



Text File

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Title

Consider and take action on a resolution authorizing a professional services agreement with RPS Group for design work related to the Jarbo Bayou Watershed Drainage Study (DR2308B) in an amount not to exceed \$126,890 (Executive Director of Development Services)

..Background:

Approval of this resolution will authorize the City Manager to enter into an agreement with RPS Group (RPS) for a drainage study in the Jarbo Bayou Watershed in an amount not to exceed \$126,890.

The area for the Jarbo Bayou Watershed drainage study is limited to Jarbo Bayou to the north, Lawrence Rd to the east, Woodcock St at the south and Columbia Memorial Parkway at the west.

The Jarbo Bayou Watershed drainage study was added to the CIP because (1) residents and business owners in these areas experience street flooding during small storm events, (2) residents and business owners contacted the City asking for drainage relief, (3) Staff assessment of the drainage issues in these areas appear to be localized issues and not dependent on improvements to the larger applicable watersheds.

Staff has been working with RPS to develop the drainage study scope which can be broken down into 5 categories:

1. Project Management & Coordination - this category includes general project management, such as schedule, coordination meetings, quality control, monthly status report.
2. Data Collection - this category includes data collection by using available LiDAR, GIS data, and plan of record drawings of the area (As-Built), conducting one field visit, identify major outfall to Jarbo Bayou and League City Parkway
3. Topographic Survey - RPS will determine specific topographic survey needs of the follow but not limited key drainage infrastructure such cross section, flowline and size of culvert and ditches, bridge geometry and flowlines, spot check for roadway centerline.
4. Modelling and Analysis - this category will evaluate existing models to determine the existing flooding, create a ROM -2D model utilizing Atlas 14 rainfall data at 10-yr, 25-yr, 50-yr, and 100-yr frequencies, create maps and exhibits of flooding based on existing conditions, assess drainage capacity, and develop a Level of Service (LOS), identify and prioritize areas in need of improvement.
5. Drainage Report Study Report & Results Summary - this category will cover a report with a summary of existing conditions, identified problems area of flooding, ponding and undersized infrastructure and a recommended drainage improvements and prioritization with a preliminary opinion of probable construction cost (OPCC) for the recommended drainage improvements.

This drainage study is estimated to take 90 calendar days to complete.

Attachments:

1. Data Sheet
2. Proposed Resolution
3. PSA Jarbo Bayou Watershed Drainage Study
4. Aerial Map

CONTRACT ORIGINATION: Professional Services Agreement reviewed and approved by City Attorney's Office

FUNDING

Funds in the amount of \$126,890 are available from Fund 5015 with expenses charged to DR2308B-PLAN DESIGN-STUDY-TS CASH

STRATEGIC PLANNING

Addresses Strategic Planning Critical Success Factor #1 - Develop and Maintain our Infrastructure