

AGENDA ITEM SUMMARY FORM

MEETING DATE: 6/6/2022

PREPARED BY: John Peterson, HDR Project Manager

AGENDA CONTENT: Discussion on drainage projects in flood prone areas.

AGENDA ITEM SECTION: Drainage

BUDGETED AMOUNT: \$0 FUNDS REQUESTED: \$0

FUND: NA

EXECUTIVE SUMMARY:

The City of Angleton has Identified two large areas in the City that has flooding issues due to the fact of insufficient drainage. HDR has performed two full studies of the area and performed a complete XP_SWMM 2-D model to identify drainage solutions, potential routing option, off site detention to mitigate the impact to the receiving stream, and reductions in the flooding areas. These areas are as follows:

Chenango Drainage Project:

The Chenango Drainage are serves approximately 210 Acres in the downtown area. The existing drainage in the area is undersized and very shallow. During rain events the water is stored in the street gutter lines and then is slowly meter out through undersize drainage in the area. HDR evaluated three options to improve drainage in this area. Once presented to Council the Council selected Option #3 which will provide the greatest benefit. This option includes 5'x3' to 2-6'x5' Reinforced Box Culverts, inlets, highway 35 crossing, potential property acquisition, and new detention pond (6.6 Acre-ft). The Cost for these identified improvements is approximately \$15 million. See exhibit attached. A copy of the full report can be made available through Ms. Megan Mainer.

Downing Drainage Project:

The Downing Drainage serves approximately 585 Acres. The existing drainage in the area is undersized and very shallow. During rain events the water is stored in the street gutter lines and then is slowly meter out through undersize drainage in the area. Police have to barricade Downing off to stop cars from driving through the high water which would push wakes into people's houses. HDR evaluated three options to improve drainage in this area. Once presented to Council the Council selected Option #3 which will provide the greatest benefit. This option includes 3- 24" Reinforced concrete pipe to 2-5'x4" Reinforced Box Culverts, inlets, highway 35 crossing, potential property acquisition, and new detention pond (10.7 Acre-ft). The Cost for these

identified improvements is approximately \$15.5 million. See exhibit attached. A copy of the full report can be made available through Ms. Megan Mainer.

RECOMMENDATION:

Staff recommends ABLC review drainage projects on the CIP plan to consider funding as a future drainage project.