



**TO:** The Honorable Mayor and City Council Members

**FROM:** Michael C. Van Milligen, City Manager

**SUBJECT:** Upper Bee Branch Creek Railroad Culverts Project, Award Contract [CIPs 2642769, 7202769, and 3402769]

**DATE:** February 13, 2019

Sealed bids were received for the Upper Bee Branch Creek Railroad Culverts Project. City Engineer Gus Psihoyos recommends award of the construction contract to the low bidder, Tricon General Construction, Inc., in the base bid amount of \$25,900,000, which is 1.24% over the engineer's estimate of \$25,582,982.

The recommendation outlines a plan that will allow the contract to be awarded and the project to proceed without increasing planned debt for the project and without increasing previously adopted stormwater utility rates. The recommendation will, however, require rescheduling other phases of the overall Bee Branch Watershed Flood Mitigation Project because it includes shifting funding for other phases of the overall watershed project to this phase.

Since 1999 there has been six Presidential Disaster Declarations which included the Bee Branch Creek Watershed. The Drainage Basin Master Plan was completed and adopted by the City Council in 2001. Based on a subsequent study in 2009 by the Federal Emergency Management Agency (FEMA), there are 1,373 properties in the flood prone area. In addition to homes, there are over 70 businesses in the at-risk area with over \$500 million in annual sales. The flood prone area in the Bee Branch Watershed encompasses historic neighborhoods offering some of the community's most affordable workforce housing. Most residents are working families, many are elderly -- those least likely to recover from repetitive flood loss. Repetitive flood damage leads to disinvestment; from 2004 to 2009, while commercial property values grew by 39% citywide, they fell by 6% in the Bee Branch Watershed flood prone area.

Since 2001, the City has implemented many of the improvements outlined in the Drainage Basin Master Plan. But since 2001 several intense, storm events have occurred in the Dubuque metropolitan area so that revisiting the predicted hydrology and hydraulic behavior of the Bee Branch Watershed was appropriate. Over a twelve-year period starting in 1999, there have been three 100-year storms, two 50-year storms, one 25-year storm, and one 10-year storm. Finally, it is important to consider how additional flood mitigation efforts undertaken by the City since 2001 fit with the

overall effort to mitigate flooding. Therefore, work began to update/amend the Drainage Basin Master Plan.

On November 18, 2013 the City Council passed Resolution 335-13 adopting the 2013 Drainage Basin Master Plan Amendment. The 2013 Amendment did not replace the 2001 Drainage Basin Master Plan. Instead, it built upon its foundation. The amended Drainage Basin Master Plan outlined several improvements throughout the Bee Branch watershed to mitigate the effects of future flooding and disasters. Collectively, the improvements form the basis of the Bee Branch Watershed Flood Mitigation Project outlined below:

#### **Twelve phases of the Bee Branch Watershed Flood Mitigation Project**

Phase	Description	
1	Carter Road Detention Basin	Complete
2	West 32 <sup>nd</sup> Street Detention Basin	Complete
3	Historic Millwork District	Complete
4	Lower Bee Branch Creek Restoration	Complete
5	Flood Mitigation Gate Replacement	
6	Impervious Surface Reduction (Green Alleys)	
7	Upper Bee Branch Creek Restoration, including the Upper Bee Branch Creek Railroad Culverts Project	
8	22 <sup>nd</sup> Street Storm Sewer Improvements	
9	Flood Mitigation Maintenance Facility	
10	North End Storm Sewer Improvements	
11	Water Plant Flood Protection	
12	17 <sup>th</sup> Street Storm Sewer Improvements	

The City of Dubuque has received approximately \$160 million in grants to help fund the \$219 million Bee Branch Watershed Flood Mitigation Project. The Project will prevent an estimated \$582 million in damages over the 100-year design life of the project. Due to the contributions of local, state, and federal funding partners, Dubuque citizens will see a return on their investment of more than \$8 for each \$1 spent. The Bee Branch Watershed Flood Mitigation Project represents a multi - phased, fiscally responsible investment. It reflects a holistic approach to mitigate flooding as it will also improve water quality, stimulate investment, and enhance the quality of life of watershed residents.

On December 4, 2013, the Iowa Flood Mitigation Board voted to approve the City's use of \$98,494,178 for the Bee Branch Watershed Flood Mitigation Project. On February 3, 2014 the City Council adopted Resolution 31-14 authorizing the execution of an agreement with the State of Iowa Flood Mitigation Board and authorizing the City's use of sales tax increment funding for the Bee Branch Watershed Flood Mitigation Project. A great deal of the debt the City of Dubuque has incurred is for implementation of this flood mitigation plan. The state grant funding and the subsequent debt issuances allow much of the protection to be provided over the next six years, instead of over the next 20 years (only some of the 240 alleys will take up to 20 years).

On March 5, 2014 the City Council passed Ordinance 16-14 establishing the stormwater utility fee rate structure necessary to fund the various phases and improvements associated with the Bee Branch Watershed Flood Mitigation Project.

#### **Current Stormwater Utility Rates**

	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22 & Beyond
<b>Current Rates</b> Per Ordinance 16-14	\$5.98	\$6.38	\$6.81	\$7.27	\$7.76	\$8.29	\$8.85	\$9.00

In December of 2004, the City Council adopted the alignment for the Bee Branch Creek Restoration Project based on the work and recommendation of the Bee Branch Citizen Advisory Committee. The adopted alignment crossed the railroad yard at 506 Garfield Avenue now owned by Canadian Pacific.

Completed through multiple contracts, again due to funding in 2015, the City proceeded with the construction of the Upper Bee Branch Creek Restoration Project. In May of 2015, the City Council awarded the contract for the Upper Bee Branch Creek – Channel, Streets, & Utilities Project. In May of 2015, the City Council awarded the contract for the Upper Bee Branch Creek – Structures Project. In October of 2015, the City Council awarded the contract for the Upper Bee Branch Creek Mississippi River Trail Project, the third contract associated with the Upper Bee Branch Creek Restoration Project. In December of 2015, the City Council awarded the contract for the Bee Branch Creek Basin Overlook & 22<sup>nd</sup> Street Parking Lot Project, the fourth and final contract associated with the Upper Bee Branch Creek Restoration Project. The improvements were substantially complete by July of 2017.

In January 2016, the State was awarded \$95.7 million in HUD National Disaster Resiliency Competition grant funds. Per the award, the City of Dubuque is to receive \$8.4 million for a comprehensive “Bee Branch Healthy Homes Resiliency Program” to help residents address residual impacts from the flooding experienced within the Bee Branch Watershed. The City is also to receive \$23.1 million for storm water infrastructure improvements associated with the Bee Branch Watershed Flood Mitigation Project. The infrastructure improvements included the (Upper) Bee Branch Railroad Culvert Infrastructure Improvements through Canadian Pacific property at 506 Garfield Avenue.

With the \$8.4 million Bee Branch Healthy Homes Resiliency Program grant, this is the first time the City has been able to help property owners repair their flood damage in any significant way. The City currently has accepted over 550 applications and approved 213 of them. Of those 213 applications that have been approved, 61 units have received resiliency work and are completed. Another 28 units are currently being

worked on and an additional 11 units that are out for bid. Almost \$2.5 million has been spent so far on these projects.

In addition to this work that has been done, the Home Advocacy Program, led by the Visiting Nurses Association (VNA) has reached out to all of the tenants of these units. Not only has the VNA discussed the resiliency part of the program, but the VNA has also shared expertise on the following subjects: Education, Child Care, Health, Financial and many more areas of concern. They want these tenants to know that there are resources available to them, upon request, for any and all of their concerns.

In October of 2016, the City Council adopted Resolution 362-16 authorizing the execution of a contract with the Iowa Economic Development Authority (IEDA) in order for the City to utilize \$23.3 million in HUD National Disaster Resiliency Competition grant funds for the Bee Branch Watershed Flood Mitigation Project with \$9,000,000 specifically for the proposed culverts from the Lower Bee Branch Creek, through Canadian Pacific Railway property, to the Upper Bee Branch north of Garfield Avenue. This phase of the Bee Branch Creek Restoration Project is also referred to as the Bee Branch Railroad Culvert Infrastructure Improvements Project. The contract with IEDA requires that the City complete all of the improvements by June of 2021.

In December of 2018, the City Council adopted Resolution 385-18, authorizing the execution of a Construction Agreement and an Environmental Right of Access Agreement with Canadian Pacific Railway.

The Upper Bee Branch Creek Railroad Culverts Project (Project) represents the final contract associated with the Bee Branch Creek Restoration Project (Phase 4 & 7 of the Bee Branch Watershed Flood Mitigation Project). The improvements will allow for the efficient flow of floodwaters from the recently completed upper Bee Branch Creek improvements, through the railroad yard on Garfield Avenue, to the lower Bee Branch Creek.

Project elements include the installation of six, 8-foot diameter culverts under the railroad tracks using tunneling methods. In addition to other elements, the design will allow the existing box culverts to serve dual functions: flood control and as a hike/bike path under the railroad tracks.

On February 5, 2019, the City received five bids for the Upper Bee Branch Creek Railroad Culverts Project. Tricon General Construction, Inc. submitted the low base bid of \$25,900,000.00, which is 1.24% over the engineer's estimate of \$25,582,982. In addition to the base bid, there were alternate bid items.

In conjunction with the preparation of the Fiscal Year 2020 Budget, the funding plan and schedule of the various phases of Bee Branch Watershed Flood Mitigation Project were considered. The construction contract budget for the Upper Bee Branch Creek Railroad Culverts Project was set to match the engineer's base bid estimate of \$25,582,982.00. The construction contingency budget to be used to cover unexpected work that might

arise during construction was set to be \$1,279,149.00 (5% of the construction contract budget). Because the low base bid received is \$317,018.00 more than the proposed budget, there isn't funding within the budget to do the additional work outlined in the alternate bid items. But as the project proceeds toward completion, and the need for the contingency funding is better understood, it may be possible to re-bid the alternate bid item improvements and construct them with contingency savings. The City will also continue to look for grant funding assistance to help cover the cost of the alternate bid item improvements.

In order to award the base bid construction contract and cover the \$317,018.00 shortfall, the recommendation is to adjust the funding and schedule of other phases of the overall Bee Branch Watershed Flood Mitigation Project versus increasing the planned debt for the project or increasing previously adopted stormwater utility rates.

While the final completion date for the Upper Bee Branch Creek Railroad Culverts Project is June 30, 2021, it is expected that the system will begin to provide flood mitigation benefits by the end of 2020.

The estimate of probable cost for Upper Bee Branch Creek Railroad Culverts Project is as follows:

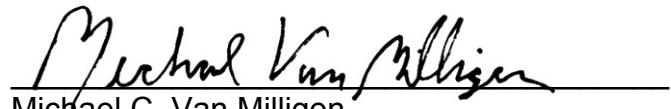
<b>BID</b>	
Construction	\$25,900,000.00
Contingency (~5%)	1,279,149.00
Property Acquisitions	410,000.00
Engineering	3,596,200.00
<b>Total Project Cost</b>	<b>\$31,185,349.00</b>

The proposed project funding is summarized as follows:

<b>Funding Source</b>	<b>Amount</b>
HUD CDBG NDR Grant	\$12,559,703
U.S. EPA Clean Water SRF Loan	16,300,000
State Sales Tax Increment Funding	1,279,149
State Sales Tax Increment Bond	1,046,497
<b>Total</b>	<b>\$31,185,349</b>

City Engineer Gus Psihoyos recommends adoption of the attached resolution awarding the construction contract for the Upper Bee Branch Creek Railroad Culverts Project to Tricon General Construction, Inc. in the base bid amount of \$25,900,000.00 and modifying the construction schedule of improvements associated with the Bee Branch Watershed Flood Mitigation Plan outlined herein so that awarding the contract for the Upper Bee Branch Creek Railroad Culverts Project can be done without increasing planned debt and without increasing previously adopted Stormwater Utility rates.

I concur with the recommendation and respectfully request Mayor and City Council approval.



Michael C. Van Milligen

MCVM:jh

Attachment

cc: Crenna Brumwell, City Attorney  
Barry Lindahl, City Attorney  
Teri Goodman, Assistant City Manager  
Cori Burbach, Assistant City Manager  
Jennifer Larson, Budget Director  
Gus Psihoyos, City Engineer  
John Klostermann, Public Works Director  
Jean Nachtman, Finance Director  
Randy Gehl, Public Information Officer  
Randy Peck, Personnel Manager  
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Steve Sampson-Brown, Project Manager