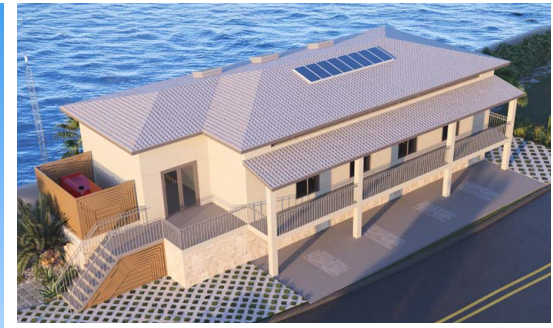


City of Hollywood

Stormwater Program Management

RFQ-320-25-JJ

JULY 10, 2025



**CDM
Smith**



July 10, 2025

Attn: Hugo Davalos, Senior Project Manager
City of Hollywood
1621 N.14th Ave Hollywood, FL 33020

Subject: RFQ-320-25-JJ Stormwater Program Management

Dear Members of the Selection Committee:

The City of Hollywood (City) is one of the world's most desirable places to visit, live, and work, but it is also one of the most vulnerable to the effects of climate change. The City currently faces an urgent and escalating threat of large-scale flooding due to aging stormwater infrastructure, low-lying topography, and the increasing impacts of sea level rise, high tides, and more intense storm events. Understanding these challenges could result in serious social and economic impacts, such as property damage, business interruptions, and a reduced quality of life for residents, the City has taken a proactive approach by developing a well-planned stormwater master plan (SWMP) and is promptly moving into implementation to meet the community's needs. **CDM Smith Inc.** would like the opportunity to continue to partner with the City to implement and manage the Stormwater CIP Program—that aligns with the City's strategic goals and timelines—by providing full-spectrum program management and engineering services through the successful execution of projects under the SWMP.

CDM Smith is proud to have been the consultant of choice and Hollywood's trusted partner in building stormwater resilience. Our team brings unmatched program management expertise, deep technical proficiency combined with local institutional knowledge, and a proven record of delivering large-scale infrastructure solutions. We understand the urgency of the City's flooding challenges and are committed to a forward-thinking, community-focused approach that protects public health, supports economic vitality, and enhances quality of life.

More than just meeting deadlines and budgets, our comprehensive, digitally enabled, and outcome-driven strategy provides lasting, transformational results. With our proven partnership, the City gains not just a program manager—but a dedicated ally in creating a safer, stronger, and more sustainable future for the City of Hollywood and your residents.

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 contact me at 561.571.3756 or mechlerse@cdmsmith.com.

Our program management approach is efficient and flexible and designed to deliver early results. Together, we'll navigate complexity with confidence and create lasting value for the City of Hollywood.

Sincerely,

Suzanne Mechler, PE | Vice President | CDM Smith

THE CDM SMITH ADVANTAGE

- **Excellence Delivered:** Our track record on the SWMP is clear: every deadline was met, and the Citywide work was well received by Department staff and the Commission.
- **Starting Ahead of the Curve:** Our recent collaboration with the City has fostered our unmatched insight into the Program and will allow an efficient, fast start demonstrating early progress and success.
- **Extension of Staff:** Our co-location with City staff and pre-existing relationships will accelerate program delivery.
- **Minimal Impact to City Staff:** We know how to navigate the City's processes to deliver the Program with minimal impact to overloaded City staff.
- **Manage Interim Projects/CIP Delivery:** We will apply strong institutional knowledge of the SWMP to optimize the planning, scheduling, and execution of work.
- **Digital Decision-Making Tools:** We will utilize artificial intelligence, machine learning, and program controls data visualization to plan, track, and manage deliverables and project milestones.
- **Community Outreach and Awareness:** Our approach advances our successful outreach strategies, and proven results that provide the greatest probability of keeping the public informed while mitigating community impact.
- **Leverage Experts When Needed:** We will draw upon our expansive, established network of multidisciplinary experts who can deliver across your entire Program.



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

CERTIFICATE

I, Paul T. Milligan, Secretary of CDM Smith Inc., a Massachusetts corporation, do hereby certify that Suzanne Mechler holds the role of Client Service Leader, 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, consistent with the firm's signing authority policies and procedures, Ms. Mechler has been delegated the authority to execute and deliver proposals, contracts and agreements for the performance of professional services specifically for the Stormwater Program Management project in 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 3rd day of July 2025.

A handwritten signature in blue ink that reads "Paul T. Milligan".

Paul T. Milligan- Secretary of the Corporation



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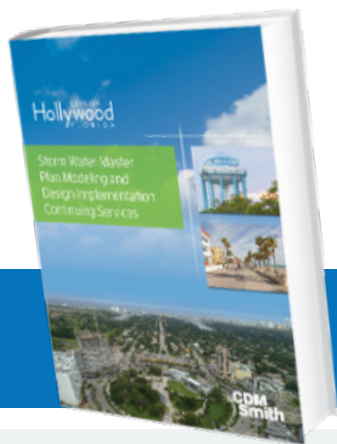


TAB B

Executive Summary

To achieve the successful implementation of stormwater projects identified in the Stormwater Master Plan (SWMP), CDM Smith offers the City a trusted long-term partner with proven qualifications and a deep expertise—not only in program management, but also in the delivery and oversight of stormwater initiatives.

With an unparalleled understanding of your infrastructure and direct experience developing the SWMP model, our team offers proven technical excellence, adaptability, and innovation. The same SWMP experts—**Jon Goldman, Tom Nye,** and **Mike Schmidt**—will be there for you. This continuity, combined with our regional expertise, enables us to anticipate challenges, streamline implementation, and serve as a trusted partner—delivering solutions efficiently, precisely, and with confidence.



CDM Smith's unmatched expertise in the City's stormwater systems sets the stage for a highly effective program.

Business Entity: CDM Smith Inc. is a corporation registered in the State of Massachusetts.

Background: Founded in 1947, CDM Smith is a global, employee owned engineering and construction firm that provides innovative solutions in the areas of water, environment, transportation, energy, and facilities. We offer a full range of services including consulting, design, construction, and program management.

Main Office: Boston, MA

Office Location to Serve this Contract: 621 NW 53rd Street, Suite 265, Boca Raton, FL
T: 561.571.3800; F: 561.241.7084

Contact Person: Suzanne Mechler, PE, BCEE;
Vice President;
E: mechlerse@cdmsmith.com;
C: 561.339.3933



EVALUATION CRITERIA 1

Firm Qualifications and Experience:

CDM Smith: proven leadership in program management and stormwater innovation.

Program Delivery

40+ active programs and \$17B of infrastructure managed under our programs

Full-Service Team

Local team of project managers, construction managers, and stormwater experts

Localized Expertise

We did the City's SWMP, as well as for many other similar communities and airports in South Florida

Digital Water Tools

Our controls and tools enhance transparency, improve decision-making, and deliver accountability



Organizational Profile and Project Team Qualifications: Our agile, diverse team will seamlessly integrate with City staff, adapting to evolving Program needs from design through construction—delivering trusted, responsive owner's representation.

Breadth and Depth of Expertise – Great shared past experience will deliver comprehensive approach to effectively manage the City's stormwater

- **Karen Counes and Juan Mendoza** recently collaborated on the \$1.6B Genera Program to restore operational capacity and improve the power generation system in Puerto Rico.
- **Jon Goldman, Mike Schmidt, Tom Nye, and Suzanne Mechler** were the primary authors of the Stormwater Master Plan for the City of Hollywood.
- **Bernadette Kolb**, technical water resources specialist for the firm, daughter of the late County Commissioner Anne Kolb (namesake for Hollywood's coastal mangrove wetland nature center), continues to bring her master planning and environmental engineering experience with strategic technical reviews, sustainability perspective, and a deep-rooted concern for the environmental resiliency of her home town.
- Our team includes four specialty support firms with recent and relevant stormwater infrastructure experience.

PROGRAM MANAGER **Karen Counes, PE**

- Seasoned program manager with 28 years of focused program experience
- Locally based in Boca Raton she will regularly meet with the City and maintain close contact with the Program team
- Leadership on seven programs totaling \$7B in constructed costs
- Expertise in leading decision-making, technical reviews, and program quality



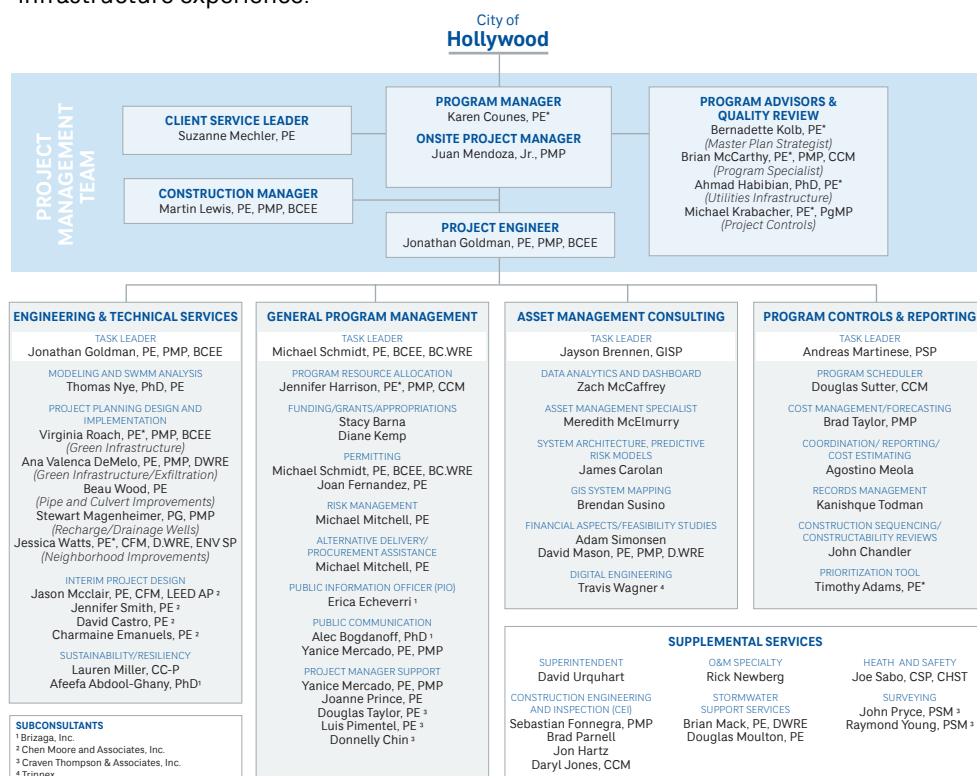
ONSITE PROJECT MANAGER **Juan Mendoza, Jr., PMP**

- Senior professional with 25 years of expertise in program, project, and construction management
- Participation on seven programs totaling \$100B in constructed costs
- Certified PMP with expertise in risk management, client communication, and adherence to quality procedures



PROJECT ENGINEER **Jon Goldman, PE, PMP, BCEE**

- Trusted project engineer with 37 years of local coastal stormwater plans and programs
- Strong track record across South Florida—including stormwater planning and implementation for the cities of Hollywood, Miami, and Fort Lauderdale
- Unparalleled knowledge of the City's needs relative to the SWMP challenges, schedule, and requirements



* PE in State other than Florida

EVALUATION CRITERIA 3

Approach and Methodology: Our approach retains continuity between the Stormwater Master Plan and the Stormwater Program resulting in increased efficiencies, streamlined coordination, and stronger alignment across planning, implementation, and funding.

Our 2-step City-wide Strategy is designed to help meet Hollywood's flood mitigation goals

1

INTERIM PROJECTS \$100K - \$4M

- Smaller jobs that fix key problem spots now
- Funded by current fees

2

LARGE CAPITAL PROJECTS \$25-40M

- Full system upgrades by area
- Funded by future bonds, grants, or loans



Continuity: Continued involvement of key individuals from your SWMP provides efficiencies and a seamless transition to the new Program contract.



Extensive System Knowledge: We have a strong understanding of the challenges posed by extreme rainfall, tidal surges, sea level rise, and water quality. We also recognize the constraints of flat topography—factors that inform our cost-effective and efficient implementation strategies.



Robust Program Controls: Thoughtful development and consistent application of the Program's Program Management Plan will deliver alignment across all phases. Our integrated program control dashboards will enhance transparency.



Tailored to Your Needs: We've consistently demonstrated to the City our ability to adapt to changes in funding availability, staffing levels, and evolving regulatory requirements—while still achieving program objectives.



Community Focus: We will deliver lasting benefits to the community by providing a transparent, cost-effective path to resiliency, enhanced access to funding, and project selection based on community impact and implementation readiness.



Digital Solutions: We will leverage technology across the Program to drive efficiency, visualize performance, enhance community engagement, and support data-driven decision-making.

We understand the urgency of the City's flooding challenges and are committed to implementing our detailed, proactive, SWMP as a dedicated ally with local knowledge of the system's performance, a proven team, and a strong commitment to public safety and quality of life.

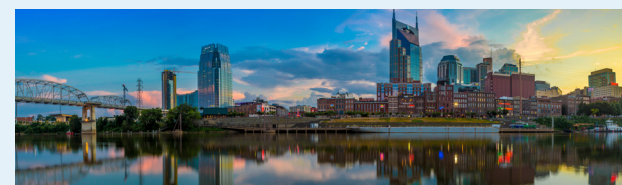
EVALUATION CRITERIA 4

Past Performance - References: With the program and technical expertise needed to achieve the City's goals, we will bring complexity under control.



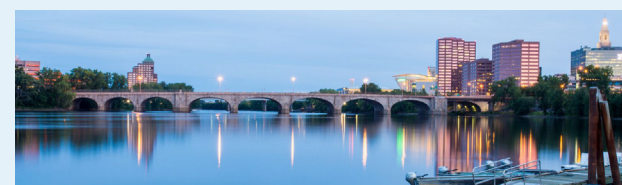
Clean Water 2020, Columbia, SC

- \$1B program /embedded staff manage 15 consultants and 12 contractors
- Program and construction management
- Includes public outreach and asset management



Clean Water Nashville, Nashville, TN

- \$2.7B program/embedded staff manage 10 consultants and 13 contractors
- Program design and construction management
- 129 projects to date
- Includes public outreach and asset management



Clean Water Project, Hartford, CT

- \$2.5B program/embedded staff manage 25+ consultants and 35+ contractors
- Program, design, and construction management
- 100 CIP projects delivered to date

EVALUATION CRITERIA 5 Value of Past Contract Awards by the City in the last 5-years Capacity and Availability

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

EVALUATION CRITERIA 6 Location of Office Managing Project: Local Leadership Located Close to the City and Project Sites

Just as we did for the SWMP, CDM Smith will manage the Program from our Boca Raton office – 30 minutes away from the City's offices and facilities, but with the added value of our Onsite Project Manager who will sit in the City's office.

Manchester, NH
Asset Management
Task Leader
Jayson Brennen

Fairfax, VA
Program Controls and
Reporting Task Leader
Andreas Martinese

Hollywood

Jacksonville, FL
General Program Management
Task Leader Mike Schmidt

Vero Beach, FL
Construction Manager Martin Lewis

Boca Raton, FL
Client Service Leader
Suzanne Mechler
Program Manager Karen Counes
Project Engineer Jon Goldman
Modeling and SWMM Analysis
Thomas Nye

Fort Lauderdale, FL
Public Information Officer (PIO)
Erica Echeverri

City Office Hollywood, FL
Onsite Project Manager
Juan Mendoza

Our team will:

Optimize each project to get the most bang for the buck on flooding reduction while keeping costs low, incorporating innovative ideas such as the recapture the swales program and the pervious pavement alleyways.

Mitigate the risk by leveraging tools for program tracking, asset inventory, and construction oversight but, most importantly, leveraging our strong project managers to oversee each project through planning, design, permitting, and construction.

Accelerate program schedule by immediately executing the interim and R&R projects with local staff familiar with the details and requirements of each project and a local firm, Chen Moore, to execute.

Tab C: Firm Qualifications and Experience



Firm Qualifications and Experience

Minimum Qualifications

CDM Smith is an employee-owned corporation with 78 years of experience delivering services aligned with the scope of this solicitation. We have operated under our current name in the State of Florida since 1974, consistently providing high-quality solutions tailored to our clients' needs.

Firm and Qualifier License

CDM Smith is certified to practice engineering under the State of Florida Department of Business. Our Professional Regulation License is shown below. Staff licenses are included at the end of **Tab C**.



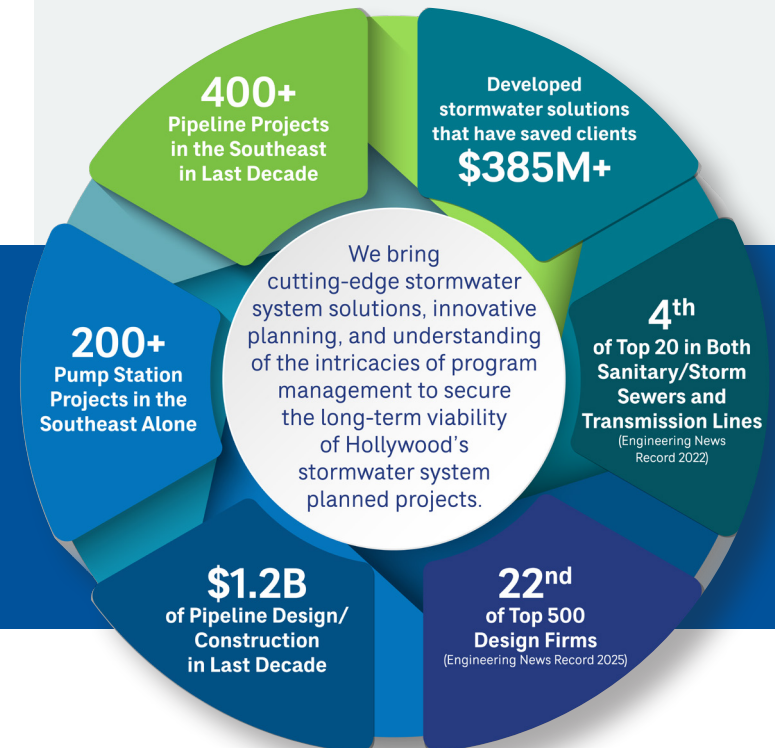
Address and Representative Contact Information

Suzanne Mechler | Client Service Leader

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

Email: mechlerse@cdmsmith.com

Phone: 561.571.3756; **Cell:** 561.339.3933



ESTABLISHED IN

1947



INCORPORATED IN

1970

CDM SMITH
WORLD
HEADQUARTERS
Boston, MA

\$1.6B
2024 ANNUAL REVENUE

6,000+
EMPLOYEES
with
450+
STAFF IN FLORIDA



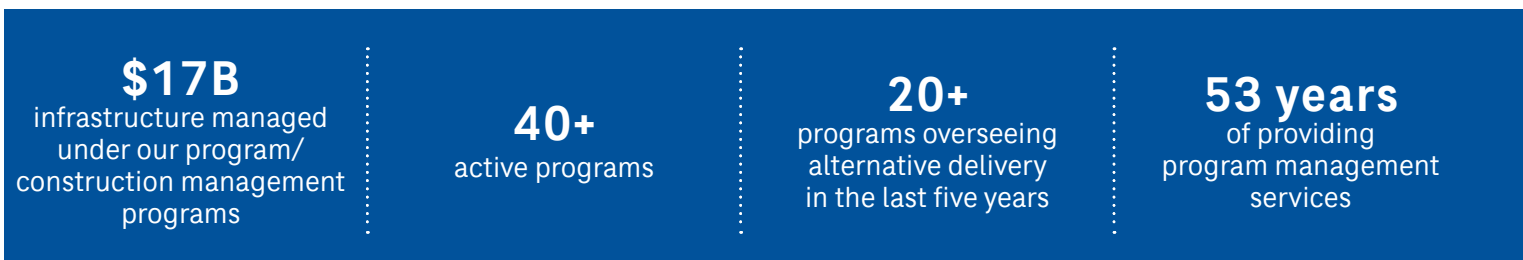
51
YEARS IN FLORIDA

Program Management Experience

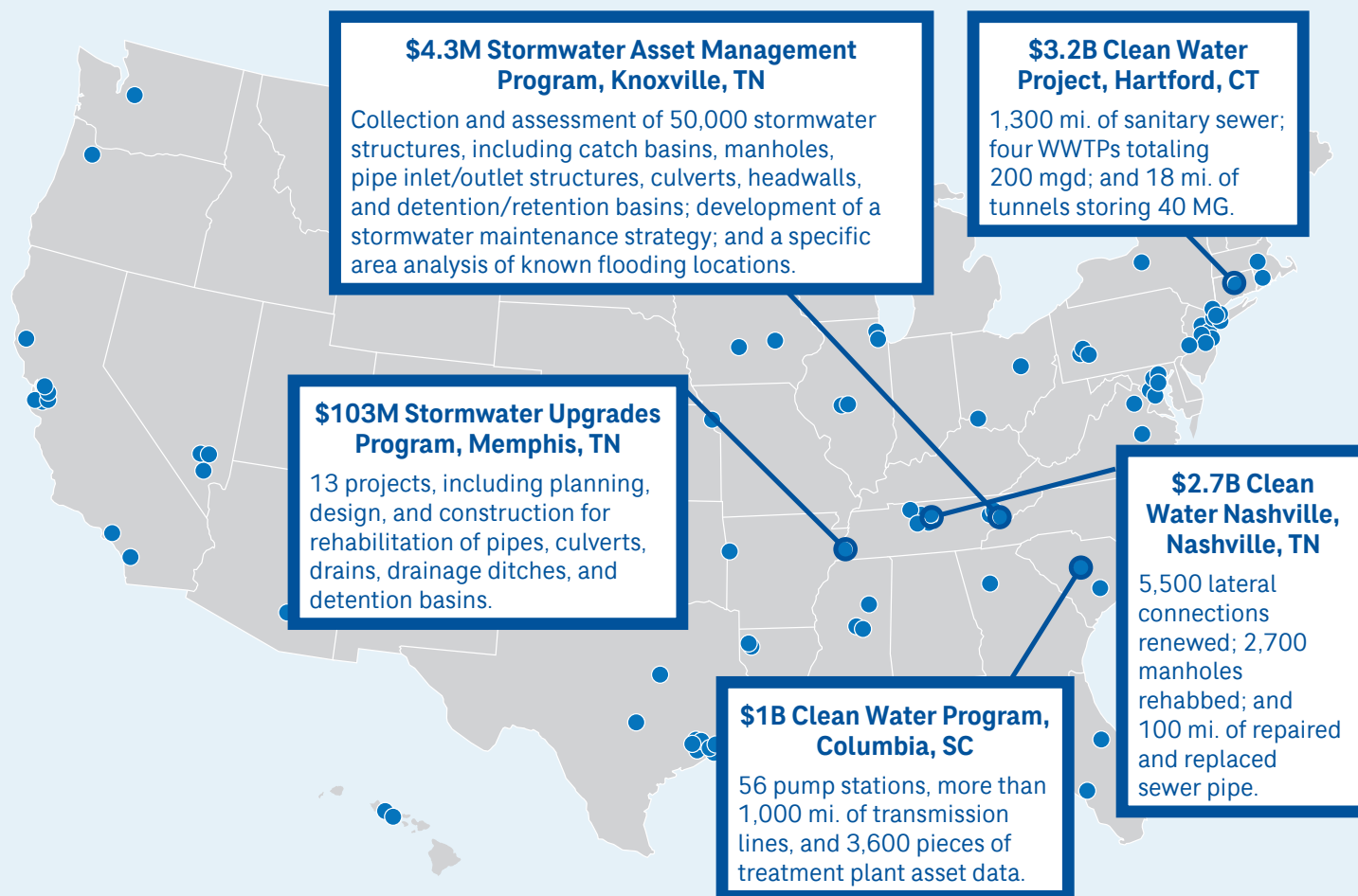
Program management has long been a cornerstone of CDM Smith's core services. Unlike many traditional engineering firms, we also operate as a general contractor and are widely recognized as a leading designer and program/construction manager.

By leveraging our deep expertise across planning, design, construction, GIS, asset management, and digital solutions, CDM Smith will deliver comprehensive support—from day-to-day details and site-specific design to construction coordination, cost estimating, and program oversight.

Our position as a trusted advisor and full-service program manager is demonstrated by the selection of CDM Smith for some of the country's most critical and ambitious capital programs including for the cities of Columbia, SC (\$1B); Nashville, TN (\$2.7B); Hartford, CT (\$2.5B); Honolulu, HI (\$5.3B); as well as ALCOSAN, Pittsburgh, PA (\$3.6B); and Lee County, FL (\$80M).

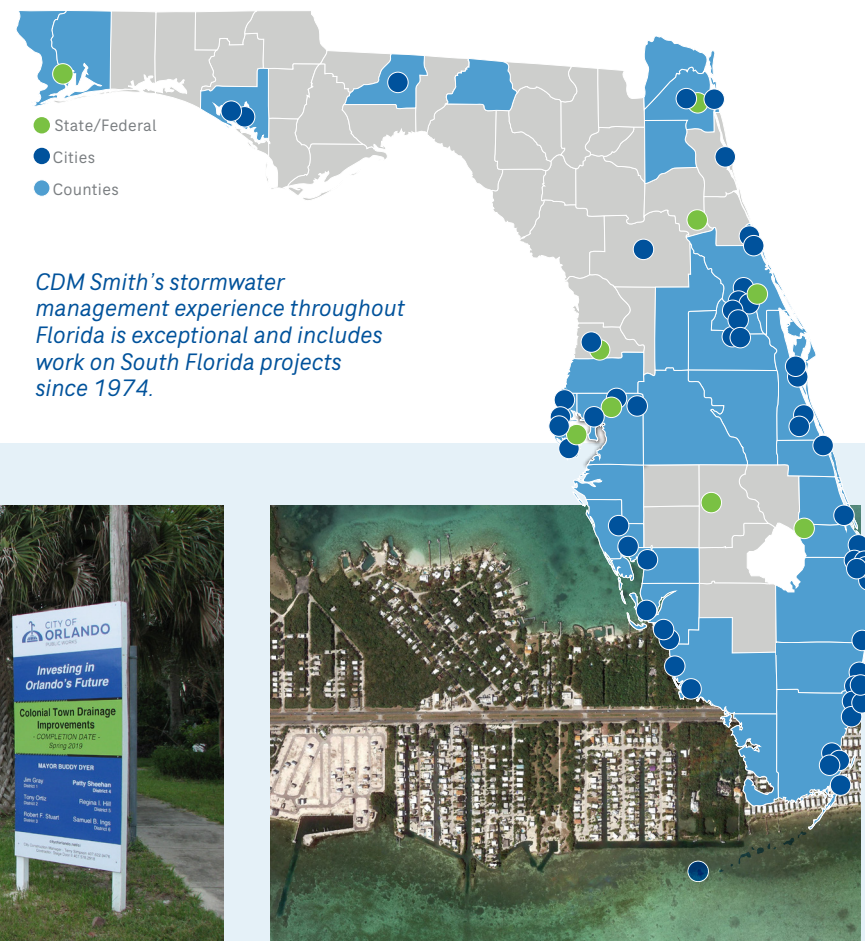


CDM Smith is an industry leader in program management with over \$30 billion in the last five years



Local Stormwater Design Expertise

As was done for the Hollywood SWMP, we will leverage our extensive knowledge of Florida stormwater issues and solutions along with the latest technical tools and hands-on experience to oversee the development of cost-effective stormwater improvements that balance client goals (such as flood prevention, groundwater recharge, wetland preservation, and water quality protection), and compliance with state-mandated programs with future needs. We are experts in ongoing stormwater issues in South Florida and more specifically in Hollywood, such as flooding and emerging state and federal water quality regulations, and will work with the City in address these issues as we work to convert the vision of the SWMP into cost-effective designs.



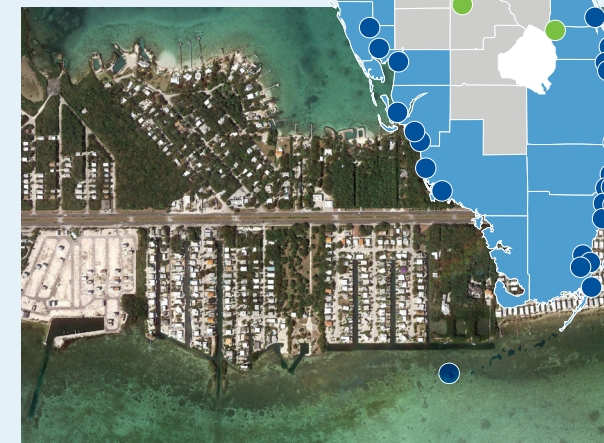
STA 5/6 Connection to Lake Okeechobee – Phase 1 South Florida Water Management District (SFWMD), FL

New 300 cfs G-773 pump station, 4-mile canal improvements, and widening and deepening an existing spreader swale to convey 300 cfs; project includes boat ramps and stilling wells, replace existing G-360B, adding a new single lane bridge, and other improvements.



Leu Gardens and Colonial Town Stormwater Improvement Design and Construction Services, City of Orlando, FL

Engineering and construction engineering inspection services for the first of three phases of this project to alleviate flooding in multiple problem areas of the City that have experienced chronic flooding for years. This includes utility replacement and rehabilitation work within built-out neighborhood and commercial areas.



Bayside and Oceanside Improvements of SR5/ US1 Overseas Highway, City of Key Largo, FL

Design, permitting, and construction administration services for 12 subdivision roadways. Our team evaluated the subdivision roads and designed the appropriate rehabilitation method and associated drainage improvements. In keeping with context sensitive design, we tailored the governing design criteria which eliminated the need to widen three of these roads.

Data Management is a Foundational Component for Program Success

A well-thought out, scalable data management solution sets up a program for success. CDM Smith knows this firsthand because we have built high performance data management solutions for the most successful large programs in the country, which have helped to streamline processes and promote accuracy.

We understand the City's GIS environment is based on the Esri GIS platform. We offer the City a technology-driven process and series of tools and innovations that will not only support the program, but also long-term maintenance of the City's stormwater assets. Our experience in implementing digital solutions is nation-wide. Key areas of focus for us include:

- **Artificial Intelligence (AI) and Machine Learning Solutions** – Beyond descriptive analysis and data visualization, advancements in analytical techniques will support planning, engineering, design, and documentation of utilities.
- **Data Management Planning** – Develop program data management strategies that clearly outline program data flow from planning to design, construction, documentation, and operation.
- **Technology Implementation** – Implement digital solutions to manage the lifecycle of the Program. We also put a strong focus on integration of existing City solutions (GIS, CMMS, etc.) to drive a higher value.
- **Integrated Digital Dashboard Solutions** – We specialize in the implementation of business intelligence dashboard and data solutions to track program progress, increase efficiency, and report effectively.

- **Web and Mobile Solutions** – We have 30 years of experience designing and implementing integrated web and mobile solutions to support mobile data collection, inspections, construction management, and public engagement.

Transformation Dashboard Solutions by Trinnex

Given the movement from descriptive to predictive, CDM Smith chose to consolidate our resources into a single entity to provide our clients with industry-leading focus in achieving their digital transformations by creating Trinnex.



Trinnex is a technology consultancy focused on delivering digital strategy, innovation, and solutions. Since Trinnex is a wholly-owned subsidiary of CDM Smith, its expertise in developing advanced data analytics solutions is infused with engineering domain knowledge and experience. From asset performance and capital planning to digital twin design and machine learning, CDM Smith and Trinnex help infrastructure owners put digital strategies into motion by leveraging data to turn information into insights, fueled through advanced data solutions. We have the holistic experience necessary to help you achieve deeper insights, defensible decision-making, and a more empowered organization. Combined, CDM Smith and Trinnex have over 200 application developers, management consultants, data scientists, and information and asset management specialists with vast experience implementing advanced data solutions, managing adoption, and integrating them with existing infrastructure.



Successful Data Management Solution

For the City of Columbia, SC, CDM Smith implemented an integrated data management solution to track the lifecycle of their CleanWater 2020 Program. As part of this effort, we designed a citywide data architecture and leveraged a combination of Esri, Cityworks, and Microsoft Power BI to build out the digital environment.

The final solution includes a library of Microsoft Power BI and Esri-based applications that provide seamless access to financial, operational, modeling, GIS, and asset management data. Dashboards enable the City to measure performance, GIS tools integrate with CCTV and condition assessment data to inform operations, and financial tools track the program's fiscal performance. The project team uses these tools daily to help operate the utilities more efficiently. Next up are AI tools to help predict future utility failures and support smarter utility management.

Esri ArcGIS Implementation Experts

GIS will play a significant role in this program, with the understanding that the City's GIS environment is built on Esri software solutions. CDM Smith has been implementing GIS-based solutions for over 40 years and is one of Esri's oldest and most trusted business partners. Over that time, we have delivered hundreds of enterprise-wide GIS environments with a strong focus on utilities. Our staff includes experts in GIS, asset management, utilities, and data integration who will work closely with the City.

Project Management Information System (PMIS) Integration

CDM Smith often leverages program management software to support programs like the City's. We have successfully integrated commercial program management information systems into broader data management and reporting. We have experience with many PMIS tools, including e-Builder, Unifier, ProCore, and Kahua.

Business Intelligence Dashboard, Web, and Mobile Tools

We excel at implementing business intelligence dashboards, as well as web and mobile solutions to support program management. Over the years, we have delivered hundreds of these solutions for our utility clients, leveraging technologies such as Esri's Experience Builder and Dashboard, Microsoft Power BI, and Tableau. We work closely with our clients to develop integrated tools that support efficient program execution.

Expertise in the Development and Use of Program Controls

Program controls are critical to streamline processes and bring efficiency for best value. With different contractors performing public- and private-side replacements, it's critical to track and communicate scheduled activities such as permits, customer notifications and touchpoints, signed contracts, and replacements all in one place to avoid duplicating work by inspectors, frustrating customers with uncoordinated work processes, and keeping the disturbance impact to homeowners to a minimum.

Implementing and delivering successful programs relies on addressing not only critical, but multiple program elements, and implementing adaptable, proven program controls strategies. By building on the City's existing processes and controls, we will bring the strength of our nationwide expertise to enhance program performance and accelerate implementation.

Program Manager Karen Counes, supported by our **Program Controls Lead Andreas Martinese** and his team, will collaborate with the City to identify and develop effective program control tools.



CASE STUDY

One of the most challenging aspects of a program is the management of data and making sure that records are updated and accurate. We have developed customized dashboards and exportable reports for tracking and reporting project execution and asset infrastructure upgrades. This experience was leveraged recently for the Newark Lead Service Line Replacement Program in which a tailored joint CDM Smith/ Trinnex solution with real-time, self-service access to the dashboard. Anyone with access can track program progress by date, contractor, or neighborhood



CDM Smith maintains a functionality matrix of market-leading software we can leverage to quickly understand which software solution would be the best fit for City of Hollywood.

Program Management Information System Functionality Matrix

Function	Description	Software A	Software B	Software C	Software D
Program Level Rollup	Ability to roll-up and track financials, schedule, tasks, etc. at program level	6	9	8	8
Contract Management	Includes contracts, change orders, invoicing	6	9	8	8
Cost Management	Includes funding and budget via cost sheet	6	9	8	8
Document Management	Version control, check-in, check-out, audit history	8	7	6	6
Schedule Management	Capability of base schedule tool (good = P6, medium = MS Project, low = built-in)	6	9	8	8
Bid Management	Capable of issuing solicitations and receiving bids	7	9	8	7
Service Management	Process service quotes, issue work orders, perform inventory management	5	9	5	4
Work Flows	Ability to customize work flows, issue notifications, track tasks, etc.	10	8	9	8
Reporting	Custom and ad hoc reporting by users	8	7	5	6
Dashboard	Fully integrated roll-up capabilities, customizable by users	5	4	7	7
Schedule Integration	Ability to integrate with external CPM schedule tools (push and pull)	8	7	8	9
"What-if" Analysis	Ability to prioritize future projects for authorization (pre-planning)	0	9	8	5
Bid Comparison	Evaluate vendor bids submitted through the software	6	6	9	8
Accounting Integration	Ability to integrate with enterprise accounting systems (SAP, Oracle)	6	7	9	8
Data Management	Ability to manage data externally via data store/warehouse	3	7	2	6
Vendor Support	User support by vendor	8	7	5	3
Configuration Control	Ability to configure using CDMs staff, no programming required	7	5	7	10
Low Code Options	Admin has ability to insert code into processes/applications	0	3	3	5
Cost of Ownership	Total cost of ownership including licenses fees, ongoing config, etc.	4	8	5	7
Timeline to Implement	Ability to obtain licenses, utilize pre-configured go-bys and go live	9	8	7	6

Implementing Asset Management Will Allow the City to Manage Infrastructure and Provide the Lowest Long-Term Cost to Rate Payers

CDM Smith has planned, developed, and implemented asset management (AM) programs across the country for utilities of all sizes, from small communities to some of the largest utilities in the world. The hallmark of our approach is to tailor a program that addresses the unique business and operating requirements of each client.

At CDM Smith, our firm-wide Asset Management (AM) and data solutions practice includes over 150 dedicated professionals focused exclusively on helping utilities optimize AM strategies and implement effective data solutions. Our AM capabilities, as represented in the list below, are further enhanced by nationally recognized strengths in conveyance, operations and maintenance (O&M), and water systems.

- AM planning and strategy development
- AM governance & ISO-55000 compliance
- Technology implementation including CMMS, GIS, business intelligence, web & mobile, and AI-driven tools
- Asset inventory and condition assessment, programs, and strategies
- Advanced risk framework development and criticality analysis
- Business intelligence and data analytics solutions
- Rate studies and organizational alignment
- Application of predictive analytics, machine learning, and digital twin technologies
- Data and technology master plans, technology integration, and data governance
- Life cycle cost analysis and risk-informed capital planning
- Preventative maintenance program optimization and training programs
- Smart capital and maintenance programs

We will leverage our experience from **150+ AM projects** developed and implemented with a customer base ranging from 10,000 to over 5 million.



Innovators in utility asset management and technology solutions



35+
YEARS

Implementing AM, GIS, and Technology Solutions for Utility and Governmental Clients



150+

Asset Management and GIS Staff



100+

Web & Mobile GIS Apps

78

YEARS

Wastewater & Water Industry

150+

Asset Management Implementations



200+

GIS & Technology Environments Implemented

35 YEARS

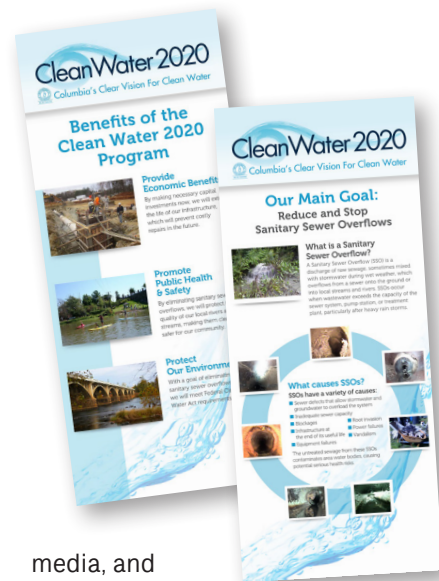
AS AN
esri
Business Partner

Public Outreach with a Keen Attention to Detail and Commitment to Keeping Your Stakeholders and Customers Informed

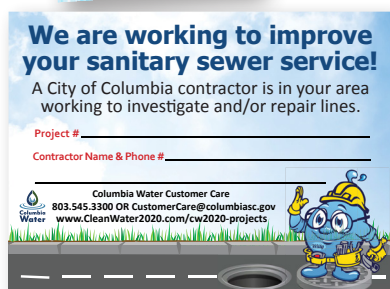
Achieving community buy-in is paramount to successfully delivering a large utility program. Gaining trust and meeting the needs of the community is the keystone to community engagement. This includes proactive communication throughout the process to the residents/community, minimizing disruptions, performing timely restorations, and respecting individual homes and businesses throughout the process.

CDM Smith offers proven performance in consensus building and maintains examples of outreach that have resulted in successful program implementation. With involvement of our trained communication specialists, skilled public policy professionals, and locally-based experts, our team's approach is based on strategic engagement and grounded in using proven outreach techniques and communication technologies.

We have helped many utilities in their outreach efforts regarding sensitive water concerns, including Columbia, Hartford, Newark, Trenton, Middlesex Water Company, and the Passaic Valley Water Commission in New Jersey, the City of Chicago, IL, and Washington, DC. We do everything from preparing multi-lingual materials about a project's progress, impacts, and benefits, to helping prepare for and attending public meetings, to guiding stakeholders through decision-making processes, taking care to align our outreach efforts with the needs of customers. For the Columbia Clean Water 2020 Program we worked with the City to support public outreach and communications on a utility-wide and project specific basis. We helped develop messaging concepts and specific content, including the Program website, newsletter, social project specific updates.



media, and
Columbia's
Clean Water
2020 Program
Public
Outreach
Materials



Effective Public Engagement Materials

CDM Smith has created a variety of targeted bilingual public outreach materials that are thematically consistent and use appealing graphics in a clear manner, supporting a high-level of community engagement.

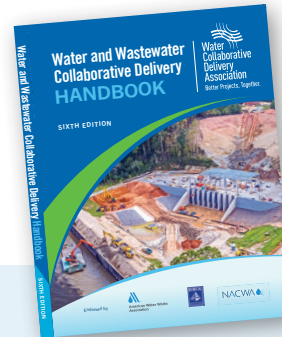
Our team member Brizaga, Inc. directed community engagement and public education efforts for the City's Stormwater Master Plan. They designed a strategic communications plan with print and digital materials to simplify complex technical data for residents. They led outreach events, including hybrid workshops and roundtables with residents, business owners, and local officials and supported the development of a Citizens' Guide to enhance public understanding of stormwater infrastructure and its role in resilience.



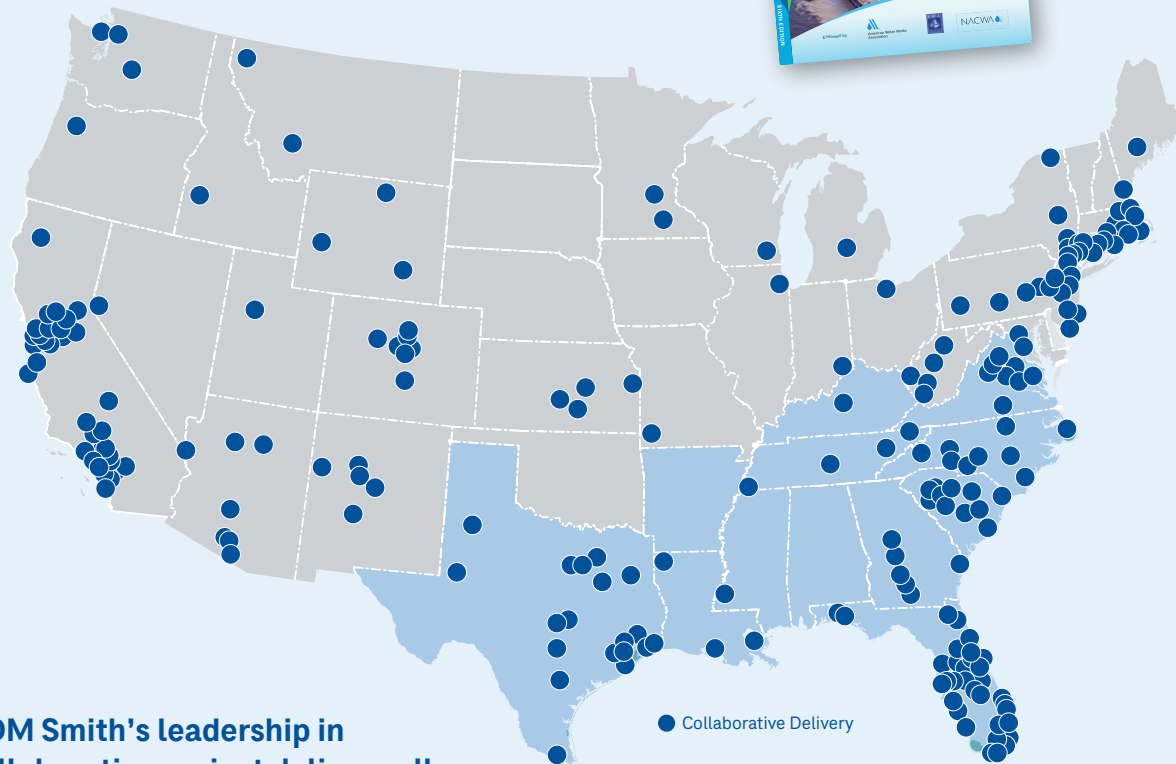
Advertise Collaborative Delivery Projects

CDM Smith has been performing collaborative project delivery for 33+ years and works closely with organizations such as Design-Build Institute of America (DBIA) to develop and implement best practices for Design-Build (DB), Progressive Design-Build (PDB), and Construction Management-at-Risk (CMAR). Collaborative delivery methods require detailed management and communication between the Program team working with the design-build contractor (if design-build) or with the designer and the constructor (if CMAR).

Our construction expertise allows us the quickly and efficiently evaluate bids and RFQ proposals, review and analyze proposals with respect to cost/risk/quality, lead source selections, negotiate work order and contracts, prepare resolution and staff summary to process and execute the approval of design work orders and construction contracts.



As a founding member of the Water Design-Build Council (WDBC) and active participant in supporting DBIA, CDM Smith provides leadership in implementing best practices.



CDM Smith's leadership in collaborative project delivery allows us to help evaluate whether projects under the City's program would benefit from collaborative delivery to meet expedited schedules and close out the program(s).



CASE STUDY

Successful Delivery of Pipeline Projects Managed by

CDM Smith Under the Columbia Clean Water 2020 Program

CDM Smith is currently serving as owner's advisor for the Saluda River Force Main Extension project, the first CMAR delivered project for Columbia Water. The project extends the current 30-inch force main by -1,200 lf and include upsize of -2,200 lf of gravity sewer to 48 inches. The project features microtunnel crossings of both the Saluda River and the historic Columbia Mill ruins, with an anticipated \$16+M construction cost. We worked closely with Columbia to select the delivery approach for this project, that best aligned with their goals, experience and internal processes. Upon selection of the CMAR delivery method, we assisted with the CMAR procurement, contract document development, and project management to verify successful project delivery.



Construction Management Expertise

CDM Smith's construction management services are centered around quality and reliability. We are the eyes and ears in the field and will look out for the City to make sure you are getting the quality and product that you are paying for.

With the City engaged in so many projects, we know it can be challenging for your staff to dedicate significant time to the construction of the projects under this program. Our staff can help. CDM Smith takes great care in the assessment and planning of construction management activities and construction operations prior to execution. Our construction professionals understand the importance of a well-organized plan and the benefits of taking time to plan, which include, but are not limited to, identifying site safety hazards, identifying schedule and sequencing conflicts, identifying design discrepancies, and other unanticipated elements that can adversely affect a construction project.

Quality

Our quality-focused tools and processes deliver consistent and complete work elements.

Pre-construction:

- Establish communications protocols
- Review contract documents for constructability and contractors' schedules and work plans for thorough planning and timely completion

During construction:

- Manage and coordinate project documentation
- Monitor, document, and report contractors' performance and progress

Post-construction:

- Coordinate, monitor, and document work acceptance
- Oversee testing, commissioning, and close-out protocols

Reliability

CDM Smith uses best practice tools and our educated experts to manage all aspects of the construction process.

- Emphasize communications and organize meetings to promote constructive discussions and structured negotiations to effectively bring issues to timely resolutions
- Develop and implement project document management systems
- Use scheduling software and advanced data analytics software to track project progress
- Use established estimating tools and software to develop and assess bids and proposed changes

Safety

Safety management on programs requires our team to assist in developing contract requirements, review safety-related submittals, and perform safety oversight and reporting. We take our strong culture and commitment to safety, as proven with our better than industry standard EMR, and apply our knowledge to reinforce the City's role in promoting strong safety performance by contractors. Field oversight specifically will:

- Use dedicated professionals
- Establish good relationships with contractor field personnel
- Monitor leading indicators of safety performance

Quality Management

CDM Smith's quality program is a cornerstone of our operational philosophy and project delivery, deeply embedded in both our internal culture and external client engagements. We define quality as meeting the requirements of our clients and ourselves—it is the foundation of providing a legendary client experience. Our robust quality management program removes uncertainty and builds trust with our clients and our brand.

Because of our extensive experience in delivering billions of dollars of programs for public sector clients, our team has established quality management processes for program management, design, and construction.

“CDM Smith has provided exceptional Program Management services to the City of Columbia. Their strengths on this long-term project enabled the City to successfully maintain compliance with our Consent Decree while staying within their contracted budget. These strengths include excellent program controls, the ability to hire and maintain a very professional and highly qualified team, a 100% focus on providing quality work on schedule and exceptional program leadership. I would hands down recommend CDM Smith for providing any aspect of program or construction management services at any level.”

— John Riggs, PE;
Wastewater Project Manager
City of Columbia, SC



CASE STUDY

Harris County Flood Control District Master Agreement for Construction Management Services, Houston, TX

Similar to the services required by Hollywood, for this large multi-purpose facility with phased construction, CDM Smith provides CM Agent services to the Harris County Flood Control District. Our services include construction management, daily inspection, and construction materials testing for a flood control improvements projects throughout the County.



Risk Management

Proactive risk management is a vital step needed to navigate uncertainties and potential obstacles that could jeopardize the success of individual projects or the Hollywood Stormwater Program overall. Our risk management approach is a continuous process that focuses on identifying, assessing, mitigating, and monitoring risk on both a project-level and a program-level. The risk management processes follows industry-recommended practices, such as those described by the Construction Management Association of America (CMAA) and the Project Management Institute (PMI). In addition to describing risk management processes, our tailored Risk Management Plans include:

- A likelihood-consequence matrix to evaluate threats and opportunities across the dimensions of cost, schedule, safety, and public relations
- A risk register template, which is the primary tool for documenting the identification and analysis of risks, risk response actions, responsibility for response actions, risk and response status, and residual risk will be provided as part of the Program Management Plan (PgMP).

Prior to holding an initial Risk Management workshop, we prepare the draft risk register. This is based on our experience on other large programs, and addresses many technical, logistical, and communication risks inherent to performing the work. This allows the initial risk workshop to be productive and efficient and helps to foster a collective understanding of the range of risks facing the program. In our experience, the risks with the highest potential combination of likelihood and impact on a program are related to logistics, public outreach and communication, permitting, and data management. We leverage our experience in assessing and responding to those types of risks to efficiently develop an approved baseline risk register, and to begin implementing risk response actions to drive achievement of planned replacement rates and productivity.

CDM Smith develops program specific risk registers for coordination with the Client on who takes the risks of the unknowns, and incorporates them in a contingency as part of budget. For the Clean Water Nashville Program we have successfully used a risk register for the past 13 years.

Expertise in Florida Septic to Sewer Conversion

The City will be embarking on a concurrent program of septic to sewer conversions in areas that may overlap the SWMP CIP. It is important for the program manager to understand the process of the wastewater system construction for coordination of design and efficient installation of the parallel systems. CDM Smith has performed many septic tank phase-outs, as well as designed numerous wastewater collection systems for clients throughout Florida.

Progresso Neighborhood Improvements, City of Fort Lauderdale, FL



- 35,000 lf of new sanitary sewers and designed and installed a new triplex submersible master pump station for a septic tank redevelopment in a mixed residential and commercial area neighborhood near downtown.
- Replacement of 25,000 lf of old, smaller diameter water mains, water service connections and water meters with new 8-inch pipe and new fire hydrants for spacing to code.

St. Augustine Beach Septic Tank Phase Out, St. Johns County, FL



- Provided engineering services to successfully secure grant funding for the elimination of failing septic tanks, the administration of the grant, preparation of the facilities, and capital finance planning for the City of St. Augustine Beach septic tank phase-out program.
- The project included 27,500 feet of gravity pipe, 120 manholes, 13,000 feet of force main, and eight pump stations to connect 700 homes to a sanitary sewer system and phase out their septic tanks.

Scott Mill Hill Wastewater Collection System Improvements, JEA, FL



- Conducted a feasibility study for the phase out of the septic tank system, as well as engineering design and bidding services for the preparation of contract documents related to the construction of wastewater collection system improvements.

Local Permitting Expertise

CDM Smith has a long-standing and multifaceted permitting presence in Florida, with extensive experience across environmental, water, and infrastructure projects. Our team brings extensive knowledge and thorough understanding of regulations, the people, and the procedures involved in obtaining permits. We strive to maintain our relationship with regulatory agencies to verify a smooth permitting process for our clients. We have specific, recent experience with Southeast Florida regulatory staff, including the Florida Department of Environmental Protection (FDEP), South Florida Water Management District (SFWMD), United States Environmental Protection Agency (EPA), US Corps of Engineers (USACE), and the Central Broward Water Control District (CBWCD). Please refer to **Tab F Knowledge of Site and Local Conditions** for additional information on our permitting experience.

Coordination with Florida Department of Transportation (FDOT)

A local firm with almost 38 years of experience providing transportation services to the FDOT and to municipalities throughout Florida, CDM Smith is uniquely qualified to assist the City with FDOT coordination and permitting, and in fact, our staff are embedded in the FDOT's head office in Tallahassee affording us a unique understanding of FDOT permitting requirements. Our extensive experience in permitting local Florida transportation projects provides valuable insight into the necessary design elements and relations with the FDOT. Our established excellent working relationships with the FDOT is demonstrated through the successful coordination efforts for many local Hollywood projects including the Johnson Street Culvert JPA, the SR A1A present and future stormwater pump stations conceptual designs and design coordination, Sterling Road/Turnpike SWMP and Sheridan St/Turnpike coordination, FDOT I-95 Expansion SWMP coordination, Sunset Park SWMP coordination, Hollywood Beaches backflow preventors, and King Tide flooding analyses and pipe lining coordination. This relationship verifies a smooth permitting process for our clients. Preapplication meetings would be conducted as soon as possible, and would be used to identify the most permissible path for each project.

Central Broward Water Control District (CBWCD)

CDM Smith and our team members, both Chen Moore & Associates (CMA) and Craven Thompson & Associates (CTA) have experience in permitting with CBWCD. During the SWMP, CDM Smith worked closely with the CBWCD and its engineer to coordinate the offsite flows to and from their basin areas and to understand their stormwater operations. As the CBWCD's jurisdictional watershed overlaps the city limits, CDM Smith obtained, analyzed, and incorporated their basic watershed stormwater model into the citywide SWMP and enhanced the detail to meet the City's desired LOS analyses. As the City's trusted representative, we hosted several stormwater workshop meetings for City Staff and Commissioners with the Control District Board members and their engineers to share the SWMP findings and propose potential joint solutions for flood reduction in the common jurisdictional areas.

In addition, CMA, as our design partner, has extensive experience working with CBWCD. They have been working on projects within CBWCD for over three decades and have a thorough understanding of the permitting requirements. All design improvements will adhere to the CBWCD Stormwater Management Regulations, Standards, and Procedures design criteria.

CTA has served as the District Engineer for the 22 square mile CBWCD since March 2007. As surveying and program management staffing augmentation, they will continue their engagement with CBWCD as an independent reviewer of all drainage projects within that area; review variance requests; and serve on the Development Review Committee, etc.

For permitting, CDM Smith has been your valued partner locally with CBWCD, Broward County Environmental Permitting Department (EPD), and Broward County Surface Water License Division using the master plan as a tool to provide analyses and respond to permit RFIs and providing project narratives for designers applying for permits on their stormwater projects. We will continue this local, close coordination.

CDM Smith has developed innovative stormwater solutions that have saved our clients over \$385M in the last 20 years on more than \$1.6B of stormwater infrastructure.

Proven Expertise Provides Funding Compliance

CDM Smith's experience in program management also includes funding support for federal, state, and municipal programs and projects. Our team has expertise in identifying available funding, writing grants and justification requests to obtain such funding, and administering the funded programs in accordance with the funding guidelines. We are also experts in preparing the financial reporting necessary for such funding for our clients. We have experience with a range of government agencies that provide financial aid for infrastructure and public works, including FEMA, Housing and Urban Development (HUD) Community Development Block Grants (CDBG), American Rescue Plan Act (ARPA), State Revolving Funds (SRF) and several others.



CDM Smith is managing the City of Miami's Stormwater Master Plan, which has received \$360M in ARPA grants.

As your program manager, we will support the City in reviewing the projects under the scope of this contract, assessing the schedules and needs for each project, and creating a comprehensive overall plan that allows for the most efficient use of funding and meets the required expenditure deadlines for each funded project. We will track and report on the progress of each project and expenditures as part of our overall reporting in project delivery to verify compliance with Federal program guidelines.

\$158M WIFIA Secured Funding for Memphis, TN

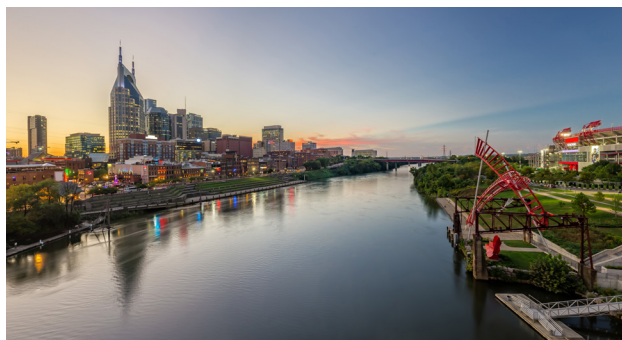
“...today we officially closed on the WIFIA loan. Its been a long journey but all of this started in partnership with CDM Smith who helped us achieve a successful application with EPA... please pass along my gratitude to the CDM Smith team who worked on the application for the City.”

— Robert Knecht | Public Works Director, City of Memphis, TN



Past Performance - Leverage Experience to Develop Good Decisions for the Future

Our team will work in unison with the City throughout the life of this contract to enable our entire team to meet our commitments and your expectations. Over the years, we have successfully led the implementation of critical local and national programs to deliver large-scale stormwater infrastructure solutions—granting us the experience and credibility to meet any challenge that may emerge. Details of our projects are included in **Tab G: References**.



Clean Water Nashville Program & Construction Management NASHVILLE, TN

Program Value: \$2.74B

Program Dates: 2011 – 2023; 2023 – Ongoing

- Technical and managerial support for 129 projects to reduce combined sewer overflows (CSOs) and sanitary sewer overflows (SSOs)
- Develop scopes and OPCCs, manage design firms, identify and manage risks, coordinate permitting and property acquisition, assist with outreach, and support bidding and construction services

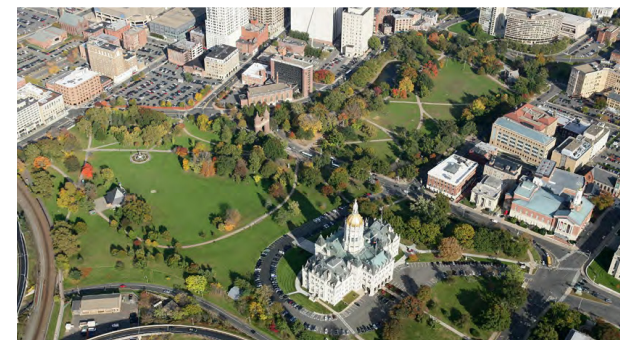


Clean Water 2020 Program COLUMBIA, SC

Program Value: \$1B

Program Dates: 2012 – 2023;
2023 – Ongoing

- Manage projects as extension of staff from inception through design and construction to closeout
- Managed 75+ active projects, from complex WWTP projects to pump station and collection system rehab, and new pump stations and pipelines for expanded capacity
- Public meetings, maintain program website, social media posts, and yard signs to alert on project status



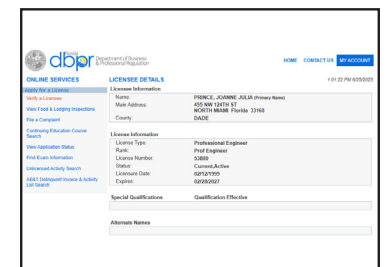
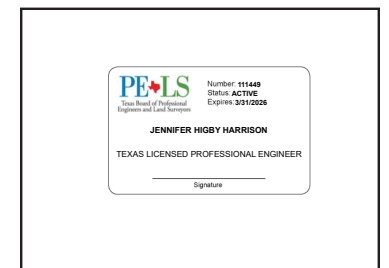
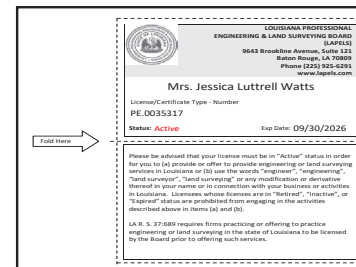
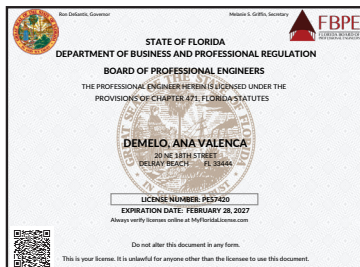
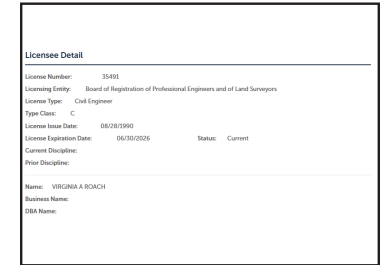
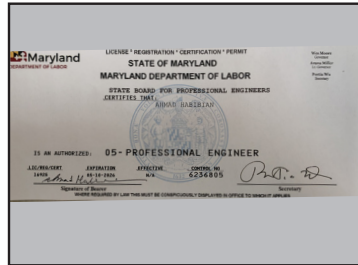
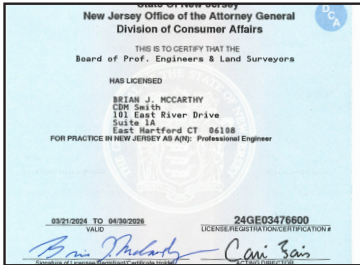
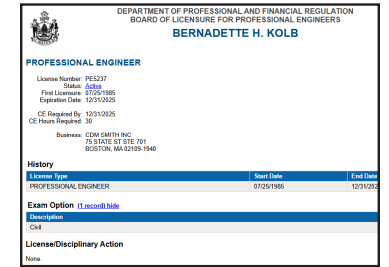
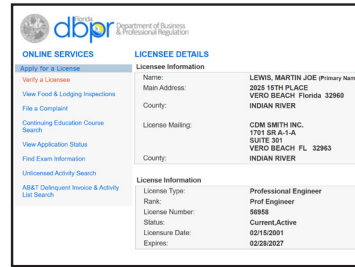
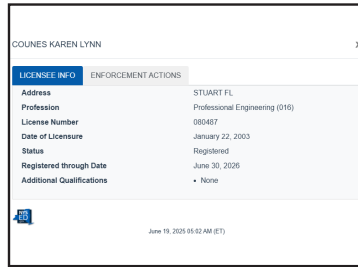
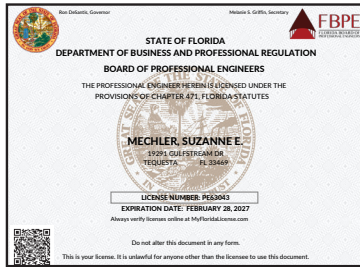
Clean Water Program Management METROPOLITAN DISTRICT COMMISSION, HARTFORD, CT

Program Value: \$2.5B

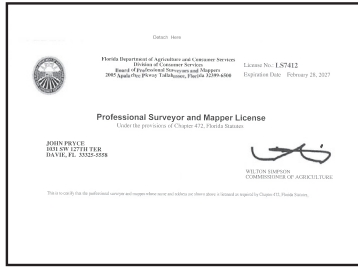
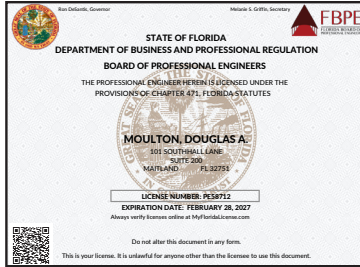
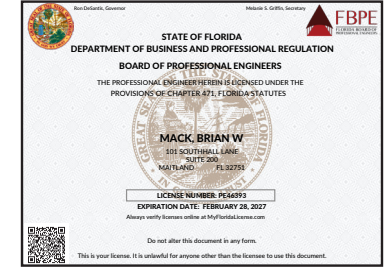
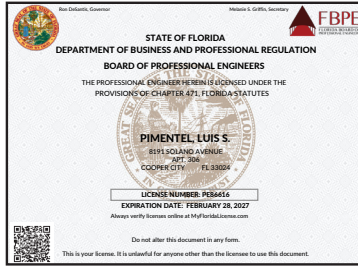
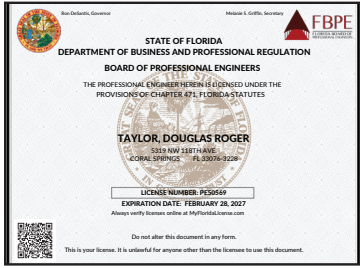
Project Dates: 2007 – 2023; 2023 – Ongoing

- 250 projects, with 100+ completed to date include \$1.2B in large-diameter tunnels/conduits, \$550M in WWTP upgrades, \$300M in separate combined sewers projects, and \$320M in projects to reduce I/I
- Assisted in fast-tracking projects to engage local contracting and labor communities and take advantage of ARRA funding; to date, secured \$1B in grants and loans for program

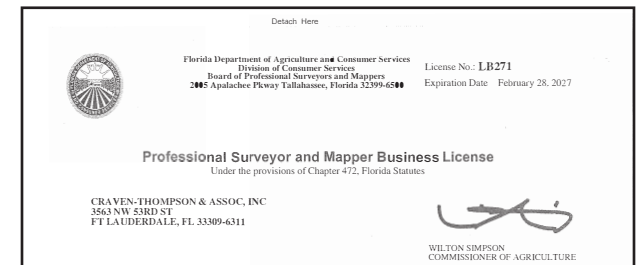
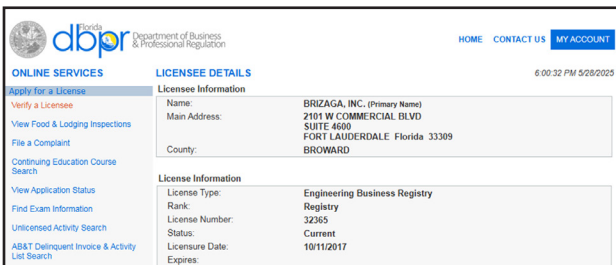
Minimum Qualifications - Staff Licenses



Minimum Qualifications - Staff Licenses (continued)



Minimum Qualifications - Subconsultant Firm Licenses



Tab D: Organizational Profile and Project Team Qualifications



Organizational Profile and Project Team Qualifications

Proven Leadership to Deliver the Program by Anticipating and Mitigating Challenges with Proactive Communication



Karen Counes, PE, Program Manager

Recognizing the significance of this program, we have assigned Karen Counes as Program Manager. She is a South Florida resident specializing in infrastructure and public works facilities. She is a proven program manager with 28 years of experience developing and delivering complex technical programs with challenging schedules and budgets and advises clients and teams on different delivery approaches to accomplish client goals.

Karen's experience includes both the consulting and owner's side of the table, giving her a clear understanding how the two need to integrate. She has been responsible for technical quality, planned major programs up to \$1B, provided collaborative contract delivery methods, and managed a team of 20 consultant design teams to prepare design and construction documents for SFWMD. She will manage the overall direction for the program, conduct scope negotiations, prepare projects for procurement, and manage projects as an extension of City staff from inception through design and construction to project closing.



Juan Mendoza, Jr., PMP, Onsite Project Manager

Juan has 25 years of experience as a project management professional with extensive experience in delivering capital projects across various industries. He has a deep understanding of construction and fiscal management processes and excels in high-tension situations requiring quick analysis and critical thinking. As a certified PMP Juan brings expertise in risk management, client communication, and quality procedures—areas necessary successful implementation of Hollywood's Stormwater Program.

Juan will support Karen and allow her to do what she does best—building a structured, right-sized team to accomplish the City's goals—while Juan focuses on day-to-day oversight of all stormwater projects from Hollywood's Public Utilities offices. This will include extensive coordination with City staff and other stakeholders including developers, homeowners, regulatory agencies, and other consultants; standards management; project scoping; capital budgeting; project scheduling; design reviews; document control; easement acquisition; bidding coordination; and construction management.

Setting the Benchmark for High-Performance Delivery

Karen and Juan recently collaborated on the \$1.6B Genera program to restore operational capacity and improve the power generation system in Puerto Rico after devastating hurricanes. While Juan acted as client liaison for the onsite program team, managing day-to-day operations, Karen provided headquarters team support as an advisor for program management needs and provided subject matter expertise in engineering operations including optimization of plant efficiencies and regulatory standards, regulatory compliance, operational dashboards, and quality management support. This talented tandem, Juan as onsite representative and Karen as the advisory support, worked in concert to lead a team of 23 professionals supporting the improvement of Puerto Rico's power infrastructure 14 projects launched in the aftermath of the extensive hurricane damage to upgrade and ultimately strengthen critical points of Puerto Rico's power grid.

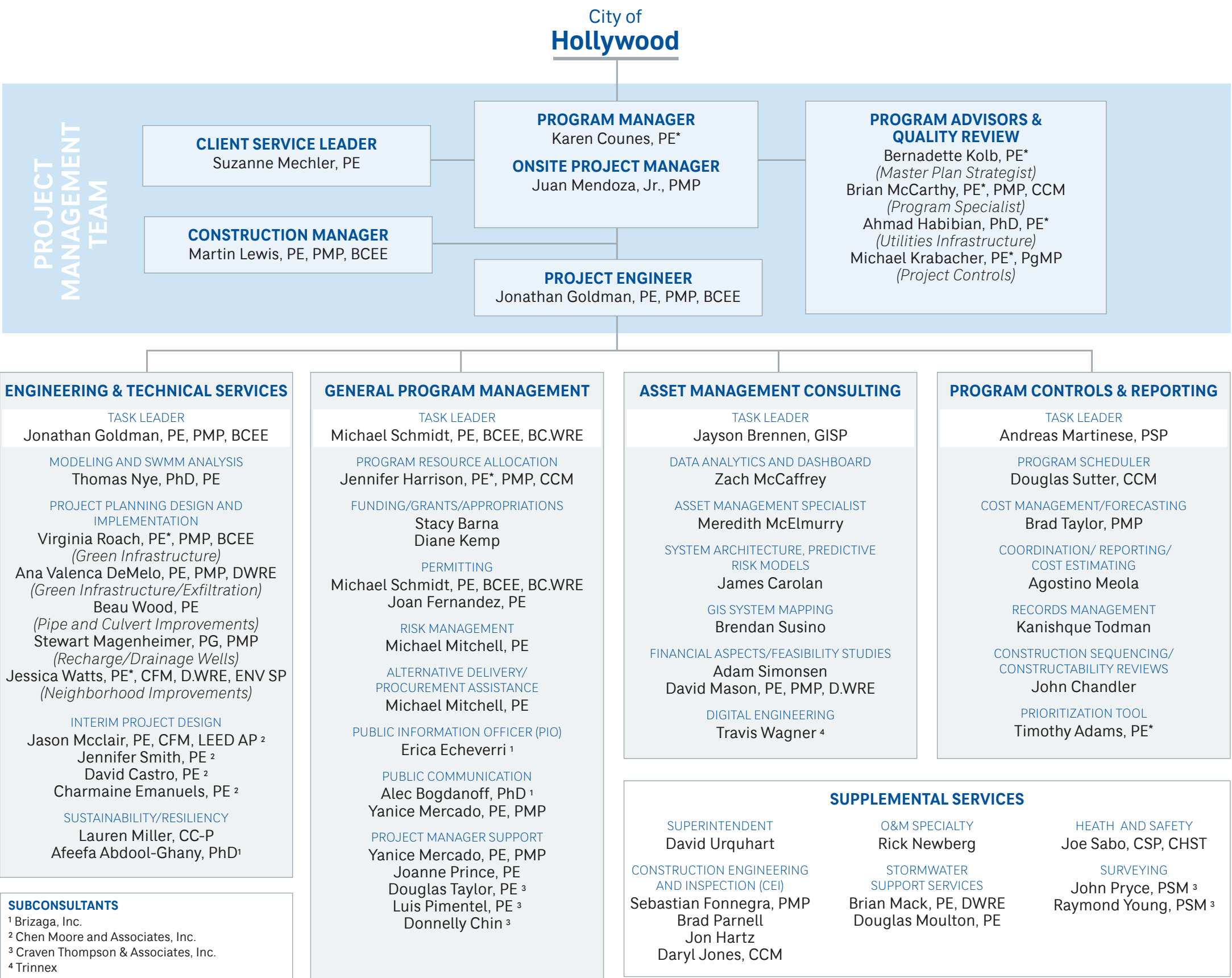
Breadth and Depth of Expertise – Great shared past experience will deliver comprehensive approach to effectively manage the City’s stormwater

The organizational structure of the CDM Smith team, shown in the attached figure, was developed to efficiently deliver this program. Based in our Boca Raton office, we offer a local Program Management team with extensive experience and a proven history of successfully delivering large, complex programs that support our client’s goals. Our organizational structure provides senior management expertise for day-to-day leadership and experienced technical experts in an organization that fully supports the City of Hollywood staff by aligning the strongest professionals with the most appropriate projects.

Local Teaming Partners with a History of Serving Hollywood

CDM Smith routinely works with specialty firms to complement our in-house capabilities. We have forged exceptional working relationships with many subconsultants throughout South Florida, we recognize and appreciate the value in developing strategic and long-term partnerships with local firms. Our team includes four specialty support firms with recent and relevant stormwater infrastructure experience. Details for each firm are included in **Tab H Subconsultant Information**.

CDM Smith is committed to being the City’s trusted partner in delivering resilience through a community-centered Stormwater Program that addresses flooding challenges, safeguards public health, protects economic vitality, and enhances quality of life.



* PE in State other than Florida

Performance, Experience, and Qualifications, Exemplary Cost Containment Minimization of Change Orders and Proven History of Project Completion Within Initial Budget

We are confident in our ability to deliver executional results in our program through project delivery and the following strengths:

Performance, Experience, and Qualifications

CDM Smith's project management and delivery process are designed 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 integrates 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 onsite project manager, Juan Mendoza 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.

Exemplary Cost Containment and Minimization of Change Orders

We implement rigorous cost control measures from project inception through completion. Our proactive budgeting, value engineering, and negotiations have consistently resulted in cost savings without compromising quality. One of the risk management strategies we implement is to regularly monitor ENR's Construction Cost Index against the program's escalation assumptions and actual costs.

In addition, through pre-construction planning, stakeholder engagement, and detailed scope definition, we minimize change orders. We maintain a change order management log to monitor and track issues with projected and actual costs as they develop. This along with managing critical path schedules will directly affect the health and expectations of the project as it moves through construction.

Proven History of On-Budget Completion

We have a strong track record of completing projects within the original budget. As maintaining the schedule is so closely linked to budget, a proactive team helps all parties stay within budget and deliver a successful project. Program Controls Lead Andreas Martinese will develop budget and tracking progress and reporting that are critical Program success.

For example, we have managed NAVFAC Atlantic's U-ICAP Program since 2009, enabling maintenance and capital replacement projects to be prioritized, to date, we have successfully delivered 50+ task orders on schedule/within budget. The success is due to our disciplined project management and forecasting tools as well as a detailed budget and schedule review at key stages to validate costs.

Clean Water 2020 Program, City of Columbia, SC

CHALLENGE	SOLUTION	BENEFITS AND RESULTS
The utility had outdated and inconsistent project documents and contracts that did not protect the owner, paired with a reactive approach to construction management. This often left the utility open to large change orders and unable to proactively manage the schedule and construction processes resulting in unclear lines of responsibility.	CDM Smith's Program Management team lead the City through a process to dramatically improve contract documents, establish new standard construction contracts, develop workflows and processes for construction management, and strengthen the construction management inspection and oversight roles.	Better contract terms, consistent workflows and responsibilities, and improved levels of inspection were delivered consistently on all new projects. This new approach led to a decrease in bid price variation as a result of clarity in the scope and contract documents. During construction, this effort also reduced change orders, improved project quality, and greatly reduced the schedule and cost risk to the City.



KEY PERSONNEL

Experience Highlights

- Responsible for technical quality, planned major programs up to \$4.2B
- Delivered programs using multiple contract delivery methods, including Construction Management At-Risk (CMAR), Design/Build (D/B), PDB, Engineer-Procure-Construct (EPC) and others,
- Managed a team of 12 engineers to prepare design and construction documents for New York Power Authority assets

EDUCATION:

ME – Environmental Engineering;
BS – Civil Engineering

LICENSING/REGISTRATION:

Professional Engineer (PE):
NY, NJ, TX

PERCENTAGE OF TIME ASSIGNED FULL TIME TO THIS PROJECT:

50%

TOTAL YEARS EXPERIENCE:

28

YEARS WITH CDM SMITH:

4

YEARS WITH OTHER FIRMS:

24

Karen Counes, PE

Program Manager

Roles and Responsibilities. Karen is a proven and tested large project and program management professional that specializes in infrastructure and public works facilities. She develops and delivers complex technical programs with challenging schedules and budgets and advises clients and teams on different delivery approaches to accomplish client goals. She develops programs and innovative solutions by using a long-term, collaborative vision and aligning people, processes, and technology to provide the best value and positive impacts to clients. Karen's 'hands-on' experience provides a unique perspective that allows her to look past the traditional ways of doing business in order to solve today's and future challenges for clients.

Assistant Director of Engineering, Everglades Restoration Program, Everglades Restoration Engineering Department, SFWMD, West Palm Beach, FL

- Led and managed multi-disciplined teams to plan, design, and construct large-scale environmental and water resource projects in accordance with the Everglades Restoration Program, spanning a total of 11 major projects of approximately \$385M each, totaling \$4.2B, plus a series of smaller projects in the program portfolio.
- Managed portions of the engineering budget and schedule of the Everglades Restoration capital program and managed a team of District project managers and over twenty consultant design teams.
- Directed activities in keeping with the strategic goals of the mission of Everglades Restoration according to the Water Resources Development Act requirements, including managed large-scale capital Everglades Restoration projects from conception to and through construction.
- Managed cross-functional consultant teams, identifying and planning land acquisitions, partnering with local government agencies, planning capital improvement project designs, budget and schedule management, engineering design review, and critical path decision-making.
- Conducted interagency coordination during all project phases and spearheaded the creation of a new change control process for project management procedures that increased efficiency and tracking in project, budget, and program management.

Program Advisor and Operations Subject Matter Expert, New Fortress Energy/Genera Master Services Agreement Program Management, New Fortress Energy/Genera, PR

- Provided quality management for program deliverables and advised an on-site program team that provided upgrades and improvements to Puerto Rico's power infrastructure in this \$1.6 billion program launched in the aftermath of the extensive damage caused by Hurricane Maria.
- Provided guidance in program setup, planning, procedure development including the program management plan, budgets, schedules, risk management and quality management.
- Performed quality reviews of major deliverables and helped resolve unanticipated program challenges with the multifaceted team and client as they arose to keep the Program moving forward.
- Acted as an operations and engineering subject matter expert and advised the client regarding plant operational inefficiencies and reporting, plus worked with the client to comply with federal licensing requirements and worked with the client to create plans to reduce inefficiencies and improve deliveries and rates for consumers.

Program Director, Program Management Services for Architecture Facilities, Nevada Department of Transportation (NDOT), Carson City and Various Locations, NV

- Developed the program management approach and guidelines for NDOT's Architecture Facilities Program, as well as managed the program delivery services on-site staff as part of a staff augmentation effort to support NDOT's Statewide Buildings Capital Improvement Program.
- Prepared the Program Management Plan and advised and guided the client through changes in their process and managed the delivery of projects from scope development through construction.
- Responsible for the development of three strategic plans, the Carson City Headquarters Complex Strategic Plans, Statewide 55 Maintenance Station Strategic Plan, and the overall Five-Year Strategic Plan.
- Led the development of a Project Prioritization tool, criteria and dashboard as part of the planning. These strategic plans are used to prioritize critical needs and also to prepare biennium budget requests to the state legislature.

Program Advisor, Clean Water 2020 Program, City of Columbia, SC

- Prepared contract documents and led contract negotiations for a public-private partnership to use the City's waste effluent for a biogas plant that would provide fuel to sell to local users. Worked with the City to develop bid criteria, bid evaluation procedures, technical criteria and agreements with stakeholders for a \$10M plant to increase greener energy for the City over a 10-year period.
- Reviewed several reports and communications documents from the program team to the City and assisted in resource management and staffing to allow the program team to continue to provide a consistently high level of service in program delivery.
- Provided recommendations and templates for reporting to both technical and executive leadership, and led the program team to streamline communications.
- Advised the program team on resource allocation and management including how to maintain the same volume of staff under varying workload conditions over time to provide continued service throughout the program.

Owner's Advisor, City of Nashville Clean Water Program, City of Nashville, TN

- Jointly drafted a memo with the Construction Manager that evaluated the use of a Construction Management At-Risk delivery method versus a traditional design-bid build delivery method for a linear project for work at the Central WWTP.
- Assessed the project, the methods and noted the benefits and impacts of each decision for the City, and ultimately provided recommendations via formal memo that was incorporated into the City's record of decision in selection of delivery method.

Owner's Advisor and Program Management Advisor, Risk Management, Valley Water P3 Purified Water Program, Santa Clara Valley, CA

- Evaluated Technical Requirements for Valley Water's Public-Private Partnership for the Purified Water Program design/build/finance/operate/maintain delivery for a large advanced treatment facility and distribution and conveyance elements for the \$15M, five-year program.
- Evaluated the technical requirements and bid documents from a risk management perspective and provided comments, edits and recommendations that helped provide a clearer, more detailed set of performance and technical requirements that will enhance the bid process for the owner and contractor and also shield the client from additional risk.

Management Consultant, Strategic Plan Development, Clay County Utility Authority, FL

- Led a team of subject matter experts, while also serving as one of those experts, in operations management, program management, engineering, communications, finance and information technology to develop a strategic plan roadmap for the Clay County Utility Authority to upgrade and add new facilities to grow from a mid-size utility into a large-scale utility.
- Evaluated the current conditions, assessed their financial and overall operations, and worked with their executive leadership team to develop critical factors for success, critical needs to address, and develop a roadmap of activities needed for a full strategic plan.
- Full strategic plan involves developing recommendations, tactical plans for enterprise-wide procedure and software system changes, operational changes in several departments, staff development and training, capital improvement planning, and related tasks.
- Led the CCUA Leadership Team through the development of the Workforce Development portion of the full strategic plan development and served as an overall subject matter expert and management consultant throughout the joint process.



KEY PERSONNEL

Experience Highlights

- Project Management Professional with Business Management background and a MBA
- Experience in Prolog, Procore, Primavera, etc.
- Fluent in Spanish with a good-neighbor attitude and a focus on diverse engagement.
- Participation on 7 programs totaling \$100B in constructed costs

EDUCATION:

MBA – Business Management;
BS – Business Management

LICENSING/REGISTRATION:

Project Management
Professional (PMP)

PERCENTAGE OF TIME ASSIGNED FULL TIME TO THIS PROJECT:

100%

TOTAL YEARS EXPERIENCE:

25

YEARS WITH CDM SMITH:

3

YEARS WITH OTHER FIRMS:

22

Juan Mendoza, Jr., PMP

Onsite Project Manager

Roles and Responsibilities. Juan has successfully led a wide range of infrastructure programs, offering a proven track record in project and design management, project execution, and providing construction administration services. His ability to manage resources, timelines, and stakeholder expectations while maintaining a focus on achieving strategic objectives has consistently delivered high-quality results.

Owner's Representative and Project Technical Lead/Pre-Construction Manager, New Fortress Energy/Genera Master Services Agreement Program Management, New Fortress Energy/Genera, Puerto Rico

- Led a team of 23 professionals supporting the improvement of Puerto Rico's power infrastructure in this \$1.6B program with 14 projects launched in the aftermath of the extensive damage caused by hurricane Maria.
- Led all aspects of the program, including planning, scheduling, document controls, budgeting and cost control, environmental compliance, real estate, safety, quality assurance, and risk management.
- Streamlined the execution of the program by optimizing the procurement and contract packaging approach, coordinating equipment purchases, and improving sequencing; coordinated regularly with key stakeholders, including facility operations, senior management, funding agencies, and regulatory agencies.
- Oversaw the development and deployment of dashboards and the integration of multiple software systems and tools to improve the reliability and timeliness of communications and status reporting.

Program Manager, Sheldon Independent School District, Houston, TX

- Responsible for the development and management of the long-range program plan, program finances and budget, comprehensive scheduling, and procurement and management of professional and construction services for all phases of a \$285M school construction program.
- Provided innovative value engineering solutions that reduced construction cost, accelerated schedules, and provided greater operational flexibility for the school District, while with a previous firm.
- Regularly presented program status updates to the school board, the public, and other stakeholders
- The program included:
 - A new 3,500-student high school with an athletic complex that included a 10,000-seat football stadium on a greenfield site of a 185-acre campus
 - A new 700 student Performing and Visual Arts Elementary school
 - Converting a 3,000-student existing high school to a 1,500-student middle school

Construction Manager, Confidential Chemical Client Design-Build Capital Projects, Southern United States

- Portfolio of fast-tracked capital projects at a complex industrial facility, these multifaceted projects included demolition, civil works, electrical, and process improvements.
- Led a team responsible for overseeing the entire construction process, including managing contracts, quality assurance, safety, and coordination with facility operations, while with a previous employer.

Program Manager, Freudenberg Oil & Gas, Houston, TX

- Led the Project Management Office (PMO), while with a previous employer, which assured that the product/project standards, methodology, and best practices were consistently applied through all product/project phases for the manufacturing of topside and subsea flange connectors.
- Developed standard reports for each department and executive manager that included production rates, resource utilization, delivery timelines, and product quality.

Senior Consultant, Turner & Townsend, Houston, TX

- Responsible for establishing a consulting business for the commercial services group, which included the business development, project management, project controls, and estimating departments.
- Developed Business Unit strategies and goals for each department and to increase revenue and profit.
- Provided direction, leadership, and supervision to staff on programs and projects, including establishing a PMO for \$1B+ portfolio for Chevron, while with a previous firm.

Senior Consultant, Faithful + Gould, Houston, TX

- Led all aspects of the program from conception through design to execution which included planning, scheduling, document controls, budgeting and cost control, environmental compliance, real estate, safety, quality assurance, and risk management
- Coordinated regularly with key stakeholders, including facility operations, funding agencies, and regulatory agencies
- Managed, maintained, and assisted various clients through all phases of programs/project execution, while with a previous employer.
- Clients included GlaxoSmithKline, BP Information Technology and Service, Nokia Siemens Networks, and a private hospital and the projects were located in multiple South American countries and across the United States.

Project Manager, Construction Contractors, Various Clients, Various Locations

- Construction project manager on a wide variety of projects, including roadway, drainage, utilities, schools, and telecommunications, while with a previous firm.

Staff Sergeant, US Army, Various Locations

- Led a float bridge team of 36 soldiers to assist in constructing a floating bridge across the Sava River, which forms the border between Croatia and Bosnia
 - Led a team of over a 100 soldiers and various contractors to build camp fortification, sleeping, dining, support facilities and a Helipad for a medical support camp facility, near Camp Bedrock
-



KEY PERSONNEL

Experience Highlights

- Extensively knowledgeable of Hollywood's SWMM model
- Includes 70+ pipeline projects totaling more than 600,000 LF and more than \$200M in constructed costs—all in Florida
- Career focused on outside-the-fence infrastructure projects in South Florida

EDUCATION:

ME, BS – Environmental Engineering

LICENSING/REGISTRATION:

PE: FL; Project Management Professional (PMP); Board Certified Environmental Engineer (BCEE)

PERCENTAGE OF TIME ASSIGNED FULL TIME TO THIS PROJECT:
60%

TOTAL YEARS EXPERIENCE:
38

YEARS WITH CDM SMITH:
38

YEARS WITH OTHER FIRMS:
0

Jonathan Goldman, PE, PMP, BCEE

Project Engineer; Engineering and Technical Services – Task Leader

Roles and Responsibilities. Jon is a senior project manager for large, complex engineering projects throughout the state of Florida, he brings a strong history of providing quality work and responsive service to Hollywood on the Stormwater Master Plan. His civil and environmental engineering experience is concentrated in the areas of stormwater management, stormwater master planning and treatment system design, and stormwater utility evaluation, creation, and refinement; hydraulic modeling and analysis of large collection, pumping and transmission systems; and utility infrastructure asset risk prioritization, evaluation, and rehabilitation, sanitary sewer evaluation studies, construction management, and water resources.

Project Manager/Engineer of Record, Comprehensive Stormwater Master Plan, City of Hollywood, FL

- Multi-year, \$2.8M effort which includes the creation of an interactive stormwater geographic information system (GIS), 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, and hydraulic modeling of the system using dynamic SWMM modeling.
- Cost benefit analysis using FEMA HAZUS methodology, a phased capital improvements program which considers sea-level rise and storm surge resiliency for two alternate levels of service across four major watersheds, water quality treatment for the Broward County receiving waterways, and a king tide emergency management standard operating procedure for low lying coastal areas.
- Coordination with City parks and golf courses for dual use conversion for stormwater management, a suite of immediate action interim stormwater relief capital improvement projects, a public awareness campaign and stakeholder workshops, funding options, and grant assistance.

Project Manager/Engineer of Record, Comprehensive Stormwater Master Plan, City of Miami, FL

- Multi-year, \$5.3M effort which includes the creation of an interactive stormwater 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, and 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/Lead Design Engineer, Capital Improvement Plan Wastewater Program, City of Fort Lauderdale, FL

- \$250M, 10-year program included planning, design, and construction of stormwater and water main improvements and pump station, new transmission force mains, sanitary sewer systems, and wastewater treatment plant (WWTP) upgrades to meet the City's goal of sewerage the entire service area.

Project Manager, Miami International Airport GIS Stormwater Atlas, Miami Dade Aviation Department (MDAD), FL

- The Miami International Airport Stormwater Atlas is an updated Stormwater Atlas for Miami International Airport, created an accurate stormwater atlas for the airport based on as-built drawings, record drawings, and CAD files verified by survey and field inspection.

Project Manager and Engineer-of Record, Miami Opa Locka Executive Airport (OPF) Stormwater Master Plan, Miami-Dade County Aviation Department (MDAD), Miami-Dade County, FL

- Provide stormwater services by using Innovyze XP-SWMM to model current conditions for the update to the hydrologic and hydraulic model and delivered future scenarios and sea level rise simulations.
- Updated stormwater model uses revised digital elevation model (DEM), an updated primary stormwater management system (PSMS) based on the 2017 Stormwater Atlas previously developed by CDM Smith for MDAD, recent project design plans, and boundary conditions from Miami-Dade County XP-SWMM model.
- Stormwater management control measures were provided to meet the Federal Aviation Administration and South Florida Water Management District requirements.

Project Manager, Parcel Pervious/Impervious Analysis and Stormwater Utility Refinement, City of Delray Beach, FL

- Parcel impervious analysis and utility refinement for the City of Delray Beach which has a stormwater management program funded through a non-ad valorem (NAV) assessment of a stormwater utility fee.
- Both the fee and utility assessment structure were updated and refined to better meet the level of service desired by its citizens.
- The project provided a review and refinement of the current stormwater ordinance and rate and revenue analyses for different assessment options.
- Approximately 40,000 parcels of mixed types were evaluated for impervious area using GIS techniques from tax roll data obtained from the property appraiser. The project included stake holder workshops and the creation of the final TRIM and NAV files for the assessment.

Project Manager, Development and Implementation of the Stormwater Utility, City of Plantation, FL

- Phased creation and implementation of the stormwater utility, the first phase studied the development of a comprehensive stormwater management program for the City and associated funding mechanisms to support the program.
- Assessed the existing stormwater program, defined a potential future program, developed options for funding of the existing and future programs, and hosted facilitated stakeholder workshops to focus groups on stormwater management and the City council.

Project Manager/Engineer-of-Record, Stormwater Master Plan and Stormwater Consulting, MDAD, Miami-Dade County, FL

- Development and execution of several stormwater-related projects for the Miami International Airport, and the Miami Executive (Tamiami) and Miami Opa-Locka Executive General Aviation airports including the creation of GIS-based stormwater utility atlases for each site, manatee barrier analysis and design, wetlands assessments, electronic stormwater design standards manuals for bus by developers at the sites, technical reviews of proposed project conceptual and final design plans and reports for adherence with the adapted stormwater master plans and permits.
- Stormwater master plan updates for the airports which included Xp-SWMM modeling for regulatory design storms to FAA requirements, water quality treatment calculations, conceptual environmental resource permitting, and a phased capital improvements plan for the future airport land uses to meet FAA criteria for length, depth and duration of ponding on the airside, and to meet permitted runoff water quality and peak volumes at the outfalls.

Project Manager, Victoria Park Stormwater Plan and Neighborhood Improvement Project, City of Fort Lauderdale, FL

- Stormwater management investigations and analyses of the study area to identify potential solutions to mitigate flooding and provided the City with alternative solutions, corresponding cost and schedule estimates for each solution and assisted in the selection of the most appropriate and permissible solution to meet the City's needs and budget.
- Responsible for the schedule, quality, and budget of the project, managed CDM Smith staff for data collection, modeling, and alternatives analyses, developed the CIP, and presented the results to the City.

Project Manager, Stormwater Master Plan (SWMP), City of North Miami, FL

- Updated master plan supported the City to comply with City and Department of Environmental Resources Management (DERM) Level of Service (LOS) standards, National Pollutant Discharge Elimination System (NPDES) municipal separate storm sewer system (MS4) permit requirements, and Federal Emergency Management Agency (FEMA) requirements and audits.
- Provided the City with a defined and defensible document to support long-term stormwater management capital improvements and equitable development/redevelopment standards for the City.



KEY PERSONNEL

Experience Highlights

- Construction management and oversight of more than 120 projects, including 14+ miles of pipeline up to 79-in-diameter
- Provide constructability reviews for plans and specs throughout design
- Managing and directing CDM Smith team field activities throughout construction

EDUCATION:

ME, BS – Environmental Engineering

LICENSING/REGISTRATION:

PE: FL; PMP; BCEE

PERCENTAGE OF TIME ASSIGNED FULL TIME TO

THIS PROJECT:

40%

TOTAL YEARS EXPERIENCE:

28

YEARS WITH CDM SMITH:

28

YEARS WITH OTHER FIRMS:

0

Martin Lewis, PE, PMP, BCEE

Construction Manager

Roles and Responsibilities. Martin was a Florida-certified General Contractor prior to his engineering career, and he will be involved early in the planning and design phases of the project through project construction completion. His experience will assist us in identifying opportunities for construction efficiencies as the design progresses.

Resident Construction Engineer, South Florida Water Management District, Okeechobee, FL

- Pump station had three high flow stormwater pumps with a combined flow of 420 cubic meters per minute.
- Included pump station structure, SCADA system, and improvement of 150 meters of stormwater canals.
- Managed the construction contract administration, daily reports, shop drawings, requests for information, pay application reviews, and monthly progress meetings.

Resident Construction Engineer, Seacoast Utility Authority, Palm Beach Gardens, FL

- Constructed a new nanofiltration and low pressure reverse osmosis water treatment plant capable of producing 30 million gallons per day (mgd) (113,500 cubic meters per day) of finish water.
- In charge of the construction contract management and was the certifying engineer upon completion of the project.
- This project was performed in parallel with a raw water booster pump station project that modifies three raw water pump stations with additional high service pumps and SCADA system to supply water for the water plant.
- The combined value of the two construction contracts exceeds \$65M, Marting managed all aspects of contract administration (document management, meetings, progress payments, schedules, change management) technical issues (interface with the design team for submittals and requests for information) and quality management (testing, inspection, and documentation).

Construction Manager, Mullins RO production Wells 5 & 6 Construction, City of Melbourne, FL

- Construction manager for drilling two upper floridan aquifer water production wells, the \$1.7M job was completed on time and \$67,000 under budget.

Project Manager, Osprey Biological Nutrient Removal WWTP, City of Titusville, FL

- \$10M Osprey Biological Nutrient Removal WWTP plant upgrade adds biological nutrient removal capacity in an effort to prevent nutrients from entering the Indian River Lagoon. The project is on schedule and on budget.

Project Manager, Salalah Emergency Marine Outfall, Salalah, Oman

- \$35M construction for a 4.8 km of 1.2m diameter pipeline into the Arabian Sea as an emergency outfall for the Master Pump Station.
- Master pump station provided all new pumps, new surge vessels, new generators, and new variable frequency drives and a new SCADA system.
- Responsible for compliance with program objective and liaison to the program manager and client.
- Instrumental in analyzing construction claims by the contractor.

Deputy Project Manager, National Water Company, Jeddah, Saudi Arabia

- Construction contract administration for \$197M largest water storage facility in world.
- Documentation, meetings, payments, change management, review, tech/material submittals, construction method reviews, commissioning, and testing.
- 11 circular concrete reservoirs with an aggregate capacity of over 2 million cubic meters (528Mgal) of water storage.

Project Manager, Phase II Expansion North County Water Treatment Plant, Indian River County, FL

- Phase II expansion added three new nanofiltration skids to the two existing skids, the project was modified at the request of the client to go to full build-out in this expansion, adding six new NF skids, increasing the plant's permeate capacity to 12 mgd.
- Expansion to the operation's building, process bay, electrical room, new high service pumps, two new generators and a new 3 million gallon ground storage tank.
- Managed all engineering services during the 18 month construction period.

Construction Manager, Indian River County Solid Waste Disposal District, Vero Beach, FL

- \$16M project constructed a new 10 acre landfill cell and closed approximately 20 acres of landfill.
- Roadway and utility improvements and a new force main and water main were installed.
- Responsible for processing pay applications, conducting monthly progress meetings, and managing construction claims and change orders.

Project Technical Leader, US-192 Scalehouse Design, Brevard County Solid Waste, FL

- Design a new scalehouse to weigh incoming waste to the facility new \$5M greenfield solid waste facility.

Project Manager, Water Main Extension Project, St. Lucie County Utilities, FL

- \$2.5M water main extension construction project was for general services during construction with general oversight and inspection services.
- Reviewed all applications for payments, permit certifications and contractor claims.

Project Technical Leader, Hallandale Lift Station No. 5 Replacement, City of Hallandale Utilities, FL

- \$2.8M upgrade and complete replacement of an existing lift station that was aging and could not efficiently serve the growing service area.

Project Manager, Indian River County Solid Waste Disposal District, Vero Beach, FL

- \$1.1M construction project added horizontal landfill gas collectors which enhanced landfill gas capture, upgraded the landfill collection system with additional leachate control and pumping out of the landfill gas wells.

South Hutchison Island Wastewater Collection and Reuse Water Distribution System, St. Lucie County, FL

- Northern expansion of the South Hutchison Island's wastewater collection and reuse water distribution system in St. Lucie County.
 - Performed the hydraulic modeling for the reuse water distribution system and sized the distribution and collection pipes.
 - Permitting of the pipeline extension and the design of the wastewater re-pump station.
-



KEY PERSONNEL

Experience Highlights

- Responsible for hydraulic modeling of Hollywood's system using dynamic SWMM modeling, cost benefit analysis using FEMA HAZUS methodology for the Comprehensive Stormwater Master Plan
- System-wide stormwater hydraulic modeling experience
- Developed FEMA's Dynamic Floodway Utility (DFU), a tool used to perform floodway analysis for FEMA Flood Insurance Studies using SWMM

EDUCATION:

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

LICENSING/REGISTRATION:

PE (FL)

PERCENTAGE OF TIME ASSIGNED FULL TIME TO
THIS PROJECT:

60%

TOTAL YEARS EXPERIENCE:

33

YEARS WITH CDM SMITH:

26

YEARS WITH OTHER FIRMS:

7

Thomas Nye, PhD, PE

Modeling and SWMM Analysis

Roles and Responsibilities. Tom's extensive professional experience includes leading and advising on the development of stormwater master plans, hydrologic and hydraulic modeling, and floodway analysis. He has worked with 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 the US Geological Survey's MODFLOW. Tom will be responsible for updating and calibrating the model throughout the program.

Lead Stormwater Modeler, Comprehensive Stormwater and Coastal Resilience Master Plan, City of Hollywood, FL

- Multi-year, \$2.8M effort which includes the creation of an interactive stormwater geographic information system (GIS), 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, and hydraulic modeling of the system using dynamic SWMM modeling.
- Cost benefit analysis using FEMA HAZUS methodology, a phased capital improvements program which considers sea-level rise and storm surge resiliency for two alternate levels of service across four major watersheds, water quality treatment for the Broward County receiving waterways, and a king tide emergency management standard operating procedure for low lying coastal areas.

Modeling Task Leader/Lead Modeler, Stormwater Master Plan Update, City of Miami, FL

- Model the City to a resolution of approximately 10 acres which includes 2,500 subbasins in eight separate watersheds.
- 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.
- 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).
- Determine the LOS of the existing seawalls and how high they would need to be to protect the City and provide alternative corrective measures will also be analyzed to improve LOS.

Lead Modeler, Stormwater Modeling, City of New Orleans, LA

- Conducted SWMM stormwater modeling for the City of New Orleans Drainage Improvement Plan, including model setup, calibration, and alternative evaluations.
- Directed a team of seven modelers in the development of 15 neighborhood-scale models of up to 3000 nodes each that encompass the entire city.

Project Technical Leader, South Cypress Creek Master Plan, City of Memphis, TN

- Development of a stormwater master plan for South Cypress Creek watershed.
- Use of InfoSWMM to evaluate necessary infrastructure improvements to resolve roadway and structural flooding complaints.
- Development of a stormwater infrastructure inventory in a GIS environment.



KEY PERSONNEL

Experience Highlights

- Guided and developed programs for more than 225 clients on more than 520 projects across 35 US states and nine countries on six continents
- Directed design and operations innovations that have saved over \$385M on more than \$1.6B of retrofit projects through design and construction innovation and operational synergies

EDUCATION:
BS – Environmental Engineering

LICENSING/REGISTRATION:
PE (FL); Board-Certified Environmental Engineer (BCEE); Board Certified Water Resource Engineer (BC.WRE)

PERCENTAGE OF TIME ASSIGNED FULL TIME TO THIS PROJECT:
40%

TOTAL YEARS EXPERIENCE:
41

YEARS WITH CDM SMITH:
39

YEARS WITH OTHER FIRMS:
2

Michael Schmidt, PE, BCEE, BC.WRE

General Program Management – Task Leader

Roles and Responsibilities. Mike brings experience in sustainable and resilient stormwater, civil works, flood control, green infrastructure, coastal, water supply, ecosystem restoration, water resource, watershed master planning, modeling, permitting, operations, asset and data management, implementation, training, public information, and funding. He has peer reviewed, applied, and/or directed stormwater, flood control, green infrastructure, ecosystem restoration, minimum flow and levels, water quality, integrated surface and ground water, water resource, and decision support and operations model applications.

Lead Engineer, Comprehensive Stormwater and Coastal Resilience Master Plan, City of Hollywood, FL

- Responsible for technical direction and review for the stormwater management and coastal resilience program for Hollywood to plan, model, and 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, and aquifer recharge within brackish and committed groundwater constraints were defined to develop alternative mitigative measure evaluations for swales, exfiltration systems recharge wells, park renovations, backflow prevention, seawalls, and pump stations for the City with coordination of multiple entities including FDOT for A1A and I-95, Central Broward Water Control District (CBWCD), South Broward Drainage District (SBDD), Broward County, Dania Beach, and Hallandale.
- The plan includes 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 future adaptation of resilient features.

Lead Engineer, Comprehensive Stormwater and Coastal Resilience Master Plan, City of Miami, FL

- Technical direction and review for the stormwater management and coastal resilience program to plan, model, and evaluate various existing and future climate conditions for sea level rise, tidal surge, and extreme rainfall.
- 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 Director, Stormwater Master Plans (SWMPs) Implementation and Updates, Miami-Dade Aviation Department (MDAD) , FL

- Overseeing the planning, permitting, and implementation of Stormwater Pollution Prevention Plans (SWMPs), design standards, USEPA NPDES and state environmental and surface water permitting, SWPPPs, and capital improvement programs (CIPs) for the redevelopment of Miami International Airport (MIA), Kendall-Tamiami Executive Airport (TMB), and Opa-Locka Executive (OPF) airports.
- Developed a BMP treatment train approach to retrofit stormwater treatment and attenuation, meeting passenger and aircraft safety goals while satisfying NPDES Industrial Stormwater Permit, SFWMD Environmental Resource Permit (ERP), and Total Maximum Daily Load (TMDL) requirements.
- BMP treatment train prevented the airport from constructing an industrial stormwater treatment plant, saving nearly \$50M.
- Development of airport-wide Stormwater Design Standards and Construction and Operations SWPPPs for the three airports.
- Modification and redevelopment of more than \$179M in stormwater infrastructure for runways, taxiways, terminals, fuel farms, and access roadways at MIA.



KEY PERSONNEL

Experience Highlights

- 32 years in the design/implementation of GIS, asset management (AM) programs, and technology solutions
- 100+ municipalities, utilities, and other agencies with implemented geospatial solutions and AM programs

EDUCATION:
BA – Geography

LICENSING/REGISTRATION:
GIS Certified Professional (GISP)

PERCENTAGE OF TIME ASSIGNED FULL TIME TO THIS PROJECT:
50%

TOTAL YEARS EXPERIENCE:
32

YEARS WITH CDM SMITH:
32

YEARS WITH OTHER FIRMS:
0

Jayson Brennen, GISP

Asset Management and GIS/IM – Task Leader

Roles and Responsibilities. As one of CDM Smith's most senior GIS program managers, Jayson has been part of CDM Smith's Information Management group since 1993. Jayson brings Hollywood extensive expertise developing and implementing enterprise GIS solutions that leverage innovative business intelligence and tools, such as ArcGIS Enterprise (ArcGIS Server and ArcSDE), ArcGIS online, portal for ArcGIS, computerized maintenance management system (CMMS) and document management solutions, and innovative web, mobile, and dashboard applications to support utility management. Jayson will be responsible for setting up and maintaining this program's data management systems.

GIS Technical Advisor, Citywide Stormwater Program, City of Knoxville, TN

- This program involves mapping the City's stormwater infrastructure, developing Esri-based GIS databases, completing a condition assessment, and implementing a citywide GIS program.
- To support this effort, a series of web, mobile, and dashboard solutions have been implemented to perform the rapid and accurate collection of data.
- Information collected as part of this program will feed the City's GIS database and support more effective stormwater management, capital planning, and MS4 compliance.

GIS Technical Advisor, Stormwater Master Plan, City of Miami, FL

- Development of a GIS of the City's primary stormwater system, creation of a stormwater model, and development of a long-range stormwater master plan that will address a changing climate and fiscal and operational challenges.
- Completed a LiDAR survey of the City's seawall system to obtain accurate mapping to support modeling of tidal surges and impacts to the system.

GIS Innovation, Stormwater Master Plan, City of Virginia Beach, VA

- Implementation of several GIS-based technologies that support program components, including mobile tools to support real-time GIS data collection, data development methods to enable more efficient data update, and the conceptualization of a WebGIS environment that allows City staff to visualize, analyze, and query the results of the master plan through an innovative GIS-based environment.
- WebGIS environment was very well received by the City as it provides them with an interactive stormwater master plan that supports more effective stormwater management.
- Conceptualized the implementation of a "Stormwater Compliance Dashboard", which will be designed to track progress against compliance measures and support reporting.

Project Manager, City-Wide Wastewater and Stormwater GIS and Utility Asset Management, City of Providence, RI

- Stormwater and sewer GIS development and asset inventory, included extensive plan research, GPS data collection, invert survey, GIS data development, and applications programming.
- Hundreds of miles of utilities were migrated to an Esri-based GIS environment; cloud GIS tools enabled the client to access the data as it is being developed, and iPad and web applications are being implemented to support enhanced system operations and asset management.



KEY PERSONNEL

Experience Highlights

- Experienced in programs with up to 10,000 individual task/activities and up to \$750M in individual value
- Three large programs utilizing e-Builder® and Primavera Unifier®

EDUCATION:

BS – Recreation Industry Management

LICENSING/REGISTRATION:

Planning and Scheduling Professional Certification (PSP)

PERCENTAGE OF TIME ASSIGNED FULL TIME TO

THIS PROJECT:

70%

TOTAL YEARS EXPERIENCE:

24

YEARS WITH CDM SMITH:

16

YEARS WITH OTHER FIRMS:

8

Andreas Martinese, PSP

Program Controls – Task Leader

Roles and Responsibilities. Experience in the project controls and project management field. He has expertise in the analytical and technical areas using multiple software programs including P6 Primavera Enterprise, P3 Primavera Planning and Scheduling, P3 Primavera Resource and Cost Analysis, and earned value system.

Scheduler, Clean Water 2020, City of Columbia Water & Sewer Department, SC

- Updates dozens of project schedules on this 10-year, \$750M Clean Water 2020 program designed to meet the requirements of the Federal CD that Columbia has entered into with the US EPA.
- The information management system includes the integration of new data review and management applications with the City's existing Esri enterprise GIS, Cityworks work order management software, and financial and capital projects tracking.

Scheduler, Clean Water Nashville, Metro Water Services Department, TN

- \$1.5B CD program, review and provides comments for cost loaded project schedules part of the master program schedule that integrates Corrective Action Plan/Engineering Report (separate sewer system) projects with the LTCP (combined sewer system) projects into a single program plan.
- Implementation and administration of the PMIS is keeping this program on track.
- Program has included 80+ Projects (5.5k lateral connections renewed; 2.7K manholes rehabbed; and more than 100 miles of repaired and replaced sewer pipe).

Scheduler, Comprehensive Stormwater Master Plan, City of Miami, FL

- Multi-year, \$5.3M effort which includes the creation of an interactive stormwater 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, and 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.

Scheduler, Davidson Branch PS Upgrades, Metro Water Services Department, TN

- Completion of a \$30M pump station and equalization facility upgrade project to reduce sanitary sewer overflows near the site.
- Design and construction of a new duty pump station, a wet weather pump station, 6 mgd of equalization, and associated piping in and around the site.
- Provided review and comments for the cost-loaded schedule.

Scheduler, Lead Free DC, District of Columbia Water and Sewer Authority, Washington DC

- \$1.8B program, provides schedule reviews, updates, analysis, accounting, budgeting, and forecasting for multiple projects within program.

Scheduler, Combined Sewer Overflow Facilities for Gowanus Canal, New York City Environmental Protection, Brooklyn, NY

- \$320M 4-year project, provides schedule reviews, analysis, what-if scenarios for cost-loaded schedule, hosting monthly team schedule progress meetings.



KEY PERSONNEL

Experience Highlights

- Technical water resources specialist for the firm, daughter of the late County Commissioner Anne Kolb (namesake for Hollywood's coastal mangrove wetland nature center), continues to bring her master planning and environmental engineering experience with strategic technical reviews, sustainability perspective, and a deep-rooted concern for the environmental resiliency of her home town

EDUCATION:

SM - Engineering (Environmental Systems); BE - Environmental and Water Resources Engineering

LICENSING/REGISTRATION:

PE (ME)

PERCENTAGE OF TIME ASSIGNED FULL TIME TO THIS PROJECT:
40%

TOTAL YEARS EXPERIENCE:

44

YEARS WITH CDM SMITH:

44

YEARS WITH OTHER FIRMS:

0

Bernadette Kolb, PE

Program Advisor and Quality Review (Master Plan Strategist)

Roles and Responsibilities. Bernadette is technical water resources specialist for the firm, specializing in stormwater management and water quality. She will continue to bring her master planning and environmental engineering experience with strategic technical reviews, sustainability perspective. She has directed numerous projects related to Clean Water Act (CWA) NPDES permitting for stormwater quality, including developing and reviewing permit applications, preparing expert technical comments on draft permits, and leading meetings with regulatory agencies.

Technical Director, Sassaquin Pond Phase 1 Water Quality Improvements, New Bedford, MA

- Directed Phase 1 of this project to define short- and long-term projects to improve the water quality of Sassaquin Pond, which has been degraded by development in its watershed and rerouting of stormwater to the pond. Issues have manifested as trash, phragmites infestation, poor water quality, increased sedimentation, and cyanobacteria blooms.
- Recommendations include improved stormwater system maintenance, floatables control, an alum treatment, diverting stormwater from the pond, public education, a long-term monitoring program, phragmites removal, and possible dredging to restore a spring.

Technical Advisor, NPDES Compliance Strategy Study, Marion, MA

- Provided guidance on compliance strategies for Marion MA to meet its new stringent draft NPDES permit.
- The feasibility of an ocean outfall is a promising option, and the work includes assessment of alignments, pipe material selection, hydraulics, and an initial permitting evaluation.

Technical Advisor, WET Testing Review and Toxicity Reduction Evaluation, Brunswick County, NC

- The Northwest water treatment plant has an existing NPDES discharge to a low flow stream that periodically fails its WET test. The use of chlorine dioxide in the treatment process was a suspected toxicant.

Technical Director, Water Quality Sampling and NPDES Permitting Support, Township of Parsippany-Troy Hills, NJ

- Reviewed the NPDES discharge permit for the Township of Parsippany-Troy Hills, NJ and oversaw the development of a regulatory-driven monitoring program for the Township to perform a reasonable potential analysis (RPA) for nitrate and copper.
- Directed development of a NJDEP-approved field sampling plan and Quality Assurance Project Plan (QAPP).
- Reviewed the data collected from the field programs and the RPA resulting from the field work and advised on strategy for negotiating with regulators to seek changes to the NPDES permit for nitrate and copper permit limits.

Project Manager, MWRA Water System Studies, Greater Boston, MA

- Analyzed three problems about potential toxic effects from chlorine: (1) whether there would be toxic effects to aquatic life in two distribution system reservoirs from initiation of chloramination upstream of these reservoirs (including whether a NPDES permit was needed – it was not), (2) assessment of which receiving waters in metro Boston could receive blowoff discharges from regular maintenance activities without dechlorination of the discharge, and (3) the need to dechlorinate system water if it was used to make up for water losses in standby distribution reservoirs.
- For one reservoir whose level floated with system pressure, thermistor arrays were installed to understand the mixing due to daily fill and draw at the reservoir's bottom.



KEY PERSONNEL

Experience Highlights

- \$7B in CIPs overseen/managed
- 100+ pipeline projects
- 8 large water/wastewater programs

EDUCATION:

MBA – Finance; MS – Civil and Environmental Engineering;
BS – Civil Engineering

LICENSING/REGISTRATION:

PE (DC, NJ, MA); Certified Construction Manager (CCM);
Certified Project Management Professional (PMP)

PERCENTAGE OF TIME ASSIGNED FULL TIME TO
THIS PROJECT:
30%

TOTAL YEARS EXPERIENCE:
40

YEARS WITH CDM SMITH:
17

YEARS WITH OTHER FIRMS:
23

Brian McCarthy, PE, PMP, CCM

Program Advisor and Quality Review (Program Specialist)

Roles and Responsibilities. Brian is a proven manager of complex, multi-discipline programs, having managed/supported \$7B in CIPs that involve hundreds of projects and involvement of many subconsultants. He will be responsible for high-level programmatic oversight of schedule and budget and facilitating resourcing and delivery of services. Brian's experience includes the \$3.2B Clean Water Program in Hartford, CT is particularly notable, having overseen 100+ projects spanning 217+ miles of pipeline R&R over 20+ years.

Program Advisor, Clean Water 2020 Program, City of Columbia, SC

- Eleven-year, award-winning \$750M CIP and Consent Decree program, regularly collaborating with the Program Manager on the direction and prioritization of the Program.
- The City has established a goal to become a 'Smart Water' utility by significantly improving their approach to O&M and management practices.
- Works closely with our program team to monitor and evaluate progress toward achieving program goals, assure that quality procedures are adopted and executed, and that CDM Smith provides the right resources to meet the program's evolving needs.

Risk Manager, Lead Free DC Program, DC Water, Washington DC

- \$1.5B Lead Service Line Replacement (LSLR) Program program began with the goal of replacing 28,000 lead service lines (LSLs) by 2030.
- Following a robust inventory review and update, the program increased in scope to 42,000 LSLs.
- Risk Manager during the early stages of this Program, responsible for developing overall program and project-level risk management procedures for individual water main assessment/replacement projects.

Program Control Consultant, Capital Improvement Program, Clean Water Project, The Metropolitan District Commission (MDC), Hartford, CT

- \$3.2-billion wet weather CIP known as the Clean Water Project.
- 100+ projects spanning 20+ years, and involving regulatory oversight from the State of Connecticut and the US EPA.
- District must coordinate and collaborate with these agencies, the eight member towns within its jurisdiction, flood commissions, the US Army Corps of Engineers, the public who are directly impacted by project activities and its ratepayers.
- Held a central role in integrating the program's management activities to align strategy and execution for 15 years.

Program Advisor, Program Services, Lee County Utilities, FL

- \$80M of design and construction projects for repair and replacement of water mains, pump stations, and treatment plant components.
- Led development and delivery of project status tracking tool for the client, based in Microsoft Access, the tool demonstrates a "right-sized" approach to information management and status tracking and replaced a bulky and inefficient spreadsheet-based set of tools.
- Assignment included client interviews and requirements analysis, developing and deploying a beta version of the database, user training, and deployment of a final version of the tool; the tool includes tracking and reporting on project cost, schedule milestones, contracts, stakeholders, and permits.



KEY PERSONNEL

Experience Highlights

- National expert with experience that includes 30+ Pipeline, 25+ Trenchless, and 25+ Pump Station Projects
- Published and presented more than 100 papers at ASCE, AWWA, WEF, NASTT, and other professional organizations publications and conferences

EDUCATION:

PhD – Geotechnical Engineering;
MPhil – Geotechnical Engineering;
MS – Civil Engineering; BS – Civil Engineering

LICENSING/REGISTRATION:

PE (MD, VA, DC)

PERCENTAGE OF TIME ASSIGNED FULL TIME TO

THIS PROJECT:

40%

TOTAL YEARS EXPERIENCE:

45

YEARS WITH CDM SMITH:

10

YEARS WITH OTHER FIRMS:

31

Ahmad Habibian, PhD, PE

Program Advisor and Quality Review (Utilities Infrastructure)

Roles and Responsibilities. Ahmad specializes in infrastructure management, pipeline assessment and rehabilitation, and trenchless technology. His experience covers planning, design, construction, evaluation, and rehabilitation of water and sewer systems. He is the recipient of the ASCE Stephen D. Bechtel Pipeline Engineering Award, CDM Smith Best Paper Award, AWWA DPOD Peak Performance Award, and ASCE Pipeline Division Award of Excellence.

Technical Specialist, Water Supply Agreement Metering Guidance Project, USACE Institute for Water Resources, CA

- Provided technical direction for the development of a metering guidance manual to assist the USACE to evaluate the applicability and appropriateness of various metering and data collection technologies.
- A data transmission example was also provided to support future pilot programs.

Technical Specialist, Hydraulic Capacity Analysis of Deep Tunnel Interceptor, City of Reading, PA

- Performed a hydraulic analysis of flow monitoring results to project the required carrying capacity of a new deep tunnel which would allow the decommissioning of a major pumping station.
- The study included the analysis of existing flow monitoring data, population projection, and pipe capacity determination.

Technical Advisor, Business Case Evaluation for 72-inch PCCP Transmission Main and Main Zone Pump Station Redundancy, WSSC, MD

- Provided technical direction for evaluation of various alternatives for WSSC's Potomac Water Treatment Plant Main Zone Pump Station and a 72-inch PCCP Transmission Main.
- Alternatives considered included modifications of the Pump Station, leveraging the existing open bays in the High Zone Pump Station, various open cut and tunnel option alignments for the 72-inch PCCP, and modifications to system valving and interconnections.
- The short-listed alternatives were further evaluated using a Life Cycle Analysis Tool, and a Risk Reduction Tool; both tools utilize a TBL approach and incorporate financial, environmental, and societal costs.

Technical Reviewer, Clean Water 2020 Program, City of Columbia, SC

- Eleven-year, award-winning \$750M CIP and Consent Decree program, regularly collaborating with the Program Manager on the direction and prioritization of the Program.
- The City has established a goal to become a 'Smart Water' utility by significantly improving their approach to O&M and management practices.
- Works closely with our program team to monitor and evaluate progress toward achieving program goals, assure that quality procedures are adopted and executed, and that CDM Smith provides the right resources to meet the program's evolving needs.



KEY PERSONNEL

Experience Highlights

- Management of large capital improvement programs up to \$2.7B in single value
- Involved in the implementation of 10 program management information systems (PMIS) utilizing, among others, the e-Builder® and Primavera Unifier® platforms

EDUCATION:

MS – Project Management;
BS – Civil Engineering

LICENSING/REGISTRATION:

PE (OH); Program Management
Professional (PgMP)

PERCENTAGE OF TIME ASSIGNED FULL TIME TO

THIS PROJECT:

50%

TOTAL YEARS EXPERIENCE:

30

YEARS WITH CDM SMITH:

21

YEARS WITH OTHER FIRMS:

9

Michael Krabacher, PE, PgMP

Program Advisor and Quality Review (Project Controls)

Roles and Responsibilities. Michael has significant experience in project/program controls, design management, construction management, procurement, process improvement, and risk management. He leads a multi-disciplined team of CDM Smith staff in the implementation of controls and systems for program management, construction management, construction engineering and inspection, and disaster management projects within the US and internationally.

Program Controls & Deputy Program Manager, Program Management Services, Metro Water Services Department, TN

- PMIS developed and implemented, and currently managed, it has captured more than 220,000 documents, 6,500 construction submittals, 2,500 requests for information and documented approximately \$950M in expenditures on program projects.
- Led the planning and implementation of updates to the PMIS necessary to support oversight of the \$200M Central WWTP upgrade projects delivered using CMAR delivery.
- Changes to the PMIS included updates to the Submittals, RFI, Request for Change and Daily Report business processes as required by the CMAR contract, client feedback, and needs of the Owners Representative Team.

Program Controls Manager, Program Director Services, Allegheny County Sanitary Authority (ALCOSAN), PA

- Comprehensive, \$2B long-term program will reduce the volume of CSOs by 7 billion gallons per year Michael was responsible for evaluating, recommending, and leading implementation of a new ALCOSAN PMIS built on the e-Builder platform, performing reviews of system performance, advising the ALCOSAN e-Builder administrators, and coordinating user training for ALCOSAN staff, designers, and contractors.
- System utilizes the Cost, Document, Process, Forms, and Reports modules, has unlimited licensed users, 20+ processes and approximately seventy-five active Clean Water and other capital improvement projects.

Clean Water Project and Capital Improvement Program, Metropolitan District Commission (MDC), Hartford, CT

- Led the development of the construction section of MDC's Project Management Manual, the manual contains standard processes and procedures which all MDC staff follows in order to verify the consistency, quality, and timeliness of all actions taken by personnel toward implementing the program.
- The Project Management Manual is a three-part set of documents that describe the processes, activities, and procedures necessary to efficiently execute MDC's capital projects (i.e. Clean Water Project and Capital Improvement Program).

Program Controls Specialist, PMIS Software Assessment, Stormwater Quantity & Quality (MSQ2) Program, Memphis, TN

- Assessment of a software options for a PMIS for the management of the delivery (planning, design, bidding, construction and closeout) of the City of Memphis Stormwater Quantity & Quality (MSQ2) Program.
- Performed a review of existing documentation, City software systems and Program team requirements which resulted in a list of key challenges and needs.
- Developed a focused set of test scenario and conducted system demonstrations for multiple software platforms including Trimble e-Builder Enterprise, Kahua, and Microsoft SharePoint, the resulting software assessment report compared each option against the stated requirements and included recommendations, conceptual cost estimates, and implementation plan.

ENGINEERING AND TECHNICAL SERVICES

Our team includes a deep bench of local and national experts to leverage as needed. A benefit of working with a local full-service engineering firm means the City has access to CDM Smith's additional expertise in our nearby Boca Raton office. But we also tap into our national experts as needed.



JESSICA WATTS, PE, CFM, D.WRE, ENV SP | Project Planning Design and Implementation *(Neighborhood Improvements)*

- 20 years of experience in planning, modeling, and design of stormwater management, green infrastructure, and civil/site development
- Experience encompasses a wide range of other civil and water resources projects including roadway design, federal design including, USACE, Navy, and FEMA Hazard Mitigation Grant Program (HMGP), shoreline stabilization, and resiliency projects



VIRGINIA ROACH, PE, PMP, BCEE | Project Planning Design and Implementation *(Green Infrastructure)*

- 40 years of years of experience specializing in developing stormwater management strategies and resolving combined sewer overflow (CSO)
- Technical Advisor and Reviewer for the Strathern Park, Fernangeles Recreation Center and David M. Gonzales Stormwater Projects, to alleviate local flooding, increase water supplies through stormwater capture, improve water quality, and provide recreational, social, and economic benefits, particularly within historically disadvantaged communities

ANA VALENCA DEMELO, PE, PMP, DWRE | Project Planning Design and Implementation *(Green Infrastructure/Exfiltration)*

- 29 years of experience including municipal infrastructure, stormwater management, site development, hydrologic and hydraulic modeling, environmental resource permitting, feasibility studies, and construction management
- Project manager for SFWMD STA 1W Expansion 2 for construction management for a 2,100 acres stormwater treatment area, approximately 15 miles of earthen embankments and levees, 11 remotely operated hydraulic control structures, extensive seepage management systems, access road, and approximately 6 miles of concrete lined canal

BEAU WOOD, PE | Project Planning Design and Implementation *(Pipe and Culvert Improvements)*

- 16 years of specializing in drainage design for roadway projects and design roadway conveyance and retention/ detention ponds for FDOT projects and reviewing roadway drainage design to verify the design meets FDOT design criteria
- Experience in reviewing both design and construction submittals for compliance with client design standards, construction specifications, and local and state requirements

STEWART MAGENHEIMER, PG, PMP | Project Planning Design and Implementation *(Recharge/Drainage Wells)*

- 45 years of experience focused on well design, hydrogeologic evaluations, and water resources planning including managed the design and implementation of programs involving geophysical surveying, mapping, deep injection and production well drilling and rehabilitation, hydraulic sampling and testing, and alternative water supply investigations
- 32 Surficial Aquifer System wells designed and installed in South Florida and 33 Floridan aquifer wells in Collier County

JASON MCCLAIR, PE, CFM, LEED AP | Interim Project Design

- 29 years of experience in utility infrastructure design, regulatory permitting, and computer aided flow modeling for stormwater collection, water distribution, and sanitary transmission systems
- Reviewed the Hollywood's 2004 master plan, updated the existing stormwater model using new LIDAR data, revised hydrologic parameters, and accounted for recent drainage projects and developed budget-level cost estimates to support future infrastructure investments

LAUREN MILLER, CC-P | Sustainability/Resiliency

- 20 years of experience specializing in vulnerability assessments, climate resilience, and adaptation plans
- Leads the firm's climate resilience team and strategic initiatives and works to institutionalize climate resilience as a matter of practice

GENERAL PROGRAM MANAGEMENT

As one of the world's top program management firms, we provide innovative and creative solutions tailored to our clients' specific needs to help them achieve successful outcomes on their most important programs.



JENNIFER HARRISON, PE, PMP, CCM | Program Resource Allocation

- 18 years of experience managing the planning, design, and construction of municipal infrastructure projects
- Led the development of the Construction Management Innovation Strategy (CMIS) and the Enterprise Program Management Plan (EPgMP), which established the future vision, objectives, and goals to modernize and foster a culture of innovation within USACE for the or the Construction Management Innovation Program



STACY BARNA | Funding/Grants/Appropriations

- 30 years of experience overseeing financial assistance programs and 19 years of experience at state funding agencies
- More than \$1B in funding secured and managed, she will manage the full suite of federal and state funding support, from determining the best loan or grant programs available, to managing the funding and corresponding requirements to program completion



ERICA ECHEVERRI | Public Information Officer (PIO)

- 10 years of experience specializing in creating comprehensive communication strategies, managing public workshops, and developing content for print, social media, and digital platforms
- Led community workshops and assisted in creating materials that translated complex technical information into accessible community-focused language for the City of Hollywood Stormwater Master Plan

JOAN FERNANDEZ, PE | Permitting

- 19 years of experience including permitting and development of Capital Improvement Projects (CIP) for various local clients including the City of Delray Beach, City of Sunrise, City of Boynton Beach, City of Hollywood, and Miami-Dade Sewer and Water Department

MICHAEL MITCHELL, PE | Risk Management; Alternative Delivery/Procurement Assistance

- 36 years of experience managing projects from the conception through implementation while monitoring budgets and addressing critical path items to maintain schedules for design-build and engineering, procurement, and construction project delivery types
- Proven ability to identify, assess, and mitigate risks in complex projects overseeing the daily operations and maintenance of infrastructure systems, managing the logistics of large-scale projects, and ensuring compliance with safety and regulatory standards

ALEC BOGDANOFF, PHD | Public Communication

- 15 years of unparalleled insight into the world of resilient infrastructure and a passion for making a tangible difference
- Designed a strategic communications plan with print and digital materials to simplify complex technical data for residents for the City of Hollywood Stormwater Master Plan

YANICE MERCADO, PE, PMP | Public Communication; Project Manager Support

- 24 years of experience with 20 years on similar infrastructure improvement projects with a focus on public outreach including PRASA, West Palm Beach, and the City of New Orleans
- Proven track record in managing complex stormwater project including infrastructure improvements, Including West Palm Beach's Washington Road Utility and Stormwater Outfall Improvements project, which involved significant drainage infrastructure enhancements

ASSET MANAGEMENT CONSULTING

CDM Smith has planned, developed, and implemented asset management programs across the country for utilities of all sizes, from small communities to some of the largest utilities in the world with a customer base ranging from 10,000 to over 5 million. The hallmark of our approach is to tailor a program that addresses the unique business and operating requirements of each client.



DAVID MASON, PE, PMP, D.WRE | Financial Aspects/Feasibility Studies

- 25 years of experience in stormwater regulatory permitting, watershed management, stormwater master planning, stormwater infrastructure design, GIS analysis, and stormwater utility development with 330+ water resources projects
- Task leader for cost of service analysis, developed a 20-year spending plan, and a rate model to support the funding need for the City of Hollywood for the \$900M in long-range capital projects



TRAVIS WAGNER | Digital Engineering

- 22 years of experience in digital strategy and transformation, data collection, integration, management, advanced analytics, and software
- Has helped utility leaders successfully navigate the complex landscape of asset integrity and management, operations, planning, data science, software/solutions development, hardware/technology expertise, and design



JAMES CAROLAN | System Architecture, Predictive Risk Model

- 31 years of experience using GIS technology to create complex data development and quality control procedures for use in building large-scale, municipal information systems
- Has implementing and integrating GIS data and software with a wide range of other software packages, including work order management systems, capital planning software and databases

ZACH MCCAFFREY | Data Analytics and Dashboard

- 7 years of GIS experience in ArcDesktop, ArcGIS Pro, ArcGIS Online, and Quick Terrain Modeler

MEREDITH MCELMURRY | Asset Management Specialist

- 27 years of extensive experience in asset management, business process re-engineering, and strategic development, including conducting asset maturity assessments, developing strategic asset management plans, and evaluating capital planning and prioritization processes

BRENDAN SUSINO | GIS System Mapping

- 10 years of GIS experience including spatial data analysis, geostatistical data analysis, 3D data analysis, model builder tool development, database management, and database design
- Developed the Stormwater Network geodatabase design and updated the primary stormwater management system (PSMS) to be used for SWMM model development for the City of Hollywood Stormwater Master Plan

ADAM SIMONSEN | Financial Aspects/ Feasibility Studies

- 25 years of experience solving challenges for water/wastewater utilities, and municipalities
- Has developed financial models, capital plans, and regulatory strategies for major acquisitions