



Legislation Text

File #: 2015-2647, **Version:** 1

Consider a resolution authorizing the Mayor to execute a Contract for Engineering Services with Kasberg, Patrick & Associates, LP for 2015 Street Drainage Assessment Work Authorization.

In 2014, City staff worked with Halff Associates, Inc. to complete a Stormwater Master Plan (SMP). Similar to the City's Water, Wastewater, and Transportation Master Plans, the SMP focuses on the major network of the City's drainage systems - the creeks, floodplains, and major detention areas. Typically, creek flooding is the most dangerous and effects a greater number of homes and infrastructure. The SMP developed a Capital Improvement Plan (CIP) based on the existing conditions for 65+ stream miles, the updated watershed models developed by UBCWCID, and historical observations.

As of January 2014, the estimated funding to address the majority of the City's creek drainage needs was approximately \$10 million. (The total did not include the costs for Lake Creek flood mitigation.) In April 2014, the drainage utility rate was increased to fund drainage CIP projects. The City's first drainage utility bond issuance generated just under \$8 million. Many of those CIP projects are under design and a couple smaller projects were completed this year. The remaining debt capacity in the current rate are tentatively reserved for the Lake Creek flood mitigation projects. Staff is optimistic that creative solutions, value engineering, and use of regional detention funds will allow for the completion of the originally estimated \$10 million in creek CIP projects with some funds remaining. As project budgets are revised down, the money is reallocated to future street drainage projects.

Street drainage issues (aka "front-door" flooding) are generally grouped into High and Low Hazard. High Hazard flooding occurs when floodwaters enter homes or businesses or when floodwaters make a major roadway or an emergency or school route impassable. Low Hazard flooding is nuisance flooding that inundates yards, enters garages, or that ponds in local roadways.

The City is recommending contracting with Kasberg, Patrick & Associates LP (KPA) to help assess High Hazard street drainage issues. The work will involve minimal drainage analysis to identify the problem scale, the most likely cause, a practical solution, and a high-level estimate. The High Hazard projects will then be prioritized considering the frequency and depth of flooding, number of structures effected, significance of the roadway impacted, the cost and complexity (e.g. permits, land acquisition) of the likely solution, etc.

KPA staff is experienced working in residential retrofit situations where resident engagement and creative solutions are vital. KPA will work alongside staff to develop the most practicable solutions to ensure that we able to improve as many drainage problems as possible giving funding limitations.

Cost: \$100,000.00

Source of Funds: 2014 Drainage Revenue Bonds

Staff recommends approval.

