



AGENDA ITEM SUMMARY FORM

MEETING DATE: October 22, 2024

PREPARED BY: Hector Renteria

AGENDA CONTENT: Drainage Updates

AGENDA ITEM SECTION: Regular Agenda

BUDGETED AMOUNT: N/A

FUNDS REQUESTED: N/A

FUND: N/A

EXECUTIVE SUMMARY: One of Public Works' functions is to maintain city owned drainage systems throughout the City of Angleton. Through the general fund the street/drainage operations are funded. This allows a crew of 7 employees to perform tasks of tree trimming, street sweeping, street maintenance, drainage maintenance, ROW maintenance, signage maintenance, Quiet Zone inspections/maintenance, and one employee dedicated to our fleet maintenance. Due to recent storms, there has been an increase in the number of concerns we receive about drainage maintenance, and drainage in general. There are currently 404 total drainage related work orders in our system. Of these 138 of them are pending, and the majority are for ditch maintenance. There are also many larger drainage projects that have been identified. These projects will require funding, design, bidding, and construction as they are larger than our current resources can accomplish.

Current Maintenance Activities: Our current ditch maintenance consists of 3-4 employees, our gradall, dump truck, Vactor truck, and grade equipment. Prior to beginning the project, the drainage crew will evaluate the area and capture grades to plan the project. One employee will indicate the grade the ditch is to be cut, while assisting the operator in continuing to stay on the correct grade. There is a gradall operator that cuts the ditches to grade and loads the spoils into the dump truck. The dump truck driver then must haul off the spoils to our site behind the Wastewater Treatment facility. The same employees will return after the ditch maintenance is completed with the Vactor truck to clear all culverts in the maintenance area. In areas where there is roadway traffic, an additional employee is needed for flagging during partial lane closures.

Current Maintenance Status: There is approximately 431,650 feet (82 miles) of city-owned, open ditch drainage to be maintained. There are also 67,774 feet (13 miles) of culverts to be maintained. Based on drainage maintenance projects that have occurred recently, it is found that our crew can average 250 to 300 feet of drainage maintenance in a single day. It could possibly take 1,438 to 1,726 days to complete all drainage maintenance.

Potential Changes:

- Increasing allocated resources to complete drainage maintenance more efficiently.
 - Will require purchase of gradall, dump truck, grading equipment, and hiring of 3-4 employees.
- Utilizing a contractor to complete drainage maintenance. Based on our quantities of open ditches and culverts it would be approximately \$6,070,387.50 for a contractor to perform all the maintenance.
- Funding source needs to be identified to begin a cyclical process on completing larger projects (e.g. Stormwater Fees)
- Continue current drainage maintenance procedures.

RECOMMENDATION: Staff would like guidance on what changes to explore, if any, to our current drainage maintenance.