

# **Capital Improvement Plan Program Management Support Report**

## **Black & Veatch Work Order 3**

**May 27, 2022**



## Background and Overview

In 2020, the City approved the ranking of the respondents, authorized the City Manager to negotiate with and approved an Agreement for Black & Veatch Corporation ("B&V") to provide NMB Water with Program Management Support Services for a term of five years with the option for two one-year extensions. Work Order #1 was approved in August 2020 for term of six months. Thereafter, Work Order #2 was approved in January 2021 and is currently being used for the services provided to date. NMB Water now requires continued services under Work Order #3 to cover the provision of on-going staff augmentation services in support of the delivery of the City of North Miami Beach NMB Water Capital Improvement Plan (CIP).

The intent of the services is to provide specialized and experienced labor, expertise, resources needed to continue supporting NMB Water as it implements its CIP and builds up NMB Water's institutional capability and associated internal management and labor capacity. Services include Program Support, Pre-Construction/Design, Construction and Inspection for the following projects identified and approved under the City of North Miami Beach 5-year CIP.

### Water Capital Projects

Project	Estimated Total Investment Budget
Norwood WTP Improvements – Phase 2*	\$43,909,000
Eastern Shores Watermain System Rehabilitation*	\$15,036,000
Norwood WTP Electrical System Improvements	\$741,000
System-wide Transmission Watermains Replacement Program*	\$20,567,000
SCADA and Radio Telemetry System Upgrades	\$5,473,000
Honey Hill Watermain System Rehabilitation	\$1,394,000
Operations Center Pump Station Improvements	\$2,795,000
<b>Total</b>	<b>\$89,915,000</b>

*\*Multiple Projects*

### Wastewater Capital Projects

Project	Estimated Total Investment Budget
Wastewater Collection R/R Program*	\$2,500,000
Master Pump Station #4 Force Main Re-Routing	\$2,800,000
Wastewater Collection System Plan of Compliance	\$400,000
Cravero Force Main Replacement	\$780,000
Velda Farms Force Main Replacement	\$300,000
Corona del Mar Collection System – Phase 2	\$3,300,000
Bell Gardens Force Main Replacement	\$1,600,000
Washington Park Sewer Connection	\$1,900,000
NE 19 <sup>th</sup> Avenue Sewer	\$2,100,000
<b>Total</b>	<b>\$15,680,000</b>

*\*Multiple Projects*

The CIP Team has assisted NMB Water with advancing the CIP. Per the Contract and previously approved Work Orders, the CIP has progressed moving through the project phases (Planning, Pre-Construction/Design, Construction). In addition, the System-wide Transmission Watermains Replacement Program has identified a multitude of projects required to be completed through the planning process. The following table shows the growth and advancement of projects at the various stages for Work Order #2 and anticipated for Work Order #3.

Work Order	Planning	Pre-Construction/Design	Construction Procurement / Construction
Work Order #2	5	6	5
Work Order #3	15	13	10

### **CIP Management Team**

The CIP Team is comprised of high caliber experienced and qualified professionals with expertise in resolving challenges on similar CIPs and projects for other clients in Florida, the United States, and around the globe. Over the first two Work Orders world-class CIP-management systems and processes have been integrated for NMB Water. The team has maximum control to quickly ramp-up/ramp down any expertise needed. As already proven on multiple occasions, the CIP Team wears multiple hats, allowing to quickly pivot and absorb additional duties requested by NMB Water. A few examples are:

- Providing staff already engaged in the CIP to fill responsibilities of vacated NMB Water management positions.
- Providing inspections and field support to the NMB Water Operations and Maintenance team.
- Providing expertise to support and complete environmental reports required to obtain additional funding.

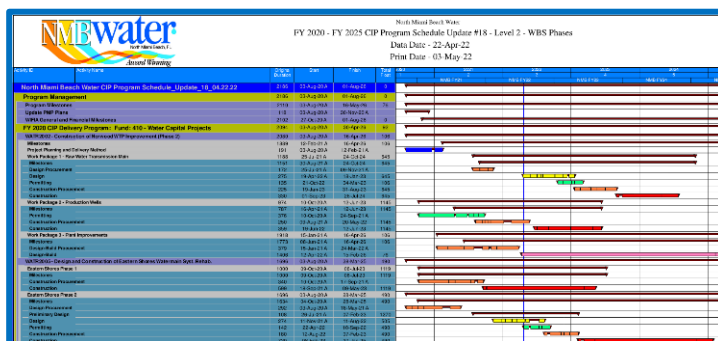
The CIP Management Team provides support in three distinct, but collaborative areas that include Program Support, Pre-Construction/Design Management, and Construction Management.

### **Program Management**

The overall Program Management objective is to continue assisting the City in managing the implementation of assigned projects and professional services.

The CIP Team's responsibilities and deliverables for this effort include, but are not limited to the following:

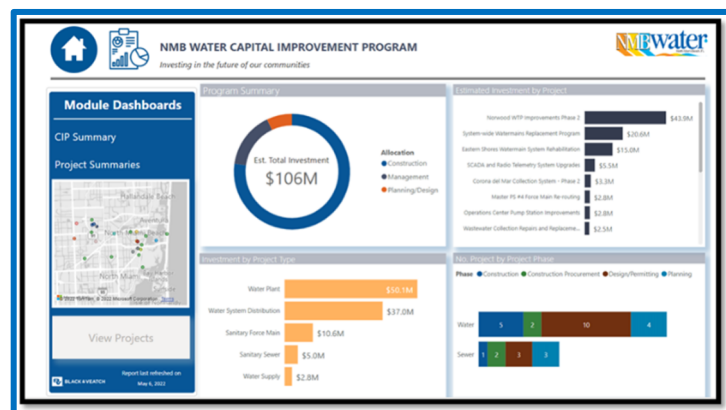
- Update and maintain NMB Water’s revised Program Management Plan (PMP) to enhance its usefulness as a practical and living management tool.
- Provide program scheduling support and tracking.
- Assist in monitoring compliance and reporting to funding agencies (WIFIA, DEO, FDEP, CRA, etc.).
- Measure, track, and recommend key performance indicators (KPIs).
- Update and monitor CIP Program budgets.
- Recommend, plan, and execute the CIP to facilitate an effective delivery of program, efficient use of resources, and coordination between projects.
- Assist NMB Water developing a logical sequence of construction and/or program delivery strategies that ensure facilities remain operational and in regulatory compliance.
- Assist NMB Water preparing an annual work plan prior to the beginning of each year that defines projects, tasks, budgets, staffing resources, and assignments.
- Review that all projects are identified, budgeted and sequenced, and that achievable schedules have been developed.



### Pre-Construction/Design Management

The CIP Team has extensive experience with the leadership, management and coordination of all facets of the pre-construction/design process on infrastructure projects. The duties as a representative of NMB Water include but are not limited to the following with the anticipated projects indicated afterwards:

- Prepare and negotiate scope of services with A/E firms that will complete designs.
- Manage and coordinate the implementation of the A/E firms’ work, schedule, and budget and other subcontractors. (e.g., surveyors, geotechnical, etc.)
- Conduct reviews of studies and designs, including progress reviews at typical design completion stages.



### Capital Improvement Plan – Program Management Support

- Collaborate and prepare cost estimates for bid packages to be reconciled with the estimates of the A/E firm.
- Monitor performance, review invoices, and recommend progress payments.
- Assist in obtaining appropriate permits to comply with requirements of applicable federal, state and local regulatory agencies.
- Assist with documentation for acquiring permits, coordination, and provide technical support during permit negotiations.
- Prepare construction bid documents utilizing plans, specifications, and other required documents prepared by NMB Water-contracted A/E firms.
- Provide assistance in the procurement of A/E and Construction firms, which includes assisting with evaluating qualification statements and bids, performing experience and background investigations, and assisting with contract negotiations.

### **Work Order 3 – Pre-construction/Design Projects**

Norwood WTP Phase 2 Raw Water Transmission Main
Norwood Water Treatment Plant Phase 2 Improvements (Progressive Design Build)
Sunny Isles Watermain Replacement
Highland Village Watermain Replacement
I-95 / Turnpike Watermain Improvements
Bunche Park Watermain Improvements
System-wide Watermain Improvements
System-wide Wastewater System Rehabilitation
Washington Park Sewer Connection

### **Work Order 3 – Construction Procurement Projects**

Eastern Shores Phase 2 Watermain System Rehabilitation
Oleta River Crossing
165th & W. Dixie Highway (Snake Creek Crossing)
Sunny Isles Watermain Replacement
Highland Village Watermain Replacement
West Dixie Industrial 153 <sup>rd</sup> Street Watermain Improvements
I-95 / Turnpike Watermain Improvements
Bunche Park Watermain Improvements
SCADA & Radio Telemetry System Upgrades (Design Build)
Velda Farms Force Main Replacement
Bell Gardens Force Main Replacement
Washington Park Sewer Connection

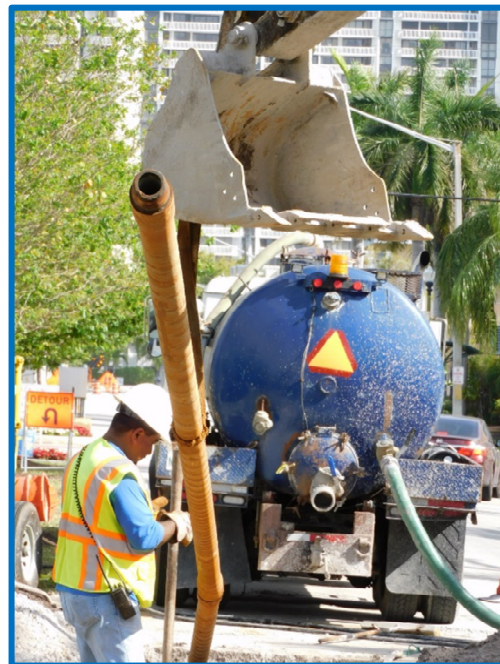
### **Construction Management**

The Construction Management phase commences upon the issuance of a written notice to the contractor to proceed with construction of a project. In general, these services include what are typically referred to as Construction Management and Inspection. Additionally, the CIP Team supports the project through completion, start-up, and the contractual closure with the

construction contractor.

The CIP Team, through our professional staff under the direction of NMB Water, performs Construction Management services that include, but are not limited to the following with the anticipated projects indicated afterwards:

- Construction inspection services required for Quality Assurance and compliance with contract documents.
- Monitor and enforce the Standard Construction Management practice as per the Construction Management Association of America (CMAA).
- Prepare and complete the commissioning technical specifications and start-up.
- Obtain the Certificate of Beneficial Use and coordinating substantial and final completion and provide to the O&M group.
- Manage and coordinate Construction Phase Engineering Services provided by A/E firm.
- Evaluate contractor’s construction work plans.
- Ensure that all activities comply with current or revised NMB Water policies, rules, procedures, standards and project specifications.
- Administer construction contracts, including the review of change orders and certification of contractors’ invoices.
- Provide technical support services for proposed design changes and review of proposed complex construction methods.



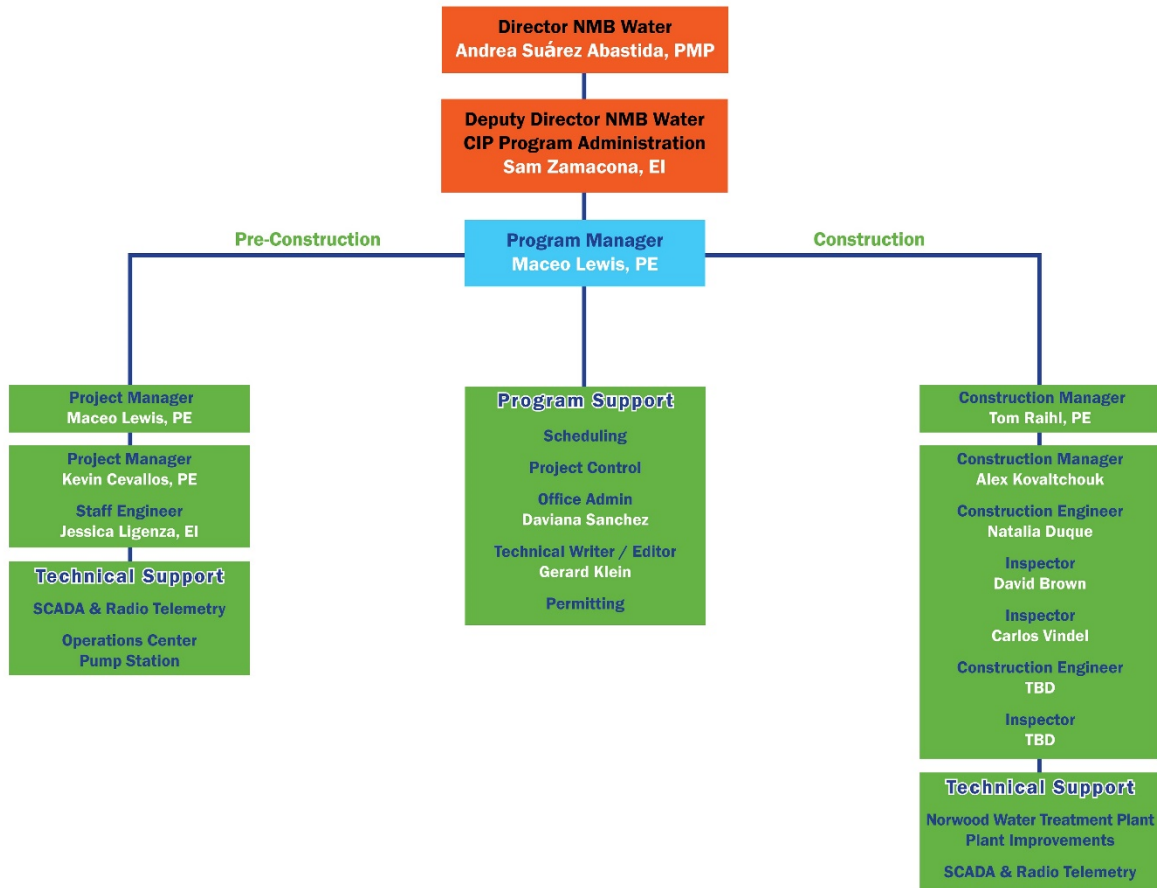
<b>Work Order 3 – Water Construction Projects</b>
Norwood WTP Phase 2 Production Wells
Norwood WTP Phase 2 – Plant Improvements (Progressive Design Build)
Eastern Shores Phase 1
Oleta River Crossing (Design Build)
165th & W. Dixie Highway (Snake Creek Crossing)
Sunny Isles Watermain Replacement
Highland Village Watermain Replacement
West Dixie Industrial 153 <sup>rd</sup> Street Watermain
West Dixie Industrial 154 <sup>th</sup> Street Watermain (Design Build)
I-95 / Turnpike Watermain Improvements
Bunche Park Watermain Improvements

<b>Work Order 3 – Sewer Construction Projects</b>
Cravero Force Main Replacement
Honey Hill Watermain Replacement
Velda Farms Force Main Replacement
Master Pump Station #4 Force Main Re-Routing
Corona del Mar Collection System Phase 2
Bell Gardens Force Main Replacement
Washington Park Sewer Connection
NE 19 <sup>th</sup> Avenue Sanitary Sewer (Design Build)

### **Capital Improvement Program Staffing**

As mentioned the CIP Team serves as an extension of NMB Water staff. The CIP Team performs professional services that include specialized and experienced labor, expertise, resources, and availability needed to support the Project Management and execution of initiatives put forth by the City of NMB. The personnel listed on the Organizational Chart below report to NMB Water Director and Program Administration and receive day-to-day direction directly from them. This approach gives NMB Water all the expertise it needs to manage the CIP, at a lower overall program cost than if the City were to hire all the staff necessary to complete it on their own.

# C I P Management Team



## Full-time CIP Staff

The following full-time positions include CIP personnel that are required to service all areas related to Program Support, Pre-Construction/Design Management and Construction Management.

- **Program Support**
  - Office Admin
  - Technical Writer
- **Pre-Construction**
  - Project Manager (2)
  - Staff Engineer
- **Construction**
  - Construction Manager (2)
  - Construction Engineer (2)
  - Inspector (2)





**Work Order #3 Costs**

The total level of effort allocated for Work Order #3 is \$4,693,552.72. NMB Water management will continue to oversee the CIP Team to ensure invoices reflect the work and support performed on a monthly basis.

As stated in the approved Agreement, "*proposed billing rates are effective from June 1, 2020 through September 30, 2022 (end of FY 2022). Commencing with FY 2023, rates will be adjusted to reflect adjustments in the cost of labor. In order to keep pace with the inflation of regular business costs, it is agreed that based on the annual change in the Consumer Price Index ("CPI") is established by the Bureau of Labor and Statistics and applicable to the Miami-Fort Lauderdale Area, to be requested thirty days (30) prior to the expiration of the then-current term; at no point shall this adjustment exceed 3%.*" It is important to note, B&V is honoring hourly rates negotiated in 2020 with no escalation until June 30, 2023.

In addition, the CIP Team has been judicious in managing its Work Order budgets. Work Order #1 funding was extended 20% beyond planned duration and Work Order #2 was extended approximately 42% beyond the planned duration.