls	Walkways, electrical controls for equipment, equipment platforms, material bunkers/cages	\$800,000	
Baler	Two Ram Baler	\$500,000	\$50,000
Compactor	Residue compactor with two containers	\$50,000	\$8,000
Project Management	Current RMPF Operator or Consultant	\$250,000	
Shipping	Equipment Shipping Costs	\$300,000	
SUB-TOTAL		\$5,900,000	\$858,000
TOTAL		\$6,758,000	

Building and Site

<i>Item/Description</i>	<i>Cost</i>
General Conditions	\$140,000
Architectural and Engineering Design	\$200,000
Site Preparation and Grading	\$500,000
Site Utilities (potential for solar or landfill gas generated electricity)	\$1,000,000
Site Work Concrete	\$600,000
Site Work Soil/Gravel	\$130,000
Site Work Paving	\$300,000
Site Work Landscaping	\$25,000
Precast Walls and Slabs	\$800,000
Caulking	\$5,000
Structural Steel	\$300,000
Framing/Drywall	\$100,000
Acoustical Ceilings (Office and Education Rooms only)	\$20,000
Roofing	\$200,000
Aluminum/Glass	\$50,000
Doors/Hardware	\$25,000
Overhead Doors	\$80,000
Ceramic Tile	\$10,000
Carpet	\$25,000
Painting	\$80,000
Restrooms (four – employee and tour groups)	\$100,000
Millwork	\$30,000
Fire Protection - Building	\$80,000
Fire Protection - Equipment	\$80,000
Plumbing	\$50,000
HVAC	\$100,000

Electrical	\$300,000
Scale	\$150,000
Materials Testing	\$20,000
Furniture & Sundry Equip	\$40,000
Signage	\$20,000
Permitting	\$250,000
Miscellaneous	\$300,000
TOTAL	\$6,110,000



REV. NO.	FILE	REFERENCE DRAWING	DATE	BY	DESCRIPTION

SCALE: 1/4" = 1'	DATE: 03/20/18	PROJECT: 3417000-0
DRAWN: [Name]	CHECKED: [Name]	APPROVED: [Name]
PROJECT LOCATION: [Address] CLIENT: [Company Name] PROJECT NO: [Number]		



RECOMMUNITY ATHENS, GEORGIA	MATERIAL RECOVERY SYSTEM 15 TPH SINGLE STREAM SYSTEM WITH OPTICAL SORTER COORDINATE LINE GENERAL LAYOUT
PROJECT NO: 3417000-0 DRAWING NO: MR-0018A-C	SHEET NO: 1 TOTAL SHEETS: 1