



THE CITY OF KEY WEST

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EXECUTIVE SUMMARY

TO: Patti McLaughlin, Interim City Manager
Todd Stoughton, Interim Asst. City Manager

FROM: John Paul Castro, Utilities Director

DATE: July 7, 2021

SUBJECT: Approving Task Order 2-21 STM from Jacobs/CH2M Hill Engineers, Inc. for Phase II of the Stormwater Masterplan Update

Action Statement:

This is a request to approve a task order from Jacob's/CH2M Engineers, Inc. pursuant to general engineering contract resolution 17-207 and 20-142, for Phase II update of the 2012 Stormwater Masterplan in the amount of \$125,536.10.

Background:

In 2012 the City tasked CH2M Engineers to create a stormwater masterplan. The plan assessed the elevations of the city using lidar. The plan identified problem areas and created a roadmap of projects to alleviate flooding in order of importance and relative impact per construction cost.

Since 2012 the City has installed nearly \$27 million dollars' worth of infrastructure. Another \$10 million will go into the ground in the next 2 years budget cycles.

Phase I of the stormwater master plan was completed in early 2021. Phase I included task A, consolidating, and including all recently completed and proposed projects under development and task B, develop an updated ICPR computer flood model with included projects and develop a new list of subbasins with flooding problems.

Purpose and Justification:

Due to the amount of infrastructure now installed it is pertinent to update the masterplan for future use. The new projects will need to be taken off the plan but more importantly in phase II of the update the results of those successes can be run into the storm model to predict flooding more accurately.

With the issue of sea level rise increasing and elevation datums changing we cannot design new infrastructure projects without considering the level of future tides.

Key to the Caribbean – Average yearly temperature 77° F.

MEMORANDUM

Stormwater systems that work off head pressures will be more and more affected as the ground water elevation increases. Pump station capacities, pump requirements, and above ground utilities will all be affected by future sea level rise.

Phase II of the update will identify new projects to reduce flooding generated by rainfall and develop conceptual design and cost estimates for near term projects. A final report in the form of a new master plan will be delivered to the city.

Jacob's/CH2M Hill Engineers, Inc. has a general engineering contract with the city pursuant to resolution 17-207 which was renewed by resolution 20-142. CH2M Hill Engineers, Inc. name was changed to Jacob's Engineering by resolution 21-006.

Financial Impact:

The task order will be funded from stormwater/general admin/professional services account 402-3801-538-3100 which was budgeted at \$120,000.00. A budget transfer will be required for the balance of \$5,536.10.

Recommendation:

Staff recommends approving task order 2-21 STM from Jacob's/CH2M Engineers, Inc. for stormwater masterplan update, Phase II, pursuant to general engineering services resolution 17-207 and 20-142 in the amount of \$125,536.10