TO: Michael C. Van Milligen, City Manager
FROM: Gus Psihoyos, City Engineer
SUBJECT: Lower Bee Branch Creek Floating Island Project
        CIP# 7201654, PROJECT# 4X0003
DATE: April 10, 2017

INTRODUCTION

The purpose of this memo is to seek approval of the plans, specifications, form of contract and the estimated cost for the Lower Bee Branch Creek Floating Island Project.

BACKGROUND

In October of 2010 the City Council passed Resolution 390-10 authorizing an application for Vision Iowa River Enhancement Community Attraction and Tourism (RECAT) grant funding specifically for amenities associated with the Bee Branch Creek Restoration Project. One of the amenities included is to construct a floating island in conjunction with the construction of the Bee Branch Creek Restoration Project.

In April of 2011 the City Council passed Resolution 114-11 approving and authorizing the execution of the RECAT Grant Agreement.

DISCUSSION

The RECAT grant application and grant agreement include funding for a floating island to be constructed as part of the Bee Branch Creek Restoration Project, located within the 16th Street Detention Basin.

The proposed floating island system is a form of a wetland which will "bio-mimic" natural floating wetland systems invented by Nature. Vegetated with native plants, it is a beautiful, natural and sustainable eco-system which provides many benefits, from habitat restoration to water cleansing.

When a floating island is launched, a whole diverse eco-system is created which attracts life in all its forms, from microbes to nymphs, to butterflies, to fish, birds.... all
the way up the food chain. Figure 1 shows the multitude of benefits provided by floating island systems.

**Genuine BioHaven® Floating Island**

![Floating Island Diagram]

*Figure 1. Benefits of a floating island system.*

The proposed floating island system consists of fourteen floating islands that vary in size from 70 square feet to 300 square feet in area. The total combined island area is 2,660 square feet. The islands will be assembled, planted with native wetland plants, launched, and anchored to the bottom of the Lower Bee Branch Creek and 16th Street Detention Basin.

**PROJECT SCHEDULE**

The schedule for the project is as follows:

- Initiate Public Bidding Process: April 3, 2017
- Publish Notice to Bidders, Advertise for Bids: April 7, 2017
- Publish Public Hearing Notice on Plans & Specs: April 7, 2017
- Public Hearing on Plans & Specifications: April 17, 2017
- Receipt of Bids (Bid Letting): April 20, 2017
- Award Construction Contract: May 1, 2017
- Final Project Completion Date: September 1, 2017

**RECOMMENDATION**

I recommend approval of the plans, specifications, form of contract and the estimated cost for the Lower Bee Branch Creek Floating Island Project (Project).
**BUDGET IMPACT**

The estimate of probable costs for the Lower Bee Branch Creek Floating Island Project is as follows:

- **Construction** $182,900.00
- **Contingency (10%)** 18,290.00
- **Engineering** 30,500.00
- **Total Project Cost** $231,690.00

The funding summary is as follows:

<table>
<thead>
<tr>
<th>CIP No.</th>
<th>Fund Description</th>
<th>Fund Amount</th>
</tr>
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<tbody>
<tr>
<td>7201654</td>
<td>Bee Branch Creek Restoration Project</td>
<td>$231,690.00</td>
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<tr>
<td></td>
<td>Vision Iowa RECAT Grant Funding</td>
<td>$46,000.00</td>
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<tr>
<td></td>
<td>State Revolving Loan Fund Proceeds</td>
<td>$185,690.00</td>
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</table>

**ACTION TO BE TAKEN**

I respectfully request adoption of the attached resolution approving the plans, specifications, form of contract and the estimated cost for the Lower Bee Branch Creek Floating Island Project.

Prepared by Deron Muehring

cc: Crenna Brumwell, City Attorney  
    Jenny Larson, Budget Director  
    Alexis Steger, Senior Budget Analyst  
    Steve Sampson Brown, Project Manager  
    Deron Muehring, Civil Engineer