



**TO:** Michael C. Van Milligen, City Manager  
**FROM:** Gus Psihoyos, City Engineer *MBK*  
**SUBJECT:** Upper Bee Branch Creek Restoration  
**DATE:** December 10, 2013

### **INTRODUCTION**

The purpose of this memo is to request a City Council work session on Monday, January 6, 2014 at 5:00 p.m. at the Historic Federal Building City Council Chamber to discuss design elements of the Upper Bee Branch Creek Restoration.

### **BACKGROUND**

The Drainage Basin Master Plan adopted in 2001 identified the recreation of an open waterway from the 16<sup>th</sup> Street Detention Basin to 24<sup>th</sup> and Washington Street as one of multiple improvements to address the flooding experienced within the Bee Branch Watershed. The open waterway improvements involve the removal of the buried Bee Branch storm sewer and replacing it with a creek and flood plain. This in effect results in the day-lighting of the buried Bee Branch creek that flowed through the area over a century ago.

In May of 2003, the City of Dubuque City Council approved the selection of CDM, a consulting engineering firm, to provide engineering and design services for the Bee Branch Creek Alignment Study. The study objectives were to:

- 1) Establish the optimum alignment for the proposed open waterway along its approximately 4,500-foot length (from 16th Street detention basin to 24th and Elm Streets) based on existing environmental, utility, social, and economic constraints;
- 2) Provide a preliminary design to a level that it establishes what the waterway will look like at different locations along its entire length and how the waterway will function before, during, and after rainstorms of different magnitudes; and
- 3) Work with impacted residents in the form of a citizen advisory committee, the Bee Branch Citizen Advisory Committee (BBCAC), to ensure that the recommended alignment location and waterway design are based on input from the neighborhoods impacted by the proposed open waterway.

The citizen committee's preferred alignment was chosen because it best met the top three criteria established by the committee: it preserved commercial and non-commercial services; it minimized residential property acquisitions; and it minimize the project cost.

In December of 2004, the City Council adopted the alignment preferred by the Bee Branch Citizen Advisory Committee and in 2005 the City began acquiring properties for the project based on the adopted alignment.

In August of 2008, the City Council authorized the hiring of Strand & Associates (Madison, WI), in association with IIW Engineers (Dubuque, IA) and Ken Saiki Design (Madison, WI), to prepare the final design of the Bee Branch Creek Restoration. As outlined in the scope of services, the consultant team utilized the engineering study previously performed and reported in the Bee Branch Creek Alignment Study to design the improvements of Bee Branch Creek Restoration. Input was to gather and utilize input from citizens as they crafted the design of the final landscaping plan for the project.

The City hosted a series of workshops to help gather citizen input. A press release was issued before each workshop and over 2,000 post cards were sent to targeted neighborhoods. At the first workshop held in October of 2008, citizens were asked to identify their hopes and fears for the project. In addition, they were asked to provide input on the various potential landscape features, bridges, and secondary uses (paths, park benches, playground equipment, etc.). At the second workshop in November of 2008 and again in January of 2009, the design team presented conceptual drawings that began to address the citizen's hopes and fears as well as their landscape preferences. And finally, at the third workshop in February of 2009, the design concept based on citizen direction was presented to the public for comment.

At the direction of the City Council, a committee was formed that along with City staff included representatives from the North End Neighborhood Association, the Point Neighborhood Association, and the now defunct Washington Street Neighborhood Association. The purpose of the Bee Branch Landscape Design Advisory Committee was to facilitate the development of a landscaping plan based on the input and direction of citizens, local businesses and in particular the implications and expectations of the neighborhood associations. In conjunction with the public workshops, the committee reviewed input gathered, discussed landscape design issues as they impact/relate to individual committee members and the neighborhood or department they represented, and advised the design consulting team on various landscape elements.

## **DISCUSSION**

On January 6, 2009 the landscape design for the Bee Branch Creek Restoration was discussed at a City Council work session. The overall concept for the Bee Branch corridor in 2009 is shown in Attachment A. The recommendations center on the "day-lighting" of the buried Bee Branch Creek thereby creating an attraction, enhancing the neighborhoods, and improving the quality of life of Bee Branch Watershed residents. To

the extent feasible, citizen input and preferences have been incorporated into the project design.

To be constructed in multiple phases, construction of the first phase, the Lower Bee Branch Creek Restoration, started in late 2010. The Lower Bee Branch Creek Restoration includes the construction of the 2,500-foot long creek and flood plain area from Kerper Boulevard west and north to the railroad tracks just south of Garfield Avenue, replacing the underground Bee Branch Storm Sewer. In addition to day-lighting and restoring the Bee Branch Creek, this phase includes the restoration of the floodplain, dredging of the 16<sup>th</sup> Street Detention Basin, relocation of utilities, and reworking the street system through the area to accommodate the flood mitigation facility and the redevelopment of adjacent private property. Creek day-lighting requires the construction of bridges, maintenance access to the creek, hike/bike trails, safety and security measures, re-landscaping the area, recreational components and overlook areas for better monitoring of the creek.

Because the Lower Bee Branch Creek Restoration was located in an area transitioning from industrial (former packing plant) to a commercial land-use, the design outlined a permanent, wide expanse of water which will enhance the commercial setting. The project included a hiking/biking path along the waterway. The design of the two bridges reflected citizen preferences voiced at the public workshops: limestone facade and spindle railing look.

The next phase of the Bee Branch Creek Restoration, the Upper Bee Branch Creek Restoration, is to be done in multiple parts. The first part involves the installation of large-diameter culverts under the Canadian Pacific (CP) Railroad yard and Garfield Avenue. It also includes property acquisitions (both partial and full), roadway reconfigurations, construction of bridge crossings and an outfall at 24<sup>th</sup> Street where the existing Bee Branch storm sewer will remain albeit in a re-aligned configuration. The second part will involve the day-lighting of the creek north to 24<sup>th</sup> Street.

The City of Dubuque has been fortunate to secure local, state, and federal financial assistance for many of the project elements.

### **RECOMMENDATION**

I recommend a City Council work session on Monday, January 6, 2014 at 5:00 p.m. at the Historic Federal Building City Council Chamber to discuss the design elements of the Upper Bee Branch Creek Restoration Project.

### **ACTION REQUESTED**

I respectfully request a City Council work session on Monday, January 6, 2014 at 5:00 p.m. at the Historic Federal Building City Council Chamber to discuss the design elements of the Upper Bee Branch Creek Restoration Project.

Attach.

Prepared by Deron Muehring

cc: Barry Lindahl, City Attorney

Laura Carstens, Planning Services Manager

Don Vogt, Public Works Director

Marie Ware, Leisure Services Manager

Deron Muehring, Civil Engineer