

TASK ORDER No 11 - DESIGN SERVICES  
FLORIDA HOUSE BILL 53 20-YEAR WASTEWATER NEEDS ASSESSMENT  
CITY OF KEY WEST

**BACKGROUND**

On June 29, 2021 the governor of Florida approved the House Bill 53 titled “Public Works”. Among other items, the bill requires counties, municipalities and special needs districts that provide a stormwater management system or program or wastewater management service to develop a 20-year needs analysis. The analysis must be submitted to the Office of Economic and Demographic Research (OEDR).

The OEDR has advised utilities that the first submittal is not intended to include a detailed analysis of the system. Rather it is intended to obtain a better understand of the financial hurdles faced by utilities and campaign for increased federal funds. Subsequent submittals, which are required in 5-year increments, will likely require more detailed information. With that guidance in place, this scope of services focuses on completing the required forms provided by the OEDR and documenting the data sources for future submittals.

**INTRODUCTION**

Black & Veatch (CONSULTANT) has been requested by the CITY to provide a 20-year needs assessment of the wastewater system. This analysis will include:

- A detailed description of the facilities.
- Number of current and projected connections and residents served in 5-year increments for a 20-years planning horizon.
- The current and projected service area.
- The current and projected cost of providing services in 5-year increments.
- Estimated remaining useful life of each facility or its major components.
- Summary of 5-year history of annual contributions to, expenditures from, and balances of any capital account for maintenance or expansions of facilities.
- Plan to fund the maintenance or expansion of facilities including revenues, expenditures, and the plan to close the gap.

**SCOPE OF SERVICES**

**TASK SERIES 100 – PROJECT CONTROLS AND ASSESSMENT REPORT**

**Task 101 – Project Coordination**

Project coordination will encompass efforts required for project set-up, resource management, scheduling, invoicing, trend management, and other requirements needed to effectively and

efficiently complete the tasks described in this scope of services. Also, this task includes administration and management of project:

- Prepare project management documents including budget, drafting standards, and quality assurance and quality control.
- Monitor schedule and budget.
- Review progress with CITY on a regular basis.
- Discuss issues with the CITY as they are noted.

### **Task 102 – Project Kick Off**

CONSULTANT will conduct a project kick off meeting (virtual) to discuss project requirements, project schedule and review pertinent available data. CONSULTANT will prepare meeting minutes and will issue to the meeting attendees.

### **Task Series 102 Deliverables**

The following deliverables are included in Task Series 102:

- Project kickoff agenda and meeting minutes (via electronic delivery).

### **Task 103 – Needs Assessment**

- A. Data Request and Review: CONSULTANT will prepare and provide the CITY with a detailed data request. Once data is provided, the CONSULTANT will review the data and request any additional data or clarifications as needed. Data that will likely be needed includes the following:
- i. Geospatial Information System (GIS) geodatabases or shapefiles of the wastewater collection and transmission system
  - ii. Record Drawings of the wastewater treatment plant (WWTP) and the collection system
  - iii. Export of the CITY's billing system to confirm service connections
  - iv. Capital Improvement Plan (CIP\_
  - v. Exports from the CITY's financial system to summarize the annual contributions to, expenditures from, and balances of any capital account for maintenance or expansions of facilities
  - vi. Most recent utility rates assessment
- B. Service Connection Projections: The CITY does not anticipate significant growth moving into the future. However, the CONSULTANT will pull the latest University of Florida Bureau of Economic and Business Research (BEBR) data to confirm and ensure consistency.
- C. Remaining Useful Life Assessment: The CONSULTANT will use data collected on the collection system and WWTP to determine the remaining useful life of the system and major components of the WWTP. No field testing or condition assessments will be included with this assessment. The CONSULTANT will compare the asset age to the original useful life estimates for the collection system and WWTP major components (headworks, nutrient removal, etc.). Original

useful life estimates will be based on the CONSULTANT's experience, interviews with the CITY staff and industry research.

- D. Capital, Renewal and Replacement Planning: The CONSULTANT will use the remaining useful life estimates to prioritize renewal and replacement (R&R) planning. The CONSULTANT will then combine the R&R needs with the CITY's existing CIP to summarize the construction costs and projected expenditures in 5-year increments for the next 20-years.
- E. Capital Account for Maintenance and Expansion of Facilities Summary: CONSULTANT will review the CITY's financial exports to summarize the last 5-years of annual contributions to, expenditures from and balances of any capital account for maintenance or expansion of facilities including the collection system.
- F. Wastewater Funding Plan: Review the CITY's utility rates assessments to summarize the projected revenues and compare the revenues to the projected expenditures. Interview the CITY and summarize the plan to close the gap between the projected revenues and expenditures in 5-year increments for the next 20 years.

#### ***Task Series 103 Deliverables***

The following deliverables are included in Task Series 103:

- Project agenda and meeting minutes for client interviews / meetings (via electronic delivery).

#### **Task 104 – Assessment Report and OEDR Submittal**

- A. CONSULTANT will develop a draft assessment report summarizing all the analysis items listed under the INTRODUCTION section and the data sources used. The CONSULTANT will also provide a draft OEDR submittal for the CITY's review.
- B. CONSULTANT will conduct a review workshop with the CITY to review the comments on the draft assessment report and OEDR submittal. Based on discussions during the workshop, CONSULTANT will modify the draft report and draft submittal to include the comments.
- C. A final assessment report and OEDR submittal document will be submitted including the comments received during the draft assessment report workshop.

#### ***Task Series 104 Deliverables***

The following deliverables are included in Task Series 104:

- Draft assessment report & Draft OEDR submittal (via electronic delivery)
- Final assessment report & Final OEDR submittal (via electronic delivery)

**ASSUMPTIONS**

1. The CITY is not growing, and future capacity improvements are not needed
2. No hydraulic modeling will be required to respond to the OEDR requirements
3. No custom service life estimates will be calculated specific to the CITY’s environmental conditions. Service life estimates will be based on the CONSULTANT’s experience, interviews with the CITY staff and industry research
4. The CITY has recently completed a utility rates assessment which the CONSULTANT will reference. No new rate assessments will be completed.
5. Its is assumed the meetings and workshops will be held virtually and no site visits will be necessary

**BUDGET**

Tasks 100 as described in this scope of work document would have the following lump sum fees:

TASK SERIES	LUMP SUM FEES
Task 101 – Project Coordination	\$8,568
Task 102 – Project Kickoff	\$2,838
Task 103 – Needs Assessment	\$27,192
Task 104 – Assessment Report & OEDR Submittal	\$18,242
Direct Costs	\$150
<b>LUMP SUM TOTAL</b>	<b>\$56,990</b>

**CITY OF KEY WEST**

**BLACK & VEATCH CORPORATION**

By: \_\_\_\_\_

By: \_\_\_\_\_

By: \_\_\_\_\_

By: Rafael E. Frias III, P.E

(Print Name)

(Print Name)

Title: \_\_\_\_\_

Title: Associate Vice President

Date: \_\_\_\_\_

Date: \_\_\_\_\_