

**INFRASTRUCTURE COMMITTEE**  
**Monday, January 4, 2016**  
**City Hall Council Chambers**  
*Immediately Following Government Operations*

**Agenda- REVISED**

- 1. Bangor Land Trust Donation for Bangor Trails V (Sylvan Rd to Stillwater Ave)**  
(Council Resolve, Council Action and a Memo Provided by City Engineer, John Theriault Attached)
  
- 2. Capehart Phase II 319 Grant**  
(Memo Provided by City Engineer, John Theriault Attached)
  
- 3. Discussion: Waste Water Treatment Plant Upgrades**  
(Memo Provided by Waste Water Treatment Plant Director, Andy Rudzinski Attached)
  
- 4. Maine DOT Bridge Maintenance Projects in Bangor in 2016**  
(Memo Provided by City Engineer, John Theriault Attached)

To: Infrastructure Committee  
From: Engineering Department  
Date: December 22, 2015  
Re: Bangor Land Trust Donation for Trail V (Sylvan Road to Stillwater Avenue)

The Bangor Land Trust wishes to donate \$22,000.00 to the City of Bangor to fund the final design of Trail V. This money was provided to the Bangor Land Trust through grants from the Elmina B. Sewall Foundation and the Stephen and Tabitha King Foundation. The purpose of these grants is to help with the design and construction of the proposed trail.

Trail V, as currently proposed in its preliminary design phase, is a 12 foot wide paved multi-use trail that begins at the end of Sylvan Road and follows alongside the north bound off ramp of Exit 186 of I-95 and terminates at Stillwater Avenue. The trail stays within the right of way of the ramp except at its northerly end near Sylvan Road where it lies on Eastern Maine Community College (EMCC) property. The total length of the proposed multi-use trail is approximately 2,300 feet (0.44 miles).

The Engineering Department's role with this project is to provide project management services to facilitate the design process between the Bangor Land Trust and their consultant, Woodard & Curran.

The Engineering Department has discussed the proposed Trail V project with the Maine Department of Transportation and have been told that the proposed trail has been approved for funding once MaineDOT themselves have been allocated the funding. MaineDOT anticipates that the trail may receive funding as soon as 2017. The funding for construction of the trail will require a 20 percent local match to secure the MaineDOT funds. The preliminary probable construction cost of the project is approximately \$650,000.

The Engineering Department requests that the City Council allow the City to accept this generous donation to go towards the final design of this important project.

---

**COUNCIL ACTION**

---

**Item No. 15-**

**Date:** January 11, 2016

**Item/Subject:** RESOLVE, Authorizing the City Manager to Accept and Appropriate \$22,000 from the Bangor Land Trust for Trail V Design

**Responsible Department:** Engineering

---

**Commentary:** The Bangor Land Trust wishes to donate \$22,000.00 to the City of Bangor to fund the final design of Trail V. This money was provided to the Bangor Land Trust through grants from the Elmina B. Sewall Foundation and the Stephen and Tabitha King Foundation. The purpose of these grants is to help with the design and construction of the proposed trail.

This Resolve would accept the donation and has been reviewed and approved by the Infrastructure Committee on December 29, 2015.

\_\_\_\_\_  
John M. Theriault

Department Head

---

**Manager's Comments:**

\_\_\_\_\_  
City Manager

---

**Associated Information:** Resolve, Memo

---

**Budget Approval:**

\_\_\_\_\_  
Finance Director

---

**Legal Approval:**

\_\_\_\_\_  
City Solicitor

---

**Introduced for**

- Passage
- First Reading
- Referral



Assigned to Councilor

## CITY OF BANGOR

---

**(TITLE.) Resolve , Authorizing the City Manager to Accept and Appropriate \$22,000 from the Bangor Land Trust for Trail V Design**

*By the City Council of the City of Bangor:*

***RESOLVED***

that the City Manager is hereby authorized to Accept & Appropriate donations in the amount of \$22,000 from The Bangor Land Trust for Trail V Design.

To: Infrastructure Committee  
From: John Theriault, City Engineer  
Date: December 23, 2015  
Re: Capehart Phase II 319 Grant Memo

When the City first submitted the original proposal (under Chapter 319 of the Clean Water Act) for the Capehart Phase II Restoration Project during the fall of 2014, the scope of work included installing 180 catch basin inserts and retrofitting the failing pond at the residential development known as Sunny Hollow (located on Ohio Street). The City sought and was awarded \$150,000.00 in 319 funds. This award was based on the City's in-kind labor match of \$75,000.00 and included donated labor from the Environmental Coordinator, the Engineering Department and Public Works. Most of the labor associated with the initial proposal came from donated labor to install the 180 catch basin filters into existing catch basins and time associated with designing a retrofit for the Sunny Hollow Pond. Public Works was going to perform the pond clean out and install the retrofit as well as provide any materials associated with the project.

By the time the Maine DEP started working with the City to develop the Capehart Phase II workplan once the grant was awarded, updates to the Capehart Brook Watershed Management Plan were being finalized by FB Environmental. The updated Capehart Brook Watershed Management Plan downplayed the efficacy of simple catch basin inserts as effective structural best management practices in a watershed. Instead of developing the workplan for the initial simple catch basin inserts, the City repurposed the proposal to include modified small catch basins that could accept two (2) specific filters for stormwater treatment. This chamber flow system used the modified catch basins outfitted to accept two specific filters capable of trapping hydrocarbons, metals, nutrients and suspended solids. Several compact bio-filtration/bioretenion devices were also proposed in workplan # 2. Because this newly proposed scope involved a great deal of excavation work, stormwater staff spoke to Brad Moore about providing a cash match instead of in-kind labor. This cash match removed a burdensome workload on Public Works. Mr. Moore had allocated storm water utility funds for work in this watershed and others and said that it would be possible to allocate \$100-125,000.00 for year 2016 and year 2017. The DEP and US EPA approved of the new workplan (2). The City put out RFPs for this grant work and received only one bid for the modified catch basins and the compact bio-filtration/bioretenion systems. The bidder was proposing proprietary systems from a company known as FABCO (catch basin inserts) and Focal Point (compact bio-filters/bioretenion systems). The City Engineering Department did not want to award the contract to the sole bidder because they were uncomfortable with potential maintenance costs and the fact that the products were of a proprietary nature. The City Engineer and stormwater staff suggested numerous bioretention systems as a new work plan.

The City set out developing the revised workplan # 3 and proposed twenty (20) bio-filters/bioretenion systems similar to large rain gardens. The Sunny Hollow Pond will also be retrofitted. This latest workplan incorporates the use of a total cash match of \$ 250,000.00. The funds are available in the stormwater utility account. Total project cost including the \$150,000.00 319 grant is estimated to be about \$400,000.00.

To: Infrastructure Committee  
From: Waste Water Treatment Plant, Andy Rudzinski  
Date: December 23, 2015  
Re: Necessary Upgrades to the Waste Water Treatment Plant

The Waste Water Treatment Plant (WTP) is scheduled to undergo much needed capital improvements in the 2016 building season. The contracted engineering firm, AECOM, has provided the City with preliminary cost estimates pertaining to three related projects:

The removal and replacement of the biofilter media that is well past the expected lifespan - \$4,237,000.

The Dissolved Oxygen control replacement needed due to aging and to allow significant electrical cost savings - \$472,000.

The replacement of controls for system allowing internal re-use of treated plant water - \$33,000

The total preliminary estimate is \$4,742,000. This is higher than previously discussed estimates due primarily to, I believe, the lack of inclusion in those discussions of costs beyond that of the replacement media. WWTP and City engineering personnel have met with AECOM to express our concerns and are currently negotiating details to reduce the estimated amounts. Amanda Soucier P.E. from the Engineering Department has directly conversed with DEP personnel administering State Revolving Fund (SRF) loans and has been encouraged to apply for more funding.

To: Infrastructure Committee  
From: Engineering Department  
Date: December 22, 2015  
Re: MaineDOT Bridge Maintenance Projects in Bangor for 2016

The Bangor City Engineer and the Public Works Director met with officials from the Maine Department of Transportation on Friday December 18, 2015 to discuss planned bridge maintenance projects in Bangor that are currently scheduled for late spring/early summer completion for the 2016 construction season.

MaineDOT currently has three bridge projects scheduled within the Bangor downtown area. The bridges included in this work are the Penobscot River Bridge, the Washington Street Bridge, and the Harlow Street Bridge.

The work included with each of these projects includes a mill of the existing bridge pavement and then adding a new pavement wearing course to each bridge. The Washington Street bridge work also includes replacement of a new bridge membrane prior to the placement of bridge pavement.

All of the work is to be completed at night with each of the bridges being closed to vehicular from 7:00 PM to 7:00 AM. Accommodations for pedestrian traffic will be provided throughout the construction both day and night.

The construction for each bridge is expected to only take a couple of evening to complete. MaineDOT will coordinate with the City of Bangor and the City of Brewer when selecting dates for construction such that they do not conflict with the major summertime events occurring within both City's.

# MAINEDOT SUMMER OF 2016 BRIDGE MAINTENANCE PROJECTS

