CITY OF Hollywood FLORIDA

QUALIFICATIONS | CDM SMITH INC.






Infrastructure Projects (Water, Sewer, Reuse and Stormwater)

RFQ-042-23-JJ | February 28, 2023

CDM Smith

621 N.W. 53rd St, Suite 265
Boca Raton, Florida 33487

February 28, 2023

Mr. Jean Joinville, Senior Purchasing Agent
City of Hollywood
Office of Procurement Services
2600 Hollywood Boulevard, Room 303
Hollywood, FL 33020-4807

Subject: RFQ-042-23-JJ – Infrastructure Projects (Water, Sewer, Reuse & Stormwater)

Dear Mr. Joinville and Members of the Selection Committee,

The City of Hollywood (City) is a world-famous coastal community known for artistry and history. Like many Florida communities, the City is facing a mounting list of required utility infrastructure improvements which is currently being defined by the Water Master Plan, Wastewater Master Plan, and the Stormwater Master Plan. The City has taken a proactive approach to identifying the investment needs for long-term resiliency and being a model of sustainability. In today's market conditions, these accelerated project demands and financing needs are complicated and require partnerships. The City needs a qualified team of diverse professionals with unmatched expertise to understand your goals and challenges; a trusted team who will partner with you to deliver high value, quality engineering solutions, while remaining on schedule and within budget. CDM Smith Inc. is pleased to present our qualifications to serve the City and we offer several advantages towards the successful delivery of projects under this contract, including:

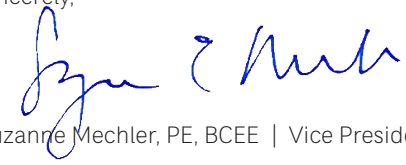
Local Expertise. Our local offices in Boca Raton, Plantation, and Miami have the depth and breadth of staff required to fulfill all your project needs. Led by seasoned officer-in-charge **Suzanne Mechler, PE** our team organization emphasizes clear roles, direct lines of responsibility, and comprehensive coverage of water resources, stormwater management, and utility infrastructure planning, modeling, and design, while maintaining focus on quality objectives. Our project manager, **Jonathan Goldman, PE, PMP, BCEE**, is a 35-year veteran in the industry and is currently serving as project manager for the City of Hollywood Stormwater Master Plan. His coastal stormwater experience across South Florida includes the Cities of Fort Lauderdale, Miami Beach, Miami, and both Fort Lauderdale-Hollywood and Miami International Airports. In addition, Jon is well recognized for his "outside the fence" work, water and wastewater master planning, and utilizing GIS to make open, transparent decisions.

Proven Record. Our team provides relevant water, wastewater, reuse, and stormwater system experience throughout Florida, holding similar continuing services contracts for more than 150 government entities throughout the state. Most of our on-call contracts have been in use for more than five years and include hundreds of assignments for utilities such as the City of Hallandale Beach, City of Fort Lauderdale, City of Boca Raton, Broward County, Palm Beach County as well as civil, water resources, and stormwater pump stations work for the South Florida Water Management District.

Committed to Delivering the Results that are Right for You. Our team provides relevant water, wastewater, and reuse, and stormwater system experience throughout Florida, holding similar continuing services contracts for more than 150 government entities throughout the state. Most of our on-call contracts have been in use for more than five years and include hundreds of assignments for utilities such as the City of Hallandale Beach, City of Fort Lauderdale, City of Boca Raton, Broward County, Palm Beach County as well as civil, water resources, and stormwater pump stations work for the South Florida Water Management District.

Our team provides you with the local resources, expertise, and a proven approach to develop and deliver efficient and effective quality project results when you need them most. I give you my personal commitment that our team will provide efficient, effective, and high-quality professional services that meet the City's needs and goals for this contract. I am authorized to make representations on behalf of CDM Smith and have included a certificate of signing authority on the following page. If you have any questions regarding this submittal, please feel free to contact me at 561.571.3756 or mechlerse@cdmsmith.com.

Sincerely,



Suzanne Mechler, PE, BCEE | Vice President | CDM Smith Inc.

CDM Smith
75 State Street, Suite 701
Boston, Massachusetts 02109
tel: 617 452-6000

CERTIFICATE

I, Paul T. Milligan, Secretary/Clerk of CDM Smith Inc., a Massachusetts corporation, do hereby certify that Suzanne Mechler holds the position of Vice President, which entitles Ms. Mechler to execute and deliver proposals, contracts and agreements for the performance of professional services in the name and on behalf of CDM Smith Inc. Further, Ms. Mechler has been delegated the authority to execute and deliver proposals, contracts and agreements for the performance of professional services specifically for the project titled Infrastructure Projects for the City of Hollywood, Florida.

I further certify that the foregoing is consistent with the Contract Signing Authority Policy and with the By-laws of the said corporation.

IN WITNESS WHEREOF, I have executed this certificate and have caused the corporate seal of CDM Smith Inc. to be hereunder affixed on this 21st day of February 2023.

Paul Milligan

Paul T. Milligan- Secretary/Clerk of the Corporation

CDM SMITH INC. 1970 MASSACHUSETTS

TAB A

Table of Contents

Tab A. **Table of Contents**

TAB B

Executive Summary

Tab B. **Executive Summary**

Background

Established in 1947, CDM Smith is a consulting engineering firm delivering exceptional service to public and private clients worldwide. An employee-owned corporation with over $1.3B in annual revenues and a multidisciplinary staff of more than 5,500 in over 120 offices worldwide, we maintain the size, stability, and resources required to successfully undertake a diverse range of projects, while providing personalized, local client service.

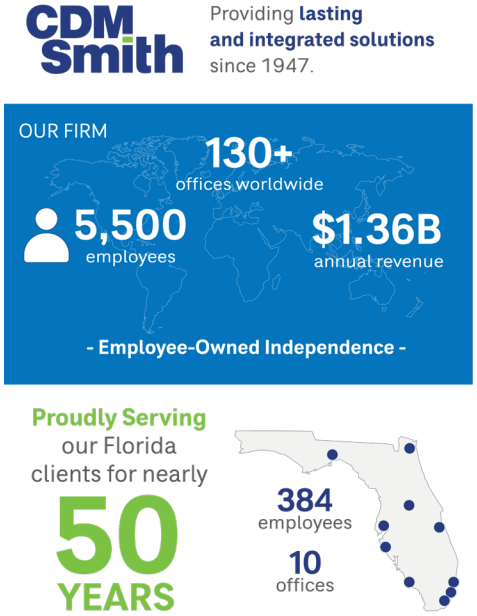
We have been successfully assisting clients nationally for over 75 years, and locally in Florida for nearly 50, and are among the country's premier consulting engineering firms. CDM Smith is passionate about our work and invested in each other, we are inspired to think and driven to solve the world's environmental and infrastructure challenges.

Primary Contact

Suzanne Mechler, PE, BCEE

CDM Smith
621 NW 53rd St,
Suite 265,
Boca Raton, FL 33487

Phone: 561.571.3756
Email: mechlerse@cdmsmith.com



CDM Smith Boston
HEADQUARTERS
75 State Street, Suite 701
Boston, MA 02109
Phone: 617.452.6000

CDM Smith Boca Raton
1. BOCA RATON
621 NW 53rd St, Suite 265,
Boca Raton, FL 33487
Phone: 561.571.3800
30 miles from the Hollywood WWTP

CDM Smith Plantation
2. PLANTATION
150 S Pine Island Rd,
Suite 358, Plantation, FL 33324
Tel.: 954.235.0618
13.5 miles from the Hollywood WWTP

CDM Smith Miami
3. MIAMI
4000 Ponce de Leon, Suite 720
Coral Gables, FL 33146
Tel.: 305.372.7171
26 miles from the Hollywood WWTP

All of our South Florida Offices are within 30 miles from the City of Hollywood WWTP.

Firm Officers

Chairman of the Board and Chief Executive Officer: Timothy Wall
75 State Street, Suite 701
Boston, MA 02109
Email: wallt@cdmsmith.com
Phone: 617.452.6257

President: Anthony Bouchard
75 State Street, Suite 701
Boston, MA 02109
Email: bouchardab@cdmsmith.com
Phone: 617.452.6111

Executive Vice President: Thierry Desmaris
75 State Street, Suite 70
Boston, MA 02109
Email: desmarist@cdmsmith.com
Phone: 617.452.6090

Chief Marketing and Communications Officer: Julia Forgas
4651 Salisbury Road, Suite 420
Jacksonville, FL 32256
Email: ForgasJB@cdmsmith.com
Phone: 904.527.6701

Clerk of the Corporation (Secretary): Paul Milligan
75 State Street, Suite 701
Boston, MA 02109
Email: milliganpt@cdmsmith.com
Phone: 617.452.6072

Value of Past Contract Awards

In the last five years CDM Smith has been awarded $4,020,238 in project fees for the City's Stormwater Master Plan.

Key Individuals

CDM Smith has the resources and availability to successfully deliver task orders under the City of Hollywood Infrastructure Projects Continuing Services Contract.

Team Member and Role	Office Location
Suzanne Mechler, PE, ▪ Officer-in-Charge; Grant Application Assistance	Boca Raton, FL
Jonathan Goldman, PE, PMP, BCEE ▪ Project Manager; Stormwater Conformance & CIP Reviews	Boca Raton, FL
Joanne Prince, PE ▪ Gravity Collection Systems; Lift Stations; Lead and Copper Rule	Plantation, FL
Dornelle Thomas, PE, ENV SP ▪ Gravity Collection Systems; Water & Force Main Design; Stormwater Permitting Assistance	Miami, FL
M. Brent Johnson, PE ▪ Water & Force Main Assessment	Raleigh, NC
Logan Whitehouse, PE, CDT ▪ Water & Force Main Assessment; Stormwater Permitting Assistance	Boca Raton, FL
Isaac Holowell, PE ▪ Lift Stations; Hydaulic Modeling; Stormwater Pump Station	Fort Myers, FL
Craig Montgomery, PE ▪ Water and Force Main Design	Tampa, FL
Sandra Kutzing, PE, PMP ▪ Lead and Copper Rule	Edison, NJ
Brendan Susino ▪ Lead and Copper Rule; Modeling/GIS; Asset Management	Edison, NJ
Ana Valenca DeMelo, PE, PMP, DWRE ▪ Drainage Improvements	Boca Raton, FL
Carl Frizzell, PhD, PE ▪ Stormwater Pump Station	Knoxville, TN
Thomas Nye, PhD, PE ▪ Modeling/GIS	Boca Raton, FL
Michael Schmidt, PE, BCEE, D.WRE ▪ Stormwater Conformance and CIP Reviews; Grant Application Assistance	Jacksonville, FL

Team Member and Role	Office Location
Robert Rooney, PhD ▪ Stormwater Permitting Assistance	Boca Raton, FL
Stewart Magenheimer, PG, PMP ▪ Hydrogeology; Water/Wastewater Plant	Plantation, FL
Yanice Mercado, PE, PMP ▪ In-House Engineering Support Services	Boca Raton, FL
Antonio Cordero-Domenech, MSCE, PE, PMP ▪ In-House Engineering Support Services	Boca Raton, FL
Craig Gadbury ▪ Cost Estimating	Orlando, FL
Stephen Freiman ▪ Construction Services	Boca Raton, FL
Daryl Jones ▪ Construction Services	Boca Raton, FL
Stacy Barna ▪ Grant Application Assistance	Austin, TX
Diane Kemp ▪ Grant Application Assistance	Tampa, FL
Andy Baranowski, GISP ▪ Asset Management	Boca Raton, FL
Joseph Ridge ▪ Asset Management	Manchester, NH
James Carolan ▪ Asset Management	Boston, MA
Layla Llewelyn, PE, PMP ▪ Water/Wastewater Plant	Miami, FL
Clay Tappan, PE, BCEE ▪ Technical Review	Sarasota, FL
Douglas Moulton, PE ▪ Technical Review	Orlando, FL

Local Experienced Team with the Ability to Perform All Facets of Scope of Services

Our hand-picked project team is backed by our 10 Florida offices that boast almost 400 staff with a variety of specialties that cover all of the engineering disciplines required for the City's projects. We have the resources with the appropriate expertise to staff this important contract. Our staff from our Florida offices routinely work seamlessly together, providing the best combination of qualified senior staff, regional regulatory experts, and local supplemental field staff. As illustrated in the table below, we provide expertise in every key service area requested by the City.

Local Powerhouse

Staff Areas of Expertise	S. Mechler	J. Goldman	J. Prince	D. Thomas	B. Johnson	L. Whitehouse	I. Holowell	C. Montgomery	S. Kutzing	B. Susino	A. DeMelo	C. Frizzell	T. Nye	M. Schmidt	R. Rooney	S. Magenheimer	Y. Mercado	A. Condero-Domenech	C. Gadberry	S. Freiman	D. Jones	S. Barna	D. Kemp	A. Baranowski	J. Ridge	J. Carolan	L. Llewelyn	C. Tappan	D. Moulton
Potable Water Transmission and Distribution System		■		■	■	■	■	■	■			■		■				■	■	■	■	■				■	■	■	
Reuse Distribution Systems		■			■	■	■	■				■							■							■		■	
Wastewater Collection Systems		■	■	■	■	■	■	■				■	■	■				■	■	■		■					■	■	
Stormwater Systems	■	■	■	■	■	■		■		■	■		■	■	■	■		■	■	■	■						■		■
Hydraulic Modeling	■	■					■	■		■		■	■	■															■
Sewer Pump Stations		■	■	■	■	■	■	■				■	■	■			■	■	■	■							■		
Stormwater Pump Stations	■	■				■	■	■			■	■	■	■					■		■						■		
Force Main Improvements	■	■	■		■	■	■	■				■	■	■		■	■	■	■	■							■		
Green Infrastructure Design	■	■				■							■	■															■
Sustainability/Climate Resilience		■				■				■	■		■	■								■							■
Sea Level Rise Mitigation		■				■				■			■	■	■														■
Asset Management		■	■		■	■				■				■					■			■		■	■	■			
Grant Application Assistance and Management	■	■											■	■		■						■	■		■	■			
Lead Copper Rule Revision Compliance			■						■	■																			
Construction Cost Estimating		■				■							■	■		■			■										
Construction Administration & Management	■	■			■	■					■	■		■		■	■	■	■	■	■	■					■		
Quality Assurance, Quality Control and Value Engineering Services	■	■	■		■	■		■	■	■	■	■	■	■		■		■	■	■	■	■					■	■	■
Water Treatment Plant and Wastewater Treatment Plant Projects	■	■	■	■		■	■	■	■			■				■		■	■	■							■	■	

Proven Record with Water, Sewer, Reuse, and Stormwater Continuing Contracts

CDM Smith is a national leader in developing effective and affordable water distribution and sewer collection management strategies and support services. We have been designing related facilities for more than 75 years, including pumping stations, storage, conveyance systems, and stormwater infrastructure.

CDM Smith 2022 ENR RANKING

- # 4 OF THE TOP 20 — WATER
- # 9 OF THE TOP 20 — WATER TREATMENT/ SUPPLY
- # 8 OF THE TOP 20 — SEWER AND WASTE
- # 10 OF THE TOP 20 — WASTEWATER TREATMENT/ SUPPLY
- # 17 OF THE TOP 200 — ENVIRONMENTAL FIRMS
- # 23 OF THE TOP 500 — DESIGN FIRMS

SOURCE: ENR; MAY 2022, JULY 2022

TAB C

Firm Qualifications and Experience

Tab C. **Firm Qualifications and Experience**

Minimum Qualifications

CDM Smith is an employee-owned Corporation and has over **75 years** of experience providing the services related to work and services contemplated in this solicitation. We have been in business in the **State of Florida under the current name since 1974**.

Firm and Qualifier License

CDM Smith is certified to practice engineering under the State of Florida Department of Business and Professional Regulation License shown to the right. We have included our staff licenses at the end of the Section.

Licensee

Name:	CDM SMITH INC.	License Number:	20
Rank:	Registry	License Expiration Date:	
Primary Status:	Current	Original License Date:	05/10/1977

Related License Information

License Number	Status	Related Party	Relationship Type	Relation Effective Date	Rank	Expiration Date
23969	Current, Active	PUJALS, VICTOR JOSE	Registry	02/10/2011	Professional Engineer	02/28/2025

Address and Representative Contact Information

Primary:

Suzanne Mechler | Officer-in-Charge

621 NW 53rd Street,
Suite 265 Boca Raton, FL 33487

Email: mechlerse@cdmsmith.com
Phone: 561.571.3756

Secondary:

Jonathan Goldman | Project Manager

621 NW 53rd Street, Suite 265
Boca Raton, FL 33487

Email: goldmanjz@cdmsmith.com
Phone: 561.571.3734

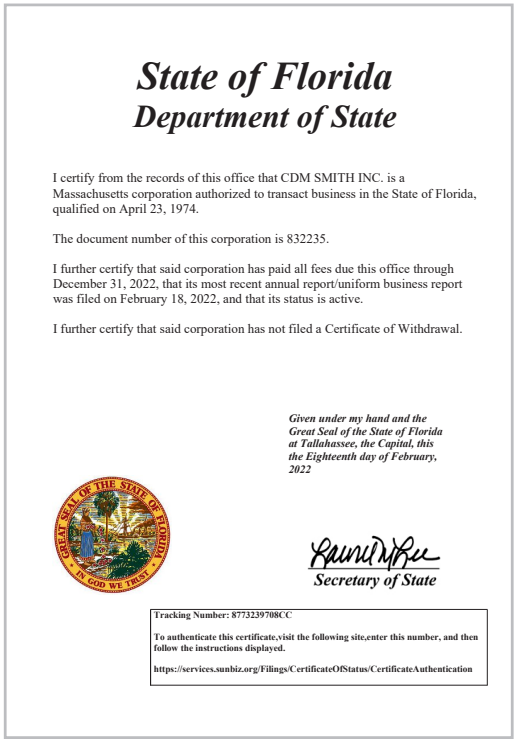
www.cdmsmith.com

Judgements/Pending Lawsuits

The firm nor its principals have no record of judgements, pending lawsuits against the City of Hollywood or any criminal activities involving moral turpitude and do not have any conflicts of interest with the City.

Arrears/Default

Neither firm nor any of its principals, officers, or stockholders are in arrears or in default of any debt or contract involving the City of Hollywood. In addition, CDM Smith has not failed to perform faithfully on any previous contract with the City.



State of Florida
Department of State

I certify from the records of this office that CDM SMITH INC. is a Massachusetts corporation authorized to transact business in the State of Florida, qualified on April 23, 1974.

The document number of this corporation is 832235.

I further certify that said corporation has paid all fees due this office through December 31, 2022, that its most recent annual report/uniform business report was filed on February 18, 2022, and that its status is active.

I further certify that said corporation has not filed a Certificate of Withdrawal.

Given under my hand and the Great Seal of the State of Florida at Tallahassee, the Capital, this the Eighteenth day of February, 2022

Secretary of State

Tracking Number: 8773239708CC

To authenticate this certificate,visit the following site,enter this number, and then follow the instructions displayed.

https://services.sunbiz.org/Filings/CertificateOfStatus/CertificateAuthentication

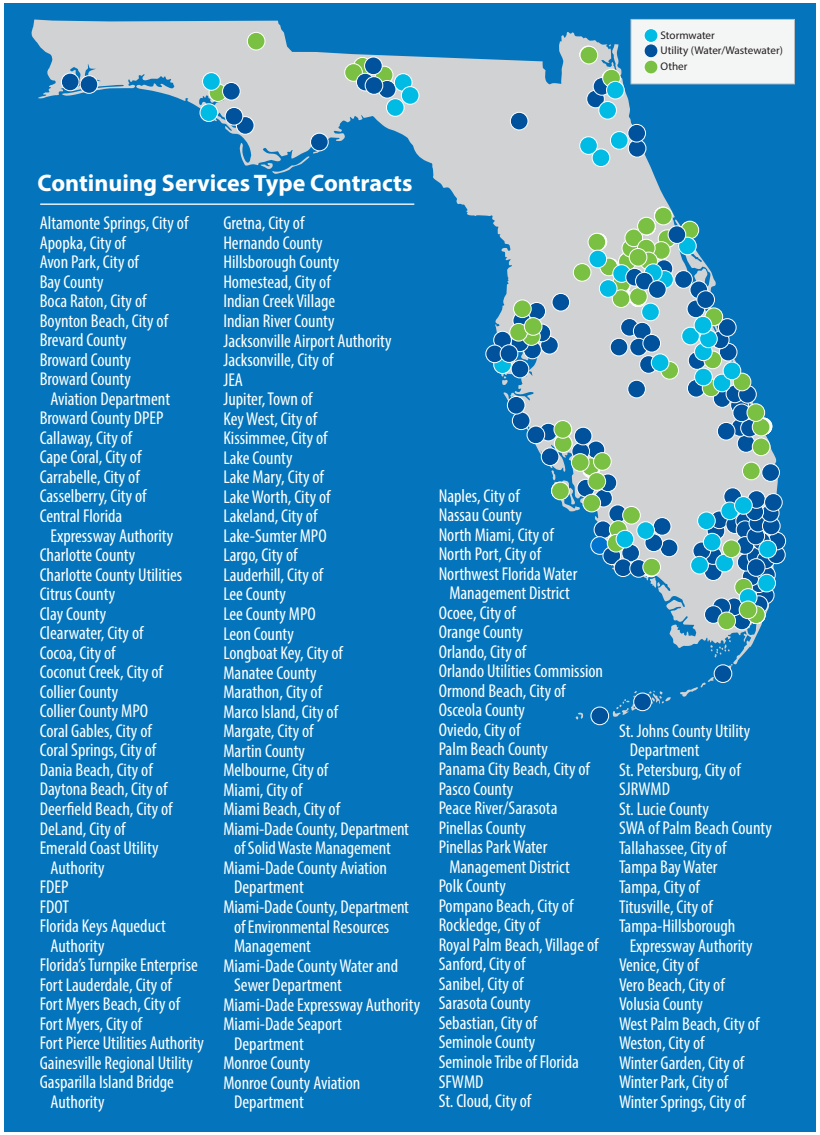
Proud History. Bold Future.

In 1947, Thomas Camp left the Massachusetts Institute of Technology to set up a consulting practice with partners Herman Dresser and Jack McKee. Together, they pioneered drinking water treatment technologies, advanced approaches in water quality protection and groundwater recharge, and established the enduring culture of our firm. Today, the over 5,500 professionals of CDM Smith around the world honor that legacy through a commitment to serve clients with excellence, apply our thought leadership for ingenious solutions, and leverage our independence to do what is best for our employees and clients.

49+ Years Providing Comprehensive Engineering Solutions in Florida

The City will benefit from our extensive experience with continuing service contracts, including more than 150 government entities throughout Florida, as shown**.** The services provided under these contracts vary by client and cover the full range of services offered by CDM Smith. We will pool the project knowledge gained from our experts working on projects like yours across the state and nation to provide the City with the most innovative and cost saving solutions. We provide complete in-house services, including water and wastewater treatment; water distribution and sewer collection systems; pump stations; control, mechanical, electrical, and structural systems; civil engineering; and more. Services include but are not limited to:

- Potable Water Transmission & Distribution System
- Reuse Distribution Systems
- Wastewater Collection Systems
- Stormwater Systems
- Hydraulic Modeling
- Sewer Pump Stations
- Stormwater Pump Stations
- Force Main Improvements
- Green Infrastructure Design
- Sustainability/Climate Resilience
- Sea Level Rise Mitigation
- Asset Management
- Grant Application Assistance & Management
- Lead & Copper Compliance Rule
- Cost Estimating
- Construction Administration & Management
- Quality Assurance Control & Value Engineering
- Water Treatment Plant and Wastewater Treatment Plant Project



CDM Smith's continuing services contracts in Florida cover a wide range of services, including the City's scope for this contract.

4600 Technical and Support Staff - 950 Management and Administrative Staff - Total Technical and Support Staff, Number of firm-wide CDM Smith staff by discipline.

Environmental (Water/Sewer/Reuse) - 595; Civil (Stormwater/Water Resources) - 807; Construction Inspection - 389; Technician - 501; Computer Programmer (Modeling/GIS) - 369; Electrical Engineer - 194; Planner - 190; Geologist - 185; Construction Management - 182; Transportation Engineer - 176; Architectural - 44; Hydrology & Hydraulic - 201; Mechanical - 82; Structural - 161; Biologist - 22; Cost Estimator - 61; Chemical Engineer - 46; Chemist - 20; Ecologist - 9; Economist - 16; Geotechnical Engineer - 138; Industrial Hygienist - 3; Land Surveyor - 50; Landscape Architect - 12; Risk Assessor - 12; Safety/Occupational Health Engineer - 75; Scheduler - 68; Specifications Writer - 24; Toxicologist - 5

Capabilities and Expertise

As requested in the Infrastructure Projects (Water, Sewer, Reuse, and Stormwater) RFQ, CDM Smith has provided services during design, bidding, and construction for water, sewer, wastewater, water resuse, and stormwater projects as demonstrated below.

Water

Drinking water supply, treatment, and distribution has been our core business since our founding in 1947. As a firm, one-third of our more than 5,500 worldwide staff are dedicated to the drinking water field. CDM Smith has also performed **more than 300 water system analyses** across the nation during the past 10 years. **CDM Smith is currently working with Palm Beach County to develop their Lead and Copper inventory and create a School Sampling Program in compliance with the Lead and Copper Rule.** Our experience involves every aspect of watermain and treatment plant field testing, hydraulic modeling, water quality modeling, demand projections, master planning, state of-the-art computer system and database management, and hands-on model training.

Lead and Copper Compliance Rule

CDM Smith has assisted many utilities through compliance with Lead Copper Rule Revisions (LCRR). We have developed an LCRR compliance readiness program that will guide utilities to prepare for compliance when the revisions take effect. The plan is flexible as we understand the unique needs and challenges for each utility.
CDM Smith assisted the cities of Newark and Trenton (NJ) after they exceeded the EPA's lead action level in 2017 and 2018. We managed each aspect of the program, including inventory development, establishing an Lead Service Line Replacement (LSLR) program, communication to the public, coordination with the regulators, data management, sampling management, Corrosion Control Treatment (CCT) evaluations and modifications, etc. We will leverage this expertise—combined with our local staff and breadth of experience—to cost-effectively implement the Lead and Copper Compliance Program and meet your objectives.

Predictive modeling reduces the resources needed to resolve unknown materials in an inventory. Trinnex's machine learning model, included with leadCAST can be used to identify service line materials. If the County has existing records of inspection information, it will be evaluated by the modeling team into the predictive model to determine if the data is sufficient to generate initial predictions for service line material types on both sides of the line.

New data from inspections, customer engagement activities, and test pits all providing additional verified service line materials will be uploaded into the model. The level of accuracy will be critical to this task in both locating lead service lines and eliminating unknowns, as well as maintaining public trust, developing more accurate funding strategies, and cost savings for service line replacement mobilization and execution.

In developing the inventory, our team will share its extensive experience and lessons learned from helping other public water systems develop their inventories and identify unknowns. CDM Smith recently helped 46 water systems in New Jersey with their inventories and verification and replacement plans, where all lines are required to be identified and LSLs replaced by 2031. We are involved in the national committees helping to set the guidelines for the national best practices in developing and maintaining inventories, as this is an ongoing process and new practices and methods are being continuously developed. With this national experience, CDM Smith is best suited to meet all needs for the inventory development.

Hydraulic Modeling

CDM Smith is a leader in the use of computer modeling for water and wastewater system planning, amassing more than 40 years of experience in the development, application, and training of water and wastewater models. We have constructed models for large and small utilities throughout the southeast US and around the world. Our proposed team has direct experience building models using various software products including Innovyze InfoWater, Innovyze InfoWorks ICM, Bentley WaterGEMS, KY Pipe, EPANET, Autodesk HydrauliCAD, IPE-FLO, and Visual Hydraulics. Our broad software experience enables our team to be flexible and to work with our clients to select the most appropriate software for their needs.

Water Distribution and Wastewater Collection Systems

We have extensive experience with the assessment, planning, design, bidding, and construction of wastewater collection systems and water transmission improvements throughout Florida and the US. These projects include major construction in highly developed residential and urban areas with pipes ranging from 4 inches to 106 inches in diameter. We can provide comprehensive services related to the design of new pumping stations, as well as the rehabilitation and/or upgrade of existing pump stations. In residential neighborhoods, we have assisted our clients in the development of aesthetically sensitive facilities to minimize adverse public opinion. We have performed odor and corrosion control studies, infiltration/inflow (I/I) analyses, sewer system evaluation studies, and sewer rehabilitation projects. **CDM Smith is currently implementing a Force Main Investigation project utilizing GIS to prioritize the system and investigative techniques to assess the state of the asset.**

As part of the Palm Beach County Water Utilities Department (PBCWUD), Force Main Investigation project, CDM Smith is conducting condition assessments of force mains as well as raw water piping. This effort is focused on pipe diameters of larger than 14" in diameter. CDM Smith is determining the extents of potential pipe wall integrity loss. Critical areas, identified by a prioritization technique, are excavated (if necessary) and the pipe wall thickness is measured using PICA's bracelet tool probe and verified with ultrasonic testing. This effort allows PBCWUD to identify piping that requires replacement.

Sewer Collection Systems

CDM Smith has been an engineering leader in the wastewater collection system rehabilitation industry since the firm's establishment in 1947. We are consistently ranked among the top design firms by ENR, and are also ranked seventh among the top trenchless engineering firms by Trenchless Technology Magazine for the tenth year in a row. Our local team brings expertise in every facet of gravity sewer renewal and replacement (R&R), ranging from small- and large-diameter trenchless R&R techniques, including Cured-in-Place-Pipe (CIPP) lining, microtunneling, point repairs, and pipe bursting, as well as open-cut replacement. We have provided technical investigations, preliminary and final design, services during construction, and construction management and inspection services for wastewater collection systems across the country, and we rank among the leaders in the industry. The foundation of our core capabilities include all services related to sanitary sewer R&R, including condition assessment and prioritization; CCTV sewer inspection; open-cut replacement; and comprehensive trenchless technologies, including subsurface utility engineering (SUE), CIPP lining, microtunneling, Horizontal Directional Drilling (HDD), point repairs, pipe bursting, and surface/easement restoration.

Water Reuse

CDM Smith is a recognized leader and innovator in the field of water reuse. **When the US Environmental Protection Agency (EPA) wanted to promote and encourage water reuse, they chose CDM Smith to prepare and update their Guidelines for Water Reuse in 1980, 1992, 2004, 2010, 2012, 2015, and 2017.** This planning document highlights the principal steps of planning for a reclaimed water program. It addresses technical matters, siting economics, legal and institutional issues, health issues, and public involvement. We have conducted over 250 water reuse projects encompassing a wide range of services and technologies, including reclaimed utility development, modeling, planning, design, permitting, and construction. CDM Smith is currently working with Palm Beach County to develop a 2 mgd (expandable to 4 mgd) indirect potable reuse system that recharges the aquifer through a lake system which will also be a public access park.

Stormwater

CDM Smith has a long history of water resources planning, including design, permitting, and management involvement with over 300 water resource programs across Florida, the US, and the world. As a firm, we are committed to water resources engineering and the stewardship of natural resources that support clean water and watersheds, including the control of water flow through urban, suburban, and agricultural areas in coordination with maintaining healthy and adequate water supplies. From our industry-defining water management studies in the 1940s to our involvement in market-shaping projects today, we have provided hundreds of clients with innovative water resources services. **We have developed innovative solutions for these projects that have saved our clients over $380M in the last 20 years on more than $1.5B of water resources infrastructure.** Our local stormwater experience is with several municipalities that are roughly the same size as the City with many of the same stormwater conditions. CDM Smith is currently working with the City to develop their Stormwater Master Plan that will help guide improvements over the next 20 years.

Stormwater Management System Planning and Design

CDM Smith has provided specialized engineering design and consulting services on hundreds of projects specifically involving facilities associated with stormwater collection, treatment, and disposal. Designs can be a straightforward culvert replacement project, comprehensive conveyance systems, nutrient separating baffle boxes, a new pump station, a replacement or rehabilitation of an aquifer recharge well, or a more complex stormwater reuse system. These designs require technical investigations, hydraulic analyses, preliminary and final design, regulatory permitting, services during construction, and operation and maintenance (O&M) considerations. CDM Smith is one of the country's leading consulting firms for the design and implementation of innovative stormwater systems.

Since 1970, CDM Smith also has provided specialized engineering design and consulting services on hundreds of projects specifically involving stormwater pumping facilities, many of them pump stations of major size. Our services have included technical investigations, hydraulic analyses, preliminary and final design, services during construction, and O&M consulting for stormwater pumping stations.

Our engineers have gained their experience on hundreds of pumping station projects for stormwater systems. As specialists in the stormwater field, our services are tailored directly to the requirements of stormwater pumping. We draw on our awareness of the most innovative technical advances in the field and on our established base of experience with proven engineering systems.

Specifically for the City of Hollywood, CDM Smith has already developed the Citywide comprehensive Stormwater Master Plan and the hydrologic and hydraulic model down to a neighborhood scale to use as a tool for developing and testing proposed capital improvements to meet the City chosen flooding level of service. The sophisticated model considers tidal and groundwater fluctuations and future sea level rise and was validated to actual flooding data from recent tropical storms.

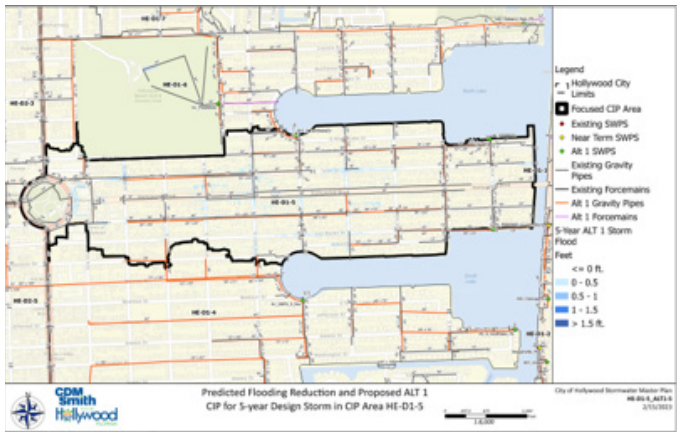
Actual Flooding (Dec 2019 Storm)

Modeled Flooding (Dec 2019 Storm)

CDM Smith provided preliminary designs of capital improvements for implementation citywide and developed the associated inundation mapping illustrating the reduction in flooding pre-and post-improvement.

Existing Conditions Flooding (Hollywood Lakes

Post-CIP Improvement Flooding Correction (Hollywood Lakes)



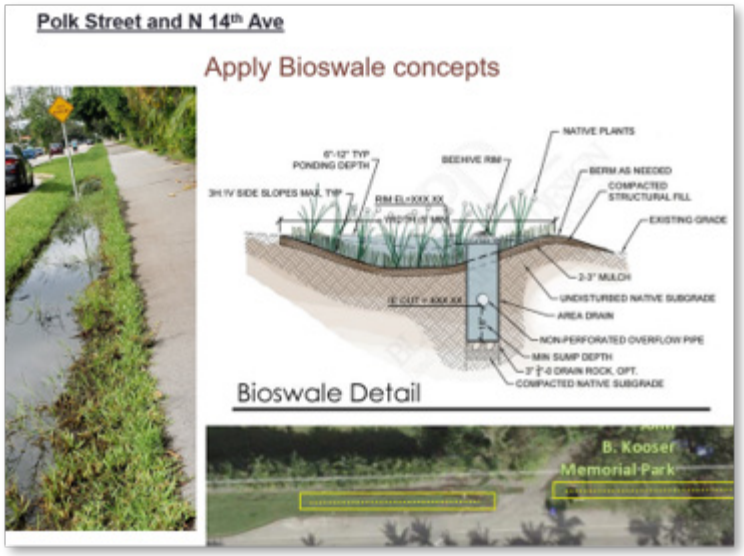
Proposed CIP Hollywood Lakes

As the City's stormwater CIP Program progresses, initial phases of the final designs can be tested efficiently in the model by our stormwater experts for conformance with the parameters adapted by the City in the stormwater master plan. In this manner, the model can be kept as a living tool that expands as the City's CIP expands streamlining design reviews and permitting. As the stormwater improvements encompass all City neighborhoods, our team is in a unique position to provide project coordination with other City projects such as streetscape and resurfacing improvements, and water, sewer, and seawall capital programs to allow roads to be torn up only once and disruption to neighborhoods minimized.

Green Infrastructure

CDM Smith offers comprehensive and integrated green infrastructure services that include: planning, modeling, permitting, landscape and engineering design, construction, construction services, monitoring, operation and maintenance, public outreach, and economic/funding/financial evaluations. We recognize that one size does not fit all with regard to implementation of green infrastructure so our approach is tailored to specific needs of the urban community, regulatory requirements, zoning, rainfall patterns, soil types, topography, hydrology, and public interests. We offer both programmatic and project-specific services.

Currently **CDM Smith is developing and implementing the City's Recapture the Swale Program.** The City's swales are an important component of green stormwater management by adding needed storage to reduce flooding, providing water quality treatment of the first flush runoff pollutants from the City's streets, and reducing the temperature of the water entering the local receiving waters protecting wildlife. Existing swales Citywide were identified and digitized into a GIS layer with location, depth, area, linear feet, and volume estimates, and were used for analysis in the model for the water quality storm to show the effectiveness of the program. Several grants were awarded to the City for this forward-thinking program, and the first five of the large swale projects has commenced. This green initiative includes a public awareness campaign with educational media and brochures on the importance of swale maintenance and tips for residents to do their part to recapture their swales.



Comprehensive Stormwater Master Plan, City of Hollywood, FL

Client Name: City of Hollywood, FL

Project Dates: 2021 – Ongoing

Role in Project: Prime

Why Relevant:

- Stormwater Systems
- Hydraulic Modeling
- Stormwater Pump Stations
- Force Main Improvements
- Green Infrastructure Design
- Sustainability/Climate Resilience
- Sea Level Rise Mitigation
- Asset Management
- Grant Application Assistance & Management
- Cost Estimating
- Quality Assurance/Control & Value Engineering

CDM Smith is developing the comprehensive stormwater master plan (SWMP), system inventory, and model to evaluate the existing level of service (LOS) as well as alternatives for flood control, water quality, and aquifer recharge on the City's urbanized system, with consideration of upstream inflows and downstream canals and tidal systems as boundary conditions. We developed a cost-effective approach to build upon municipal separate storm sewer system and total maximum daily load goals for impaired waters to improve and document water quality benefits.

CDM Smith is evaluating the current LOS and identifying prioritized problem areas, existing and future regional operation and maintenance needs, and projected costs. The study considers future climate change projections into the planning, engineering design, construction, and operations of the systems. We developed and applied comprehensive USEPA SWMM quantity and Watershed Management Model (WMM) quality representations for existing and future conditions.

As a team member supported the SWMP efforts by analyzing the existing conditions of the stormwater pump stations. The team gathered information from existing as-builts for other facilities for pump data not included in the condition assessment but needed for model operation.

The stormwater system and problem area inventory consisted of evaluating and benchmarking the City's existing stormwater infrastructure, using the City's existing library records, GIS, and FEMA repetitive loss data. CDM Smith conducted GIS mapping efforts for the modeling including stormwater network geodatabase design, impervious analysis, total dissolved solids estimation, and seawall survey update.

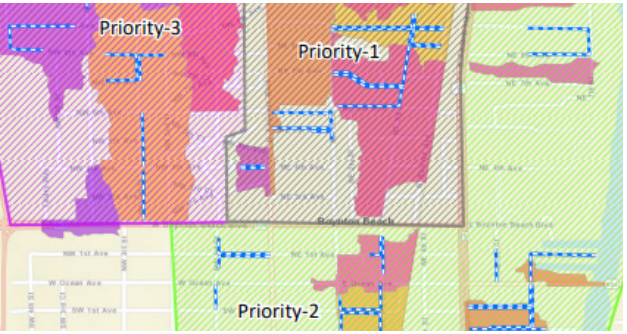
To support early-out projects for critical problem areas and Resilient Florida funding, CDM Smith evaluated cost-effective refinements to ongoing capital improvement projects to further improve LOS and water quality. We prepared and supported the City with grant applications and work plans for the following SWMP projects: Recapture the Swale, A1A pump stations, and Hollywood Lakes and Hollywood Hills exfiltration projects.

The SWMP will include capital improvement plan projections and an outline of available funding options and opportunities, including grants, loans, and/or stormwater utility rate revenues. We will use the FEMA HAZUS-MH software to calculate structural and economic damage during storm events. CDM Smith, along with our team member Brizaga, is conducting public outreach and created brochures for the City's distribution.

Key Features

- Level of service evaluation considering climate change
- Grant application and support
- Public outreach

Our proposed team members for this contract that worked on this project:
Suzanne Mechler, Jon Goldman, Michael Schmidt, Thomas Nye, Douglas Moulton, Robert Rooney, Brendan Susino, Stewart Magenheimer, and Dornelle Thomas



Client Name: City of Boynton Beach, FL

Project Dates: 2018 – Ongoing

Role in Project: Prime

Why Relevant:

- Stormwater Systems
- Hydraulic Modeling
- Stormwater Pump Stations
- Green Infrastructure Design
- Sustainability/Climate Resilience
- Sea Leave Rise Mitigation
- Grant Application Assistance & Management
- Cost Estimating

Vendor Reference Form provided in Tab G

General Engineering Contract, City of Boynton Beach, FL

As part of an overall infrastructure and ancillary services and consulting and engineering services for the Boynton Beach General Consulting Services contracts, CDM Smith supported the City with the following projects:

- **Hydraulic Analysis for Downtown Stormwater System:** CDM Smith provided consulting services for work in connection with updating the City's hydraulic modeling of the downtown stormwater conveyance and treatment system. The updated hydraulic model will manage stormwater runoff of the downtown watershed for Town Square development. We reviewed the 10-year, 72-hour design storm flooding events. As part of the effort, we identified improvements including exfiltration, detention basin, and other innovative alternatives. An objective of the analysis was to develop a tool/database to assist the City in knowing where there is excess capacity when making decisions for future development.
- **VTScada Upgrade:** CDM Smith supported the replacement and/or modification of the current collection system, aquifer storage and recovery (ASR), and wellfield VTScada application. This system monitors and controls the referenced applications and communicates to the existing field devices through Motorola FIUs. The existing system had a proprietary layer integrated into the application which is no longer supported and thus prevented the City from upgrading to the current version of VTScada. To rectify this, CDM Smith upgraded the VTScada application to the latest version and remove the proprietary layer. To support the replacement and/or modification of the current collection systems, ASR, and wellfield VTScada application, CDM Smith reviewed the existing application for functionality, including the proprietary layer, and a new application was developed (and/or modified) using the existing screens in the East Plant HMI application as a design guide.
- **Consumptive Use Permit Modification:** CDM Smith supported the City in a consumptive use permit (CUP) modification to revise the service boundaries as a result of the City expanding its service area. In addition, future reclaimed water delivery schedule and offsets were updated. CDM Smith worked closely with the City and SFWMD to incorporate these changes.
- **Evaluation and Update of the City's 10- Year Water Supply Plan:** As part of the requirements associated with the 2018 Lower East Coast Water Supply Plan (LECWSP) Update on January 14, 2019, the City is adopting a 10-year Water Supply Facilities Plan (update for 2019-2029) and related amendments, if any, into its comprehensive plan within 18 months of the SFWMD approval of the update. CDM Smith prepared this update to include the City's potable water service within the approximate 16.1 square miles of the City of Boynton Beach as well as portions of unincorporated Palm Beach County, Town of Briny Breezes, Town of Ocean Ridge, Town of Gulfstream, and parts of the Village of Hypoluxo. The potable water service area extends approximately from Hypoluxo Road south to the City of Delray Beach, from the Atlantic Ocean west to the E-3 Canal west of Military Trail.
- **Force Main By-Pass at Lift Station 317:** CDM Smith services include design and construction of the existing force main modications associated with Lift Station No.317 (LS 317). LS 317 is located at Boynton Beach Boulevard and is a large re-pump station with two large force mains entering the wetwell and some gravity flow. The purpose of the effort is to modify connections to existing force mains such that the current influent flow to LS 317 is reduced by routing a portion of the influent from the force mains that feeds the station and connecting the flow to discharge side of the station in the vicinity. CDM Smith is performing a pipeline route alternatives evaluation for the proposed force main and will recommend a final pipeline alignment for development of design.

Client Name: City of Hallandale Beach, FL

Project Dates: 2021 – Ongoing

Role in Project: Prime

Why Relevant:

- Potable Water Transmission & Distribution System
- Wastewater Collection Systems
- Stormwater Systems
- Sewer Pump Stations
- Asset Management
- Cost Estimating
- Construction Administration & Management
- Quality Assurance/Control & Value Engineering

Vendor Reference Form provided in Tab G

General Consultant Services, City of Hallandale Beach, FL

CDM Smith was selected to perform multiple disciplines/services which include General Engineering Services, Civil Engineering, Environmental Engineering, Electrical Engineering, Water Resources, Stormwater Design/Wastwater Engineering, Construction Project Management Services, and General Planning Services under this General Consultant Services multi-year contract. The City of Hallandale Beach encompasses approximately 4.5 square miles in southeast Broward County and its Public Works Department serves approximately 40,000 people. Projects completed or currently in progress under this contract include:

- **Utility GIS Mapping:** The City contracted CDM Smith to enhance its existing GIS database of the water, wastewater, and stormwater systems so that the infrastructure data is compiled in a single, accessible location for use by the City to aid in routine and emergency maintenance procedures and with system information for design purposes. The City desired their data to be catalogued and entered into the GIS in the correct geospatial locations so that these plans can be accessed and viewed rapidly using point and click technology directly on a map both in the office and in the field via a mobile device developed application. CDM Smith held workshops to review the City's data sources and formats, and to analyze the software and hardware framework for the asset management system. A group of 1,550 plan sheets of infrastructure record drawings were identified, extracted, and geospatially referenced in the GIS. Each plan area limit polygon will be attributed with plan name, plan date, and plan type, as applicable and related to an intersection or fixed points. This process resulted in a polygon layer of plan area limits linked to scanned images of each plan to allow the City to access historical plans via the GIS environment. We then populated GIS data attributes for 96 miles of sanitary sewer and forcemain and transcribed the utility features and attribute information from the plans to populate the GIS database fields with new or missing information. The quality review process included a combination of automated tools using Esri's "data reviewer" and "map automation" technology and datums and elevations were standardized and adjusted to NAVD88. The contract allow for continuation of similar services for water, stormwater, and other utilities.
- **Lift Station 5 Replacement:** CDM Smith was contracted for the new Lift Station 5 which will be located adjacent to the exiting Lift Station to handle increase growth and development near this critical lift station. The new lift station design has a below grade submersible duplex pumps with 30 horsepower, 480-volt, 3 phase, constant speed motors. Design includes an above-grade rack-mounted control and power panels with cellular communications to the existing base station via a 20-foot-tall communications tower and antenna, a new Florida Power and Light transformer and power meter, and a dedicated self-enclosed backup power generator with integrated diesel fuel storage tank. Also included is an odor control system like Lift Station 8, a channel grinder by JWC like Lift Station 8, a valve vault, 10-foot-tall hot dipped galvanized chain-link fencing (no barbwire), landscaping, and a concrete drive. This included abandoning the existing Lift Station 5 wet well in-place by cleaning and filling with sand and removing above grade top and nearby communication tower and includes 1200 linear feet of 12-inch diameter pipe force main pipe lifting to the manhole at the west end of Atlantic Shores Boulevard just before NE 14 Avenue.

Client Name: Palm Beach County, FL

Project Dates: 2016 – Ongoing

Role in Project: Prime

Why Relevant:

- Hydraulic Modeling
- Lead & Copper Compliance Rule
- Cost Estimating
- Construction Administration & Management
- Water Treatment Plant & Wastewater Treatment Plant Project

Vendor Reference Form provided in Tab G

Water Treatment & Water Resources General Engineering Contract, Palm Beach County, FL

As part of an overall services contract, CDM Smith is responsible for the implementation of master planning, evaluation, and small design projects for the five WTPs within unincorporated Palm Beach County. The following includes projects implemented or currently being executed:

- **Consumptive Use Permit Renewal Support:** CDM Smith provided consulting/professional services to renew the Consumptive Use Permit 50-00135-W associated with the eastern system. This effort included confirming the base condition water use and future water supply development, assisting PBCWUD in strategy to obtain water allocation to meet its future water needs, and conduct groundwater modeling in support of the permit renewal.
- **Belle Glade Water Treatment Plant Demolition:** CDM Smith is conducting design to demolish/restore the former Belle Glade Water Treatment Plant (BGWTP) site and make improvements to the master flow meter. We are providing permitting, design, and bidding services for the demolition and disposal of existing infrastructure, and improvements to water distribution piping and master flow meter located at the site. CDM Smith is using over 60 percent minority business participation on this project.
- **Water Treatment Plant 11 Clearwell Recoating Evaluation:** CDM Smith evaluated the feasibility of recoating the clearwell at WTP 11 by partially of fully bypassing the clearwell. Challenges of the project included meeting finished water demand and plant production during an extended shutdown, arrangement of the clearwell and isolation of the bays for recoating, and absence of water stops for interior clearwell walls. CDM Smith reviewed applicable design and operational data, chemical dosing and flow ranges, and developed potential bypass methods at WTP 11 to facilitate recoating of the clearwell.
- **Lead Copper Rule Revisions (LCRR):** CDM Smith is providing consulting services to assist with compliance activities required under the revised lead and copper regulations. As part of this effort, CDM Smith created a schools sampling plan for the education and childcare facilities within Palm Beach County's service area as of the 2022-23 school year, conducted a corrosion control study, and worked with the PBCWUD GIS team to develop the inventory and identify the unknowns.
- **Integrated Utility Master Plan - Water:** CDM Smith developed scopes, estimated budgets, and implementation schedule for all capital improvement projects associated with the water treatment facilities including the raw water delivery system. Alternative solutions were identified for five (5) treatment plants and the eastern and western distribution system.

In addition, CDM is executing another contract with Palm Beach County titled System-wide Force Main Investigation. As part of that contract, CDM Smith is conducting condition assessments of high priority force mains as well as the raw water main systems. The effort focuses on the critical infrastructure as determined through a GIS prioritization effort..

Client Name: Broward County, FL

Project Dates: 2014 – Ongoing

Role in Project: Prime

Why Relevant:

- Potable Water Transmission & Distribution System
- Hydraulic Modeling
- Force Main Improvements
- Green Infrastructure Design
- Sustainability/Climate Resilience
- Sea Level Rise Mitigation
- Asset Management
- Grant Application Assistance & Management
- Cost Estimating
- Construction Administration & Management
- Quality Assurance/Control & Value Engineering
- Water Treatment Plant & Wastewater Treatment Plant Project

Water Treatment & Raw Water Production Systems General Engineering Contract, Broward County, FL

For several years, as part of an overall services contract, CDM Smith has implemented renewal and replacement projects and conducted various studies and permitting support for the water treatment plants. Types of projects to date have included:

- **Disinfection/Chlorination:** Improved chemical feed systems for finished water quality to WTP 1A, WTP 2A, and WTP 3A. Including demonstration of the Four-Log virus removal/inactivation requirement.
- **Power Management and Generation:** Design through construction services for replacement of electrical switchgear at WTP 1A, 2A, and 3A and backup power generator at pumping stations 1A-1. Including scrubbing backup power generator muffler exhaust gases.
- **Projects at WTP 1A:** Various projects included rehabilitating treatment unit steel parts, new ground storage tank, new 1A1 re-pumps and backup power generator, corrosion control update, anion exchange treatment update, and scrub power generator muffler exhaust gases.
- **Projects at WTP 2A:** Various projects included rehabilitation of chemical feed systems, rehabilitate treatment unit steel parts, corrosion control update, 130-foot communication tower inspection, and scrub power generator muffler exhaust gases.
- **FLL Recirculation Water Booster Pump Station:** Development of the hydraulics and pumping system equipment and controls for a large, in-line, water booster station for the District 3A distribution system. The pump station was designed to disinfect and recirculate potable water in the system through the large looped system at the Fort Lauderdale Hollywood International Airport where water age was becoming a problem due to large size pipes and great fluctuation in daily demand. The booster station was also designed to provide emergency water flow and pressure to the airport. The new booster station and controls was integrated into the InfoWater potable water model developed by us during the Retail Master Plan project.
- **3A Nanofiltration Process Feasibility:** CDM Smith prepared an assessment of the feasibility of designing and constructing a new water treatment facility utilizing nanofiltration (NF) treatment technology at the WTP 3A site. The new membrane treatment plant would use up to 12.13 million gallons per day (mgd) of raw water from the County's Brian Piccolo Biscayne Aquifer wellfield to produce up to 10.31 mgd of potable water to supply the needs of Districts 3A, 3B, and 3C. In addition to present a sound conceptual planning level basis for the potential design of the new WTP 3A, this study is also intended to specifically address the anticipated quality of the raw water supply, necessary treatment processes for potable water production, the engineer's opinion of probable capital construction cost (OPCC) and probable operations and maintenance (O&M) costs, and comparison of these probable O&M costs to the 2013 cost to purchase water from the City of Hollywood.

  Other projects included demolition of the old lime process components, hydraulic modeling, corrosion control, and chlorination system improvements. Overall, CDM Smith has executed 33 projects for this contract with a total value of $3.7M. Approximately 14 of those projects were various studies with fees ranging from $30k to $60k.

Client Name: City of West Palm Beach, FL

Project Dates: 2015 – 2020

Role in Project: Prime

Why Relevant:

- Wastewater Collection Systems
- Stormwater Systems
- Hydraulic Modeling
- Sewer Pump Stations
- Stormwater Pump Stations
- Sustainability/Climate Resilience
- Cost Estimating
- Construction Administration & Management

General Engineering Contract, West Palm Beach, FL

Under this contract, CDM Smith supported the City with various activities from modeling to training to design. Types of projects have included:

- **Lift Station No. 5 Improvements:** CDM Smith provided design, bidding, and construction management support for Lift Station No. 5. The City had previously conducted a condition assessment which was used as the basis for the work done. We reviewed and design replacement of the mechanical pumps and discharge piping as well as structural and electrical improvements at the Lift Station. We also provided permitting and construction oversight.
- **Lift Station Inventory and Condition Assessment:** The City of West Palm Beach was working towards developing and strengthening the asset management program for the Utility Department. As such, the City retained CDM Smith to undertake an evaluation of the existing 100 lift stations in its wastewater collection system. Our team began this project by performing thorough data collection for the City's wastewater collection system, including lift station locations/identifiers, record drawings for each lift station, operational records, maintenance records, electrical usage by station, and pump curves. Our team then proceeded with field evaluations for the City's wastewater collection system, separating the system into five groups of 20 lift stations each to facilitate the inventor process. Upon completion of each of the five groups, we summarized the existing stations where additional, more detailed structural and/or electrical evaluations were warranted.
- **Biological Process Monitoring Workshop:** Through CDM Smith's R&D program, CDM Smith led the Water Research Foundation (WRF) project 620: Bioprocess Monitoring Tools for Biological Filtration. The City participated in the sampling and workshop components of the research. Subsequent to that, We conducted a full day of Biological Filtration and UV Disinfection training to the WTP operators. Collaboratively, CDM Smith and the City furthered the industry and the operator's knowledge of the details of biological filtration.
- **WTP Arc Flash Training and Electrical Standard Operating Procedures:** CDM Smith provided electrical system review and recommendations for electrical safety for the City for the Pumping Operations department and the Water Treatment Plant. We created a four-hour training course on Arc Flash and Electrical Safety based on NFPA 70E-2108 for operations and maintenance personnel, tailored specifically for the City. Training was provided on three separate occasions. In addition, CDM Smith developed standard operating procedures (SOPs) for electrical work on equipment. Our electrical engineers conducted site visits and reviewed the electrical drawings to identify site-specific needs related to electrical equipment, operating procedures, and arc flash hazards.
- **Pipe Restraint Evaluation:** While the City was in the process of constructing a new sanitary sewer pipe, they exposed an existing 20-inch water main which had been previously cut and capped. The City requested CDM Smith provide engineering services to install pipe restraints on the capped end of the pipe and three upstream tees. We provided a pipe restraint detail and signed and sealed calculations for each of the four locations.

Miami-Dade County WASD Ocean Outfall Legislation (OOL) Program, Miami-Dade County, FL

CDM Smith was retained to perform design development, engineering, preparation of construction documents, permitting and bid services, and design services during construction for facility improvements, working in coordination with WASD staff and the Owner's Representative to deliver the necessary design documents and to ensure the timely completion of projects associated with the OOL program. We began work on the OOL program with improvements to the SDWWTP, which is located in the south east part of Miami-Dade County and has an overall capacity rating of 112 mgd. These improvements included adding peak flow management facilities and improving the capacity of the existing secondary treatment train. High-level disinfection and effluent disposal facilities were also included. For ease of procurement, the designs were split into two construction packages for separate bidding and procurement:

- **SDWWTP – Clarifiers and HLD, South Treatment 2B (ST-2B):** The bid package (ST-2B) includes improvements to the secondary clarifiers, return activated sludge (RAS) pump stations, transfer pump station bypass, and existing High Level Disinfection Facilities (flocculation, deep bed filter facilities, new 108 inch diameter pipeline connecting filters to chlorine contact chambers). The SDWWTP has ten clarifiers in service, and to accommodate the additional treatment flow, CDM Smith was tasked with the design of two additional circular clarifiers (Clarifies 11 and 12) that will essentially mirror the existing clarifiers but differing in some respects (such as hardening for sea level rise).
- **SDWWTP – Chlorine Contact and Generation and Wells PS, South Treatment 2C (ST-2C):** The bid package (ST-2C) includes improvements to chlorine contact tanks, an effluent pump station expansion, connections to three injection wells, overall grading, drainage, a new 72-inch diameter pipeline connecting the effluent disposal loop, and other miscellaneous improvements. Filtered effluent is conveyed to the nine existing Chlorine Contact Chambers (CCCs) to disinfect wastewater so as to meet deep injection well standards. CDM Smith was tasked with the design of two new CCCs (CCCs 10 and 11). CCCs 10 and 11 can be taken out of service by operating two manually controlled influent and effluent sluice gates.
- **ST-2C Injection Wells:** The existing effluent disposal system includes 17 existing deep injection wells with total permitted capacity of 284.5 mgd. With the projected 329 mgd PHF, the deep injection well network will require an additional 44.5 mgd of capacity. Three Class I municipal deep injection wells that meet high level disinfection standards are proposed. CDM Smith developed and field calibrated an effluent disposal loop hydraulic model. The final locations of the three new wells were determined based on the effluent disposal loop hydraulic modeling efforts.

Client Name: Miami-Dade County, FL

Project Dates: 2017– Ongoing

Role in Project: Prime

Why Relevant:

- Reuse Distrubution Systems
- Wastewater Collection Systems
- Stormwater Systems
- Hydraulic Modeling
- Sewer Pump Stations
- Force Main Improvements
- Sustainability/Climate Resilience
- Sea Level Rise Mitigation
- Cost Estimating
- Quality Assurance/Control & Value Engineering
- Water Treatment Plant & Wastewater Treatment Plant Project

Client Name: City of Ft. Lauderdale, FL

Project Dates: 2001 – Ongoing

Role in Project: Prime

Why Relevant:

- Hydraulic Modeling
- Sewer Pump Stations
- Force Main Improvements
- Cost Estimating
- Quality Assurance/Control & Value Engineering
- Water Treatment Plant & Wastewater Treatment Plant Project

General Engineering Contract, Ft. Lauderdale, FL

For 19 years, CDM Smith has served as the City's Engineer of Record for Wastewater, enjoying a long and successful relationship. CDM Smith has worked in various aspects of planning and engineering which include renewal, replacement, and capital improvement projects.

- **Renewal and Replacement Annual Report (R&R) Update:** CDM Smith managed the City's annual report for the large users of the Central Regional Wastewater System with the preparation of an annual R&R report. CDM Smith has worked with City staff for the 19 years on the preparation of R&R Reports. The R&R Report conducts and identifies recommended improvements and modifications of equipment based on interviews with City staff and observations by our staff's field visits. Planning level opinions of probable cost are prepared for the equipment and structures recommended for R&R activities. The identified replacement costs are then used by the Large Users to set their billing rates for the coming fiscal year. Our staff attends quarterly Large User meeting held and provides technical updates as requested by the City. In 2020 we teamed together to survey equipment suppliers for their replacement material cost. Also, CDM Smith's structural engineer conducted structural inspection at the wastewater plant for above ground pipe, pipe supports, pump pads, clarifier bridges, HVAC equipment supports, and roofs.
- **Annual Capacity Analysis Report Updates:** CDM Smith managed the City's Capacity Analysis Report annually for the past 19 years. We gathered and organized the GTL WWTP flow, biological loading, rainfall, and population during for peak hour, day, month, and annual events for trend analysis. CDM Smith updated the capacity analysis report based on flow data and biological loadings for the GTL Wastewater Treatment Plant as stipulated in Rule 62-600.405, Florida Administrative Code (FAC) so the City conducts timely planning, design, and construction of wastewater facilities necessary to provide proper treatment. CDM Smith's key services include the Tabulate and chart 10-years of historical flow data from the prior year, Tabulate and chart 10-years of biological loading data from the prior year, list major plant process components improvements from the prior year, tabulate and chart the annual rainfall data from the prior year. CDM Smith developed Population projections based on the Bureau of Economic and Business Research (BEBR) population for this service area (City plus Large Users) which was then projected forward at the same rate as the BEBR (medium) population projection rate for Broward County. Tabulate and chart future flows based on developed population projections, tabulate and chart future biological loadings based on developed population projections. Provide recommendations for future expansion needs.
- **GTL Large Diameter PCCP Replacement with DIP Design and Construction Management/CEI:** CDM Smith managed the phased replacement of large diameter process pipe with ductile iron pipe beginning with approximately 2,460 linear feet of critical-duty prestressed concrete cylinder pipe (PCCP) consisting of 660 feet of 66-inch pipe; 180 feet of 54-inch pipe; 780 feet of 48-inch pipe, and 840 feet of 42-inch pipe. The initial design consists of one bid document for Sequence A, B, C combined. The City separated the project into three bids over several years to accommodate staggered funding cycles. Sequence A was constructed in 2018. Sequence B was constructed in 2020. Sequence C was constructed in 2022. This project consists of removing and replacing precast concrete cylinder pipe (PCCP) and replacing it with ductile iron pipe via open cut method. When the PCCP cannot be removed, then the interior will be line with an internally bonded carbon fiber reinforced polymer wrap. A key activity of the project consists of by-pass pumping of up to 50% of the influent wastewater around process tankage during pipe rehabilitation.
- **Additional projects include:** GTL Emergency Generator and Switchgear Upgrades for the WWTP and Construction Engineering and Inspecition (CEI), George T. Lohmeyer Regional Wastewater Treatement Plant (RWWTP).

CDM Smith brings over **75 years of experience as a trusted advisor and full service partner**. We have a **successful record of meeting the needs of our clients**.

Infrastructure Needs, St. Lucie County, FL

The County retained CDM Smith to conduct a high-level needs assessment for St. Lucie County to evaluate potential alternatives to bulk services provided by others. The alternatives provided service for future growth within the County, concentrating on water, wastewater, and reclaimed water infrastructure.

Our team determined how to provide the most economical and beneficial services for its consumer base by identifying viable alternatives for potable, wastewater and reclaim service, including corner stone alternatives that would bring the greatest benefit for future growth. We utilized modeling software and analyzed specific plant processes to develop our solutions, that included plants/treatment facilities and evaluation alternatives that would connect treatment facilities.

Ultimately, we developed more than 10 potable water service alternatives, 11 wastewater service alternatives, and six reclaimed water alternatives. These alternatives were provided to the County in a useable document for planning purposes and Capital Improvement Plan development, providing a roadmap for future infrastructure needs.

International Golf Parkway, St. Johns County, FL

CDM Smith designed and provided engineering services during construction for approximately 14,000 linear feet (lf) of reclaimed water main and 7,800 lf of force main along International Golf Parkway. The majority of construction utilized horizontal directional drilling (HDD) technology in congested areas. We provided shop drawing review, answered requests for information (RFIs), provided design clarifications, and recommended payments to the contractor, and verified work was completed in accordance with the contract documents.

Canova Pump Station, City of Melbourne, FL

CDM Smith is currently providing design, permitting, and bidding phase services for a new water pump station, replacing the existing pump station at the Canova Beach Pump Station site.

The project elements include:

- A new slab on grade pump station with three 1.5–gallons per minute vertical turbine pumps with VFD
- A new electrical building that includes architectural aesthetic features
- A new electrical service via pad-mounted transformer
- Associated electrical, instrumentation and control equipment, including a distribution panelboard, VFDs, and a SCADA panel and related electrical, lighting, and grounding provisions
- Site work including structures, grading and drainage, paving, landscaping, and irrigation
- Sequence of construction to maintain pump station operation

The project is currently in the bidding phase.

Riverside Drive Force Main Improvements, City of Titusville, FL

CDM Smith provided three conceptual routing plans, for the force main replacement along Riverside Drive. This project also included review of potential funding sources like State Revolving Funding (SRF). The existing force main is approximately 4,200 feet in length and the new route will be approximately 5,400 feet in length. The current force main is aging and is in close proximity to the Indian River Lagoon which elevates consequence of failure. The goals of this project included finding a suitable routing plan for the force main to reduce the risk associated with pipe failure of the current location. Project challenges included finding routes that were the least invasive and routes that would require minimal permitting.

CDM Smith utilized GIS mapping to determine the least amount of conflict, leveraged the City's institutional knowledge of existing utilities and actively worked with the City throughout the process to determine the most beneficial solution. Following construction, the project will eliminate the potential of a force main break along the Indian River Lagoon.

Water and Force Main Infrastructure Criticality and Risk Assessment, City of Boca Raton, FL

CDM Smith prepared a crticial infrastructure assessment of 700 miles of water main from 2 to 48 inches in diameter and 590 miles of force main from 6 to 48 inches in diameter to assess the extent of needed rehabilitation and replacement of water and wastewater system as part of the City's Pressure Pipe Renewal Program. Risk analysis provided rehabilitation pirority lists, lifecyscel costs, and O&M procedures.

CDM Smith also identified potential CIP recommended improvements at various milestones such as 5 and 10 years in the future or at target years determined by the City.

As-needed Professional Services, Town of Longboat Key, FL

CDM Smith has been providing as-needed engineering services for the Town of Longboat Key under a continuing services contract since 2016. Under this contract, we have provided engineering services on a task-order basis for projects involving civil, environmental, process, hydraulic, mechanical, structural, electrical, instrumentation, and value engineering. Our scope of services has included studies, analysis and reports, design, modeling, field testing, and development review services. Example projects include:

Potable Water System Hydraulic Model Update and Validation: Hydraulic modeling services were requested to assist in the evaluation of additional pipeline improvements to enhance potable water services. CDM Smith performed hydraulic model evaluations for proposed pipeline improvement options to determine the relative impact on service area delivery pressures.

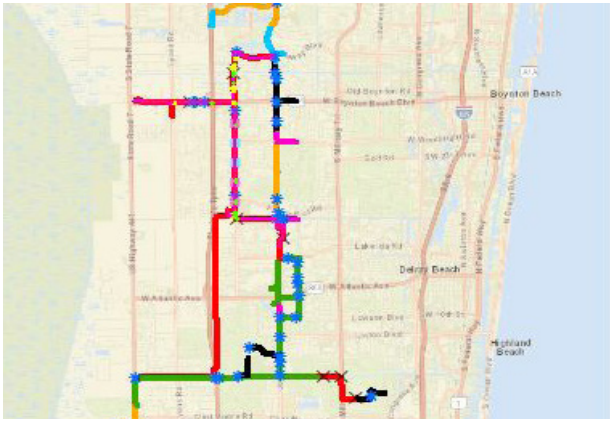
Lift Station Design and Rehabilitation: Design of several lift station rehabilitation projects, including the replacement of existing pumps, motors, electrical controls, station piping, flow project standards, and permitting.

General Engineering Services, Pasco County, FL

CDM Smith has been retained by Pasco County over the years to provide a variety of water, wastewater, and reclaimed water projects. Example projects include:

Funding Support Services: Provided miscellaneous professional services to Pasco County Utilities Services Branch on an as-requested basis in support of the County's efforts to obtain an SRF loan. Tasks included guidance on document completion, conference calls, recommended approaches to the SRF process, and other support services as required.

Boyette Reservoir HSPS Upgrade: Provided design, permitting, and bidding services for modifications to the Boyette Reclaimed Water Pump Station and professional services during construction. The HSPS includes three 500-hp variable-speed vertical turbine pumps that draw reclaimed water from the Boyette Reclaimed Water Storage Reservoir and delivers it to the County's reclaimed water distribution system. The pump station intake system configuration includes cylindrical wedge-wire intake screens and a divided concrete rectangular wet well.

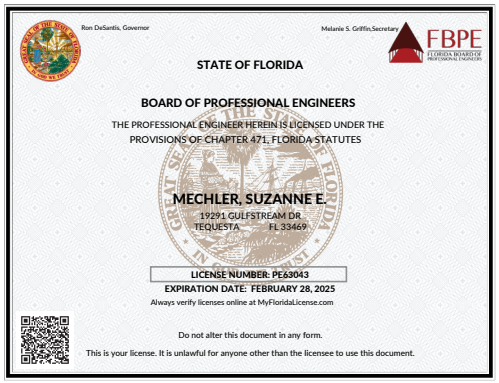


Sanitary Sewer and Force Main System Evaluation, Palm Beach County, FL

CDM Smith evaluated 1,250 miles of gravity sewer pipe ranging in size from 4 to 30 inches in diameter and 600 miles of force mail ranging in size from 2 to 66 inches. The evaluation allowed CDM Smith to develop a multi-year inspection and rehabilitaiton program, ehancing its approach to prioritizing condition assessment and rehabilitation of wastewater force main and water distribution systems.

CDM Smith also developed a R&R funding needs analysis for the County's systems using the InfoAsset model to ensure that the rate of pipe renewal remains sustainble with respect to cost and effort over the service life of the utility assets.

Minimum Qualifications - Staff Licenses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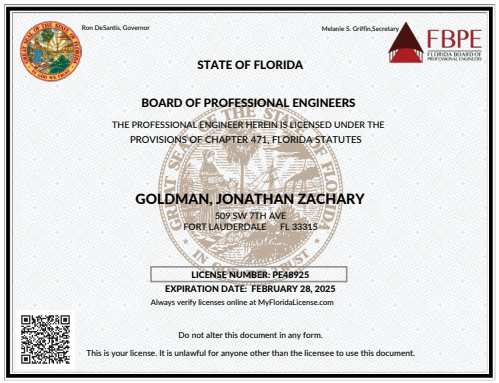
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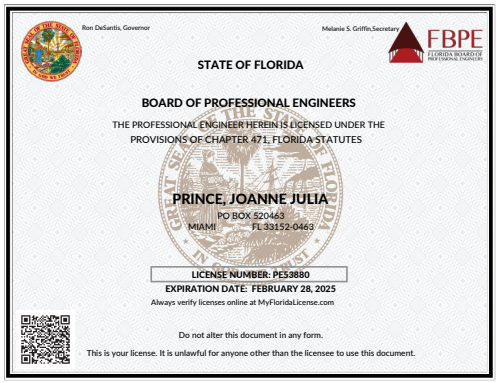
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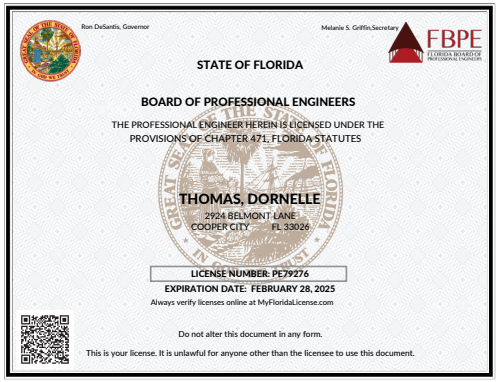
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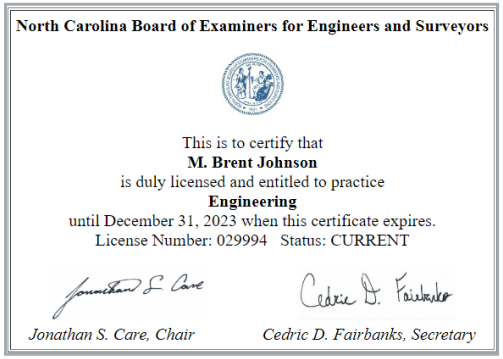
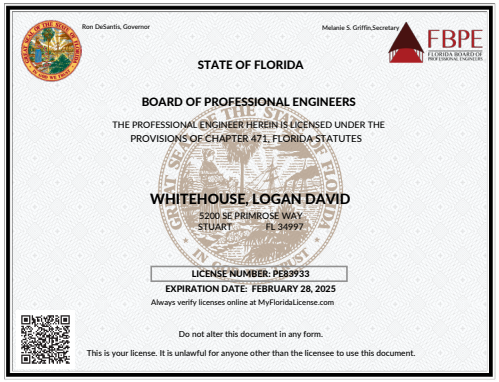

North Carolina Board of Examiners for Engineers and Surveyors
This is to certify that
M. Brent Johnson
is duly licensed and entitled to practice
Engineering
until December 31, 2023 when this certificate expires.
License Number: 029994 Status: CURRENT
Jonathan S. Care, Chair
Cedric D. Fairbanks, Secretary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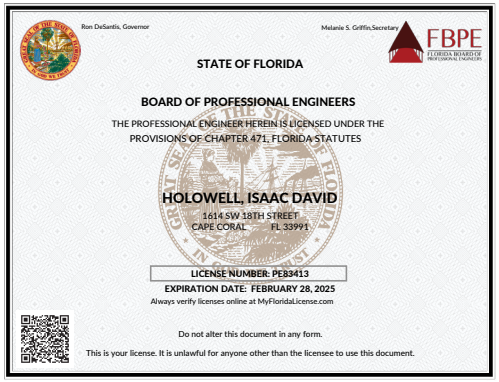
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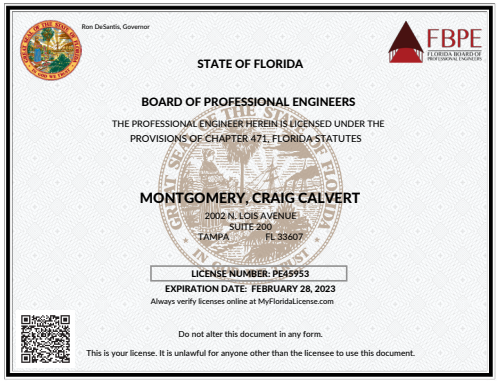
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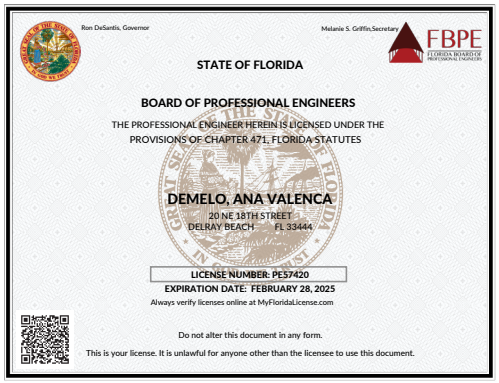
Address: MATAWAN NJ
Profession: Professional Engineering (016)
License Number: 084002
Date of Licensure: July 25, 2006
Status: Registered
Registered through Date: September 30, 2023
Additional Qualifications: • None
February 21, 2023 10:15 AM (ET)
https://www.op.nysed.gov/verification-search?licenseNumber=084002&professionCode=016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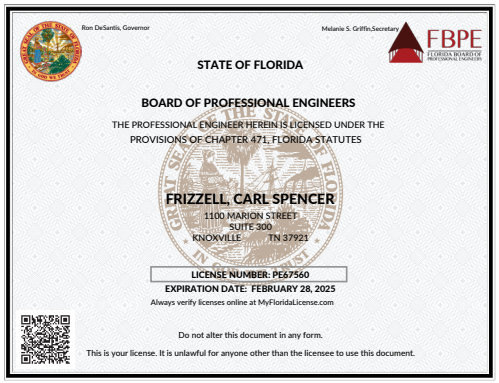
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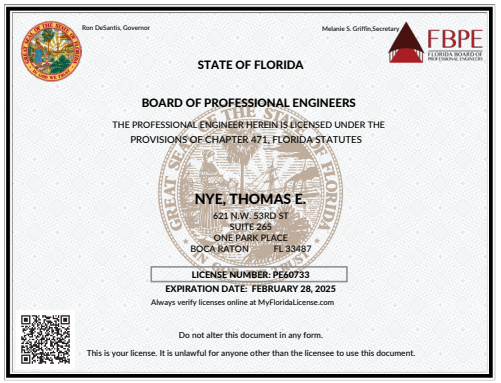
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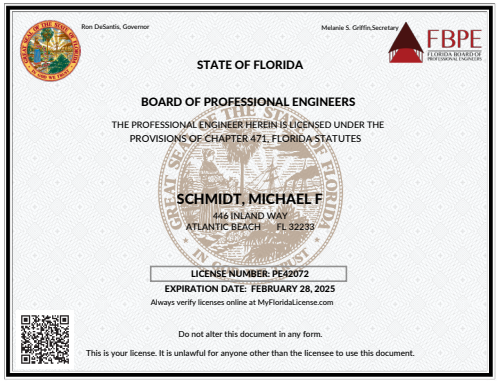
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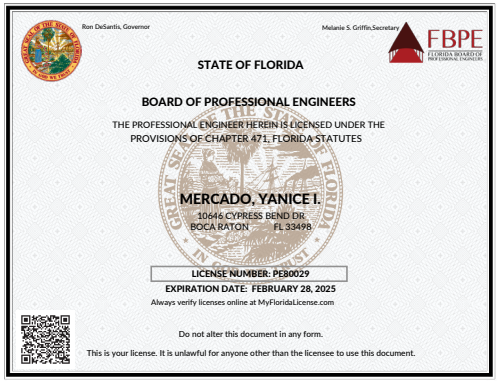
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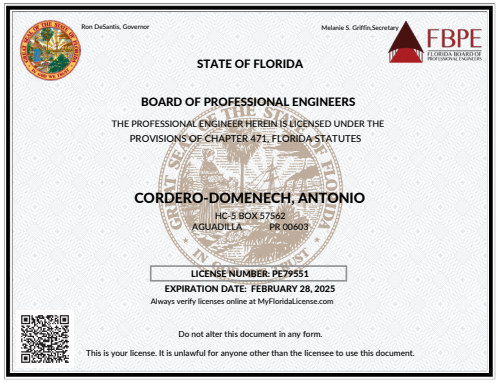
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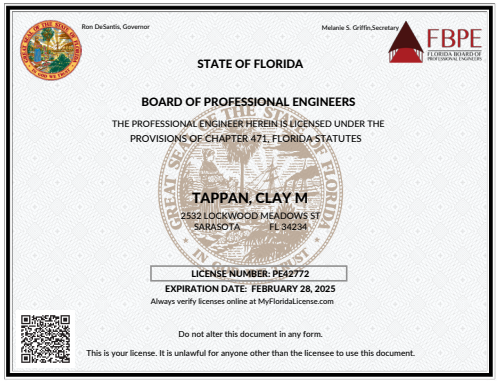
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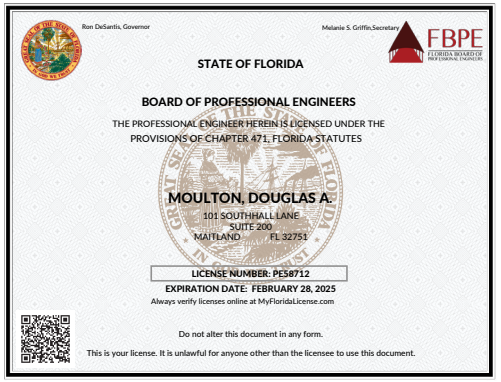
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TAB D

Organizational Profile and Project Team Qualifications

Tab D. **Organizational Profile and Project Team Qualifications**

Organization

CDM Smith is a global privately owned engineering and construction firm providing over 75 years of legendary client service and smart solutions in water, environment, transportation, energy, and facilities. Maintaining a presence in Florida for nearly 50 years, including local South Florida offices since 1974, we are residents who live, work, and play in the local community. With nearly 400 professionals in Florida and a global staff network of more than 5,500, the CDM Smith team has in place the horsepower needed to effectively deliver concurrent projects successfully under this contract.

Local Management Team with the Flexibility to Handle Your Diverse Project Needs

Our team structure, presented in the organization chart will maximize the use of our vast local resources to complete the professional services required under this contract. Projects issued to CDM Smith by the City will first be delivered to CDM Smith's Officer-in-Charge, Suzanne Mechler. Once received, Suzanne will assign to our Project Manager, Jon Goldman who will activate the appropriate team members to the project based on your preference and/or experience with similar projects and availability. Our project manager will then serve as the single point of contact for the life of the work assignment.

Our team have all successfully served on professional engineering contracts for local municipalities. Our Project Manager supported by our project team, have the experience to perform every aspect of the project tasks anticipated under this contract. Our proposed team members for engineering and construction-related services are based primarily out of our local South Florida offices.

CITY OF Hollywood FLORIDA

Officer-in-Charge

Suzanne Mechler, PE

Technical Review Committee

Clay Tappan, PE, BCEE
Douglas Moulton, PE

Project Manager

Jonathan Goldman, PE, PMP, BCEE

Water/Sewer/Reuse

Gravity Collection Systems
Joanne Prince, PE
Dornelle Thomas, PE, ENV SP

Water and Force Main Assessment
M. Brent Johnson, PE*
Logan Whitehouse, PE, CDT

Lift Stations
Joanne Prince, PE
Isaac Holowell, PE
■ Metco Services Southeast, LLC

Water and Force Main Design
Dornelle Thomas, PE, ENV SP
Craig Montgomery, PE

Hydraulic Modeling
Isaac Holowell, PE

Lead and Copper Rule
Joanne Prince, PE
Sandra Kutzing, PE*, PMP
Brendan Susino

Stormwater

Drainage Improvements
Ana Valenca DeMelo, PE, PMP, DWRE

Stormwater Pump Station
Carl Frizzell, PhD, PE
Isaac Holowell, PE

Modeling/GIS
Thomas Nye, PhD, PE
Brendan Susino

Conformance and CIP Reviews
Jonathan Goldman, PE, PMP, BCEE
Michael Schmidt, PE, BCEE, D.WRE

Permitting Assistance/Support
Dornelle Thomas, PE, ENV SP
Logan Whitehouse, PE, CDT
Robert Rooney, PhD

Hydrogeology
Stewart Magenheimer, PG, PMP

Engineering Support Services

In-House Support Services
Yanice Mercado, PE, PMP
Antonio Cordero-Domenech, MSCE, PE, PMP

Cost Estimating
Craig Gadberry, PE

Construction Services
Stephen Freiman
Daryl Jones

Grant Application Assistance
Stacy Barna
Diane Kemp
Suzanne Mechler, PE, BCEE
Michael Schmidt, PE, BCEE, D.WRE
■ Brizaga, Inc.

Green Infrastructure
■ Curtis + Rogers Design Studio, Inc.

Asset Management
Andy Baranowski, GISP
Brendan Susino
Joseph Ridge
James Carolan

Public Outreach
■ Brizaga, Inc.

Survey
■ Biscayne Engineering Company, Inc.

SUE
■ Craig A. Smith & Associates, LLC

Geotechnical
■ Nutting Engineers of Florida Inc.

Water/Wastewater Plant

Process Design
Layla Llewelyn, PE, PMP

Hydrogeology
Stewart Magenheimer, PG, PMP

■ **Subconsultants**

Brizaga, Inc.
Curtis + Rogers Design Studio, Inc.

Craig A. Smith & Associates, LLC
Biscayne Engineering Company, Inc.

Nutting Engineers of Florida Inc.
Metco Services Southeast, LLC

*PE in state other than Florida

Proven Performance and Experience

Beginning in 2018, CDM Smith completely revamped our Project Management and Delivery process to meet client expectations and incorporate technological and business tools to assist project managers in delivering projects on time and within budget. The program also integrated our well-established Quality Management System (QMS) as an integral part of our Delivery Process.

Our approach is based on the Project Management Institute's (PMI) framework to project management. Our project manager, Jon Goldman is a certified Project Management Professional that is trained and proficient in the use of modern project management tools and data that allow an efficient project delivery.

Our project delivery will focus on one-on-one client coordination. We will connect our appropriate technical staff with the City's liaison for the type of work being conducted. To meet schedule, we will maintain communication with the City staff for decision making and check-ins as the project moves forward so all City staff and team membrs are engaged in the process that impact schedule and technical requirements.

Subconsultants

CDM Smith will be supported by local subconsultants with a proven history with the City and with CDM Smith. Together we will provide a winning combination to deliver assignments under this contract. More detailed overviews of each of the firms can be found in **Tab H Subconsultant Information**.

Curtis + Rogers Design Studio, Inc.
Green Infrastructure

Metco Services Southeast, LLC
Lift Stations

Craig A. Smith & Associates, LLC
SUE

Nutting Engineers of Florida Inc.
Geotechnical

Biscayne Engineering Company, Inc.
Surveying

Brizaga, Inc.
Public Outreach & Grant Application

CDM Smith resumes can be found on the following pages.

Suzanne provides the City of Hollywood with our corporate assurance that projects issued to CDM Smith under this contract will be the key priority for our firm until all work is successfully completed. She has the authority to commit our staff to this project, and will be personally responsible for your overall satisfaction with our services. Her leadership skills, high level of responsiveness, commitment to the City of Hollywood, and ability to get things done will maximize outcomes and offer the City a trusted partner in the completion of your important projects.

YEARS OF EXPERIENCE
22

YEARS WITH CDM SMITH
21

EDUCATION
ME – Environmental Engineering; BS – Environmental Engineering

REGISTRATION/ CERTIFICATIONS/TRAININGS
Professional Engineer (PE): FL

PERCENTAGE OF TIME ASSIGNED TO THE PROJECT

60% Availability

Suzanne Mechler, PE

KEY ROLE(S)
Officer-in-Charge; Grant Application Assistance

Officer-in-Charge, Comprehensive Stormwater Master Plan, City of Hollywood, FL. Mrs. Mechler is responsible for developing and managing the team that is executing the multi-year, multi-million dollar effort which includes the creation of an interactive stormwater geographic information system (GIS), hydraulic modeling of the system using dynamic SWMM modeling, cost benefit analysis using FEMA HAZUS methodology, a phased 10- and 20-year capital improvementsprogram, a public awareness campaign and stakeholder workshops, funding options, and grant assistance. Ms. Mechler has worked closely with the City and Brizaga, our grant funding subconsultant, to obtain multiple grants to support the CIty's efforts.

Officer-in-Charge, Water Treatment and Raw Water Production Systems Continuing Contract, Broward County, FL. For more than 15 years, CDM Smith has been providing water treatment and raw water production system services on a continuing basis for Broward County's water treatment system. Recent WTP projects under this contract include: WTP 1A Electrical Switchgear #2 Replacement; WTP 1A Pumping System and 4-Log Upgrade; WTP 3A New Boost Pumping Station. Ms. Mechler is serving as the client service manager for this continuing contract.

Officer-in-Charge, Sanitary Sewer and Forcemain Asset Risk Prioritization and Force Main Investigation, Palm Beach County, FL. Palm Beach County's wastewater collection system consists of approximately 1,250 miles of gravity sewer pipe ranging in size from 4 to 30-inches in diameter, as well as 650 miles of force main ranging in size from 1.25 to 66 inches. CDM Smith worked closely with the Utilities GIS staff to enhance the existing GIS with updated data obtained from the condition assessments and inspections. We focused on standardization of the system for consistency. The purpose was to identify and prioritize areas in the system requiring rehabilitation to limit inflow and infiltration, restore asset service life, and help maintain a reliable and structurally sound system. CDM Smith is currently conducting pipe wall thickness using PICA's bracelet tool probe and verified with ultrasonic testing to determine the extents of potential pipe wall integrity loss. Ms. Mechler is responsible for ensuring overall client satisfaction while overseeing all related project work.

Officer-in-Charge, Citywide Program Management Consulting (PMC) Services, City of West Palm Beach, FL.
CDM Smith provided PMC services to act as an extension of City staff and support the administration of multiple CIPs. Ms. Mechler worked with the City of West Palm Beach in executing their $60M bond program. As part of this effort, she worked with the City of West Palm Beach to integrate an embedded senior project manager to conduct an initial assessment of their reporting and project control tools, update their utility policy manual, support capital improvement project prioritization efforts, and develop schedules and reporting tools for over 40 projects.

Jon's experience includes 70+ wastewater/water pipeline projects totaling more than 600,000 linear feet and more than $200M in constructed costs—all in Florida. He also has stormwater master planning and treatment system design, and stormwater utility evaluation, creation, and refinement experience in coastal stormwater programs across South Florida including the Cities of Hollywood, Fort Lauderdale, and Miami, and Fort Lauderdale-Hollywood and Miami International Airports. Jon is a resilient project manager that bridges the gap between driving budgets and schedules, and developing innovative technical solutions.

YEARS OF EXPERIENCE
35

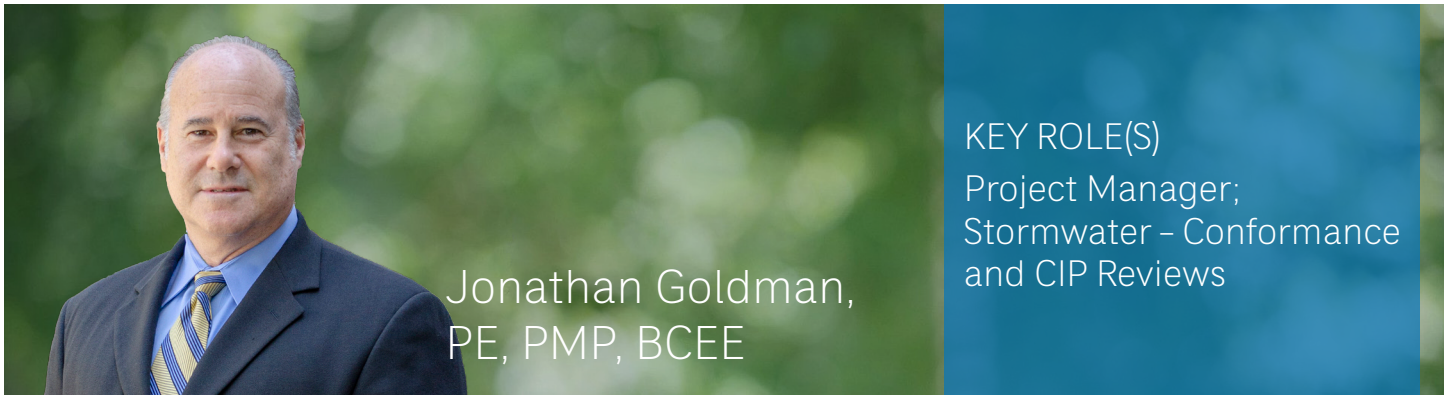
YEARS WITH CDM SMITH
35

EDUCATION
ME – Environmental Engineering;
BS – Environmental

REGISTRATION/ CERTIFICATIONS/TRAININGS
Professional Engineer (PE): FL; Project Management Professional (PMP); Board Certified Environmental Engineer (BCEE)

PERCENTAGE OF TIME ASSIGNED TO THE PROJECT

65% Availability



Jonathan Goldman, PE, PMP, BCEE

KEY ROLE(S)
Project Manager; Stormwater – Conformance and CIP Reviews

Project Manager/Engineer-of-Record, Comprehensive Stormwater Master Plan, City of Hollywood, FL. . Mr. Goldman is responsible for the two year effort of development of the existing and future hydraulic and hydrology USEPA SWMM models at a neighborhood-scale resolution. The models were verified to actual past storms and match the flooding in all areas of the City and for the first time for the City, considers off site influences into the City. Workshops were held with the citizens and commissioners to identify areas of repetitive flooding and capital improvements were created for each neighborhood to resolve the flooding to the City's desired level of service. Planning-level budgets were developed and a series of prioritized projects is being finalized. A special purpose LiDAR was flown to determine the existing seawall elevations and locations and model runs analyzed their effect on the stormwater flooding. The project also included sea level rise analyses for vulnerability, a benefit cost analysis using FEMA HAZUS modeling, grant funding assistance, early-out projects for immediate action, a review of the current operations, design standards, and review of funding sources. A public information campaign was performed in parallel with the work to keep the City's residents and commission informed of the progress and findings of the study and what to expect in the future.

Project Manager/Engineer-of-Record, Comprehensive Stormwater Master Plan, City of Miami, FL. Mr. Goldman is responsible for the multi-year, multi-million dollar effort which includes the creation of an interactive stormwater geographic information system (GIS) from several decades of mixed media records and as-builts, comprehensive survey of topography, LiDAR, stormwater feature verification of location, elevation, and connectivity, development of basin boundaries, seawall heights, finished-floor elevations of critical infrastructure, and channel cross sections, hydraulic modeling of the system using dynamic SWMM modeling, cost benefit analysis using FEMA HAZUS methodology, a phased 10- and 20-year capital improvements program which considers sea-level rise and storm surge resiliency for multiple levels of service across seven major watersheds, water quality treatment for the protection of Biscayne Bay, an electronic stormwater design standards manual, a public awareness campaign and stakeholder workshops, funding options, and grant assistance.

Project Manager/Engineer-of-Record, Water Distribution Replacement Prioritization, Miami Dade Water and Sewer Department (WASD), Miami-Dade County, FL. Mr. Goldman was responsible for providing the organizational structure required for implementation of the rehabilitation of the County's water system for pipes 6 to 30 inches in diameter while maximizing the impact of available funding. This was accomplished by the development of a strategic analysis using GIS-based risk rankings of individual pipe segments in the system based on weighted factors for both probability of failure and consequence of failure. Capital improvement programs for the watermains were developed with projected costs based on a created workflow process which included the incorporation of other ongoing projects in the County, coupled with the highest priority identified pipe rehabilitations/replacements.

Joanne provides the City with over 25 years of engineering experience in the fields of water resources, pipelines and solid waste management. Her experience includes design, permitting, feasibility studies, financial analyses, asset management, and various engineering analyses. She has provided senior level management of more than $200M infrastructure improvements in South Florida, granting her a long-term understanding of local conditions and regulations.

YEARS OF EXPERIENCE
25

YEARS WITH CDM SMITH
1

EDUCATION
BS – Civil Engineering

REGISTRATION/ CERTIFICATIONS/ TRAININGS
Professional Engineer (PE): FL

PERCENTAGE OF TIME ASSIGNED TO THE PROJECT

70% Availability

Project Manager, Palm Beach County Lead and Copper Rule Revisions, Palm Beach County, FL. Ms. Prince is assisting the Palm Beach County Water Utilities Department (WUD) with planning activities to bring them into compliance with the Lead and Copper Rule Revisions that will become effective on October 16, 2024. Working with our technical experts, she is assisting WUD with preparation of a schools sampling plan, a review of the corrosion control program to identify gaps in the current program and LCRR requirements, and preparation of a baseline inventory and guidance memo to address lead service line identification and inventory preparation. CDM Smith is providing staff support for records review and desktop verification of utility and customer side service line material.

Project Manager, Capacity Analysis Report Annual Update, George T. Lohmeyer RWWTP, City of Fort Lauderdale, FL. Ms. Prince assisted with the City's Capacity Analysis Report, where we gathered and organized the GTL WWTP flow, biological loading, rainfall, and population during for peak hour, day, month, and annual events for trend analysis. CDM Smith updated the capacity analysis report based on flow data and biological loadings for the GTL Wastewater Treatment Plant as stipulated in Rule 62-600.405, Florida Administrative Code (FAC) so the City conducts timely planning, design, and construction of wastewater facilities necessary to provide proper treatment. CDM Smith developed Population projections based on the Bureau of Economic and Business Research (BEBR) population for this service area (City plus Large Users) which was then projected forward at the same rate as the BEBR (medium) population projection rate for Broward County. Tabulate and chart future flows based on developed population projections, tabulate and chart future biological loadings based on developed population projections. We provide recommendations for future expansion needs.

Project Engineer, Comprehensive Stormwater Master Plan, City of Miami, FL. CDM Smith is creating an interactive stormwater geographic information system (GIS) from several decades of mixed media records and as-builts, comprehensive survey of topography, LiDAR, stormwater feature verification of location, elevation, and connectivity, development of basin boundaries, seawall heights, finished-floor elevations of critical infrastructure, and channel cross sections, hydraulic modeling of the system using dynamic SWMM modeling, cost benefit analysis using FEMA HAZUS methodology, a phased 10- and 20-year capital improvements program which considers sea-level rise and storm surge resiliency for multiple levels of service across seven major watersheds, water quality treatment for the protection of Biscayne Bay, an electronic stormwater design standards manual, a public awareness campaign and stakeholder workshops, funding options, and grant assistance. Ms. Prince performed technical review of the stormwater master plan and provided feedback to the technical team.

Dornelle is an environmental engineer who has served as a project engineer on various water and wastewater related projects. She has also performed laboratory and field experiments for wastewater sampling and wastewater quality testing.

YEARS OF EXPERIENCE
15

YEARS WITH CDM SMITH
15

EDUCATION
MS – Civil Engineering;
BS – Civil Engineering

REGISTRATION/ CERTIFICATIONS/TRAININGS
Professional Engineer (PE): FL;
Envision Sustainable Professional, Institute for Sustainable Infrastructure;
NASSCO Pipeline Assessment & Certification Program (PACP);
NASSCO Manhole Assessment & Certification Program (MACP);
OSHA 10-hour Construction Safety and Health Certification

PERCENTAGE OF TIME ASSIGNED TO THE PROJECT

80% Availability

Dornelle Thomas, PE, ENV SP

KEY ROLE(S)
Water/Sewer/Reuse – Gravity Collection Systems, Water and Force Main Design; Stormwater – Permitting Assistance/Support

Project Engineer, Installation of Approximately 5 miles of 20/24/30-inch Diameter Water Transmission Main, WASD, Miami Dade County, FL. Ms. Thomas is a project engineer responsible for the design of approximately five miles of 20/24/30-inch diameter water transmission main. She is also responsible for the development of contract documents for the proposed water transmission main, including permitting services, bid phase support services, and limited services during construction.

Project Engineer, Installation of Approximately 4.2 miles of 20-inch through 24-inch Diameter Water Transmission Main, WASD, Miami Dade County, FL. Ms. Thomas is a project engineer responsible for the design of approximately 4.2 miles of 20-inch through 24-inch diameter water transmission main. She is also responsible for the development of contract documents for the proposed water transmission main, including permitting services, bid phase support services, and limited services during construction.

Project Engineer, GTLRWWTP Large Diameter Force Main Replacement, City of Fort Lauderdale, FL. Ms. Thomas was a project engineer involved in the preparation of the technical specification for the fiberglass structural lining of large diameter process pipe.

Project Engineer, George T. Lohmeyer Regional WWTP (GTLRWWTP) Renewal and Replacement Report Update, City of Fort Lauderdale, FL. Ms. Thomas was responsible for visiting the GTLRWWTP and re-pump stations, meeting with plant personnel and confirming the condition of plant equipment. With this information, she assisted the City with preparing an annual schedule for renewal or replacement of its equipment over the next 20 years. She was also responsible for the preparation of the City's 2016 Renewal and Replacement Report Update.

Project Engineer, GTLRWWTP Capacity Analysis Report, City of Fort Lauderdale, FL. Ms. Thomas was responsible for collecting, reviewing and evaluating the City's 2015 flow data. This analysis was used to generate flow projections through 2040 and confirm any future treatment plant expansion needs. She was also responsible for the preparation of the City of Fort Lauderdale's 2016 Capacity Analysis Report Update.

Project Engineer, Stormwater Infrastructure Services, Village of Indian Creek, FL. Ms. Thomas was a project engineer for this project. She created data reports for stormwater structures, visually inspected and photographed stormwater structures, prepared deliverable report binder, and communicated project status and needs directly with the Indian Creek Village.

Brent is a condition assessment subject matter expert with experience leading condition assessment and rehabilitation efforts for more than 1M lf of various sanitary sewer/water systems ranging from 4- to 120-inches in diameter. Brent is active with several national organizations, including American Water Works Association (AWWA) and the National Association of Sewer Service Companies (NASSCO)

YEARS OF EXPERIENCE
32

YEARS WITH CDM SMITH
9

EDUCATION
BS – Civil Engineering

REGISTRATION/ CERTIFICATIONS/TRAININGS
Professional Engineer (PE): NC; National Association of Sewer Service Companies: Pipeline Assessment and Certification Program, U-1208-7940; Horizontal Direction Drilling Methods; Trenchless Technology Pipeline Renewal Methods

PERCENTAGE OF TIME ASSIGNED TO THE PROJECT

80% Availability

Brent Johnson, PE

KEY ROLE(S)
Water/Sewer/Reuse – Water and Force Main Assessment

Senior Technical Director, Gravity Sewer and Force Main Condition Assessment and Rehabilitation, Palm Beach County, FL. Mr. Johnson served as Senior Technical Director for the condition assessment and rehabilitation of 300,000 linear feet of 4-inch through 30-inch gravity sewer and force mains ranging from 2-inch to 66-inch. The project consisted of desktop asset prioritization, CCTV, smoke/dye testing, and manhole inspections as well as rehabilitation design and construction administration services.

Technical Director, Briar Creek Gravity Sewer Condition Assessment, City of Charlotte, NC. Mr. Johnson served as technical director for the condition assessment and rehabilitation design of 18-inch through 54-inch gravity sewer mains in the Briar, Paw, and Coffey Creek basins. The project included CCTV inspection of the gravity mains and visual inspection of the manholes. Rehabilitation design included CIPP lining, open cut replacement and point repairs, sewer diversion, and manhole rehabilitation.

Technical Director, North Durham Water Reclamation Facility Piping Condition Assessment, City of Durham, NC. Mr. Johnson served as technical director for the condition assessment of 14-inch and 18-inch DIP in the aeration basin pipe galleries. The inspection was performed using the PICA Bracelet Probe wall thickness evaluation tool applied to the exterior of the pipe. The inspection identified 400 linear feet of piping requiring replacement.

Senior Technical Manager, Large Diameter Sewer Main Rehabilitation, City of Columbia, SC. Mr. Johnson served as technical lead for the rehabilitation design of 245,000 linear feet of 15-inch through 60-inch gravity sewer mains. Project included CIPP, Sliplining, Pipe Bursting, Open Cut Replacement, and manhole rehabilitation replacement.

Technical Director, Sewer Force Main Condition Assessment and Rehabilitation, Public Works Commission Fayetteville, NC. Mr. Johnson served as technical lead for the condition assessment and rehabilitation of 28,000 linear feet of 20-inch ductile iron pipe force main. The project consisted of ultrasonic and emergency repairs following a break. CDM Smith then prepared a bid package for a 21,000-foot 24-inch HDPE bypass and planning efforts utilizing the PICA SeeSnake Remote Field Technology inspection tool to accurately assess the entire length of the force main.

Technical Director, State Street Basin Water and Sewer Improvements, City of Raleigh, NC. Mr. Johnson served as technical director for 80,000 linear feet of water main replacement and 80,000 linear feet of sewer main replacement in downtown Raleigh area. Project effort included evaluation of the feasibility of different construction phasing alternatives, evaluation of trenchless technologies to avoid construction fatigue and accelerate construction, and survey, design, permitting and bid services for multiple bid packages organized by area and/or technology as appropriate.

** PE in state other than Florida*

Logan is a water distribution, wastewater collection and water resources engineer with experience on an expansive variety of projects including pump station design, stormwater planning and design, collection system assessments, treatment plant design support, ecosystem restoration, and construction management and oversight for various related projects.

YEARS OF EXPERIENCE
9

YEARS WITH CDM SMITH
2

EDUCATION
M.Eng – Environmental Engineering; BS – Civil Engineering

REGISTRATION/ CERTIFICATIONS/TRAININGS
Professional Engineer (PE): FL, VA; Construction Documents Technologist (CDT)

PERCENTAGE OF TIME ASSIGNED TO THE PROJECT

85% Availability

Logan Whitehouse, PE, CDT

KEY ROLE(S)
Water/Sewer/Reuse – Water and Force Main Assessment; Stormwater – Permitting Assistance/Support

Project Engineer, System Wide Forcemain Evaluation, Palm Beach County, FL. Mr. Whitehouse served as a project engineer for prioritizing and selecting forcemain pipelines for inspection, presenting to the client, and coordinating field inspection and reporting activities with the specialty inspection firms and the County's O&M staff.

Assistant Design Manager/Civil Task Coordinator, Green Cay Phase 2, Palm Beach County, FL. Mr. Whitehouse serves as the assistant design manager for this design-build advanced treatment facility and recreational park project. His duties include coordination of all disciplines to assemble plans, specifications, and design documentation. As civil task manager, Mr. Whitehouse works closely with the civil and landscaping subcontractors to ensure the designs adhere to CDM Smith design standards and the civil and landscape aspects of the job are coordinate with the appropriate CDM Smith-led disciplines.

Project Civil Engineer and Inspector, Stormwater Masterplan Pump Station Assessment, City of Miami, FL. Mr. Whitehouse served as the civil engineering inspector for this project, visiting numerous stormwater pump stations throughout the City of Miami to assess condition and resiliency concerns in conjunction with the overall Stormwater Masterplan project. Mr. Whitehouse performed inspections and prepared findings for memo creation.

Project Engineer, Lift Station Sea Level Rise Impact Assessment and Recommendations, City of West Palm Beach, FL. Mr. Whitehouse served as project engineer and inspector on this project, visiting several City of West Palm Beach lift stations deemed vulnerable to sea level rise to assess the station and surroundings. He assisted staff with upgrade recommendations to the stations to improve sewer system resilience and combat nuisance flooding in the areas.

Project Engineer/Civil Task Lead, STA 5/6 Connection to Lake Okeechobee, South Florida Water Management District (SFWMD), West Palm Beach, FL. CDM Smith was retained by SFWMD to continue analysis and conceptual design to assist the District with delivery of Lake Okeechobee water to STA 5/6. In his role, Mr. Whitehouse has coordinated with modeling and geotechnical staff as well as design team staff to assist with the development of the civil design for the project including canal geometry modifications and pump station operation and siting characteristics. This project is currently in final design and includes a 300 cubic feet per second (cfs) stormwater pump station and 9 miles of improvements to exiting canals.

Issac is a environmental engineer with experience focused on hydraulics and pumping applications but also has experience in process mechanical piping, pressure pipe, and sanitary sewer design. His software experience includes ESRI ArcGIS, Autodesk AutoCAD Civil 3D, Innovyze InfoWater, Innovyze InfoWorks ICM, Bentley WaterGEMS, MS Office, EPANET, and Visual Hydraulics. His relevant modeling experience for clients throughout South Florida, including Broward County, Miami-Dade County Water and Sewer Department, Collier County, and the Cities of Fort Myers and North Port.

YEARS OF EXPERIENCE
9

YEARS WITH CDM SMITH
8

EDUCATION
BS – Environmental Engineering

REGISTRATION/ CERTIFICATIONS/TRAININGS
Professional Engineer (PE): FL

PERCENTAGE OF TIME ASSIGNED TO THE PROJECT

60% Availability

Project Engineer, BCWWS Retail Master Plan, Broward County, FL. CDM Smith developed a retail potable water and wastewater master plan for a future forecast year of 2040 to address retail facilities within the County's four service areas (known as Districts 1, 2, 3A, and 3BC). As part of this effort, our team developed a hydraulic model of the County's retail potable water, water, and wastewater systems. Mr. Holowell, using Innovyze InfoWater, performed hydraulic analyses of Broward County's four potable water transmission and distribution districts for planning purposes. The evaluation of potable water district was performed to identify hydraulic deficiencies in the systems and provide recommendations on CIP based on existing conditions and expected growth.

Project Engineer, Utilities Extension Project (UEP) North 2 Facilities Design and Construction Services, City of Cape Coral, FL. The North 2 UEP area consists of adding potable water, wastewater, and irrigation services to an approximately 6.2 square miles residential area. Mr. Holowell performed hydraulic analyses using Innovyze InfoWater for the extension of potable water transmission and distribution mains throughout the North 2 UEP area. The primary purpose of the hydraulic analyses of the potable water system was sizing the approximately 90 miles of proposed water mains to meet various flow conditions including peak hourly and fire flow requirements. Mr. Holowell was also responsible for performing hydraulic analyses using Innovyze InfoWater for the design of 13 new sanitary pump stations and approximately 25 miles of force mains to transmit the wastewater collected in the project area to the City's existing water reclamation facilities. Mr. Holowell was a key member in the design of 13 sanitary duplex lift stations, two sanitary master pump stations, and two canal pump stations for transmitting surface water for irrigation purposes.

Project Engineer, Collier County Public Utilities Renewal (PUR) Program – Wastewater Basin 101, Collier County, FL. CDM Smith was tasked with designing a new sanitary interceptor sewer to combine three neighborhood lift station service areas into one master pumping station service area. Mr. Holowell was the lead process mechanical engineer for the design of the new wastewater master pumping station in Collier County, FL. He was responsible for the hydraulic evaluation using Bentley WaterGEMS, civil and process mechanical design including drawings and technical specifications. The hydraulic evaluation of the proposed pump station was performed for sizing and selection of three submersible solids handling pumps in a parallel circuit, and a diesel driven standby pump. He was also involved with the design and coordination of approximately 4,000 lf of gravity sewer pipe, 29 polymer concrete manholes, and 2,600 lf of 24-inch force main.

Craig has 35 years of experience as a design manager for dozens of water, wastewater, and transmission projects. He will leverage his extensive experience designing complex expansion projects that are heavily constrained by the need to maintain service throughout the duration of construction to benefit the City's projects, ensuring successful maintenance of plant operations throughout project execution.

YEARS OF EXPERIENCE
35

YEARS WITH CDM SMITH
33

EDUCATION
ME, BS – Environmental Engineering

REGISTRATION/ CERTIFICATIONS/TRAININGS
Professional Engineer (PE): FL

PERCENTAGE OF TIME ASSIGNED TO THE PROJECT

50% Availability

Project Engineer, South and Central Wastewater Expansion Study, Hillsborough County, FL. CDM Smith worked closely with County planning and engineering, as well as the assistant County administrator and director-level staff, to validate County proposed solutions to provide water and wastewater utilities to a growing population. We assisted in feasibility analysis of developing pipeline routes, flow requirements, plant capacity requirements, and other strategies for addressing the County's capacity needs.

Project Manager/EOR, Replacement of Pump No. 7 at the Regional Facility Site (RFS) High Service Pump Station (HSPS), Tampa Bay, FL. CDM Smith provided design, permitting, bidding, and services during construction for modifications to TBW's HSPS at its RFS in order to provide increased capacity to meet demands. Our team designed the replacement of the existing 600-hp Pump No. 7 with a new 2,000-horsepower (hp) pump (to match existing Pump Nos. 1 – 6), replacement of discharge piping and valves, and electrical power distribution system modifications to support the addition of one new medium voltage variable frequency drive (VFD) and new 2,000-hp pump.

Project Manager, Jarvis Street/Gainsboro Drive Stormwater Pump Station Alternatives Evaluation, Pasco County, FL. The Holiday Hill Subdivsion (located immediately east of US 19 between Stone Road and Embassy Boulevard) in west-central Pasco County experiences periodic flooding. Flooding was reported to be most frequent and severe in the vicinity of a stormwater pond located just east of Pegasus Avenue between Gainsboro Drive and Hyperion Drive, but larger areas of the subdivision have also experienced flooding. Mr. Montgomery served as project manager and led our team to model the existing conditions in the Gainsboro Drive neighborhood and provided repair recommendations. Our team utilized County's asset database to produce accurate modeling simulations.

Design Manager, Golden Gate Canal Intake and Transmission Main, City of Naples, FL. CDM Smith designed a new 10 mgd surface water intake and transmission main for the City. The intake withdraws water from the Golden Gate Canal upstream of its final weir and pumps the water to the City's wastewater treatment plant where it is blended with reclaimed water and stored for distribution through the City's reclaimed water network. The transmission main traverses a mainly open country route through an existing golf course, an undeveloped parcel, a municipal airport property and existing City road right-of-way. The pipeline, which totals nearly 12,000 feet, includes approximately 8,000 feet of open cut installation of 20-inch PVC pipeline and nearly 4,000 feet of HDD installation of 20-inch PVC pipeline. There are two HDD installations, the larger of which is approximately 3,300 feet. Mr. Montgomery served as design manager for the canal intake pump station. Design included owner purchase specifications for the two 160 hp submersible pumps and associated VFDs.

Sandy has 22 years of professional experience in the design and implementation of drinking water and wastewater projects. She has experience in the design of water and wastewater treatment facilities, corrosion control studies, lead service line replacement programs, pump stations, water transmission mains, tank rehabilitation, outfalls, and sanitary sewers. She has worked on all phases of the project lifecycle, from planning and studies, to permitting, design, bidding, construction and operation.

YEARS OF EXPERIENCE
22

YEARS WITH CDM SMITH
18

EDUCATION
MS, BS – Civil Engineering

REGISTRATION/ CERTIFICATIONS/TRAININGS
Professional Engineer (PE): NY, NJ, DE; Project Management Professional (PMP)

PERCENTAGE OF TIME ASSIGNED TO THE PROJECT

40% Availability

Project Technical Lead, Compliance with New Jersey's Lead Law to Identify and Remove all Lead Service Lines by 2031, Various Systems. Ms. Kutzing served as a technical advisor for 44 water systems, both publicly-owned and investor-owned utilities, in New Jersey to develop inventories and identification and replacement plans prior to New Jersey's deadline of July 22, 2022. Ms. Kutzing will continue as a technical advisor for several of these systems as they implement their identification and replacement plans. Ms. Kutzing also served on the Lead Task Force for Jersey Water Works giving presentations and developing templates and guidance documents for utilities of all sizes to meet the aggressive New Jersey deadlines.

Project Technical Lead, Compliance with the Lead and Copper Rule Revisions (LCRR), Various Locations. Ms. Kutzing is currently the project technical lead helping several utilities comply with the Lead and Copper Rule Revisions (LCRR) including developing service material inventories, assisting with verifications of unknown service lines, reviewing sampling pools for compliance with the LCRR, performing baseline corrosion control treatment evaluations, preparing Lead Service Reporting (LCR) program plans and preparing public education and outreach materials. A sample of these projects include:

Public Works Commission (PWC) in Fayetteville, NC. CDM Smith is working on developing PWC's inventory and standard operating procedures (SOPs) for replacements and data collections. CDM Smith will also be performing a baseline corrosion control treatment study, review the lead and copper sampling for compliance with the LCRR and design documents and a website for public education and outreach. If lead service lines (LSL) are located, CDM Smith will assist PWC in developing and implementing a lead service line replacement program (LSLRP).

- **Town of Cary, NC.** CDM Smith is currently working on developing Cary's inventory and SOPs for replacements and data collections. CDM Smith will also be performing a baseline corrosion control treatment study, review the lead and copper sampling for compliance with the LCRR and design documents and a website for public education and outreach. If LSLs are located, CDM Smith will assist Cary in developing and implementing a LSLRP.
- **Project Technical Lead, Palm Beach County Lead and Copper Rule Revisions, Palm Beach County, FL.** Ms. Kutzig is assisting the Palm Beach County Water Utilities Department (WUD) with planning activities to bring them into compliance with the LCRR that will become effective on October 16, 2024. She is developing a schools sampling plan, a review of the corrosion control program to identify gaps in the current program and LCRR requirements, and preparation of a baseline inventory and guidance memo to address lead service line identification and inventory preparation. CDM Smith is developing a baseline via a desktop verification of utility and customer side service line material to implement a machine learning tool for the reminder of the unknowns.

Brendan is a GIS specialist with diverse knowledge of geographic information systems. His GIS skills include spatial data analysis, geostatistical data analysis, 3D data analysis, SQL, database management and database design. Geoprocessing application experience also includes multispectral and hyperspectral remote sensing, digital image analysis, digital elevation model (DEM) processing, and LiDAR analysis.

YEARS OF EXPERIENCE
7

YEARS WITH CDM SMITH
5

EDUCATION
MA, BA – Geography

PERCENTAGE OF TIME ASSIGNED TO THE PROJECT

70% Availability

Brendan Susino

KEY ROLE(S)

Water/Sewer/Reuse – Lead and Copper Rule; Stormwater – Modeling/ GIS; Engineering Support Services – Asset Management

GIS Specialist, Stormwater Masterplan, City of Hollywood, FL. Mr. Susino has developed the Stormwater Network geodatabase design and updated the primary stormwater management system (PSMS) to be used for SWMM model development. He has worked with survey crews to identify and fill missing data gaps in the GIS. He also developed portions of technical memoranda and figures for reports.

GIS Specialist, Comprehensive Stormwater Masterplan Update, City of Miami, FL. Mr. Susino has assisted with the development of the primary stormwater management system (PSMS) in GIS, including database maintenance and management, development of GIS workflow, and management of ArcGIS Online applications used in the aid of data collection and verification. He conducted a HAZUS Analysis city-wide for each design storm flood level and alternative design storm flood levels to aid in the development of Grant Proposals.

GIS Specialist, GIS Update, City of Hallandale Beach, FL. Mr. Susino has management the georeferencing of utility plans which are used for the development and update of existing GIS utility layers.

Palm Beach County Lead and Copper Rule Revisions, Palm Beach County, FL. Mr. Susino has assisted with developing a baseline via a desktop verification of utility and customer side service line material to implement a machine learning tool for the reminder of the unknowns.

GIS Specialist, Stormwater Assessment, City of Delray Beach, FL. Mr. Susino has conducted statistical analysis of residential and non-residential properties for the City of Delray Beach in the support of a stormwater assessment update.

GIS Specialist, Opa-Locka and Tamiami, Miami-Dade Aviation Department (MDAD), FL. Mr. Susino has assisted with the development of future conditions topographic data by updating digital elevation models (DEM) through advanced geoprocessing methods. He also has updated the geometric network (GIS) to include stormwater features and structures for use in the Stormwater Management Master Plan Update.

GIS Specialist, Arizona State University IUMP, AZ. Mr. Susino developed the tunnel utility GIS network for the ASU Campus of Tempe from a variety of reference drawings, documents, and other ancillary data sources including CAD. GIS conversion as part of his task includes potable water, distilled water, telecom, and electricity, he created a QA/QC procedure for GIS conversion in collaboration with GIS colleagues during tunnel conversion process. Mr. Susino has created an ArcGIS online web mapping application for use of QA/QC of Polytechnic Campus Electric GIS network. He also has been tasked with record drawing review and GIS updates as part of the QA/QC process of both Tempe (Sewer GIS Network) and Polytechnic (Telecom GIS Network).

Ana has completed numerous civil and environmental engineering projects from planning, design, permitting, bidding, construction management and close out. Her experience includes municipal infrastructure, stormwater management, site development, solid waste, hydrologic and hydraulic modeling, environmental resource permitting, feasibility studies, and construction management.

YEARS OF EXPERIENCE
27

YEARS WITH CDM SMITH
14

EDUCATION
MS – Civil and Environmental Engineering; BS – Civil Engineering

REGISTRATION/ CERTIFICATIONS/TRAININGS
Professional Engineer (PE): FL; Project Management Professional (PMP); Diplomate, Water Resources Engineer (DWRE)

PERCENTAGE OF TIME ASSIGNED TO THE PROJECT

40% Availability

Ana Valenca DeMelo, PE, PMP, DWRE

KEY ROLE(S)
Stormwater – Drainage Improvements

Project Manager, Stormwater Master Plan, City of Parkland, FL. Ms. DeMelo is providing project management to a team of engineers and scientists performing as subconsultant to the prime firm in developing a City-wide Stormwater Master Plan, including conducting a stormwater infrastructure inventory, roadway drainage investigation, hydrologic and hydraulic modeling, water quality analysis, drainage retrofit alternatives developed in accordance with permitting agencies requirements, and development of engineer's opinion of construction cost. The City intends to adopt the stormwater master plan with proposed capital projects in support to their stormwater utility program.

Project Manager, American Public Works Association (APWA) Certification Assistance, City of Hallandale Beach, FL. Hallandale Beach is in the process of seeking APWA Certification. This project provides technical support validating and developing site specific operation and maintenance instructions of Standard Operating Procedures (SOP), reviewing existing and drafting new SOPs to fulfill the APWA Certification.

Project Manager, STA 1W Expansion 2 Construction Management Services (CMS), South Florida Water Management District (SFWMD), FL. Ms. DeMelo is performing project management functions for construction management services task authorization for a 2,100 acres stormwater treatment area (STA), approximately 15 miles of earthen embankments and levees, 11 remotely operated hydraulic control structures, rock blasting, extensive seepage management systems, access road, and approximately 6 miles of concrete lined canal.

Project Engineer/Civil Task Lead, STA 5/6 Connection to Lake Okeechobee, South Florida Water Management District (SFWMD), West Palm Beach, FL. CDM Smith was retained by SFWMD to continue analysis and conceptual design to assist the District with delivery of Lake Okeechobee water to STA 5/6. In his role, Ms. Demelo has coordinated with the design team staff to assist with the development of the civil design for the project including over 9 miles of improvements to canal geometry and construction of a 300 cubic feet per second (cfs) pump station. Project Manager, Stormwater Master Plan, City of Lake Worth, FL. Ms. DeMelo was responsible for managing a team of engineers and scientists in developing a city-wide Stormwater Master Plan which included conducting a stormwater infrastructure inventory, roadway drainage investigation, hydrologic and hydraulic modeling, estimate of pollutant mass loading, drainage retrofit alternatives developed in accordance with permitting agencies requirements, and development of engineer's opinion of construction cost. The City's stormwater master plan was adopted and included in the City's stormwater and roadway management program.

Carl is an industry-recognized hydraulics expert with experience throughout Florida and the Southeast, conducting hydraulic modeling, pump station design, pipeline design, plant hydraulics, and construction management. He is also an active member of the Hydraulics Institute, serving on the Pump Intake Standard, Pump Piping Standard, Submersible Pump Test, and WTP Pump Application Guideline Committees.

YEARS OF EXPERIENCE
20

YEARS WITH CDM SMITH
18

EDUCATION
PhD, MS, BS – Civil Engineering

REGISTRATION/ CERTIFICATIONS/TRAININGS
Professional Engineer (PE): FL, GA, TN

PERCENTAGE OF TIME ASSIGNED TO THE PROJECT

50% Availability

Carl Frizzell, PhD, PE

KEY ROLE(S)
Stormwater –
Stormwater Pump Station

Technical Reviewer, Utilities Extension Project (UEP) North 2 Facilities Design and Construction Services, City of Cape Coral, FL. The North 2 UEP area consists of adding potable water, wastewater, and irrigation services to an approximately 6.2 square miles residential area. Dr. Frizzell provide quality review of the hydraulic analyses for the extension of potable water transmission and distribution mains throughout the North 2 UEP area. The primary purpose of the hydraulic analyses of the potable water system was sizing the approximately 90 miles of proposed water mains to meet various flow conditions including peak hourly and fire flow requirements. He was also responsible for providing quality review for the hydraulic analyses for the design of 13 new sanitary pump stations and approximately 25 miles of force mains to transmit the wastewater collected in the project area to the City's existing water reclamation facilities.

Project Engineer, Kingsport Raw Water Intake Improvements, City of Kingsport, TN. Dr. Frizzell served as the project engineer during preliminary and final design of the new 36-mgd raw water pump station and raw water tunnel. He completed the hydraulic analysis that evaluated two alternative pump station concepts. Dr. Frizzell led the process mechanical design for the selected alternative during the final design phase, which included design of a new raw water pump station at the water treatment plant and a new 1,100 linear feet raw water tunnel. The pump station consist of a bottom suction can design, where four vertical turbine pumps operate in the new raw water tunnel.

Hydraulics/Pumping Reviewer, Rivertown WTP, JEA, Jacksonville, FL. With rapid growth in JEA's northwest St. Johns County service area, CDM Smith is the consulting engineer for design, permitting, bidding, and construction phase services for 2,500 lf of raw water main from two proposed remote well sites along Longleaf Pine Parkway in St. Johns County to the proposed Rivertown WTP. The piping was designed to convey approximately 4.7 mgd of raw water off-site and installed using a combination of open-cut and HDD methods to accommodate the limited space, congested corridor, and 30-foot easement. Dr. Frizzell served as technical reviewer for the hydraulics and pumping components of this project.

Pump Station Technical Expert, Saratoga Springs WTP and Reclaimed Pumping Facility, Clay County Utility Authority, Clay County, FL. Dr. Frizzell served as the pump station technical expert and resource for the well pumps, high service pump station WTP and reclaimed pump station on the design and permitting of a new 2-mgd potable WTP and reclaimed pump station. The project includes the design and installation of three new dual zone LFA/UFA wells, two prestressed concrete tanks, two high service pump stations, one disinfection system, and approximately 1 mile of 12-inch water and reclaimed force main. The project also requires a major modification of CCUA's Potable Consumptive Use Permit (CUP), and a minor modification of the reclaimed CUP. The design phase includes a hydraulic surge analysis to assess the impacts of the new facility to the existing potable and reclaimed water distribution grids.

Tom's extensive professional expertise in water resources includes stormwater, sewer groundwater, and river modeling as well as watershed planning, operations, permitting, and conceptual design. His model experience includes various versions of the US Environmental Protection Agency's Stormwater Management Model (SWMM), the US Army Corps of Engineers' Hydrologic Modeling System (HEC-HMS) and Adaptive Hydraulics Model (ADH), and the US Geological Survey's MODFLOW.

YEARS OF EXPERIENCE
32

YEARS WITH CDM SMITH
23

EDUCATION
PhD – Applied Marine Physics;
BS – Civil Engineering;
BS – Geology

REGISTRATION/ CERTIFICATIONS/TRAININGS
Professional Engineer (PE): FL

PERCENTAGE OF TIME ASSIGNED TO THE PROJECT

60% Availability

Thomas Nye, PhD, PE

KEY ROLE(S)
Stormwater
– Modeling/GIS

Modeling Task Leader, Comprehensive Stormwater Master Plan, City of Hollywood, FL. Dr. Nye is the lead modeler for the multi-year, multi-million dollar effort which includes the creation of an interactive stormwater geographic information system (GIS) from several decades of mixed media records and as-builts, comprehensive survey of topography, LiDAR, stormwater feature verification of location, elevation, and connectivity, development of basin boundaries, seawall heights, finished-floor elevations of critical infrastructure, and channel cross sections, hydraulic modeling of the system using dynamic SWMM modeling, cost benefit analysis using FEMA HAZUS methodology, a phased 10- and 20-year capital improvements program which considers sea-level rise and storm surge resiliency for multiple levels of service across seven major watersheds, an electronic stormwater design standards manual, a public awareness campaign and stakeholder workshops, funding options, and grant assistance.

Modeling Task Leader/Lead Modeler, Stormwater Master Plan Update, City of Miami, FL. Dr. Nye is leading efforts to model the City to a resolution of approximately 10 acres which includes 2,500 subbasins in eight separate watersheds. The project includes hydrologic and hydraulic models that will map the primary stormwater management system down to a level of 24-inch diameter pipe and greater, as well as canals, ditches, pumps, weirs, and other stormwater structures. The models will be calibrated to historical storms and run multiple South Florida Water Management District (SFWMD) design storms to determine existing levels of service (LOS). Part of the SWMP is to determine the LOS of the existing seawalls and how high they would need to be to protect the City. Alternative corrective measures will also be analyzed to improve LOS.

Lead Modeler, South Miami Heights (SMH) H&H Modeling, Miami-Dade Water and Sewer Department (WASD), FL. In preparation for the construction of WTP improvements by WASD, CDM Smith performed a climate change adaptation review that resulted in recommended actions to protect the WTP components from flooding, sea level rise concerns, coastal subsidence, and increased storm surges, thus ensuring the resiliency of this facility. Dr. Nye developed stormwater modeling in XP-SWMM and advised for the sea level rise analysis as requested by WASD using the model developed by the County's RER DERM for the C-1 Canal.

Technical Reviewer/Project Advisor, Stormwater Management Master Plan, City of Lake Worth, FL. Dr. Nye served as a technical reviewer and advisor for this effort, which includes the development of a hydrologic and hydraulic evaluation of the City's stormwater management system using the US EPA Stormwater Management Model (SWMM) for the purpose flood control. The project included developing conceptual improvements to identify stormwater conveyance deficiencies. In addition to flood control, CDM Smith evaluated water quality strategies to address changing regulatory requirements using the Watershed Management Model (WMM). Dr. Nye reviewed the modeling efforts used to develop a city-wide SWMP, including hydrologic and hydraulic modeling of stormwater outfalls and basins located in this coastal community.

Mike has experience in stormwater and water resource planning, modeling, facilities design, permitting, operations, training, standards, and implementation. He has developed stormwater, flood control, coastal, ecosystem restoration, and water resource programs for the City of Hollywood and more than 440 clients across 34 US states and eight countries. Mike has directed design and operations innovations that have saved over $380M on more than $1.5B of retrofit projects with green stormwater, flood control, coastal, and environmental restoration infrastructure.

YEARS OF EXPERIENCE
39

YEARS WITH CDM SMITH
37

EDUCATION
BS – Environmental Engineering

REGISTRATION/ CERTIFICATIONS/TRAININGS
Professional Engineer (PE): FL, LA; Diplomate Water Resource Engineer (DWRE)

PERCENTAGE OF TIME ASSIGNED TO THE PROJECT

30% Availability

Michael Schmidt, PE, BCEE, DWRE

KEY ROLE(S)
Stormwater – Conformance and CIP Reviews; Engineering Support Services – Grant Application Assistance

Lead Engineer and Technical Reviewer, Comprehensive Stormwater Master Plan, City of Hollywood, FL. Mr. Schmidt is the lead engineer and leads technical reviews for the multi-year, multi-million dollar effort which includes the creation of an interactive records and as-builts, comprehensive survey of topography, LiDAR, stormwater feature verification of location, elevation, and connectivity, development of basin boundaries, seawall heights, finished-floor elevations of critical infrastructure, and channel cross sections, hydraulic modeling of the system using dynamic SWMM modeling, cost benefit analysis using FEMA HAZUS methodology, a phased 10- and 20-year capital improvements program which considers sea-level rise and storm surge resiliency for multiple levels of service across seven major watersheds, an electronic stormwater design standards manual, a public awareness campaign and stakeholder workshops, funding options, and grant assistance.

Lead Engineer, Comprehensive Stormwater and Coastal Resilience Master Plan, City of Miami, FL. Mr. Schmidt is responsible for technical direction and review for the stormwater management and coastal resilience program to plan, model, evaluate various existing and future climate conditions for sea level rise, tidal surge and extreme rainfall. Levels of service (LOS) for flood control, water quality treatment for Biscayne Bay, and aquifer recharge were defined to develop alternative mitigative measure evaluations, which included multi-benefit resilient and adaptable green and grey stormwater and coastal components, benefit-cost analysis using FEMA HAZUS for a 50 year planning horizon with conditions for resilient features through year 2100.

Technical Reviewer-Advisor, Downtown Watershed Design and Update, City of Boynton Beach, FL. Mr. Schmidt served a technical advisor-review for the original downtown watershed SWMP and 4 acre Downtown Watershed Regional Facility and Park. The project was coordinated with FDOT to mitigate bridge approach flooding and redevelopment of the marina area while providing retrofit treatment, flood control, mangrove wetland restoration, and aquifer recharge with three wells for the 40 acre tributary area. The SWMP is being updated to provide additional implementation guidance for exfiltration systems and detention basins.

Project Engineer, Project Manager, and Technical Manager, Master Stormwater Management Plan (MSMP), Climate Resiliency Update and Implementation, City of Jacksonville, FL. Mr. Schmidt served as project engineer, project manager, and technical manager over the past 35 years for the 800-square mile study area for the City of Jacksonville MSMP with detailed hydrologic, hydraulic, and water quality modeling; permitting; design; and implementation of over $150M in stormwater facilities as part of the Lower St. Johns River Restoration Program for the City and the SJRWMD. He also innovated floodplain, floodway, and detention techniques for sustainable river management systems, including volume-time detention controls for the full range of hydrology and dynamic floodway methodologies that consider both storage and conveyance. The plan is being updated for additional tidal surge boundary and multiple sea level rise conditions through 2070 for coastal resiliency protection of critical assets.

Robert is a water resources engineer with a variety of modeling experience including computational fluid dynamics for stormwater unit operations, spatially distributed water quantity and quality hydrologic models, spatially and temporally downscaling Global Circulation Model (GCM) precipitation data, and global sensitivity analysis. He has worked on numerous hydraulic and hydrologic projects in the State of Florida in concert with commercial and Governmental Agencies. His computer language and software experience includes Excel, ArcGIS, WAM, EEAMOD, HEC_HMS, SWMM 5, PCSWMM, InfoSWMM, FLUENT, GAMBIT, Matlab, FORTRAN, and UNIX.

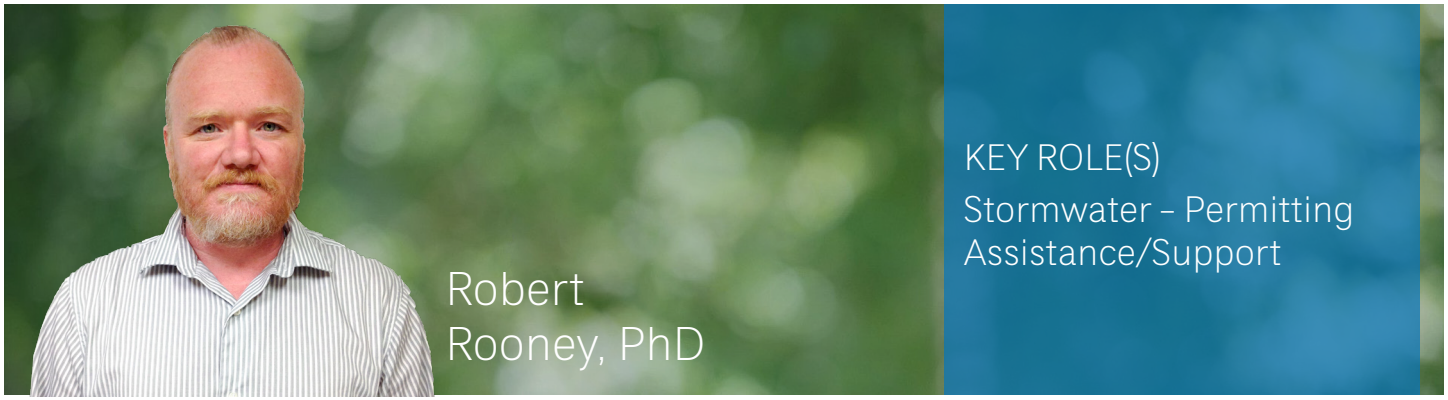
YEARS OF EXPERIENCE
8

YEARS WITH CDM SMITH
7

EDUCATION
PhD – Agricultural and Biological Engineering; ME – Environmental Engineering; BS – Chemical Engineering

PERCENTAGE OF TIME ASSIGNED TO THE PROJECT

70% Availability



Robert Rooney, PhD

KEY ROLE(S)
Stormwater – Permitting Assistance/Support

Stormwater Modeler, Comprehensive Stormwater Master Plan, City of Hollywood, FL. Dr. Rooney is a modeler for the multi-year, multi-million dollar effort which includes the creation of an interactive stormwater geographic information system (GIS) from several decades of mixed media records and as-builts, comprehensive survey of topography, LiDAR, stormwater feature verification of location, elevation, and connectivity, development of basin boundaries, seawall heights, finished-floor elevations of critical infrastructure, and channel cross sections, hydraulic modeling of the system using dynamic SWMM modeling, cost benefit analysis using FEMA HAZUS methodology, a phased 10- and 20-year capital improvements program which considers sea-level rise and storm surge resiliency for multiple levels of service across seven major watersheds, an electronic stormwater design standards manual, a public awareness campaign and stakeholder workshops, funding options, and grant assistance.

Stormwater Modeler, Comprehensive Stormwater Master Plan, City of Miami, FL. Dr. Rooney developed hydrologic and hydraulic models of the stormwater system (watershed based) using XP-SWMM. Subsequently analyzes current stormwater infrastructure capability in relation to storm events and Sea level rise scenarios and provides recommendations for future infrastructure improvement.

Stormwater Modeler, Hydraulic Analysis for Downtown Stormwater System, City of Boynton Beach, FL. Dr. Rooney is responsible for updating the spatial domain of the City's downtown stormwater system model. Project details include LIDAR-based delineation, stage storage relationships, land-use based runoff parameters, and soil-based infiltration parameters. Dr. Rooney also provides recommendations for volumetric and water quality stormwater infrastructure improvements.

Stormwater Modeler, Western Everglades Restoration Project (WERP) RSM Model Developer, South Florida Water Management District, FL. In an embedded position, Dr Rooney assisted in the expansion and refinement of a regional scale stormwater and flow routing model encompassing 1194 sq. miles. His assistance included mesh refinement, evaluation and development of hydrologic parameters, incorporation of existing and proposed canal segments, evaluating and coding operational controls, and the development, assessment, and reporting of proposed structural improvements.

Wastewater Modeler, Wastewater Management Master Plan, Broward County, FL. Dr. Rooney assisted in modelling Broward County's water and wastewater system using InfoSWMM. His assistance included developing future population growth projections, processing and analyzing model results for future conditions, and making prioritized recommendations regarding infrastructure and pump station improvements.

Stew has experience in working with local (Southeast Florida), state, and federal regulators and regulations on environmental and construction issues. More specifically, he has served as lead hydrogeologist for more than 100 mgd capacity of screened and rock well design and construction in the karst Biscayne aquifer and surficial aquifer system (depths to 200 feet) and karst Floridan aquifer (depths to 1,400 feet). Stew is highly familiar with and knowledgeable of Southeast Florida hydrogeological conditions, having worked with the Cities of Boca Raton, Coral Springs, and Deerfield Beach, as well as Miami-Dade and Palm Beach Counties.

YEARS OF EXPERIENCE
36

YEARS WITH CDM SMITH
33

EDUCATION
MSc, BSc– Geology;
MBA – Business Administration

REGISTRATION/ CERTIFICATIONS/TRAININGS
Professional Geologist (PG): FL;
Project Management Professional (PMP)

PERCENTAGE OF TIME ASSIGNED TO THE PROJECT

60% Availability

Stewart Magenheimer, PG, PMP

KEY ROLE(S)
Stormwater – Hydrogeology; Water/ Wastewater Plant – Hydrogeology

Hydrogeologist, Comprehensive Stormwater Master Plan, City of Hollywood, FL. Mr. Magenheimer is the hydrogeologist for the multi-year, multi-million dollar effort which includes the creation of an interactive stormwater geographic information system (GIS) from several decades of mixed media records and as-builts, comprehensive survey of topography, LiDAR, stormwater feature verification of location, elevation, and connectivity, development of basin boundaries, seawall heights, finished-floor elevations of critical infrastructure, and channel cross sections, hydraulic modeling of the system using dynamic SWMM modeling, cost benefit analysis using FEMA HAZUS methodology, a phased 10- and 20-year capital improvements program which considers sea-level rise and storm surge resiliency for multiple levels of service across seven major watersheds, an electronic stormwater design standards manual, a public awareness campaign and stakeholder workshops, funding options, and grant assistance.

Project Manager and Lead Hydrogeologist, Continuing Wellfield Technical Services, City of Boca Raton, Palm Beach County, FL. As part of a multiple year program to manage the City's six wellfields, Mr. Magenheimer has been providing support to the City through wellfield performance records review, preparing quarterly reports, developing well repair and rehabilitation plans, and assisting the City as needed with ongoing maintenance, rehabilitation and optimization efforts.

Resident Project Manager and Lead Hydrologist, Water Supply Wells 28W, 31W, and 33W, City of Boca Raton, FL. Mr. Magenheimer served as the resident project manager for design and bidding phases and served as lead hydrologist for the final design of the three new Biscayne Aquifer raw water production wells; and approximately 9,000 linear feet of 12-, 14-, and 18-inch raw water piping, including associated electrical, instrumentation, and site improvements for the City. This project was completed on-time and on-budget.

Project Manager, West Wellfield Improvements, City of Deerfield Beach, Broward County, FL. As part of a 4 million gallon per day (mgd) water treatment plant expansion, Mr. Magenheimer provided project management and hydrogeological support services related to the development of two karst Biscayne aquifer and one 1,400-foot deep Floridan aquifer municipal production wells. Services provided included evaluation of lithologic, geophysical, and well test data and the selection of final production intervals.

Project Manager, Joe Mullins Water Treatment Plant (WTP) Wellfield Evaluation, Rehabilitation, and Expansion, City of Melbourne, FL. Mr. Magenheimer is assisting the City of Melbourne with the restoration and expansion at its Floridan aquifer wellfield that provides feed water for the Joe Mullins WTP. The project is in three phases. The first phase evaluated restoration potential and identified rehabilitation techniques to restore well capacity. The second phase provided for the execution of the rehabilitation recommendations through well treatment. The third phase is underway with the design and eventual bidding for an additional well, appurtences, and water main extension.

Layla has experience in the planning, analysis, design, permitting, and construction management of wastewater and water treatment, collection and conveyance systems, including process improvements and process design, hydraulics, and pumping systems. She is a versatile senior environmental engineer with wide ranging experience that includes hydraulics and pumping systems, process improvement, and process design.

YEARS OF EXPERIENCE
22

YEARS WITH CDM SMITH
25

EDUCATION
MS – Environmental Engineering;
BS – Civil Engineering

REGISTRATION/ CERTIFICATIONS/TRAININGS
Professional Engineer (PE): FL;
Project Management Professional (PMP)

PERCENTAGE OF TIME ASSIGNED TO THE PROJECT

40% Availability

Layla Llewelyn, PE, PMP

KEY ROLE(S)
Water/Wastewater Plant – Process Design

Technical Review, Replacement of Large Diameter Process Pipe Preliminary Design, George T. Lohmeyer RWWTP, City of Fort Lauderdale, FL. CDM Smith was selected to address several large diameter process pipe failures at the George T. Lohmeyer Regional Wastewater Treatment Plant. The design team performed hydraulic evaluations at current design flows to confirm pipe diameters needed to gravity flow from the pretreatment building to both reactors and from both reactors to clarifier battery 3. The construction team determined how long a process pipe component can be taken offline, determined best replacement techniques, identified strategic flow by-passing with temporary jumper pipes, provided budget costs and provided a replacement schedule. The preliminary design identified the phased replacement of large diameter process pipe with ductile iron pipe beginning with approximately 2,460 linear feet of critical-duty prestressed concrete cylinder pipe consisting of 660 feet of 66-inch pipe; 180 feet of 54-inch pipe; 780 feet of 48-inch pipe, and 840 feet of 42-inch pipe. Ms. Llewelyn provided technical review.

Project Manager, Design Services for the South District Wastewater Treatment Plant for the Ocean Outfall Legislation (OOL) Program, Miami-Dade Water and Sewer Department (WASD), Miami-Dade County, FL. Ms. Llewelyn is serving as a task manager for the design of improvements to WASD's 112.5-mgd South District WWTP. The SDWWTP must comply with Florida's OOL, which dictates a large plant upgrade program. As part of the program, CDM Smith is designing expansions to the plant's secondary clarifier and return activated sludge (RAS) systems, deep bed filters, disinfection process, and effluent pumping system that discharges treated effluent into a systems of injection wells. The design of this project will upgrade the plant capacity to 131 mgd. Design was successfully completed in 2018 under an aggressive 10-month project schedule and the construction is currently in process.

Project Manager/Task Manager, Central District WWTP Oxygen Production, WASD, Miami-Dade County, FL. The oxygen production facility is part of the activated sludge process at the CDWWTP. Oxygen for the oxygenation trains is generated on-site by three 70-tpd cryogenic oxygen production units. Ms. Llewelyn led a team through the implementation of the technical design and construction requirements of a new oxygen production system that will provide full redundancy, as existing units are near the end of their useful life and are prone to failure. Tasks included the evaluation of the oxygen delivery needs for the CDWWTP, including identifying different alternatives for addressing the oxygen delivery system deficiencies, identifying alternative oxygen generation technologies, production of a design criteria package for design-build procurement, and engineering services during design and construction.

YEARS OF EXPERIENCE
20

YEARS WITH CDM SMITH
19

EDUCATION

ME – ENVIRONMENTAL ENGINEERING;
BS – Chemical Engineering

REGISTRATION/ CERTIFICATIONS/TRAININGS
Professional Engineer (PE): FL, PR;
Project Management Professional (PMP)

PERCENTAGE OF TIME ASSIGNED TO THE PROJECT

70% Availability

YANICE MERCADO, PE, PMP | Engineering Support Services – In-House Support Services

Yanice's experience includes capital improvements projects, change management, technology integration, drinking water infrastructure, and odor dispersion modeling.

Engineering Management, General Continuing Services Contract, City of Boynton Beach, FL. The City has retained CDM Smith to provide infrastructure and ancillary services, as well as consulting and engineering services. Ms. Mercado is providing engineering management services for projects that included Hydraulic Analysis for Downtown Stormwater System, VTScada Upgrade, Cosumptive Use Permit Modification, Evaluation and Update of the City's 10-Year Water Supply Plan, and Force Main By-Pass at Lift Station 317.

Senior Project Manager, Program Management Consulting Services, City of West Palm Beach, FL. Ms. Mercado served as senior project manager and provided services as an extension of City of West Palm Beach's Public Utilities staff. She supported the management and administration of multiple existing capital improvement projects. Overall responsibilities included preparation of scope of services, negotiating fees, schedules and deliverables in order to contract design services, administering design contracts and tracking project expenditures, overseeing and coordinating design consultant activities, conducting and attending project meetings, reviewing invoices and recommending progress payments. Ms. Mercado actively participated and supported initiatives related to project scheduling and progress reporting. She provided assistance in the development of a CIP prioritization process for the City.

YEARS OF EXPERIENCE
21

YEARS WITH CDM SMITH
3

EDUCATION
MS – Structural Engineer;
BS – Civil Engineering

REGISTRATION/ CERTIFICATIONS/TRAININGS
Professional Engineer (PE): FL, PR;
Project Management Professional (PMP)

PERCENTAGE OF TIME ASSIGNED TO THE PROJECT

85% Availability

ANTONIO CORDERO-DOMENECH, PE, PMP | Engineering Support Services – In-House Support Services

Antonio is an experienced project manager with significant experience in the construction industry, knowledge in construction management, construction cost estimates and critical path analysis for water and wastewater infrastructure.

Project Manager, Program Management Consulting Services, City of West Palm Beach Public Utilities Department, FL. Mr. Cordero provided project management consultant services to the City of West Palm Beach Public Utilities Department (PUD) Capital Improvement Program and assisted City staff with construction contracts from bid opening through contract award and execution. Assisted with the development of project procurement and managed utility projects (water, wastewater, reclaimed, and stormwater) though pre-design, design, bidding, construction, and closeout and coordinated projects with WPB PUD operations and maintenance (O&M), County and State agencies, and other City departments. In addition to these tasks, Mr. Cordero oversaw Architectural/Engineering (A/E) Services and reviewed A/E contract payment applications. Throughout this contract, he reviewed, updated and implemented standard specifications, standard details, and design manuals for the City of WPB. One notable project was the WTP Improvements – UV System and Related Infrastructure ($27M in construction cost) where he provided project management services and acted as an extension of the City of West Palm Beach staff. Also, he provided technical leadership during project delivery and close-out.

YEARS OF EXPERIENCE
28

YEARS WITH CDM SMITH
20

EDUCATION
BS – Civil Engineering

REGISTRATION/ CERTIFICATIONS/TRAININGS
Professional Engineer (PE): FL

PERCENTAGE OF TIME ASSIGNED TO THE PROJECT

35% Availability

CRAIG GADBERRY, PE | Engineering Support Services – Cost Estimating

Craig is an experienced cost estimator which includes estimates water and wastewater facilities, pipelines and pumping stations, and for solid and hazardous waste facilities. His is highly experienced in alternate delivery methods, including design-build and construction manager-at-risk (CMAR).

Chief Estimator, Retail Potable Water and Wastewater Master Plan, Broward County, FL. CDM Smith was responsible for developing a Retail Potable Water and Wastewater Master Plan for a future forecast year of 2040 to address retail facilities within the County's four service areas (known as Districts 1, 2, 3A, and 3BC). As part of this effort, our team developed the hydraulic model of the County's retail potable water, water, and wastewater systems, utilizing ESRI ArcGIS, InfoWater, and InfoSWMM, respectively, to develop a detailed and accurate model. In addition, our team was also responsible for data collection and cataloging. Mr. Gadberry provided oversight, review, and QA/QC of the engineer's opinion of probable cost of construction.

Chief Estimator, West Wellfield Expansion and Raw Water Transmission Mains, City of Deerfield Beach, FL. CDM Smith was retained to perform injection well and pump station design and construction services projects in several contracts at the City of Deerfield Beach's West WTP. The construction of the concentrate pump station, injection well, and dual zone monitor well was managed by CDM Smith. In addition to providing on-site resident engineering services, CDM Smith provided general construction services, including shop drawing review, construction coordination and scheduling, instrumentation programming, and O&M start-up and training services. Mr. Gadberry provided oversight, review, and QA/QC of the engineer's opinion of probable cost of construction.

YEARS OF EXPERIENCE
20

YEARS WITH CDM SMITH
<1

EDUCATION
BS – Civil Engineering

PERCENTAGE OF TIME ASSIGNED TO THE PROJECT

80% Availability

STEVE FREIMAN | Engineering Support Services – Construction Services

Steve's experience includes municipal utility, pump station improvements, and water treatment plant and wastewater treatment plant improvements involving traditional and design-build construction delivery methods

Construction Inspector, George T. Lohmeyer Wastewater Treatment Plant Replacement of Oxygen System, City of Fort Lauderdale Public Works Department, FL. Mr. Freiman observed field work activities for Vapor Pressure Swing Adsorption (VPSA) system construction and produced daily reports with photos. He verified that work was following contract drawings and specifications. He participated in progress meetings and reviewed pay applications. Mr. Freiman tracked deficiencies and their resolution, coordinating with the project manager and contractor leadership. He witnessed quality assurance checks such as welding inspections, and bridge crane load testing.

Construction Inspector, Overhead to Undergrounding and Water Main Replacement Projects, Town of Palm Beach, FL. Mr. Freiman observed field work activities for multiple contracts each day and wrote concise, detailed daily reports, while with a previous employer. He verified that work performed was in compliance with contract specifications and drawing details. He reviewed pay applications for work quantities and participated in progress meetings. Mr. Freiman discussed and resolved issues related to work quality with contractor supervision. He appraised project managers of unresolved issues and helped work toward solutions. He performed witness and held point inspections such as pipeline pressure and leak testing, water main pigging and flushing, and water main tie-ins.

YEARS OF EXPERIENCE
37

YEARS WITH CDM SMITH
2

EDUCATION
AA – Engineering Sciences

REGISTRATION/ CERTIFICATIONS/TRAININGS
Construction Quality Management for Contractors, United States Army Corps of Engineers

PERCENTAGE OF TIME ASSIGNED TO THE PROJECT

80% Availability

DARYL JONES | Engineering Support Services – Construction Services

Daryl is an experienced project manager with significant experience in the construction industry, knowledge in construction management, construction cost estimates and critical path analysis for water and wastewater infrastructure.

Resident Construction Inspector, Pump Station S-191A, South Florida Water Management District (SFWMD), Okeechobee, FL. This project included a four bay intake structure that encompasses 150cfs electric pumps and discharge piping. An onsite generator building included a control room, an electrical room and generator room that houses four diesel 450 kW generators and one 80 kW generator. Mr. Jones provided construction oversight and inspections to verify the project was constructed in accordance with the project plans, specifications and approved supplemental documents, while with a previous employer. Project entailed 14 of the 16 divisions of construction that included power and control, sanitary, potable water distribution, fuel and exhaust management, trash conveyance and SCADA communication. Geotechnical scope included demucking, site filling and grading, monitoring compaction control, subsurface investigations, and subaqueous and embankment rip rap stabilization.

YEARS OF EXPERIENCE
25

YEARS WITH CDM SMITH
4

EDUCATION
BS – Environmental Science

REGISTRATION/ CERTIFICATIONS/TRAININGS
AWWA Utility Risk & Resilience Certification

PERCENTAGE OF TIME ASSIGNED TO THE PROJECT

70% Availability

STACY BARNA | Engineering Support Services – Grant Application Assistance

Stacy has comprehensive experience in multiple areas of drinking water, wastewater, and financial assistance programs, specializing in water system regulatory compliance, capital improvement and master planning, project financing, asset management, and sustainability initiatives.

TWDB Funding Manager, Sister Grove Water Resource Facility, North Texas Municipal Water District, TX. Ms. Barna assisted the District with the application and receipt of $458M from the Clean Water State Revolving Fund (CWSRF) to plan, design, and build the District's new greenfield water reclamation facility. This Construction Manager at Risk delivery method project requires detailed management and communication between the District, design team, constructor, and the TWDB. In our funding management role, we conduct routine meetings with the District, monthly coordination meetings with the District and TWDB, manage communication on behalf of the District with the TWDB including submission of all design and construction documents for review and approval, addressing all RFIs, tracking all correspondence and uploading and organizing documentation in the District's database. In addition, during construction our role includes review and audit of Davis-Bacon wage rate reports and verification of documentation with federal Buy American provisions.

YEARS OF EXPERIENCE
40

YEARS WITH CDM SMITH
39

EDUCATION
BA – Economics and Accounting

PERCENTAGE OF TIME ASSIGNED TO THE PROJECT

50% Availability

DIANE KEMP | Engineering Support Services – In-House Support Services

Diane applies her experience in rate setting, special assessments, budget reviews, financial feasibility studies, and municipal accounting to a variety of water, wastewater, reclaimed water, stormwater and solid waste projects. She has also prepared impact fee studies, performed acquisition studies, negotiated multi-jurisdictional contracts, prepared rate models, conducted fixed asset studies, and analyzed the cost effectiveness of various treatment/ownership options.

Financial Specialist, Stormwater Rate Study, City of Cape Coral, FL. CDM Smith was engaged to determine the stormwater utility revenue requirements, based upon the current level of service. Additional objectives were to determine the cost for an enhanced level of service and to analyze the costs of the quality versus quantity functions as they relate to development project credits. The revenue requirements were identified for a five year period. Adjustments to the current stormwater utility fee were recommended, with the increase to be phased in over the five year period.

Financial Specialist, Preparation of State Revolving Fund (SRF) Loan Documents for Various Wastewater and Reclaimed Water Projects, City of Orlando, FL. Ms. Kemp has provided SRF services to the City of Orlando since 2003, qualifying them for over $150M in low-interest loans. The planning and financing documents were prepared, public hearing assistance provided, and loan applications prepared.

YEARS OF EXPERIENCE
33

YEARS WITH CDM SMITH
29

EDUCATION
BA – General Studies

REGISTRATION/ CERTIFICATIONS/TRAININGS
Geographic Information Systems Professional Certification

PERCENTAGE OF TIME ASSIGNED TO THE PROJECT

60% Availability

ANDY BARANOWSKI, GISP | Engineering Support Services – Asset Management

As a geographic information system (GIS) data conversion specialist, Andy has experience providing GIS solutions, with a strong background in data conversion and quality assurance (QA). He provides both management and technical leadership in the application of information technology, GIS implementation, and support services. .

Senior Technical Lead, Stormwater GIS Mapping Study - Data Conversion Plan, Palm Beach County, FL. Mr. Baranowski is the lead author for the stormwater Data Conversion Plan. The plan includes workflows and procedures necessary to convert existing stormwater infrastructure data into a GIS. Palm beach County is one of 40 co-permittees on a federal Clean Water Act-mandated National Pollutant Stormwater Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) permit (FLS000018-004) administered by the Florida Department of Environmental Protection (FDEP). Specific requirements include maintaining an up-to-date stormwater infrastructure inventory, inspecting and maintaining stormwater infrastructure, monitoring water quality, and preparing annual reports. Mr. Baranowski created a plan to develop a detailed inventory of stormwater assets. While focusing on the MS4 permit compliance, the inventory and GIS is envisioned to provide a foundational framework for expansion into related needs such as identification and evaluation of flooding, community rating system/flood insurance analyses, water quality total maximum daily load solution strategies, asset management and infrastructure replacement planning, facilitation of vulnerability assessments, and enabling future comprehensive water resources management planning.

YEARS OF EXPERIENCE
42

YEARS WITH CDM SMITH
35

EDUCATION
MCRP – Public Finance;
BA – Economics

PERCENTAGE OF TIME ASSIGNED TO THE PROJECT

85% Availability

JOSEPH RIDGE | Engineering Support Services – Asset Management

Joe is an economist with extensive experience in assessing the fiscal and economic impacts of capital projects on municipal governments and authorities. He has experience assisting clients in assessing and implementing programs to improve competitiveness and in determining the financial feasibility and economic impact of proposed projects.

Project Manager, Rates and Financial Plans, Hartford Metropolitan District Commission (MDC), CT. Since 1994, Mr. Ridge has been assisting the MDC evaluate its ability to undertake a significant mandated capital program to address wet weather flow. This work has included three separate affordability studies as the Commission implemented part of the program, evaluated its impacts and sought revisions based on results to date. In addition, Mr. Ridge has developed a detailed financial model to assess the cost of and pricing for sludge incineration as the MDC evaluated the feasibility of constructing a second sludge incinerator primarily to be used as a merchant facility. He is currently undertaking the development of a detailed financial planning model that will assess the costs of service for wastewater components (flow, BOD, TSS, and Total Nitrogen) as well as the allocation of costs among wholesale customers.

Wholesale Rate Mediation and Updates, Metro Water Services (MWS), Nashville, TN. Mr. Ridge was hired by MWS to evaluate a proposed wholesale rate developed by a third party for the MWS's eight contract/wholesale communities. The outside communities were objecting to the proposed rate structure and increase. Mr. Ridge developed an alternative approach and then negotiated the resolution of the agreement with the two parties. At this time all eight outside communities have agreed to the revised approach. Twice in the past six years, Mr. Ridge has led teams to reset the rate for the next three year term.

YEARS OF EXPERIENCE
38

YEARS WITH CDM SMITH
35

EDUCATION
MS – Engineering Management
BS – Environmental Engineering

REGISTRATION/ CERTIFICATIONS/TRAININGS
Professional Engineer (PE): FL; BCEE

PERCENTAGE OF TIME ASSIGNED TO THE PROJECT

15% Availability

CLAY TAPPAN, PE, BCEE | Technical Advisor

Clay is a nationally recognized pipeline expert with 38 years of experience in the design of water, wastewater, and reclaimed water pipeline conveyance systems. He is experienced with regulatory permitting and the necessary approvals needed for funding and constructing these projects. He has designed hundreds of miles of pressure and gravity pipelines during his career in a wide variety of challenging subsurface conditions..

Technical Reviewer, City-wide Wastewater System Improvements, City of Fort Lauderdale, FL. CDM Smith completed the design and implementation of transmission system improvements, pump station upgrades, new force mains, and the sewering and extension of sanitary service to previously unsewered areas including design, permitting, bidding, and construction services, hydraulic modeling, analyses and evaluations and provided equipment recommendations, which include analysis, modeling, design, rehabilitation, construction management, operation, and maintenance. Mr. Tappan provided independent evaluations for project deliverables.

Project Manager, 48-inch Water Main for Area N, WASD, Miami-Dade County, FL. Mr. Tappan led design services for 42,768 lf of 36- and 48-in PCCP pipeline while successfully navigating multiple competing jurisdictions from SFWMD, USACE, FDOT, FEC Railway, and more. The project also involved heavy-duty route evaluation with easement acquisition. Our route notably eliminated need for costly trenchless crossings.

YEARS OF EXPERIENCE
25

YEARS WITH CDM SMITH
23

EDUCATION
MS, BS –Civil and Environmental Engineering

REGISTRATION/ CERTIFICATIONS/TRAININGS
Professional Engineer (PE): FL; FDEP-Qualified Stormwater Management Instructor; 40-hour HAZWOPER

PERCENTAGE OF TIME ASSIGNED TO THE PROJECT

15% Availability

DOUGLAS MOULTON, PE | Technical Advisor

Doug is an environmental engineer specializing in hydrological and hydraulic modeling—including ICPR—and is one of the nation's leading MIKE SHE, MIKE 11 modelers. He has applied his ICPR modeling expertise to many Florida projects, including the development of the ICPR model for the southern basins of Lake Jesup for Seminole County. He also developed the ICPR for the Big Econ stormwater master plan for Orange County, which included incorporating several existing ICPR models into the basin model.

Task Manager, Integrated Water Resource Management Plan, Broward County, Florida (2007 – 2010). Mr. Moulton was responsible for managing the update of an existing MIKE SHE/11 model of Broward County. This included revision of canal leakance coefficients, groundwater withdrawals, and a reduction of the simulation period. The revised model was then used to estimate the impacts due to increasing the withdrawals to the future conditions (2025). Using the future conditions model various alternative water supply (AWS) projects were incorporated in efforts to mitigate negative impacts. Groundwater drawdown reductions as well as water balance analysis were used to quantify the benefit of the AWS projects. The management plan incorporated numerous water supply alternatives for a number of independent cities and water control districts within Broward County.

Technical Reviewer, Marks and Pasadena Drainage Improvements, City of Orlando, FL. The Marks and Pasadena Drainage Improvements will significantly reduce flooding in an area of the City that experiences chronic and severe flooding. CDM Smith initially evaluated this flooding as part of an overall drainage study that considered three potential alternatives for improvements. The study concluded that diverting drainage from the flooded areas out of the Lake Concord system to Lake Highland provided the most effected flood reduction. The study also identified the drainage infrastructure that was needed to adequately convey the diverted drainage.

TAB E

Approach to Scope of Work

CDM Smith Understands the Cities Needs and Offers All the Required Specific Professional Services to Meet these Needs

CDM Smith has assembled a pool of exceptional professional resources to properly provide the services required under this contract. As shown below, our proposed team contains all the critical disciplines required to complete this multidisciplinary project. CDM Smith, along with our partners, is providing expertise in each of the required disciplines under this contract.

1. Potable Water Transmission and Distribution Systems
2. Reuse Distribution Systems
3. Wastewater Collection Systems
4. Stormwater Systems
5. Hydraulic Modeling
6. Sewer Pump Stations
7. Stormwater Pump Stations
8. Force Main Improvements
9. Green Infrastructure Design
10. Sustainability/Climate Resilience
11. Sea Level Rise Mitigation
12. Asset Management
13. Grant Application Assistance and Management
14. Lead Copper Rule Revision Compliance
15. Construction Cost Estimating
16. Construction Administration and Management
17. Quality Assurance, Quality Control, and Value Engineering Services
18. Water Treatment Plant and Wastewater Treatment Plant Projects

Ensuring the Integrity of the City's Future is Protected and Enhanced Over Time

CDM Smith recognizes the City is facing a mounting list of required utility infrastructure improvements which is currently being defined by the Water Master Plan, Wastewater Master Plan, and the Stormwater Master Plan. The City has taken a proactive approach to identifying the investment needs for long-term resiliency and being a model of sustainability. In today's market conditions, these accelerated project demands, and financing needs are complicated and require partnerships. The City requires a qualified team of diverse professionals with unmatched expertise to understand your goals and challenges; a trusted team who will partner with you to deliver high value, quality engineering solutions, while remaining on schedule and within budget. CDM Smith understands the City's needs, goals and objectives and will include these considerations in every work order we are given under this contract.

OUR PROACTIVE APPROACH THAT MEETS THE CITY'S NEEDS AND VISION

IDENTIFY
anticipated regulatory requirements and issues early

ENGAGE
Regional partners in OneWater approach

COORDINATE
Funding and grant opportunities

PRIORITIZE
Using GIS and dashboards for transparent decisions

EXECUTE
High-level of technical quality and expertise

CONSIDER
Long-term impacts in each decision

Project Approach

Our approach to project delivery outlines our plan to meet schedule and budget with quality, while meeting the objectives and requirements in the Infrastructure Projects (Water, Sewer, Reuse and Stormwater) RFQ.

Project Approach to Performing the Work

Understanding Project Success

The key to successfully delivering your projects on schedule, with quality, and within budget is to utilize an experienced, PMI-Certified project manager who is committed to a philosophy of consistent effective communication to ensure that project objectives are understood and achieved throughout the project lifecycle. Before developing a project scope of services and budget, **we will meet with the project stakeholders to understand the answer to the question, "How will project success be defined?"**

Assigning Qualified Personnel to Handle Tasks Effectively

Work assignments issued to CDM Smith by the City will first be delivered to CDM Smith's **Officer-in-Charge, Suzanne Mechler**. Once received, she will consult with our **Project Manager, Jon Goldman** and they will assign the appropriate team members based on their experience with similar projects and availability. The tag team of Suzanne and Jon have supported the City with the Stormwater Master Plan (SWMP) and will continue as part of this contract. The project manager will be your single point of contact for the life of the task order. Our proposed staff and team have all successfully worked on similar utility consulting contracts throughout South Florida and have unique areas of specific expertise. Our team, supported by our vast project resources, have the experience to perform every aspect of the project tasks anticipated under this contract.

Project Development

An important aspect of managing projects to control schedule and budget is establishing an appropriate scope of work at the beginning of a project. Our past work on similar contracts has taught us that an issue common to work associated with contracts of this nature is the early identification of all aspects of the work needed to eliminate changes to the scope once the project has begun. Our project manager will actively listen to your project manager and team of technical and operations staff to understand the ultimate objectives of the project, how the objectives were determined, and how the City understands the work assignment will achieve the project objectives to reduce and/or eliminate these issues prior to project kick-off.

Well-Planned Schedule Development to Maintain Schedule and Budget

A well-planned project schedule is another key control to maintaining schedule and budget. All phases of the project, from planning, assessment, design, permitting, bidding, and services during construction, will be carefully planned with appropriate sequencing of events, durations, milestones, project risk, and float; and where appropriate, schedules will be cost and resource loaded. **We will identify and integrate grants or other intergovernmental funding timetables and requirements in the schedule and budget**. The schedule will be evaluated with the City prior to final acceptance, and a realistic project budget will be established based on this approved schedule. Before any work begins, the CDM Smith and City project manager's will agree to the proposed scope of work, budget, and project baseline schedule from which project variances can be measured and updates performed monthly.

At the 10 percent project milestone, we conduct an initial technical review of the project with senior project-independent reviewers. Conducting this review after the detailed project definition stage allows us to confirm the adequacy of scope early in project execution, and allows for course correction, if required, to be implemented at a time when it can still be managed to eliminate or attenuate impacts to schedule and budget. As the work progresses, a monthly project status meeting will be held to monitor project status with respect to budget, schedule, scope, deliverables, and resources assigned to the project. These meetings allow us to be proactive in identifying variance to the budget and schedule requirements, and to provide early initiation of corrective action measures to correct the project direction if it is off track.

Project Execution

Once the scope, schedule, and budget for the work authorization have been agreed to, we will develop a project execution plan (PxP). While the scope of work explains what will be done, how much it will cost, and when it must be completed, the PxP defines how the project will be executed and who will be accountable for each of the different tasks throughout the project lifecycle. **The PxP will be updated monthly. Information obtained through the updates will be shared with the corresponding City project manager so that they will always have the latest project information and can report that information up to City management during internal project status meetings.**

As required per the language in your RFQ, CDM Smith is committed to performing all of the services assigned, in accordance with the generally accepted professional standards and as expeditiously as is consistent with professional skill, care, and the orderly progress of the work. All work of any kind shall conform to and comply with applicable codes, laws, ordinances, regulations, and restrictions.

Project Delivery For Operations

We are committed to consistent, effective communication required throughout the lifecycle of a project and will communicate during the scoping, design development, and construction management phases of projects to **ensure operability issues and concerns are accounted for, reducing the potential for project changes to schedule or budget.**

Current Workload and Ability to Handle the Scope of Services

CDM Smith's South Florida offices are full-service design centers that routinely conduct multiple projects simultaneously. These projects include planning studies, preliminary designs, final designs, alternative delivery, construction management, environmental studies, and other projects for public clients.

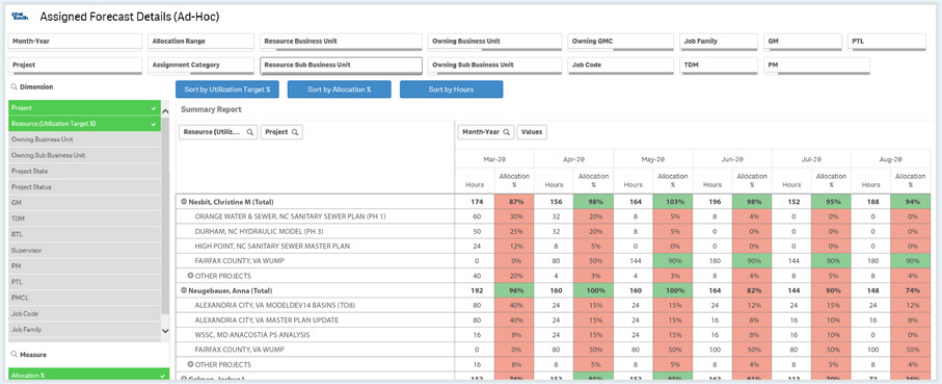
As such, our local project managers are accustomed to managing more than one project at a time. On a monthly basis, they complete workload projections to determine the technical expertise, anticipated schedule, and staff resources required for a project. Our project managers will utilize this process to effectively handle the City's scope of services under this contract. In addition, our deep local bench provides the City with reliability, broad technical expertise, and better quality control, as well as the ability to assign more than one team to your projects.

Using these methods, CDM Smith considers current and future workload when selecting the right team. Our key staff are almost entirely local to quickly respond to the City's needs and are available to commit whatever time is required to meet your budget and schedule requirements.

Committed Project Team

We understand the City expects that the staff proposed for the project will be the staff who complete the work. Through the use of CDM Smith's specialized resource management software tools, we are able to reliably plan and confirm availability for each staff member proposed to your project. This is done by loading the project in workload projections to reserve the required personnel for the duration of the project. This tool also shows if staff members are overloaded. It is standard practice for our project managers to plan with staff availability at the forefront of every project so that our personnel are brought in at the right time, keeping the schedule on track. Once staff are booked for an assignment, they are committed.

The City can have confidence in selecting CDM Smith for infrastructure services. We have looked at our other ongoing assignments and have identified responsible strategies to address their needs so that our ability to plan and react to the evolving needs of this contract will not be impacted. In short, if the City requires more time from our staff, you will have it—that's our commitment to you!



CDM Smith uses resource forecasting software to verify staff availability and commit them to future projects for the duration.

Demonstrated Ability to Solve Complex Project Issues

Recognizing the challenges of a continuing services contract, we are providing the City with a full-service firm that will be responsive to all requests. We share a common culture and will provide the City of Hollywood with confidence that our team will meet or exceed all project goals. Our culture emphasizes commitment to our clients' goals and objectives. Our matched core values of integrity, commitment, and excellence demonstrate a shared aspiration of personal and corporate integrity, value for cooperative and collaborative working relationships, and our joint commitment to excellence.

CDM Smith has demonstrated our ability to solve complex project issues through our efforts with the City's comprehensive Stormwater Master Plan. As stormwater touches every facet of the City, including residences, businesses, emergency routes, long-term viability, etc., CDM Smith and the City have been working with multiple partners and stakeholders to efficiently and effectively manage the challenges and create a map for resiliency. Over the two-year period of this contract, CDM Smith has met and coordinated with the following stakeholders to understand priorities and determine the best proposition for mutually beneficial projects:

- FDOT and their consultants
- Broward County Permitting and Resiliency Departments
- City of Hallandale Beach
- Hollywood Beach CRA and their consultants
- South and Central Broward Drainage Districts
- City's Parks Department and their consultants
- City's Utilities Department and consultants for water and wastewater master planning

This work highlights the need for partnerships, innovative solutions, and communications to coordinate future projects in the best interest of the City.

Communication

Engaging City Representatives. Our project teams have a long and successful history of working with operations staff on a wide variety of projects. We are committed to consistent, effective communication required throughout the lifecycle of a project and will engage with Public Utilities through the City's project manager during scoping, design development, and construction management phases of projects to ensure operability issues and concerns are accounted for, reducing the potential for project changes to schedule or budget. For facility design and construction projects, we prefer to hold project kickoff meetings in the field to facilitate more effective understanding. These meetings assist in early identification of all aspects of the work and help avoid changes in scope.

CDM Smith is keenly aware that even the most innovative project solutions cannot achieve your goals without buy-in from the teams responsible for your operation and maintenance long after we have completed the project.

Communications/Coordination/Meetings. CDM Smith understands that there are specific client services, such as open and frequent communication/coordination, that are paramount. Project communication generally involves phone calls and emails for simpler items, but face-to-face meetings are typically required for complex items where multiple parties are involved. With accessibility in mind, CDM Smith will accommodate the meetings according to attendees needs by combining on-site (in-person) accessibility with platform availability (i.e. Microsoft Teams). **Our project manager will make sure that CDM Smith's communications strategy with the City is clearly outlined and provides for a complete reception and transmittal of information critical to project success, and provide a written summary of the proceedings following all meetings with distribution to all stakeholders, as CDM Smith is doing now.**

Quick Response. CDM Smith understands the importance of quickly responding and physically attending stakeholder and emergency meetings. Due to our proximity to the City, our local officers and expert staff are able to quickly travel anywhere the City maintains facilities. Our commitment to active listening and preparedness will reduce communication barriers and elicit a productive conversation.

Accessibility and Availability. CDM Smith is committed to attending the City's needs by being receptive and available during the term of the Contract. We will maximize the use of our vast local resources to complete the professional services required under this contract. Our commitment to you starts with our Officer-in-Charge, Suzanne Mechler, followed by our Project Manager, Jon Goldman. Our proposed team members for engineering and construction-related services are based entirely out of our local South Florida offices all within 30 miles from the City of Hollywood.

Technological Capabilities and Other Available Resources

Virtual and 3D/4D/BIM Design

At CDM Smith we are leveraging the power of virtual design and using intelligent models that allow our clients to become fully immersed in the design prior to construction. Our approach to virtual design and construction (VDC) is to utilize its potential whenever possible on a project, to enhance communication and decision making. In addition, we provide 3D renderings of projects and utilize modeling and intelligent design which provides for greater project detail and understanding of costs, schedule, and constructability.

Data Visualization

CDM Smith works with clients to define user requirements and storyboard business intelligence and analytics solutions. To support this process, we conduct focus groups and individual meetings to understand the audience, conceptualize analytic dashboard products, and solicit and document business feedback. The elicitation of users' stories will enable the CDM Smith team to understand City's workflows, expectations, and ideas for working with improved strategic analytics to gain insights from data analysis and dashboard capabilities. CDM Smith develops a user interface and user experience (UI/ UX) specifically tailored to meet the efficiency and transparency goals of the City.

Unique Issues and Special Considerations

Unique Issue – Labor and Material Shortages

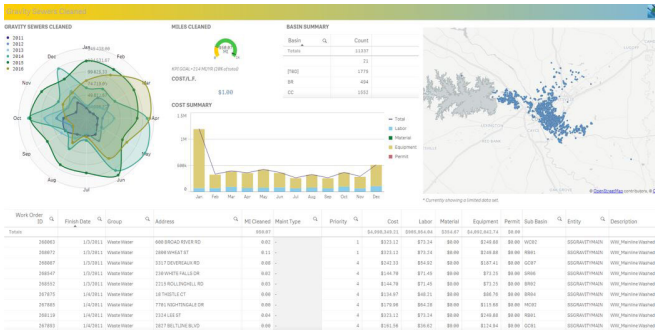
The construction industry is facing unprecedented material and labor shortages, and as a result, we have re-evaluated our approach to design and construction management to better serve our clients and help them accelerate their project schedules by:

- Identifying opportunities to utilize existing equipment or temporary equipment, especially electrical equipment, such as transformers and VFDs, to allow construction to continue and the City to utilize necessary processes while new equipment is delayed
- Identifying material substitutions to avoid longer delivery times (most delays are related to either material or equipment being manufactured and/or shipped from overseas)
- Recommending contract language that requires shortened submittal review lengths, such as 14 days versus 28 days for the engineer

Special Considerations to Reduce Capital and Operations Costs

In a market with escalating costs and scarcity of resources, identifying operational efficiencies becomes critical. Investing in modeling studies is one possible way of identifying these efficiencies. We have the experience and resources needed to assist the City with:

- Performing physical modeling to evaluate the potential for more capacity out of existing pumps and pump stations
- Using the information and communication technology (ICT) approach to help optimize chlorination process and save chemical costs
- Developing computational fluid dynamics (CFD) models to identify tweaks that can improve treatment efficiency or capacity of existing unit processes



Grant Application/Funding Capabilities

Funding is critical to ensuring our clients' projects can be built. CDM Smith can assist with all phases of the funding progression for a project or program. From determining the best loan or grant available for projects to the application for the funds, as well as managing the funding and corresponding requirements through project completion, we are here to help. Our experts excel at identifying funding, writing grants and justification requests to obtain funding, and administering programs in accordance with funding guidelines to keep your CIP moving forward. Often, time is of the essence to receive funding and move projects forward. CDM Smith's familiarity with funding timeframes and requirements helps clients receive the best funding package and stay on schedule.

Industry Leaders in Lead and Copper Rule Programs

CDM Smith has assisted several utilities with guiding them through compliance with the LCR, and now the new LCRR. We have developed an LCRR compliance readiness program that will guide utilities to prepare for compliance when the revisions take effect. The plan is flexible as we understand the unique needs and challenges for each utility. CDM Smith experience includes developing programs, SOPs, and policies related to federal and/or state rules and regulations.

CDM Smith's North America Funding Discipline Leader

Stacy Barna has over 25 years of experience with drinking water and wastewater financial assistance programs, including State Revolving Funds (SRFs) and the Water Infrastructure Finance and Innovation Act (WIFIA). Nineteen years of her experience includes directing two SRF programs at the state level and working closely with EPA on SRF program development. Since joining consulting six years ago, Stacy has worked with clients to determine the best funding opportunities, led successful application for and receipt of funding, and facilitated communication and project deliverables with the funding agencies. Stacy has supported clients with over $1B of low-interest loans and grants.

The Newark, NJ LSLR Program: "A National Model"

CDM Smith, serving as program manager for the City of Newark, NJ's Lead Service Line Replacement (LSLR) Program, completed 23,000 replacements citywide in under three years. On February 11, 2022, the City celebrated this project milestone with several prominent figures, including Vice President Kamala Harris, EPA Administrator Michael Regan, and New Jersey Governor Phil Murphy. Harris said, ***"The success of New Jersey's biggest city at replacing nearly 24,000 lead drinking water pipes can serve as a national model . . . "***

Scheduling Methodology for Effective Project Management

CDM Smith will work closely with your team to identify the best solution to meet your needs. This means identifying options that work from both a technical and community perspective. Our staff will work closely with you to anticipate and plan for proactive management of community issues, and we have a dedicated core team supported by a deep bench of experienced professionals who can help guide your project as required. We are committed to developing and delivering the best solution for the City.

We will not provide a "one-size fits all" project solution or apply "standard" project delivery packages that might result in higher cost of service, operational difficulties, and frustration across multiple departments. We will work with you to identify and mitigate risks and capitalize on opportunities. We will partner with you to integrate your established policies, procedures, and available staff into our team to build the most efficient and cost-effective team possible.

We will work with you, as needed, to develop and implement a project schedule, document management systems, engineering and construction review processes, design-build agreements, communications protocols, and provide any other potential services that may have been envisioned under this contract.

Regulatory Agencies and Other Stakeholders:
We have long recognized the importance of developing positive relationships with regulatory agencies and other key stakeholders. Our team is experienced with developing strategic decision-making plans that involve an appropriate level of stakeholder involvement. This advanced planning helps avoid any regulatory, funding, or public surprises that could arise if a proposed project was not thoroughly analyzed. Locally, CDM Smith has experience successfully performing similar general and miscellaneous professional engineering services for many South Florida, including the counties of Palm Beach, Broward, and Miami-Dade, the cities of Hollywood, Fort Lauderdale, Hallandale Beach, West Palm Beach, Miami, and agencies like SFWMD.

Project Integrated Schedule and Budget Management

Our PMI-certified project manager uses Earned Value Management (EVM) techniques as part of a suite of status reporting tools to integrate project scope, time, and budget objectives, and measure these objectives against the baseline plan during execution of the project. EVM predicts project outcomes based on actual performance to date and facilitates proactive project management by identifying problems early on and in time to plan and implement corrective actions.

CDM Smith uses a suite of tools, including Oracle "Primavera P6" (P6) and EcoSys "Enterprise, Planning, and Control" (EPC) with configurations designed to implement best practices in project planning and EVM. All projects require a holistic approach to developing the project schedule. Our experienced project controls specialist and project manager will work together with the City to devise effective and efficient schedules, project contingencies, monitor work progress, apply corrections, and take City projects to successful completion.

Our project manager will then be able to monitor and visualize project performance versus plan. EPC provides a robust EVM system that allows for tracking of key performance indicators and complies with ANSI 748.

By integrating cost data with project and schedule information (activities, WBS elements, resource and expense assignments, and percent complete) we can automatically generate reports featuring earned value, expenditures, actuals, commitments, budgets, and resource plans. Our tools suite also allows our team to strategically align resources with project goals, priorities, and demand while tracking the availability of resources.

Managing Quality, Risk, Schedule, and Budget Processes and Tools

Plan Quality

CDM Smith's quality processes will begin early in the lifecycle of your project and will be tailored to your scope of work to meet the requirements of the project and our quality management system.

Quality Assurance

CDM Smith's QA process will focus on prevention and reduction of errors and omissions, conformance to standards and expectations, open-mindedness for innovation and creativity, monitoring and controlling quality checks and milestones, and providing value enhancement.

Quality Control

CDM Smith's QC processes will continuously monitor quality through every phase of the project lifecycle, controlling the quality of our deliverables through quality checks and milestones to ensure they align with your needs and expectations.

Project Risk Management

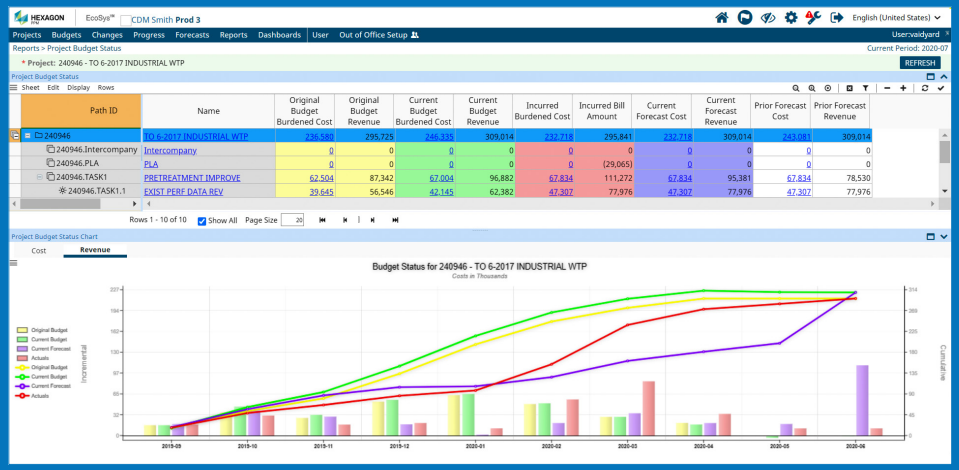
All projects carry a degree of risk. Our team relies on their creativity, planning, flexibility, and teamwork to expertly manage risk every day on projects.Successfully managing risk will give the City's projects the best chance of success.

Managing Subconsultants

All subconsultant staff are required to implement and execute the procedures that are established in the CDM Smith quality management process. Subconsultants will be required to document all reviews and coordination activities. All coordination and review activities associated with the subconsultants require the same level of review and documentation as we require of our internal staff.

Our project management team will work closely with our subconsultants to establish clear and open lines of communication to ensure that work requirements are entirely clear, and to monitor the performance of work as it progresses, not just the end product. By establishing such close partnerships with subconsultants, the project manager can identify potential trouble areas very early and devise and implement corrective action plans if needed. We have found that corrections implemented proactively and early in the project cause less negative impact than a more "hands-off" management approach. All subconsultants must successfully complete our vetting process for both financial stability and ethical conduct before being approved to work with us.

EcoSys is a specialized software with full integration of planning, tracking, monitoring and controlling project aspects as scope/work break down structures, budgets, schedules, variances, and resources, including staff, money, and assets, along with our in-house financial tools to proactively allot, track, and control resources. Our project manager is supported by a dedicated staff of project controls specialists with project scheduling experience with Microsoft Teams and/or Primavera P6 who leverage these resources and systems throughout our firm with over 50 projects per year typically managed and executed from our local South Florida offices. The cost and resource-loaded P6 schedules and resource forecasting tools capture both project and non-project activities, and ensure the availability of assigned project staff members. We systematically and routinely track our staff availability to make sure the right type of staff are available. EcoSys allows us to cost and resource load our entire work breakdown structure and upload it into Primavera P6 to better assist us with planning, tracking, monitoring, and controlling projects and staff availability.



Approach to Scalability to Support Simultaneous Projects

Our team structure will maximize our vast local resources to complete the services required under this contract. Our local team provides the City with the benefits of our experience gained serving other local utilities, as well as our extensive knowledge of planned, pending, and existing statewide regulations, code requirements, and engineering trends. **CDM Smith puts the right team on the right project.**

For those tasks that require nationally recognized expertise, we can draw on our pool of 5,500 employees and nationally and globally recognized experts. On these occasions, we will make every effort to ensure that our locally based staff and/or subconsultants are assigned to assist the out-of-area specialist by performing field work and coordinating with local and state regulators and other officials as required. We believe this approach to staffing provides the City with the best of both worlds when it comes to local staff involvement and national expertise.

Ability to Perform All Facets of Scope of Services

Our hand-picked project team is backed by our 10 Florida offices that boast almost 400 staff with a variety of specialties that cover all of the engineering disciplines required for the City's projects. We have the resources with the appropriate expertise to staff this important contract. Our staff from our Florida offices routinely work seamlessly together, providing the best combination of qualified senior staff, regional regulatory experts, and local supplemental field staff, to provide high quality, efficient project delivery and lower costs. As illustrated in the table below, we provide expertise in every key service area requested by the City.

Local Powerhouse

Staff Areas of Expertise	S. Mechler	J. Goldman	J. Prince	D. Thomas	B. Johnson	L. Whitehouse	I. Holowell	C. Montgomery	S. Kutzing	B. Susino	A. DeMelo	C. Frizzell	T. Nye	M. Schmidt	R. Rooney	S. Magenheimer	Y. Mercado	A. Condero-Domenech	C. Gadberry	S. Freiman	D. Jones	S. Barna	D. Kemp	A. Baranowski	J. Ridge	J. Carolan	L. Llewelyn	C. Tappan	D. Moulton
Potable Water Transmission and Distribution System		■		■	■	■	■	■	■			■		■				■	■	■	■	■				■	■	■	
Reuse Distribution Systems		■			■	■	■	■				■							■							■		■	
Wastewater Collection Systems		■	■	■	■	■	■	■				■	■	■				■	■	■		■					■	■	
Stormwater Systems	■	■	■	■	■	■		■		■	■		■	■	■	■		■	■	■	■						■		■
Hydraulic Modeling	■	■					■	■		■		■	■	■															■
Sewer Pump Stations		■	■	■	■	■	■	■				■	■	■			■	■	■	■							■		
Stormwater Pump Stations	■	■				■	■	■			■	■	■	■					■		■						■		
Force Main Improvements	■	■	■		■	■	■	■				■	■	■		■	■	■	■	■							■		
Green Infrastructure Design	■	■				■							■	■															■
Sustainability/Climate Resilience		■				■				■	■		■	■								■							■
Sea Level Rise Mitigation		■				■				■			■	■	■														■
Asset Management		■	■		■	■				■				■					■			■		■	■	■			
Grant Application Assistance and Management	■	■											■	■		■						■	■		■	■			
Lead Copper Rule Revision Compliance			■						■	■																			
Construction Cost Estimating		■				■							■	■		■			■										
Construction Administration & Management	■	■			■	■					■	■		■		■	■	■	■	■	■	■					■		
Quality Assurance, Quality Control and Value Engineering Services	■	■	■		■	■		■	■	■	■	■	■	■		■		■	■	■	■	■					■	■	■
Water Treatment Plant and Wastewater Treatment Plant Projects	■	■	■	■		■	■	■	■			■				■		■	■	■							■	■	

TAB F

Knowledge of Site and Local Conditions

Tab F. **Knowledge of Site and Local Conditions**

Knowledge of Site and Local Conditions

Per Question and Answer #58, #59, #64, and #65 in the OpenGov Portal for this specific Proposal, **Tab F does not have to be included** in our proposal submittal due to that language being project-specific and constrution related and does not apply to this project and therefore can be removed.

59. RFQ-042-23-JJ *Jan 31 2023 at 4:22 PM*

Anonymous *Jan 31 2023 at 4:22 PM*
User information is private

Tab F: "Knowledge of Site and Local Conditions", requires knowledge of specific sites and/or City infrastructure. Will you share the City Atlas and the location of the lift stations, pump stations and utility infrastructure that is to be replaced under this RFQ? This will ensure all firms have access to the same information.

Feb 8 2023 at 10:22 AM
City of Hollywood

Knowledge of Site and Local Conditions are project-specific and construction related and do not apply to this project. Not applicable.

64. RFQ-042-23-JJ *Feb 8 2023 at 8:41 AM*

Anonymous *Feb 8 2023 at 8:41 AM*
User information is private

In reference to the City's answer to Question No. 58: does "Not Applicable" mean to delete Tab F from our submittal?

Feb 9 2023 at 10:37 AM
City of Hollywood

Yes, you do not have to include Tab F in your submittal.

TAB G

References - Vendor Reference Form

Tab G. **References - Vendor Reference Form**

Reference 1

City of Boynton Beach, FL

Christopher Roschek

Deputy Director, Utilities Operations

roschekc@bbfl.us

561.742.6413

Project Name: General Engineering Contract

Dates Services Provided: 2018 - Ongoing

Role in Project: Prime Vendor

Amount: Various (CCNA Statory Limits)

Description of Services: General engineering consulting services contract where we provided overall infrastructure and ancillary services and consulting and engineering services. Projects included: Hydraulic Analysis for Downtown Stormwater System, VTScada Upgrade, Evaluation and Update of the City's 10-year Water Supply Plan and Stormwater Infrastrucutre Retrofit Project.

Reference 2

City of Hallandale Beach, FL

Peter A. Kunen, P.E., CFM

Assistant Director of Public Works

pkunen@hallandalebeachfl.gov

954.457.3042

Project Name: General Consultant Services

Dates Services Provided: 2020 - Ongoing

Role in Project: Prime Vendor

Amount: Various (CCNA Statory Limits)

Description of Services: General consulting services contract to perform multiple disciplines/ services which include general engineering, civil engineering, environmental engineering, electrical engineering, water resources, stormwater design, wastewater, and construction project management. Projects include Utility GIS Mapping and Lift Station 5 Replacement.

Reference 3

Palm Beach County, FL

Krystin Berntsen, P.E., PMP

Deputy Director

kberntsen@pbcwater.com

561.493.6008

Project Name: General Engineering Services

Dates Services Provided: 2020 - Ongoing

Role in Project: Prime Vendor

Amount: Various (CCNA Statory Limits)

Description of Services: Responsible for implementation of master planning, evaluation and small design projects for the five WTPs within un-incorporated Palm Beach County. Projects include; Consumptive Use Permit Renewal Support, Belle Glade WTP Demolition, WTP 11 Clearwell Recoating Evaluation, and Lead Copper Rule Revisions Inventory Developement.

See Completed Vendor Reference Forms on the following pages.

VENDOR REFERENCE FORM

City of Hollywood Solicitation #: RFQ-042-23-JJ
Reference for: CDM Smith

Organization/Firm Name providing reference: City of Boynton Beach, FL
Organization/Firm Contact Name: Christopher Roschek CJR
Title: Deputy Director, Utilities Operati
Email: roschekc@bbfl.us
Phone: 561-742-6413
Name of Referenced Project: General Engineering Contract
Contract No: 046-2821-17/TP
Date Services were provided: 2018 - Ongoing
Project Amount: Various (CCNA Statutory Limits)

Referenced Vendor's role in Project: ☑ Prime Vendor ☐ Subcontractor/ Subconsultant

Would you use the Vendor again? ☑ Yes ☐ No. Please specify in additional comments

Description of services provided by Vendor (provide additional sheet if necessary):
General Engineering Consulting Services Contract where we provided overall infrastructure and ancillary services and consulting and engineering services. Projects included: Hydraulic Analysis for Downtown Stormwater System, VTScada Upgrade, Evaluation & Update of the City's 10-year Water Supply Plan & Stormwater Infrastrucutre Retrofit Project.

Please rate your experience with the Vendor	Need Improvement	Satisfactory	Excellent	Not Applicable
Vendor's Quality of Service				
a. Responsive	☐	☐	☑	☐
b. Accuracy	☐	☐	☑	☐
c. Deliverables	☐	☐	☑	☐
Vendor's Organization:				
a. Staff expertise	☐	☐	☑	☐
b. Professionalism	☐	☐	☑	☐
c. Staff turnover	☐	☐	☑	☐
Timeliness/Cost Control of:				
a. Project	☐	☐	☑	☐
b. Deliverables	☐	☐	☑	☐

Additional Comments (provide additional sheet if necessary):
CDM Smith has provided excellent engineering and consulting services as part of the General Engineering Contract.

****THIS SECTION FOR CITY USE ONLY****						
Verified via:	**Email:**	☐	**Verbal:**	☐	**Mail:**	☐
Verified by:	**Name:**				**Title:**	
	Department:				**Date:**	

VENDOR REFERENCE FORM

City of Hollywood Solicitation #: RFQ-042-23-JJ
Reference for: CDM Smith

Organization/Firm Name providing reference: City of Hallandale Beach, FL
Organization/Firm Contact Name: Peter A. Kunen, P.E., CFM
Title: Assistant Director of Public Works
Email: pkunen@hallandalebeachfl.g
Phone: (954) 457-3042
Name of Referenced Project: General Consultant Services
Contract No: 2018-2019-012
Date Services were provided: 2020 - Ongoing
Project Amount: Various (CCNA Statutory Limits)

Referenced Vendor's role in Project: ☑ Prime Vendor ☐ Subcontractor/ Subconsultant

Would you use the Vendor again? ☑ Yes ☐ No. Please specify in additional comments

Description of services provided by Vendor (provide additional sheet if necessary):
General Consulting Services Contract to perform multiple disciplines/services which include General Engineering, Civil Engineering, Environmental Engineering, Electrical Engineering, Water Resources, Stormwater Design, Wastewater, and Construction Project Management. Projects include Utility GIS Mapping, and Lift Station 5 Replacement.

Please rate your experience with the Vendor	Need Improvement	Satisfactory	Excellent	Not Applicable
Vendor's Quality of Service				
a. Responsive	☐	☐	☑	☐
b. Accuracy	☐	☐	☑	☐
c. Deliverables	☐	☐	☑	☐
Vendor's Organization:				
a. Staff expertise	☐	☐	☑	☐
b. Professionalism	☐	☐	☑	☐
c. Staff turnover	☐	☐	☑	☐
Timeliness/Cost Control of:				
a. Project	☐	☐	☑	☐
b. Deliverables	☐	☐	☑	☐

Additional Comments (provide additional sheet if necessary): CDM Smith has always provided exceptional service and highly professional staff to assist our needs. Would highly recommend.

****THIS SECTION FOR CITY USE ONLY****						
Verified via:	Email:	☐	Verbal:	☐	Mail:	☐
Verified by:	Name:				Title:	
	Department:				Date:	

VENDOR REFERENCE FORM

City of Hollywood Solicitation #: RFQ-042-23-JJ
Reference for: CDM Smith

Organization/Firm Name providing reference: Palm Beach County, FL
Organization/Firm Contact Name: Krystin Berntsen, P.E., PMI
Title: Deputy Director
Email: kberntsen@pbcwater.com
Phone: 561-493-6008
Name of Referenced Project: General Engineering Services
Contract No: R2020-1719/ 19-076R
Date Services were provided: December 2020 - Ongoing
Project Amount: Various (CCNA Statutory Limits)

Referenced Vendor's role in Project: ☑ Prime Vendor ☐ Subcontractor/ Subconsultant

Would you use the Vendor again? ☑ Yes ☐ No. Please specify in additional comments

Description of services provided by Vendor (provide additional sheet if necessary):
Responsible for implementation of master planning, evaluation and small design projects for the five WTPs within un-incorporated Palm Beach County. Projects include; Consumptive Use Permit Renewal Support, Belle Glade WTP Demolition, WTP 11 Clearwell Recoating Evaluation, and Lead Copper Rule Revisions Inventory Developement.

Please rate your experience with the Vendor	Need Improvement	Satisfactory	Excellent	Not Applicable
Vendor's Quality of Service				
a. Responsive	☐	☑	☐	☐
b. Accuracy	☐	☑	☐	☐
c. Deliverables	☐	☑	☐	☐
Vendor's Organization:				
a. Staff expertise	☐	☑	☐	☐
b. Professionalism	☐	☑	☐	☐
c. Staff turnover	☐	☑	☐	☐
Timeliness/Cost Control of:				
a. Project	☐	☑	☐	☐
b. Deliverables	☐	☑	☐	☐

Additional Comments (provide additional sheet if necessary):

****THIS SECTION FOR CITY USE ONLY****						
Verified via:	**Email:**	☐	**Verbal:**	☐	**Mail:**	☐
Verified by:	**Name:**				**Title:**	
	Department:				**Date:**	

Krystin Bot 2-16-2023

TAB H

Subconsultant Information

Tab H. **Subconsultant Information**

CDM Smith is proposing the following subconsultants to support our efforts and is subject to the task/work orders assigned and City of Hollywood approval:

Curtis + Rogers Design Studio, Inc. - Green Infrastructure

Curtis + Rogers is a minority owned firm, well known throughout South Florida for providing quality award-winning landscape architectural services. Their Landscape Architects have more than 100 years of combined experience with complex projects and their long-term relationships with clients is a testimony to their ability to create environments which engage the senses and lift the spirits, while meeting the operational demands and functional realities of urban projects.

They believe that creativity results from an interaction between motivated clients and professionals. The best designs result from an interactive process between artistic creativity and experienced judgement. They utilize a process that emphasizes creativity within the context of rational problem-solving. Cultural, economic, environmental, and social forces are strong determinants of design. Their expression is a direct result of maximizing the social benefits, while minimizing the imposition of the man-made environment on the natural setting. The severity of heat waves and the handling of more frequent heavy rain events are the key challenges that are currently being pursued in the context of adaptive strategies to climate change. One of the core tools for mitigating negative climate change effects is the use of green infrastructure and high-performance landscapes, in which an increase in urban trees is a key strategy. Examples of their green infrastructure experience include the City of Hollywood Flood Mitigation and Swales projects.

Metco Services Southeast, LLC - Lift Stations

Metco Southeast, LLC is a minority owned firm established in 2008 to provide multi-disciplined consulting engineering services to meet the needs of the communities located in the State of Florida in the areas of Water and Wastewater Systems. They are a Certified Small and Disadvantage Business with multiple agencies throughout the region including Broward County. Since its inception, they have established a well-earned reputation for the delivery of complex design engineering solutions in addressing the needs of the most challenging engineering projects.

Metco Southeast is a dynamic organization, evolving constantly to keep abreast with the emerging technology to develop unique and cost-efficient solutions to serve the demands of the Clients. They provide their clients with services specifically tailored to meet their needs including feasibility studies, preliminary design development and final design documents. Metco Southeast takes pride in their commitment to perform all assignments of this Project by utilizing only the local resources within Broward County.

Craig A. Smith & Associates, LLC - SUE

Craig A. Smith & Associates (CAS) was established in 1980. Since then, the firm expanded from its original, technical orientation in municipal engineering and surveying into a full service civil engineering practice with specialized expertise in engineering, surveying & mapping, grants/loan assistance, construction management, utility locates, and CAD design & development. CAS is a client-oriented firm tailored to serving the needs of many governmental clients. They serve numerous Florida counties, cities, special districts, and utility authorities.

CAS provides complete subsurface utility engineering and location services utilizing the latest in electronic verification, ground penetrating radar, vacuum excavation, and GPS survey equipment. CAS can provide utility location information in various formats from simplistic 2D (two dimensional) to comprehensive 3D (three dimensional) Radar Tomography coupled with advanced software platforms (AutoCAD Civil 3D). CAS performs subsurface utility engineering providing utility mapping, electromagnetic designating, 2D radar designating, 3D radar tomography, vacuum soft digs, and conventional and GPS utility surveys. CAS also provides utility coordination services, interfacing with utility owner/operators on behalf of engineers, planners, contractors, and project designers.

Biscayne Engineering Company, Inc. - Surveying

Founded in 1898, Biscayne Engineering (BE) has a deep and rich history as one of South Florida's pioneer companies and has been providing civil engineering and surveying professional services since that time. Today, BE remains dedicated to our founding principles and driven to create innovative solutions for the changing demands of both our clients and the environment. Biscayne's exceptional team of professionals uses the most advanced methods and technologies available. They are extremely well-versed working with private clients as well as the public sector at both the state and municipal level. We do things the way they are meant to be done, always. No shortcuts. No half-measures.

Nutting Engineers of Florida Inc. - Geotechnical

Nutting Engineers of Florida, Inc. has been one of the premier geotechnical engineering firms in South Florida since its inception in 1967. Prior to this date work was performed under the name Nutting Engineers, Inc., which originated in 1956 preceded by H.C. Nutting in Miami from 1932 until 1956. NUTTING's comprehensive range of services include geotechnical exploration and engineering including soil borings and groundwater well drilling, monitoring of pile installation, groundwork modification and chemical grouting procedures, quality control/quality assurance testing of construction materials, and structural inspections (special/threshold) of structures.

Brizaga, Inc. - Public Outreach & Grant Application Assistance

Brizaga, Inc. is a strategic consulting firm built to solve complex problems by leveraging science, communications, engineering, and policy. They work to plan for and address the impacts of rising seas, more frequent flooding, and a changing environment on property, infrastructure, community, and the local economy. They bring a unique perspective meshing physical science, engineering design, public policy and community engagement to create innovative and practical solutions in the face of more frequent flooding, rising tides, and a changing environment.

TAB I

Financial Resources

Tab I. **Financial Resources**

Financial Resources

Per Question and Answer #73 in the OpenGov Portal for this specific Proposal, **Tab I does not have to be included** in our proposal submittal and therefore can be removed.

73. No subject *Feb 16 2023 at 2:30 PM*

Anonymous *Feb 16 2023 at 2:30 PM*

User information is private

The information requested for Tab I: Financial Resources (financial statements) is confidential. Please advise if the information can be provided directly to the City separately and not uploaded via OpenGov portal/attached to our proposal.

Feb 22 2023 at 11:55 AM

City of Hollywood

You do not have to provide Tab I: Financial Statements at the moment. It may be requested further in the evaluation process.

TAB J

Legal Proceedings and Performance

Tab J. **Legal Proceedings and Performance**

CDM Smith Inc - Prime

Due to its size and volume of business, over the years CDM Smith Inc. has occasionally been involved in litigation. There are no past or currently outstanding legal proceedings, judgments or contingent liabilities that could adversely affect the financial position or ability of CDM Smith Inc. to perform its contractual commitments. The following is a list of lawsuits filed against CDM Smith Inc. in the past five (5) years involving project performance:

Date Filed	Case Name	Forum	Cause of Action	Description	Status
17-Jan-23	Johnson Bros. Corp, for itself and as assignee of Volusia County, FL v. WSP USA, Inc. f/k/a Parsons Brinckerhoff, Inc. and CDM Smith, Inc.	US District Court for the Middle District of Florida	Breach of Contract, Contractual Indemnification, Negligence	Plaintiff alleges improper CEI services on bridge replacement project	Pending
22-Dec-22	City of Shreveport v. CDM Smith Inc., et al	Parish of Caddo, LA, First Judicial District Court	Negligence, Breach of Contract	Plaintiff sued 28 entities (engineers and contractors) performing work on a multi-year sanitary sewer rehabilitation program pursuant to the City's Consent Decree with the EPA. CDM Smith served as the Program Manager. Plaintiff alleges negligence and breach of contract against the named defendants.	Pending
05-Aug-22	Ruskin Construction Ltd. v. Pomerleau-Bessac G.P., CDM Smith Canada ULC, Hatch Ltd., Greater Vancouver Sewerage & Drainage District, The Guarantee Company of North America, and Continental Casualty Company	Supreme Court of British Columbia	Misrepresentation	Plaintiff alleges errors in design and construction of a coffer dam used in a wastewater treatment plant project.	Pending
14-Jan-22	David Vanmeter v. Timothy Morse, Civil Services Incorporated, and CDM Smith Inc.	State Court of Fulton County, Georgia	Negligence	Plaintiff alleges inadequate roadway inspection services resulted in motor vehicle accident. CDM Smith was dismissed without prejudice.	Pending
19-Nov-21	New England Building & Bridge Co., Inc. v. Town of Cohasset v. CDM Smith Inc.	US District Court for the District of MA	Contract Indemnification	Third party complaint against CDM Smith for indemnification alleging deficient design	Pending
09-Aug-21	T.F.R. Enterprises, Inc. v. Florida DOT and Target Engineering Group LLC f/k/a Target Engineering Group Inc. (TPP) v. AE Engineering, Inc., CDM Smith Inc., JBS Engineering Technical Services, Inc., PI Consulting Services, LLC, Rummel, Klepper & Kahl, LLP, and RS&H Inc. (TPDs)	Circuit Court of 7th Judicial Circuit, Volusia County, FL	Breach of Contract, Indemnification	Third party complaint alleging insufficient field debris monitoring and documentation services.	Closed
20-Jul-21	Reed Street Yards LLC v. CDM Smith Inc., Gestra Engineering, Inc., The Sigma Group, Inc.	Milwaukee County (WI) Circuit Court	Negligence	Plaintiff alleges negligence in design of stormwater diversion structure and conveyance system.	Closed
11-Jun-21	Michael J. Shaheen, Esq., Tracy Lancione Lloyd, Esq., as Co-Adminstrators of the Estate of Richard St. John, deceased, Codey St. John and Logan St. John, v. Joell Lytle, Wyatt Dingus, Dean Dingus, CDM Smith Inc., Reco Equipment d/b/a Bobcat of Pittsburgh, and John Doe	Court of Common Pleas, Allegheny County, PA	Negligence, Wrongful Death	Plaintiffs allege Richard St. John's death in sewer line trench collapse was the result of defendants' negligence	Pending

Date Filed	Case Name	Forum	Cause of Action	Description	Status
12-May-21	Garrett Norman v. HNTB Corporation et al, including CDM Smith Inc.	Marion County Superior Court	Negligence	Plaintiff alleged negligent design of roadway markings and signs caused auto accident.	Pending
07-Apr-21	Glover Construction Corporation v. CDM Smith Inc.	4th Judicial Circuit Court Duval County FL	Negligence	Plaintiff alleges negligent engineering services in landfill expansion project.	Pending
30-Mar-21	City of Largo, FL v. Greeley and Hansen LLC v. CDM Smith Inc.	Circuit Court for 6th Judicial Circuit for Pinellas County FL	Indemnity, Breach of Contract, Breach of Duty to Defend	Third party plaintiff brought indemnity action against CDM Smith alleging deficient engineering services.	Closed
22-Feb-21	Lake Cooper Maintenance Fund, Inc. v. South Carolina Department of Transportation, County of Charleston, et al. including CDM Smith Inc.	Charleston Cty (SC) Court of Common Pleas, 9th Judicial Circuit	Negligence, Nuisance, Trespass, Unfair Trade Practices	Plaintiff alleges defendants' negligence caused harm to the ecosystem and properties surrounding Lake Cooper.	Pending
16-Jul-20	Springfield Water and Sewer Commission v. Ludlow Construction Company Inc., CDM Smith Inc., and Tis Nuoval, S.R.L.	Hampden County Superior Court	Breach of Contract, Negligence, Contractual Indemnification	Plaintiff alleges deficient services in water treatment plant project.	Pending
29-May-20	Gregory and Brenda Wilson, as Personal Representatives of the Estate of Aaron Jamal Wilson vs. SEMA Construction, Inc., CDM Smith Inc., AECOM Inc., Tierra, Inc.; Horizon Engineering Group, Inc., and Traffic Engineering Data Solutions, Inc.	Circuit Court of 9th Judicial Circuit, Orange County, Florida	Negligence	Plaintiff filed suit alleging incorrect traffic signage, lighting, and other channeling devices caused automobile accident.	Pending
28-Jan-20	City of Brevard, a North Carolina Municipal Corporation v. CDM Smith Inc.	NC Superior Court, County of Transylvania	Breach of Contract, Negligence	Plaintiff alleges breach of contract and negligence in engineering services performed for pump station and flow equalization tank at a wastewater treatment plant improvements project. Plaintiff alleges contaminated soil from nearby property was improperly handled.	Closed
04-Nov-19	Thayer Academy v. R.A.D. Corp. d.b.a R.A.D. Sports v. CDM Smith Inc.	Norfolk County Superior Court	Contribution and Indemnification	Third party plaintiff brought contribution and indemnification action alleging negligent project performance against CDM Smith.	Closed
01-Nov-19	Santa Clara Valley Water District v. CH2M Hill, Inc., CDM Smith, Inc., DOES 1 - 60	Superior Court of the State of California, County of Santa Clara	Negligence	Plaintiff alleges engineering errors in water treatment plant residuals management project	Pending
25-Oct-18	Spence Brothers v. Board of County Road Commissioners of the County of Bay, and Board of County Road Commissioners of the County of Bay, Counter-Plaintiff, v. Spence Brothers, Counter-Defendant/Third-Party Plaintiff, v. CDM Smith Inc., Third-Party Defendant.	Circuit Court for the County of Bay, State of Michigan	Third Party Complaint alleging Negligent Misrepresentation	Third Party Plaintiff alleges CDM Smith submitted project documents with errors.	Closed

Date Filed	Case Name	Forum	Cause of Action	Description	Status
24-Oct-18	Vladimir Nazarov and James Nazarov v. Consolidated Edison Company of New York (D, TPP) v. CDM Smith Inc. (TPD)	Supreme Court of the State of New York	Third Party Complaint for Property Damage - Contractual Indemnity / Breach of Contract	Third Party Complaint alleging contractual indemnity and breach of contract	Pending
21-Sep-18	Cambria Community Services District, a California Independent Special Services District v. CDM Smith Inc., a Massachusetts Corporation, and DOES 1 through 25, inclusive	Superior Court of the State of California for the County of San Luis Obispo	Breach of Contract, Negligence	Plaintiff alleges CDM Smith breached its contract and was negligent in the performance of engineering services in water treatment facility design project	Closed
29-Jun-18	Morange Lake Association, Inc. v. South Carolina Department of Transportation, South Carolina Department of Health and Environmental Control, CDM Smith, Inc., Phillips & Jordan, Inc.	State of SC Court of Common Pleas, County of Lexington	Negligence, Trespass, Conversion, Strict Liability, Nuisance, Civil Conspiracy	Plaintiff alleges defendants negligently damaged their dam by wrongfully destroying spillway	Closed
06-Jun-18	Buckman Direct Diversion Board v. CDM Smith Inc., et al	Santa Fe County 1st Judicial District Court	Breach of Contract, Negligence	Plaintiff alleges defendants breached their contract and were negligent in Rio Grande River diversion project.	Closed
02-Apr-18	Daniel Nishihara, et al. v. CDM Smith Inc., f/k/a/ Camp Dresser & McKee Inc., Damien Herrera, P.E., S.J. Louis Construction of Texas Ltd., S.J. Louis, LLC, and City of San Antonio, acting by and through its San Antonio Water System Board of Trustees	285th Judicial District in Bexar County, Texas	Wrongful Death, Survival Action, Personal Injury	Wrongful death action allegedly arising from damage to roadway due to wastewater pipe failure.	Closed
29-Mar-18	Skyline Engineering, LLC v. RCDolner LLC, Lakhani & Jordan Engineers, P.C., CDM Smith Inc. and Turner & Townsend Ferzan Robbins LLC	Supreme Court of the State of New York, County of New York	Contribution, Indemnification	Third party plaintiff (Skyline) alleged professional negligence. CDM Smith ultimately dismissed from the case after the arbitrator in the underlying matter found in favor of the CDM Smith.	Closed

CDM Smith Inc - Prime

75 State Street, Suite 701
Boston, Massachusetts 02109
tel: 617 452-6000

February 24, 2023

RE: City of Hollywood General Engineering Consulting Services - Infrastructure

To Whom it may Concern:

I write in response to the Solicitation for the above-referenced Project, and in particular, Section 4.2.10 Tab J: Legal Proceedings and Performance.

Please be advised that there has been one such termination. In 2010, Bossier City, Louisiana terminated a CDM Smith Inc. contract just prior to filing a lawsuit. CDM Smith Inc. disputed the City's claims, and the matter was settled.

Thank you.

Very truly yours,

Paul Milligan
Senior Vice President and
Assistant General Counsel
CDM Smith Inc.

Suzanne Mechler
Vice President
CDM Smith Inc.

Biscayne Engineering Company, Inc. - Surveying

LITIGATION STATEMENT

In February 2016, Annex Industrial Park, LLC initiated a civil action against Biscayne Engineering Company, Inc. in the Circuit Court in Miami-Dade County, Florida. The case went to a bench trial in December 2019. The Court ordered Biscayne to pay $200,000 to Annex. This case is now closed.

In July 2021, Liubor Slepykh and Igor Slepykh, her husband initiated a civil action against Biscayne Engineering Company, Inc. in the Circuit Court of Miami-Dade County, Florida. Biscayne was named along with multiple other defendants. Biscayne Engineering, Inc. maintains that we should never have been listed as a defendant in this case, as we were never in possession or in control of the property.

No licensure, disciplinary, or debarment proceeding is pending. No such proceeding has ever been applied to or administered against Biscayne Engineering Company, Inc.

Biscayne Engineering Company, Inc. has not had any contracts which were terminated for default, non-performance, or delay within the past five (5) years.

Sincerely,

Melissa Bolton Calabrese
Chief Executive Officer
Date: February 7, 2023

INSPIRED BEYOND MEASURE • SINCE 1898

CORPORATE HEADQUARTERS
529 West Flagler Street,
Miami, FL 33130
Tel. 305.324.7671
Fax 305.324.0809

www.BiscayneEngineering.com
info@BiscayneEngineering.com

PALM BEACH BRANCH
449 NW 35th Street,
Boca Raton, FL 33431
Tel. 561.603.2329
Fax 561.609.2317

Brizaga, Inc. - Public Outreach & Grant Application Assistance

BRIZAGA
ASSESS. COMMUNICATE. ADAPT.

February 9, 2023

RE: Litigation Statement
City of Hollywood – Request for Qualifications RFQ-042-23-JJ
Brizaga Project No. 218004.09

To Whom It May Concern:

Brizaga, Inc. (Brizaga) hereby certifies that no litigation or regulatory action has been filed against our firm in the previous five years.

Should you have any questions or require additional information, please do not hesitate to contact me via email at alec@brizaga.com or at (954) 834-3533.

Sincerely,

Alec Bogdanoff, Ph.D.
Principal & Co-Founder

2101 West Commercial Boulevard, Suite 4600
Fort Lauderdale, Florida 33309
(954) 834-3533 • www.brizaga.com

Craig A. Smith & Associates, LLC - SUE

CRAIG A. SMITH & ASSOCIATES
A SMART-INFRASTRUCTURE COMPANY

January 25, 2023

To Whom It May Concern

RE: LITIGATION HISTORY FOR PAST 5 YEARS

Craig A. Smith & Associates, LLC has zero litigation history to report for the last 5 years.

Yours sincerely,

Stephen C. Smith, P.E.
President

\\cas-file\admin\proposal-assembly\masterfiles\litigation-llc-2022.docx

561.314.4445 | 21045 Commercial Trail Boca Raton, FL 33486 | www.craigasmith.com

Curtis + Rogers Design Studio, Inc. - Green Infrastructure

CURTIS+
ROGERS
DESIGN
STUDIO
INC.

Landscape
Architecture

February 8, 2023

Curtis + Rogers Design Studio, inc. is not involved in or never has been involved in any litigation, administrative proceedings, and bankruptcy proceedings.

Curtis + Rogers Design Studio, Inc. have never had any claims.

Sincerely,

Aida M. Curtis
Principal
Curtis + Rogers Design Studio, Inc.

7520
S. RED
ROAD,
SUITE M
SOUTH
MIAMI,
FLORIDA
33143
TELEPHONE
305.442.1774
FACSIMILE
305.445.9488
www.curtisrogers.com
LIC. LC C000241

State of *Florida*
County Of *Miami-Dade*
The foregoing instrument was acknowledged before me this February 8, 2023
by *Aida M. Curtis* of *Curtis + Rogers Design Studio, Inc.*, a *Florida* corporation, on behalf of the corporation.
She is personally known to me or has produced (personally known to me) as identification.

Signature of Notary

Notary: Barbara Diaz

Serial number: GG 311742

BARBARA DIAZ
Notary Public - State of Florida
Commission # GG 311742
My Comm. Expires Mar 24, 2023
Bonded through National Notary Assn.

Metco Services Southeast, LLC - Lift Stations

METCO Southeast
CONSULTING ENGINEERS

February 7, 2023

RE: LITIGATION AND CLAIMS

Dear Sir/Madam;

Metco Southeast does not have any ongoing or pending litigations, claims, or suits.

Sincerely,

Metco Services Southeast, LLC

Raj Vijayendran, PE
General Manager

Nutting Engineers of Florida Inc. - Geotechnical

Litigation History
5 years

Case Name: Miralago Estates Neighborhood Assn, Inc Plaintiff
vs
Lennar Homes etal Defendants

Subject Matter of the Dispute: Alleged Construction Defects with no specifics provided as to any which might be related to Nutting's work on the project. Numerous Defendants in widespread "turnover" action by HOA

Amount in Dispute: Unknown

Outcome: Pending

TAB K

Required Forms

Tab K. **Required Forms**

All required forms listed and provided here and on the following pages may be a duplicate of forms that are acknowledged and uploaded in the OpenGov portal and are as follows:

Acknowledgement and Signature Page

12. ACKNOWLEDGMENT AND SIGNATURE PAGE

✔ **12.1. If Corporation - Date Incorporated/Organized:***

12-29-1970

✔ **12.2. State Incorporated/Organized:***

Massachusetts

✔ **12.3. Remittance Address***

621 NW 53rd Street, Suite 265, Boca Raton, FL 33487

✔ **12.4. Bidder/Proposer's Authorized Representative's Typed Full Name***

Suzanne Mechler, PE, BCEE

✔ **12.5. IT IS HEREBY CERTIFIED AND AFFIRMED THAT THE BIDDER/PROPOSER CERTIFIES ACCEPTANCE OF THE TERMS, CONDITIONS, SPECIFICATIONS, ATTACHMENTS AND ANY ADDENDA. THE BIDDER/PROPOSER SHALL ACCEPT ANY AWARDS MADE AS A RESULT OF THIS SOLICITATION. BIDDER/PROPOSER FURTHER AGREES THAT PRICES QUOTED WILL REMAIN FIXED FOR THE PERIOD OF TIME STATED IN THE SOLICITATION.***

☑ Please confirm

✔ **12.6. THE EXECUTION OF THIS FORM CONSTITUTES THE UNEQUIVOCAL OFFER OF BIDDER/PROPOSER TO BE BOUND BY THE TERMS OF ITS PROPOSAL. FAILURE TO SIGN THIS SOLICITATION WHERE INDICATED BY AN AUTHORIZED REPRESENTATIVE SHALL RENDER THE BID/PROPOSAL NON-RESPONSIVE. THE CITY MAY, HOWEVER, IN ITS SOLE DISCRETION, ACCEPT ANY BID/PROPOSAL THAT INCLUDES AN EXECUTED DOCUMENT WHICH UNEQUIVOCALLY BINDS THE BIDDER/PROPOSER TO THE TERMS OF ITS OFFER.***

☑ Please confirm

Vendor Reference Form(s)

✔ **2. Vendor Reference Form***

Please download the below document and upload three (3) or more completed forms.

Vendor_Reference_Form_(1).pdf

Your file uploads:

Boynton_Beach_GEC_Eval_Form_Christopher_Roschek.pdf

Hallandale_Beach_GEC_Eval_Form(PAK).pdf

Palm_Beach_County_GEC_Form.pdf

Hold Harmless and Indemnity Clause

✔ **3. Hold Harmless and Indemnity Clause** *

I, an authorized representative, the contractor, shall indemnify, defend and hold harmless the City of Hollywood, its elected and appointed officials, employees and agents for any and all suits, actions, legal or administrative proceedings, claims, damage, liabilities, interest, attorney' s fees, costs of any kind whether arising prior to the start of activities or following the completion or acceptance and in any manner directly or indirectly caused, occasioned or contributed to in whole or in part by reason of any act, error or omission, fault or negligence whether active or passive by the contractor, or anyone acting under its direction, control, or on its behalf in connection with or incident to its performance of the contract.

☑ Please confirm

Non-Collusion Affidavit

✔ **4. Non-Collusion Statement***

I, being first duly sworn, depose that:

A. He/she is an authorized representative of the Company, the Proposer that has submitted the attached Proposal.
B. He/she has been fully informed regarding the preparation and contents of the attached Proposal and of all pertinent circumstances regarding such Proposal;
C. Such Proposal is genuine and is not a collusion or sham Proposal;
D. Neither the said Proposer nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant has in any way colluded, cor agreed, directly or indirectly with any other Proposer, firm or person to submit a collusive or sham Proposal in connection with the contractor for which the attached Proposal to refrain from bidding in connection with such contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with an or person to fix the price or prices, profit or cost element of the Proposal price or the Proposal price of any other Proposer, or to secure an advantage against the City of Holly interested in the proposed Contract; and
E. The price or prices quoted in the attached Proposal are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the agents, representatives, owners, employees, or parties in interest, including this affiant.

☑ Please confirm

Sworn Statement Pursuant to Section 287.133(3)(a)

✔ **5. Sworn Statement Public Entity Crimes***

Please download the below documents, complete, and upload.

Sworn_Statement_Public_Entity_Crimes_(1).pdf

Your file uploads:

Sworn_Statement_Public_Entity_Crimes__(2).pdf

Certifications Regarding Debarments, Suspensions and Other Responsibility Matters

✔ **6. Certifications Regarding Debarment, Suspension and Other Responsibility Matters***

The applicant certifies that it and its principals:

Are not presently debarred, suspended, proposed for debarment, declared ineligible, sentenced to a denial of Federal benefits by a State or Federal court, or voluntarily excluded from covered transactions by any Federal department or agency;

Have not within a three-year period preceding this application been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction, violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (b) of this certification; and

Have not within a three-year period preceding this application had one or more public transactions (Federal, State, or local) terminated for cause or default.

☑ Please confirm

Drug-Free Workplace Program

✔ **7. Drug-Free Workplace Program***

A. IDENTICAL TIE PROPOSALS - Preference shall be given to businesses with drug-free workplace programs. Whenever two or more bids which are equal with respect to price, quality, and service are received by the State or by any political subdivision for the procurement of commodities or contractual services, a bid received from a business that certifies that it has implemented a drug-free workplace program shall be given preference in the award process. Established procedures for processing tie proposals will be followed if none of the tied vendors have a drug-free workplace program. In order to have a drug-free workplace program, a business shall:

1. Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.
2. Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.
3. Give each employee engaged in providing the commodities or contractual services that are under bid a copy of the statement specified in subsection (1).
4. In the statement specified in subsection (1), notify the employee that, as a condition of working on the commodities or contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction of, or plea of guilty or nolo contendere to, any violation of chapter 893 or of any controlled substance law of the United States or any state, for a violation occurring in the workplace no later than five (5) days after such conviction.
5. Impose a sanction on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program (if such is available in the employee's community) by, any employee who is so convicted.
6. Make a good faith effort to continue to maintain a drug-free workplace through implementation of these requirements.

As the person authorized to sign the statement, I certify that this firm complies fully with the above requirements.

☑ Please confirm

Solicitation, Giving and Acceptance of Gifts Policy

✔ **8. Solicitation, Giving, and Acceptance of Gifts Policy***

Florida Statute 112.313 prohibits the solicitation or acceptance of Gifts. "No Public officer, employee of an agency, local government attorney, or candidate for nomination or election shall solicit or accept anything of value to the recipient, including a gift, loan, reward, promise of future employment, favor, or service, based upon any understanding that the vote, official action, or judgment of the public officer, employee, local government attorney, or candidate would be influenced thereby." The term "public officer" includes "any person elected or appointed to hold office in any agency, including any person serving on an advisory body."

The City of Hollywood/Hollywood CRA policy prohibits all public officers, elected or appointed, all employees, and their families from accepting any gifts of any value, either directly or indirectly, from any contractor, vendor, consultant, or business with whom the City/CRA does business.

The State of Florida definition of "gifts" includes the following:

- Real property or its use,
- Tangible or intangible personal property, or its use,
- A preferential rate or terms on a debt, loan, goods, or services,
- Forgiveness of indebtedness,
- Transportation, lodging, or parking,
- Food or beverage,
- Membership dues,
- Entrance fees, admission fees, or tickets to events, performances, or facilities,
- Plants, flowers or floral arrangements
- Services provided by persons pursuant to a professional license or certificate.
- Other personal services for which a fee is normally charged by the person providing the services.
- Any other similar service or thing having an attributable value not already provided for in this section.

Any contractor, vendor, consultant, or business found to have given a gift to a public officer or employee, or his/her family, will be subject to dismissal or revocation of contract.

As the person authorized to sign the statement, I certify that this firm will comply fully with this policy.

☑ Please confirm

W-9 (Request for Taxpayer Identification)

✔ **9. W-9 (Request for Taxpayer Identification)***

Please download the below documents, complete, and upload.

W-9.pdf

Your file uploads:

CDM_SMITH_INC._FORM_W-9_-_SIGNED_2023.pdf

Certificate of Insurance

✔ **10. Certificate of Insurance***

See requirements in the #SPECIAL TERMS AND CONDITIONS section.

2023-CDM_Smith_Inc_-_Certificate_of_Liability_Insurance_-_PROPOSAL_PURPOSES_ONLY_(1).pdf

Drop some files here or click to select files to upload.

Proof of Sunbiz Registration

✔ **11. Proof of Sunbiz Registration***

Enter company FEIN to be verified in Sunbiz

04-2473650

Acknowledgement and Signature Page

✔ **12.1. If Corporation - Date Incorporated/Organized:***

12-29-1970

✔ **12.2. State Incorporated/Organized:***

Massachusetts

✔ **12.3. Remittance Address***

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✔ **12.4. Bidder/Proposer's Authorized Representative's Typed Full Name***

Suzanne Mechler, PE, BCEE

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☑ Please confirm

STATEMENT OF QUALIFICATION CERTIFICATION

Please Note: All fields below must be completed. If the field does not apply to you, please note N/A in that field.

If you are a foreign corporation, you may be required to obtain a certificate of authority from the department of state, in accordance with Florida Statute §607.1501 (visit http://www.dos.state.fl.us/).

Company: (Legal Registration) CDM Smith Inc.

Name/Principal/Project Manager: Suzanne Mechler, PE, BCEE, Vice President

Address: 621 NW 53rd Street, Suite 265

City: Boca Raton State: FL Zip: 33487

Telephone No. 561.571.3756 **FEIN/Tax ID No**. 04-2473650 Email: mechlerse@cdmsmith.com

Does your firm qualify for MBE or WBE status: N/A MBE _____ WBE _____

ADDENDUM ACKNOWLEDGEMENT - Proposer acknowledges that the following addenda have been received and are included in the proposal:

Addendum No.	Date Issued	Addendum No.	Date Issued
1	01/18/23	3	01/19/23
2	01/19/23	4	01/24/23
5	02/21/23		

VARIANCES: State any variations to specifications, terms and conditions in the space provided below or reference in the space provided below all variances contained on other pages of bid, attachments or bid pages. No variations or exceptions by the Proposer will be deemed to be part of the bid submitted unless such variation or exception is listed and contained within the bid documents and referenced in the space provided below. If no statement is contained in the below space, it is hereby implied that your bid/proposal complies with the full scope of this solicitation. If this section does not apply to your bid/proposal, simply mark N/A. **If submitting your response electronically through OPENGOV you must click the exception link if any variation or exception is taken to the specifications, terms and conditions.**

CDM Smith Inc. looks forward to negotiating the Indemnity (and related provisions) and Uncontrollable Forces/Force Majeure provisions of the contract.

The below signatory hereby agrees to furnish the following article(s) or services at the price(s) and terms stated subject to all instructions, conditions, specifications addenda, legal advertisement, and conditions contained in the bid/proposal. I have read all attachments including the specifications and fully understand what is required. By submitting this signed bid/proposal, I will accept a contract if approved by the City and such acceptance covers all terms, conditions, and specifications of this bid/proposal. The below signatory also hereby agrees, by virtue of submitting or attempting to submit a response, hereby agrees that in no event shall the City's liability for respondent's indirect, incidental, consequential, special or exemplary damages, expenses, or lost profits arising out of this competitive solicitation process, including but not limited to public advertisement, bid conferences, site visits, evaluations, oral presentations, or award proceedings exceed the amount of five hundred dollars ($500.00). This limitation shall not apply to claims arising under any provision of indemnification or the City's protest ordinance contained in this competitive solicitation.

Submitted by:

Suzanne Mechler, PE, BCEE — Signature

Name (printed)

2/28/2023 Vice President

Date: Title

CDM Smith®

cdmsmith.com