# **Solid Waste Projects**

### **Planning**

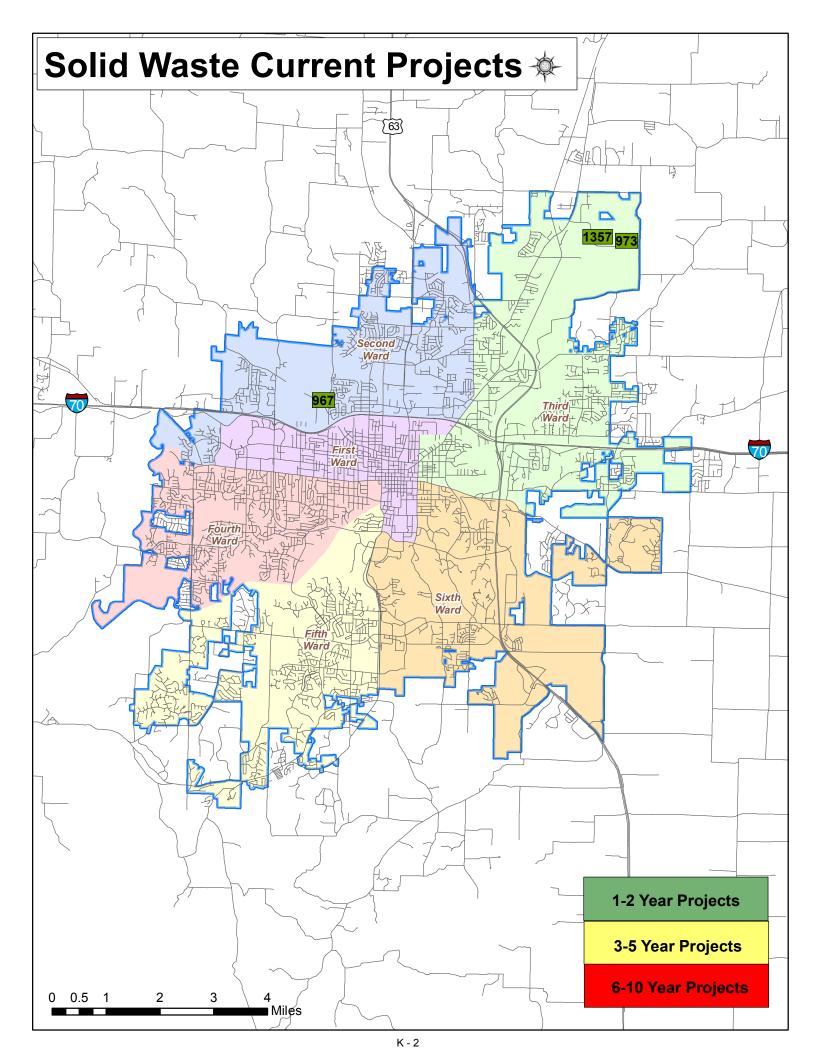
The multi-year Capital Improvement Plan (CIP) Budget is updated annually. For the Solid Waste Utility, the CIP is primarily a plan for capital expansion of the utility disposal function at the Sanitary Landfill complex which includes the Material Recovery Facility (MRF), MDNR permitted sanitary landfill and compost operation.

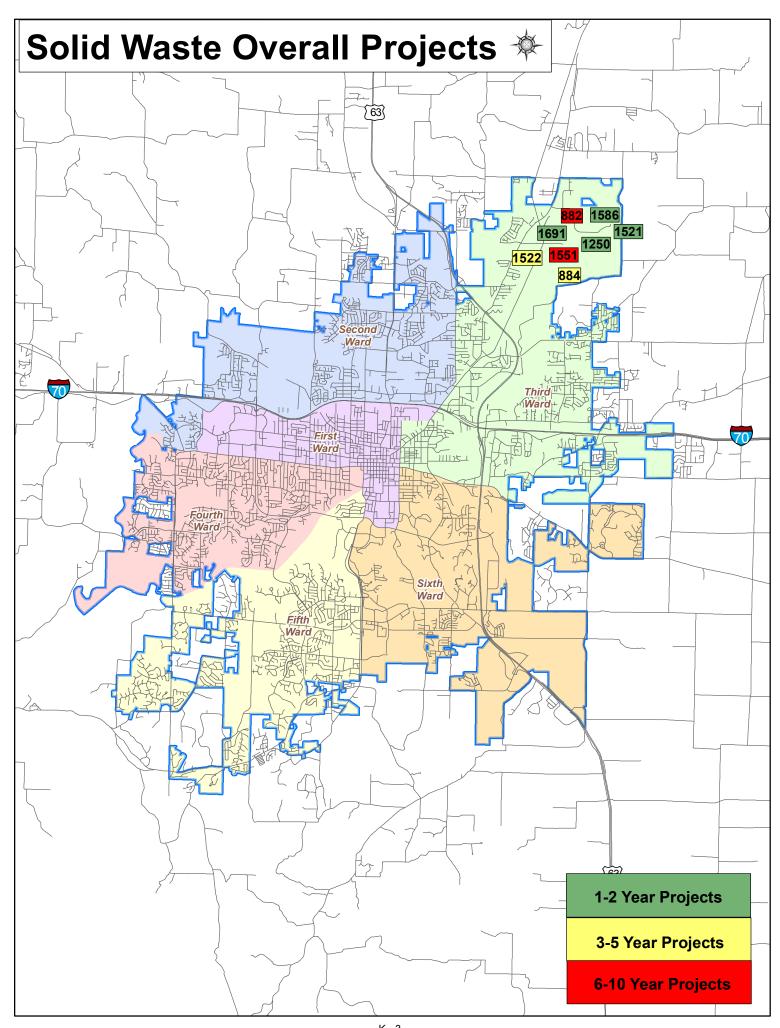
Evaluation for CIP needs is influenced by the quantity of material which requires disposal. As landfill space is consumed, plans must be implemented for the next cell construction and the methane collection system must be extended to comply with permit requirements. As recycling material quantities increase, additional handling equipment or space is needed. Other items on the planning list, such as the household hazardous waste facility will be implemented to provide additional capacity and more efficient or economical operations.

### **Funding**

Funding is primarily derived from enterprise revenue. However, since the early 1990's the City has taken advantage of grant funding which was available to expand the recycling efforts of the City.

A Solid Waste Management Master Visioning Plan was developed in summer 2008 to determine the direction for the future. The plan was updated in 2011. This visioning plan includes types of collection, equipment, landfill and material recovery programs.





Solid Waste CIP Projects
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	Project Name	Status	Ward	Begin Constru tion	Total ic- Appro- priated	Funding Still Needed	Unfunded/ Future Ballot Amount
	Annual						
1	Methane Gas Extraction Wells - C48031 [ID: 883]	On-going	3	2010	\$1,525,947	\$450,000	
	1 Projects				\$1,525,947	\$450,000	\$0
	Project Name	Status	Ward	Begin Constru tion	Total ic- Project Cost	Funding Still Needed	Unfunded/ Future Ballot Amount
	Current						
1	Landfill Cell #5 C48042 [ID: 973]	In Service	3	2011	\$3,730,000		
2	Parkside Mulch Site Drop-Off C48045 [ID: 967]	In Service	2	2012	\$100,000		
3	Stimulus Landfill Gas Plant EMC- C4801J [ID: 1357]	In Service	3	2011	\$425,275		
	3 Projects				\$4,255,275	\$0	\$0
	1-2 Years						
	Agriturf for Bioreactor Cell C48050 [ID: 1586]	Proposed	3	2014	\$250,000		
2	Collection and Admin Relocation-Landfill C48048 [ID: 1250] Large Truck Washing Facility [ID: 1521]	Preliminary Design Proposed	3 3	2015 2015	\$4,635,680 \$400,000	\$3,600,000 \$400,000	
3		Froposed	3	2013	. ,		
	3 Projects				\$5,285,680	\$4,000,000	\$0
	3-5 Years						
1	Diposal Cell #6 [ID: 1522]	Proposed	3	2016	\$4,300,000	\$4,300,000	
2	Landfill Expansion Permitting [ID: 1585]	Proposed	3	2017	\$600,000	\$600,000	
3	Material Recovery Facility Phase 1 [ID: 884]	Proposed	3	2016	\$1,500,000	\$1,500,000	
	3 Projects				\$6,400,000	\$6,400,000	\$0
	6-10 Years						
1 2	Household Hazardous Waste Building [ID: 882] Material Recovery Facility Expansion Phase 2 [ID: 1551]	Proposed Proposed	3 3	2020 2020	\$350,000 \$2,400,000	\$350,000 \$2,400,000	
	2 Projects				\$2,750,000	\$2,750,000	\$0
	12 Total Projects				\$20,216,902	\$13,600,000	\$0

# Agriturf for Bioreactor Cell C48050

# **Description:**

Install Agriturf to outer slope of bioreactor cell. Material performs as intermediate cover, provides erosion control by replacing vegetative cover (regulatory compliance) and acts as landfill gas collection device.

**Detail Project Pages** 

Ward	Begin Design	Begin Construction	
3	2014	2014	
Eligible for Percent for A	No		
Current Funding Request:		\$0	
Total Appropriated:		\$250,000	
Total City Project Cost:		\$250,000	
Est. Project Balance: 10	/01/2013	\$250,000	

### **Current Status:**

10/14/13: Engineer preparing Design Scope of Work

## **Factors Effecting Timing/Completion of Project:**

Weather and funding

## **Eligible Funding Sources:**

Enterprise Revenue

FY	Eligible Funding Sources	Amount
2014	Ent Rev	\$250,000
		\$250,000

### Master Plan:

		around 63
Columbia	hird Vard	
Agriturf for	Bioreactor Cell	

Collection	and	Admin	Relocation-La	andfill
C48048				

## **Description:**

Move solid waste collection and administration operation currently housed at the Grissum Building to new complex located at the landfill property.

Ward	Begin Design	Begin Construction
3 2013		2015
Eligible for Percent for A	No	
Current Funding Reques	\$3,600,000	
Total Appropriated:		\$1,035,680
Total City Project Cost:	\$4,635,680	
Est. Project Balance: 10/01/2013		\$663,680

### **Current Status:**

10/14/13: Design process continuing with Connell Architecture, beginning to define specifications, coordinating with other depts (W & L, I.T., etc.) as applicable.

## **Factors Effecting Timing/Completion of Project:**

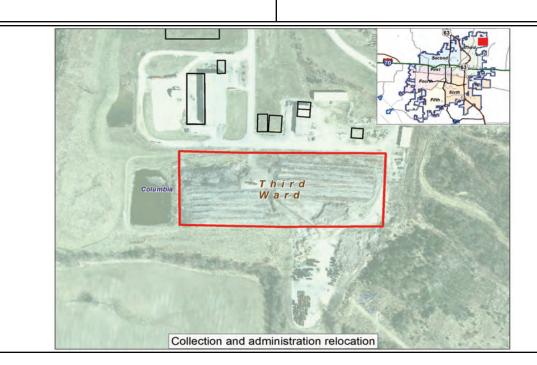
Funding and weather

# **Eligible Funding Sources:**

Ent Rev

FY	Eligible Funding Sources	Amount
2015	Ent Rev	\$3,600,000
		\$3,600,000

### Master Plan:



# Large Truck Washing Facility

## **Description:**

All Solid Waste vehicles are currently washed at a local car wash. This washing facility will provide in house washing for Solid Waste vehicles at the landfill where the vehicles are planned to be parked and maintained after Solid Waste Administration facilities are built there, and allow for the recovery of wash water.

Ward	Begin Design	Begin Construction
3	2015	2015
Eligible for Percent for A	No	
Current Funding Request:		\$400,000
Total Appropriated:		\$0
Total City Project Cost:	\$400,000	
Est. Project Balance: 10/01/2013		\$0

#### **Current Status:**

10/14/13: Is being designed & specified into Solid Waste Administration/Collection/Maintenance Facility planned for construction bid FY15.

## **Factors Effecting Timing/Completion of Project:**

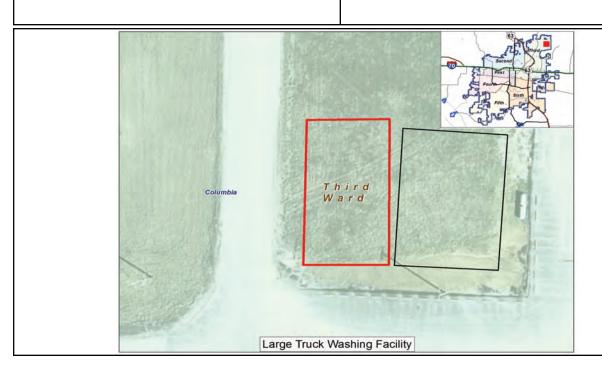
Weather

## **Eligible Funding Sources:**

Enterprise Revenue

FY	Eligible Funding Sources	Amount
2015	Ent Rev	\$400,000
		\$400,000

#### Master Plan:



Diposal Cell #6	Ward	Begin Design	Begin Construction
	3	2015	2016
<b>Description:</b> Current landfill disposal cell number 5 is projected to	Eligible for Percent f	or Arts?	No
be filled to designed intermediate level in January	Current Funding Red	quest:	\$4,300,000
2017. A new disposal cell must be ready at that time. It takes about a year to design and build a new	Total Appropriated:		\$0
disposal cell.	Total City Project Co	st:	\$4,300,000
	Est. Project Balance	: 10/01/2013	\$0

## **Current Status:**

10/14/13: Future Project

# **Factors Effecting Timing/Completion of Project:**

Weather

# **Eligible Funding Sources:**

Enterprise Revenue

FY	Eligible Funding Sources	Amount
2015	Ent Rev	\$300,000
2016	Ent Rev	\$4,000,000
		\$4,300,000

### **Master Plan:**



Landfill Expansion Permitting	Ward	Begin Design	Begin Construction
	3	2017	2017
Description:	Eligible for Per	cent for Arts?	No
Permitting of new disposal areas with the Missouri DNR takes 5 years or more on existing property. Our	Current Funding Request:		\$600,000
capacity projections on currently permitted space result in fill completion around 2022-2024	Total Appropria		\$0
result in iiii completion around 2022-2024	Total City Proje		\$600,000
		ance: 10/01/2013	\$0
Current Status: 10/23/13 - Future Project			
Factors Effecting Timing/Completion of Project: Pace of filling current space			
Eligible Funding Sources:	FY Eligible	Funding Sources	Amount
Enterprise Revenue	2017 Ent Rev	•	\$600,000 \$600,000
Master Plan: 2011 Solid Waste Management Master Visioning Plan			

Material Recovery Facility Phase 1	Ward	Begin Design	Begin Construction
	3	2015	2016
Description: Expansion of the MRF Phase 1	Eligible for Percent for Arts?  Current Funding Request:		Yes \$1,500,000
	Total Appropriated:		\$0
	Total City Project Cost	t:	\$1,500,000
	Est. Project Balance: 1	10/01/2013	\$0

### **Current Status:**

10/14/13: Future Project. Keep current project balance. Volume is continuing to maintain or increase annually. Bale storage and material staging capacity are limited at current volumes. Admin/Restrooms/Breakroom are not sufficient to accommodate number of staff and employees.

## **Factors Effecting Timing/Completion of Project:**

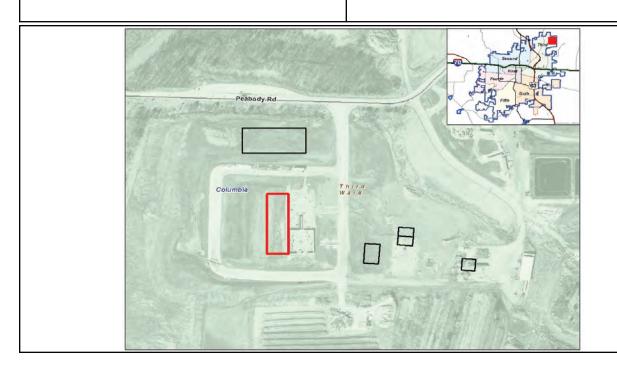
Funding and construction

# **Eligible Funding Sources:**

Enterprise Revenue

FY	Eligible Funding Sources	Amount
2015	Ent Rev	\$200,000
2016	Ent Rev	\$1,300,000
		\$1,500,000

### Master Plan:



Household Hazardous Waste Building	Ward	Begin Design	Begin Construction
	3	2020	2020
Description:  Move the HHW collection facility to a master planned Eligible for Percent for Arts?		Arts?	No
location near the MRF.	Current Funding Requ	est:	\$350,000
	Total Appropriated:		\$0
	Total City Project Cost	:	\$350,000
	Est. Project Balance: 1	0/01/2013	\$0

## **Current Status:**

10/23/13: Future project FY2015 - \$350,000

# **Factors Effecting Timing/Completion of Project:**

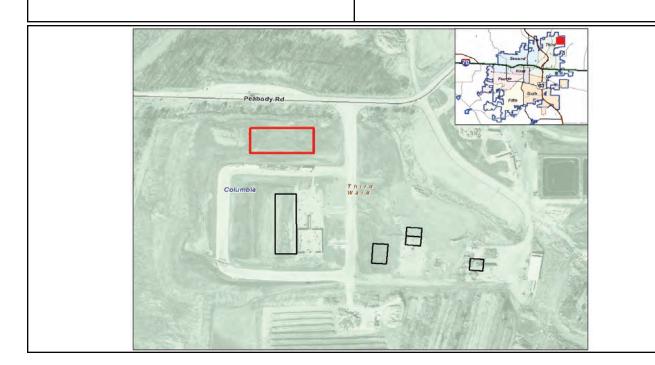
Funding and construction

# **Eligible Funding Sources:**

Enterprise Revenue

FY	Eligible Funding Sources	Amount
2020	Ent Rev	\$350,000
		\$350,000

### **Master Plan:**



# **Detail Project Pages**

Material	Recovery	Facility	Expansion
Phase 2			

## **Description:**

Expand MRF for growth and potentially different processing depending on direction of automated collection, new technology, etc. Continue development of processing capabilities for facility expansion planned to initiate in 2014.

Ward	Begin Design	Begin Construction
3	2020	2020
Eligible for Percent for Arts?		No
Current Funding Request:		\$2,400,000
Total Appropriated:		\$0
Total City Project Cost:		\$2,400,000
Est. Project Balance: 10/01/2013		\$0

### **Current Status:**

10/23/13: Future Project

## **Factors Effecting Timing/Completion of Project:**

Weather and funding

## **Eligible Funding Sources:**

Enterprise Revenue

FY	Eligible Funding Sources	Amount
2020	Ent Rev	\$2,400,000
		\$2,400,000

### Master Plan:

