

RESOLUTION NO. 21-013

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF KEY WEST, FLORIDA, APPROVING A TASK ORDER FROM PEREZ ENGINEERING AND DEVELOPMENT, INC. IN THE AMOUNT OF \$445,410.00 FOR PROFESSIONAL ENGINEERING DESIGN AND TECHNICAL SERVICES FOR DRAINAGE IMPROVEMENTS AT HARRIS AVENUE AND 10th STREET (PROJECT ST38022102); AUTHORIZING ANY NECESSARY BUDGET TRANSFERS; AUTHORIZING THE CITY MANAGER TO EXECUTE ANY NECESSARY DOCUMENTS; PROVIDING FOR AN EFFECTIVE DATE

WHEREAS, in Resolution No. 17-207, the City Commission approved a contract with Perez Engineering and Development, Inc. for General Engineering Services and in Resolution 2-142 the contract was extended; and

WHEREAS, the City Commission accepted FEMA Phase I Hazard Mitigation Grant Program (HMGP) Funds for design of certain flood mitigation projects in an amount of up to \$662,450.00, with a 75% federal match, giving a maximum federal contribution for design of \$496,838.00; and

WHEREAS, this task order will provide new stormwater inlets and a retaining wall along the salt pond at the intersection of Harris Avenue and 10th Street to help prevent water from inundating city streets, presenting health hazards and damaging vehicles and property.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COMMISSION
OF THE CITY OF KEY WEST, FLORIDA AS FOLLOWS:

Section 1: That a Task Order for professional engineering design and technical services for drainage improvements at Harris Avenue and 10th Street Phase I Project (Project ST38022102) is hereby approved in an amount not to exceed \$445,410.00.

Section 2: That funding for this Task Order is budgeted in account Utilities/Stormwater/Construction in Progress Account 402-3802-538-6500 (Project ST38022102). FEMA HMGP grant funding at the rate of 75% of project cost has been approved. Any necessary budget transfers and adjustments are hereby authorized.

Section 3: That the City Manager is authorized to execute any necessary documents, upon the advice and consent of the City Attorney.

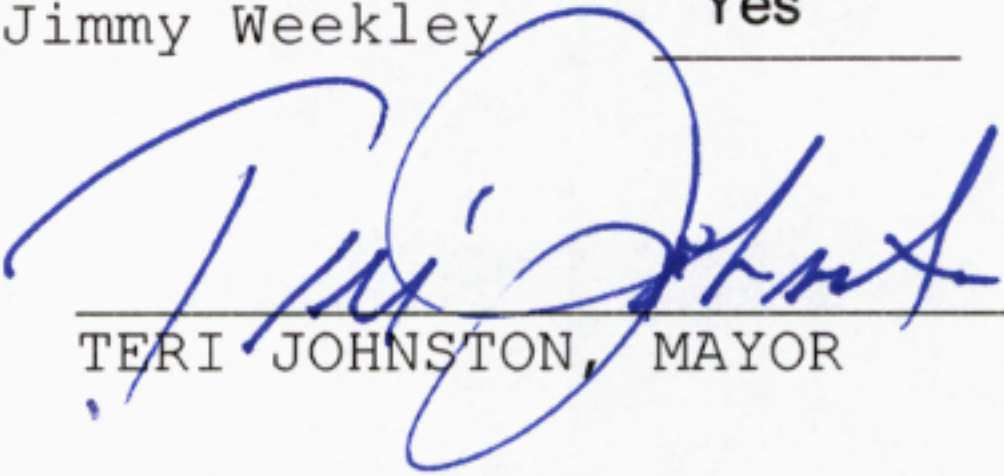
Section 4: That this Resolution shall go into effect immediately upon its passage and adoption and authentication by the signature of the Presiding Officer and the Clerk of the Commission.

Passed and adopted by the City Commission at a meeting held this 2nd day of February, 2021.

Authenticated by the Presiding Officer and Clerk of the Commission on 3rd day of February, 2021.

Filed with the Clerk on February 3, 2021.

Mayor Teri Johnston	<u>Yes</u>
Commissioner Gregory Davila	<u>Yes</u>
Commissioner Mary Lou Hoover	<u>Yes</u>
Commissioner Sam Kaufman	<u>Yes</u>
Commissioner Clayton Lopez	<u>Yes</u>
Commissioner Billy Wardlow	<u>Yes</u>
Commissioner Jimmy Weekley	<u>Yes</u>


TERI JOHNSTON, MAYOR

ATTEST:


CHERYL SMITH, CITY CLERK



THE CITY OF KEY WEST
Post Office Box 1409 Key West, FL 33041-1409 (305) 809-3700

EXECUTIVE SUMMARY

TO: Gregory W. Veliz, City Manager
Patti McLaughlin, Asst. City Manager

FROM: John Paul Castro, Utilities Director

DATE: January 4th, 2021

SUBJECT: Approving a General Engineering Task Order from Perez Engineering and Development, Inc. for the Design of Stormwater Improvements at Harris Avenue and 10th Street

Action Statement:

This is a request to approve a task order Perez Engineering and Development, Inc. for drainage improvements at Harris Ave. and 10th St. pursuant general engineering consulting resolution 17-207, extended by resolution 20-142, in the amount of \$445,410.00

Background:

In 2012 the city utilities department established the stormwater master plan. This plan took flood modeling across the city and used the data to create drainage projects to alleviate flooding. The projects were ranked by effectiveness and given projected costs.

Harris Ave. and 10th St. is a low laying area in mid-town that was high on the list of worthwhile drainage projects. After hurricane Irma, city staff applied for federal and state mandated grant programs for flood mitigation. The subject project ranked high enough to be awarded Phase I HMGP grant funding for design.

Purpose and Justification:

The project concept is to install at least 4 new stormwater inlets at the intersection of Harris Ave. and 10th St. that will outfall into the neighboring salt pond. Due to the low elevation of the street there will need to be a significant retaining wall built along the pond to keep tide water separate of stormwater. The outfall pipe will also need to include a tide valve.

Perez Engineering is the engineer for the City's tide valve project. Their staff has direct knowledge and experience with the tide's of the city's interior waterways, the

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

MEMORANDUM

needs of the storm system in conjunction with the tide levels, and has months of detailed data for the area. Due to the direct experience and data in hand Perez Engineering was chosen for the design.

The Phase I design grant was awarded for \$662,450 with a 75% federal match giving a maximum federal contribution for design of \$496,838.

Staff has reviewed the tasks and level of effort proposed by the engineer and considers the proposal fair and reasonable.

Financial Impact:

The funds for project ST38022102 are in account Utilities/Stormwater/Construction/Construction In Progress 402-3802-538-6500.

Recommendation:

Staff recommends approving the task order from Perez Engineering and Development, Inc. for the design of Harris Ave and 10th St. Stormwater improvements in the amount of \$445,410.00

PROPOSAL FOR PROFESSIONAL SERVICES

Task Order 20-09

Engineering Design and Technical Services

Harris Avenue and 10th Street Drainage

FEMA Hazard Mitigation Grant Program (HMGP) DR-4337-386-R

Prepared for

City of Key West Utilities Department

January 11, 2021



1010 Kennedy Drive, Suite 202

Key West, Florida 33040

305-293-9440

BACKGROUND AND OBJECTIVES

The purpose of this scope of work is to improve drainage of the Harris Avenue and 10th Street neighborhood in Key West, Florida. This will help protect structures and reduce loss of use of roads, business, and other associated response costs. The City has been awarded a Hazard Mitigation Grant (FEMA Project 4337-386-R) for Phase I of this project. The Phase I deliverables include, but are not limited to the following:

- Hydrologic and hydraulic studies.
- Construction plans and bid documents.
- Construction cost estimates.
- Color maps/photographs of the areas of ground disturbance.

This task order includes the following components pertaining to the storm water improvements including installation of storm inlets, storm pipes, tide valves, and a new outfall pipe to serve the neighborhood (approximately 12 intersections):

- Data Collection and Project management - Design,
- Land surveying,
- Final construction plans and specifications,
- Detailed construction cost estimate, and
- Hydrologic and hydraulic studies.

SCOPE OF WORK

TASK 1 – SITE EVALUATION, DATA COLLECTION AND SURVEY

- 1.1 Collect and review available as-built documents and drainage basin data describing the existing land use, drainage facilities, topography, utility atlas maps and utility record drawings.
- 1.2 Review the Storm Water Master Plan with City staff to identify the specific locations and limits of the proposed improvements.
- 1.3 Perform project area inspection to determine City drainage sub-basins and confirm existing physical conditions pertaining to current stormwater drainage elements, patterns and characteristics.

TASK 2 – HYDROLOGIC AND HYDRAULIC STUDIES

- 2.1 Prepare hydrologic/hydraulic evaluations identifying the losses before and after mitigation. (Protection against 25-yr storm event)
- 2.2 Demonstrate mitigation effectiveness by showing the physical locations and elevations of the structures/infrastructure.

- 2.3 Prepare color maps/photographs for historical preservation requirements and tribal consultation.

TASK 3 – PRELIMINARY PLANS

- 3.1 Prepare Preliminary Design documents consisting of final design criteria, preliminary drawings, outline specifications and written descriptions of the Project.
- 3.2 These drawings shall consist of a cover sheet, overall site plan/key map, site plans, and details. These drawings will be of presentation quality intended to reflect the final product.
- 3.3 Make available all design calculations and associated data.
- 3.4 Furnish five (5) copies of the Preliminary Design documents and present and review them with the City.
- 3.5 Upon receipt of complete written comments from all applicable CITY departments, we shall address the comments, provide the necessary revisions and prepare final drawings.

TASK 4 – FINAL PLANS

- 4.1 Prepare construction documents which shall include but not be limited to drawings and technical specifications, general and supplementary conditions, bid forms, invitations to bid, instructions to bidders, with technical criteria, descriptions and design data necessary for permitting by governmental authorities, and shall include any further adjustments in the scope or quality of the project or in the construction budget authorized by the City.
- 4.2 Use front end bid documents provided by the City including bidding forms, conditions of the contract, and form of AGREEMENT between the City and CONTRACTOR.
- 4.3 Make available all design calculations and associated Data.
- 4.4 Provide 100% complete contract documents for bidding purposes (hardcopies and electronic format).

TASK 5 – COST ESTIMATES

- 5.1 Prepare a detailed opinion of probable construction costs identifying quantities and their associated unit costs.

TASK 6 – ENVIRONMENTAL PERMITTING

- 6.1 Research and gather existing permit data. Review the general conditions and specific conditions of the existing permit(s).
- 6.2 Conduct pre-application meetings with SFWMD and ACOE to determine the most efficient permit/permit modification approach.
- 6.3 Prepare concept level permitting plans/exhibits and review them with the City.
- 6.4 Prepare and submit the appropriate permit applications to SFWMD and ACOE.
- 6.5 Follow up on the applications and respond to RAI's to obtain permit approval.

TASK 7 – BID PHASE SERVICES

- 7.1 We shall assist the City in obtaining bids or negotiated proposals, assist in awarding and preparing contracts for construction, attend pre-bid conferences, and prepare addenda.
- 7.2 We shall issue addenda as appropriate to interpret, clarify or expand the Bidding Documents.

DELIVERABLES

1. Task 2 Hydrologic/Hydraulic studies
2. Task 3 Preliminary Plans & Specifications
3. Task 4 Final Plans & Specifications
4. Task 5 Detailed Engineer's Opinion of Construction Costs
5. Task 6 SFWMD and ACOE permits/approvals
6. Task 7 Bid phase document clarification and contract addenda

ASSUMPTIONS

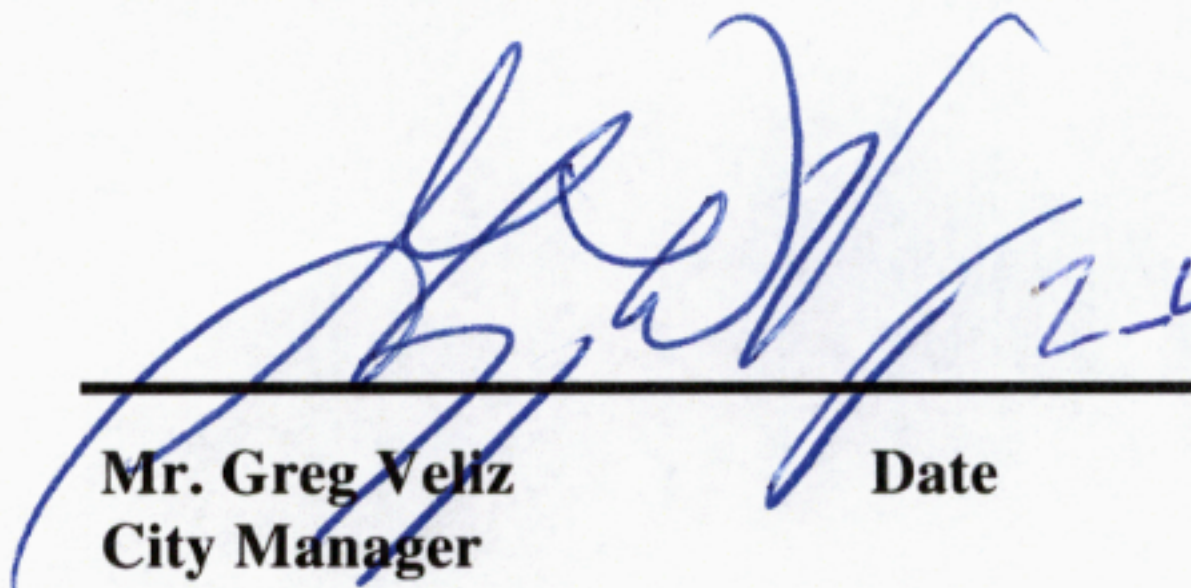
1. City will furnish all pertinent documents and site-specific data in its possession regarding the project area in a timely matter, including basin lines, topographic maps, storm sewer system maps, and related information.

COMPENSATION

The proposed total lump sum fee compensation for this scope of work is **\$445,410**. A summary of compensation per task is shown on the attached worksheet.

Task 1 – Site Evaluation and Data Collection	\$ 29,840
Task 2 – Hydrologic/hydraulic Studies	\$ 74,350
Task 3 – Preliminary Design	\$ 84,840
Task 4 – Final Design	\$105,920
Task 5 – Cost Estimate	\$ 23,070
Task 6 – Environmental Permitting	\$ 39,240
Task 7 – Bid Phase Services	\$ 10,150
Permit Fees*	\$ 8,000*
Survey*	<u>\$ 70,000*</u>
Total	\$445,410

*Permit Fees and Survey line items are not lump sum values, they will be billed as needed to cover the costs of each of these items.

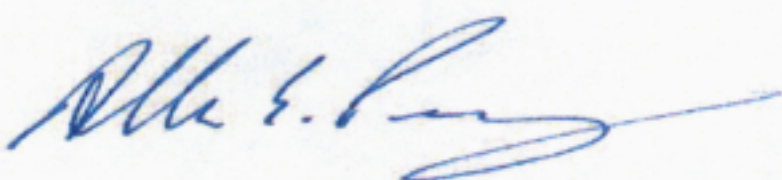


2-4-21

Mr. Greg Veliz

City Manager

Date



Allen E. Perez, P.E.

President

Date



KW 10th Street and Harris Avenue (HMGP) DR-4337-386-R

FEE SUMMARY

Summary of Billable Costs											
Sub-Task Description	Principal		Senior Engineer	Project Engineer	Senior CADD Designer	Clerical	Const. Inspector	Terramar		TOTAL HOURS	TOTAL BILLABLE COSTS
Hourly Rate	210.00	0.00	165.00	130.00	85.00	55.00	90.00	1.00	1.00		
A. Site Evaluation and Data Collection	44	0	0	80	120	0	0			244	\$29,840.00
B. Hydraulics and Hydrology	163	0	0	224	88	64	0			539	\$74,350.00
C. Preliminary Plans	80	0	0	288	360	0	0			728	\$84,840.00
D. Final Plans	112	0	0	320	480	0	0			912	\$105,920.00
E. Quantities and Cost Estimate	30	0	0	60	90	24	0			204	\$23,070.00
F. Environmental Permitting	56	0	0	96	72	16	0	8000		8240	\$39,240.00
G. Bid Phase Services	24	0	0	32	6	8	0			70	\$10,150.00
G. Permit Fees*									\$8,000		\$8,000.00
H. Survey Cost*									\$70,000		\$70,000.00
SUBTOTAL LABOR	509	0	0	1100	1216	112	0			10937	
TOTAL BILLABLE COSTS	\$106,890.00	\$0.00	\$0.00	\$143,000.00	\$103,360.00	\$6,160.00	\$0.00	\$0.00	\$78,000.00	\$437,410.00	\$445,410.00

*Permit Fees and Survey Cost are not lump sum fees. They will be billed as needed to cover the costs of each of these items.