

**A RESOLUTION**

declaring the necessity for construction of improvements for the ecological restoration of the former Columbia Sewer Treatment Plant #2 located along Hinkson Creek and adjacent to the MKT Trail; stating the nature of and the estimate of the cost of the improvement; providing for payment for the improvement; providing for compliance with the prevailing wage law; and setting a public hearing.

BE IT RESOLVED BY THE COUNCIL OF THE CITY OF COLUMBIA, MISSOURI, AS FOLLOWS:

SECTION 1. The City Council deems the construction of improvements for the ecological restoration of the former Columbia Sewer Treatment Plant #2 located along Hinkson Creek and adjacent to the MKT Trail, necessary to the welfare and improvement of the City.

SECTION 2. The nature and scope of the improvement shall consist of furnishing all labor, materials, transportation, insurance and all other items, accessories and incidentals thereto necessary for the complete construction of the improvement.

SECTION 3. The estimated cost of this improvement is \$60,000.00.

SECTION 4. Payment for this improvement shall be made from Parks Sales Tax Funds, a 3M Foundation Environmental Stewardship Grant and such other funds as may be lawfully appropriated.

SECTION 5. Any work done in connection with the construction of the improvement specified above shall be in compliance with the provisions of the prevailing wage laws of the State of Missouri.

SECTION 6. A public hearing in respect to this improvement will be held in the Council Chamber of the City Hall Building, 701 E. Broadway, Columbia, Missouri, at 7:00 p.m. on January 18, 2011. The City Clerk shall cause notice of this hearing to be published in a newspaper published in the City.

ADOPTED this \_\_\_\_\_ day of \_\_\_\_\_, 2011.

ATTEST:

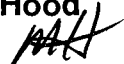
\_\_\_\_\_  
City Clerk

\_\_\_\_\_  
Mayor and Presiding Officer

APPROVED AS TO FORM:

\_\_\_\_\_  
City Counselor

Source: M. Hood



Agenda Item No. \_\_\_\_\_

**FISCAL and VISION NOTES:**

<b>City Fiscal Impact</b> Enter all that apply:	
\$0	City's current net FY cost.
\$40,000	Amount of Funds Already appropriated
\$20,000	Amount of budget amendment needed
\$60,000	Estimated 2 yr net costs:
\$0	One-time
	Operating / On-going
<b>Program Impact:</b>	
N	New program/ agency (Y/N)
N	Duplicates/expands an existing program (Y/N)
N	Fiscal impact on any local political subdivision (Y/N)
<b>Resources Required:</b>	
N	Requires add'l FTE personnel? (Y/N)
N	Requires additional facilities? (Y/N)
N	Requires additional capital equipment? (Y/N)
<b>Mandates:</b>	
N	Federal or state mandated? (Y/N)
<b>Vision Implementation Impact</b> Enter Below All That Applies: Refer to Website:	
N	Vision Impact? (Y/N or if N, go no further)
12.1	Primary Vision, Strategy and/or Goal Item#
Item #	Secondary Vision, Strategy and/or Goal Item#
Task #40	FY10/FY11 Implementation

**TO: City Council**  
**FROM: City Manager and Staff**  
**DATE: December 22, 2010**  
**RE: 3M Urban Ecology Restoration Project**



**EXECUTIVE SUMMARY:**

The Department of Parks and Recreation was pleased to receive notice of a \$40,000 3M Foundation Environmental Stewardship Grant for the ecological restoration of the former Columbia Sewer Treatment Plant #2. The department is recommending that an additional \$20,000 in 2005 Park Sales Tax Annual Park Maintenance funds be transferred to the project in order to address the vacant sewer treatment pump house building on the site. Pending hazardous and structural inspections, the building will either be partially demolished to create a viewing area or completely removed from the site. Site improvements will include construction of a wetlands system, removal of exotic plant species, restoration of native species, and construction of a perimeter trail.

Detailed construction planning has begun and it is anticipated that construction will begin during the spring of 2011. Work will be done by a combination of contract and park staff. It is estimated that the project will be substantially completed by the end of 2011. Total project cost is estimated to be \$60,000. The Department is currently working with 3M representatives for a mid-week groundbreaking ceremony in April, 2011.

**DISCUSSION:**

The Columbia Parks & Recreation Department identified the ecological restoration of the 25 +/- acre former Sewer Treatment Plant #2 as part of the 2002 Parks, Recreation and Open Space Master Plan. The project remained unfunded, until the opportunity to submit a grant request to the 3M Foundation Environmental Stewardship Grant program became available. The City was very pleased to find out that the grant was awarded in the amount of \$40,000 with the understanding that the City would provide funds to address the vacant treatment building.

**History of Restoration Sites**

The 1983 completion of the Columbia Regional Wastewater Treatment Plant eliminated the need for smaller treatment facilities along Hinkson Creek and other Columbia waterways. Several of these sites were eventually transformed into parks by the City of Columbia with funding and assistance from community agencies and organizations. For example, the site where the digesters of Treatment Plant #1 once existed is now the Martin Luther King Memorial and Muriel Battle Gardens. The treatment plant's control house was converted into restrooms and a local Audubon museum for park visitors. Similarly, the 64-acre Twin Lakes Recreation Area was constructed

where a 40-acre sewage lagoon discharged its treated effluent into Hinkson Creek and now houses multiple picnic pavilions, a dog park, and swimming area. The recently completed 52-acre Garth Nature Area, located adjacent to Bear Creek, was also a sewage lagoon and part of Columbia's previous sewage treatment system. The Nature Area now includes a 1.6-mile trail, 3-acre dog park, and access to the Bear Creek Trail.

The rehabilitation of these former sewage treatment sites demonstrates the City's and specifically, the Park and Recreation Department's ability and willingness to reclaim and restore the Hinkson Creek area, which was the site of Columbia's second Sewer Treatment Plant. The proposed plan seeks to work with multiple agencies in order to restore the Sewer Treatment Plant #2 property.

### Goal of the Project

The most important goal of the Urban Ecology Restoration Project is to restore the former treatment plant site to wetland habitat and bottomland woods. As to be expected in an area with a history of land disturbance, the Hinkson Creek location is also infested with a number of invasive exotic plant species. These exotic plants play a detrimental role in the area because they are displacing the native plants. Thus, removing these exotic plants will reinforce the sustainability of the natural habitat that the project will provide for avian and other wildlife species.

Though the 8.9-mile MKT Trail is consistently frequented by Mid-Missouri citizens, the link near Hinkson Creek is not as commonly used as other trail pathways because of its current environmentally degraded condition. Thus, restoring this site to its natural state could increase the participation of area residents using the MKT Trail, which furthers the importance and opportunities to educate Columbia citizens and visitors about the area's natural habitat. A final issue that the Columbia Parks and Recreation Department wants to address with this project is the area's storm water runoff fed by the adjacent Katy Place apartment complex. The old service road for the treatment plant is heavily eroded from the concentrated flow of water that heads directly toward Hinkson Creek, contributing to the degradation of water quality in this impaired watershed. Restoring this area's natural habitat would help reduce and potentially eliminate the current erosion present and allow for proper management of the storm water movement.

### Partnering Agencies

For this project, the Columbia Parks and Recreation Department is partnering with environmental organizations that offer both technical assistance and community support. Agencies such as the U.S. Fish and Wildlife Service and the Missouri Department of Conservation both have natural sciences experts who will assist in important ecological design aspects of this project, such as best depth of pools for wading birds or most desirable plant selection for habitat and restoration.

The Columbia Audubon Society, Missouri Native Plant Society, and environmental volunteer organizations like Treekeepers and CARP (Columbia Aquatic Restoration Project) are composed of community members who care a great deal about urban ecology and are eager to assist in the project's progression through volunteering to help plant, along with providing photos or other information for the educational signs that inform visitors about the trail's natural wildlife and habitat.

Partnering stormwater agencies of the Columbia Public Works Department and the Boone County Public Works are not only providing technical support but also helping to promote and

demonstrate the value of this project as a stormwater management system. The non-motorized transportation pilot program, GetAbout Columbia, will be funding a community connector link that further invests in community restoration and renewal for this area. The project will create additional wetland areas as a method to control storm water.

### Planning

Park planning staff has been working on site plans with the Missouri Department of Conservation's Wet Team, U.S. Fish and Wildlife, Columbia's Public Works and Water and Light departments. An interested parties meeting was held on September 28, 2010 with less than 10 people in attendance. Preliminary plans have been posted on the department's website and the few comments received have been supportive of the project. Staff believes that the attached plans represent a consensus of the general public and all involved agencies.

### Sewer Treatment Pump House Building

The site contains a 40x40 pump house building that sits over deep pits. The department is anticipating a partial demolition thus creating an elevated viewing platform of the site. However, prior to determining if this is possible, both a hazardous material inspection and structural engineering services are required. The department anticipates that the building treatment and professional services will cost approximately \$20,000. After conducting these services, the results may require that the building be demolished and removed from the site. If that is the case, the department still has plans to construct an elevated viewing area either at this site or in close proximity.

### Construction

It is anticipated that the work will begin this spring or as early as weather allows. Preliminary surveying, conducted by the Missouri Department of Conservation at no cost to the City, has begun and detailed construction plans are being prepared. Work will be conducted by force account labor for the site clean-up, trail construction, exotic plant removal, and all plantings. Contract labor will be used to grade the site, construct the wetland cells and any building work. The project will be bid through the City's Purchasing Department.

### Groundbreaking Ceremony

Park staff is working with 3M representatives for a groundbreaking ceremony in April 2011. Preliminary discussions with 3M indicate a preference for a mid-week event. Staff will continue to work with 3M and return to Council with some proposed dates.

### **FISCAL IMPACT:**

The City was fortunate to receive a \$40,000 3M Foundation Environmental Stewardship Grant to fund the project. As part of the discussion with 3M, the City agreed to address the old sewer treatment plant building that currently sits vacant on the site. To fund this portion of the project, the department is recommending that \$20,000 of the 2005 Park Sales Tax Annual Park Improvement funds be transferred to the project. The proposed natural plant selection will require minimal labor for maintenance and it is anticipated that most of the on-going maintenance work will be done by existing volunteers programs such as CARP and TreeKeepers. A department staff member, primarily funded by Missouri River Communities Network AmeriCorps program, is working on developing a long term volunteer program for this as well as other areas. The trails will be generally located above traditional flood levels avoiding repeated trail maintenance due to flooding. Therefore, staff anticipates that the addition of this park, specifically, the wetland areas, aquatic plantings, interpretative signs, and improvements or

removal of the existing building will not significantly impact the operating budget, but as other parks and amenities are developed, additional staff and resources will ultimately be required in order to maintain current levels of care.

**VISION IMPACT:**

12.1 Goal: A variety of attractive, well-maintained parks throughout Columbia-including neighborhood parks, regional parks, nature parks, and urban parks-will ensure all residents have access to a full range of outdoor and indoor recreational opportunities.

Implementation task #40: Fund and complete capital improvement program projects (parks).

**SUGGESTED COUNCIL ACTIONS:**

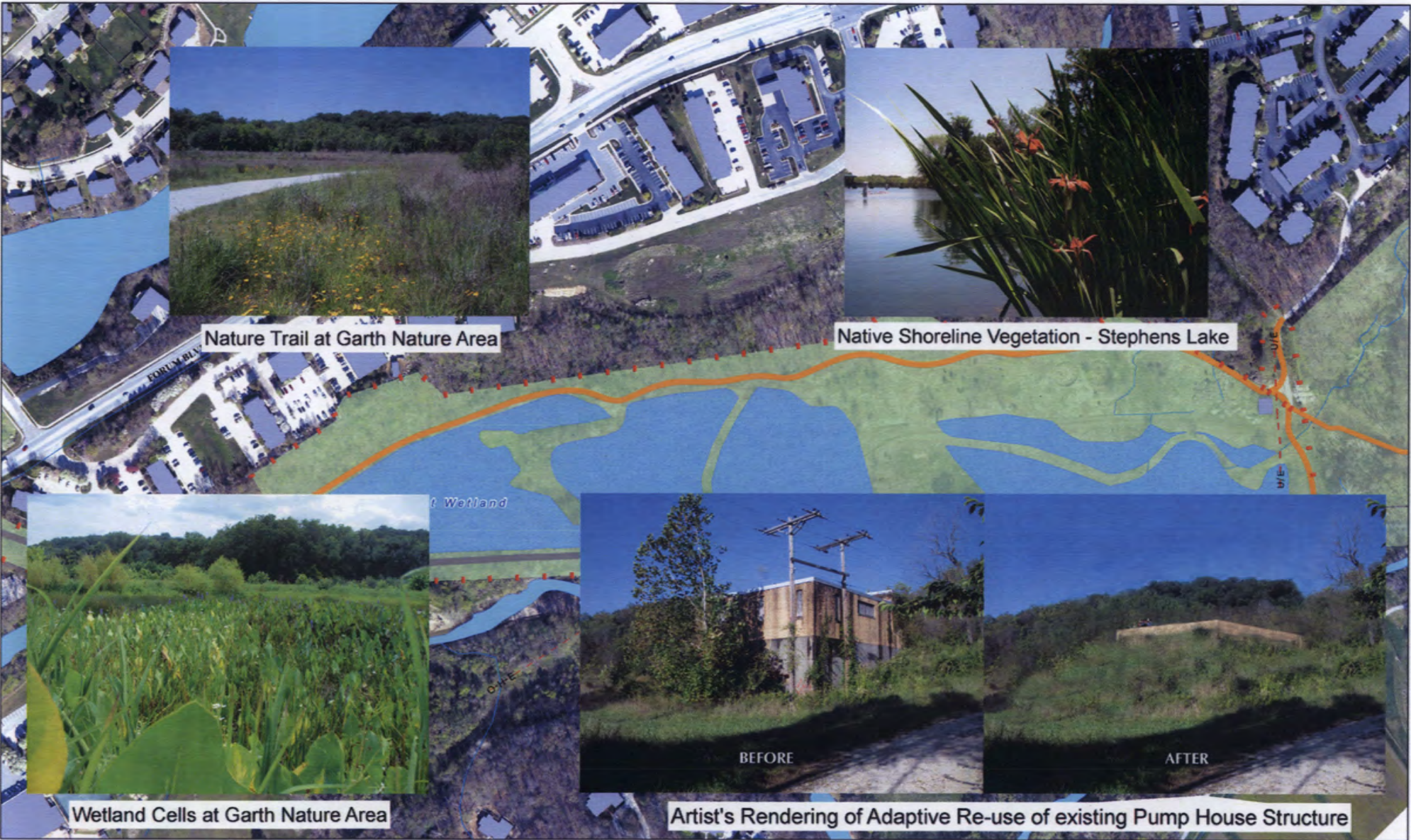
Approve the resolution setting a public hearing for the proposed project. Following the public hearing, approve the ordinance authorizing the project to proceed.



Preliminary Schematic - 3M Urban Ecology Restoration Project

0 90 180 360 540 720 Feet  
1 inch = 100.01 feet





Nature Trail at Garth Nature Area

Native Shoreline Vegetation - Stephens Lake

Wetland

Wetland Cells at Garth Nature Area

Artist's Rendering of Adaptive Re-use of existing Pump House Structure



Preliminary Schematic - 3M Urban Ecology Restoration Project

