



## MEMORANDUM

**To:** Mayor and City Council

**From:** Kent Collins, P.E., Director of Public Works

**Date:** June 12, 2018

**Reference:** Professional Engineering Services Agreement with Halff Associates for Phase II of an update to the City-Wide Storm Water Management and Rate Study (Conceptual Drainage Master Plan and Rate Study)

**2030:** Sustainable City Government, Goal 3  
Excellent and Well-maintained City Infrastructure and Facilities

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### General Information:

- This is Phase II of an update to the 1991 City-Wide Storm Water Management Study
- Phase I of the update was the Denton Creek Study
- This study has two broad objectives: provide a conceptual Storm Water Master Plan and develop a new storm water rate
- The current storm water rate was established in 2004 and funds the Municipal Drainage Utility District
- The conceptual plan will identify project needs
- Proposed rates will be based on project, capital and, potentially, contract or personnel needs

### Introduction:

This item is to consider approval to enter into a contract with Halff Associates to complete Phase II of the City-Wide Storm Water Management and Rate Study (Conceptual Drainage Master Plan and Rate Study) in the amount of \$268,300.00.

In May of 1989, the City experienced over 5.5 inches of rainfall during a 24-hour period. The result of the rainfall was flooding throughout Coppell. Rain continued into June 1989 creating even more flooding. Most of the creek flooding complaints were from residents along Grapevine Creek and its six tributaries. At the time there was very little development along the other creeks in town. In May of 1990, rain again caused flooding in portions of Coppell. The outcome of that flooding was the development and adoption of the City's 1991 City-Wide Storm Water Management Study.



The City has worked to complete the drainage projects identified in the 1991 study. However, with the development of the City over the last 25 years and recent significant rainfall events, and apparent changes in recurrence of heavy rainfall events, an update to the Coppell City-Wide Storm Water Management Study is needed. Phase I of the update is the Denton Creek Drainage Study which is in its final stages of completion. Phase II of the update will be this study, which will be a City-wide examination of the storm water system and identification of public projects in specific trouble locations.

In 2004, City Council adopted an ordinance to establish a schedule of drainage charges against property owners to fund the municipal Drainage Utility District (DUD). This was necessary to fund implementation of a Storm Water Management Plan (Coppell is considered a small Municipal Separate Storm Sewer System or MS4) to be in compliance with the requirements of the National and Texas Pollutant Discharge Elimination Systems (NPDES/TPDES). Coppell, as a small MS4, must update the Storm Water Management Plan periodically and will typically review the storm water charges as part of that update. This program ranges from public education to managing the illicit discharge ordinance to monitoring construction sites. Coppell has not amended the storm water fee since its original adoption. This study will include an analysis of the current rates to determine if they meet the needs of necessary storm water improvements and management plan.

#### **Analysis:**

This study has two broad objectives. One is to determine what drainage improvements are needed (needs assessment). The other is to develop a proposed drainage utility rate structure to meet those needs. The 1991 study identified projects throughout the city regardless of location on public or private property. The City's responsibility is to maintain the full width of creeks and streams if they are located on public property or within proper drainage easements. If a creek or stream is on private property, the City's responsibility is only to ensure and preserve conveyance of flow as part of the National Flood Insurance Program. Consequently, this update will only include projects that are on public property or within appropriate drainage easements. Maintaining conveyance is an ongoing maintenance activity. In addition to projects related to creeks and streams, there are specific subdivisions where the drainage systems (typically open ditch or undersized culverts) have silted in or lost their capacity. These areas will be analyzed in greater detail with this study. All of these projects and needs (creeks, streams, storm drains, neighborhoods, capital needs, etc.) will assist us in developing a drainage capital improvement plan.

The second part of this study will utilize the storm water needs assessment and benchmark data to develop a proposed rate structure. Currently, the rate is \$1 per residential household and commercial is based off of impervious acreage up to a max of \$75. This generates approximately \$230,000 annually. Coppell currently has one of the lowest drainage utility rates in the area. Staff would anticipate any proposed changes to be implemented incrementally over time. Willdan Financial Services along with the Jenkins Consulting Group will be sub-consultants to Halff Associates to perform the rate study. This is the same financial group that recently completed the utility rate study.

#### **Legal Review:**

No legal review required.

#### **Fiscal Impact:**

The fiscal impact of this Agenda item is \$268,300.00 as budgeted from the General Fund.



**Recommendation:**

The Public Works Department recommends approval of the agreement with Halff Associates.