

## PROGRAM CONTROLS AND REPORTING

CDM Smith's project controls team is comprised of schedulers, estimators, cost engineers and PMIS specialists. Our team has the process, tools, and experience to navigate complex project life cycles to deliver exceptional project outcomes for our clients.



### **DOUGLAS SUTTER, CCM | Program Scheduler**

- 32 years as a construction scheduler with extensive experience working with construction teams to meet fast-track schedules, he will facilitate project planning, construction scheduling, risk register facilitation, and project controls support
- Attention to detail and ability to integrate input from numerous sources to form comprehensive project schedules will be a great benefit to the Hollywood Program



### **AGOSTINO MEOLA | Coordination/Reporting/Cost Estimating**

- 30 years of experience with cost analysis and estimating for multiple projects of varying sizes and stages, including Order of Magnitude estimates (OOM), Budgetary Cost Estimates (BCE), Fair Cost Estimates (FCE), and Comparative Fair Cost Estimates (CFCE)
- Portfolio development on the owner's side by preparing and evaluating costs and budgets for future projects and portfolios, including the prioritization and risk management of future multi-year projects



### **JOHN CHANDLER | Construction Sequencing/Constructability Reviews**

- 40 years of experience in the construction and construction management field, having delivered projects totaling \$350M in constructed costs, responsibilities have also included budgeting and scheduling, permitting, report preparation, construction layout, and bid preparation
- Provides project management, bid preparation, construction management, and engineering and design services related to a variety of projects

### **BRAD TAYLOR, PMP | Cost Management/Forecasting**

- 15 years of expertise in cost control, earned value management, and risk analysis for projects valued at over \$20 billion
- Managed over \$155M in cost control capacity, ensuring consistent and timely reporting, including weekly updates on project completion, actual costs, and estimates to complete

### **KANISHQUE TODMAN | Records Management**

- 7 years of experience includes assisting project managers and construction managers managing the day-to-day construction activities including preparing monthly status report which include the tasks and subtask information and percentages within CDM Smith's scope of work and update the projects earned value

### **TIMOTHY ADAMS, PE | Prioritization Tool**

- 8 years of experience in distilling complex mathematical and engineering concepts into clear, actionable insights, ensuring the big picture is always in focus
- Regularly uses scripting languages such as Python, R, MATLAB, and Microsoft Excel VBA to develop innovative solutions, visualize large climate data sets, and streamline workflows

## SUPPLEMENTAL SERVICES

### **DAVID URQUHART | Superintendent**

- 34 years of experience in the construction industry, including more than 24 projects involving the construction of treatment facilities and other associated infrastructure; superintendent for projects up to \$672M in value
- Entrenched in Florida/Southeast construction/design-build programs for the more than three decades, working on-site with design and construction teams to deliver award-winning facilities that not only meet schedule and budget, but exceed safety and quality requirements

## Tab E: Approach to Scope of Work



# Approach to Scope of Work

## Understanding of the City's Needs, Goals and Objectives

The City of Hollywood is facing an urgent and escalating challenge of large-scale flooding due to aging stormwater infrastructure, low-lying topography, and the impacts of sea level rise, higher tides, and more intense storm events. Without immediate and strategic intervention, these vulnerabilities will lead to significant societal and economic consequences, including property damage, economic loss, disruption to businesses and daily routines, and a diminished quality of life for residents. Over the past four years, CDM Smith worked with the City to develop the detailed Stormwater Master Plan (SWMP) analysis citywide and its capital improvement program (CIP) recommendations. The SWMP focuses on resolving flooding issues in each neighborhood through close coordination with the residents, community associations, City Commission, and the Department of Public Utilities. Our recommendations follow a two-step strategy: implementing smaller, immediately actionable interim-relief projects to address known flooding hot spots, while the large CIP designs are implemented. The City Commission officially and unanimously adopted the SWMP and its capital improvements plan in June of 2025.

### 2-step citywide strategy designed to help meet Hollywood's flood mitigation goals

1 INTERIM PROJECTS \$100K-\$4M	LARGE CAPITAL PROJECTS \$25-40M
<ul style="list-style-type: none"> <li>Smaller jobs that fix key problem spots now</li> <li>Funded by current fees</li> </ul>	<ul style="list-style-type: none"> <li>Full system upgrades by area</li> <li>Funded by future bonds, grants, or loans</li> </ul>

*At the June 2025 Commission Meeting, the City presented a two-step strategy. CDM Smith collaborated closely with the City to develop and prioritize both interim projects and major capital initiatives as part of the SWMP development.*

The City is seeking a qualified, experienced program management firm to serve as a long-term partner. The selected firm will help implement and manage the City's comprehensive stormwater CIP. This program must align with the City's strategic goals and timelines. The selected firm will provide full-spectrum program management and engineering services to support the operation and maintenance of the City's stormwater system through successful execution of the SWMP and CIP.



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.



**Continuity:** The continued involvement of key individuals from the Stormwater Master Plan and ongoing implementation assistance (Jon Goldman Project Manager, Michael Schmidt Lead Engineer, and Tom Nye Lead Modeler) will provide efficiencies and a seamless transition to the new Program contract.



**Extensive System Knowledge:** Through our work on the SWMP, we've developed a strong understanding of the challenges extreme rainfall, tidal surges, sea level rise, and water quality pose for the City. We also recognize the constraints of flat topography, built-out conditions, and existing system limitations—factors that will continue to inform our cost-effective and efficient implementation strategies.



**Robust Program Controls:** Thoughtful development and consistent application of the Project's Program Management Plan (PgMP) will certify alignment across all phases. Our integrated program control dashboards will enhance transparency for the City and its stakeholders.



**Tailored to Your Needs:** Through our past work we've consistently demonstrated our ability to adapt to changes in funding availability, staffing levels, and evolving regulatory requirements—while still achieving program objectives. Our unmatched local presence, supported by a deep bench of national experts, provides comprehensive support across all phases of the Program.



**Community Focus:** The success of this program 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. Our team remains committed to ongoing collaboration with the community to deliver stormwater improvements.



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



## Our approach centers on building a “one team” culture, where all parties work together with a shared focus on delivering successful projects on time and with excellence.

We are committed to fostering a collaborative, transparent, and unified environment among all program and project stakeholders—including the City, designers, constructors, FDOT, regulatory agencies, and community partners.

By cultivating trust and open communication, we will create the conditions for improved quality, increased productivity, and proactive problem-solving. Challenges will be addressed swiftly and at the project level, ensuring continuous forward momentum and minimizing disruptions. This integrated approach not only enhances outcomes but also strengthens relationships and accountability across the board.

CDM Smith stands ready to be the City’s trusted partner in the implementation of the Stormwater Program, bringing unmatched program management expertise, deep technical and institutional knowledge, and a proven track record in delivering large-scale stormwater infrastructure solutions. We understand the urgency of the City’s flooding challenges and are committed to implementing our detailed, proactive, SWMP in a manner that **delivers early, visible results, adapts as new data or funding becomes available, and safeguard’s consistency in future planning.** With CDM Smith, the City gains the continued partnership of 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.

### A Forward-Thinking Stormwater Master Plan is Being Implemented in Hollywood

“Following 2 years of engineering analysis, the plan (SWMP) provides us with a list of projects, street by street, neighborhood by neighborhood, enabling us to better address stormwater management throughout the city - with consideration to Flood Control, Water Quality Protection, Aquifer Recharge, Supply Conservation and Reuse Conservation, Operation and Maintenance Stormwater Utility Sufficiency, Long Term Financing, Community Acceptance, Adaptability, Resiliency, Fairness in execution and Sustainability.”

— Josh Levy, Mayor City of Hollywood

## Overview of CDM Smith’s Proposed Vision, Approach, Ideas and Methodology

The City has committed to implementing the recommended SWMP as the formal strategy for reducing flood risk and strengthening drainage infrastructure over the next 30 years.

Our proposed local leadership is in place and experienced with your SWMP and CIP allowing Program Management services to proceed at a rapid pace with “no learning curve”. CDM Smith knows your programs, your policies, constraints and opportunities, and the industry’s best practices. Our collaborative work to date will provide an aligned and well-planned stormwater infrastructure solution. Our vision for a successful program centers on leveraging the detailed stormwater model to guide decision-making.

We will implement a transparent, collaborative approach with a strong emphasis on community engagement, an essential factor in project success. Our methodology outlines targeted strategies for program staffing support, project and program execution, accelerated schedules aligned with the SWMP timeline, stakeholder engagement, and securing bond, loan, and grant funding.

CDM Smith will make extensive use of digital solutions to support this program by leveraging the City’s existing GIS and program data environments and extending them to meet the evolving needs of the Program. We will deploy a suite of integrated technologies, including GIS-based mobile tools for field inspections, data-driven dashboards for progress tracking, and AI-powered solutions to enhance efficiency to support the full lifecycle of the stormwater program. Continuing with our proficient SWMP technical team provides the City with access to efficient alternative analyses to unforeseen “what-if” scenarios and the needed flexibility

to respond to alternate solutions that may require deviations from the initial plan during final design or construction. No other team has CDM Smith's level of understanding of the City's Program and its requirements.

As the City embarks on implementing projects under the Program, our team, led by seasoned program management professional Karen Counes, with support from our SWMP team, will work closely with the City to maintain consistency in future planning and help remain competitive for state and federal funding. Our experts will assist the City in the shift from reactive repairs to proactive, system-wide solutions. Of particular importance to the City, CDM Smith is retaining the institutional knowledge of the primary authors of the Citywide SWMP. This includes the core leadership team: Engineer of Record and Project Manager **Jonathan Goldman, PE, BCEE, PMP**; Senior Water Resources Engineer and stormwater modeler **Tom Nye, PhD, PE**; and Senior Stormwater Engineer **Michael Schmidt, PE, BCEE, WRE**. This team will provide continuity throughout implementation and give the City confidence that the same dedicated team will remain committed to advancing the City's interests.

## Approach to Performing the Work

### Major Tasks and Responsibilities

Our team has developed a plan for the Program outlining major tasks and responsibilities, project time scheduled, and staff assigned.

### Matching Staff to the Needs

Part of our plan development includes matching staff to the needs, ramping up the staff proportional and adjustable to the workload, and aligning with the 2-step citywide strategy. The CDM Smith program staff involved through all phases of the Program include Program Manager **Karen Counes, PE\***, Onsite Project Manager **Juan Mendoza, Jr., PMP** who will guide the daily activities, and project engineers Jon Goldman and Tom Nye who will leverage all the existing knowledge of the SWMP efforts and maintain their current role of engagement and support of City projects.

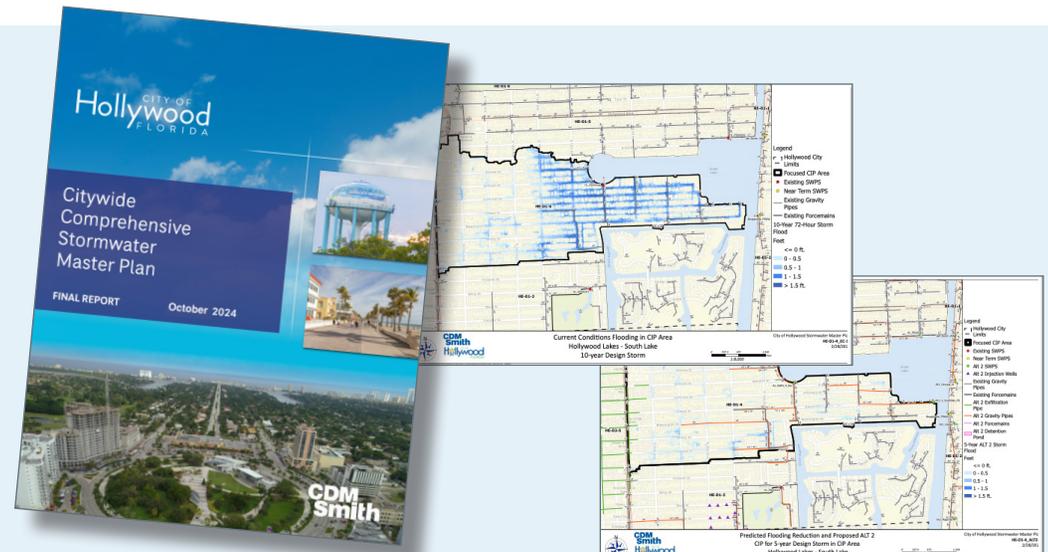
- Overall Program Manager Karen Counes will mobilize the team on Day 1 and lead its efforts through close coordination with City staff.
- Onsite Project Manager Juan Mendoza brings a proven ability to identify program needs and lead the right team with the right skills for any task. As our onsite project manager, Juan will be 100% dedicated



### Transparent, Collaborative Approach Built with the Future in Mind

We are committed to fostering a collaborative, transparent, and unified environment among all program and project stakeholders—including the City, designers, constructors, connected state and county systems and municipalities, regulatory agencies, and community partners. Our approach centers on building a “one team” culture, where all parties work together with a shared focus on delivering successful projects on time and with excellence.

By cultivating trust and open communication, we create the conditions for improved quality, increased productivity, and proactive problem-solving. Challenges are addressed swiftly and at the project level, ensuring continuous forward momentum and minimizing disruptions. This integrated approach not only enhances outcomes but also strengthens relationships and accountability across the board.



to the City from the notice to proceed. He has successfully led programs and projects across the full lifecycle—from planning through operations—and will conduct daily activities for the City including:

- Manage projects.
- Report daily to the Utility Director.
- Coordinate projects with City project managers and assign additional project managers, as needed, from CDM Smith and CTA.
- Track program budget as well as individual projects with each project manager.
- Update schedule.
- Manage the document control system.
- Identify staffing and support resources to best serve the City's evolving needs.
- Collaborate closely with Jon Goldman, Tom Nye, and Suzanne Mechler to engage the right team members at the right time.
- Your proven team of **Jon Goldman, Tom Nye** and **Mike Schmidt** will continue to work as your dedicated engineering team leveraging their knowledge of the City's SWMP and infrastructure system for program tasks involving:
  - Expedited engineering analysis and review of stormwater design plans for conformance to the SWMP and analysis of required modifications to CIP designs and phasing refinements as project coordination opportunities arise.
  - Impacts of new development and re-development.
  - Assistance with permitting issues using the Citywide stormwater model.
  - Analysis of impacts of further phasing for construction execution.
  - Technical presentations and engineering responses to inquiries from staff, residents, city management, and commission on program technical questions and concerns.
  - Updating the stormwater model as a "living document" to keep a current snapshot of the Program progress and baseline for comparison of key metrics such as flood reduction and time of dissipation after storms pre-and post-project construction.
  - **Program Controls Lead, Andreas Martinese, PSP** will develop budget and tracking progress and reporting, critical for program success. The approach to controls management will be documented in our project specific policies and procedures. Our program advisors and quality review staff will be engaged to guide the program, reinforce SWMP objectives, and provide big-picture utilities infrastructure assessment. He will:
    - Guide our controls team in the development of the controls portion of the PgMP.
    - Implement established procedures in support of controls at the project and program levels.
    - Lead a team that will perform an assessment of the City's need for a Project Management Information System (PMIS) dedicated to the Stormwater Program.



**Onsite Project Manager**  
**Juan Mendoza,**  
**Jr., PMP**

The value Juan brings immediately to the City include:

- A manager/business mindset as a Project Management Professional with Business Management background and a MBA.
- Experience in construction including logistics, operations, and various enterprise solution systems for capital program and construction project management including Prolog, Procure, Primavera, etc.
- Fluent in Spanish with a good-neighbor attitude and a focus on diverse engagement, timeliness of communication, and detailed and real-time reporting.
- Skilled at employing innovative tools such as GIS, Asset Management and Project Controls dashboards and leading the team to integrate multiple software systems to create efficiencies and transparency.
- The ability to manage multiple projects running concurrently with the right procurement plan aligned with the funding plan.
- Thrives on successful project completion and measurable results.

## Major Tasks and Scope Items

### DESIGN

Whether requested to serve in a program-related capacity overseeing the work of another engineer/architect or delivering a project as the engineer/architect, CDM Smith will support the City through implementation. Our team has served in both capacities and has a strong understanding of the necessary steps for success through all phases of design development. We will work with the City to promote collaboration and input from various internal stakeholders to gain consensus on these elements. Frequent communication with these stakeholders and formal signoffs will document input with formal communications and deliverables stored in an electronic document management system for ease of reference for all.

The City Commission has already prioritized the urgent, interim projects as part of the resolution passed on June 18th, 2025. Our team will utilize this prioritization aligned with funding availability (stormwater rate adjustment to be initiated October 1, 2025) with pay-as-you go funding to immediately implement the design phase of these projects. For execution of design associated with these urgent, interim project designs, CDM Smith and CMA will split the project workload and initiate fast-tracked designs in parallel with the schedule and priority previously approved by the City.

For the remaining CIP projects, the team will follow the process for solicitation of design consultants and technical quality review of deliverables against the project objectives through formal reviews at the 60 and 90 percent design completion levels. A budget and schedule review will also occur at these key stages to validate costs and schedule and implement mitigation measures if needed. This will allow for consistent, well-informed management reports to the City to quickly see the status of all projects for technical progress, budget, and schedule.

### QUALITY MANAGEMENT PROCESSES

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. Our team will be responsible for quality management of the overall program and, in that context, will share quality assurance (QA) responsibilities with the parties responsible for the development of design and construction work-products. The project designers and construction contractors will be required to submit their own QA/QC plans for review and approval. They will then be held responsible for QC of their work and for QA activities to check that



## Quality Management and Improvement: City of Nashville's Clean Water Program

A long-term program, the City of Nashville's Clean Water Program, involved tracking and auditing projects using certain themes over a series of years, taking the data and making some changes to yield process efficiencies and reduce risk exposure for the City. The studies of the lessons yielded unexpected points of improvement and ultimately benefited the client in terms of more efficient delivery. After assessing the data from the quality audits, with some of the lessons learned shown in the table, the team found that there were ways to improve our processes and the City's processes for project delivery. In this case, the program management plan and quality plans were modified to improve communications during the design and construction of projects, attention to issue response times received more focus, and the team changed the business processes to improve flow and coordination to improve the quality of deliverables and the overall delivery process, which also reduced risk exposure in field construction activities.

### Lesson Learned Themes

THEME	NUMBER OF PROJECTS	PLANNING	DESIGN	CONSTRUCTION
Improve Communications with other Metro Departments	8	✓	✓	✓
Improve Communications with Customers/Council	7			✓
Timely Identification and Response to Issues	6			✓
Verify Field Conditions	6	✓	✓	✓
Verify Edits to Standard Program Documents	3		✓	
Modify Schedule Specifications for Rehabilitation Projects	3			✓
Coordinate with Other Projects	2	✓	✓	

their approved QC procedures are being carried out. At CDM Smith, our program management teams continuously strive for quality improvement. One of the ways we do this is using quality audits and the documentation of lessons learned from current and past programs, which help teams identify areas of improvement. Teams can then work to make changes to processes and behaviors to further improve the quality of products and services.

## CONSTRUCTION PHASE SERVICES

CDM Smith understands the City is looking for the Program team to provide full construction, engineering and inspection (CEI) services for urgent, interim CIP projects, R&R projects, and other fast-track projects where the Program team is serving as the designer. The scope of CEI services will include review of technical submittals, inspection of certain work elements and involvement in any issues that involve the project's design intent. The City also requires the Program team to provide construction management (CM) services for all other CIP projects that the Program team does not design. This would include management/administration of the construction contract, on-site representation, progress monitoring, schedule review, quality assurance, and reporting. The City typically delivers construction using a design-bid-build approach and existing City standard specifications, design contracts, and construction phase manuals address the required standard policies and procedures.



## CONSTRUCTION, ENGINEERING, AND INSPECTION METHODOLOGY

CDM Smith takes a detailed and focused approach to the administration of our field construction, engineering, and inspection services. We know that a carefully planned field operation leads to smoother coordination, reduced delays, cost savings, and increases the chances of successful delivery of the Program. Critical CEI activities are summarized as follow:

**Establish Document and Communication Protocols:** CDM Smith recognizes the importance of records management and communications in any construction operation. Document management is paramount in achieving success and maintaining a proper project record for contract, legal, financial, permitting compliance, and future asset management. Our approach emphasizes structured communication and meticulous document control to verify project success, legal compliance, and operational efficiency. In partnership with the City, we will implement a unified system that supports transparency, accountability, and real-time collaboration across all stakeholders by establishing:

- **Unified Platform:** All stakeholders (City staff, designers, contractors) use a single, common, user friendly, document control system and interface for consistency, transparency, and ease of use which integrates all of the key parameters and access required to manage and control construction services.
- **PgMP:** Developed jointly with the City to define roles, points of contact, responsibilities, and procedures for daily operations and unexpected field conditions.
- **Dedicated Oversight:** Onsite Project Manager Juan Mendoza leads communication efforts and provides protocol adherence.
- **Trained CEI Staff:** Personnel skilled in managing large volumes of data and maintaining accurate records. Examples of these data include the following:
  - Requests for information (RFIs).
  - Meeting agendas and minutes.
  - Public notices and stakeholder communications.
  - Shop drawings and construction submittals.
  - Daily construction progress reports.
  - Payment applications and material testing results.
  - Construction claims and record drawings management.

**Construction Communication and Protocols:** Communication in construction operations is critical for safety, schedule management, stakeholder notification, and identifying any areas of potential challenges before they impact project schedule or quality. CDM Smith's CEI team keeps all parties informed and aligned throughout construction by assuring communication is managed by the following:

- **Central Liaison:** CEI staff coordinate communication between the City, contractors, and agencies.
- **Standardized Protocols:** Communication plans are included in the Construction Management Plan and shared with all team members.
- **Proactive Issue Management:** Protocols outline how to report and respond to hazards or schedule risks.
- Additionally, the CEI staff will establish Protocol Components in the following areas:
  - Health and Safety procedures.
  - Emergency communications.
  - Compliance notices.
  - County document formats.
  - Field operations documentation.

**Pre-Construction Services:** CDM Smith's CEI personnel begin the construction process at the pre-construction stage. Our staff will:

- Conduct constructability and operability reviews of contract documents.
- Value Engineer plans for potential project cost savings from both a project and a program perspective.
- Identify gaps in schedules, testing plans, and manuals.
- Align project team expectations to support cost, schedule, and quality goals.

**Field Quality Management:** CDM Smith will collaborate and partner with the contractor to verify understanding of the plans and specifications, timely delivery of project milestones and verify compliance. The CEI team will:

- Monitor construction progress and quality through daily inspections and reporting.
- Track discrepancies and coordinate timely resolutions with the City and contractor.
- Manage change documentation and verify updates are reflected in red-line and as-built drawings.

**Inspection and Reporting:** Our project team understands that specialty inspection availability and working hours shall be at the discretion of the City's Project Manager and may vary as required to provide observation services to cover work being conducted by the design-builder. This includes both night and weekend hours.

- Provide 24/7 inspection coverage, as required, including night and weekend shifts.
- Attend and document all field testing, commissioning, and startup activities.
- Maintain photographic and digital records of construction progress.
- Conduct monthly progress meetings and specialty issue-resolution sessions.

**Commitment to the City:** Acting as liaison our CEI team will verify that all project parties are transparency and responsiveness. That all parties uphold safety, schedule, and stakeholder communication standards, and that we are there to support the City's goals through proactive issue management and collaborative problem-solving.

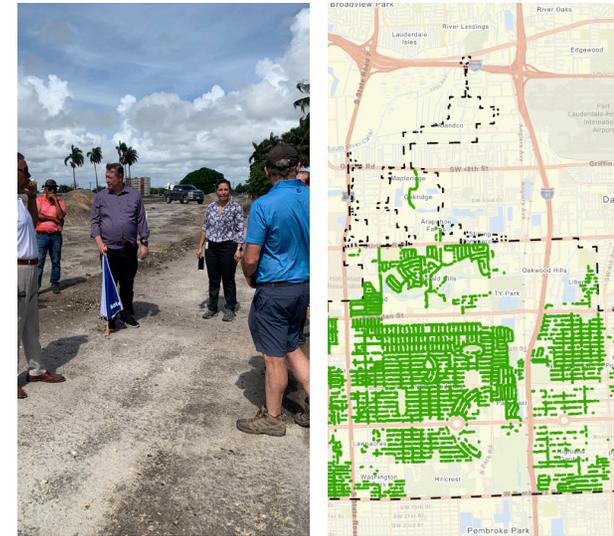
## COORDINATION WITH OTHER STAKEHOLDERS AND PROJECT TEAMS

Over the past several years, CDM Smith has demonstrated our ability to work with multiple designers and contractors and will continue that communication-driven approach to project planning and execution through the Stormwater Program. We have also worked successfully with the broad base of regulatory agencies by coordinating regularly with designers from FDOT, South Broward Drainage District, Central Broward Drainage District, Broward County MPO, Broward County EPD, FDEP, SFWMD, and the neighboring cities of Dania Beach, Pembroke Pines, and Hallandale Beach to coordinate future stormwater plans, initiatives, and projects to verify the latest data, plans, and infrastructure operations were accounted for in the SMWP and cost-sharing opportunities for multi-jurisdictional benefits were discussed.

CDM Smith has delivered successful project coordination in the role and has been the primary point of contact for the City for several key City projects:

- For the **Hollywood Beach Golf course renovation project**, CDM Smith analyzed and provided the conceptual designs to guide the developers to seamlessly incorporate the future SWMP infrastructure into the golf course and modify their stormwater infrastructure for no impact in the interim condition until the SMWP CIP is constructed.
- For the **City's GO Bond Shoreline Protection Project**, CDM Smith analyzed and alerted the City early on to an interim condition of potential exacerbated flooding discovered by applying the new seawall plans to the SMWP model. We developed a solution to reduce the impact of the interim condition and conceptually designed a system of removable weirs "gaps" in the seawalls at strategic locations to allow stormwater water to flow off of the land until the large future pump stations are constructed, that were seamlessly incorporated into the City's design without a schedule delay.
- For the **Orangebrook Golf Course Development**, CDM Smith analyzed and provided a design review by incorporating the City's P3 plans into the larger, more detailed SWMP Model, and analyzed for both present condition impacts and needed future dual-use stormwater features to incorporate per the SWMP CIP and is currently working with the designers to incorporate the features and is assisting with the permitting of the project.
- For the **Sunset Golf Course**, CDM Smith has been providing design reviews of the proposed City park plans as they evolve and providing insight to the City on the their impact on the future SWMP CIP.
- For the **Barrier Island**, CDM Smith has been working with FDOT's and its designers to analyze and validate the four new stormwater pump stations and has provided conceptual design input to the projects. Working with the Beaches CRA, CDM Smith has provided coordination and design guidance for the Streets Road Raising projects.
- For the **City's Johnson Street culvert joint project with FDOT**, CDM Smith has provided the designer the conceptual layout and sizing base of the future SWMP requirements and provided the permit technical support for the project.
- CDM Smith analyzed and provided the conceptual design cross sections and pre-post project impacts from the model for the **City's Eco Grand Primary Stormwater Conveyance Ditch restoration project**.

CDM Smith will continue this coordination and relationship with the various City departments and entities to continue moving the SWMP and Program forward with rapid responses and solutions.



## PUBLIC OUTREACH SERVICES

A program of this magnitude represents a significant undertaking for any city, and its impact on residents must be thoughtfully acknowledged. Given the scale of investment and its implications for the City's customers and taxpayers, it is essential that the program's benefits are clearly articulated and consistently communicated.

To support this critical dialogue, our project team includes Brizaga, a public relations firm, with **Erica Echeverri serving as the Public Information Officer (PIO)**. Erica will lead the development of a strategic communications plan designed to craft and deliver key messages tailored to each target audience. The activities are summarized below:

- **Public Acceptance and Outreach:** Our approach will build public support through transparency, clarity, and empathy. Using tailored, story-driven communications, we will craft neighborhood-specific messaging, use multilingual materials, and develop interactive visuals to show community benefits.
- **Communication Plan and Rapid Response:** Brizaga will implement a comprehensive Communications Plan with a built-in Rapid Response Protocol—ensuring timely, consistent information reaches residents before, during, and after key project milestones. This includes FAQs, fact sheets, and social media.
- **Technology-Enhanced Engagement:** Our team will leverage digital tools to broaden participation and simplify outreach, including virtual and hybrid workshops, online portals for comments, real-time project dashboards, including ProjectWatch, and geo-targeted surveys and interactive maps.
- **Public Information Officer (PIO) Role:** Brizaga will coordinate closely with the City's team and the office of Communications, Marketing, Economic Development (CMED), ensuring unified messaging across media, public meetings, and community updates.
- **Real-Time Response To Citizen Concerns:** Residents will always know what is happening, when, and why. Our approach includes pre-construction notices and signage, onsite representatives during active work, rapid-response channels (hotline, email), and proactive listening sessions within the community.

With Brizaga as a key team member, communication is not an add-on—it's a core function. Our team will help build understanding and trust so the City can deliver a stormwater program that protects neighborhoods and earns lasting public support.

## Public Communication/Notification Plan

### ACTIVITIES

- Identify stakeholders for each project or project package, including elected representatives, partner agencies, civic and community leaders, and impacted residents
- Survey residents about perceptions, how they'd like to receive information and ways to improve outreach
- Define an outreach plan specific to each project package and the neighborhood
- As needed, partner with residents to create an advisory board
- Implement the outreach plan and participate in community meetings and/or events
- Facilitate distribution of information through flyers, letters, phone calls, social media, blogs, and communication with press, in addition to using non-traditional tools, such as artistic decals and signage

### OUTCOMES

- Increased trust
- Increased information sharing
- Increased number of residents notified
- Increased understanding of infrastructure projects and City's objectives
- Strengthened partnerships
- Reduced construction complaints
- Increased facilitation of meeting program implementation goals



As part of Miami-Dade's Countywide Resilience Hub Network Strategy, Brizaga led bilingual outreach in Overtown, Hialeah, and South Miami-Dade. They developed Spanish-language handouts and participated in multiple community events, each engaging 20 to 40 participants, including residents, business owners, local officials, and agency staff. The input gathered helped shape a master plan for resilience hubs that provide everyday resources like education, job training, and emergency preparedness.

## Program Time Schedule and Staff Assigned

The graphic on the following page references the priority for the first 90 days and the first two years as we work to implement the R&R and urgent, interim projects while also getting the overall Program off the ground and solidify the vision to keeping it going.

 <b>DAY 1 - 90</b>	 <b>90 DAY - 1 YEAR</b>	 <b>YEAR 2 and BEYOND TASKS</b>
<p><b>KEY STAFF INVOLVEMENT:</b> Program Manager, Onsite Project Manager, Project Engineer, Program Controls Lead</p>	<p><b>KEY STAFF INVOLVEMENT:</b> Program Manager, Onsite Project Manager, Project Engineer, Program Controls Lead, Quality Management/ Project Technical Lead</p>	<p><b>KEY STAFF INVOLVEMENT:</b> Program Manager, Onsite Project Manager, Project Engineer, Program Controls Lead, Construction Manager, Quality Manager</p>
<p><b>Early Critical Planning Activities</b></p>	<p><b>Program Execution Stage</b></p>	<p><b>Program and Construction Execution</b></p>
<ul style="list-style-type: none"> <li>■ Assess City’s program readiness (initiated by SWMP team)</li> <li>■ Plan program requirements collaboratively with City (multiple departments)</li> <li>■ Evaluate CIP or projects with priorities</li> <li>■ Develop Master Program Schedule baseline</li> <li>■ Start gathering mapping data for GIS dashboards</li> <li>■ Prepare program management plan to align with City requirements and business practices</li> <li>■ Initiate interim project designs</li> <li>■ Prepare budget and schedule reporting system with digital dashboard including earned value metrics and KPIs</li> <li>■ Develop program budget and schedule and reporting templates</li> <li>■ Assess PMIS needs and City’s data requirements</li> <li>■ Develop PMIS System and begin implementation</li> <li>■ Start interim project plan and sequence</li> <li>■ Determine permit requirements and near-term permitting submittals required and prepare schedule of activities</li> <li>■ Determine City’s public outreach and reporting requirements and begin preparing standard reporting formats along with stakeholder list for distribution</li> <li>■ Begin preparing long-term capital project list and begin prioritizing projects based upon risk criteria as per the Risk Management section in the PgMP</li> <li>■ <b>REQUIREMENTS:</b> Weekly meetings with City staff, monthly City briefings</li> </ul>	<ul style="list-style-type: none"> <li>■ Start full program execution</li> <li>■ Continue to enact PgMP elements</li> <li>■ Start adding program staff as activities ramp up</li> <li>■ Begin monthly reporting for stakeholders</li> <li>■ Begin construction phase planning and construction sequencing for both urgent, interim R&amp;R projects and longer-term CIP projects</li> <li>■ Begin adding design data and prepared data into the asset management system</li> <li>■ Identify near-term risks and longer term risks and begin risk mitigation strategies</li> <li>■ Continue with Urgent Interim and R&amp;R planning</li> <li>■ Prepare detailed scopes of work for A/E contractors</li> <li>■ Begin the procurement and design process</li> <li>■ Start budget and tracking progress and reporting with controls team.</li> <li>■ Revisit CIP plan and evaluate priority assignments, master schedule, and sequencing of procurement</li> </ul>	<ul style="list-style-type: none"> <li>■ Provide continued leadership, training and onboarding for all program staff, as needed</li> <li>■ Continued oversight of the design and construction of infrastructure projects</li> <li>■ Continue to work with leaders across various departments and external agencies to help streamline projects</li> <li>■ Assure KPIs are met and/or adjustments are made to keep the Program on track</li> <li>■ Continue standard program reporting</li> <li>■ Ongoing lessons learned and risk management</li> <li>■ Continue with design of later-term scheduled CIP projects</li> <li>■ Continue with construction of urgent, interim R&amp;R projects</li> <li>■ Begin construction of near-term CIP projects</li> <li>■ Plan construction of later-term CIP construction projects</li> </ul>

## NTP to 90 Days - Parallel Paths – Development of Program Plan and Initiation of Urgent, Interim Projects

### PROGRAM MANAGEMENT PLAN (PGMP)

Karen Counes will lead the development of the PgMP as the first program task. CDM Smith will draw upon our vast experience developing similar plans for clients that will be tailored to align with the City’s existing policies and processes but clearly outline all necessary elements of effective management and coordination within the Program team. The PgMP will include key elements and details to set up procedures for project planning, budget and schedule development and tracking, cash flow reporting, risk management, procurement and delivery, community outreach and communications, change management and related procedures. CDM Smith follows the Project Management Institute (PMI) guidance for program management which includes five interrelated performance domains; Strategic Alignment, Benefits Management, Stakeholder Engagement, Governance and Program Lifecycle Management.

### DEVELOPMENT OF DESIGN, CONSTRUCTION, AND QUALITY MANAGEMENT REQUIREMENTS

CDM Smith’s program manager and project engineer(s) will work with City staff to develop current design requirements, City standards, submittal requirements and codes for the design of projects within the Program. Within the first 90 days of the Program, a guidance document for design and construction submittals will be prepared for program stakeholders. This document will detail the requirements for deliverables, which will be shared with stakeholders to achieve uniform delivery and uphold technical quality standards. The PgMP will incorporate the City’s standard CEI and CM documentation by reference. It will also provide clear guidance on how these documents are to be applied within the Program team, particularly in scenarios where the City may choose to have the Program team perform both design and CEI services.

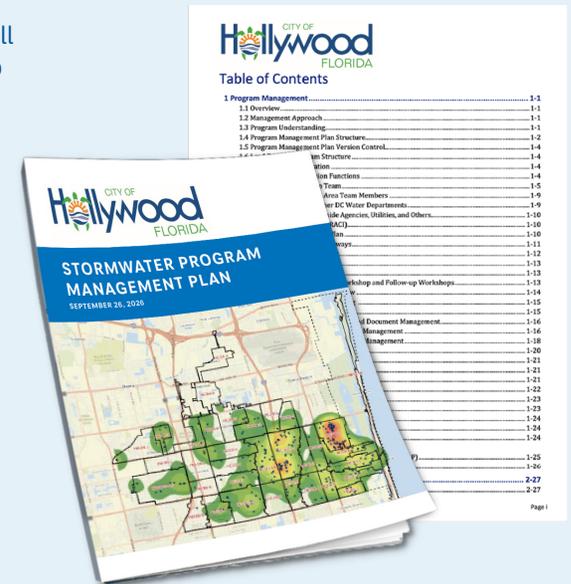
As part of the program planning activities, a quality management plan (QMP) will be prepared that aligns the objectives of the program with industry best practices, CDM Smith quality management procedures, and the City’s quality management standards. The QMP will be incorporated into the PgMP and used as guidance throughout the duration of the Program. The QMP will also be used during training and onboarding of all program team members to provide consistency in the QA process.

### DRIVING THE PROJECTS TO ALIGN WITH THE FUNDING

Working collaboratively with the City, we identified a phased plan of 81 recommended projects. With the adopted stormwater utility rate, the City can expect to generate \$22M per year to implement the renewal and replacement (R&R) projects and the urgent, interim projects while building revenue to position for implementation of the long-term large CIP projects. This focused work plan is designed to deliver early, visible results and is adaptable as new data or funding becomes available.

### PgMP: Systems Used For Planning, Controls, Scheduling, Estimating, QA/QC, and Public Relations/Transparency

Serving as the guidance document for program execution, the PgMP will be drafted and reviewed with all stakeholders and then finalized and adopted by the program management team. Karen Counes, Juan Mendoza, and Jon Goldman will work closely with the City to develop the PgMP, which will be used as the basic training manual to instruct all team members on proper policies and procedures. The PgMP will document input from the City regarding organization alignment; staffing needs, roles, and responsibilities; business practices, systems, and procedures; program funding; management practices; communication links; QA/QC practices; and data and information management. For each item, the PgMP will include a prioritization of activities and a timeline for implementation.



**Conceptual Work Plan to Deliver Early, Visible Results and is Adaptable for New Data or Funding**

RENEWAL & REPLACEMENT PROJECTS	URGENT, INTERIM CIP PROJECTS	LONG-TERM LARGE CIP PROJECTS
<p><b>District 1</b></p> <ul style="list-style-type: none"> <li>Stormwater Point I/I Repairs Along A1A</li> <li>SR A1A BFPs Installations with FDOT</li> <li>Monroe &amp; Southlake Wapro repair</li> <li>SW02 Emergency Repairs</li> <li>Wapro Installation Taft and 14th Ave</li> </ul> <p><b>District 2</b></p> <ul style="list-style-type: none"> <li>Dewey Street and S 20th Avenue Improvements</li> </ul> <p><b>District 3</b></p> <ul style="list-style-type: none"> <li>Sunset Park Storage, Ditches Restoration</li> <li>Hollywood Hills - Polk St (N 56 Ave - N 48 Ave)</li> <li>Lincoln Street west of N 56th Avenue Improvements</li> <li>Garfield Street and N Golf Drive Improvements</li> </ul> <p><b>District 4</b></p> <ul style="list-style-type: none"> <li>36th &amp; N 52 Ave Stormwater Improvements</li> <li>Emerald Lakes Outfall N. 34th Street</li> <li>N 31st Place (The Club at Emerald Hills Golf Course) Outfall Repair</li> <li>Allen Street and N 57th Avenue Improvements</li> <li>W. Park Road and N 57th Ave Improvements</li> </ul> <p><b>District 5</b></p> <ul style="list-style-type: none"> <li>Pershing Street west of N 65th Ave Improvements</li> <li>Cleveland Street W of N 74 Way Drainage Improvements</li> <li>Sheridan Street Drainage Improvements (70 Ave - 66 Ave)</li> </ul> <p><b>Citywide</b></p> <ul style="list-style-type: none"> <li>Additional Temporary Pump Installations</li> <li>Recapture Swale Improvements</li> </ul>	<p><b>District 1</b></p> <ul style="list-style-type: none"> <li>SW08/SW07 and Discharge Pipe Improvements (Moffett Area)</li> <li>HBCG Stormwater Pipe and Swale Improvements (East Johnson, Grant, Hayes, N. 14th Avenue)</li> <li>D1 Eco Grande GC Stormwater Ditches (Taft, Harding, Coolidge, Scott)</li> <li>Arthur St and W Lake Park Entry Dr Backflow Valves (Hollywood Lakes North)</li> <li>East Washington Street Stormwater Pipe Outfall Connection</li> <li>Arthur St and W Lake Park Entry Dr Backflow Valves (Hollywood Lakes North)</li> <li>East Washington Street Stormwater Pipe Outfall Connection</li> </ul> <p><b>District 2</b></p> <ul style="list-style-type: none"> <li>Cody Street Stormwater Improvements</li> <li>Fletcher-Mayo Street Exfiltration System</li> <li>Royal Poinciana Exfiltration Systems</li> <li>Taylor Polk Street Improvements</li> <li>Highland Gardens Exfiltration Systems (Washington St)</li> <li>Cody Street Stormwater Improvements</li> <li>Fletcher-Mayo Street Exfiltration System</li> <li>Royal Poinciana Exfiltration Systems</li> <li>Taylor Polk Street Improvements</li> <li>Highland Gardens Exfiltration Systems (Washington St)</li> </ul> <p><b>District 3</b></p> <ul style="list-style-type: none"> <li>Johnson St Culvert FDOT JPA (Northcentral)</li> <li>Rainbow Drive Stormwater Swale (Hospital Area)</li> <li>Park &amp; Johnson (Hospital Access) Stormwater Improvements</li> <li>Harding Pond Stormwater Pipe Outfall to Rotary Park (Liberty St)</li> <li>Pierce Street Detention Pond and Stormwater Pipe (Northcentral)</li> <li>N 26th Ave and Harding Stormwater Improvements</li> </ul> <p><b>District 4</b></p> <ul style="list-style-type: none"> <li>CS-22 Structure Backflow Prevention Modification</li> <li>Driftwood Neighborhood Exfiltration Systems</li> </ul> <p><b>District 5</b></p> <ul style="list-style-type: none"> <li>Boulevard Heights Neighborhood Exfiltration Systems</li> </ul> <p><b>District 6</b></p> <ul style="list-style-type: none"> <li>S 62nd Ave City Gateway Entry Exfiltration Systems (Beverly Park)</li> <li>City Integration Projects (Seawall, Sunset Park, and others)</li> <li>Potential Land Acquisition</li> </ul>	<p><b>District 1</b></p> <ul style="list-style-type: none"> <li>North and South 14th Ave Corridor</li> <li>3 Hollywood Lakes South (Moffett Neighborhood)</li> <li>7 Hollywood Lakes North (Eco GC Neighborhood)</li> <li>5 Hollywood Lakes Central (N&amp;S of Hollywood Blvd)</li> <li>4 Hollywood Lakes South Lake</li> <li>6 Hollywood Lakes North Lake</li> </ul> <p><b>District 2</b></p> <ul style="list-style-type: none"> <li>1 Oakwood Hills (Liberia Neighborhood)</li> </ul> <p><b>District 3</b></p> <ul style="list-style-type: none"> <li>2 North Central South (Sunset Park Neighborhood)</li> <li>1 North Central North (Phase I - West)</li> </ul>



**Conceptual Work Plan for Renewal & Replacement Projects, Urgent, Interim CIP Projects, and Long-Term Large CIP Projects that includes:**

- Projects Span all Commission Districts
- Prioritized Based on Risk, Equity, and Feasibility
- Focused on Hospitals, Schools, Historic Districts and Underserved Areas



## 90 Days to 2 Years – Heavy Capital Program Delivery

Once the PgMP is jointly developed by the City and the CDM Smith team, it will serve as both a communication tool—defining how work will be performed throughout the Program—and an onboarding resource for training all program staff. For all items initiated within the first 90 days, our team will continue executing key capital program components, including urgent interim projects, with a focus on scoping, design assignments, and coordinated execution between CDM Smith and CMA. For projects already in design, permitting activities will continue to advance.

### PROCUREMENT STRATEGY

With design initiated, procurement strategy will also need to start. With the phasing plan, construction will start overlapping. Our team will develop a procurement strategy that doesn't overwhelm the City, and we will market appropriately so as not to overload the labor market. In this phase, the Program Manager will work with the Project Engineer and key City staff regarding procurement needs and sequencing of both urgent and long-term capital projects. We will work with the City and the associated engineers to develop clear scopes. During the bidding process, we have found the introduction of simple administrative checklists for bidders has reduced the number of administrative irregularities and omissions from bidders, and we strongly recommend they are included in final documents and reviewed at Pre-Bid meetings. After receiving the bids, we will work with the City to do a complete administrative review of the bid packages, including bid forms, bonds, insurance, and other required forms. We will complete due diligence reviews of prospective bidders for technical competence, safety records, financial stability, bonding capacity, insurance limits, and reference checks. We will complete a scope and line-item review of the bid and conduct a pre-award meeting as needed to clarify any assumptions and document them for the final contract. After all these efforts, we will complete a summary bid evaluation with a "recommendation to award". Juan will take over procurement and delivery at this stage.

#### COMPLEX PROJECT ISSUE: Metro Nashville Water Services, Cleanwater Nashville Program

CHALLENGE	SOLUTION	RESULTS
<ul style="list-style-type: none"> <li>Delivery of defined list of projects to meet CD milestones</li> <li>Multiple construction delivery methods (DBB and CMAR)</li> <li>Plan for closeout and transfer of information to MWS</li> </ul>	<ul style="list-style-type: none"> <li>Establish PMO, prepare PMP/client consultant staff mix</li> <li>Perform planning, manager design, track bidding and manage construction</li> <li>Implement standalone PMS</li> </ul>	<ul style="list-style-type: none"> <li>Improved policies and procedures</li> <li>Increased efficiencies and "single source of truth" for past 10 years</li> <li>Eight years of independent audits, each with "no significant findings"</li> </ul>

### Strategy for Project Procurement Delivery Method Selection

An evaluation of the market and Contractor preference and availability will be done with the City to determine which construction method to implement considering cost, risk, quality, and schedule.

#### Continuing Contract Civil Contractors

Our team will utilize the pool of contractors to execute urgent interim projects.

#### Design-Bid-Construction

Our team will incorporate the City's typical design-bid-build standards and contracts for large CIP Projects that will require consultant solicitation and larger planning.

#### Design-Build

Our team will focus on size and type for design-build that will engage the right firms and commitment. For example, stormwater pump stations and/or neighborhood improvements projects (complete project area).

#### Construction Manager at Risk

This will require a separate consultant solicitation as well but could be considered for neighborhood improvements projects as well as a combined selection of urgent interim projects.

## CAPITAL PROGRAM DEVELOPMENT

During this timeframe, our team will move to the capital program implementation, including finalizing prioritization and developing the full master schedule. We will start the planning, design, and execution of the near-term (2026 through 2028) grouping of projects. The capital program development will:

- Proactively identify risks—financial, labor, etc. —to navigate uncertainties and potential obstacles that could jeopardize the success of individual projects or the Stormwater Program overall.
- Focus on the prioritized seven capital improvements projects and work with the City to prioritize the remainder of the Program based on jointly developed parameters such as flooding impacts, sea level rise resilience, permitting feasibility, and minimal construction disruption.
- Conduct design reviews and deliverable reviews.
- Provide regular reporting and holding coordination meetings.

### RISK MANAGEMENT AND MITIGATION: Metro Nashville Water Services, Cleanwater Nashville Program

CHALLENGE	SOLUTION	RESULTS
The risk of annual escalation exceeding our initial baseline assumption of 3% was identified early in the program as a potential risk affecting the overall program budget.	Closely monitor trends and forecasts in construction and materials costs indices and monitor local bid prices, contractor and labor capacity to inform escalation assumptions.	Program cost forecasts are more accurate, which avoids surprises and allows proactive program adaptation to changing conditions.

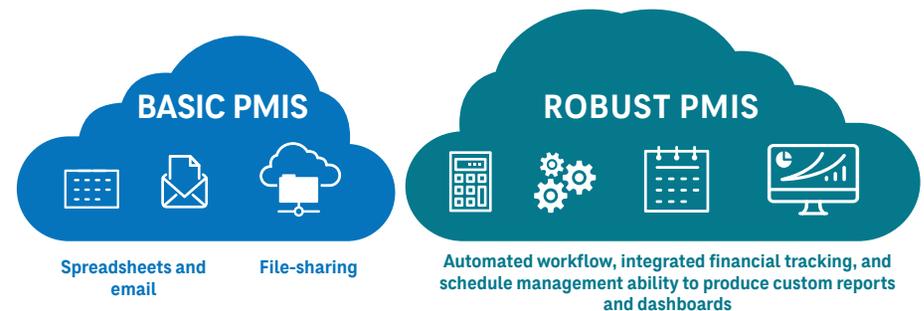
### RISK MANAGEMENT AND MITIGATION

The 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. Project-level “lessons learned” also feed into the program-level risk management plan. That plan identifies the Program’s risks and contains an assessment of those risks and recommended management strategies. In general, the risks included in the program-level risk management plan are associated with multiple projects or a single risk that, if realized, would affect the overall Program.

During the first 90-days through 160 days of the Program, a full risk analysis is performed using the known projects, funding, market conditions and related potential risks. A risk management plan is developed that includes risks, program impacts and risk reduction, and risk mitigating measures. The program-level risk management plan is reviewed annually by key CDM Smith team members, including the Program Manager and Onsite Project Manager, for quality and monitoring, and when there are changes that could affect risk. This is an ongoing process as program needs change and outside influences can affect the program and risks imposed upon it. This intentional review step references budget and schedule assessment, project “lessons learned”, and other reports and relies on critical insight from the team to document any new or emerging risks, remove risks that are no longer applicable, and assess the consequence and likelihood of each risk. Discussions on these program-level risks often generate key action items that are tracked as part of the monthly program leadership team meetings. This keeps a continual focus on identified and emerging risks as well as mitigation strategies and confirms that key action items are not overlooked.

### A DIGITAL FUTURE: INTEGRATE FINANCIAL, SCHEDULING, AND TASK MANAGEMENT PROCESSES AND DEVELOP A ROADMAP

As an implementation partner for multiple software systems, CDM Smith has in-house expertise to deploy a range of commercially available platforms with integrated financial, scheduling, and task management capabilities. These systems are tailored to support the Stormwater Program and can be transitioned to the City for continued use, if needed. Additionally, the path forward for the PMIS will be determined during the PgMP efforts but will be implemented during this phase, in close collaboration with the City. Overall, the goal during this period will be to set the City and the Program up for success. This will include identifying ways to modernize your operations, through innovation and digital consulting. We will meet you where you are and chart a path forward.



*Our team will establish procedures in support of controls at the project and program levels and perform an assessment of the City’s need for a Project Management Information System, in addition to or in collaboration with e-builder, dedicated to the Stormwater Program.*

We will work with the City to identify an obtainable plan that we can developed together. The digital products and services will follow the procedures and processes laid out in the PgMP, and the program team will create processes and tools that will be integrated with the City's systems to the intent possible and take into account cyber security protection and capabilities for future expansion and updates. The digital planning will start with the assessment phase in the first 90 days and implementation will begin once the PgMP is in place and digital tools will be begin to be deployed after the first 90 days.



### Offering Innovation Through Trinnex

- **Strategy development** to guide decisions for organizational success
- **Technology assessment** to maximize existing resources
- **Digital roadmap** to define your pathway to future goals
- **Solution implementation** to tackle your biggest data challenges

### STAFF ASSIGNED

This timeline will bring our staff into heavy program delivery with a focus on launching the procurement process for the fast-tracked interim and critical renewal and replacement projects that were initiated in the first 90 days and to for selection of design consultants for the long-term capital improvements projects. Our Onsite Project Manager will lead this effort and have overall responsibility for this phase. A strong team of support staff will be ramped up to allow the team to execute multiple efforts and project components at the same time.

**Onsite Project Manager:** Juan will be the primary contact to support efficient and accurate communication, status reporting, and forecasting. He will work closely with both the Program team, project management team, and technical team for a full integration of cost, schedule, and risk management supporting informed and timely decision making. Specifically, Juan will be

- Continuing urgent, interim, and R&R project planning.
- Coordinating with the Program Controls Lead to certify consistent reporting on urgent, interim project execution and general program reporting.
- Working with the Program Manager and Project Engineer to start developing longer term capital project delivery schedules.
- Reviewing preliminary budgets and cash flow reports.
- Starting scenario modeling to make future decisions and reprioritize as needed.

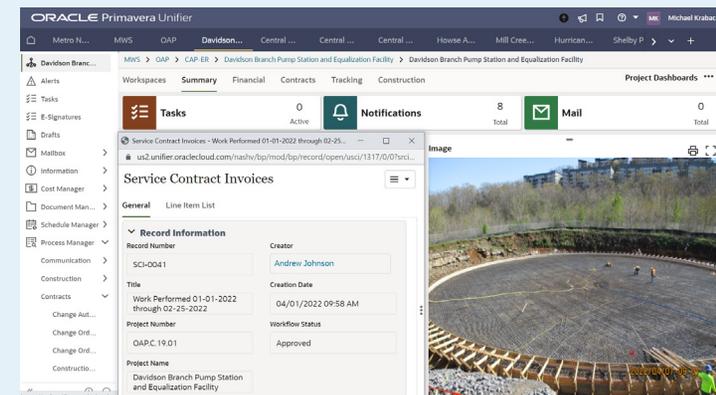
**Program Manager:** After the completion of the 90-day activities, the Program team will be ready to begin delivery of the Program in accordance with the policies and procedures listed in the PgMP. The PgMP is a living document, and it is anticipated that during the first year the PgMP will require updates to reflect additional detail as well as the incorporation of lessons learned during program delivery. Responsibility for circulating proposed updates and obtaining approval from the City for modifications will be assigned to the Program Manager. Standard reports documenting the status of the Program, updates to KPIs, project changes, and progress made will be produced monthly by the program team, reviewed and assessed by the Program Manager for presentation to the City, according to a format developed during the initial program startup. Also, during this period, the Program Manager will continue to manage the overall activities of each facet of the Program, address long-term program needs and

## City of Nashville's Clean Water Program PMIS

We implemented a state-of-the-art PMIS (Oracle Primavera Unifier) and since start-up, have captured more than 200,000 documents; 2,000 RFIs; and \$760M in project expenditures.

“Yesterday we received our latest totally successful independent audit, which is a tribute to a strong controls component to our program management team. When you're dealing with a program of this magnitude an external audit provides credibility, and the fact that one can enter an annual audit with total confidence is due to the caliber of the professionals you have working for Nashville.”

— Ron Taylor, Program Director, Clean Water Nashville



coordinate with the Project Engineer and On-Site regarding the urgent, interim program delivery and capital improvement project delivery.

**Program Controls Lead:** CDM Smith will update conceptual project budgets from the SWMP as planning and design phases are progressed using updated OPCC's developed in accordance with Program guidelines (e.g. escalation assumptions, contractor O&P, etc.) to verify consistency across estimates. The team will also use available information to develop Class 5 (Association for Advancement of Cost Engineering) estimates for projects to allow the team to support initial decision making and communications about Program budget.

## Two Year + Continuing

The Program team will be highly functioning after two years of program delivery where policies and procedures have been utilized and City staff have been integrated into the day-to-day operations. The Program team will continue to provide guidance and training to City staff in regard to both project and program-level activities and respond to ad hoc requests. The Program team will actively execute the urgent, interim projects and manage both design and construction contracts that were procured using detailed scopes and procurement processes developed and document during the first two years.

## CONSTRUCTION MANAGEMENT

After a project is awarded to the successful contractor through procurement, the team begins the construction phase of the project. This is where proactive management of the contractor and the engineer/architect becomes critical to the success of the project. The construction manager can positively impact the project by pushing the team to stay on schedule by looking ahead to make sure key submittals are approved, permits issued, and other approvals are requested and obtained in a timely manner, and dependent construction activities are sequenced properly. The goal is to keep everyone on the team proactive and on schedule; as maintaining the schedule is so closely linked to budget, it will help all parties stay within budget and deliver a successful project.

The initial activities of a construction project are all about planning and organizing to set the team up for success. These initial activities include conducting a kickoff meeting to review key activities on the project schedule, outline expectations on submittals, emphasize the importance of site safety, coordinate any overlap with other contractors or projects, provide look-ahead for construction activities, and then memorializing them in meeting minutes that are sent to the document control system.

## Quality Assurance (QA) Program, Coordination of Activities



### 1. Review Contract Bid Documents for Familiarity and for Biddability, Constructability and Operability and Consistency Between Design Disciplines

This first critical step sets the CDM Smith team on the path toward successful construction cost and schedule management.



### 2. Establish and Enforce Document Control and Communications Protocols

Communication between all parties on a construction project is paramount to success. Roles and responsibilities for critical and daily operations are well-defined to handle unanticipated field conditions. Document control and records of change are also important, in both design changes and change management, but also claims management and other items.



### 3. Assist with Selecting Contractor and Expediting Permit Processing and Utility Coordination

Many construction projects are under several different regulatory jurisdictions, so careful attention to permitting conditions and timelines is critical to maintaining project schedules.



### 4. Schedule and Cost Monitoring and Change Management

Strict attention to contract terms and measurement and payment rules, along with careful consideration for practical changes, lays the groundwork for successful contracts.



### 5. On-site Field Services

CDM Smith considers the flow of information to and from the "boots on the ground" the most vital pipeline during the construction phase, and we carefully select on-site inspection personnel with the right skills and experience and equip them with the right tools to yield the greatest benefit for the specific needs of the project.

## ALIGNMENT OF STAFF WITH PROGRAM REQUIREMENTS

Staff will be aligned with program requirements as we continue on in the Program.

With a combined 50 years of experience delivering stormwater solutions, the core project team from the SWMP, Jon Goldman, Mike Schmidt, and Tom Nye will continue to demonstrate and provide their technical knowledge of the City's stormwater issues, system enhancements, review and make recommendations on projects, be responsive and provide fast-tracking project decision-making, work with the stormwater utility rate consultant, and align with other City key projects and departments garnering public confidence.

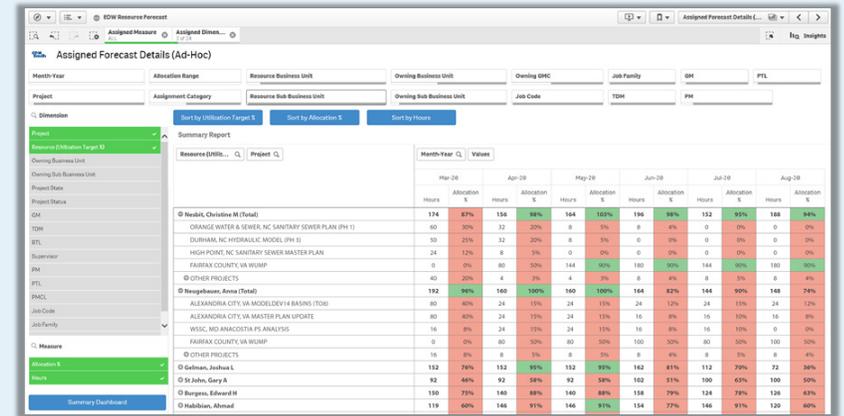
As demonstrated throughout the SWMP development, Jon Goldman and Tom Nye are committed and available to fulfill the City's needs including community meeting attendance, coordination with other departments and consultants for ongoing projects, and resolve emergency flooding situations including conducting model runs in anticipation and recommending location of emergency pumps. Because of our technical understanding, our team will be efficient and responsive to the Program needs throughout.



*CDM Smith stormwater team participating on a site walkthrough with the Golf Course developer to coordinate with the future stormwater master plan requirements in the CIP area.*

## Current Workload and Ability to Handle the Scope of Services

Our core team is fully committed and available to Hollywood's Program. Our specialty staff will be available as needed. We track availability through the Resource Forecasting Tool which our Program Manager will access for support to reliably plan and confirm availability for each staff member proposed for any project. CDM Smith's South Florida offices are full-service and recognize the importance of executing multiple projects simultaneously. As such, our local project teams and assigned project managers are accustomed to executing and managing more than one project at a time. We consider current and future workload when selecting the right team.



## Committed Project Team

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

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

### Projected Availability for Key Staff Aligns With the Expected Levels of Effort for the Roles Identified Will Keep Program Costs Streamlined

NAME	ROLE	PROJECT AVAILABILITY AND EXPECTED LEVEL OF EFFORT
<b>Karen Counes</b>	Program Manager	50%
<b>Juan Mendoza</b>	Onsite Project Manager	100%
<b>Jon Goldman</b>	Project Engineer	60%
<b>Marty Lewis</b>	Construction Manager	40%
<b>Mike Schmidt</b>	General Program Management - Task Leader	40%
<b>Tom Nye</b>	Modeling and SWMM Analysis	60%
<b>Jayson Brennen</b>	Asset Management Consulting - Task Leader	50%
<b>Andreas Martinese</b>	Program Controls & Reporting - Task Leader	70%
<b>Bernadette Kolb</b>	Program Advisors & Quality Review - Master Plan Strategist	40%
<b>Brian McCarthy</b>	Program Advisors & Quality Review - Program Specialist	30%
<b>Ahmad Habibian</b>	Program Advisors & Quality Review - Utilities Infrastructure	40%
<b>Michael Krabacher</b>	Program Advisors & Quality Review - Project Controls	50%

## Firm's Demonstrated Ability to Solve Complex Project Issues

Our agile and diverse engineering (right-sized) team will integrate with the City's staff to adapt to the changing needs of the Program from engineering design through construction, acting as a trusted owner's representative. We recognize that each design concept will require unique and thoughtful consideration for the community, green benefits, and long-term impacts. CDM Smith has worked closely with the City during the SWMP efforts to develop some of these design concepts and will further enhance and engage the community to support the interim project delivery as well as the larger capital improvement projects.

### Recapture the Swales Program

Our ongoing support for your "Recapture the Swales" program in coordination with Broward County has included more than 15 projects enhancing stormwater collection, storage, treatment and infiltration. We supported your public information program for swale restoration and planting and parking requirements as part of the SWMP Recapture the Swales informational flyer developed by our team in support of the SWMP. Cumulatively, these neighborhood focused green and grey solutions with green benefits will reduce the sizing of piping, pump stations, and force mains while providing flood reduction for smaller storms, aquifer recharge to reduce saltwater intrusion, irrigation for land-landscape planters, and water quality benefits to protect receiving waters and maintain the natural beauty of your waterways.

CDM Smith is currently analyzing targeted use of pervious pavement where feasible in areas of the city as a Commission action item to provide additional water quantity and quality benefits where standard piped stormwater collection infrastructure cannot be implemented. CDM Smith intends to commence a pilot program for the City with potential grant funding assistance from the County and/or State to test areas of this technology for further application Citywide.

### Pervious Pavement Alleyways

CDM Smith has identified and helped the City implement various solutions that provide green benefits. These include exfiltration and swales (and bioswales) to collect, store, treat, infiltrate and convey stormwater in the city rights-of-way (ROWS) for the lowest cost. In addition, pervious pavement and green alleyways with walking trails, lights, and benches enrich community life will be considered. CDM Smith recognizes that the City has multiple alleyways that could be considered hydraulically feasible sites. Our team will analyze the type of surfaces, utilize a decision tool, and develop alternative types of previous pavement recommendations. CDM Smith will work with the stakeholders and review types of porous pavement to be considered, design criteria, standard details and specifications, operations and maintenance impacts, and relative costs. Based on our project experience, having experienced contractors and site-specific details for specific pavement types are critical. Our team will develop basic requirements such as requiring test panels and samples in specifications, time the construction period for optimal temperatures, and qualifications and testing standards prior to construction.



*CDM Smith supported the City with the Recapture the Swale Pilot Program. We recognize the importance of swales on the system by reducing flooding citywide and improving water quality.*



*The left picture is an existing City of Hollywood alleyway. The two above pictures are photos of the "Green Alley Project" in Lowell, MA. All design concepts will make provisions for future maintenance.*

## New Resilient Stormwater Pump Stations

Retrofitting and integrating new resilient infrastructure into existing neighborhoods requires a Program Manager with deep experience in design review boards, permitting processes, the City's vulnerability and resiliency initiatives, and community engagement protocols. These projects include the mixed flow stormwater pumps, wetwell and outfall piping, a new building to house the pump station components, emergency generators, and other associated components including sound attenuation, grass paver drivers, and a cascading waterfall type outfall. These stations are situated between existing residential properties, so noise and aesthetic concerns are paramount in the design concepts. CDM Smith employs detailed three-dimensional design models—such as CDM Smith's concept rendering of the proposed stormwater pump station SW09 at South Lake, one of the first-priority CIP areas—to help stakeholders, residents, design review staff, and the City Commission clearly visualize what is planned and how it will appear within the neighborhood once constructed.



## Septic to Sewer Coordination

Analysis of this program reveals that some of the Stormwater CIP areas may overlap with other large City water and wastewater programs such as the City's Septic to Sewer Initiative (for example in the priority Northcentral Neighborhood). The coordination, timing, and logistics of these parallel capital improvements will be an important consideration for the program management of the stormwater CIP to avoid tearing up the roadways in neighborhoods twice, keeping access to homes and businesses open, avoiding contractor conflicts or delays, and potentially taking advantage of a single contract for the installation of utilities concurrently, potentially deferring the final roadway restoration to one contract or the other to save the City costs. Using master scheduling techniques and GIS project data overlays, adjustments can be made to the program projects to take advantage of concurrent project areas or avoid pending conflicts.

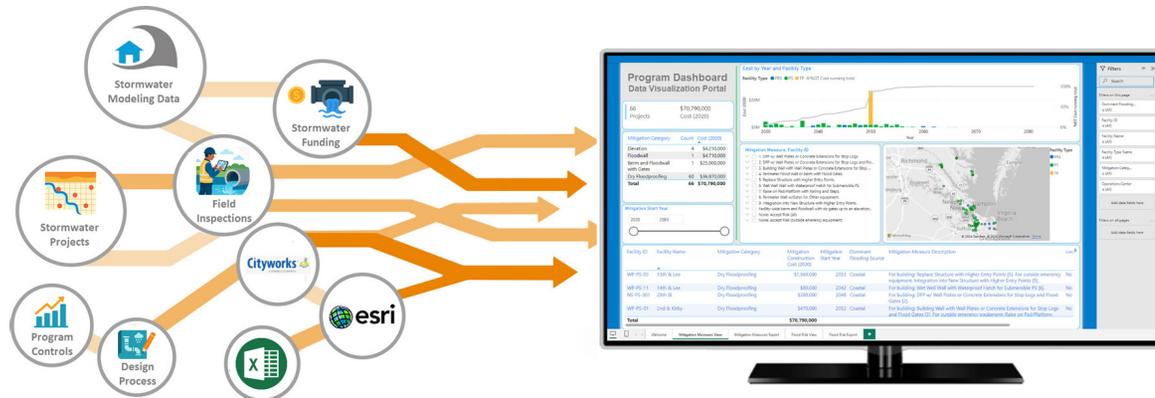
In a position similar to the City's situation, as the wastewater consultant for the Waterworks 2011 Initiative for the City of Fort Lauderdale, over the twelve year program with Project Manager and Engineer-of-Record Jon Goldman along with other key team members including Mike Schmidt and Tom Nye for evaluations of related benefits. CDM Smith provided program coordination services for design, permitting, and other utility coordination for their septic to sewer conversions, designing over 185,000 lf of new sanitary sewers, 90,000 lf of new watermain, 180 rehabilitations of existing or new pump stations, and performing related ancillary stormwater work in the neighborhoods to take advantage of the opened roadways, and provided services during construction, including assisting Fort Lauderdale with construction management and CEI inspections of the projects. This knowledge and experience will be applied to coordinate the City's two parallel programs where overlapping of projects occur. Our evaluations have also demonstrated that removal of septic tanks is beneficial for increasing rainfall runoff infiltration as well as improving water quality.

# Available Facilities, Technological Capabilities And Other Available Resources

## Technological Capabilities and Innovations

### Data-Driven Program Management, GIS, Asset Management Solutions

CDM Smith has been at the forefront of data-driven program management, GIS, asset management solutions for nearly 40 years and we excel at implementing innovative technology solutions that support large program management projects, like Hollywood's. These solutions drive efficiency and performance, while providing instant access to critical information by the Program team, stakeholder, and the public. We also know that the City has developed GIS-based program tools to support project visualization. Our team will work with the City to expand this environment to implement a program management solution that supports lifecycle program management.



*CDM Smith will implement an integrated digital environment to support the full lifecycle of the program—delivering improved efficiency and coordination, real-time data access, enhanced transparency, stronger public engagement, and scalable, adaptable solutions.*

We will make extensive use of technology throughout this program. This will encompass the use of GIS-based and financial tools to support program planning; mobile and dashboard tools to facilitate program execution; public and internal-facing solutions to push information to the public and inform the project team; and AI-based tools to help plan effectively, measure performance, and drive efficiencies. Our data-driven approach includes:

## Proven Digital Solution through Trinnex Tool Development: National Levee Database Web-Mapping Application, US Army Corps of Engineers

The National Levee Database (NLD) is the focal point for comprehensive information about our nation's levees. Authorized by Congress in 2007, the database contains information to facilitate and link activities, such as flood risk communication, levee system evaluation for the National Flood Insurance Program (NFIP), levee system inspections, flood plain management, and risk assessments. CDM Smith, and our subsidiary Trinnex, assisted USACE with the enhancement of the National Levee Database application to support the needs of federal, state, and local government, as well as the general public. The application consists of a dynamic user interface, an enhanced searching and mapping capabilities, support for extensibility to third party applications, and data entry capabilities. The system combines GIS, database management, reporting, and data visualization capabilities into a single system that will be used by stakeholders and the general public. This dashboard tool can be readily adapted to the City of Hollywood for stormwater and coastal resilience CIP upgrades over time, including tracking seawall implementation status for continuity, heights, and deployable systems for phased implementation for larger facilities such as pump stations and outfalls (e.g., N and S Lake seawalls gaps) and stormwater outfalls and backflow preventers.



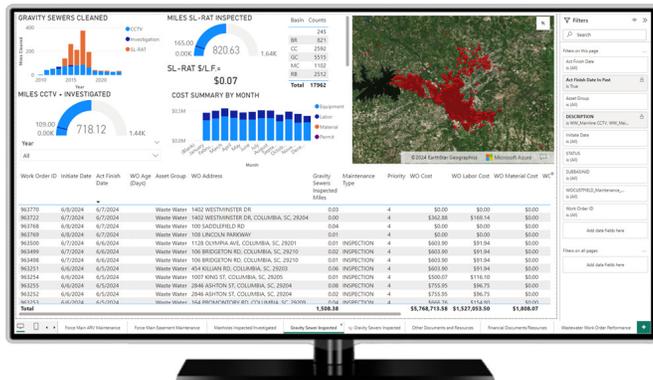
## DATA MANAGEMENT STRATEGY DEVELOPMENT

This is a large program, with many moving parts. At the outset of the Program, CDM Smith will complete a quick-hitting data management strategy to set the direction for how digital tools will be implemented across the Program, how data will be managed and integrated with city systems, and what technologies will be implemented, and when. This “digital roadmap” will allow the Program team and the City to work together to deploy data-driven digital solutions that support the lifecycle of the program. Key digital tools include PMIS, GIS, asset management, AI-driven capital planning, web and mobile tools, and other forward-thinking tools.

Given the multi-year scope of the Program, this approach allows our team to proactively integrate emerging technologies—such as large language model-based document storage and retrieval systems—by building in the necessary digital infrastructure from the outset.

## PROGRAM MANAGEMENT DASHBOARD SOLUTION

CDM Smith will implement a Hollywood Stormwater Program Management dashboard solution that will track key aspects of the Program, support project scheduling and bundling, and use AI-driven tools to measure performance and allow for dynamic adjustment of the program based on changing conditions. Dashboards will pull from the data warehouse and environment established as part of the Data Management Strategy development process.



Program dashboards will be implemented to track key project components including planning, inspections, financial information, and contractor performance.

The City’s dashboard environment will be based in Microsoft Power BI, Esri’s Experience Builder/Dashboard, Google, or other technology solutions and will allow the Program team to track project locations, budget, contractor performance, inspections, compliance, and other key aspects of the program. CDM Smith excels at implementing program-based dashboards and has developed similar innovative solutions for programs nationwide including for the \$1B City of Columbia SC’s Clean Water Program, the \$1.5B DC Water’s Lead Program, and the US Navy’s \$30M Global Utility Asset Management Program.

## MOBILE SOLUTIONS FOR FIELD DATA COLLECTION AND INSPECTIONS

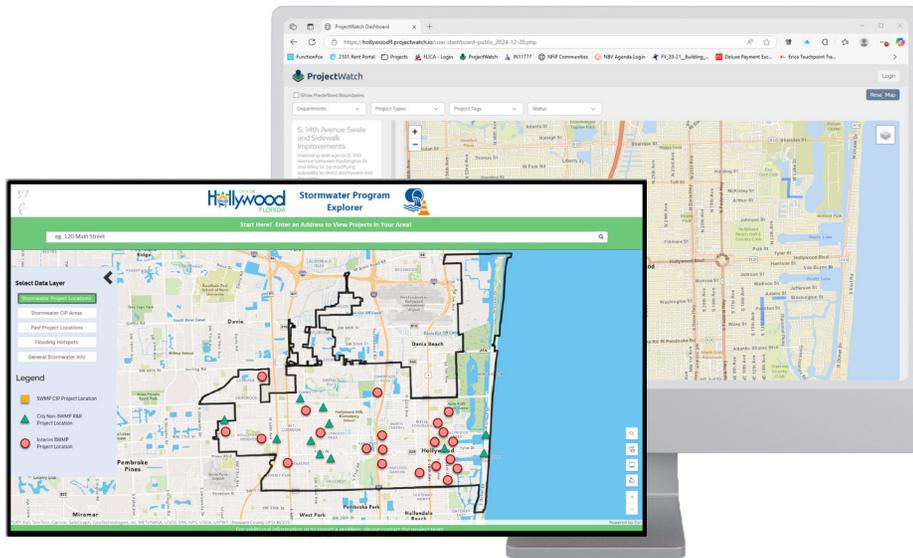
CDM Smith will implement a series of mobile data collection tools to support baseline data collection, outreach, inspections, and final documentation. Data collected using these tools will be fed into the centralized program database. Key technology tools include the use of Esri’s ArcGIS Online / Portal for ArcGIS (via Field Maps and Survey 123). Over the years we have implemented hundreds of mobile tools in support of utility management programs and will configure tools that allow our field staff to instantly access critical information, effectively collect data, and build an integrated program database that will integrate with the City’s ArcGIS and Cityworks environments.



Our use of mobile tools will provide the CDM Smith team with instant access to key data and support data collection.

## PUBLIC-OUTREACH TECHNOLOGY SOLUTION

A critical success factor of the Program is a strong public outreach program. CDM Smith takes public outreach very seriously and for the City's program, we will implement public-facing tools to allow the public to access critical program information. This includes general program information, project locations, project schedule, road impacts, contactor information and other program details. Many of the public-facing tools that we implement are interactive, allowing the public to dive into individual project summaries, view near real-time information, and interact with key project contacts. A social media component to this solicitation will allow the Program team to "push" information to the public based on a defined basis.



*Our team will leverage ProjectWatch, as developed specifically for Hollywood, and supplement with web applications that can be refined to provide transparent communication with City staff and the stakeholders.*

## IMPLEMENTATION OF A STORMWATER ASSET MANAGEMENT AND GIS PROGRAM

The Program will result in new infrastructure that will need to be accounted for, maintained, and improved over time. CDM Smith has a dedicated Asset Management and GIS practice that focuses on inventory development and long-term planning. We will establish a stormwater asset management framework for this program to enable the City to onboard new assets into the City's asset management, CMMS, and GIS environments. In addition, we will provide guidance on the development of a clear preventive and major maintenance program to support management of new assets. We will work with City staff to verify that GIS and CMMS datasets reflect newly-constructed stormwater assets.



*The City's Stormwater GIS and asset management environment will be improved during this program.*



**From seawall upgrades to stormwater retrofits—Brizaga's in-house developed software, ProjectWatch, keeps your adaptation priorities visible and on track. With interactive dashboards and milestone tracking, our team can clearly map projects, monitor deadlines, and coordinate implementation—all in real time, all in one place.**

## PROGRAM OPTIMIZATION TOOLS AND INNOVATIONS

To support the execution of the Program, we will implement proven and innovative tools to support managing the lifecycle of the Program. Key tools include:

<p><b>Project Optimization Tools</b></p> <p>Support optimizing and bundling projects to improve efficiencies, improve program scheduling, and reduce costs using the City's existing tools, such as e-Builder, and supporting with mobile and PMIS applications.</p>	<p><b>Level-A GIS and Asset Inventory Development</b></p> <p>Use high-end GPS, 360 cameras, and other data collection tools to develop a "Level A" GIS environment for all new construction.</p>	<p><b>BIM/3D &amp; Drone Technology</b></p> <p>Use of 3D and drone technologies to support the design and construction process, advanced data visualization, and the stormwater GIS, and asset management programs.</p>	<p><b>Large Language Model for Program Documentation</b></p> <p>Implement a ChatGPT-style Large Language Model (LLM) for program data for users to simply "chat" with program data, ask questions, and receive answers.</p>
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## DATA MANAGEMENT TOOLS

Digital data management tools optimize efficiency of data collection and construction progress reporting. The CDM Smith team will use an Application Programming Interface (API) connection to keep the City's systems updated in near real-time during the construction phase. The data can also be provided in electronic file formats and reports, and a dashboard will provide high-level access to project progress. CDM Smith is currently deploying the new Trimble Unity Field mobile application on multiple construction management projects leveraging its ability to operate across Trimble's software suite. Trimble Unity Field is a configurable mobile solution that provides a role-based, GIS-centric and project centric data collection workflows for their e-Builder (i.e., Trimble Unity Construct) and CityWorks (i.e., Trimble Unity Maintain) packages in a single mobile app.



*CDM Smith has successfully used these tools that contain pre-configured applications, as shown in Trimble Unity Field mobile applications, such as Site Inspection, Daily Report, and Request for Information and Submittals, streamlining the collection of field data, review of documents, and capturing of site photos in the field.*

### Solving a Complex Data Management Issue: Columbia, SC

For Columbia, SC, CDM Smith is using technology tools, such as SharePoint to encourage the standardization of approach, procedures, and documentation. The CW2020 SharePoint site is customized to accommodate varying stakeholders, using user-based permissions and secure function-based sub-sites. In addition to using the site for program- and project-specific documentation, the CW2020 SharePoint site includes both collaboration sites for specific team-based needs and a reference library where standards, templates, and guides are located ensuring that only the most current versions are accessible to users.

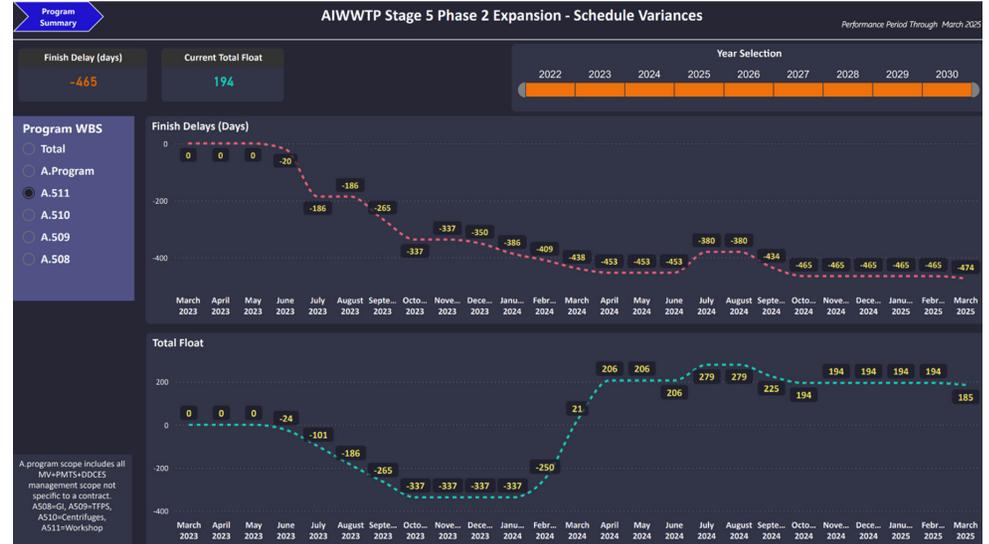
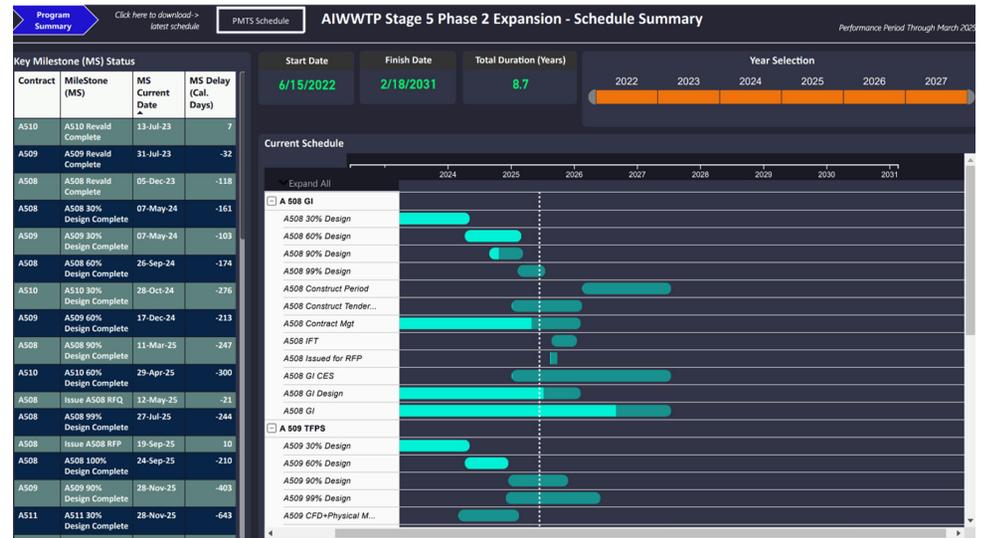
CHALLENGE	SOLUTION	RESULTS
<ul style="list-style-type: none"> <li>Standardization of approach, procedures, and documentation.</li> </ul>	<ul style="list-style-type: none"> <li>Developed a business intelligence and dashboard environment that supports critical aspects of their capital and maintenance programs.</li> <li>As part of this process, we "unified" their key data systems (GIS, CMMS, finance, construction management, SCADA, etc.); identified key performance indicators, metrics, and reporting requirements; storyboarded ideas on how data could be presented; and developed dashboard solutions using commercial software tools.</li> </ul>	<ul style="list-style-type: none"> <li>In the end, a real-time business intelligence environment was implemented that included a series of integrated dashboards that track projects, finances, schedule, contractor performance, and work management. This system is used by the City on a daily basis and can leverage Esri, MS PowerBI, Tableau, SQL Server, Oracle, and other tools.</li> </ul>

# Scheduling Methodology (Timeline) for Effectively Managing and Executing the Work

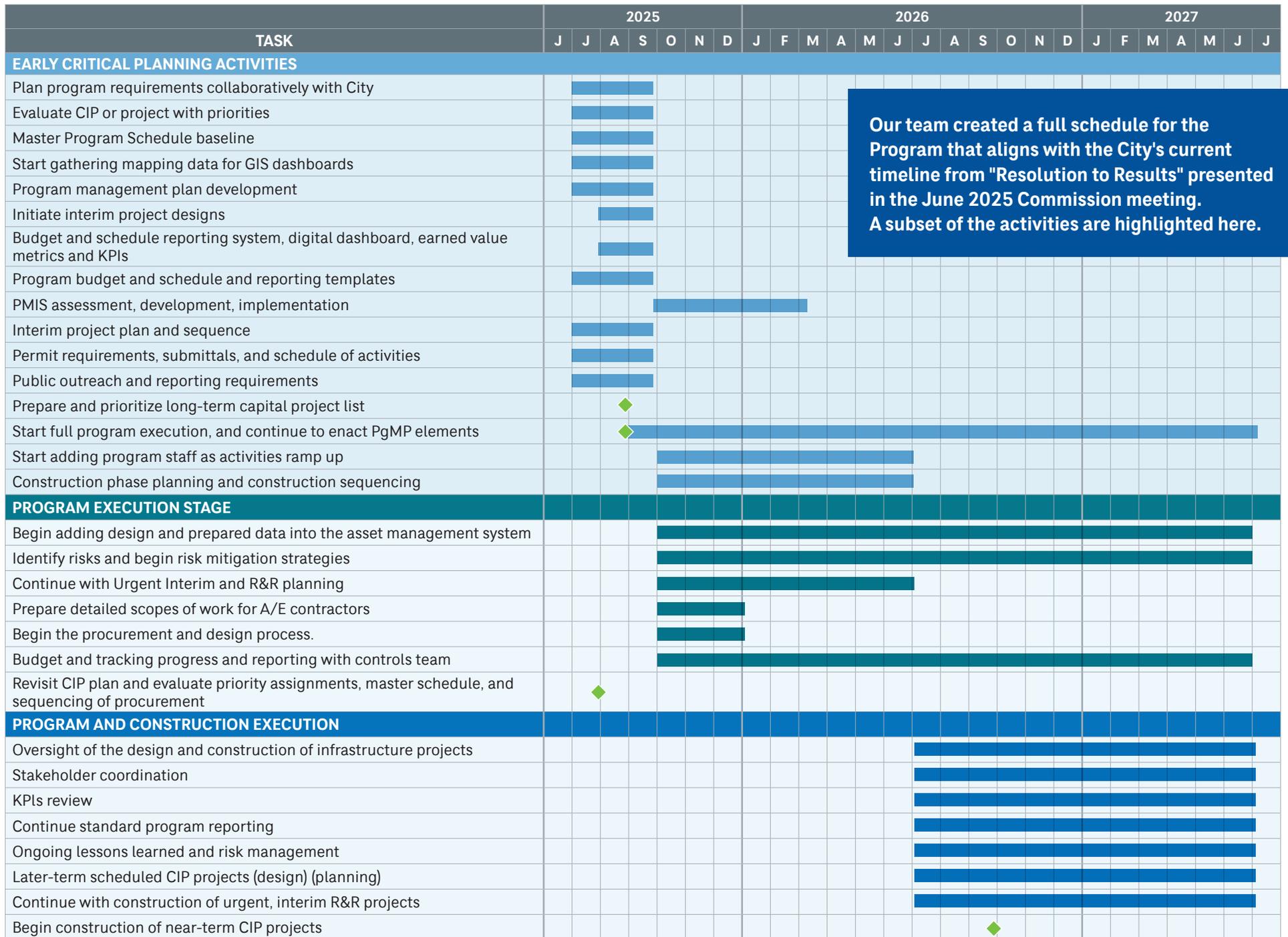
As described earlier, in the first 90 days of the program CDM Smith will facilitate a schedule workshop with appropriate City staff to focus on several key items; agreement on project phases, reasonableness of phase durations, inter-project dependencies, resource constraints (i.e. funding, cash flow) and identification of standard milestones. Upon completion of the workshop, CDM Smith will incorporate comments and refine the draft version to create the baseline version of the Master Program Schedule.

Second, CDM Smith will update the Master Program Schedule using information from detailed schedules which have additional activities and breakdown the work to facilitate management and tracking by the Project Manager. As projects advance, each phase requires the development and submission of more detailed phase schedules that are reviewed by the CDM Smith scheduler and the Program team. It is expected that detailed schedules will be received monthly from consultants during design and contractors during construction. Review of and approval of these detailed schedules will receive a technical review by a CDM Smith scheduler and management review by the Project Manger before being reflected in the Master Program Schedule. Completion of this monthly update process and statusing of the Master Program Schedule will provide timely and accurate schedule information about the Stormwater Program progress.

CDM Smith will coordinate with the City to determine the desired key metrics but those that have proven effective on other programs include monthly phase variance, 90 day phase variance and substantial completion variance. CDM Smith's experience on similar programs has found that obtaining timely and approved schedule updates (submittals) from construction contractors requires rigor and follow-through on behalf of the construction managers. Updating standard scheduling specifications, requiring schedule updates for preceding month by the 5<sup>th</sup> calendar day of following month, meeting to resolve rejected schedules in workshop format and tracking which projects have approved schedules delivered on-time are best practices to obtain detailed construction schedules consistently.



Summarizing schedule data using Power BI to understand variance and trends at program level for Metro Vancouver Wastewater Program.



**Our team created a full schedule for the Program that aligns with the City's current timeline from "Resolution to Results" presented in the June 2025 Commission meeting. A subset of the activities are highlighted here.**

## Firm’s Approach to Team Scalability to Support Various Projects Simultaneously

CDM Smith designs its programs and teams with scalability at the core, providing consistent performance regardless of workload fluctuations. Our scalable team structure is designed to flex and adapt to the City’s evolving needs, enabling us to support multiple stormwater projects simultaneously without compromising quality, responsiveness, or efficiency. Our approach also helps us avoid over staffing, which drives up costs—and under staffing—which can compromise performance. Our flexible team structure, supported by extensive local and national resources, allows us to scale up during critical phases and seamlessly onboard new team members without disrupting workflows. By leveraging a deep bench of multidisciplinary experts and proven resource management strategies, we provide the right expertise at the right time, across parallel work streams and multiple program components, delivering consistent, high-quality results across all phases of the program. This accelerates project development and implementation, helping the City achieve your goals faster.

Given the dynamic nature of this Program, the level of effort required for each task may vary significantly over time. Staffing needs will depend on the number of active projects in planning, design, or construction phases, as well as any supplemental tasks requested by the City.

Our proposed approach also includes continuous review and adjustment of staffing levels to certifies the right expertise is available when needed. This flexibility also allows us to align with any changes the City makes to its own program staffing. Maintaining this alignment is critical to the continued success of program delivery.

With our approach, the City benefits from the best of both worlds: strong local engagement and the depth and scalability of CDM Smith’s national expertise.

We have learned that the program approach needs to be flexible, and we would like to emphasize that the organization and role of the program manager and team can be modified to meet the needs of the City, which we fully expect to change over time. Our program management teams, for several programs discussed in our submittal, have changed over time as the program evolved from planning through design and construction, and the resources of the client organization change as well. The programs we have worked on have many similar aspects to the Stormwater Program. We will share/leverage our lessons learned from each program to tailor the City’s Program.

**Scalability:** Our approach addresses the need for ramping up of personnel during the early stages of the Program, changing the expertise as the program moves from planning to design and then construction, and ramping down as the program winds down.

### SCALABILITY: Metro Nashville Water Services, Cleanwater Nashville Program

CDM Smith coordinate with Metro Water Services to ramp down work on program due to reduce funding as they awaited rate increase for 18 months.

CHALLENGE		SOLUTION		RESULTS
<ul style="list-style-type: none"> <li>■ Metro Water Services established a cash flow ceiling for the program which was well below prior year spend and needed to cut spending by over 50%.</li> </ul>	➤	<ul style="list-style-type: none"> <li>■ Existing mitigation plan for this risk (Funding Reduction) were already in Program Risk Management Plan so client was prepared to implement actions</li> <li>■ Used master schedule to forecast cash flow model expenditures and maximize available funding</li> <li>■ Maintained project planning activities due to low cost and to build backlog of planned projects for when ceiling was lifted</li> <li>■ Completed design phase, documented status using memos and placed "on shelf" for bidding for when ceiling was lifted</li> <li>■ Reduced consultant project and construction manager staffing as projects phases (design and construction) were completed</li> </ul>	➤	<ul style="list-style-type: none"> <li>■ Cut spending by required amount within several months and maintained until rate increase was approved</li> <li>■ Rapidly restarted projects into design phase and directly to bid and award as soon as rate increase was approved</li> <li>■ Re-engaged project and construction management staff to restart using memorandum and other information from PMIS to reduce ramp-up for some new staff</li> </ul>

## Tab F: Knowledge of the Site and Local Conditions



# Knowledge of Site and Local Conditions

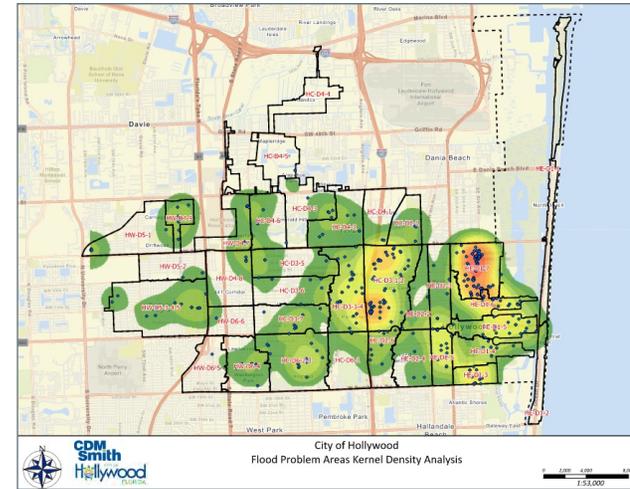


## Knowledge of the Site State, County, and City Requirements, Codes, and Ordinances

### Understanding of the Root Causes of Flooding in Each Neighborhood

CDM Smith developed Hollywood's Citywide stormwater models for the Stormwater Master Plan, detailed to a neighborhood level to identify the root causes of flooding across the City for events ranging from the 5-year through 100-year with sea level rise consistent with Florida Statutes (FS)380 as well as simulation of historic flood events such as April 2023 and Hurricane Irma, and the recent "rain bombs" historic outlier events of May 2023 and Jun 2024. The model considers swales, exfiltration systems, wells, pipes, culverts, pump stations, force mains, outfalls and backflow preventers, seawalls and deployable barriers, groundwater levels and increases from sea level rise, and effects of rainfall and tidal surge and King Tide events in combination. The detailed model, and each SWMP project and the CIP was developed to be certain that each project can "stand on its own" in phases and not "move the flooding problem" elsewhere in the City.

All SFWMD major canals, FDOT corridor connections (e.g., A1-A, I-95, SR-441, SR-820), Florida's Turnpike, and Dixie Hwy, connections to the South Broward Drainage District and Central Broward Water Control District, Fort Lauderdale-Hollywood International Airport, and adjacent cities of Dania Beach, Hallandale Beach, and Pembroke Pines are included to fully understand the sources of runoff, root causes of the problems, constraints for storage and conveyance, and opportunities for partnerships to cost-effectively address the problems and leverage funds for implementation synergies.



### Understanding of Local and Permitting Impacts

Led by **Mike Schmidt, PE, BCEE, BC.WRE**, the CDM Smith team are experts in permitting, related procedures and testing protocols as required. We have worked with FDEP and the Florida Engineering Society (FES) on the updates for the new Environmental Resource Permit (ERP) rule with considerations for retrofit and credits for various Best Management notes like Hollywood will require.

We have extensive experience with SFWMD ERP permits which are delegated to Broward City for Hollywood, as well as USACE Section 404 Dredge-and-Fill permitting for canals, wetlands and nearshore waters for seawalls, outfalls and backflow preventers, and FDEP Underground Injection Control (UIC) permitting recharge wells to the salty surficial aquifer system, after pretreatment to reduce discharge volumes and pollutants loads, which will also reduce saltwater intrusion from sea level rise.



CDM Smith is one of Florida's foremost experts in developing permitting plans. We have a thorough knowledge of applicable federal, state, and City of Hollywood regulations, as well as extensive experience interpreting and complying with local regulations. Most importantly, our excellent working relationships with local FDEP and USACE staff can be leveraged to make sure Hollywood's projects meet all environmental requirements.

## Experience Working in Local Areas Affected by Low Elevation Lines, Points, etc.

With decades of experience supporting utilities and communities across Florida, CDM Smith understands the urgent need for resilient stormwater infrastructure in the face of rising seas, tidal events, low elevations, and storm surge. Our work with cities like Hollywood, Miami, Jacksonville, and Boca Raton; as well as counties including Broward, Miami-Dade, and Palm Beach; and State and Federal agencies like FDEP, SFWMD, and USACE has positioned us as a trusted partner in tackling the state's most complex stormwater challenges. We have innovated Level of Service (LOS) standards for retrofit to cost-effectively support implementation while protecting public safety, homes and buildings, and evacuation routes and first responder access, and emergency infrastructure.

Extreme weather is intensifying across Florida. From stronger, longer-lasting hurricanes to sea level rise, these climate extremes are placing unprecedented stress on aging stormwater infrastructure. CDM Smith has responded with innovative, adaptive solutions—such as the development of comprehensive stormwater master plans that integrate green infrastructure, aquifer recharge, and flood mitigation strategies.

Resilience, to us, means more than just weathering the storm and maintaining service. It's about empowering communities, institutions, and systems to adapt, thrive, and grow—no matter the adversity, now and in a changing future with more extreme storms and sea level rise and higher groundwater levels.

Our approach includes climate hazard risk assessments, predictive modeling, and the design of infrastructure that protects public health, verifies regulatory compliance, and supports long-term sustainability. The detailed model provides the ability to evaluate adaptive measures as needed to account for future climate conditions and phase them in as needed with Benefit-Cost (B/C) analyses using FEMA HAZUS to demonstrate value for the investment and support grant applications.

## Experience Working in Areas Prone to Hurricane Wind Forces

The 2025 Hurricane season is expected to be an above-average hurricane season, with 17 named storms, 9 hurricanes, and 4 major hurricanes (Category 3–5). As residents of Florida, we all know too well that hurricane storm surge is fast and brings with it dangerous flooding.

CDM Smith has extensive experience working in areas prone to hurricane wind forces, particularly through our focus on coastal resilience, stormwater management, and infrastructure protection. We have led over 500 projects across 35 US states and nine countries, focusing on sustainable and resilient infrastructure.

Hurricane preparedness plans for construction to protect both the sites and the surrounding communities will be requirements of the program, as well as model simulations to predict potential high water areas hindering access.

## Our Team has a Strong Understanding of Hardened Facilities and Associated Design Considerations

- Design-build services for the Cat 4/5 hurricane hardening of Palm Beach County's WTP #9 and #2, as well as their customer service building and regional operations center
- Hardened Miami-Dade WAST's SDWWTP Effluent Pump Station by designing it a story higher than other plant stations to combat rising flood elevations
- Assessed potential impacts of climate variability on Metro Atlanta's water resources and infrastructure
- Technical peer review and guidance for OOL WWTP upgrades for Miami-Dade WAST's Central District WWTP, which included hardening guidelines for armoring, raising, and relocating facilities for operational range of conditions, safety, performance, and resiliency
- Flood mitigation plans for hurricane-impacted neighborhoods in Virginia Beach that analyzed complex hydrologic and hydraulic conditions and proposed stormwater improvements
- Plan prioritized sea level rise resilience, permitting feasibility, and minimal construction disruption
- USACE \$3.9BM program to enhance hurricane flood protection in Port Arthur, TX, including raising 27.8 miles of levees and floodwalls, replacing 26 closure structures, and enhancing pump station protection and erosion control



## Knowledge of Local Permitting Agencies, Procedures, Testing Protocols

CDM Smith will develop a standard operating procedure for all City projects in the Program for consistency and conformity to help expedite the permitting process, similar to the below:

- Set up the permit tracking for the project.
- Host a pre-meeting with the permit regulators to describe the project, the methodology, and the design intent, and get initial feedback on any special requirements for the permit application submittal.
- Provide the analysis calculations from the City-wide model for pre-post retrofit impact of the project as an enhancement for the project designer to include with the submittal showing water quality enhancements and meeting the requirements for stages and flows up and downstream.
- Review the design for conformance with both the SWMP and the regulatory requirements.
- Review the permit application for conformance with the regulatory requirements.
- Assist with reviewer requests for additional information.
- Add to the repository for permanent record, easy access, tracking, status updates, and closure.



## Proven Experience with Permitting and Development Reviews in South Florida

For the Miami-Dade Aviation Department (MDAD), CDM Smith has been providing similar stormwater master plan, permitting, designs, and design guidance and standards for their capital program services for the past 36 years. We developed the detailed stormwater models and master plans, conceptual MSSW/ERP permits and updates, USEPA NPDES Industrial permits and SWPPPs, and design standards manuals for the Miami International Airport, Miami-Opa Locka Executive Airport, and the Miami Executive Airport (Tamiami) and has since been the County's consultant managing multiple concurrent expansions and development at these "small cities". CDM Smith provides technical guidance and reviews of all new development plans submitted to MDAD by consultants at the three airports for conformance to the stormwater design standards and the stormwater master plans.

The CDM Smith team including Jon Goldman as PM, Tom Nye as Lead Modeler, and Mike Schmidt as Technical Manager and Lead Engineer, have provided coordination between multiple designers and AEs, and recommended cost-effective phased future infrastructure by analyzing the bigger picture from a master plan perspective saving the County money, responding to MDAD contractor inquiries as needed to keep projects on schedule, and maintaining and updating a dynamic living model of the three systems for the department to provide timely and efficient feedback on stormwater issues, permit requirements, and design guidance to keep projects moving forward and in compliance with MDAD RER, SFWMD ERP, FDEP, public safety, and FAA regulations.

CDM Smith has played a critical role for the County's economic engine by performing over 70 time-sensitive development reviews in the latest contract keeping MDAD one of the nation's top performing aviation departments. Our permitting, designs, and design standards innovation have saved MDAD over \$50M with first flush system to bring MIA into water quality compliance while maintaining flood control as they redeveloped Concourses A-K.

## Experience Working on Projects With Complex Logistical Challenges

CDM Smith developed your SWMP and CIP to deliver cost-effective LOS flood management improvements and protection for homes, businesses, buildings, emergency facilities and infrastructure, and for evacuation routes and safe access for first responders (police, fire, ambulance). The plan identifies prioritized options that can be phased throughout CIP implementation and into the future to meet the LOS goals presented at your public meetings and to commission to identify public concerns for flooding throughout all areas of the City.

Our team understands the complex logistical challenges faced with working in the South Florida environment and in and around neighborhoods and businesses requiring modifications to surface water/canal systems, addition of new pump stations, below grade infrastructure that is weaved in and out of existing sewer/force mains, water distribution systems, roadways, and coordinating work with other ongoing City projects such as the seawalls, parks, and the overlapping septic to sewer conversion areas. Recognizing the constraints and risks associated with occupied buildings, areas accessible to the public, or locations with specific safety requirements is paramount. This includes identifying potential hazards, traffic patterns, and existing logistical operations, and importantly, maintaining existing utility services while new infrastructure is being installed.

## Approach to Working in Dense, Urban Environments

Working in dense urban environments with high traffic volumes requires a proactive approach to address potential safety risks to both the public and project teams and to maintain access for emergency vehicles. Many of the project locations are close to apartments, houses, and businesses. Safety of the public and traffic flow in these areas will require careful planning. We will require the contractors to develop site specific public safety plans for each project that include traffic control, identifying alternate pipeline and duct alignments, investigate trenchless technology options, and fully understand site traffic plans prior to construction. Maintenance of traffic plans (MOTs) for different projects will be analyzed and coordinated so that neighborhoods are kept accessible from multiple directions.

Our team understands the complex logistical challenges faced with working in and around the South Florida environment with neighborhoods and businesses requiring modifications to surface water/canal systems, addition of new pump stations, and below grade infrastructure that is weaved in and out of existing right of ways for sewer/ force mains, water distribution systems, and roadways. We recognize the importance of proactively managing risks associated with occupied buildings, public access areas, and sites with stringent safety requirements. This entails careful identification of potential hazards, traffic impacts, and ongoing operations. Success hinges on close coordination with multiple contractors, local agencies, utility providers, and surrounding stakeholders to navigate constraints and maintain strong community relations and public safety throughout the project.

CDM Smith also understands the importance of safeguarding the owner's interests by maintaining compliance with all applicable permits along with local noise and nuisance ordinances, as well as the specific requirements outlined in the project specifications. Proactively monitoring sound and vibration levels at the site perimeter can help protect the City against unfounded or costly legal claims from neighboring properties.

## Proven Coordination to Resolve Complex Logistical Challenges

**City of Hollywood Shoreline Protection Bond Program Assistance** – To comply with the Broward County Ordinance for tidal and sea level rise protection, the City passed a General Obligation Bond (GO Bond) to fund a variety of city-wide public improvement projects including phased Tidal Flooding Mitigation and Seawalls where no current shoreline protection exists and with improvements of existing shoreline protection measures. CDM Smith analyzed the project for the City within the context of the SWMP and alerted the City that the timing of the shoreline barriers is preceding the planned stormwater CIP in these areas and will exacerbate flooding if constructed. We tackled the complex logistical problem by proposing an innovative solution of incorporating removable gaps in the seawalls at strategic locations to allow stormwater to continue to flow off the land in large storms and keep the sea out at high tide conditions. Engineering analyses were expeditiously performed by our team using a modified version of the SWMP stormwater model and design parameters for the stormwater release gates were provided to the engineers to add to their design plans without impacting the tight bond-driven construction schedule.



## Approach to Safety During Construction

Our approach to safety during construction will be in accordance with the established safety program detailed in our PgMP and supporting construction requirements. Although safety of the ongoing construction is the responsibility of the Contractor at each job site; our team sets the overarching attitude and definition of the overall Program as well as each of its individual projects.

Overseen by **Martin Lewis, PE, PMP, BCEE**, our construction management team's key roles for overall safety compliance are to review the Contractor's site-specific Safety Plan for each project in conformance with requirements set forth in the PgMP and supporting construction requirements developed with the City. 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. Once the review is confirmed to be in conformance, the Program team will work with all parties to understand and abide by the Contractor's approved site-specific Safety Plan. The following safety compliance items will be established to certify proper compliance with safety policies and procedures:

- Appoint a Safety Coordinator (further detailed below).
- Establish responsibilities for visitors, site workers, and site construction managers.
- Establish accountability for employees for performance of their safety responsibilities.
- Establish a process for enforcing disciplinary procedures for employees.
- Provide and/or instruct appropriate use of proper personal protective equipment.

The Program's Health and Safety Coordinator, **Joe Sabo, CSP, CHST**, will review contractor safety programs and plans for compliance, hazard identification and risk assessment, and confirm hazard controls are in place to promote the safety of the public, property, and project team. Additionally, Joe will perform monthly audits and observation of field activities to assess compliance with submitted safety programs. These audits and observations will be documented in report format with field photographs. The reports will be combined quarterly and presented to the Program and City staff in a presentation that allows for PDH credit. We will also coordinate with the entire team, including City staff, to identify any appropriate trainings so that certifications and competencies are in place and documented.

Safety is everyone's responsibility, and fostering an environment of safety is done by providing helpful comments to the designer and contractor and act as their extra set of eyes on the project. Keeping safety as a top of mind exercise for the contractor is critical to promoting a safe project for everyone involved including the owner, the contractor, the engineer, and the public.

### MITIGATION OF RISKS

Traffic control must be primary consideration in developing work sequencing and pipe alignment

Coordinate closely with the City to plan work packages and construction sequencing during the design process to minimize disruptions to businesses during construction

Coordinate with schools to do work in off-season

Public information programs

Route selection to avoid major conflicts

## Tab G: References





## Clean Water Nashville Program Management, Metro Water Services, TN

**Project Description:** Since 2011, CDM Smith has served as Program Manager to support MWS in renewing the Music City one sewer pipe at a time.

**Program Value:** \$2.7B

**Program Dates:** 2011 – 2023, 2023 – Ongoing

“ We have been very satisfied with the quality of CDM Smith’s work and their ability to adhere to aggressive time schedules. The staff at CDM Smith is very knowledgeable and they are always eager to help in a courteous and professional manner.”

– Cyrus Q. Toosi, Assistant Director of Division of Engineering & Planning

### CITY SCOPE

CIP Management & Project Delivery

Technical Support / Design of R&R Projects

O&M Consulting Support

Program Controls Metrics/ (Document, Cost, and Schedule Management)

Funding/Grants/ Appropriations

Primary Manager/ Onsite Representative

Asset Management Consulting services

Public Information Officer

Construction Management

### PROGRAM PARALLELS

- Providing technical and managerial support to implement 129 projects totaling \$2.74B to reduce CSOs and SSOs
- To date, 94 projects (\$1.38B) complete/underway, already resulting in number of overflow events dropping significantly
- Develop scopes and OPCCs, manages design firms, identifies and manages risks, coordinates permitting and property acquisition, assists with outreach, and supports bidding and construction phase services
- Maintain sanitary sewer hydraulic model, including annual update using data from over 100 flow monitors
- Update Capacity, Management, Operation and Maintenance (CMOM) reporting metrics
- Coordinate field service activities (manhole and sewer inspection, smoke testing, and trunk walking)
- Implement state-of-the-art PMIS (Oracle Primavera Unifier); since start-up, has captured more than 200,000 documents; 6,000 construction submittals; 2,000 RFIs; and documented \$760M in project expenditures
- Prepare various guidance documents such as Design and Quality Management Manuals and Document Control, Cost Estimating, and Procurement Guidelines
- SRF Loan Program funding assistance/administration for Drinking Water Reservoir, Water Main Replacement, and Water Storage Tank improvements projects
- Our “extension of staff” approach provides MWS with support of key individuals fully embedded in the program, supplemental staff engaged as needed, and an extensive network of experts available
- Initiate gap assessment for AM practices
- Apply condition/criticality risk assessment to establish locations for annual sewer rehabilitation
- Develop periodic newsletter, maintains program website, and conducts virtual public meetings
- Assisted with public relations activities and customer complaint resolution related to construction projects
- Assisted the Program Management Consultant (PMC) with design and constructability reviews
- Wrote the Construction Management Manual (CMM), and provided annual updates to the CMM that define the processes and procedures for managing the construction phase of the program and provided input into modifications of OAP design standards
- Provided change management in accordance with the MWS’s procedures for modification of contracts
- Incorporated sustainable practices into the program, including providing sustainability input as part of constructability reviews and performed Triple Bottom Line analyses

### IMPLEMENTING CORRECTIVE ACTIONS TO ACCOMPLISH BEST PRACTICES FOR THE PROGRAM

CHALLENGE	SOLUTION(S)/RESULT(S)
<b>Elevated bid prices for rehab projects</b>	▪ Discussions with contractors to understand how to share risks affecting costs, resulting in better/stabilized bid pricing
<b>Long delays with contractor procurement</b>	▪ Worked with MWS and Purchasing to establish IDIQ contracts for rehab and small diameter conveyance to streamline process, reduce procurement time frames and allow project schedules to be better maintained
<b>Impact of budgeting issues on projects</b>	▪ Continue to evaluate program budget/cash flow projections and prepare summaries as needed ▪ Apply similar tracking for non-program projects, re-prioritize upcoming projects to emphasis project impacts, and request revised completion dates for individual projects from EPA—resulting in revised schedules granted by EPA
<b>Environmental impacts</b>	▪ Received two-year force majeure extension (flooding), and assisted with regulatory agency negotiations that extended the compliance deadline by years

## VENDOR REFERENCE FORM

**City of Hollywood Solicitation #:** 320-25-JJ  
**Reference for:** Stormwater Program Management

**Organization/Firm Name providing reference:** Metropolitan Government of Nashville and Davidson County

**Organization/Firm Contact Name:** Ron Taylor **Title:** Program Director  
**Email:** ron.taylor@nashville.gov **Phone:** 615-566-4952  
**Name of Referenced Project:** Clean Water Nashville Program **Contract No.:** 6562353  
**Date Services were provided:** Management **Project Amount:** \$2.7B  
2011 - 2023, 2023 - Ongoing

**Referenced Vendor's role in Project:**  **Prime Vendor**  **Subcontractor/ Subconsultant**  
**Would you use the Vendor again?**  **Yes**  **No. Please specify in additional comments**

**Description of services provided by Vendor (provide additional sheet if necessary):**  
 Program Manager to support Nashville Metro Water Services (MWS) in implementing the requirements of a federal Consent Decree designed to reduce combined sewer overflows (CSOs) and sanitary sewer overflows (SSOs). CDM Smith provided the technical and management support needed to implement the projects identified in two main planning documents, the Corrective Action Plan/Engineering Report (CAP/ER) and the Long-Term Control Plan (LTCP).

Please rate your experience with the Vendor	Need Improvement	Satisfactory	Excellent	Not Applicable
<b>Vendor's Quality of Service</b>				
a. Responsive	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Accuracy	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Deliverables	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Vendor's Organization:</b>				
a. Staff expertise	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Professionalism	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Staff turnover	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Timeliness/Cost Control of:</b>				
a. Project	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Deliverables	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Additional Comments (provide additional sheet if necessary):**  
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<b>Verified by:</b>	<b>Name:</b>		<b>Title:</b>		
	<b>Department:</b>		<b>Date:</b>		



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

**Project Description:** As an extension of staff model, CDM Smith has worked hand-in-hand with the existing City staff and management to accomplish the goals of the Clean Water 2020 Program for the past 13 years.

**Program Value:** \$1B

**Program Dates:** 2012 – 2023;  
2023 – Ongoing

CITY SCOPE	PROGRAM PARALLELS
CIP Management & Project Delivery	<ul style="list-style-type: none"> <li>Managing 60+ active projects, from complex WWTP projects to pump station and collection system rehab, and new pump stations and pipelines for expanded capacity</li> <li>Created Columbia-specific program standards such as new technical specifications, front-end contract documents, and guides for local teams to use as a go-by throughout the project for efficient implementation</li> <li>Responsible for scope negotiations and preparing projects for procurement</li> </ul>
Technical Support / Design of R&R Projects	<ul style="list-style-type: none"> <li>Collected data for projects, coordinating with internal/external entities to execute and keep projects moving forward, and updating City of project status</li> </ul>
O&M Consulting Support	<ul style="list-style-type: none"> <li>Implemented extensive, data-driven O&amp;M dashboards to drastically improve short- and long-term decision making</li> </ul>
Program Controls Metrics/(Document, Cost, and Schedule Management)	<ul style="list-style-type: none"> <li>Managed several areas, including project progress reporting, budget and schedule tracking, document controls, and management related dashboards</li> </ul>
Funding/Grants/Appropriations	<ul style="list-style-type: none"> <li>Assisted the City in obtaining a federal ARPA grant for \$10,000,000 in 2023; currently administering the grant during construction of a \$64M Sanitary Sewer Wet-Weather Storage Tank project</li> <li>Assisted the City in obtaining a state grant for \$1,500,000 in 2025; the grant will be administered during construction of a Sanitary Sewer Rehabilitation project set to begin in late-2025</li> </ul>
Primary Manager/ Onsite Representative	<ul style="list-style-type: none"> <li>8 program staff have managed projects as extension of staff from inception through design and construction to closeout</li> </ul>
Asset Management Consulting services	<ul style="list-style-type: none"> <li>Implemented innovative technology environment with GIS, CMMS, CCTV videos, inspections, AM, capital planning, and other information into single, seamless environment accessible to users via web and mobile</li> </ul>
Public Information Officer	<ul style="list-style-type: none"> <li>Public meetings, maintain program website, social media posts, and yard signs to alert on project status</li> </ul>
Construction Management	<ul style="list-style-type: none"> <li>Engineering services during construction include oversight of consultant responses to RFIs and change order requests</li> </ul>

### IMPLEMENTING CORRECTIVE ACTIONS TO ACCOMPLISH BEST PRACTICES FOR THE PROGRAM

CHALLENGE	SOLUTION(S)/RESULT(S)
<b>Inadequate data impacted decision-making and project performance</b>	<ul style="list-style-type: none"> <li>Developed workflows/processes for integrating CCTV and other asset inspections with GIS environment; implemented tools to allow City to access information via web and mobile devices</li> <li>Performed criticality analysis of City infrastructure and incorporated data into asset register to support efficient maintenance and budgeting for replacement and growth</li> </ul>
<b>Reporting progress to City leadership</b>	<ul style="list-style-type: none"> <li>Dashboards and reporting tools developed using Microsoft PowerBI and allow the City to track progress towards goals and report on system compliance</li> </ul>
<b>Environmental impacts</b>	<ul style="list-style-type: none"> <li>Helped obtain extension based on a force majeure event (flooding) gaining 1 year, and justifying a second force majeure extension due to COVID-19 to gain 2 years</li> <li>Hurricane Joaquin flooding (Oct '15) caused damage and fatalities, but we completed post-storm assessment of City pump stations and equipment in just one month; repair response times were substantially expedited</li> </ul>

“CDM Smith has provided exceptional Program Management services to the City of Columbia...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

## VENDOR REFERENCE FORM

City of Hollywood Solicitation #: 320-25-JJ  
 Reference for: Stormwater Program Management

Organization/Firm Name providing reference: City of Columbia, SC

Organization/Firm Contact Name: John T. Riggs, PE Title: Deputy Director of Major Capital Projects  
 Email: john.riggs@columbiasc.gov Phone: 803.528.4238  
 Name of Referenced Project: Clean Water 2020 Program Contract No: SS7644  
 Date Services were provided: 2012 - 2023; 2023 - Ongoing Project Amount: \$3.9M per year

Referenced Vendor's role in Project:  Prime Vendor  Subcontractor/  
 Subconsultant  
 Would you use the Vendor again?  Yes  No. Please specify in additional comments

**Description of services provided by Vendor (provide additional sheet if necessary):**  
 CDM Smith has provided Program Management services for the City of Columbia, developing expanded project management practices and assisting with delivery and administration of all CIP projects. By leveraging infrastructure improvements, organizational optimization, and technology upgrades, CW2020 will not only satisfy regulatory requirements and make the City's waterways cleaner, but it will also provide a foundation for growth and development..

Please rate your experience with the Vendor	Need Improvement	Satisfactory	Excellent	Not Applicable
<b>Vendor's Quality of Service</b>				
a. Responsive	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Accuracy	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Deliverables	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Vendor's Organization:</b>				
a. Staff expertise	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Professionalism	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Staff turnover	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Timeliness/Cost Control of:</b>				
a. Project	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Deliverables	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Additional Comments (provide additional sheet if necessary):**  
*Hire them. I have ~~had~~ had the best experience working with this team.*

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Verified by:	Name:			Title:	
	Department:			Date:	



# Clean Water Program Management, Metropolitan District Commission, Hartford, CT

**Project Description:** Since 2007, CDM Smith has served as PgM for MDC's \$2.5B Clean Water Program.

**Program Value:** \$2.5B

**Project Dates:** 2007 - 2023, 2023 - Ongoing

“ We needed a program manager who could oversee not only the engineer aspects, but all the aspects associated with the program, including our outreach, our financial needs . . . CDM Smith brings capacity, they bring their technical expertise . . . they bring financial expertise, they bring communications expertise, so they're not just an engineering company”

– Scott Jellison; CEO

## CITY SCOPE

CIP Management & Project Delivery

Technical Support / Design of R&R Projects

O&M Consulting Support

Program Controls Metrics/ (Document, Cost, and Schedule Management)

Funding/Grants/ Appropriations

Primary Manager/ Onsite Representative

Asset Management Consulting services

Public Information Officer

Construction Management

## PROGRAM PARALLELS

- MDC's \$2.5B Clean Water Program comprises of 250 projects, with 100+ completed to date
- Few projects were clearly defined initially, so we helped MDC structure the program by developing schedules, budgets, and plans for resource and staffing, funding and financing, and contract packaging
- Projects 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
- Developed Integrated Planning approach to balance CO compliance with other asset management and regulatory requirements
- Conducted extensive metering programs, pipe condition assessments, and performed long-term continuous hydraulic modeling of system
- Managing and coordinating a number of designs completed by other firms as design engineers
- Final design for sewer separation, sewer R&R, private lateral R&R, private I/I removal, relief sewers, consolidation conduits, water mains, and WWTP improvements
- Support execution of collection system CMOM program
- Tracking and forecasting budgets, expenditures, and financing, including reporting and forecasting commitments, funding, and M/WBE participation
- Affordability analysis evaluated impact of alternatives on ratepayers by integrating water/sewer use projections, rate structures, external funding, projected expenditures, etc.
- 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
- Our co-located embedded staff manage 25+ consultants and 35+ contractors
- Project prioritization and system evaluations are closely linked with District's GIS
- Prepare collateral materials for public communication, present in public forums, and represent the District to stakeholders in project-specific outreach
- Engineering services during construction included responses to RFIs, change order requests, and CEI
- Provided Construction Managers, Resident Engineers, and Inspectors

## IMPLEMENTING CORRECTIVE ACTIONS TO ACCOMPLISH BEST PRACTICES FOR THE PROGRAM

CHALLENGE	SOLUTION(S)/RESULT(S)
<b>Balance consent order/decree compliance spending with other asset management and regulatory requirements</b>	<ul style="list-style-type: none"> <li>▪ This CD/CO-driven program's initial projected completion was 15 years; we redefined the program from CD/CO compliance to an integrated water resources planning approach, gaining an additional 8 years of schedule without increasing costs</li> </ul>
<b>Justifying lateral rehabilitation needs to MDC Management</b>	<ul style="list-style-type: none"> <li>▪ Piloting I/I removal approaches in targeted locations allowed us to quantify benefits MDC would realize from sewer rehabilitation</li> </ul>
<b>Achieving DBE participation goals</b>	<ul style="list-style-type: none"> <li>▪ Implemented proactive small and disadvantaged contractor engagement programs which led to exceeding set-aside goals</li> </ul>
<b>Accommodating growth and change during a long-term program</b>	<ul style="list-style-type: none"> <li>▪ Being flexible and adaptable as the program has progressed has allowed us to take advantage of new funding, opportunities, and technologies</li> </ul>

## VENDOR REFERENCE FORM

City of Hollywood Solicitation #: 320-25-JJ  
 Reference for: Stormwater Program Management

Organization/Firm Name providing reference: Metropolitan District Commission

Organization/Firm Contact Name: Scott Jellison, PE Title: CEO  
 Email: sjellison@themdc.com Phone: 860.278.7850 ext. 3500  
 Name of Referenced Project: Clean Water Program Contract No: RFQP#7  
 Date Services were provided: Management Project Amount: \$70M  
2007 - 2023, 2023 - Ongoing

Referenced Vendor's role in Project:  Prime Vendor  Subcontractor/  
 Subconsultant  
 Would you use the Vendor again?  Yes  No. Please specify in additional comments

**Description of services provided by Vendor (provide additional sheet if necessary):**  
 Since 2007, CDM Smith has served as program manager for MDC's \$2.5B Clean Water Program, comprising 250 projects with 100+ completed to date. This program was initially projected to be completed in 15 years; however, we helped redefine the program from CD/CO compliance to an integrated water resources planning approach, gaining an additional 8 years of schedule without increasing costs.

Please rate your experience with the Vendor	Need Improvement	Satisfactory	Excellent	Not Applicable
<b>Vendor's Quality of Service</b>				
a. Responsive	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Accuracy	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Deliverables	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Vendor's Organization:</b>				
a. Staff expertise	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Professionalism	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Staff turnover	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Timeliness/Cost Control of:</b>				
a. Project	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Deliverables	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Additional Comments (provide additional sheet if necessary):**  
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	Department:				Date:

## Tab H: Sub Consultant Information



# Sub Consultant Information

## Proven Partners to Delivering Large-Scale Stormwater Infrastructure Solutions

While CDM Smith can provide nearly all of the requested services in-house, in studying the Program's scope and understanding the City's needs, we carefully considered the anticipated technical expertise required and teamed with the firms that best complement our in-house services.

### BRIZAGA, INC. | SUSTAINABILITY/RESILIENCY; PUBLIC INFORMATION OFFICER; PUBLIC COMMUNICATION

Brizaga is a strategic consulting firm built to solve complex problems by leveraging science, communications, engineering, and policy. They work to plan for and address the impacts of rising seas, more frequent flooding, and a changing environment on property, infrastructure, community, and the local economy. As part of CDM Smith team for the City of Hollywood's Stormwater Program, the firm offers access to ProjectWatch – a cloud-based project dashboard developed internally and designed to enhance transparency, streamline internal coordination, and keep the public informed. Additionally, they have helped over 140 communities across more than 30 counties build resilience against sea level rise and climate change. Brizaga is a certified Small Business Enterprise (SBE) with Broward County and SFWMD.



### CHEN MOORE AND ASSOCIATES, INC. (CMA) | INTERIM PROJECT DESIGN

CMA specializes in civil engineering, water resources, water and sewer, landscape architecture, electrical engineering, transportation, planning, irrigation, environmental, and construction administrative services to Florida clients since 1986. They are well regarded for our in-house knowledge of water/wastewater modeling and engineering, stormwater engineering, roadway, streetscapes, parks, site design, and irrigation design. With a proven track record as a design consultant across Florida, with expertise in modeling, analysis, and design of retention areas, exfiltration trench, stormwater systems and pump stations. CMA has 23 projects for Hollywood including the Hollywood Stormwater Master Plan Update, Miscellaneous Stormwater Services, and numerous stormwater improvement programs.



### CRAVEN THOMPSON & ASSOCIATES, INC. (CTA) | PROJECT MANAGER SUPPORT; SURVEYING

CTA has provided a full range of professional services including stormwater management, GIS/Mapping, surveying, roadway design, landscape architecture, neighborhood improvements, planning, streetscape, complete streets, roadway beautification, and construction management to South Florida since 1962. They have extensive experience in infrastructure rehabilitation, redevelopment, and Capital Improvement Projects, involving the replacement and upgrade of water and sewer lines, new infrastructure, sewage pump stations, storm water drainage projects, and waterway projects. Since 2009, they have worked for Hollywood on various contracts including stormwater/drainage, streetscape, and surveying.

CRIVEN THOMPSON



&amp; ASSOCIATES INC.

### TRINNEX | DIGITAL ENGINEERING

Trinnex, a wholly owned subsidiary of CDM Smith, is a technology company and solution provider with the institutional and engineering expertise to support the Stormwater Program. The Trinnex team is composed of water experts with decades of domain knowledge, data science proficiency, and a proven track record of delivering technical excellence. Recognizing that utilities have been collecting and using data for decades, Trinnex focuses on helping organizations extract greater value and impact from that data. They will collaborate with our team to deliver digital strategies and tools that empower the City to make informed decisions. They understand and align with your vision for a more efficient, sustainable, and resilient future.



## Tab K: Required Forms



# Required Forms

Per Question 18 to the Request for Qualification, we have uploaded several of the forms in Section 3 in the Opengov portal.

- Form 1 – Submittal Checklist Form **(Not required per Question and Answer #32)**
- Form 2 – Acknowledgment and Signature Page **(Submitted on the Opengov portal item 4)**
- Form 3 – Bid Form **(Not required per Question and Answer #12)**
- Form 4 – Vendor Reference Form **(Submitted on the Opengov portal item 3.1)**
- Form 5 – Hold Harmless and Indemnity Clause **(Acknowledged on the Opengov portal item 3.2)**
- Form 6 – Non-Collusion Affidavit **(Acknowledged on the Opengov portal item 3.3)**
- Form 7 – Sworn Statement Pursuant to Section 287.133(3)(a) **(Submitted on the Opengov portal item 5)**
- Form 8 – Certifications Regarding Debarments, Suspensions and Other Responsibility Matters **(Acknowledged on the Opengov portal item 3.4)**
- Form 9 – Drug-Free Workplace Program **(Acknowledged on the Opengov portal item 3.5)**
- Form 10 – Solicitation, Giving and Acceptance of Gifts Policy **(Acknowledged on the Opengov portal item 3.6)**
- Form 11 – W-9 (Request for Taxpayer Identification)

**Request for Taxpayer  
 Identification Number and Certification**  
 Go to [www.irs.gov/FormW9](http://www.irs.gov/FormW9) for instructions and the latest information.

**Give form to the  
 requester. Do not  
 send to the IRS.**

**Before you begin.** For guidance related to the purpose of Form W-9, see *Purpose of Form*, below.

<b>Print or type.</b> See <i>Specific Instructions</i> on page 3.	<b>1</b> Name of entity/individual. An entry is required. (For a sole proprietor or disregarded entity, enter the owner's name on line 1, and enter the business/disregarded entity's name on line 2.) <b>CDM SMITH INC.</b>	
	<b>2</b> Business name/disregarded entity name, if different from above.	
	<b>3a</b> Check the appropriate box for federal tax classification of the entity/individual whose name is entered on line 1. Check only <b>one</b> of the following seven boxes. <input type="checkbox"/> Individual/sole proprietor <input checked="" type="checkbox"/> C corporation <input type="checkbox"/> S corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Trust/estate <input type="checkbox"/> LLC. Enter the tax classification (C = C corporation, S = S corporation, P = Partnership) _____ <b>Note:</b> Check the "LLC" box above and, in the entry space, enter the appropriate code (C, S, or P) for the tax classification of the LLC, unless it is a disregarded entity. A disregarded entity should instead check the appropriate box for the tax classification of its owner. <input type="checkbox"/> Other (see instructions) _____	<b>4</b> Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3):  Exempt payee code (if any) <u>  <b>5</b>  </u>  Exemption from Foreign Account Tax Compliance Act (FATCA) reporting code (if any) _____
	<b>3b</b> If on line 3a you checked "Partnership" or "Trust/estate," or checked "LLC" and entered "P" as its tax classification, and you are providing this form to a partnership, trust, or estate in which you have an ownership interest, check this box if you have any foreign partners, owners, or beneficiaries. See instructions _____ <input type="checkbox"/>	<i>(Applies to accounts maintained outside the United States.)</i>
	<b>5</b> Address (number, street, and apt. or suite no.). See instructions. <b>75 STATE STREET, SUITE 701</b>	Requester's name and address (optional)
	<b>6</b> City, state, and ZIP code <b>BOSTON, MA 02109</b>	
	<b>7</b> List account number(s) here (optional)	

**Part I Taxpayer Identification Number (TIN)**

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN*, later.

<b>Social security number</b>									
				-					
<b>or</b>									
<b>Employer identification number</b>									
0	4	-	2	4	7	3	6	5	0

**Note:** If the account is in more than one name, see the instructions for line 1. See also *What Name and Number To Give the Requester* for guidelines on whose number to enter.

**Part II Certification**

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
2. I am not subject to backup withholding because (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
3. I am a U.S. citizen or other U.S. person (defined below); and
4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

**Certification instructions.** You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and, generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

<b>Sign Here</b>	Signature of U.S. person <i>Janeen Pitts</i>	Date <b>01/02/2025</b>
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**General Instructions**

Section references are to the Internal Revenue Code unless otherwise noted.

**Future developments.** For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to [www.irs.gov/FormW9](http://www.irs.gov/FormW9).

**What's New**

Line 3a has been modified to clarify how a disregarded entity completes this line. An LLC that is a disregarded entity should check the appropriate box for the tax classification of its owner. Otherwise, it should check the "LLC" box and enter its appropriate tax classification.

New line 3b has been added to this form. A flow-through entity is required to complete this line to indicate that it has direct or indirect foreign partners, owners, or beneficiaries when it provides the Form W-9 to another flow-through entity in which it has an ownership interest. This change is intended to provide a flow-through entity with information regarding the status of its indirect foreign partners, owners, or beneficiaries, so that it can satisfy any applicable reporting requirements. For example, a partnership that has any indirect foreign partners may be required to complete Schedules K-2 and K-3. See the Partnership Instructions for Schedules K-2 and K-3 (Form 1065).

**Purpose of Form**

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS is giving you this form because they

