



## PROPOSAL DOCUMENT REPORT

RFQ No. RFQ-118-23-JJ

### DESIGN, CONSTRUCTION ENGINEERING AND INSPECTION SERVICES

RESPONSE DEADLINE: October 2, 2023 at 3:00 pm

Report Generated: Thursday, December 14, 2023

## Arcadis U.S., Inc. Proposal

### CONTACT INFORMATION

**Company:**

Arcadis U.S., Inc.

**Email:**

michelle.sattler@arcadis.com

**Contact:**

Michelle Sattler

**Address:**

150 S Pine Island Road, Suite 300  
Plantation, FL 33324

**Phone:**

N/A

**Website:**

[www.arcadis.com](http://www.arcadis.com)

**Submission Date:**

Oct 2, 2023 11:13 AM

## ADDENDA CONFIRMATION

Addendum #1

*Confirmed Sep 26, 2023 10:55 AM by Michelle Sattler*

## QUESTIONNAIRE

### 1. Upload Statement of Qualification\*

Proposals or Statements of Qualifications should be organized using the following format:

- A. Table of Contents
- B. Executive Summary
- C. Firm's Qualification & Experience
- D. Organizational Profile and Project Team Qualifications
- E. Approach to Scope of Work
- F. References/Past Performances

Please refer to [#SUBMITTAL REQUIREMENTS](#) section, for details regarding the requirement of each section of the Statement of Qualification.

Hollywood\_RFQ\_118-23-JJ\_CEI\_Services\_SOQ\_(Arcadis).pdf

### 2. Vendor Reference Form\*

Please download the below documents, complete, and upload.

- [Vendor Reference Form \(1\).pdf](#)

Form\_4\_Vendor\_Reference\_Form\_Harford\_County.pdfForm\_4\_Vendor\_Reference\_Form\_Richmond\_VA.pdfForm\_4\_Vendor\_Reference\_Form\_Schneider\_Electric.pdf

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

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

Confirmed

**4. Non-Collusion Statement\***

I, being first duly sworn, depose that:

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

Confirmed

**5. Certifications Regarding Debarment, Suspension and Other Responsibility Matters\***

The applicant certifies that it and its principals:

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

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

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

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

Confirmed

**6. Drug-Free Workplace Program\***

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

1. Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.



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

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

Confirmed

#### **7. Solicitation, Giving, and Acceptance of Gifts Policy\***

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

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

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

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

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

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

Confirmed

#### **8. List of Subcontractors\***

Please download the below documents, complete, and upload.

- [Form 14 - List of Subcontra...](#)

2.\_Form\_14\_-\_List\_of\_Subcontractors.(Arcadis).docx.pdf

**9. Certificate of Insurance\***

See requirements in the [#SPECIAL TERMS AND CONDITIONS](#) section.

3.\_Certificate\_of\_Insurance\_copy.pdf

**10. Proof of Sunbiz Registration\***

Enter company FEIN to be verified in Sunbiz

57-0373224

[Click to Verify](#) *Value will be copied to clipboard*

**11. Proof of License - Department of Business & Professional Regulation**

Enter license number to be verified in Department of Business & Professional Regulation

F98000001104

[Click to Verify](#) *Value will be copied to clipboard*

**12. ACKNOWLEDGMENT AND SIGNATURE PAGE**

IF CORPORATION - DATE INCORPORATED/ORGANIZED:\*

10/9/1997

STATE INCORPORATED/ORGANIZED:\*

Delaware

REMITTANCE ADDRESS\*

150 S Pine Island Road, Suite 315, Plantation, FL 33324

BIDDER/PROPOSER'S AUTHORIZED REPRESENTATIVE'S TYPED FULL NAME\*

Leah K. Richter

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

Confirmed

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

Confirmed

PROPOSAL FORM\*

Please download the below documents, complete, and upload.

- [Proposal Form.docx](#)

1.\_Proposal\_Form\_Arcadis.pdf

### 13. SWORN STATEMENT PURSUANT TO SECTION 287.133 (3) (a) FLORIDA STATUTES ON PUBLIC ENTITY CRIMES

THIS FORM STATEMENT IS SUBMITTED TO THE CITY OF HOLLYWOOD BY:\*

(Print individual's name and title) (Print name of entity submitting sworn statement)

Leah K. Richter, PE / Vice President / Principal

SWORN STATEMENT CONTINUATION:\*

Enter business address:

150 S Pine Island Road, Suite 315, Plantation, FL 33324

SWORN STATEMENT CONTINUATION:\*

Enter Federal Employer Identification Number (FEIN) is:

If the entity has no FEIN, include the Social Security Number of the individual signing this sworn statement.

57-0373224

SWORN STATEMENT CONTINUATION:\*

I understand that “convicted” or “conviction” as defined in Paragraph 287.133(1)(b), Florida Statutes, means a finding of guilt or a conviction of a public entity crime, with or without an adjudication of guilt, in an federal or state trial court of record relating to charges brought by indictment or information after July 1, 1989, as a result of a jury verdict, nonjury trial, or entry of a plea of guilty or nolo contendere.

Yes

SWORN STATEMENT CONTINUATION:\*

I understand that “Affiliate,” as defined in paragraph 287.133(1)(a), Florida Statutes, means:

1. A predecessor or successor of a person convicted of a public entity crime, or
2. An entity under the control of any natural person who is active in the management of the entity and who has been convicted of a public entity crime. The term “affiliate” includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in the management of an affiliate. The ownership by one person of shares constituting a controlling interest in another person, or a pooling of equipment or income among persons when not for fair market value under an arm’s length agreement, shall be a prima facie case that

one person controls another person. A person who knowingly enters into a joint venture with a person who has been convicted of a public entity crime in Florida during the preceding 36 months shall be considered an affiliate.

Confirmed

SWORN STATEMENT CONTINUATION:\*

I understand that “person,” as defined in Paragraph 287.133(1)(e), Florida Statutes, means any natural person or any entity organized under the laws of any state or of the United States with the legal power to enter into a binding contract and which bids or applies to bid on contracts let by a public entity, or which otherwise transacts or applies to transact business with a public entity.

The term “person” includes those officers, executives, partners, shareholders, employees, members, and agents who are active in management of an entity

Confirmed

SWORN STATEMENT CONTINUATION:\*

Based on information and belief, the statement which I have marked below is true in relation to the entity submitting this sworn statement. (Please indicate which statement applies.)

Division of Administrative Hearings, determined that it was not in the public interest to place the entity submitting this sworn statement on the convicted vendor list. (attach a copy of the Final Order).

Neither the entity submitting sworn statement, nor any of its officers, director, executives, partners, shareholders, employees, members, or agents who are active in the management of the entity, nor any affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989.

SWORN STATEMENT CONFIRMATION\*

I UNDERSTAND THAT THE SUBMISSION OF THIS FORM TO THE CONTRACTING OFFICER

FOR THE PUBLIC ENTITY IDENTIFIED IN PARAGRAPH 1 (ONE) ABOVE IS FOR THAT PUBLIC ENTITY ONLY AND THAT THIS FORM IS VALID THROUGH DECEMBER 31 OF THE CALENDAR YEAR IN WHICH IT IS FILED. I ALSO UNDERSTAND THAT I AM REQUIRED TO INFORM THAT PUBLIC ENTITY PRIOR TO ENTERING INTO A CONTRACT IN EXCESS OF THE THRESHOLD AMOUNT PROVIDED IN SECTION 287.017 FLORIDA STATUTES FOR A CATEGORY TWO OF ANY CHANGE IN THE INFORMATION CONTAINED IN THIS FORM.

Confirmed



Statement of Qualifications



**City of Hollywood, FL**

# **Design, Construction Engineering and Inspection Services**

**RFQ -118-23-JJ**

October 2023







**Section A.**

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# Table of Contents

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*This proposal and its contents shall not be duplicated, used or disclosed in whole or in part for any purpose other than to evaluate the proposal. This proposal is not intended to be binding or form the terms of a contract. The scope and price of this proposal will be superseded by the contract. If this proposal is accepted and a contract is awarded to Arcadis as a result of or in connection with the submission of this proposal, Arcadis and/or the client shall have the right to make appropriate revisions of its terms, including scope and price, for purposes of the contract. Further, client shall have the right to duplicate, use or disclose the data contained in this proposal only to the extent provided in the resulting contract.*





## Section B.

# Executive Summary



City of Hollywood  
**Jean Joinville, Sr. Purchasing Agent**  
City Hall  
2600 Hollywood Blvd., Room 221  
Hollywood, FL 33020

October 2, 2023

## **Re: RFQ-118-23-JJ / Design, Construction Engineering and Inspection Services**

Dear Mr. Joinville and Selection Committee Members:

Arcadis U.S., Inc. (Arcadis) is pleased to submit our qualifications for the subject RFQ. The City of Hollywood (City) is requesting services related to the design, construction administration, grant management, resident engineering and inspection services for seven projects associated with water, wastewater and stormwater. All seven require construction services, with one project requiring design support as well. Arcadis has the depth of experience, resources and expertise to handle the projects whether assigned individually, in groups or all together.

For more than 20 years Arcadis has partnered with the City in the successful delivery of critical projects in support of the City's Water Service Area Capital Improvement Program. Our relationship has been built on delivering value and is guided by our client-focused engagement philosophy. We hope to build on these principles as we partner with you on the projects noted in this RFQ. Our experienced local team will deliver to the City projects which are constructed according to the plans and specifications and operate as intended.

Highlights of our offering include:



### **A trusted local team who knows your operations and facilities and is accessible at a moment's notice.**

Arcadis values tremendously the relationship and reputation it has earned over the last 20+ years of providing services for the City of Hollywood and wants to continue that partnership providing construction engineering and inspection services for you. Our core team, Vicki Lehr, Darryl Dunn, Jose Custodio, Garth White, are all in South Florida, working less than 20 minutes from the City's offices. They will be working closely with the Arcadis staff currently working on City of Hollywood projects, including Leah Richter, PE, Dan Garcia, PE and Stephanie Bishop, PE. Our team's knowledge of the City's infrastructure, standards and local conditions will be an asset to your program. With more than 20+ professionals in Broward County and over 370 staff in Florida, we have the local resources to execute your projects.



### **An experienced, proven contract manager and construction team.**

Our Contract Manager, Vicki Lehr, brings more than 40 years of construction and program management experience delivering critical infrastructure projects and programs in South Florida and the eastern United States. For more than 10 years, she worked directly for the SFWMD, leading the delivery of their CIP and major infrastructure projects. That experience provided an understanding of the pressures and drivers encountered on the client side and those lessons learned will be applied to your projects. Vicki has also worked hand in hand with multiple clients in Florida delivering CEI services through on-call contracts. These clients include the City of Ft. Lauderdale, Sarasota County, Hillsborough County, the Orlando Utility Commission, SFWMD, and USACE among others. As the Area Leader for the Arcadis CM group, Vicki will work collaboratively with you to make certain your projects are right staffed, scopes and budgets are adhered to, and project plans, specifications and regulatory requirements are met.

Vicki will be supported by three strong construction managers. Darryl Dunn, PE brings more than 40 years of experience as an engineer and construction manager, and has led teams in the design and construction of all types of water and wastewater related infrastructure with an emphasis on water and wastewater treatment facilities. Jose Custodio, PE brings more than 15 years of experience, including time working as a public works director for a South Florida utility. Garth White has 22 years of experience specializing in civil and mechanical engineering disciplines, with a focus on construction management and oversight. So whether the City decides to award a single project to a team or multiple projects, we have the resources available to provide support.





**Knowledge and experience with the types of projects in the RFQ.** Arcadis is the designer for the 4-Log Virus Treatment project, which is one of the seven projects mentioned in the RFQ. This knowledge puts us in a unique position to oversee the construction of that project. Dan Garcia, PE and Stephanie Bishop, PE, the project manager and engineer of record for the 4-Log project respectively, are readily available to the construction team should any questions arise. We are also continuing our partnership with McKim & Creed who is currently performing the electrical design on the 4-Log project.

If the City desires to award more than one project to a firm, Arcadis can offer expertise within the areas of service required for all seven projects mentioned in this RFQ. While the projects in this program are quite diverse in type, size and complexity, Arcadis has the experience and flexibility to offer a wide-ranging approach to the planning, staffing and execution of each of these projects. Arcadis has structured its services and organizational chart to align with the services needed for all seven projects listed in the RFQ.

The City of Hollywood has long been, and remains, a highly valued client to us. We are proud to celebrate our longstanding relationship with the City and to be able to say that we have successfully completed many critical projects at your water treatment plant and for your water system, including the Water System Master Plan Update and most recently the improvements needed to implement the 4-Log Virus Treatment system at the City's Water Treatment Plant. Through this experience, we have come to understand your preferences and standards, expectations for project ownership, schedule and budget adherence, and desire for innovative high-quality outcomes.

We look forward to being a part of this journey with the City, as you continue to provide high-quality, sustainable and cost-effective projects to your customers. A review of our qualifications and approach will make it evident Arcadis can support the City in the planning, administration, execution, and resolution of any construction efforts associated with your projects. In addition to our knowledgeable inspection staff and experienced project and document controls personnel, we also have experts in developing alternative project delivery strategies and addressing complex constructability issues, operational concerns or contractor claims.

We appreciate the opportunity to submit our qualifications and look forward to continuing our partnership with the City. Should you have any questions about our response or require additional information from us, please do not hesitate to contact me at **(561) 400-2757** or **Victoria.Lehr@arcadis.com**. Thank you for your time in considering Arcadis.

Sincerely,  
Arcadis U.S., Inc.

Vicki Lehr  
Contract Manager, Vice President  
✉ Victoria.Lehr@arcadis.com | ☎ 561.400.2757

Leah K. Richter  
Principal-in-Charge, Vice President  
✉ Leah.Richter@arcadis.com | ☎ 954.525.2499

# Executive Summary



Arcadis has been an active member of the **local community** since opening our office in Broward County more than 30 years ago and have had the privilege to serve the **City of Hollywood** for more than 20 years. During that time, we have collaborated with you on projects which have improved the quality of life for the community and your customers. We are excited for the opportunity to apply our comprehensive and specialized expertise related to **Construction Engineering & Inspection** in support of your critical infrastructure projects. Our seamless work across multiple disciplines will continue to provide the City with a unique big picture perspective, from a reliable, trusted, and committed partner who can help you navigate the challenges in the years to come.

## Firm Qualifications and Experience:

**Business Entity:** Arcadis U.S. Inc. is wholly owned by Arcadis North America, Inc., a Colorado Corporation, whose sole shareholder is Arcadis USA, B.V., a Dutch company.

**Background:** Arcadis is a leading global natural and built asset design and consultancy firm working in partnership with our clients to deliver exceptional and sustainable outcomes through the application of design, consultancy, engineering, construction management, and project management services. Arcadis now operates through four Global Business Areas (GBAs): Resilience, Places, Mobility, and Intelligence.

Arcadis has been in business under the present name for 55 years. Founded in 1888, the firm's roots began when the organization was founded in the Netherlands as an association for wasteland redevelopment. Arcadis has evolved throughout the 20th century, expanding its global reach and range of service offerings through strategic initiatives and targeted acquisitions.

**Main Offices:** Our Florida practice is supported by 370 professionals among 8 Florida offices, including Plantation, Miami, Boynton Beach, Tampa, Orlando, Jacksonville, Pensacola, and Tallahassee, FL.

**Office Location that Will Service this Contract:** Plantation, FL

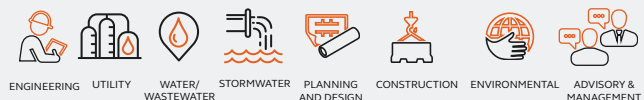
**Primary Contact:** Vicki Lehr, PE, T. (561) 400-2757, E. victoria.lehr@arcadis.com

## Our Value to the City:

- ✓ **Our team as 20+ professionals in Broward County, over 370 professionals in the state of Florida and national subject matter experts ready to assist the City.**
- ✓ **A Contract Manager who brings more than 40 years of project and program/construction management experience in delivering critical infrastructure projects and programs in South Florida for utilities and municipalities, as well as federal and state agencies.**
- ✓ **The right qualifications and approach to support the City with construction management and construction engineering inspection (CEI), as well as the possibility to serve as your partner on strategic initiatives, including funding, resilience, sustainability, and P3 or alternative project delivery.**

# 150+ YEARS

# EXPERIENCE



## Specialty Subconsultants



**STONER**  
SURVEYORS • MAPPERS

## Project Team Experience and Qualifications:

### Officers/Principals/Key Individuals and Office Locations:

**Leah Richter, PE:** VP, Principal in Charge, Plantation, FL

**Vicki Lehr, PE:** VP, Contract Manager, Plantation, FL

**Carlton Serrette, PE:** Sr. VP, QA/QC and Technical Advisor, Tampa, FL

**Melissa L. Pomaes, PE, PMP, ENV SP:** Sr. VP, QA/QC and Technical Advisor, Plantation, FL

**Chris Matthews, PE, CGC, CMC:** QA/QC and Technical Advisor, Sarasota, FL

**Darryl Dunn, PE:** Construction Manager (Water, Wastewater), Plantation, FL

**Jose Custodio, PE:** Construction Manager (Civil, Utilities/Pipelines), Plantation, FL

**Garth White:** Construction Manager (Pump Stations, Stormwater), Plantation, FL

## Key Elements of the Proposal:



### Partnership

Arcadis has **20 years of experience working with the City of Hollywood**. Since the early 2000's, Arcadis has worked closely with the City in supporting its mission of delivering clean, safe drinking water to its residents, customers, and tourists. From the locating and permitting of new Biscayne and Floridan wells to upgrading the WTP's treatment to leverage advances in technology and developing your most recent Water Master Plan, **Arcadis has helped the City navigate growth, emerging needs, and continually updated regulations. We will bring that same partnership to the CEI Services contract.**



### Qualifications:

**A leader in providing construction management (CM) and Construction Engineering and Inspection (CEI) services**, Arcadis successfully manages multiple on-call CM contracts for utilities around the nation. Our construction personnel and professionals include construction managers, inspectors, engineers, CPM schedulers, cost estimators, certified value engineering specialists, commissioning agents, claims specialists, and LEED Accredited Professionals.



### Responsiveness:

Arcadis project teams are agile and flexible. We are specialists in promptly identifying and anticipating a project's need and quickly committing the appropriate staff. Our team has **20+ professionals in Broward County and over 370 staff in Florida**, including senior construction management and field staff. **The projects will be managed from our Plantation office which is less than 20 minutes from the City of Hollywood facilities.**

### 2022 ENR's Top 500 Sourcebook

#### Top Professional Services Firms

#11

PM/CM  
(Arcadis N.A. + CRTKL)

### 2022 ENR's Top 500 Sourcebook

#### Top Design Firms In Environment

#5

Water Treatment

#1

Treatment & Desalination

#4

Water Supply

#4

Sanitary & Storm Sewers

#6

Sewer & Waste

#5

Wastewater Treatment Plants

#6

Dams and Reservoirs

**"Arcadis provides the highest level of expertise needed for OUC's complex projects."**

- Chuck DiGerlando, Manager, Water Distribution Engineering, Orlando Utilities Commission

**"We have worked with Arcadis for years and they have always worked with us to find a way to get it done."**

- Phil Clark, Director of Utilities, City of Tavares





## Section C.

# Firm Qualifications and Experience





# Firm Qualifications and Experience

## Arcadis History and Background

Arcadis U.S., Inc. is a leading global, natural and built asset design and consultancy firm working in partnership with our clients to deliver exceptional and sustainable outcomes through the application of design, consultancy, engineering, and project and construction management services.

For more than 150 years, Arcadis has provided consultation services with a concentration in water, wastewater and the environment. We have been providing engineering and project and construction management services across industries, including water and wastewater.

**We have a profound understanding of regional and local circumstances and we also offer the City of Hollywood the capabilities of a large, diversified firm.** Our staff are adept at solving the difficult issues that face public utilities today, including difficult rehabilitation projects, constrained budgets, future capacity needs, customer expectations, and tight schedules. We work with our clients to overcome these challenges. This experience, coupled with our local personnel and national experts, will bring fresh ideas to the City.

With more than 35,000 people worldwide, approximately 6,000 U.S. professionals and support personnel, and more than 370 staff members among our eight Florida offices, Arcadis has the capacity to

provide the resources necessary to meet your project's objectives. **This contract will be managed from our office in Plantation, FL, which is less than a 20-minute drive from the City.**

Since our internal company founding in 1888, Arcadis has served as a trusted partner to communities worldwide, developing innovative ideas and solutions for some of the most complex problems and projects. With more than 120 offices across the U.S., we have experienced staff working and residing near you – your community is our community and we are vested in the success of your projects.

**Arcadis has 20 years of experience working with the City of Hollywood. Beginning in the early 2000's, Arcadis has worked closely with the City in supporting its mission of delivering clean, safe drinking water to the City's residents and customers.**

From locating and permitting of new Biscayne and Floridan wells to upgrading the WTP's treatment to leverage advances in technology, Arcadis has helped the City navigate growth and continually updated regulations. As a leader in the water industry, Arcadis works closely with Federal and industry to help shape policy and anticipate future needs.

## Arcadis At-a-Glance

Over  
**6,000**  
U.S. employees

Working in  
**120+**  
offices across the U.S.

More than  
**\$4.2**  
billion in revenues

Over  
**35,000**  
team members  
worldwide

### Firm Ownership

Arcadis U.S., Inc., is owned 100% by Arcadis North America, Inc., a Colorado corporation

### Project Office

150 S. Pine Island, Suite 315, Plantation, FL 33324

### Corporate Headquarters / Website

630 Plaza Drive, Highlands Ranch, CO 80129 / [www.arcadis.com](http://www.arcadis.com)

### Contact Person

Vicki Lehr, PE  
T: 561.400.2757  
E: [victoria.lehr@arcadis.com](mailto:victoria.lehr@arcadis.com)

### Organizational Structure

Arcadis U.S., Inc. is a corporation registered in the State of Delaware, and a subsidiary of Arcadis N.V., a Dutch company (founded in 1888).

In the last 5 years, the value of Contract Awards to Arcadis is approximately \$3,820,000. Recent successes and completed projects with the City includes:

1. 4-Log BODR and Pilot Testing (DBPs)
2. 4-Log Disinfection Upgrades (to be completed in 2023)
3. Water System Master Planning through 2045 and beyond (to be completed in 2023)
4. Design and Construction for the HSPS upgrades
5. Pilot Testing and BODR development for MS/RO Facilities
6. WTP Filter Upgrades Evaluation
7. AWIA Risk and Resiliency Assessment and Emergency Response Planning
8. Hurricane and Emergency Electrical Outage Planning
9. ABPS Pump Station Upgrades (to be completed in 2023)
10. MIT Testing for IW-1
11. Hydraulic Modeling and System Calibration Updates
12. Condition Assessments of all Water Facilities assets
13. Condition Assessment of all linear assets

## Florida License

### State of Florida Department of State

I certify from the records of this office that ARCADIS U.S., INC. is a Delaware corporation authorized to transact business in the State of Florida, qualified on February 26, 1998.

The document number of this corporation is F9800001104.

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

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

*Given under my hand and the  
Great Seal of the State of Florida  
at Tallahassee, the Capital, this  
the Third day of June, 2022*



**Secretary of State**



Tracking Number: 6909654938CU

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

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

## Qualifications

Arcadis is pleased to submit our qualifications for design, construction administration, grant management, resident engineering and inspection services related to water, wastewater, and stormwater projects and are excited about the opportunity to provide these services to the City of Hollywood. A leader in providing construction management (CM) and inspection services, Arcadis successfully manages multiple on-call CM contracts for utilities and municipalities around Florida and the nation. Our construction personnel and professionals include construction managers, inspectors, engineers, CPM schedulers, cost estimators, certified value engineering specialists, commissioning agents, claims specialists and LEED Accredited Professionals. Our CM practice specializes in the delivery of public works infrastructure projects, including water/wastewater treatment, distribution, and collection, stormwater, buildings, and general civil projects. Arcadis will bring best practices gleaned from our extensive project and CM experience, delivering innovative solutions in close collaboration with City staff. We know the importance of planning, coordinating and communicating with operations and maintenance staff so related systems continue to operate safely and reliably during construction.

With approximately **6,000 U.S. professionals** and support personnel, and more than **370 staff members in the State of Florida**, Arcadis has the capacity to provide the resources necessary to meet your project objectives. We have added to our team a strong group of local subconsultants, which brings the number of local resources available to serve the City to over 300. We have the ability and resources to manage multiple projects with accelerated schedules simultaneously, respond quickly, maintain quality work, and meet budget and time constraints. Should an increase in resources be necessary, our team can draw from a resource pool of employees within Florida and nationally. In short, we have the knowledge and resources to successfully meet the needs of this CEI services continuing services task order contract.

## CM/CEI Capabilities

Arcadis has unmatched experience and expertise in design and construction management services for water and wastewater treatment facilities, as well as collection and conveyance facilities. **Arcadis has completed CM work for some of the largest water and wastewater utilities and facilities in the world** including **New York City** (Wards Island, Coney Island, Newtown Creek), **Detroit** (DWSD WWTP), **Cleveland** (NEORS Southernly), **Phoenix** (91st Avenue), **Washington DC** (Blue Plains), and **Boston** (Deer Island). Our team has performed world class design and construction management services throughout the U.S. including JEA's Large Diameter Pipe Replacement Program, Chicago Department of Water Management CIP, DC Water Sewer Program, Port Miami Bond Engineering, ALCOSAN Wet Weather Plant Expansion Program, NYC's \$4 billion Newtown Creek WWTP Upgrades Program, Nassau County's \$800M Post-Sandy Rehabilitation Program and PRASA's 2005-2016 CIP.



## City of Hollywood, FL - Water Treatment Plant High Services Pump Station Upgrades Design and Construction Management Services



The City of Hollywood Water Treatment Plant is the only source of potable water within its service area and, consequently, the high service pump station at the plant is a crucial element of the City's water system. The WTP has 10 high service pumps located in two different buildings — four are installed in the Aeration Building and the other six are located in the High Service Pump Station building. **Arcadis evaluated the current pump array, and analyze demands and pumping capacity and prepared plans and specifications to upgrade the high service pump station** – specifically replacing existing pumps and associated systems with state-of-the-art equipment to provide sufficient pumping capacity and high performance over the next 50 years. **We also led the CM activities during construction.**

Managing the change process is one of the most challenging issues that we face as project managers. To address this, we allow out-of-the-box and creative thinking early in the process (planning and preliminary design phases), but implement a rigorous change process during the later design phases. During the process, we recommend incorporating constructability reviews and value engineering reviews to identify potential issues and optimization opportunities, respectively, that may arise during the construction process. This approach is one of our “Keys to Success” for maintaining schedule and budget.

### Design Review / Constructability Review

Arcadis performs design reviews or constructability and value engineering reviews with our team of construction managers, resident engineers and design engineers. We review everything from the proposed structural elements, abutments, piers, mix designs, traffic engineering, and overall completeness of the drawings and specifications in relation to the project objectives set forth by City of Hollywood.

Successful projects are defined not only by effective sequencing and staging of construction, but also by the protection of personnel and the surrounding community and businesses from safety issues. Our CM staff will coordinate with your project managers and support community affairs personnel to keep the local community updated on the progress of the construction and provide support to address community concerns.

## Construction Engineering and Inspection

A leader in providing CM and CEI services, Arcadis successfully manages multiple on-call CM contracts for utilities in Florida and around the nation. **Our construction personnel and professionals include construction managers, inspectors, engineers,**

**CPM schedulers, cost estimators, certified value engineering specialists, commissioning agents, claims specialists and LEED Accredited Professionals.**



### Sarasota County, FL - SR 45 Utility Relocation and Construction Services

The proposed FDOT work required **relocation of existing County utilities** including about 2,100 linear feet (LF) of 30-inch water main, 25 LF of 12-inch water main, 855 LF of 10-inch water main, 695 LF of 18-inch force main. Arcadis provided design and permitting services and also CEI services during construction. Arcadis was able to assist the County in **meeting the stringent FDOT schedule** during design. The design included **trenchless construction** through horizontal directional drilling (HDD) of portions of the existing mains.

Our Water CM practice specializes in the delivery of public works infrastructure projects, including water/wastewater treatment, distribution, and collection.

Arcadis will bring best practices gleaned from our extensive project and CM experience, delivering innovative solutions in close collaboration with City staff. We know the importance of planning, coordinating and communicating with operations and maintenance staff so plant and collection and distribution systems continue to operate safely and reliably during construction.

As construction managers, we optimize cost, improve operability, improve the plans and specifications to obtain competitive bids and assure quality construction. Arcadis has extensive experience in the construction management of municipal utility projects and are well suited to meet your CM needs throughout this contract. **This includes owners who desire to implement projects through alternative approaches such as design-build, design-build-operate, CM@Risk and Public Private Partnerships.** We are well-suited to evaluate the advantages and disadvantages of the various delivery methods to assist the City in selecting the delivery approach that best meets your drivers for a project. Once selected, we can help you manage the implementation of the selected approach.

**For the City of Hollywood we have been performing CM services on the Water Treatment Plant since the initial construction of the Membranes Building. We have the capabilities to complete CM work inside the fence and also outside the fence.**

### Construction Site Health and Safety Management

Arcadis shares our clients' concern regarding the safety of their construction projects. We are committed to promoting and enforcing both construction site safety and environmental health and safety on all of our projects. While the construction contractors have the legal responsibility to provide for the safety of their employees, we routinely assist contractors and clients in maintaining a safe work environment. We follow a safety communications protocol that involves tracking of safety-related issues and providing the client with timely information on spills, incidents and accidents.

### Permitting and Regulatory Compliance

During design and throughout construction work, we monitor the contractor's compliance with all permit and regulatory compliance requirements and stipulations.

We maintain logs of permits noting all expiration dates to assure timely renewals. Additionally, we assure the contractor's required reporting is performed in both timely and a correct manner.

## Value-Added Services

### Grant Funding, Resiliency and Sustainability

#### Funding and Grant Management

We offer a proactive and innovative approach to funding and grant management that ensures proper expenditure of funding. Arcadis assists our state-level clients with the management of both state and federal pass-through grant funding, as well as with the application, management, and reporting of SRF loans. Grant management activities include technical assistance, eligibility reviews, project reporting and monitoring, processing agreements, requests for reimbursements, maintenance of records, and project/program closeouts. Arcadis is committed to helping our clients continually improve programs and processes. We offer methods to improve efficiency and effectiveness of state-level grant programs through the development of standard operating procedures. **Over the past 10 years we have secured more than \$5 billion in federal grant and programmatic funding for stormwater, water and wastewater projects. We have secured over \$100M in federal grants for our Florida clients in the past 10 years.**

#### Resilience / Sustainability

Arcadis is experienced in flood risk and resiliency projects for planning, design and construction management of storm surge barriers, gate structures, levees, dikes, and dunes. **Through our Dutch roots, Arcadis is recognized as a global leader in international water management technologies.**

Our specialists have assessed impacts, planned, designed, and maintained flood defense infrastructure from levees to complex one-of-a-kind structures. We understand the complexities of coastal and riverine circumstances - we have planned, designed and managed the construction of some of the largest flood defense projects ever contracted in the United States. And most importantly, Arcadis understands the many assets and services that keeps our cities going and that help drive local communities and businesses.

Arcadis has a complete range of innovative engineering and construction expertise to plan, design, assess, build, and maintain water resiliency systems, including:

- Hydraulic Structures and Storm Surge Barriers
- Coastal Strengthening and Ecosystem Restoration
- Critical Infrastructure Fortification
- Sustainable Waterfront Redevelopment
- Climate Change and Sea Level Rise Adaptation

## Similar Project Experience

Arcadis brings a team of local and national expertise with extensive experience, knowledge and proven technical skills in the areas required by the City of Hollywood. We are showcasing on the following pages a few recent project descriptions to illustrate our experience.

No.	Client	Project Title	Design Services	Construction Administration	Bid Services	Resident Engineering & Inspection Services	Permitting Support	Grant Funding Support
1.	City of Hollywood, FL	4-Log Virus Treatment Implementation	●					
2.	City of Hollywood, FL	Water Treatment Plant Service Pump Station Upgrade	●	●	●	●		
3.	City of Hollywood, FL	General Consulting Services/On-Call	●	●				
4.	Sarasota County, FL	Sarasota County CEI Projects	●	●	●	●	●	
5.	Hillsborough County, FL	Pump Station Electrical / Supervisory Control and Data Acquisition Upgrade	●	●	●	●		
6.	Harford County, MD	Open End Engineering and Inspection Services for Water and Wastewater Projects	●	●	●	●	●	●
7.	Cobb County, GA	South Cobb WRF Influent Lift Station Recovery CM Services		●	●	●		
8.	Schneider Electric	CM Design Build Program	●	●	●	●		
9.	District of Columbia Water and Sewer Authority, DC	CM4E Construction Management Program		●	●	●	●	●
10.	District of Columbia Water and Sewer Authority, DC	Tunnel Dewatering Pump Station and Enhanced Clarification Facility		●	●	●		
11.	City of Richmond, VA	City Wastewater Treatment Plant and CSO Upgrade Program		●	●	●	●	●
12.	Anne Arundel County, MD	Anne Arundel County Water Utility, Program Phase 4		●	●	●	●	
13.	Anne Arundel County, MD	Water & Sewer Main Construction Management and Inspections Phase 3		●	●	●	●	
14.	Orlando Utilities Commission	Orange Avenue Water Main Replacement	●	●	●	●		
15.	City of Sunrise, FL	Various CMS Projects	●	●	●	●		
16.	Anne Arundel County, MD	Patuxent WRF Expansion		●	●	●	●	●
<b>City of Hollywood Projects in this RFQ</b>								
1.	Washington Park Utilities Improvements Projects			●		●		●
2.	Sewer Expansion Between Arthur St and Taft St from N 35th Ave to North Park Rd			●		●		
3.	Sewer Expansion between Buchanan St and Fillmore St and from N 72nd Ave to N 70th Way			●		●		
4.	Lift Station E-8 Replacement			●		●		●
5.	Implementation of 4-log Virus Disinfection Process at the WTP			●		●		●
6.	Sodium Hypochlorite Disinfection Conversion at the Southern Regional WWTP			●		●		●
7.	Design and Construction Management of Lift Station E-8 Generator		●	●	●	●	●	●



# 1. 4-Log Virus Treatment Implementation

## City of Hollywood | Hollywood, FL

The City of Hollywood received conceptual approval from Broward County Department of Health (BCDH) on November 29, 2017 for achieving 4-log virus treatment of source water by using free chlorine for disinfection. As part of the conceptual approval, BCDH required an evaluation of the chlorine feed and storage system capacity along with the implementation of any needed improvements to satisfy 4-log virus treatment and requirements of Florida Administrative Code (FAC) Chapter 62-555.320. Since the City attained the conceptual approval of implementing 4-log disinfection at the WTP, the Southeast District of the FDEP became the “Authority Having Jurisdiction” over these improvements to the WTP. The City and Arcadis have since met with FDEP to obtain approval to continue the evaluation including soliciting guidance and permitting requirements related to WTP modifications that support the conversion to 4-log inactivation using free chlorine. Subsequently, **Arcadis completed the field bench testing and basis of design report phase for the City which identified and validated the modifications required to meet 4-log treatment using free chlorine at the WTP.**

Arcadis is finalizing the design of the upgrades identified as part of the Basis of Design Report dated September 15, 2020. Some of the Tasks performed/designed by Arcadis for this project are:

- Visual inspections of all nine (9) existing sodium hypochlorite tanks
- Demolish the on-site generation equipment and brine tank at the Chlorine Storage Building and structural repairs
- Install 5 new metering pumps  
These pumps will allow for continued operations of the Raw Water and LS Pre-Filter (Spiractors 7-12) injection points while the LS/HEX Chemical Storage/Area is being rehabilitated structurally and mechanically.
- Install 3 new transfer pumps to deliver back-up bulk storage from the Chlorine Storage Building to the Membrane Building Storage and LS Cl2/Hex Storage areas.
- Demolish the existing two (2) pumps at the Chlorine Shed and the location will be repurposed as an instrument shed.
- Modify the feed and controls systems to accommodate the increased sodium hypochlorite dose in the blend tank. This change is required to operate a free chlorine segment through the blend tank and 42-inch piping.
- Install an ammonia injection point and static wafer mixer at the 42-inch pipe upstream of the ground storage tanks.
- Install new ammonia tanks and a new feed system with a pressure feed and a mass flow meter/controller at new location between the 3.5 MG ground storage tanks.



### Client

City of Hollywood

### Client Contact

Wilhelmina Montero, PE  
Senior PM  
T. (954) 921-3930  
E. wmontero@hollywoodfl.org

### Firm's Role

Lead Designer - EOR

### Constructed Value

\$5.9 million (Estimated Construction Cost)

### Fee

\$487,196 (Design Fees)

### Contract Term

2020 - Ongoing

### Key Staff

Dan Garcia  
Joan Fernandez  
Leah Richter  
Jose Custodio

### Relevant Features

- Design Services
- Project Management
- Permitting Support
- Bench Testing

## 2. Water Treatment Plant Service Pump Station Upgrade

City of Hollywood | Hollywood, FL

Arcadis was selected by the City of Hollywood to evaluate pumping system at the water treatment plant and provide design improvement to replace the various sizes of pumps, with new pumps and upgrades to the control system to provide a constant discharge pressure. Replacement of the existing water pumps is necessary to maintain water delivery reliability and improve energy efficiency by installing variable speed pumps. The rehabilitation of the pump station includes the replacement check valves and isolation valves, along with the two filter backwash pumps.

**Our Role.** Arcadis is the prime consulting engineer of record for the complete evaluation, design, permitting, and bidding for this 32,000 gpm capacity finished water high service pump station. The final design

consists of six 400 HP variable speed horizontal split case pump, two 200 HP horizontal end suction constant speed pumps, two 15-ton HVAC units, a new roof on the electrical building, modifications to the pump discharge

header, installation of floor cones inside the clearwell at the pump suction inlets, and modifications to the pump controls for variable speed pump operation for constant pump discharge pressure.

Arcadis is also providing the construction administrative services for this Contract.

**Solutions.** Arcadis teamed with Clemson Engineering's Dr. David Werth to construct and test a scaled model of the pump stations pump suction pipe configuration. This model was used to confirm that the pumps would vortex. The model was also used to confirm that floor cones and insertion style grates on the pump suction piping would eliminate this operational deficiency.

The technical specifications provide a detailed sequence of construction and coordination with Owner's Operations. This was accomplished to provide a means of providing a minimum of 36,000 gpm throughout construction.



### Client

City of Hollywood

### Client Contact

Wilhelmina Montero, PE  
Project Manager  
T. (954) 921-3930  
E. wmontero@hollywoodfl.org

### Firm's Role

Prime

### Fee

\$1.1 million (Design and Construction Services)

### Contract Term

2015 - 2019

### Key Staff

Chris Matthews  
Leah Richter  
Joan Fernandez  
Dan Garcia  
Jose Custodio

### Relevant Features

- Independent Consulting Engineer
- Consulting Engineer's Technical Feasibility Report
- Facility Condition Assessment
- Operations Monitoring
- Management Financial Consulting Services
- Debt Issuance
- On Site Inspections
- Change Management
- Contract Administration
- Testing Services

### 3. General Consulting Services/On-Call

City of Hollywood | Hollywood, FL

Arcadis has been serving the City for nearly 20 years. Since the last Water Master Plan was developed in 2007, multiple facilities plan updates have occurred to address the needs at the WTP. Under the General Consultant Services Contract, Arcadis provides design, evaluation, and construction support for planned and emergent needs. A few recent projects include the following:

#### WTP High Services Pump Station Upgrades Design and Construction Management Services

Arcadis U.S., Inc. (Consultant) evaluated the current pump array, and analyzed demands and pumping capacity and prepared plans and specifications to upgrade the high service pump station – specifically replacing existing pumps and associated systems with state-of-the-art equipment that will provide sufficient pumping capacity and high performance over the next 50 years. The design included six equally sized horizontal split case pumps each with a capacity of 8,000 gpm at 150-ft TDH each and two 12,000 gpm backwash pumps. The plans and specifications include:

Arcadis also provided Construction Management and Inspection services during the construction activities.

**Fees: \$253,400**

#### AWIA Risk and Resilience Assessment (RRA) and AWIA Emergency Response Plan (ERP)

Since 9/11, the United States Federal Government, the American Water Works Association (AWWA), and water utilities across the nation have worked together to protect the approximately 153,000 public drinking water systems

in the United States. America's Water Infrastructure Act of 2018 (AWIA) mandates that water systems serving over 3,300 people must conduct an assessment of the risks to, and resilience of, its water system.

Arcadis assisted the City of Hollywood in carrying out the RRA to comply with AWIA requirements. The performed tasks included:

- Asset Characterization and Threat Characterization
- Consequence Analysis and Vulnerability Analysis
- Threat Likelihood Analysis
- Cyber Risk/Business Continuity and Finance Resilience Assessment
- Risk and Resilience Analysis
- Risk and Resilience Management
- Risk Assessment and Recommendations Report: Arcadis prepared draft and final risk assessment findings and recommendations summarized in the form of a report.

**Fees: \$84,040**

Following the completion of the RRA, Arcadis worked in close collaboration with the City of Hollywood to develop an ERP and comply with all requirements of AWIA. Arcadis led multiple interviews and conversations with stakeholders to develop the ERP components outlined above. Interviews were conducted to capture information relating to emergency management, operations and maintenance, procurement, public information and communications, and other key ERP elements. Arcadis worked with local emergency management agencies and engaged a large team of City of Hollywood staff



#### Client

City of Hollywood

#### Client Contact

Wilhelmina Montero, PE  
Project Manager  
T. (954) 921-3930  
E. wmontero@hollywoodfl.org

#### Firm's Role

Prime

#### Fee

Fees included under each description

#### Contract Term

2017 - Ongoing

#### Key Staff

Leah Richter  
Joan Fernandez  
Dan Garcia  
Sam Hobbi  
Jose Custodio





feasibility of replacement of the filters (in-kind) and ensuring equipment is still readily available. **Fees: \$72,850**

#### **MS Building Pilot Testing**

The City currently operates seven membrane softening (MS) trains that soften Biscayne aquifer water using nanofiltration (NF) membrane elements. Each membrane array consists of a 32:16:6 3-stage array, designed to produce two million gallons per day (MGD) of permeate while operating at 90% recovery. Due to the age and performance of the system, the City has a critical need to replace the MS system to improve system reliability and to meet treatment objectives and selected Arcadis to furnish professional engineering services for the project management, preliminary design, final design, permitting, and bidding phase services for the following:

- Train C – Removal of the existing 3-stage array and replacement with a new 2-stage array with a permeate capacity of 2.0 MGD
- New Booster Pump with variable frequency drive (VFD) for the MS skid
- New Sample Stations and instrumentation
- Associated electrical and instrumentation for new equipment
- Connection of the MS array to the existing feed, permeate, and concentrate headers including valves.
- Connection of the MS array to the existing clean in place (CIP) headers including valves.

As part of the design, Arcadis also performed a pilot testing concurrently with the design development, in order to validate model outputs for membrane selection and to optimize the performance of the replacement system. The pilot study also tested operations and fouling control without the use of acid feed to reduce future operating expenses for the plant by \$300,000 per year.

**Fees: \$396,039**

across different departments to align the City's ERP with local, state, federal, and industry standards.

**Fees: \$84,040**

#### **4-Log BODR and Design**

The City selected Arcadis to complete the basis of engineering report (BODR) and the final design for the required water treatment plant (WTP) upgrades to implement the 4-log disinfection. As part of this work, Arcadis completed the following services:

- Conceptual design for WTP upgrades including rehab and upgrades of chemical system upgrades
- Tank inspections for all sodium hypochlorite tanks
- Condition assessment of pumps and injectors
- Bench testing for disinfection by-products formation

- Underground utility survey
  - Development of final design and construction bidding documents
- Fee: \$97,496 (BODR), \$372,679 (Final Design)**

#### **WTP Filter Upgrades Evaluation**

The City currently treats raw water from multiple wellfields in the Biscayne and Floridan aquifers using three major treatment processes which are lime softening (LS), membrane softening (MS), and reverse osmosis (RO). The treated water is blended, disinfected, and pumped into the service area. The LS system was originally constructed in 1967 with additional treatment capacity added in phases as the WTP was expanded. Arcadis evaluated the condition of the WTP's 12 existing steel vessel filters (also referred to Automatic Valveless Gravity Filters (AVGFs) or self-backwashing filters) and assess the

#### **Relevant Features**

- Independent Consulting Engineer
- Consulting Engineer's Technical Feasibility Report
- Facility Condition Assessment
- Operations Monitoring
- Management Financial Consulting Services
- Debt Issuance
- On Site Inspections
- Change Management
- Contract Administration
- Testing Services

# 4. Sarasota County CEI Projects

## Sarasota County | FL

Sarasota County entered into a Utility Work by Highway Contractor Agreement (UWHCA) with the Florida Department of Transportation (FDOT) for the FDOT SR45 (US41) Improvements Project.

The proposed FDOT work required review of 5 miles of US41 roadway improvements to locate potential utility conflicts, coordinate with 6 other utilities in the corridor, and meet a tight schedule to join the FDOT project while they were in Phase 4 preparations.

The relocation of existing County utilities included 1,400 LF of 30-inch water main, 60 LF of 12-inch water main, 850 LF of 10-inch water main, 700 LF of 18-inch force main, 1,100 LF of 8-inch force main. Arcadis provided design, permitting and administration with field support during construction. Arcadis was able to assist the County in meeting the stringent FDOT schedule during design and working closely during construction when unforeseen conditions were encountered. The design included trenchless construction through horizontal directional drilling (HDD) of portions of the existing mains. Overall, the project realized savings to the County through close coordination with FDOT, the County, and Arcadis’

design revisions that took advantage of field conditions. Arcadis found ways to spread costs on preliminary engineering activities realizing \$100K in savings on this project.

### Clark Road CEI

Sarasota County entered into a Utility Work by Highway Contractor Agreement (UWHCA) for the Florida Department of Transportation (FDOT) Financial Project ID 201277-3-52-01 Sarasota County 17075. The UWHCA included the relocation of a 16-inch water main under active and future ramps as well as Interstate 75 (SR 93), modifications to a 16-inch reclaimed water, and traffic fiber optic cables relocations along Clark Road (State Road 72) from Gantt Road to Hummingbird Avenue. The project limits are approximately 5,000 LF along Clark Road and professional engineering services included design, permitting, bidding, and construction phase services. The decision to enter the UWHCA required that Arcadis draft 60% alignment plans within one month of NTP for the County to meet the FDOT schedule. The bid came in at \$1.2M. Arcadis has met with Robert Hess and Lori Carroll to understand the requirements and expectations of the County for construction inspections associated with FDOT projects.



### Client

Sarasota County

### Client Contact

Wayne Disbrow  
Utilities Project Manager  
T. (941) 258-8173  
E. wdisbrow@scgov.net

### Firm’s Role

Prime

### Constructed Value

\$3 million (Construction Cost)

### Fee

\$475,000 (Design and Construction Services)

### Contract Term

2018 - Ongoing

### Key Staff

Bryce Kaufman  
Jeff Luetjen  
Chris Matthews  
Tim Ware  
Vicki Lehr

### Relevant Features

- Meeting Support
- Document control (i.e., e-Builder)
- Schedule Reviews
- Estimating/Change Management/Claims
- Reviews (Design Reviews,
- Submittals, RFIs, Payment
- Applications, Permit Applications)
- Confirm Record Drawings
- Providing or Supervising Field Inspection Staff
- Survey Control
- Testing Services

# 5. Pump Station Electrical / Supervisory Control and Data Acquisition Upgrade

Hillsborough County Public Utilities Department | Hillsborough County, FL

The Hillsborough County Public Utilities Department (County) owns, maintains and operates approximately 800 pump stations across the North, Central and South regions of the County. In Phase I of the Supervisory Control and Data Acquisition (SCADA) upgrade of these pump stations, the County established three central monitoring locations, one within each region. At the central locations, the County installed redundant Citect HMI servers and a master radio base station to monitor and control the pump stations in the respective region. The County also installed RTUs/PLCs at 159 pump stations across the three regions, with the majority being in the South region. In Phase II of the SCADA upgrade of pump stations, the County replaced the existing control panels at approximately 300 pump stations with a single combination RTU/MCC control and integrated those stations into the existing 220 MHz radio network and SCADA system. The County hired Arcadis to provide professional engineering services for the preparation of installation contracts for each of the approximately 300 pump stations. The work included assisting the County in structuring a unit price panel fabrication contract and preparing the unit price electrical install contracts which included development of specifications for incorporation into the County's standard bidding documents and

assistance in developing Special Condition requirements. Arcadis also provided management oversight of each of the contractors involved in the project. Construction services included planning, field inspections, site layouts, TECO coordination, programming, configuration, startup, testing and troubleshooting, training, operational assistance, as-built drawings, asset management and closeout.

As part of the project, the Arcadis team performed site reconnaissance, coordinated with Tampa Electric Company, developed site specific sketches for contractor use, managed the bidding process, performed fulltime oversight inspection, developed programming code for control and SCADA, added the pump stations to the County's WIN911 Enterprise Remote Alarming System, performed start-up and commissioning, developed as-builts, and delivered populated assets for the County's CAMS system, station settings, programmable logic controller (PLC) programs and SCADA configurations for 300 pump stations to the County.

In addition to reducing SSOs, implementation of the project will benefit the County in the form of improved maintenance efficiency, improved personnel safety and better data generation for planning purposes.



## Client

Hillsborough County Public Utilities Department

## Client Contact

David C. Page, PE  
Team Leader  
T. (813) 272-5977  
E. PageDa@HillsboroughCounty.org

## Firm's Role

Prime

## Constructed Value

\$13.4 million (Construction Cost)

## Fee

\$3.3 million (Compensation Services)

## Contract Term

2011 - Ongoing

## Key Staff

David Morgan  
Chris Matthews  
Vicki Lehr

## Relevant Features

- Meeting Support
- Document control (i.e., e-Builder)
- Schedule Reviews
- Estimating/Change Management/Claims
- Reviews (Design Reviews, Submittals, RFIs, Payment
- Applications, Permit Applications)
- Confirm Record Drawings
- Providing or Supervising Field Inspection Staff
- Material Testing
- Survey Control



## 6. Open End Engineering Services For Water And Wastewater Projects

### Harford County | Harford, MD

Arcadis provided construction management and inspection services for several projects under the Open-End Engineering Services for Water and Wastewater Projects Contract (No. 16-194) as described below:

#### Solids Handling at Sod Run WRF

Arcadis provided the CM services for the removal of belt presses and installation of new presses and conveyor system. The building was completely renovated including the removal for precast roof systems and installation of new trusses and standing seam roof system. Arcadis used its project management skills while dealing with a contractor that was not well versed on start up and system commissioning activities.

#### Sod Run Methanol Tank

Arcadis provided CM services for the removal of existing steel tank with floating lid and replacement of tank while keeping the methanol system in operation using a temporary tank and pumping system. Additional improvements entailed the installation of multiple access platforms for the maintenance of existing valves in the enhanced nutrient removal filter gallery.

#### Town Center Drive Pump Station Repairs

Arcadis provided CM services for the complete removal and replacement of all pumps, valves and control system for the water booster pump station serving the Town Center Community. This operation provided the complete change out while maintaining the water system use for the community.

#### Evaluation of BGE Tower Impact on Bill Bass Force Main

The 36-inch-diameter steel force main from the Bill Bass Pumping Station crosses under the Bush River and is approximately 70 feet away from the existing BGE towers for the power

supply. BGE proposed to relocate the power lines even closer to the force main, which may jeopardize the integrity of the force main. The County retained Arcadis to evaluate BGE's concept design and record information available for the force main and provide a memorandum with potential impacts, field verifications and design considerations for BGE as a result of this project.

Arcadis has a team of pipeline engineer, geotechnical engineer, river hydrology/environmental specialist, structural engineer, electrical engineer, and a survey specialist to identify all potential issues and will discuss our findings, comments and concerns with the County and BGE.

#### Bush Creek Force Main Rehabilitation

Harford County retained the services of Arcadis Inc. to provide construction management and inspection services for slip lining of existing Bush Creek force main beneath the Bush River with 4,200 feet of 24-inch HDPE pipe material. Arcadis provided daily and weekly reports, pictures/videos, inspection of work and material, coordination of testing, and project closeout related services. Arcadis provided construction management and inspection (CMI) services on the following projects under the Contract No. 16-194.

- Solids Handling at the Sod Run Wastewater Treatment Facility Upgrades
- Sod Run Methanol Tank Replacement
- Town center Drive Pump Station Repairs



#### Client

Harford County

#### Client Contact

Steven Schulz, PE  
Project Manager  
T. (410) 683-3300  
E. sdschulz@harfordcountymd.gov

#### Firm's Role

Prime

#### Constructed Value

\$30 million

#### Fee

\$3.5 million

#### Contract Term

2019 - 2021

#### Key Staff

David Morgan  
Chris Matthews  
Dave Jacobson  
Chris Remme  
Vicki Lehr

#### Relevant Features

- Meeting Support
- Document Control (i.e., e-Builder)
- Schedule Reviews
- Reviews (Design Reviews, Submittals, RFIs, Payment Applications, Permit Applications)
- Estimating/Change Mgmt/Claims
- Confirm Record Drawings
- Providing or Supervising Field Inspection Staff
- Survey Control
- Material Testing Coordination

# 7. South Cobb WRF Influent Lift Station Recovery CM Services

Cobb County | Cobb County, GA

Arcadis provided Construction Management Services for the South Cobb Water Reclamation Facility Influent Lift Station (ILS) Recovery. The ILS, initially placed into service in 2014, is over 200 feet deep with a concentric cylinder configuration, the inner cylinder functioning as the wet well and the dry well occupying the annular space between the outer cylinder and the wet well. The dry well contains six 32.5 mgd/1500 HP and two 10 mgd/500 HP vertical non-clog centrifugal pumps, 36-inch/20-inch discharge piping, motors, utility and other service pipes, electrical and control service cables, instrumentation, and architectural components. The ILS also contains elevators, HVAC and dehumidification systems and other support equipment.

A December 2018 failure in the lift station caused the dry well to flood with untreated wastewater, submerging all equipment within 165 feet of the bottom, exposing equipment above that level to sewage gasses. The investigation of the cause of failure remains ongoing.

The scope of the current ILS Recovery project entails the removal and replacement of virtually all major components compromised by the 2018 failure. Arcadis is providing all facets of third-party CM services including (but not limited to):

- Daily, on-site communications with the Owner, design engineer, and contractor on requests for information, requests for proposals, proposed change orders, allowance directives, etc.
- Scheduling, conducting, and documenting all meetings.
- Document control
- Review and recommendation of contractor construction schedules & applications for payment
- Observation & inspection services
- Operational testing and start-up services



## Client

Cobb County

## Client Contact

Richard J. Wittman, PE  
Project Engineer  
T. (770) 419-6326  
E. Richard.wittman@cobbcounty.org

## Firm's Role

Prime

## Constructed Value

\$23.8 million

## Fee

\$1.9 million

## Contract Term

2020 - Ongoing

## Key Staff

Tina Laird  
Benjamin Ruppel  
Bhadrash Patel  
David Jacobson  
Chris Matthews  
Vicki Lehr

## Relevant Features

- Daily, on-site communications with the Owner, design engineer, and contractor on requests for information, requests for proposals, proposed change orders, allowance directives, etc.
- Scheduling, conducting, and documenting all meetings.
- Document control
- Review and recommendation of contractor construction schedules and applications for payment
- Observation and inspection services
- Operational testing and start-up services

## 8. CM Design Build Program

Schneider Electric | Various Locations, FL, GA, VA, NJ, TX, AZ, MO, KS, NE

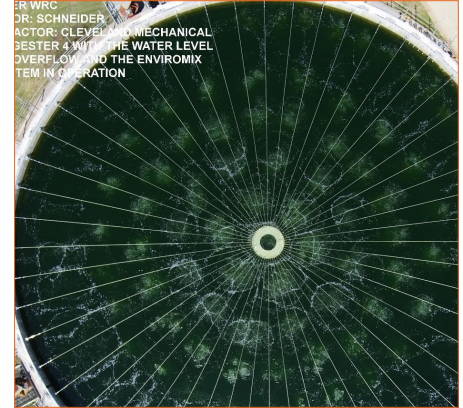
Schneider Electric Buildings performs Energy Conservation Contracts as the design builder in municipalities across the nation. Schneider partnered with Arcadis for assistance with concept ideas and plans for the City of Atlanta. Working with Schneider, Arcadis reviewed multiple possible Energy Conservation Measures (ECMs). Due to Mr. Matthews' experience with design build contracts, he was assigned as the Client Representative with Schneider. Once the ECMs were determined and Schneider was under contract with Atlanta, Arcadis performed the design and construction management of the selected ECMs.

After this project got under way, Schneider reached out to Arcadis for assistance on other projects. This has now become a program with a portfolio of projects across the country with Mr. Matthews the assigned Program Manager for all projects.

In many cases, Schneider is required to work with the local engineer for the project Municipality, but Arcadis has become the Consultant of choice for Schneider whenever possible. Arcadis has even been retained to assist Schneider with Construction Management for projects not designed by Arcadis and with issues on completed projects not designed by Arcadis.

### Relevant Features

- Project Planning
- Concept Design and Budget
- Value Engineering
- Constructability Reviews
- 50% Design and Budget
- Assist in Contractor Solicitation
- 100% Design and Budget
- Construction Management
- Construction inspection
- Cost Management
- Change Order Negotiation
- Post Project Assessments



### Client

Schneider Electric

### Client Contact

John Barta  
Operations Manager  
Schneider Electric  
T. (972) 323-3053  
E. John.Barta@se.com

### Firm's Role

Design & Construction Engineer

### Fee

\$10 million

### Contract Term

2015 - Ongoing

### Key Staff

Chris Matthews  
Vicki Lehr  
Bill Hixon  
Tina Laird  
Benjamin Ruppel  
Sean Pitcher

# 9. CM4E Construction Management Program

## District of Columbia Water and Sewer Authority (DC Water) | Washington, DC

Arcadis is providing construction management and related engineering services for the management of multiple construction contracts construction cost of in excess of approximately \$75M over a period of seven (7) years. This Contract was task ordered based and Arcadis developed and managed twelve (12) task orders and three (3) supplemental agreements. This Contract provided Construction Management services for several key DC Water facilities such the rehabilitation of the Ft. Stanton Reservoir, Brentwood Reservoir and the Bryant Street Pump Station. Arcadis also managed the construction of the 2-million-gallon St. Elizabeth's Water and installation of 4,000 LF of new watermain.

Services required will be provided throughout DC Water's water distribution and sewer collection service areas and includes the following, but are not limited thereto:

- Design reviews including biddability, constructability, cost estimates and schedules
- Assistance during the bidding phase
- Office engineering including review of all shop drawings, schedules, and other construction contractor submittals
- Preparation and negotiation of change orders, task orders, agreements
- Resident engineering and inspection services
- Quality assurance and quality control plan/program

- Material testing
- Claims avoidance, analysis, and resolution
- Inter-agency, intra-agency, utility coordination and public relations program support
- EPA grant closeout
- Coordinate & conduct meetings for program projects, operational interface
- Other services reasonably necessary to complete the work.

### The following projects were managed during this DC Water contract:

- Rehabilitation of Fort Stanton No. 1 Reservoir
- Rehabilitation of Brentwood and Fort Stanton No. 2 Reservoir
- G-100 Local Sewer Rehabilitation 1
- Pope Branch Stream Restoration Project
- St. Elizabeth Water Tower
- Claims Support for MD Potomac Interceptor (PI) Odor Control
- Local Area Trunk Sewer Rehabilitation
- Sewers Under Buildings Sewer Rehabilitation-Phase 2
- SDWM #12A
- SDWM Replacement Bloomingdale
- Anacostia 2nd High Residential PRV Installation
- 4th High West Residential PRV Installation
- B Street/NJ Avenue Trunk Sewer Rehabilitation
- LSR Program Support
- Rehabilitation of the Upper Potomac Interceptor (UPI)



### Client

District of Columbia Water and Sewer Authority (DC Water)

### Client Contact

Deidre Saunders  
Manager, Construction Branch  
T. (202) 787-7614  
E. Deidre.Saunders@dcwater.com

### Firm's Role

Prime

### Constructed Value

\$75 million

### Fee

\$16.5 million

### Contract Term

2014 - 2023

### Key Staff

Vicki Lehr  
Chris Remme  
Chris Matthews  
Bhadrash Patel

### Relevant Features

- |                           |                            |                              |   |
|---------------------------|----------------------------|------------------------------|---|
| • Construction Management | • Constructability Reviews | • Shop Drawing Review        | • Change Orders                         |
| • Inspection              | • Cost Estimating          | • QA/QC                      | • Data Management                       |
| • Design Reviews          | • Project Controls         | • Submittal Reviews          | • Community Outreach                    |
|                           | • Scheduling               | • Contractor Invoice Reviews | • BOA/Task Order Contract with DC Water |



# 10. Tunnel Dewatering Pump Station and Enhanced Clarification Facility

District of Columbia Water and Sewer Authority (DC Water) | Washington, DC

Arcadis provided construction management services for the Tunnel Dewatering and Enhanced Clarification Facility at the Blue Plains Advanced Wastewater Treatment Plant (AWTP) in the District of Columbia. As part of the \$2 billion Clean Rivers project to reduce combined sewer overflows into the district's waterways, DC Water constructed a pump station with capacity to dewater its 23-foot-diameter combined sewer storage tunnel. The project also involved construction of a treatment system for the flows from the tunnel to attain near-secondary standards before discharging to the Potomac River or combining with primary effluent for full treatment at the Blue Plains AWTP. Of this \$215 million design build contract, the pump station consisted of a tunnel dewatering pump station and the enhanced clarification facility. The pump station was constructed within the tunnel main shaft, which is 132-feet in diameter and 160-feet deep. The initial pumping capacity is 250 mgd, expandable to 500 mgd with the addition of more pumps. The enhanced clarification process included fine screens, vortex grit removal, an Actiflo ballasted flocculation process, and chlorination/dechlorination.

Arcadis' scope of services included contract administration, design management and review, field office engineering, change management, resident engineering and inspections,

site logistics coordination, quality assurance, material testing, claims management, start-up commissioning coordination, and United States Environmental Protection Agency grant closeouts. The design-build contract was signed in August 2013.

This design/build project consisted of:

- Deep well pump station of 160 feet below grade
- Installation of 5, 3,000 hp pumps, capable of delivering 80 million gallons per day each, with expansion up to one million gallons per day
- Enhanced clarification system with 5 trains of fines screens
- 3 grit removal systems
- 3 high-rate clarifiers using sand ballast to assist in waist removal
- Two trains of chlorine contact tanks
- Upgrades to existing plant chemical delivery were also included, consisting of ferric chloride, disinfection, dechlorination and polymer
- New plant substation
- Instrumentation and controls were integrated into the campus distributed control system
- Approximately 4,000 new control points were added to the Plant DCS system.



## Client

District of Columbia Water and Sewer Authority (DC Water)

## Client Contact

Deidre Saunders  
Manager, Construction Branch  
T. (202) 787-7614  
E. Deidre.Saunders@dcwater.com

## Firm's Role

Prime

## Constructed Value

\$206 million

## Fee

\$34 million

## Contract Term

2020 - 2022

## Key Staff

Dave Jacobson  
Bhadrash Patel  
Chris Matthews  
Chris Remme  
Vicki Lehr  
Benjamin Ruppel  
Bill Hixon

## Relevant Features

- Construction Management
- Inspection
- Cost Estimating
- Scheduling
- Constructability Reviews
- Project Controls
- QA/QC
- Submittal Reviews
- Contractor Invoice Reviews
- Change Orders
- Data Management
- Community Outreach
- Alternative Project Delivery Support
- DC Water Contract



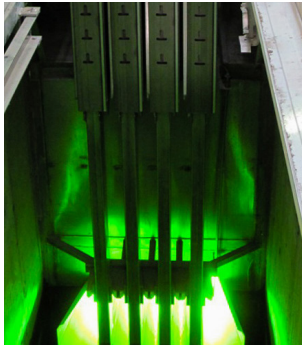
# 11. City Wastewater Treatment Plant and CSO Upgrade Program

City of Richmond, Department of Public Utilities | Richmond, VA

This program includes 11 construction projects at the City's WWTP and through the City with over \$150M in construction value. WWTP upgrades include a \$29M new Grit and Influent Screening facility, \$52M new Sludge & Thickening facility, \$3.7M Plant Water Upgrade, \$3M of Sewer Facility Cleaning, \$29M of CSO Storage Tunnels and \$30M Sewer Trash Rack and Gate Replacement for the plants influent sewer. **In order to keep the existing facilities and process in operation at the City's WWTP, Arcadis developed**

**a Master Program CPM schedule** which identified sequencing of these projects both from process standpoint but also from site logistics standpoint.

This allowed the plant operations staff and contractors to work cohesively over the course of this program. Arcadis is providing onsite quality inspections for all projects with various types of trade/craft inspectors to ensure high quality contractor work in compliance with the contract documents.



## Client

City of Richmond, Department of Public Utilities

## Client Contact

Robert Stone  
Engineering Manager  
T. (804) 646-8557  
E. robert.stone@richmondgov.com

## Firm's Role

Prime

## Constructed Value

\$150 million

## Contract Term

2008 - Ongoing

## Key Staff

Vicki Lehr  
Chris Matthews  
Chris Remme  
Benjamin Ruppel

## Relevant Features

- Construction Management Plan
- Onsite Construction Management
- Monthly Reporting, Document, Submittal and Change Management
- Claims Mitigation, Testing, System Start-ups and commissioning,
- Schedule Analysis
- Construction Materials Observation and Testing Services
- Quality control inspections, and Project close-out and turnover of documents.

# 12. Anne Arundel County Water Utility Program Phase 4

Anne Arundel County, Department of Public Works | Anne Arundel County MD

Anne Arundel County, MD, Department of Public Works, maintains a \$10 million budget for improvements to the water distribution system throughout the County. Arcadis was retained to provide construction management and inspection services for as many as 6 projects annually.

These projects staff approximately 5 inspectors on a full-time basis, one construction manager, project administrator and project manager. Recent projects include \$2.5M Ft. Smallwood Road Water Transmission

Main Valve Replacements, \$1.5M Water Service Replacements, \$1.3M Bonnet Bolt Replacements, \$1M Small Diameter Replacement within the County Communities, \$2.1M Fire Hydrant Replacements, \$8.5M Brock Bridge Water Transmission Main Emergency, and \$4M Crain Highway Water Main Clean and Line. One key to project success for this highly public project is Arcadis’ public outreach services to notify residents of work, handling questions and complaints, tracking call logs and being the face of these projects for the County.



**Relevant Features**

- Project/Construction Management
- Construction Management Plan
- Onsite Project Representative
- Document, Submittal and Change Management
- Schedule Analysis
- Community Outreach Program
- Start-ups and commissioning
- Construction Materials Observation and Testing Services
- Quality control inspections
- Project close-out and turnover of documents

**Client**

Anne Arundel County, Department of Public Works

**Client Contact**

Pamela Mann  
Project Manager  
T. (443) 336-8275  
E. pwmann00@aaacounty.org

**Firm’s Role**

Prime

**Fee**

\$1.5 million per year

**Contract Term**

2021 - Ongoing

**Key Staff**

Chris Matthews  
Vicki Lehr  
Chris Remme  
Dave Jacobson  
Bhadrash Patel  
Mike Scott

# 13. Water & Sewer Main Construction Management and Inspections Phase 3

Anne Arundel County, Department of Public Works | Annapolis, MD

**Water CMI - Phase 3:** Arcadis was selected to provide construction management and inspection (CM/I) services on various water main capital improvement projects. Most of the task orders include a Constructability Review of the plans and specifications prior to bid release. The information and comments in the review are based upon the collective review of our Constructability Assessment Team, including those with civil and mechanical expertise. These reviews also include a field assessment of the conditions for the project implementation with photographs of possible conflicts and current conditions. The capital improvement tasks include horizontal directional drilled piping, cement and other lining of pipe, replacement of water mains, air release valves and other appurtenances. The water main replacements usually require a temporary pumped bypass system to be placed in service during the removal and replacement activities. All areas of installation and water distribution quality assurance are maintained for both the temporary and permanent water mains.

**Sewer CMI - Phase 3:** Arcadis was selected to provide construction management and inspection (CM/I) services on various sewer main capital improvement projects.

Most of the task orders include a Constructability Review of the plans

and specifications prior to bid release. The information and comments in the review are based upon the collective review of our Constructability Assessment Team, including those with civil and mechanical expertise. These reviews also include a field assessment of the conditions for the project implementation with photographs of possible conflicts and current conditions.

The open-ended contract included contracts for the rehabilitation and improvements to be made under Phase 3 of the County's conveyance improvements to its wastewater collection system. Projects included, but were not limited to: Cured-In-Place Pipe (CIPP); Air Release Valve (ARV) Rehabilitation and Replacement; Force Mains; Sewer Lateral Replacements; Mini-system Rehab; Open Trench; Trenchless; Clearing; and Special and Emergency Cases.

Arcadis recognized the complexity of coordinating multiple contractors and the possibility of some having multiple crews in simultaneous operation. Arcadis succeeded over this challenge by having the necessary resources available, even if the schedule required a greater level of effort, due to night and weekend work. The project scope also covered all areas of the County's sewer collection system, including closed-circuit television (CCTV) video inspection, point repairs and manhole lining.



## Client

Anne Arundel County, Department of Public Works

## Client Contact

Water Main CMI  
Pamela Mann, PE  
Project Manager  
T. (410) 224-274  
E. pwmann00@aacounty.org

Sewer Main CMI  
Lee Greenwald, PE  
Senior Project Manager  
T. (410) 224-1275  
E. pwgree40@aacounty.org

## Firm's Role

Prime

## Fee

\$1.2 million per year

## Contract Term

2016 - 2021

## Key Staff

Vicki Lehr  
Chris Matthews  
Dave Jacobson  
Steve Woodhurst  
Tina Laird

## Relevant Features

- Construction Management
- Inspection
- Cost Estimating
- Scheduling
- Constructability Reviews
- QA/QC
- Submittal Reviews
- Contractor Invoice Reviews
- Change Order Management
- Data Management
- Community Outreach
- BOA/Task Order Contract



# 14. Orange Avenue Water Main Replacement

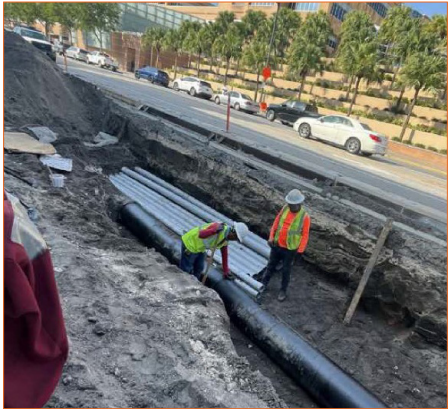
Orlando Utilities Commission | Downtown Orlando, FL

Arcadis provided construction engineering services for the replacement of approximately 4,350 LF of a 16-inch water main, maintenance of traffic (MOT) plans for the Utility Work by Highway Contractor Agreement (UWHCA) project, permitting, bidding, public outreach, and construction administration and construction inspection services. Orange Avenue is a busy corridor owned by FOOT with high traffic volume, hospitals, businesses, etc. which adds a level of complexity to the MOT and the construction sequence.

OUC is in the process of replacing aging water distribution pipes in downtown Orlando to ensure the long-term reliability of water infrastructure and accommodate for future growth in the city. OUC entered into a UWHCA with the Florida Department of Transportation (FDOT) for relocation of an existing 16-inch water main, as part of a roadway improvement project in downtown Orlando. The existing cast iron water main along State Road (SR) 527 (Orange Avenue) was originally constructed in 1948. Arcadis provided professional engineering services, including design of replacement water main, MOT plans for the UWHCA project, permitting, bidding, public outreach, construction administration and construction inspection services for this water main relocation project.

The stretch of Orange Avenue between Grant Street to Annie Street is one of the busiest traffic corridors in downtown Orlando, as it cuts through the heart of a newly revamped south downtown (SODO) area. The SODO area is a vibrant, mixed-use, multi-modal neighborhood, with shops, multi-story housing, a sprawling Orlando Health Medical Campus and a commuter train station. As a results, the corridor owned by FDOT, experiences high traffic volume from hospitals, businesses, and residents etc. This high traffic volume added a level of complexity to the MOT and the construction sequence for the project. Additionally, OUC wanted to minimize the impact of construction activities on the area businesses, which added another complexity to the project as it required that public notifications are timely disbursed to the affected parties informing them about the ongoing and upcoming activities.

Arcadis is the design engineer for OUC's program for replacing aging and deteriorating water mains within its service area. Under this program, OUC requested Arcadis to provide professional engineering services for the relocation of the existing water main along Orange Avenue. Arcadis completed the design of approximately 155 LF of 20-inch water main, approximately 4,400 LF of 16-inch ductile iron (DI) water main; 1,860 LF of 12-inch DI water main and several smaller sized pipes.



**Client**  
Orlando Utilities Commission

**Client Contact**  
Natalie Urick, PE  
Senior Engineer  
T. (321) 230-6694  
E. nurick@ouc.com

**Firm's Role**  
Prime

**Constructed Value**  
\$11.3 million  
**Fee**  
\$975,000

**Contract Term**  
2020 - 2023  
Design: 2020  
Construction: Expected  
Completion in November 2023  
(Approximately 35% complete)

**Key Staff**  
Joan Fernandez  
David Wilson  
Steve Woodhurst  
Isoel Rodriguez  
David Morgan  
Chris Matthews  
Vicki Lehr

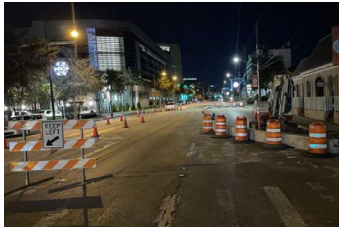
### Relevant Features

- Construction engineering
- Construction inspection services
- Design of replacement water main
- MOT plans for the UWHCA project
- Permitting, bidding, public outreach
- Construction administration

The design services also included coordination with electrical improvements along the Orange Avenue corridor between Kaley Street and Annie Street. Also installing a medium voltage distribution electrical duct bank (12.5 KV) to include 5,000 LF of conduit (design by a third party).

### Maintenance of Traffic (MOT)

Arcadis provided MOT services for the entire project with portions of night work and lane closures; bidding assistance; and permitting support.



### Construction Management

Arcadis is currently providing full construction management and inspection services during construction, covering both day and night shifts.

### Congested Right-of-Way/Utility Corridors

Orange Avenue has been one of the long-established major roadways running through a crowded downtown. As a result, the utility corridor has a number of existing utilities from such as electrical, wastewater force mains, gas line, cable and telecommunication fiber lines.

### Permitting

FOOT Project required obtaining the Right-of-Way Utility Permit from the FOOT for water and electric replacement. FDEP Multiple permits were obtained from the Florida Department of Environmental Protection (FDEP), including:

- General Potable Water Permit needed for the installation of the new water main.
- Certification of Construction Completion and Request for Clearance to Place Permitted PWS Components into Operation



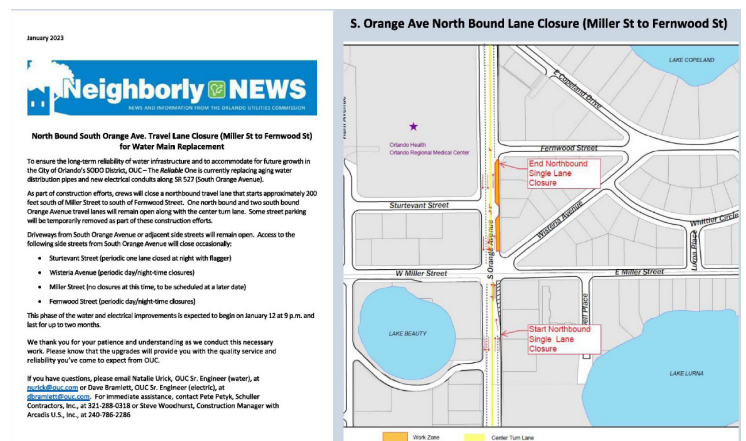
### City of Orlando

City of Orlando's Engineering permit was obtained to modify our conformed drawings to show the limits of restoration within the City's ROW as per their Engineering Standards manual. We also submitted a modified cost sheet along with the drawings.

### Public Outreach

Arcadis also assisted OUC with public engagement, by providing materials needed for the public meeting, addressing public questions. During the ongoing construction phase of the project, it is very important to provide advance notice of the construction schedule with details on road closures to the area residents and businesses.

Arcadis worked with OUC for a proactive approach by preparing a newsletter known as "Neighborly News," which provides details on the work schedule of the construction crews, nighttime construction activities, lane closures etc. Arcadis also developed maps to be included in the newsletter that identify the limits of the construction work area and provided visual representation of the upcoming lane closures. Arcadis worked with the contractor to distribute the newsletter. The newsletter was positively received by the area residents and businesses.



### Project Success Factors

Throughout the design and now in construction, our team actively engaged the client through regular meetings (in person and virtual). Due to frequent communication, we were able to alert OUC to situations before issues arose - for this reason, our team has developed a high level of trust among OUC staff.

### Maintaining Budget, Schedule and Quality

The design of the project was completed within budget, on schedule and to OUC's satisfaction. As a result, OUC hired Arcadis to provide full time construction services on the project.



# 15. Various CMS Projects

## City of Sunrise | Sunrise, FL

Arcadis has maintained an engineering and professional consulting services contract with the City of Sunrise (City) since 2012, under which it has successfully completed approximately 60 task orders under this contract. These services have included water, wastewater and reclaimed water system planning and design, water supply and injection well permitting and design, and construction management. A few recent tasks include.

**Springtree WWTP Deep Injection Wells Flow Delivery CMS.** This project included Construction Management Services (CMS) services for the completion of the site piping and appurtenance for the conveyance of reverse osmosis concentrate and wastewater treated effluent to recently installed deep injection wells. The construction activities include: the installation of a standby treated effluent pump (400 HP) to assist with plant water pumps pressures; VFDs for the existing treated effluent pumps; piping/valving/metering system to deliver the treated effluent to the injection wells; piping/valving/metering to deliver RO reject to the injection wells, and a new diesel standby generator with fuel system.

**Springtree Wellhead Construction, Wells 13, 14, 15 & 16 (5009WF) Project Agreement 14-003-MP, P.O. No. 081414.** This project agreement provides for the CMS for the equipping of four (4) wellheads and modifications to eight (8) other existing wells. The CMS includes Construction Administration and Non-Fulltime Project Representative Services (Inspection). The wellheads include slab on grade wellhead assemblies, well pumps, motors, water level transducers, concrete well pads, pressure gauges, flow meters, bypasses, valves, discharge piping, piping connections, instrumentation and controls (I&C), electrical, control panels, meter calibration manholes, fencing,

landscaping and other appurtenances along with general site restoration.

**Nova Drive Watermain and Forcemain Improvements Project Agreement 16-008-MP P.O. No. 088269.** CMS services related to the replacement of a potable cement asbestos water main located within the Park City residential neighborhood area within the City's service area. The water main to be replaced is within SW 86th Ave, from SW 21st Street south to Nova Drive, then east along Nova Drive to University Drive. A new aerial crossing of an existing canal is planned. The City is also planning on replacing an aged force main (consisting of cement asbestos and cast iron) from LS No. 203, south along SW 86th Ave to Nova Drive, then east along Nova Drive to University Drive.

**N.W. 44th St./Pine Island Road Water Transmission Main Improvements (5082PI) Project Agreement 16-017-MP, P.O. No. 90786.** Provide CMS services for the replacement of a 36-inch main within NW 44th St from the Springtree WTP to Pine Island Road, and a 30-inch main in Oakland Park Blvd., from NW 35th Ct., to the C-13 canal.

**Escape and Valencia Water Main Improvements (5031PI) Project Agreement 16-011-MP, P.O. No. 088267.** CMS services related to the replacement of aging potable PVC water mains located in The Escape and Valencia residential neighborhood areas within the City's service area. These neighborhoods are located within the Town of Davie.



### Client

City of Sunrise

### Client Contact

Tim Welch, PE  
Director of Utilities  
T. (954) 888-6055  
E. [utilitiesdirector@sunrisefl.gov](mailto:utilitiesdirector@sunrisefl.gov)

### Firm's Role

Prime

### Constructed Value

\$18 million

### Contract Term

2012 - Ongoing

### Key Staff

Joan Fernandez  
Steve Woodhurst  
Isoel Rodriguez  
David Morgan

### Relevant Features

- Independent Consulting Engineer
- Consulting Engineer's Technical Feasibility Report
- Facility Condition Assessment
- Operations Monitoring
- Debt Issuance
- Management Financial Consulting Services
- Contract Administration
- On site Inspection
- Change Management

# 16. Patuxent WRF Expansion

Anne Arundel County, Department of Public Works | Crofton, MD

The award-winning Patuxent WRF Expansion Project was a fast-paced project with a 24-month duration to meet community development needs. The project duration required significant coordination between all team members to maintain the project schedule and the plant treatment process during construction.

Arcadis' contract consisted of construction management and inspection (CM/I) services during the construction of all necessary modifications to expand the Patuxent Water Reclamation Facility (WRF) facility from 7.5 million gallons per day (mgd) to 11.6 mgd. This facility underwent an enhanced nutrient removal (ENR) upgrade to achieve ENR treatment at a design flow of 7.5 mgd.

Arcadis provided CMI services for the ENR project. From this experience, we knew the plant and plant operator staff very well and had a keen understanding of what it takes to complete successful construction projects at this facility.

During the Expansion Project the entire Patuxent Water Reclamation Facility was upgraded and expanded, while maintaining operation at the treatment process. The Arcadis CM managed the "Glass House" communication plan,

which expedited the resolutions that were developed by the project team for the many difficulties associated with construction.

By allowing all teams to take part in the solution-making process, there was an expedited understanding of the design intent, better understanding of existing operational constraints and challenges, assurance that each project team was working toward the same set of goals and encouraged timely conflict resolution. The process promoted whole project team buy-in for all approaches and implementations used, and the entire team took ownership of the project. There were no unresolved issues, and all stakeholders/team members left the project feeling they were treated fairly and congratulated each other on a great project experience.



## Client

Anne Arundel County, Department of Public Works

## Client Contact

Chris Murphy  
Engineering Administrator  
T. (443) 223-6371  
E. pwmurp21@aacounty.org

## Firm's Role

Prime

## Constructed Value

\$45.1 million

## Fee

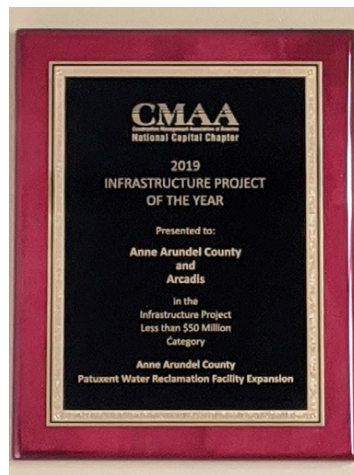
\$2.6 million (CM/I)

## Contract Term

2017 - 2020

## Key Staff

Chris Matthews  
Vicki Lehr  
Chris Remme  
Dave Jacobson  
Bhadrash Patel  
Steve Woodhurst  
Tina Laird



## Relevant Features

- Project/Construction Management
- QC inspection
- CPM Schedule Analysis
- Document & Submittal Management
- Cost Estimating
- Change Management
- Payment Application Reviews
- Project Meetings
- Issue Resolution
- Start-up testing and Commissioning
- O&M Training
- Punchlists
- Project Close-out



## Section D.

# Organizational Profile and Project Team Qualifications





# Organizational Profile and Project Team Qualifications

Arcadis has been working with the City of Hollywood since 2003. We greatly value our partnership and throughout our 20 year collaboration Arcadis has consistently brought to the City the right individuals and the right team to deliver your most critical projects. Applying our core philosophy of 'client focus', we present a team that combines the strongest of our local staff supported by the best and brightest technical experts from throughout the country. The result: A team of core staff based in Plantation, FL, only minutes from your facilities, backed by additional technical resources that will be available to support the delivery of any of the seven projects identified in this RFQ.

A leader in providing construction management (CM) and inspection services, Arcadis successfully manages multiple on-call CM contracts for utilities and municipalities around Florida and the nation. Our construction personnel and professionals include construction managers, inspectors, engineers, CPM schedulers, cost estimators, certified value engineering specialists, commissioning agents, claims specialists and LEED Accredited Professionals. Our CM practice specializes in the delivery of public works infrastructure projects, including water/wastewater treatment, distribution, and collection, stormwater, buildings, and general civil projects. Arcadis will bring best practices gleaned from our extensive project and CM experience, delivering innovative solutions in close collaboration with City staff. We know the importance of planning, coordinating and communicating with operations and maintenance staff so related systems continue to operate safely and reliably during construction.

## 1. Organizational Chart of Proposed Key Personnel

### Organization Chart

Arcadis' emphasis on client focus places your needs, visions and objectives as the driver in everything we do. The people selected and the way we have structured our team for this proposal is based solidly upon our direct knowledge and experience of your preferences for how projects are delivered, your expectations of the quality of work you receive, and the degree of responsiveness and sophistication in the level of service we provide as your consultant.

Our Contract Manager, **Vicki Lehr**, and our individual Construction Managers, **Darryl Dunn**, **Jose Custodio**, and **Garth White**, have broad experience in the construction of water, wastewater, pipelines, and stormwater facilities. Ms. Lehr will be the Primary Point of Contact for the City and will work with you to determine what resources are needed for each individual task order, matching the resources to the functional areas and to the complexity of the project. Our team has the depth and flexibility to provide the right resource at the right time.

Ms. Lehr will be supported by the technical advisors and key staff noted in the org chart and in the brief bios that follow. Arcadis has also partnered with specialty subconsultants **McKim & Creed** and **Stoner and Associates, Inc.** to supplement our in-house expertise.



4-Log Design Project – City of Hollywood

# Summary of the Experience and Qualifications of the Individuals and Project Manager



## Qualifications of Contract Manager

**Vicki Lehr, PE**

**Office: Plantation, FL**

Ms. Vicki Lehr, PE, will serve as the **contract manager** and main point of contact with the City. Ms. Lehr has **more than 40 years of experience in the construction field, managing federal, state, and local infrastructure**, water resource and environmental restoration programs and projects. Ms. Lehr's background includes the management of many infrastructure projects, including water and wastewater treatment facilities, major pipeline and pump station projects. She serves as the area leader for the construction management group for the south region of Arcadis, which includes Florida. Ms. Lehr is responsible for the oversight of our construction management services and resources for our CM projects. **As the area leader for the Arcadis CM group, Vicki has worked hand in hand with multiple clients delivering CEI services through on-call contracts. These projects and clients include:**

- ✓ Current on-call CEI contract with the City of Fort Lauderdale, FL
- ✓ Numerous CEI projects (under On-Call Continuing Services Contract), Sarasota County, FL
- ✓ Pump Station Electrical/Supervisory Control and Data Acquisition Upgrade Phase II, Hillsborough County, FL
- ✓ Comprehensive Everglades Restoration Program, South Florida Water Management District (SFWMD), FL
- ✓ Owner's Representative for 10-mgd Reverse Osmosis Plant Owner's, City of Hialeah, FL
- ✓ Tunnel Dewatering Pump Station, DC Water, DC
- ✓ On-Call Project and Construction Management Assistance, City of Baltimore, MD
- ✓ On-Call Project and Construction Management Assistance, Washington Suburban Sanitary Commission (WSSC), Laurel, MD
- ✓ Patuxent Water Reclamation Facility (WRF) Enhanced Nutrient Removal (ENR) Upgrade, Anne Arundel County, Department of Public Works, Annapolis, MD

## Qualifications of Construction Managers



**Darryl Dunn, PE**

Construction Manager - Water, Wastewater

**Office: Plantation, FL**

Mr. Dunn is a licensed professional engineer with more than 40 years of experience in construction management and engineering. As Project Construction Manager (PCM), Mr. Dunn has been responsible for administering construction contracts for owners including overseeing construction inspection activities, resolving field issues, controlling schedules, approving pay requests, tracking documentation and submittals, overseeing startup and commissioning activities, conducting punch list inspections, and closing out contracts. He has extensive experience overseeing upgrades to both wastewater and water treatment systems, including a \$20M project to upgrade a 20-mgd treatment train to 30-mgd and completely re-purpose the old 10-mgd train, the \$25M upgrade of a plant originally built in 1927, and serving as Resident Engineer for the 50-mgd filter expansion at the Blue Plains AWTF on the banks of the Potomac River in Washington, DC.



**Jose Custodio, PE**

Construction Manager - Civil, Utilities/Pipelines

**Office: Plantation, FL**

Mr. Custodio is a professional engineer registered in the states of Florida and Puerto Rico, with background in civil/environmental engineering and construction management. Work experience includes planning, design, procurement, construction management of several Capital Improvements Program (CIP) projects for different municipalities in the State of Florida and for the Puerto Rico Aqueduct and Sewer Authority (PRASA). Mr. Custodio is OSHA Certified in Construction 30 Hrs, and a FDEP Certified Stormwater Inspector. He also has managed the construction phase of water and sewer projects (55,000+ LF) in the City of Fort Lauderdale.



**Garth White**

Construction Manager - Pump Stations, Stormwater

**Office: Plantation, FL**

Mr. White has more than 22 years of experience specializing in civil and mechanical engineering disciplines, with a focus on construction management and oversight. His experience includes construction management and inspection, operations monitoring, cost estimating, and trend analysis for large industrial facilities and infrastructure improvement projects throughout Florida and has served in many roles on a variety of water and wastewater projects. Recent experience includes water/wastewater treatment plant rehabilitation, installation of production wells and deep injection wells, installation of above grade and underground high voltage and medium voltage cables, replacement of large diameter water transmission mains, watermain and forcemain aerial crossings including site restoration, trenchless pipeline restoration/replacement, and paving/drainage projects.





**Subconsultants**

- 1 - McKim & Creed
- 2 - Stoner & Assoc

\* Resume included

The core team consisting of our contract manager and three strong construction managers will be supported by a very accessible leadership team and technical experts. Brief bios of those individuals are included below.

## Key Personnel Summaries



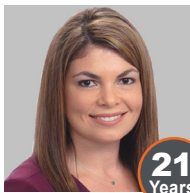
### **Leah Richter, PE | Principal-in-Charge**

Ms. Richter has a diverse 25 year background in program management, business advisory and financial consulting services and civil engineering. She specializes in assisting municipal clients in South Florida with managing their planning, operational and capital program needs. Her experience includes project management and delivery, vendor procurement, contract compliance, regulatory permitting, public outreach, annual reporting to bondholders/trustees, litigation support services, environmental compliance and operation and maintenance evaluation. She currently serves as the Principal-in-Charge for the City of Hollywood. She is also the Southeast Florida Operations Leader and is located in our Plantation office, just minutes from the City and available to provide a rapid response to any request.



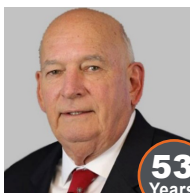
### **Carlton Serrette, PE | QA/QC / Technical Advisor**

Mr. Serrette is the regional director for the Arcadis Water South group. He has more than 29 years of experience in all phases of planning and design of wastewater collection, pumping, treatment, and disposal facilities and more than 16 years of experience serving clients in Florida. He has broad experience in design projects from facility planning to conceptual and preliminary designs, final detailed design, contract specifications, construction cost estimates, and construction administration services. Mr. Serrette has supervised and coordinated civil, mechanical, architectural, structural, electrical, Heating, Ventilation, and Air Conditioning (HVAC), plumbing, and hazardous materials work within Arcadis and with subconsultant firms during the design of new facilities and the reconstruction of existing facilities.



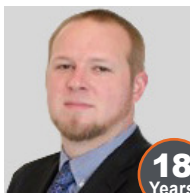
### **Melissa L. Pomales, PE, PMP, ENV SP | QA/QC / Technical Advisor**

Ms. Pomales has 21 years of experience in managing and delivering utility management and consulting services. Melissa advises water and wastewater clients on innovative ways to meet serious challenges including strategic planning, risk and resiliency, aging infrastructure and asset management, contract operations, organizational assessments, non-revenue water, operational optimization, affordability, and funding and financing strategies. She is the Florida Area Leader for the Water Business Line. She is a licensed Professional Engineer in Florida and Puerto Rico with direct and relevant experience in planning, design and construction of water treatment systems and distribution networks; water/wastewater master planning; program and project management for utility water and wastewater capital plans.



### **Chris Matthews, PE, OGC, CMC | QA/QC / Technical Advisor**

A licensed professional engineer and general contractor, Mr. Matthews has performed as a project manager, construction manager, and engineer of record for multiple public and private water infrastructure projects during his 50-year career. Mr. Matthews has worked for more than 20 years on the Engineers Joint Contract Documents Committee and has served three times as the chairman. He is currently an ACEC Delegate to the EJCDC, a Life Director of the Associated General Contractors of America and has held general contractor licenses in twelve states. Mr. Matthews is the Arcadis construction area manager for Florida and is therefore involved in all of our Florida projects including Sarasota County's SR45 UWHCA, Clark Road UWHCA, and the Center Road DIW MIT.



### **Andrew McDonald | Health & Safety**

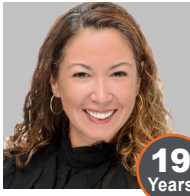
Mr. McDonald has 18 years of professional experience, and has worked both in the Corporate Health & Safety (H&S) Department and Multiple Business Areas. Mr. McDonald is currently the Director of H&S for Arcadis U.S. Inc. As part of his internal corporate focus, Mr. McDonald participates in developing and preparing company-wide health and safety policies and programs. In this role, he mentors Senior Leaders in stewarding the behavior base safety program, provides technical guidance for project health and safety issues, evaluates H&S program implementation through project and office conformance assessments, and conducts incident investigations.



### **Stephanie Bishop, PE | Water/Wastewater**

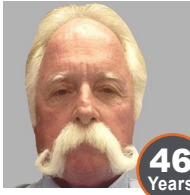
Ms. Bishop has more than 29 years of experience in the water, wastewater, and hazardous waste treatment fields. She has been involved as Design Leader for various chemical system projects including sodium hypochlorite, sodium hydroxide, fluoride, ammonia, sulfuric acid, antiscalant, ferric sulfate, and ozone. She has designed water treatment facilities including various pumps, storage tanks, and filters. She has designed groundwater and soil remediation systems for petroleum-contaminated sites and performed Phase 1 and 2 environment site assessments. Ms. Bishop has done work for the City of Hollywood's 4-Log Improvement Project.

## Key Personnel Summaries



### Joan Fernandez, PE, IAM | General Civil, Stormwater

Ms. Fernandez is a licensed Professional Engineer with a diverse and broad range of experience in the business consulting, civil, and environmental fields. She has more than 19 years of experience in project management, planning, design, permitting, procurement, and construction management. During her professional career, Ms. Fernandez has worked closely with various internal and external stakeholders staff at all levels, consultants and contractors in conducting contract negotiations, presentations, workshops, and project implementation including Sewer System Evaluation Surveys (SSES) projects. Ms. Fernandez continues to be involved in the development and delivery of Capital Improvement Projects (CIP) for various clients valued at more than \$15 million including City of Hollywood, City of Miramar, Miami-Dade Sewer and Water Department and the Orlando Utilities Commission.



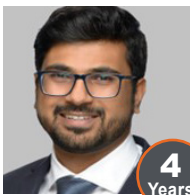
### Steve Woodhurst | General Civil, Water/Wastewater

Mr. Woodhurst has more than 46 years of technical and management experience in the quality assurance (QA), inspection and engineering field, including surveillance of in-process and final manufacturing activities, site inspections, maintenance of construction schedules, construction inspection and construction management with specialization in water, wastewater and infrastructure projects. He has experience with project and construction management for a variety of infrastructure projects, all phases of site work, and the supervision of field personnel.



### Chris Tilman, PE, BCEE, CDT | General Civil

Mr. Tilman provides professional engineering and consulting services in several civil engineering disciplines. He specializes in assisting municipal and industrial clients in Central and South Florida with various stormwater, site/civil infrastructure and permitting projects. His 24 years of experience includes project management and delivery, stormwater design services, mathematical modeling, regulatory permitting and compliance, and operation and maintenance evaluations. Mr. Tilman currently serves as Project Manager for the City of Sebastian Stormwater Master Plan project and is also a project team member on other stormwater projects.



### Shantanu Dandane | Buildings/Structural

Mr. Dandane is a structural engineer with a Master of Civil Engineering (structures) degree from the University of South Florida. He has experience in building and beam design; tunnel corrosion evaluation; and the use of design software including Auto-Computer Aided Design, REVIT, ETABS, RISA 3D, Life 365, Structural Analysis and Design -Pro, ANYSIS, and System Applications and Products in Data Processing 2000. He is familiar with design standards such as American Society of Civil Engineers 7-10, American Concrete Institute 318, American Association of State Highway and Transportation Officials LRFD, PCI Handbook, American Institute of Steel Construction Steel Manual, and Department of Transportation design standards and design manual.



### Sam Hobi, PE | Buildings/Structural

Mr. Hobi a principal structural engineer in the South Region of the Water Business Line, he is a specialist in civil/structural engineering with more than 27 years of experience. During his career as a structural engineer, he has worked on many water and wastewater projects has a wealth of experience in the design, analysis and construction of reinforced concrete structures above and below grade with deep or shallow foundations. Particular aspects of his expertise include the design of earth retaining structures and flood control structures for water resources projects. He is proficient in the design and analysis of all types of low-rise buildings.



### Renato Vargas, PE | Buildings/Structural

Mr. Vargas serves as a principal structural engineer with 33 years in combined experience in structural analysis and design of hydraulic structures (e.g., navigable, flood control, reservoirs, dams, and water conveyance), bridges, buildings, residential, retaining structures, and signage structures; design and fabrication of precast/prestressed concrete; and construction and project management in hotel, residential and non-residential construction. As QC Manager at South Eastern Prestressed Concrete, Mr. Vargas led the efforts to obtain the PCI Certification (a nationwide accreditation in the precast/prestressed industry). Proficient in STAAD-Pro, LEAP CONSPAN, TimeLine, Microsoft products, CPGA, Mathcad, GTSTRUDL, and BIM 360.



### Len Sheptock | Buildings/Structural

Mr. Sheptock is a principal project director with Arcadis, and brings more than 36 years of program, project, and construction management, and General Contracting experience to this project. Holding a general contractor's license, Mr. Sheptock brings a fresh perspective to projects, focusing on constructability, overall project costs, materials availability, sequencing of construction, risk management and contracting terms and procurement methodologies. Having experience not only in the water and conveyance markets, but also with schools, healthcare, commercial properties, transit and roadways, Mr. Sheptock can apply the best practices learned on those types of project to the utility industry, incorporating efficiencies and cost saving ideas in areas where traditional designers/constructors might not have imagined

## Key Personnel Summaries



### Tom Turberville, PE, IMSA II | Traffic Engineering

Mr. Turberville is a transportation engineer with more than 20 years of experience in planning, traffic operations, roadway design, highway safety, traffic modeling and project estimates. He is a former project manager with the Florida Department of Transportation (FDOT) responsible for managing planning/operations districtwide contracts. He was the lead transportation engineer for a civil site plan for Tampa Electric Power to implement new secure gate accesses to and from plant that includes a traffic roundabout. Mr. Turberville has served as traffic engineer on dozens of interstate, interchange and intersection traffic and safety studies. He was the express lanes feasibility study manager for I-95 Express Lanes Phase 3 in Broward and Palm Beach Counties, Florida, and the lead roadway designer for SR 60 reconstruction in Indian River County, Florida.



### David Morgan | Water/Wastewater, Electrical/SCADA

Mr. Morgan is a construction project management / inspector with more than 30 years of construction and operations experience. Areas of expertise include construction/project management, treatment plant operations, planning, scheduling, claims analysis and project control on projects. He has a proven ability to manage simultaneous demands efficiently. His responsibilities have included developing and updating of schedules, tracking and analyzing project progress, developing and implementing corrective procedures mitigating impacts from construction changes and delays, prepared and analyze reports for project management as needed. As a seasoned operator and supervisor in wastewater treatment, he has been involved with coordinating start-up, troubleshooting, permit compliance and serves as a liaison between the client's operation / maintenance staff and the project engineers.



### Tim Ware, PE | Water/Wastewater

Mr. Ware has 19 years of experience as an Engineer, Project Manager, Operator and Facility Manager for water and wastewater collection and treatment systems. Prior to a career in consulting, he worked within municipalities and in contract operations evaluating, operating, and managing large water and Wastewater Treatment Plants (WWTPs), collection systems and pumping stations. He has successfully completed over 40 projects worth \$7.4 million through continuing engineering services contracts as a project manager since coming to Arcadis. He has experience working with facilities within Florida and throughout the U.S. on a wide variety of tasks and projects. He is a professional engineer in Florida and holds a Florida Wastewater Operator B license.



### Ben Ruppel | Electrical/SCADA

Mr. Ruppel is a highly skilled and knowledgeable master electrician with more than 30 years of electrical construction experience. He is highly proficient with the NEC (National Electrical Code), API500 (American Petroleum Institute) and NFPA (National Fire Protection Association) publications for electrical installations. His experience ranges from commercial/industrial facilities, oil field and refinery projects, to wastewater and water treatment plants.



### Eric Battle, PE, CDT | Electrical/SCADA

Mr. Battle is a senior electrical engineer with extensive and varied experience in the analysis, design and services during construction of power distribution systems, facility systems, power system analysis calculations, as well as I&C systems and SCADA. He has gained skills through the design, bidding, procurement, and construction management of many water and wastewater facility projects and upgrades. He demonstrates strong relationship management and communication skills with the ability to network and team with project managers, peers, clients, vendors and contractors. Mr. Battle is resourceful, analytical and detail driven on every project, no matter the scale, with a goal to provide his clients with the best possible service and products.



### Daniel Ignacio Garcia, PE | Pump Stations/Mechanical

Mr. Garcia has extensive experience in municipal infrastructure and resiliency project engineering and management as well as financial analysis and planning. He currently serves as the lead for the 4-log improvements for the City of Hollywood. He has managed diverse projects involving stormwater and sanitary sewers, water supply and wastewater treatment, neighborhood improvement and streetscapes, traffic engineering, civil/site engineering, highways and bridges, and coastal and riverine protection. He has also served in roles as financial analyst/planner and internal auditor for large multinational banks and engineering consulting firms.



### Errol Dawkins, RA, LEED AP | Building Architecture

Mr. Dawkins establishes the Arcadis water division's architectural design approach and technical direction and coordination of the architectural group. As an architectural project leader and manager, he has worked on various projects including public and private schools, water and wastewater treatment facilities, pools, laboratories and offices. As a Leadership in Energy and Environmental Design (LEED) accredited professional, he incorporates sustainable building strategies into his design projects.



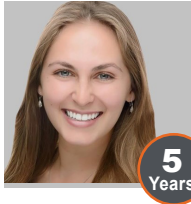
## Key Personnel Summaries



### Richard Bello, RA, CCCA, LEED AP BD+C | Building Architecture

Mr. Bello has an extensive background in all phases of architectural design services, including code studies and schematic design through construction administration. His experience includes a diverse number of building types including wastewater treatment plants (WWTP), laboratories, commercial buildings, and single and multifamily residential houses.

29  
Years



### Lia Dombroski | Utilities/Pipelines

Ms. Dombroski has five years of civil and environmental engineering experience serving municipal and government clients in the water and wastewater industry. She has assisted in planning, condition assessments of large-scale infrastructure including water and wastewater treatment and distribution systems, renewable energy facilities, and port facilities. She has also been heavily involved in planning efforts as well as report writing focusing on local legislation, capital improvement programs, financial obligations, as well as construction oversight, including water and wastewater conveyance systems, paving, drainage, and roadway design.

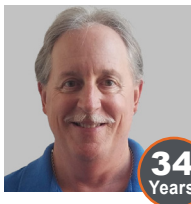
5  
Years



### Isoel Rodriguez | Utilities/Pipelines

Mr. Rodriguez has 12 years of experience in understanding utility project management policies and procedures, knowledge of principles, practice, laws, and regulations governing the project development and design of facilities as they are related to utilities. Mr. Rodriguez has a wide range of project activity experience in observing and inspecting construction work performed by contractors for municipal water and wastewater treatment, power generation, manufacturing facilities, and other heavy construction projects.

12  
Years



### Jeff Luetjen | Utilities/Pipelines

Mr. Luetjen is a construction inspector with over 34 years of experience performing all types of utility project inspections, including water, wastewater, reclaimed water, stormwater, and roadway improvement type projects. Prior to joining Arcadis, Mr. Luetjen worked directly for the Sarasota County Utilities Department.

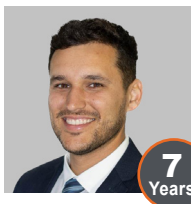
34  
Years



### Bryce Kaufman | Utilities/Pipelines

Mr. Kaufman has 35 years of experience performing all types of utility project inspections, including water, wastewater, reclaimed water, stormwater, and roadway improvement type projects. Prior to joining Arcadis, Mr. Kaufman worked directly for the City of Sarasota Utilities Department.

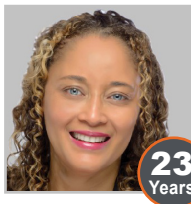
35  
Years



### Viktor Cieslik | Surveying/GIS

Mr. Cieslik has more than seven years of experience including work on condition assessment, prioritization planning and data management focused on large programs involving municipal water distribution and combined, sanitary and stormwater collection systems design and construction. His work has included infrastructure evaluations, pump station rehabilitation, review of CCTV inspection videos, smoke testing, risk evaluation and construction management. He is the senior lead for Arcadis' pipeline testing team, experienced in evaluation condition and remaining useful life of pressurized ferrous mains, plant piping, and pump station piping via Broadband Electromagnetic Tests.

7  
Years



### Ifetayo Venner, PE, ENV SP, LEED GA | Value Engineering

Ms. Venner is a professional engineer and Arcadis' wastewater treatment and water sustainability leader. As a wastewater treatment technical expert she has been responsible for the planning, modeling, design and startup of municipal wastewater treatment and reuse facilities throughout the U.S. As a project manager she has been responsible for project delivery for various projects related to water and wastewater treatment and distribution. She is President-Elect and a member of the Water Environment Federation (WEF) Board of Trustees and has been involved in several WEF committees and task forces on wastewater design, modeling, and sustainability.

23  
Years



### Paul Stirm | Risk Management

Mr. Stirm is a vice president of Arcadis, seasoned account leader, and project management professional. He has more than 35 years of experience in the engineering, construction, procurement (EPC) industry with expertise in large-scale industrial, commercial, and infrastructure planning, project finance and development, project controls, and construction management. Mr. Stirm has worked on major private and public projects in North America, South America, Europe, and Asia, several in excess of \$1 billion in value. He currently serves as the North America program & project management service leader responsible for regional implementation of Arcadis' global service strategy focused on improving operational efficiency and client outcomes.

35  
Years



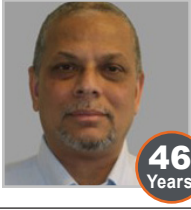
## Key Personnel Summaries



27  
Years

### **Tina Laird | Project Controls**

Ms. Laird has 27 years of experience in the construction industry as a professional project administrator, assistant project manager and certified project manager. She has worked for 16 years at Arcadis. Ms. Laird is proficient in using contract manager software such as Orion, Oracle and Primavera. She supports the project managers, construction managers and inspectors with project control related tasks including invoicing, projects costs, project set up, contracts, subcontracts, and construction documents.



46  
Years

### **Bhadrash Patel | Project Controls**

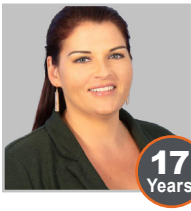
Mr. Patel has 46 years of experience in the field water and wastewater, airport engineering, chemical industry and highway engineering, urban roadway construction & planning and structural design. He has a strong background in project controls and claims analysis in water, wastewater, environmental, chemical and transportation construction sectors. He has been responsible for preparation of engineering analysis, reports and negotiations of delay claims and project schedules.



17  
Years

### **Ronnie Alvarez | Project Controls**

Mr. Alvarez has excellent problem-solving and analytical skills. Strong ability to multitask. He is capable of working in a fast paced, dynamic and customer-oriented environment. He is proficient in SharePoint On-Premises, SharePoint Online, CMiC, Bluebeam, Power BI, BIM 360, Primavera P6, ProjectWise, Prolog, ProjectSight, Procore, PlanGrid, Microsoft Office 365, Microsoft Teams, eBuilder Adobe Professional, eDoc, ProjectSolve, Citrix, WebEx.



17  
Years

### **Nichole Lynch | Project Controls**

Ms. Lynch has more than 17 years of experience serving multiple municipal clients throughout South Florida. She has extensive experience with conducting siting analysis for facilities as well as developing necessary permits associated with the construction and operation of these facilities. Additionally, Nichole has developed procurement documents such as RFQs and RFPs for utilities throughout South Florida.



37  
Years

### **Chris Remme, CCM, CCP, PSP | Constructability Review, Cost Estimating and Alternative Project Delivery**

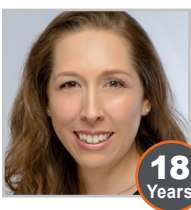
Mr. Remme has been a Program and Construction Management (PM/CM) Professional for 37 years with experience in multi-project and capital improvement programs consisting of heavy/civil, water and wastewater facilities, transit and building projects throughout the U.S. He is also a Certified Construction Manager (CCM) with the Construction Management Association of America (CMAA), and a Certified Cost Professional (CCP) and Planning and Scheduling Professional (PSP) with the Advancement of Cost Engineering International (ACEI). He is experienced in various contract deliveries, such as design-bid-build, design build and Private Public Partnerships and experienced in providing Critical Path Method (CPM) scheduling, budgets, and cost estimating, and claims resolution services. Proven technical capabilities in value engineering, constructability reviews and quality control.



25  
Years

### **Dave Jacobson, PE, LEED AP | Testing, Commissioning & Start-up**

Mr. Jacobson has more than 25 years of experience in the construction project management industry with emphasis on startup and commissioning of mechanical and electrical systems. Areas of expertise include industry knowledge in design and construction of process systems, district energy, utility distribution, bio-solids, wastewater treatment, geothermal, energy efficient buildings, HVAC, plumbing, building system automation, and electrical distribution systems. He provides reasonable and practical solutions to common and complex challenges and strives for continuous improvements in project delivery and owner satisfaction. Mr. Jacobson emphasizes quality training, and operating instructions as part of project turnover and acceptance.



18  
Years

### **Cindy Eckert, PE, CFM | Permitting and Regulatory Compliance**

Ms. Eckert has experience working with public utilities including solid waste management where she has provided negotiations support, financial and life-cycle cost analysis, and solid waste rate studies. She has assisted with the development and analysis of a landfill gas-to-energy (LFGE) Facility Agreement, resolution of landfill operational claims, and development of amendments to landfill and facility operating agreements. Ms. Eckert routinely provides owner's agent services including facility inspections, construction monitoring, contract development and administration, and assistance with environmental permitting and monitoring.

## Key Personnel Summaries



34  
Years

### Roy Cooper, PE | Claims Analyst and Resolution

Mr. Cooper leads Arcadis's construction claims services in North America. He has more than 34 years of construction experience, including the analysis and review of complex construction claims from the beginning stages through trial support and expert testimony. He has led large-scale claims evaluation assignments of almost every type, including the evaluation of schedule impacts, cost impact analysis, mediation, and claims negotiation. He has also been qualified as an expert on both horizontal and vertical project types.



19  
Years

### Brian Goodreau, PSP | Claims Analyst and Resolution

Mr. Goodreau is a vice president and operations leader for the Arcadis contract solutions team of experts in project controls and construction disputes. He has 19 years of experience in the construction industry and currently manages scheduling, cost estimating, and claims efforts on behalf of public and private owners for numerous complex infrastructures and building projects across North America. He has a proven record of accomplishment helping clients deliver projects on time and on budget by implementing techniques such as critical path method scheduling and total cost management.



45  
Years

### Bill Hixon | Claims Analyst & Resolution, Alternative Project Delivery/Owner's Agent

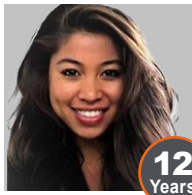
Mr. Hixon is Past President and on the Board of Directors of the Water Collaborative Delivery Association and is a member of Design Build Institute of America. He has significant experience in the design and construction of water and wastewater systems and improvements as well as other environmental projects. He has conducted numerous workshops for engineers, teaching the basic principles involved in preparing bidding and contract documents. Mr. Hixon has been involved in Design/Build project delivery for projects for more than 25 years.



15  
Years

### Danica Adams | Grants & Funding Management

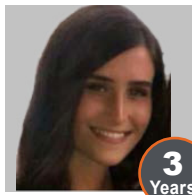
Ms. Adams has extensive experience translating management needs into policy initiatives and planning objectives, and collaborates with Mayors, County Commissioners, and other regional leaders to provide ongoing support for implementation of infrastructure management practices and accomplish program objectives. She also specializes in community engagement, regional and environmental planning, and start-to-finish program concept, design, administration and close-out for disaster mitigation and recovery.



12  
Years

### Melissa Hew, CFM, WEDG | Grants & Funding Management

Ms. Hew is experienced in the areas of floodplain management, funding, urban and coastal resilience, climate adaptation, nature-based solutions, sustainability, and environmental protection. Ms. Hew developed proposals for, secured and managed state and federal grants totaling over \$20,000,000.00 (CDBG-MIT, CDBG-DR, PDM, HMGP, BRIC, FMA, RIASE, Resilient Florida). Prior to joining Arcadis, Ms. Hew was the adaptation Resilience Programs Manager for the City of Miami where she developed and implemented strategies to help the City and its residents adapt to risks such as increased flood events, extreme heat, sea-level rise and storms.



3  
Years

### Alesia Fiocca | Scheduling/Project Controls/Utilities and Pipelines

Ms. Fiocca is a civil design engineer with expertise in water distribution system design, conflict analyses, cost estimating and project management using a variety of tools including AutoCAD Civil 3D, Autodesk Design Review, Bluebeam, and MicroStation. Her experience includes working for the City of Chicago's Department of Water Management focusing on the review of construction plans for any impacts to the City's water distribution system, and the subsequent design for modification of existing water facilities.



7  
Years

### Laurel Smith, PE | Electrical/SCADA (McKim and Creed)

Ms. Smith has experience designing power distribution system components such as generators, medium and low voltage switchgear, motor control centers, and single- and three-phase panel boards. She has experience calculating voltage drop and expected load, including three-phase current vector plotting, designing electronic control systems for pump stations and other water and wastewater facility components, and conducting cost-benefit analyses for both new installations and upgrades to equipment and facilities. She is an expert user of CAD, Excel, and MathCAD-based software.

## 2. Performance, Experience and Qualifications, Proven Project History

Arcadis has completed numerous projects for you during our 20-year partnership. The work we have performed has included planning, design and engineering services during construction. This new contract will allow us to expand our role with the City by providing more focused services in the area of construction engineering and inspection services. The specific experience of partnering with the City for so many years gives our team a profound understanding of local circumstances and your priorities and processes. Our staff is aware of the many difficult issues that face the City and other public utilities today - future capacity needs, customer expectations, replacements/upgrades, set budgets and project scheduling. We will work with you to overcome these modern challenges. It is this experience, coupled with our local personnel and national experts in water and wastewater facilities and infrastructure that will ensure the City of Hollywood benefits from inventive ideas and industry best practices.

Our mission is to help our clients and communities create cost-effective and efficient sustainable solutions that make the world cleaner and safer. Our specialty groups include electrical engineering, instrumentation and controls (I&C), mechanical systems and HVAC, structural engineering, operations and maintenance (O&M) and experts in alternative delivery methods. Our team resources enable us to optimize project coordination, quality control and scheduling to deliver projects that meet or exceed your needs and expectations.

The experience of our project leadership team, which includes a strong contract manager and three construction managers with deep capabilities is a qualifying differentiator for us. The primary project support team we have assembled makes certain that we can deliver the range of projects included in the RFQ, including the 4-Log project for which we are currently performing the design work.

### Constructability Reviews on Arcadis Construction Management Contracts

**Constructability Reviews:** Arcadis recommends review of designs at the 90% stage with a rigid Constructability/Bidability/Operability/Maintainability (CBOM) review of the project. Our thorough CBOM Reviews typically result in change orders of less than 2% of the total construction cost (excluding owner scope changes).

Projects	VE Savings	Constructability Review	Change Orders	Litigation	Bid Price	Within Budget	Comments
<b>Broadneck WRF</b>	No VE   Study Performed	Yes	<1%	None	\$17.3 Million	Yes	ENR Upgrade/Expansion
<b>Patuxent WRF</b>	No VE   Study Performed	Yes	<1%	None	\$8.9 Million	Yes	ENR Upgrade/Expansion
<b>Little Patuxent WRF ENR</b>	No VE   Study Performed	Yes	<2%	None	\$9.2 Million	Yes	ENR Upgrade/Expansion
<b>Sod Run WWTP</b>	\$19 Million	Yes	<0.5%	None	\$65 Million	Yes	Multi-phase Project
<b>Queen Anne's County WWTF</b>	\$4.7 Million	Yes	<1%	None	\$30 Million	Yes	Arcadis saved \$4.7 million and added ENR
<b>Annapolis WRF</b>	No VE   Study Performed	Yes	3%	None	\$14.5 Million	Yes	Renovation with BNR Addition
<b>Henrico WRF (Expansion to 75 mgd)</b>	\$14 Million	Yes	2%	None	\$83.4 Million	Yes	Renovation; Multi-Phase Project; BNR Additions
<b>Roanoke WPCP</b>	\$3 Million	Yes	<2%	None	\$47 Million	Yes	Renovation
<b>Mason Farm WWTP</b>	No VE   Study Performed	Yes	2.5%	None	\$39 Million	Yes	Renovation & Expansion BNR Addition
<b>Noonday WRF</b>	No VE   Study Performed	No	<2%	None	\$67 Million	Yes	Renovation & BNR Addition
<b>Blue Plains AWT</b>	No VE   Study Performed	Yes	2%	None	\$243 Million	Yes	Renovation



## Benefits of Arcadis' Approach

- Proactive schedule monitoring, including a program schedule combining the individual contract schedules.
- Continuous partnering with all stakeholders throughout the construction project.
- An effective communication plan with immediate communication response with the City of Hollywood project managers, contractors and the public. We are available 24/7 for emergency resolution and have a proven record on some recent emergencies where our dedicated staff responded during off-hours and weekends.
- Proven program control systems for time, cost, quality, and documentation.
- Extensive design, construction, and technical support experience to prevent issues from becoming obstacles to project success.
- Quality assurance to promote high quality and efficient projects.
- Effective decision making and project management to monitor construction and start-up.
- A defined method of project turnover and closeout which captures as-built conditions, warranty data and operations information.

## 3. Subconsultants

### Key Subconsultants

To enhance our project team, we have added two highly qualified subconsultants, **McKim & Creed** and **Stoner & Associates**. McKim & Creed is currently on our design team for the 4-Log project for the electrical component of the work. Their knowledge of that project is directly applicable to the 4-Log project mentioned in this RFQ.

Arcadis has partnered with both McKim & Creed and Stoner & Associates in the past and know they would provide value to any of the seven (7) projects listed in this RFQ. More detailed information on each of the subconsultants is presented in tab H: Subconsultant Information.

**McKim & Creed**  
Role: Electrical and Controls

**Stoner & Associates**  
Role: Survey

### Specialty Subconsultants



## 4. Resumes

We have included resumes for our proposed team in Appendix A of this Statement of Qualifications.



## Section E.

# Approach to Scope of Work



# Approach to Scope of Work

## 1. Approach to Performing the Work

Arcadis welcomes the City of Hollywood's solicitation seeking qualifications to provide design, construction administration, grant management, resident engineering, and inspection services related to the seven Water, Wastewater and Stormwater Projects listed in the Request For Qualifications (RFQ). Arcadis is uniquely qualified to provide the services requested as we are engineers, designers, builders, and construction managers of similar projects and programs in Florida, in the U.S. and around the world.

Arcadis' goal for every project is a fully satisfied client. We understand that the critical element in successful projects is people. Therefore, we staff our projects, so our clients receive excellent technical expertise delivered through a responsive local leadership team. **Contract Manager, Vicki Lehr**, will be responsible for properly staffing all projects and assignments under this contract to assure the right team is assembled and ready to serve the City of Hollywood.

Arcadis is eager to be a valuable asset to the City of Hollywood design and construction program as outlined in the RFQ. We offer a full menu of expertise, tools, systems, and protocols to deliver each of your projects with quality and in a timely fashion.

### Needs, Goals & Objectives

Arcadis is a natural fit for the services requested and for the projects listed. We have worked in the CEI model as collaborative partners implementing highly technical and complex construction projects as trusted agents for Owners.

Arcadis has an abundance of resources that align with your requested services of project management, design and construction.

We believe our goals for your project will mirror your goals at this point in the selection process. These goals can be developed further as we move toward commencement of services. These goals are:

- Safety for all
- Timely completion of projects
- Projects are completed within budget
- Minimize disturbances and surprises
- Placing the City of Hollywood in control of its program

Arcadis believes that our delivery methods will address these goals through the consistent accomplishment of objectives using tools, systems and protocols designed to put the City in control of project Time, Cost, Quality, Risk and Safety.

## Understanding of Technical Scope and Approach

The City of Hollywood desires to outsource management and delivery of seven construction projects and one design project. The RFQ contains certain specific criteria and questions that indicate the city is looking for innovative, resourceful firms with depth of experience and expertise to handle the projects whether assigned sequentially, in groups, or en masse. Those specific criteria and questions focus on our understanding of the scope of work, our approach to it, workload and scalability, problem-solving capabilities, schedule management, and technological capabilities.

This SOQ will show that Arcadis is an outstanding engineering, design and construction firm with stellar experience and expertise, and has practically unlimited innovative capabilities of delivering any size and type of project.

Arcadis will demonstrate in this SOQ that we understand the Scope of Work and the projects, that we have an overall customized approach suited to deliver the projects whether en masse or sequential, and that we can deliver your projects as if they were our own.

Arcadis will bring the best practices of our extensive Design and Construction Management (CM) experience, delivering innovative solutions in close collaboration with City staff. We know the importance of planning, coordinating and communicating with City managers, operations and maintenance staff so related systems continue to operate safely and reliably during construction.

### The services requested by the City are natural subsets of Arcadis' robust Construction Management Practice.

Arcadis implements all the comprehensive tools, systems and protocols to keep stakeholders informed, resolve construction issues at the lowest level possible in the field, and to maintain project momentum going forward to successful completion.



Following are descriptions of specific requested construction-related services and how we intend to approach each element:

## Construction Administration

Construction administration comprises the overall planning, coordinating, executing, and staffing the projects to adequately administer the construction contract requirements among all of the projects with the goal of managing time, cost, quality, risk, and safety for successful delivery.

What better way to accomplish this goal than the application of solid project management techniques to the construction phase. Many of the techniques and procedures implemented by Arcadis are as prescribed by the Construction Management Association of America (CMAA), the largest construction management organization in the country.

Arcadis will staff each project with the appropriate mix of personnel that will provide the necessary level of technical oversight and control for compliance, keep stakeholders informed, resolve issues at the lowest level possible in the field, control schedules and costs. This includes implementing electronic web-based platforms to expedite communications and processes such as technical submittals, RFIs, meetings, reporting and correspondences; the rigorous day-to-day presence onsite to observe work at the point of construction; and implementing the management techniques necessary for control of schedules and costs.

This work will also involve performing true third-party services during construction for projects where Arcadis is not the designer. We believe a successful project requires a team effort and cannot be accomplished by a random set of individual players. Rather, a successful project results from a united effort to assist each other, facilitating a “win-win” situation for all parties.

Our experience in coordinating team efforts has been a primary component of our successful track record. Our approach is to be collaborative with both the designer and the contractor, while always keeping our client at the forefront of our inspection and decision-making processes. While we can certainly hold the engineer's or contractor's feet to the fire when necessary, projects go more smoothly and are more successful where a collaborative environment exists, not a combative one.

**Arcadis is aware that the City of Hollywood bids some of its construction contracts as Time & Material (T&M) and others as Lump Sum.** This is important because observation and management of T&M contracts must be done differently than for Lump Sum contracts. Observation of T&M contracts

must be closer, more detailed and more calculated in order to control and limit the time spent and materials delivered to prevent excesses, which in turn, helps control overall project costs. Collecting, verifying and recording delivery tickets increases the administrative effort.

## Grant Management

We offer a proactive and innovative approach to funding and grant management that facilitates proper expenditure of funding. Arcadis assists our state-level clients with the management of both state and federal pass-through grant funding, as well as with the application, management and reporting of SRF loans. Grant management activities include technical assistance, eligibility reviews, project reporting and monitoring, processing agreements, requests for reimbursements, maintenance of records, and project/program closeouts. Arcadis is committed to helping our clients continually improve programs and processes. We offer methods to improve efficiency and effectiveness of state-level grant programs through the development of standard operating procedures. Over the past 10 years we have secured more than \$5 billion in federal grant and programmatic funding for stormwater, water and wastewater projects.

**Arcadis has secured over \$100M in federal grants for our Florida clients in the past 10 years.**



## Resident Engineering

Arcadis has ‘deep bench strength’ of highly qualified engineers that can be mobilized for short or long-term assignment in the field in order to oversee problematic

construction, to provide timely resolution of construction problems, and to provide continuity of services across many projects at the same time. These engineers, referred to as Resident Engineers (REs), are typically more qualified for the technical side of design and construction. Many of Arcadis' REs are Professional Engineers (PEs) and may function interchangeably as design engineers. Arcadis has identified a cadre of potential REs for your projects and they will be available for any discipline of construction including pipelines, excavations, soils, structures, electrical, instrumentation and control.

## Inspection Services

Construction Inspection is at the heart of Arcadis' Construction Services offering. Qualified inspectors are at the point of construction continuously every day witnessing that construction is as designed and specified. To do so, inspectors must be highly knowledgeable of the contract documents in order to make certain that the construction work is being done in compliance with the documents.

**Construction Inspectors are an intrepid, resourceful and deliberate group of people that choose to be at the point of construction for you, the client,** sometimes under less-than-ideal environmental conditions, to make certain that construction is proceeding according to its design intent. Arcadis has such a group of people.

Our deep bench of resources will allow the City to always have "eyes" on the projects. For example, for a South Florida municipality we are currently the owner's representative for a water main and a force main project, and our inspection team is covering both of day-time and night work without any issues.

These Inspectors observe construction as it progresses and they document their observations thru Daily Reports to keep everyone informed, but also, to serve as a record of the details and sequences of construction as it occurred. Inspectors also must work shoulder to shoulder with trade labor in the field to accomplish the work as specified and to resolve problems in the field at the lowest level possible.

## Consistency of Approach with the Project Goals

Arcadis believes that our approach to the execution of the required scope will match up with established goals and objectives as follows:

- Safety for all through our robust safety program for all employees
- Timely completion of projects through control of contractor schedules and minimizing delays

- Projects are completed within budget through recommending contractor payments based on Earned Value
- Minimize disturbances and surprises through comprehensive project planning, application of Constructability Review, and effective problem resolutions in the field
- Placing the City of Hollywood in control of its program through trust and confidence in our ability to effectively manage, communicate and control projects

## Successful Project Delivery

Arcadis will provide the appropriate mix of technical services and staffing with high-performing individuals so that the projects will be delivered consistent with project goals. Achievement of project goals requires accomplishment of project objectives including control of time, cost, quality, risk, and safety. Following are characteristics of typical Arcadis project delivery accomplishments:

### Minimizing Delays

Schedule slippage is a common malady in construction project performance. Contractors are always on the lookout for opportunities to shift responsibility of delays onto the owner, making management and control of progress very important. Arcadis implements requirements for Critical Path Method (CPM) schedules where possible on individual projects. This allows accurate determination of construction and administration progress and also allows analysis of delays and responsibility. Having an overall CPM schedule in-hand also allows comparison of a contractor's two-week lookahead with activities shown for the same time period. This type of activity is executed on a weekly or bi-weekly basis as a component of regularly scheduled coordination or progress meetings.

Time and cost are inextricably linked in project management and execution. **When schedules are managed and controlled through frequent review and analysis, momentum is maintained, completion occurs on-time, and costs are kept in line with projections.** When schedules slip, momentum and progress are lost, time frames are extended and added costs can be incurred, not only for the contractor, but for the Owner as well.

### Administration and Communication

Contract administration and communication are interrelated when it comes to project execution as these are key for management of the project. Arcadis has many tools, systems and protocols for keeping everyone informed and for providing necessary day-to-day organization through established procedures. Arcadis will implement electronic web-based document control platforms that will streamline communications and enhance administration of the construction contract.

This includes tracking technical submittals for review, meetings, reports, requests, and correspondences.

## Controlling Costs

Cost effectiveness begins at the outset of projects. During the project development phase, effective cost estimates are essential. Costs and budgets are estimated for each phase of the work with levels of contingency equal to the amount of unknown risks involved. As the risks are clarified and managed, contingency amounts can be reduced. If the costs were originally developed on sound estimating procedures, commodity prices and proper escalation - accurate budgets result.

As explained above in **Minimizing Delays**, time and cost are inextricably linked. **When project momentum is maintained through effective schedule management, cost estimates fall within the original estimate assumptions and projects can be completed within budget.** Also as explained above, delays in momentum can result in added costs - responsibility of which can be determined through effective schedule and delay analysis.

Arcadis has a strong cost management approach to project development including expert cost estimating based on ENR commodity indices, regional price adjustments and real-time estimating scenarios as Arcadis is a builder and constructor. Other tools for cost control we have at our disposal include value engineering and constructability reviews.

## Effective Document Control

Arcadis will implement an electronic web-based platform, as explained above in **Administration and Communication**, that also serves to issue, record and track administrative project documents. This is essential for assurance that the project was executed properly and for future references. Project documentation includes meetings, letter, emails, reports, and change documents. Our platform streamlines processing procedures, tracking

documents and issuing notifications which facilitates effective communication and coordination. All types of documents are retained within the platform until the end of the project when all will be gathered for turnover to you, the Owner.

## Problem Resolution

Every construction project has issues and problems that must be addressed in a timely fashion and with high confidence of technical resolution. These issues and problems can range from miniscule to major with catastrophic implications. Arcadis' approach to issues and problems at the point of construction is to resolve them at the lowest level possible in the field before taking the issues up the chain of management. This requires experienced and knowledgeable onsite personnel to work shoulder-to-shoulder to resolve minor issues, e.g. an inspector and a trade foreman or site superintendent. When successfully resolved and the specific design intent is met, it is explained to others and it becomes documented in a number of project document types. If an issue cannot be resolved with onsite collaboration, the issue will be kicked up the chain for resolution. Arcadis implements a problem resolution matrix in the project documentation to show how this works.

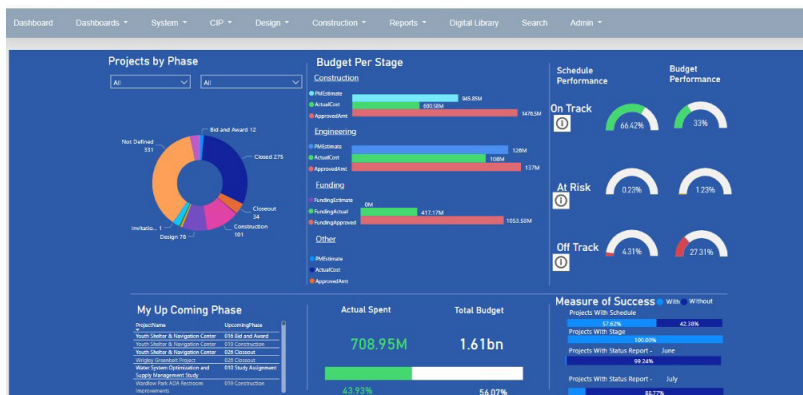
## Risk Management

Management of risks on any given project is key also for managing costs and schedule. Unknown risks represent added costs for either the contractor or for the owner. **Early identification of risks is essential for controlling its effect on costs and schedule.** There are several tools for identification of risks including risk registers, constructability reviews and value engineering studies.

Risk registers typically begin life during the design phase where risk effect on design options are considered. However, where there risk registers are not initiated during phase, they can become a tool for use in the construction phase. Arcadis is adept at using this tool to identify risks and then apply techniques for managing those risks. This, in turn, helps to control costs and to assign responsibilities for managing the risks.

Constructability Review (CR) is an integral part of Arcadis' overall cost and quality control system. Arcadis is not only an Engineering firm but we are also a constructor and we perform constructability reviews from the standpoint of a constructor having to bid and build the project.

Arcadis' constructability review is not another drawing review - it is a detailed analysis from a contractor perspective of potential change order conditions. We review the project from the standpoint of time, cost, quality, risk and



Electronic web-based platform for Project Controls developed for a client.



safety in a facilitated workshop forum so that experts in each discipline can communicate and coordinate freely with each other in the same room with some of the following elements in mind.

- **Time** - Identify elements that can adversely impact the project schedule and if the project can be constructed within the contract time allotted.
- **Cost** - Verify if the engineer's estimate is valid, if the contingency used is appropriate for the design stage or if all the unknowns have been accounted for.
- **Quality** - Confirm that all the disciplines have been coordinated for fit and interference, and checks for complex construction that can be simplified.
- **Risk** - Verify if all the bidding and construction risks have been identified, assigned appropriately and accounted for in the cost estimate and contract documents.
- **Safety** - Verify that the project can be constructed safely with the design intent. Simply stated, the constructability review simulates a constructor's view of the construction resulting in:
  1. a well-defined set of contract documents;
  2. a plan for construction with provisions in the specifications to properly manage the construction process; and
  3. a tool that allows the contractor to plan necessary resources and costs to properly prosecute the work on time and within the engineer's estimate.
- Research by the Construction Industry Institute (CII) shows that properly conducted constructability reviews can save 4.3% of project costs and 7.5% of project time. These savings represent at least a 10:1 return on investment to the owner. We use a facilitator to guide and manage the review process and we have comprehensive checklists representing common major faults found on designs. Then we provide resulting commentary to the owner and designer in report form for implementation in the project design.

Value engineering is a great risk management tool for validating large complex projects when conducted early in the project development process. It affords development of alternative options that either can reduce costs or add value to the project. Risks are considered when evaluating development alternatives.

## Safety

Nothing can negatively impact a construction project more than an injury or death on a project site. Construction contractors and Owners must have their own safety programs, and Arcadis has its own called **TRACK to Zero**. See the [Commitment To Safety](#) section for extended discussion of our safety program.

## TRACK TO ZERO TRACK



Arcadis field staff are very knowledgeable in the program and it is taken very seriously. The health and welfare of others onsite are not excluded from this program as our field staff are authorized to point out potential safety violations when

observed. And in the case of an imminent danger situation, ANYONE must stop the immediately to prevent an injury or worse. Our safety program also solicits reporting of construction site safety behavior by tracking 'Near Misses' and 'Close Calls'. This protocol helps keep the safety mindset at the forefront of daily staff activity. Further details of our safety program follows in the Commitment to Safety Section.

## Support Capabilities

Arcadis has extensive local and national resources for support of staffing, consultation and technical innovation. Following are examples of available resources:

**Electronic Document Control Platforms** - Arcadis has extensive experience with electronic document control platforms such as eBuilder, ProCore, Prolog, Oracle and others.

**Cost Estimating** - As a large international consulting engineering and construction firm, Arcadis has advanced, robust cost estimating capabilities for supporting Change Management, budgetary estimates, and alternative analysis. Our Cost Estimating practice uses commodity pricing, ENR price indices, and regional adjustments in its cost estimating procedures which results in accurate estimates at any level of project development.

**Discipline and Trades Support** - Arcadis has unlimited resources for support of design and construction issues related to infrastructure, technology, structural, mechanical, electrical, instrumentation and control.

**Technological Innovation** - Arcadis has a proven track record of technologically innovative projects and knowledge of innovative products that could be consulted if necessary.



Arcadis CEI Project - Preparation work for utility crossing under stormwater pipe.



Washington Park neighborhood entrance monument sign.

## Understanding of the Projects

The projects in this program are quite diverse in type, size and complexity requiring an agile, wide-ranging approach to planning, staffing and executing the requested services. Arcadis has structured its services and delivery to the tasks required with alignment across the organization chart for the projects listed in the RFQ.

Detailed project descriptions are as follows:

- **Project 1 - Washington Park Utilities Improvements Projects**
  - (It is understood that these project elements are funded by the Broward County Mobility Advancement Program (Broward County Surtax) Funding Requirements.)
  - **Water Main Replacement Program Pembroke Rd to Hollywood Blvd between S 52nd and 56th Ave and US 441** - This project installs approx. 16,700 LF of 8-inch, 12-inch & 16-inch PVC and DIP water mains in City streets and easements to replace existing mains, valves, hydrants, backflow devices, and services.
  - **Washington Park/Lawn Acres Septic to Sewer Conversion** - This project installs approx. 10,300 LF of 8-inch to 15-inch gravity sewers, 42 sewer manholes, laterals and discharges into existing lift stations in a currently unsewered area!
  - **Washington Park Drainage Improvements** - This project installs inlets, manholes, French drain systems, and removal of existing drainage structures.
  - **Washington Park Roadway Resurfacing Improvements** - This project resurfaces the roadways affected by the above listed projects and realigns traffic lanes to provide a separate bicycle lane.

- **Project 2 - Sewer Expansion Between Arthur St and Taft St from N 35th Ave to North Park Rd** - This project involves a sewer collection expansion including major traffic plan, gravity sewers, manholes, sheet piling and shoring, dewatering, and road surface replacement.
- **Project 3 - Sewer Expansion between Buchanan St and Fillmore St and from N 72nd Ave to N 70th Way** - This project involves a sewer collection expansion including major traffic plan, gravity sewers, manholes, sheet piling and shoring, dewatering, and road surface replacement.
- **Project 4 - Lift Station E-8 Replacement** - This project involves construction of a new pump station to replace the existing re-pump station built in 1972 that serves the City of Hallandale east service area followed by abandonment and demolition of the existing one.
- **Project 5 - Implementation of 4-log Virus Disinfection Process at the WTP** - This project consists of miscellaneous improvements including chemical injection/piping modifications, chlorine storage tank replacement and miscellaneous mechanical, structural, electrical, instrumentation/SCADA improvements and restoration work.
- **Project 6 - Sodium Hypochlorite Disinfection Conversion at the Southern Regional WWTP** - this project comprises conversion from chlorine gas to liquid sodium hypochlorite including miscellaneous improvements and modifications of treatment components, piping modifications, mechanical, structural, electrical, instrumentation, restoration, landscaping and other civil work.
- **Project 7 - Design and Construction Management of Lift Station E-8 Generator** - This project involves design and construction of a new 250kw diesel generator for the new Lift Station E-8 described as Project #4 and funded by Florida Division of Emergency Management (FDEM).

Arcadis has analyzed the characteristics of each of the above projects in order to match up our approach to execution of the scope of work, to measure the impacts to be addressed, and to further demonstrate our understanding of the projects involved. **Further, we understand that some of these infrastructure projects may be bid as time & material (T&M) contracts which require extra attention in oversight and administration.**



**Our analysis of construction impacts of the seven listed projects is as follows:**

**Projects #1, 2 & 3 Washington Park area utilities:** these projects will have major impacts on the wide-spread surrounding areas for extended periods. Impacts include major traffic and access disruptions due to major traffic control plans, construction noise, debris and dust, material delivery and laydown traffic, pedestrian and bicycle traffic disruption, potential dewatering and bypass pumping operations. Safety will be paramount for all onsite contractor and Arcadis personnel during working hours. Another primary concern will be safety after-hours for passers-by accessing the area to protect them from the dangers of open trenches, unsafe access routes to homes and businesses during overnight hours. Arcadis recommends the City to require the Contractor a detailed Public Outreach Plan, to reduce complaints from residents and business owners during work hours. This project is very similar to the Fort Lauderdale A-16 PS Rehabilitation where Arcadis is the owner's representative on this project where water and sewer infrastructure is being installed along neighborhood roads.

**Project #4 Lift station E-8 Replacement:** this project will have an impact on the limited area surrounding pump station E-8 at the corner of SE 5 Street and SE 4 Ave. in Hallandale. There are residences and businesses nearby. The construction area is fairly compact and laydown area is across the street. Impacts include construction noise and dust during working hours, and potentially the impact of continuous dewatering overnight. Traffic control plans will be in effect when tie-ing in new pipes to existing in the streets. Access and egress may be disrupted temporarily. The project cost is estimated at \$1.8M. Our subconsultant McKim & Creed is currently performing CEI services for Lift Station 3, Lift Station 6 and SW-8. Our team is very familiar with these projects, and can help the City on this LS E-8 Project.

**Project #5 4-log virus disinfection process at the WTP:** this project is currently under design by Arcadis. Construction projects within treatment plant sites always impact plant operations and much coordination of construction activities with plant operation activities is required to assure continuous plant operation. The project involves replacement of hypochlorite generation system with bulk hypochlorite and replaces the existing ammonia feed system with new including a deep excavation for a new feed point. Bypass pumping or flow diversions will likely be required in order to make chemical feed tie-ins with existing piping. Plant operation will be impacted in some areas. Safety will be an important consideration especially for nighttime operations for operators doing their rounds. Light and easy access will be beneficial.

**Project #6 Sodium Hypochlorite Disinfection Conversion at the Southern Regional WWTP:** this project involves replacement of chlorine gas feed facilities with bulk hypochlorite feed and storage facilities. Safety will be paramount for all as both chemicals are extremely dangerous. Bypass pumping or flow diversions will likely be required in order to make tie-ins with existing piping. Chlorine gas is heavier than air and will settle in low areas presenting a danger to onsite and offsite locations. Evacuation procedures should be omnipresent while working in the gas facilities.

**Project #7 Design and Construction Management of Lift Station E-8 Generator:** this project is companion to Project #4 Replacement of Lift Station E-8. Project #7 will be funded by Florida Division of Emergency Management and will likely require special project reporting and accounting during design and construction. Arcadis is currently finalizing the City's Water Master Plan where the operation of the facilities were assessed by Arcadis and McKim & Creed. McKim & Creed is familiar with the City's lift station design and operation. The Arcadis team can help the City in completing the design on-time, on schedule and in compliance with the funding requirements by FDEM.



Arcadis CEI Project - 10-inch FM HDD for tie-in to new PS A-16 in Fort Lauderdale. MOT keeping one travel lane open on each direction.



## Staffing for Success

Arcadis understands the potential problem of staffing the ebb and flow of multiple projects that may go to construction simultaneously within a program. We have staffed our organization chart with multiple members in the specialized assignments to work collaboratively in providing continuous service for all project assignments. The core staff assigned to your program are expert designers, engineers, managers, and inspectors. They will be supported by a deep field of staff that will provide additional expertise when and where needed, especially in times of high workload.

**This contract will be managed from our office in Plantation, FL**, which is less than a 30-minute drive from the City's administrative building. We understand the regional and local issues and are adept at solving the difficult issues that face public utilities today, including difficult rehabilitation projects, constrained budgets, future capacity needs, customer expectations, and tight schedules. This experience, coupled with our local personnel and national experts, will bring fresh ideas to the City of Hollywood.

**The Arcadis team can assist in the oversight of the construction of all of these projects by providing highly qualified inspectors who have the depth and flexibility to respond when needed, whether it be a planned project or an emergency situation.**

We have an extensive local "bench strength" to provide experienced field inspectors and other CM staff support on an as-needed, on-call bases.

**Our team also includes experienced subconsultant firms.** All of our subconsultants have experience working on the City's projects. Our subconsultant and MBE partners have personnel available to fill key construction management and inspection services positions and to also provide back-up personnel if needed depending on project demands.

The depth of local inspection and CM personnel available will be of significant benefit for the City, allowing the Arcadis team to provide inspectors when needed, providing timely, innovative and cost-effective solutions through our construction management, technical and operations expertise and knowledge.

To keep the City abreast, streamline communication and provide a single source of information, our proposed **Contract Manager, Vicki Lehr**, will share a daily morning report with the City's project manager that will outline all anticipated activities being performed by the contractors and inspectors on each project.

## Continuity of Service

Arcadis has listed several team members for most of the positions in the project organization chart. This was done to show that we have serious capabilities for staffing the City's projects. These alternate names in the organization chart serve to show assignments across all projects if they are being executed simultaneously. This way, continuity of service is provided across all projects.

Arcadis recommends development of a master program schedule of the listed projects which will be invaluable for assigning staff. Refer to selection item **5) Scheduling Methodology (Timeline)** for further discussion.

## Construction Management and CEI Methodology for Delivery

### Project and Construction Management Excellence

Arcadis developed our project delivery system to address the needs of utility owners faced with major capital outlays, whether they are building new facilities or performing rehabilitation work on existing facilities.

With a balanced concentration on managing all phases of project implementation, we strive to improve and enhance a facility's long-term operability, its ability to meet permit and regulatory requirements and to plan thoroughly for operations during construction.

**As project and construction managers, we optimize cost, improve operability, improve the plans and specifications to obtain competitive bids, and facilitate quality construction.** Arcadis has extensive experience in the construction management and inspection of municipal utility projects and are well suited to meet your CEI needs throughout this contract. We can advise on alternative approaches such as design-build, design-build-operate, CM@Risk and Public Private Partnerships. We are well-suited to evaluate the advantages and disadvantages of the various delivery methods. Once selected, Arcadis can help you manage implementation of the selected approach

## Commitment to Safety

Safety is at the forefront of every Arcadis job to protect our most valuable asset, our people. Arcadis is committed to providing a healthy and safe work environment for our employees, subcontractors, clients, and visitors.

A safe construction program does not happen by accident but rather requires a totally trained behavior by all project participants. Our approach will be to work proactively with the City and the Contractor(s) to keep health and safety priority one at the forefront

of every project — **Arcadis Fundamental Health and Safety Principle No. 1: Demonstrate Health and Safety Stewardship Daily.** We train our site staff in safe behaviors and we will assist the City in monitoring the site for unsafe construction practices to the Contractor's attention and advising the City to mitigate health and safety related risks.

We approach each project with the understanding that:

- Our work is never so urgent or important that we cannot take the time to do it safely
- All injuries are preventable
- Everyone is obligated to refuse unsafe work
- Everyone is obligated and empowered to raise concerns about the hazards seen
- All levels of supervision are accountable for safety performance
- Employee and contractor commitment is essential for safety performance

## Successful Project Delivery Services

Arcadis is committed to success! We bring a proven track record and a highly experience team to your projects. To further strengthen our pursuit of success we will strive to identify issues early, apply lessons learned, maintain project momentum, and serve in your best interest!

To further represent our overall approach, read on to find further details of our tools, systems and protocols we will be implementing on your projects.



### Pre-Construction Services

Initiation of CM services typically includes the development of a detailed project scope, determination of roles and responsibilities, a

stakeholder register and a project kickoff meeting. It is critical to establish a clearly defined strategy that sets the stage for a successful project. In partnership with the City, the project team will establish how the project will be managed, the project scope, objectives and deliverables, team member roles and responsibilities, and success criteria.

Arcadis can provide several valuable pre-construction services including:

- Scope development assistance
- Constructability review of the complex projects
- Pre-bid conference assistance
- Master program schedule will aid in staffing the projects

**Project Pre-Bid Conferences:** At this meeting, a shared understanding of the goals of the project with all stakeholders is created by reviewing the project scope, schedule, established expectations, and clarifying roles and responsibilities. The results of this meeting are memorialized and distributed to all attendees and serve to set the stage on how the project will proceed.



### Delivery Thru Execution

Arcadis' integrated CEI Project Delivery system comprises contract administration, resident engineering and inspection. Arcadis is uniquely qualified to provide the following CEI services:

### Construction Management Plan

Arcadis implements a Construction Management Plan (CMP) on all its construction project that defines how the construction contract will be administered including:

- Contact information
- Site emergency procedures
- Submittal and RFI procedures

## Harford County, Maryland: Constructability Review of the Sod Run WRF Expansion Project



A specific example of the value of CM input during the design phase is the recent expansion for the Sod Run WRF in Harford County, Maryland. Arcadis provided a Constructability Review prior to the project being advertised for bid. During this review, Arcadis suggested a different odor control manufacturer be considered than the one specified. **This change resulted in the fermenter structures foundations being raised five feet which resulted in an overall project savings to Harford County of more than a million dollars.**

**This project was also the recipient of a CMAA award.**

- Roles and responsibilities
- Communication procedures
- Pay request and schedule update procedures
- Problem resolution matrix

The CMP will be coordinated with the construction contract, the drawings and specifications and the planned approach to the job. Thus, a well-integrated system for project management is established and communications and methods of information management are described. This will be integrated and consistent with the contract documents and will support the development of a job record and documentation system. Comprehensive records will minimize contractor claims and will save research time if claims are made.

**Preconstruction Conference:** Arcadis will conduct a preconstruction conference with the contractor and key stakeholders to outline the required administrative procedures and contractual terms, and to review the contractor's strategy for procurement and construction.

We would focus on the conformance of those strategies to the schedule milestones. The CMP would be distributed and discussed at the preconstruction conference.

**Document Control:** Arcadis will implement a document control platform that streamlines communications, requests and submittals. All project participants will be invited to use this platform. and training will be provided as necessary. these document control platforms help us administer the contract and monitor and track the status of any type of documentation at any given time in the contract.

**Construction Progress Meetings:** Arcadis will chair and provide minutes for regular construction progress and coordination meetings. For best results, we recommend bi-weekly meetings, but that frequency can be changed depending on the complexity and speed of the project.

We also take this opportunity to analyze the contractor's plan for the next couple of weeks ahead. this is done for coordination with any owner activities, but also, to compare the lookahead schedule to the project schedule for compliance. The two should compare favorably.

Field issues and problems will be discussed as well as any administrative conditions such as submittals, RFIs, and change requests.

**Construction Administration:** Arcadis' construction managers will coordinate with City PMs to assure construction is proceeding according to City requirements; that contract requirements are being met; and to inform all of project status and issues.

Administration occurs continuously during the contract duration by the CM, admin staff, and inspectors to make certain that the contractor is meeting all construction AND administrative requirements.

**Construction Resident Inspection:** Our resident engineers and inspectors will work shoulder-to-shoulder with the contractor to make certain that the work performed is in conformance with the contract documents, approved shop drawings and any approved changes. The resident inspector will conduct and record on-site observations of the engineer and work in progress with such frequency as necessary to verify accuracy and quality of installation and materials installed; prepare daily inspection reports providing a log of activities in progress and completed, including an accounting of labor and equipment, noting discrepancies, discussions inspections, test results, weather, and other pertinent information. Photo document the work progress; reject any portion of the work and transmit to City, engineer and contractor a notice of non-conforming work when it is in the opinion of the CM, City, or engineer that such work does not conform to the requirements of the contract documents. The contractor's work zone traffic control plan will be reviewed and any issues reported to the City.

**On a recent project for another client, an Arcadis inspector identified an issue the contractor was having with another contractor's inability to locate utilities in a timely manner, and often times were mismarked. Our inspection team kept the client alerted of the issue and helped identify areas of concern. Further, the CM noted these concerns in the monthly meetings and assisted in the collaboration of discussions with the contractor, client and the gas and electric company to resolve the issue.**

**Review of Contractor's Payment Requisitions:** Arcadis will review contractors' monthly payment requisitions and recommend payment on the basis of work completed.

Payments shall not be authorized before the project schedule is updated, material quantities counted and deficient work corrected. Arcadis will report on the monies invoiced and remaining throughout the project.

**Field Testing, Start-up and Commissioning:** Arcadis will coordinate with the contractor to develop an overall startup and commissioning plan, including a schedule of activities for turnover of the project with the contractor and the City operations staff.

Arcadis will observe and document all tests of materials and equipment, oversee and coordinate training sessions for City operating personnel.





## Monitor & Control

Arcadis will implement proven processes to monitor project progress and against the plan and taking corrective action where necessary.

We often come across as-built situations which prohibit work to proceed as planned. During a recent lining installation, after reviewing the CCTV camera footage, our inspection team noted the sewer line was not lineable due to its installation and layout. **Therefore, a different approach was needed and was changed from lining to open cut replacement.** When working underground, one must “expect the unexpected.” We use our experience to make sound recommendations to the client. **These constraints and differing conditions affect contractor schedules and require us to be flexible in our workload, as well as responding to stakeholder concerns.**

Process for review of work, rejection of defective work, inspections, and tests:

1. Conduct on-site observations of the work in progress to make certain that it is in general conformance with contract requirements. Identify and report to the City work that is unsatisfactory, faulty or defective or does not conform to the contract documents, or has been damaged, or does not meet the requirements of any inspection, test or approval required to be made.
2. Verify that tests, equipment, system startups, and operating and maintenance training are conducted in the presence of appropriate personnel and that the contractor maintains adequate records thereof; and observe appropriate details relative to the test procedures and startups.
3. Verify that equipment delivered is per the approved shop drawing.
4. Verify that equipment is stored per the manufacturer's recommendations.
5. Accompany visitors representing public or other agencies having jurisdiction over the project and record the visits.
6. With input from Arcadis' project manager, the City and the engineer, evaluate the contractor's suggestions for variations from the contract plans and specifications.
7. Inspect environmental measures including control of discharged water and direct contractor to take whatever actions may be required to fully comply with approved sediment and/erosion control plan.

### Change Management and Change Order Resolution:

Changes occur on any project so change management is vitally important for control of costs and schedule. These changes usually occur as a result of unknown

conditions or interferences too small or too complex to be recognized during design.

Arcadis approaches changes with care and deliberation. Some changes are straightforward and valid but others can be much more complex and elusive. Upon receipt of a change request, we analyze it to clarify and detail what is the change and why is it a change to the contract. After discussing it with the design engineer and you, the Owner, to develop an approach for resolving the matter, we get a comparative cost estimate from our cost estimating team. The CM will analyze the estimate and schedule a negotiating session with the contractor's PM. This may require several meetings to resolve if it is a complex issue. But after preliminary agreements are reached, we inform and discuss with you and the design engineer for appropriateness. We are then able to forge an approach to a final resolution of cost and time.

**Schedule Monitoring:** After establishment of a baseline schedule at the outset of the project, we will analyze the contractor's required monthly updates for progress and status against a set of technical key performance indicators (KPIs). If progress is shown to be falling behind schedule, we request a recovery plan capable of getting the project back on track.

Lookahead schedules required at each periodic coordination meetings will be compared to the same time period on the project schedule another indicator of progress.

Our experience shows that waiting until the end of the project to identify and resolve delay issues is an ineffective approach to dispute resolution. Performing this analysis contemporaneously enables a cost-effective analysis that is more accurate than an evaluation performed at the end of the project.

**Site Safety Monitoring:** Arcadis has made a significant commitment to delivering safe, environmentally compliant construction projects. The enforcement of OSHA and company regulations is of utmost importance to any project we manage because the safety of all personnel at the site is a paramount objective. Therefore, before a project begins, we produce a written project-specific safety plan for Arcadis staff. Safety of construction personnel at the construction site is the sole responsibility of the contractor. We will periodically monitor the site for general compliance with the contractor's safety plan and report any observed violations to the contractor and the City.

The contractor has its own safety program but we observe the contractor's performance and warn of activities that might be OSHA violation or violation of their own safety program.

Arcadis is concerned for the safety of all stakeholders in our projects and for this reason will plan to use a “stop work” order for the contractor if warranted by significant unsafe conditions.



### Project Closeout

It is essential to formally close the project and secure sign-offs/approvals from stakeholders sponsor. Arcadis has an excellent record of completing projects, including the completion of punchlist work, resolution of outstanding change orders, full warranty activation, and compliance with all requirements of the Owner. We will maintain complete records for the project. These records will be turned over to the City as the official record file. All construction files, copies of warranties, guarantees and insurance certificates, the daily construction log, record drawings, and the conformed and posted contract specifications will be transmitted to the City upon contract closeout.

We focus on the closeout phase from the very beginning of a project because we know that punch lists items, corrections, equipment adjustments, certifications, and other details extend the project completion time. Closeout will include the following:

- Punchlist inspection and guarantee inspections.
- Administrative punch list item review and confirmation of completion.
- Substantial completion inspection.
- Final inspection of all work, controlled inspections and follow-up inspections.
- Scheduling final integrated equipment and system checks.
- Operations and maintenance procedures training for staff as appropriate.

- Review and acceptance of “As-Built” drawings.
- Final delay analysis and final extension of time report.
- Certificate of substantial completion.
- Completion of punchlist work.
- Final waivers of lien from contractors.
- Guarantees/warranties.
- Final applications for payment.
- Written deficiency notifications to the contractor.
- Lessons learned documentation.

## 2. Firm’s Current Workload

### Team Availability

Arcadis’ client-focused project management approach (PMA) maintains a project staffing schedule, much like a project CPM schedule, so we can effectively manage project staffing. Arcadis project principals review project status periodically for comparison with our staffing schedule in order to provide continuity of service and availability of appropriate staff.

Through the years of working for you, we have a solid understanding of the importance you place on timely performance and schedule adherence. Our contract manager and each project manager assigned to lead work in this contract are recognized for timely performance in delivering projects they manage. We will make certain that all of our future projects follow the excellent example of the delivery of the Hydraulic Modeling Update and Calibration. Our PMA tools and emphasis on continuous schedule review will provide additional tools in achieving solid schedule performance on our projects for you.



30-inch HDPE Water Main - Approximately 1,000 LF to cross under the Tarpon River.

## Current/Anticipated Workloads

The staff resources available in our local and regional offices provide significant “bench strength” that facilitates required resource allocations to meet the City’s needs. Our South Florida offices (Plantation, Boynton Beach and Miami) include more than 75 professionals to cover the potential services described in this solicitation. We have more than 350 additional professionals located throughout Florida. Key project personnel are available to initiate the work immediately upon contract execution and to continue work on an ongoing basis. Furthermore, we commit to providing other resources as needed to supplement the proposed team to meet your needs. Our Contract Manager, **Vicki Lehr**, will be responsible for scheduling and committing team resources to assigned project and incorporating additional staff as needed.

Below is a listing of the availability of our proposed key team members and support personnel for this project over the next 12 to 16 months.

Name   Role	Availability	Name   Role	Availability
<b>Leah Richter, PE</b>   Principal in Charge		<b>Ben Ruppel</b>   Electrical/SCADA Inspector	
<b>Vicki Lehr, PE</b>   Contract Manager		<b>Lia Dombroski</b>   Utilities/Pipeline Design & Insp	
<b>Carlton Serrette, PE</b>   QA/QC / Technical Advisor		<b>Isoel Rodriguez</b>   Utilities/Pipeline Inspection	
<b>Melissa L. Pomales, PE, PMP, ENV SP</b>   QA/QC / Technical Advisor		<b>Jeff Luetjen</b>   Utilities/Pipeline Inspection	
<b>Chris Matthews, PE</b>   Construction Manager		<b>Bryce Kaufman</b>   Utilities/Pipeline Inspection	
<b>Darryl Dunn, PE</b>   Construction Manager		<b>Ifetayo Venner, PE, ENV SP, LEED GA</b>   Value Engineering	
<b>Jose Custodio, PE</b>   Construction Manager		<b>Tim Ware, PE</b>   Water/Wastewater	
<b>Dan Garcia, PE *</b>   4-Log Design Project Manager		<b>Tina Laird</b>   Project Controls	
<b>Garth White, PE</b>   Construction Manager		<b>Bhadrash Patel</b>   Project Controls	
<b>Joan Fernandez, PE, IAM</b>   General Civil/ Stormwater		<b>Chris Remme, CCM, CCP, PSP</b>   Cost Estimating, Constructability Reviews, Alt. Project Delivery	
<b>Steve Woodhurst</b>   Construction Manager		<b>Dave Jacobson, PE, LEED AP</b>   Commissioning and Start Up	
<b>Len Sheptock</b>   Construction Manager		<b>Roy Cooper, PE</b>   Claims Analysis and Resolution	
<b>David Morgan</b>   W/WW/Electrical/SCADA Insp			



### 3. Demonstrated Ability to Solve Complex Project Issues



#### FIRM EXPERIENCE AND AWARDS

Nationally, our Construction Management team has managed **billions of dollars of construction** for new and renovated water and wastewater facilities; has worked with all forms of project delivery systems, including traditional design-bid-build projects and alternative project delivery systems like design build; and performed value engineering for more than 650 water and wastewater projects, resulting in a combined total savings of over **\$2 Billion for our clients**.

Our projects have received **awards from the Construction Management Association of America (CMAA) for excellence in construction management**, as described below. Several members of our team have worked on these award winning projects:

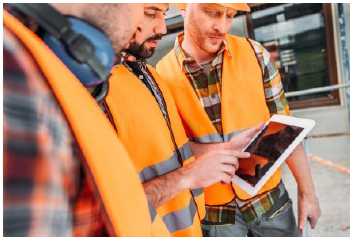
- City of Brentwood WTP, Contra Costa, CA – Project Achievement Award for Projects over \$20 Million.
- New York City Department of Environmental Protection, Catskill/Delaware Ultraviolet Water Disinfection Plant, Corona, NY - Honorable Mention greater than \$100 Million.
- Crystal Spring Water Treatment Facility, Roanoke, VA – CMAA Outstanding Project.
- Lower Northwest Interceptor Pump Stations, Sacramento, CA – Project Achievement Award for Projects over \$100 Million.
- Henrico County, VA Wastewater Treatment Plant – CMAA Honorable Mention for Outstanding Project for Public Projects over \$10 Million. This is one of two awards given nationally in this category.
- Sod Run WWTP BNR and Renovation Program, Harford County, MD – this \$65 Million program upgraded and expanded the plant from 10 to 20 mgd and provided BNR. Arcadis, under the CDG brand, won the Top Construction Management Project Achievement Award for Public Projects Under \$100 Million from the CMAA. This project also won a second time with ENR.
- Humbercare Wastewater Treatment and CSO Program, Hull, UK (Yorkshire Water) (\$300 Million) – this is the largest wastewater capital program in the UK. Arcadis, under the CDG brand, received the Top Construction Management Project Achievement Award for International Projects from the CMAA for Project Excellence.
- Patuxent WRF, Anne Arundel County, MD – Expansion of existing ENR Water Reclamation Facility to 10 mgd CMAA award.
- Phase I Improvements to the Terminal Area at Long Beach Airport, Long Beach, CA - Project Achievement Award; Design Quality Award; Sustainable Construction Award.
- SCE Data Center, Los Angeles, CA – Project Achievement Award; Building New Construction \$51-100 Million.

#### ADDITIONAL CONTRACTS WHERE WE HAVE PERFORMED CM AND/OR INSPECTION SERVICES (SEVERAL MEMBERS OF OUR TEAM HAVE WORKED ON THESE PROJECTS):

- **City of Hollywood:** Water Treatment Plant Service Pump Station Upgrade / Hollywood, FL (\$8 Million),
- City of Fort Lauderdale
- Hillsborough County: Pump Station Electrical/Supervisory Control and Data Acquisition Upgrade Phase II / Hillsborough County, FL (\$13.4 Million).
- Tampa Bay Water: Cypress Creek WTP Chemical Feed System Rehabilitation / Land O' Lakes, FL (\$660k).
- Solid Waste Authority Palm Beach County: Palm Beach Renewable Energy Facility No. 1 and No. 2 Bond Engineer Services / West Palm Beach, FL (\$670 Million).
- City of Atlanta: Atlanta Annual Contract for AE Services / Atlanta, GA (\$1 Billion+).
- DC Water Tunnel Dewatering Pump Station / Washington DC (\$215 Million).
- Harford County, MD: Construction Management Services for Water and Wastewater Projects / Harford County, MD (\$215 Million).
- DC Water: Construction Management 4E / Washington, DC (\$160 Million).
- Anne Arundel County, MD: Sewer and Water Main Construction Management and Inspection Services / Anne Arundel County, MD (\$3 Million/Year fee).

## 4. Available Facilities, Technological Capabilities and Other Available Resources

Arcadis is a state-of-the-art company and we use state-of-the-art technology in all our projects — from everyday design, management and administration tools to Artificial Intelligence(AI)! That's right, Arcadis has its own AI instance hosting on our company intranet for use internally on projects if needed, and it is called **ArcadisGPT**. Of course, not every project is so complex that AI is required, but our use of AI indicates Arcadis' forward-thinking in its use of technology!



Arcadis does, however, use high-tech tools every day on our projects including Mobile Data Collection tool, Power BI Dashboarding,

360-degree cameras, BIM and BIM360 Collaboration and Document Management platform, Drone imagery, and Remote Expert. These tools are implemented at different stages of a project as needed in order to add value, improve efficiency, or enhance collaboration.

### Innovative Solutions

Arcadis utilizes many digital tools and innovative solutions that can be used to assist or enhanced the services provided in the RFP scope of services. These industry leading digital platforms enable seamless collaboration and data compilation efficiencies along with visual, interactive and easily accessible solutions for our clients.

Many tools also increase project efficiency, such as digital data gathering such as our FieldNow tool, virtual conflict resolution using our BIM capabilities and drone capabilities to gather information and data that would otherwise be more difficult to obtain. These various tools are available for use on a wide variety of projects or services for the City.

## 5. Scheduling Methodology (Timeline)

Arcadis recommends critical path method (CPM) schedules for all but the smallest of construction projects. A project CPM schedule shows the contractor's detailed plan for executing the work and it is the driving force behind maintaining the momentum required to complete the project on-time. Arcadis also recommends "cost-loading" schedule activities to pay the contractor on an "Earned Value" basis. Arcadis recommends requiring project CPM schedules for the seven-listed projects.

A "Baseline" schedule is created at the outset of the project and then updated monthly to reveal actual progress. The updated schedule is then used frequently each week to compare the two-week lookahead to the project CPM schedule. They should coincide closely.

During the course of preparing this SOQ, we have noticed no schedule for the seven listed projects. Arcadis recommends creation of a master program schedule showing time frames for the projects to make certain that progress, next-steps and status can be determined. This master schedule will prove invaluable for planning staff assignments. Arcadis would be pleased to develop this master schedule for the City.



4-Log Design Project – City of Hollywood

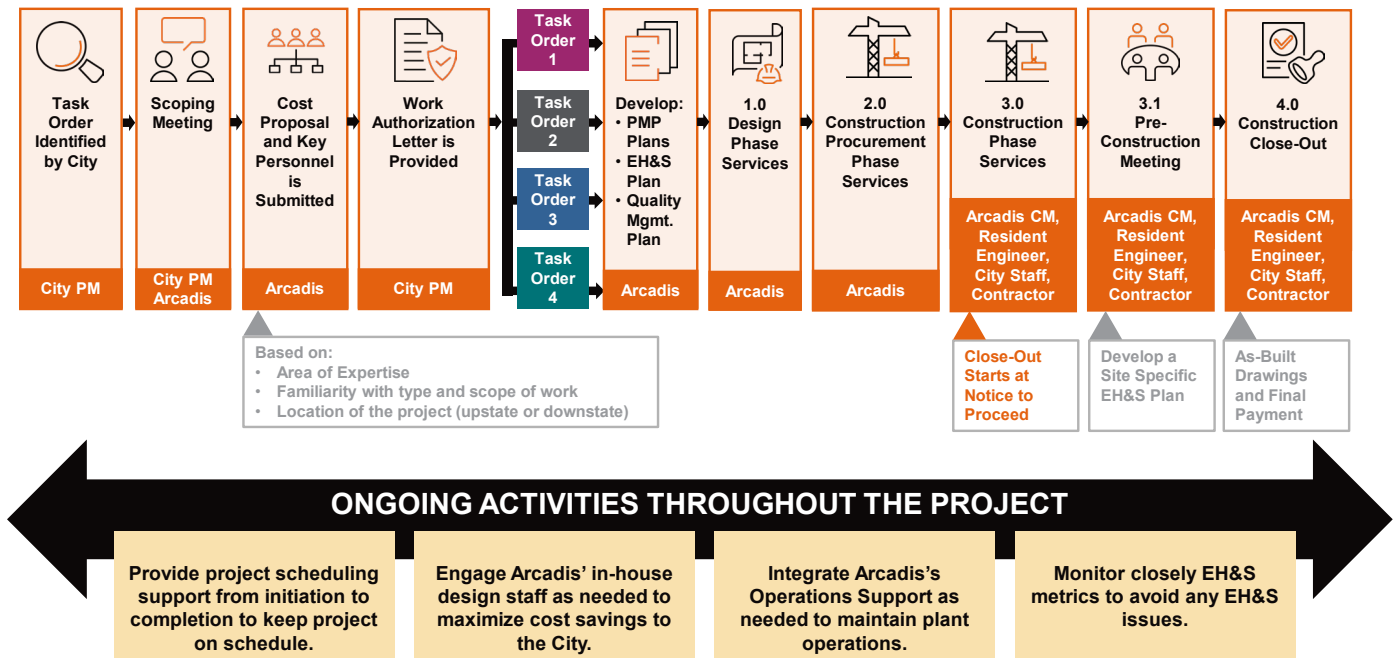


## 6. Approach to Team Scalability to Support Various Projects Simultaneously

The challenge of successfully performing on-call services requires a firm with proven experience that demonstrates its ability to successfully respond to a variety of assignment types. Arcadis has the flexibility to respond to multiple concurrent assignments and has demonstrated our ability to mobilize project teams based on the needs of our clients. Arcadis has successfully provided on-call engineering services to some of the largest public agencies in the country.

One of the advantages of being a large engineering firm is our deep bench of resources and availability to manage multiple contracts/projects at the same time.

Our approach will be similar to the one we have been using currently with the City's WTP and WWTP Engineering Contracts. We will have single PIC, and project manager for each project that will be selected based on the scope needed. With Arcadis's deep bench of resources and firm's qualifications we can provide CEI services for some or all of these projects. We have staff with extensive experience in Water Treatment, Wastewater Treatment, Conveyance and distribution.







## Section F.

# Knowledge of the Site and Local Conditions



# Knowledge of the Site and Local Conditions

## Local, County, State Regulations

Our work for the City of Hollywood will be led by staff from our office in Plantation and Florida, from which we are within close proximity to Hollywood and can quickly respond to issues as they arise. Arcadis also maintains offices in Tampa, Orlando, Miami, Sarasota, Boynton Beach, Jacksonville, Pensacola, and Tallahassee. Our staff have worked for numerous Florida communities including the City of Hollywood to expand and improve their utilities in all respects.

In recent years the Building Officials, County, and State reviewers have all shifted to digital permitting applications. This includes guidelines from Florida Board of Professional Regulations (FBPR) allowing for digital designing and sealing. Ultimately, this shortens the time from project start to project bid durations and allows for more transparency in the permitting process. Our team are experienced in obtaining permitting approvals from all levels of government and multiple jurisdictions in Broward County and South Florida.

## Federal Regulations and Technical Standards Experience

Arcadis brings superior understanding of regulatory requirements as a result of our more than 25 years of experience providing engineering and technical support to the USEPA Office of Ground Water and Drinking Water (OGWDW). Over that period, we have conducted treatability studies, prepared technologies and costs (T&C) documents, and developed guidance to assist public water systems to meet critical requirements of many of the rules promulgated over that period.

Arcadis developed T&C and guidance manuals for most major drinking water regulations over the past 15 years, including the Enhanced Coagulation and Enhanced Precipitative Softening Guidance Manual, the Stage 2 Disinfectants and Disinfection Byproducts

Rule (DBPR) Operational Evaluation Guidance Manual, and the Membrane Filtration Guidance Manual. Our water treatment experts have also contributed to the development of numerous American Water Works Association (AWWA) standards and manuals of practice including M65: On-site Generation of Hypochlorite, M53: Microfiltration and Ultrafiltration Membranes for Drinking Water, M61: Desalination of Seawater, and the upcoming 2nd ed. of M46: Reverse Osmosis and Nanofiltration.

## Constructability Reviews

Arcadis will review designs at the 90% design stage with a rigid Constructability/Bidability/Operability/ Maintainability (CBOM) review of the project. At the 90% stage, the contract documents should be in near final form with the exception of final details. Our reviews at this stage simulate the contractor's process to bid, procure, construct and startup the planned work. Part of the review will be to walk the site with the plans to identify potential conflicts. We have found that this effort is well worth the time since potentially expensive conflicts can be resolved prior to taking bids. We broaden the aspects of construction to account for the operations that will occur during construction and to test the designs for the future operability of the facilities. **Our thorough CBOM Reviews usually result in change orders of less than 2% of the total construction cost.**



4-Log Design Project – City of Hollywood

**Our experts hold leadership roles on various organizations like the American Membrane Technology Association, lead research in emerging technologies, and have written dozens of guidance manuals.**



## Safety

At Arcadis, the safety and well-being of our employees, clients, and business partners is our most important priority. To that end, our health and safety (H&S) vision and policy reflect a proactive risk and behavior-based approach that integrates health, safety, and wellbeing into our culture, values, and the way we do business. We strive to achieve zero incidents in everything we do ensuring the health, safety, and well-being of our employees and our clients. Our H&S program covers standard safety and accident prevention in the workplace and at job sites, and we have a standard project H&S plan template. The program includes standards, processes, and elements that meet Occupational Safety and Health Administration (OSHA) and other governmental H&S requirements, as applicable. These proactive tools, along with risk tools that incorporate behavior-based safety into the program, go beyond compliance in our efforts to protect our staff and others associated with our projects from work-related injuries and illness. Central to our safety culture is the concept of **TRACK**:

- **T**hink through the task
- **R**ecognize the hazards
- **A**ssess the risks
- **C**ontrol the risks
- **K**eep health and safety first in all things

## Risk Management

Every project has risks. Managing and communicating them helps achieve that goal. Arcadis' risk management approach includes a comprehensive assessment and analysis of the project cost, performance and schedule. It requires input from numerous sources with influence from various factors, many beyond our control but all that affect the project delivery. We identify, analyze, quantify, monitor and communicate the project risks that our clients use to make informed decisions that lead to a higher chance of successful project delivery.

Arcadis provides complete risk management services including both qualitative and quantitative methods and analysis. We facilitate and conduct risk workshops; establish, compile and update risk registers; and, follow industry standards and use.



## Safety Commitments



- 1 Our work is never so urgent or important that we cannot take the time to do it safely.
- 2 All injuries are preventable.
- 3 Everyone is obligated to refuse unsafe work.
- 4 Everyone is obligated to raise concerns about the hazards seen.
- 5 All levels of supervision are accountable for safety performance.
- 6 Employee and contractor commitment is essential for safety performance.
- 7 Excellence in safety leads to excellence in business.
- 8 Safety attitude off the job is as important as being on the job.





## Section G.

# References - Vendor Reference Form



# References – Vendor Reference Form

The below provides a brief overview of relevant projects (full writeups are included in Tab C: Firm Qualifications and Experience) for each vendor we have selected to provide a reference. The following pages include the completed Vendor Reference Form for the below listed projects/clients.

## 1. Engineering & CM Services for Water and Wastewater Projects | Schneider Electric

Arcadis provides construction management services to progressive design build wastewater projects/cost control.

## 2. Open End Engineering Services For Water And Wastewater Projects | Harford County

Arcadis provided construction management and inspection services for several projects under the Open-End Engineering Services for Water and Wastewater Projects Contract.

## 3. CM Services Chimborazo3/CSO4 | City of Richmond, VA

Arcadis provides construction management services, contract administration and resident inspection for City of Richmond, VA Wastewater Treatment Plant and CSO Projects.



## What Our Clients are Saying...

*Harford County is pleased with Arcadis' performance including project management, technical competence and their ability to meet our overall project goals and objectives. For these reasons, we have continued to select Arcadis to perform both CM and engineering services work for our water and sewer projects.*

David E. Pergrin, PE | Harford County Division of Water & Sewer

*During construction, Arcadis maintained cost control by providing independent cost estimates, clarifying the necessary changes, negotiating a fair value for the changes, and recommending a course of action for approval. They ensured the schedule and project goals were met by working with all project team members to address the actionable items in a timely manner.*

Christopher P. Murphy, PE, Engineer Administrator |  
Anne Arundel County, Bureau of Engineering

*Overall, Arcadis has been a fantastic partner and very easy to deal with and we will be selecting them for future work when presented.*

John Barta, Operations Manager | Schneider Electric

*Arcadis has been extremely helpful in providing additional services and being responsive to the unique situations of this project during construction.*

Natalie Urick, Senior Engineer | Orlando Utilities Commission

*Arcadis' work ethic exemplifies professionalism, and ownership of their contractual duties. Arcadis provides consistent and efficient services during Construction Management and Contract Administrative Services. The City is very pleased with the services provided.*

Susan Hamilton, Program & Operations Manager |  
City of Richmond, VA

*Arcadis provides the highest level of expertise needed for OUC's complex projects.*

Chuck DiGerlando, Manager, Water Distribution  
Engineering | Orlando Utilities Commission

*Arcadis is a very professional outfit. They have taken care of the City of Richmond, VA with impeccable diligence, attention to detail, and care. I highly recommend their services; their contributions to my project have been, in a word - invaluable.*

Todd Loney, PE, Engineer 3 | City of Richmond, VA

1. Engineering & CM Services for Water and Wastewater Projects | Schneider Electric

# VENDOR REFERENCE FORM

City of Hollywood Solicitation #: RFQ-118-23-JJ  
Reference for: Arcadis U.S., Inc.

Organization/Firm Name providing reference: Schneider Electric

Organization/Firm Contact Name: John Barta Title: Operations Manager

Email: John.Barta@SE.com Phone: (972)323-3053

Name of Referenced Project: Engineering & CM Services For Water And Wastewater Projects Contract No:

Date Services were provided: Ongoing Project Amount: multiple contracts

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):  
Provides CM services to progressive design build wastewater projects/cost control.

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):  
Overall Arcadis has been a fantastic partner and very easy to deal with and we will be selecting them for future work when presented.

<b>****THIS SECTION FOR CITY USE ONLY****</b>				
Verified via:	Email:	<input type="checkbox"/>	Verbal:	<input type="checkbox"/>
Verified by:	Name:		Title:	
	Department:		Date:	



2. Open End Engineering Services For Water And Wastewater Projects | Harford County

# VENDOR REFERENCE FORM

City of Hollywood Solicitation #: RFQ-118-23-JJ  
Reference for: Arcadis U.S., Inc.

Organization/Firm Name providing reference: Harford County  
Organization/Firm Contact Name: Steven Schulz, PE  
Email: sdschulz@harfordcountymd.gov  
Name of Referenced Project: Open End Engineering Services For Water And Wastewater Projects  
Date Services were provided: Ongoing  
Referenced Vendor's role in Project: ☒ Prime Vendor  
Would you use the Vendor again? ☒ Yes  
Title: Project Manager  
(410) 683-3300  
Phone: (410) 683-3300  
Contract No: 20-001 / 22-236  
Project Amount: NTE \$3.5 Mil  
☒ Subcontractor/ Subconsultant  
☐ No. Please specify in additional comments

Description of services provided by Vendor (provide additional sheet if necessary):  
Provided BOTH ENGR Design & Construction Mgmt/Inspection SERVICES ON NUMEROUS W/WW PROJECTS WITH CONTRACT VALUES TO \$3MIL ON SEWAGE PUMP STATION, WATER BOOSTER STATION AND WWTP FACILITIES

Please rate your experience with the Vendor	Need Improvement	Satisfactory	Excellent	Not Applicable
Vendor's Quality of Service				
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"/>
Vendor's Organization:				
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"/>
Timeliness/Cost Control of:				
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):  
PROFESSIONAL IN PROVIDING VALUE ENGR CPM SCHEDULE ANALYSIS AND MAINTAINING SCHEDULE WITHIN BUDGET & ON TIME COMPLETION.

****THIS SECTION FOR CITY USE ONLY****				
Verified via:	Email:	<input type="checkbox"/>	Verbal:	<input type="checkbox"/>
Verified by:	Name:		Title:	
	Department:		Date:	

## 3. CM Services Chimborazo3/CSO4 Project | City of Richmond, VA

## VENDOR REFERENCE FORM

City of Hollywood Solicitation #: RFQ-118-23-JJ

Reference for: Arcadis U.S., Inc.

Organization/Firm Name providing reference:

City of Richmond, VA

Organization/Firm Contact

Name:

Bob Stone

Title:

Engineer Manager

Email:

robert.stone@rva.gov

Phone: (804) 646-8661

Name of Referenced Project:

CM Services Chimborazo3/CSO4 Project

Contract No: 21000001237

Date Services were provided:

Ongoing

Project Amount: \$17,392,050

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):

Provides CM services, Contract Administration, and Resident Inspection for City of Richmond, VA  
Wastewater Treatment Plant and CSO Projects.

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):

ARCADIS HAS BEEN PROVIDING  
CONSTRUCTION MANAGEMENT/INSPECTION SERVICES TO RICHMOND DPU SINCE 2008.  
THEY HAVE SUCCESSFULLY MANAGED NUMEROUS COMPLEX PROJECTS AT THE WASTEWATER  
PLANT AND OTHER LOCATIONS.

\*\*\*\*THIS SECTION FOR CITY USE ONLY\*\*\*\*

Verified via:	Email:	<input type="checkbox"/>	Verbal:	<input type="checkbox"/>	Mail:	<input type="checkbox"/>
Verified by:	Name:		Title:			
	Department:		Date:			





## Section H.

# Sub Consultant Information





# Sub Consultant Information

In addition to our subconsultant partners listed below, we have numerous relationships with other subconsultants such as geotech, public outreach, traffic engineering, and others that we could engage rapidly as specific project needs arise.



## Role: Electrical and Controls

**McKim & Creed** is a committed team

of talented professionals who improve the quality of life for businesses and communities by providing world-class engineering and geomatics solutions. Their technical specialties include civil, environmental, mechanical, electrical, plumbing, and structural engineering; industrial design-build services; airborne and mobile LiDAR/scanning; unmanned aerial systems; subsurface utility engineering; and hydrographic and conventional surveying services for the energy, transportation, federal, land development, water and building markets. As an employee-owned company that has been in operation since 1978, they provide these services through excellent work, dedicated service and a passionate desire to solve problems and impact lives. McKim & Creed's depth of local resources offers the flexibility to provide experienced staff at your disposal to keep your project on track. Their solid background and experience have resulted in the method and controls being in place to balance staff requirements while maintaining quality, schedule and budget for their clients. McKim & Creed is committed to meeting budget and schedule requirements.

### Relevant Project:



**City of Hollywood 4-Log Virus Treatment Implementation, Hollywood, FL**



**Mr. Aubrey Haudricourt, PE,** of McKim and Creed, brings more than 28 years of experience in electrical and instrumentation

engineering combined. He is currently performing the electrical design of the 4-Log Virus Treatment improvements for the City of Hollywood as a subconsultant to Arcadis. He has designed and overseen the installation of power generation, controls systems, lighting for large facilities. He has also participated in security vulnerability assessments, including hurricane and flood resilience. He conducts coordination and arcflash research and provides personnel protection recommendations. He has more than 20 years of expertise in inspection and administration, among other construction-related sectors.



THE OFFICIAL SITE OF THE FLORIDA DEPARTMENT OF BUSINESS & PROFESSIONAL REGULATION

**dbpr** Department of Business & Professional Regulation

HOME CONTACT US MY ACCOUNT 4:00:13 PM 3/16/2022

**ONLINE SERVICES**

- Apply for a License
- Verify a License
- View Food & Lodging Inspections
- File a Complaint
- Continuing Education Course Search
- View Application Status
- Find Exam Information
- Unlicensed Activity Search
- AB&T Delinquent Invoice & Activity List Search

**LICENSEE DETAILS**

**Licensee Information**

Name:	MCKIM & CREED, INC. (Primary Name)
Main Address:	3903 NORTHALE BLVD SUITE 1153 TAMPA, Florida 33624
County:	HILLSBOROUGH

**License Information**

License Type:	Registry
Rank:	Registry
License Number:	29588
Status:	Current
Licensure Date:	06/29/2011
Expires:	

**Special Qualifications**

Special Qualifications	Qualification Effective

**Alternate Names**

Alternate Names

[View Related License Information](#)  
[View License Complaint](#)

2001 Blair Stone Road, Tallahassee FL 32399 - Email: [Customer Contact Center](#) - Customer Contact Center: 850-487-5395

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Under Florida law, email addresses are public records. If you do not want your email address released in response to a public records request, do not send electronic mail to this entity. Instead, contact the office by phone or by traditional mail. If you have any questions, please contact 850-487-5395. Pursuant to Section 455.27(1), Florida Statute, effective October 1, 2012, businesses licensed under Chapter 455, F.S. must provide the Department with an email address if they have one. This email provided may be used for official communication with the licensee. However, email addresses are public record. If you do not wish to supply a personal address, please provide the Department with an email address which can be made available to the public. Please see our Chapter 455 page to determine if you are affected by this change.



## Role: Survey

**Stoner & Associates** was founded by James D. Stoner, P.S.M. in 1988. Stoner & Associates has over fifteen employees, including four Licensed Professional Surveyor and Mappers, supervising four survey field crews. Stoner & Associates maintains an office in Fort Lauderdale, Florida. Teamwork and highly

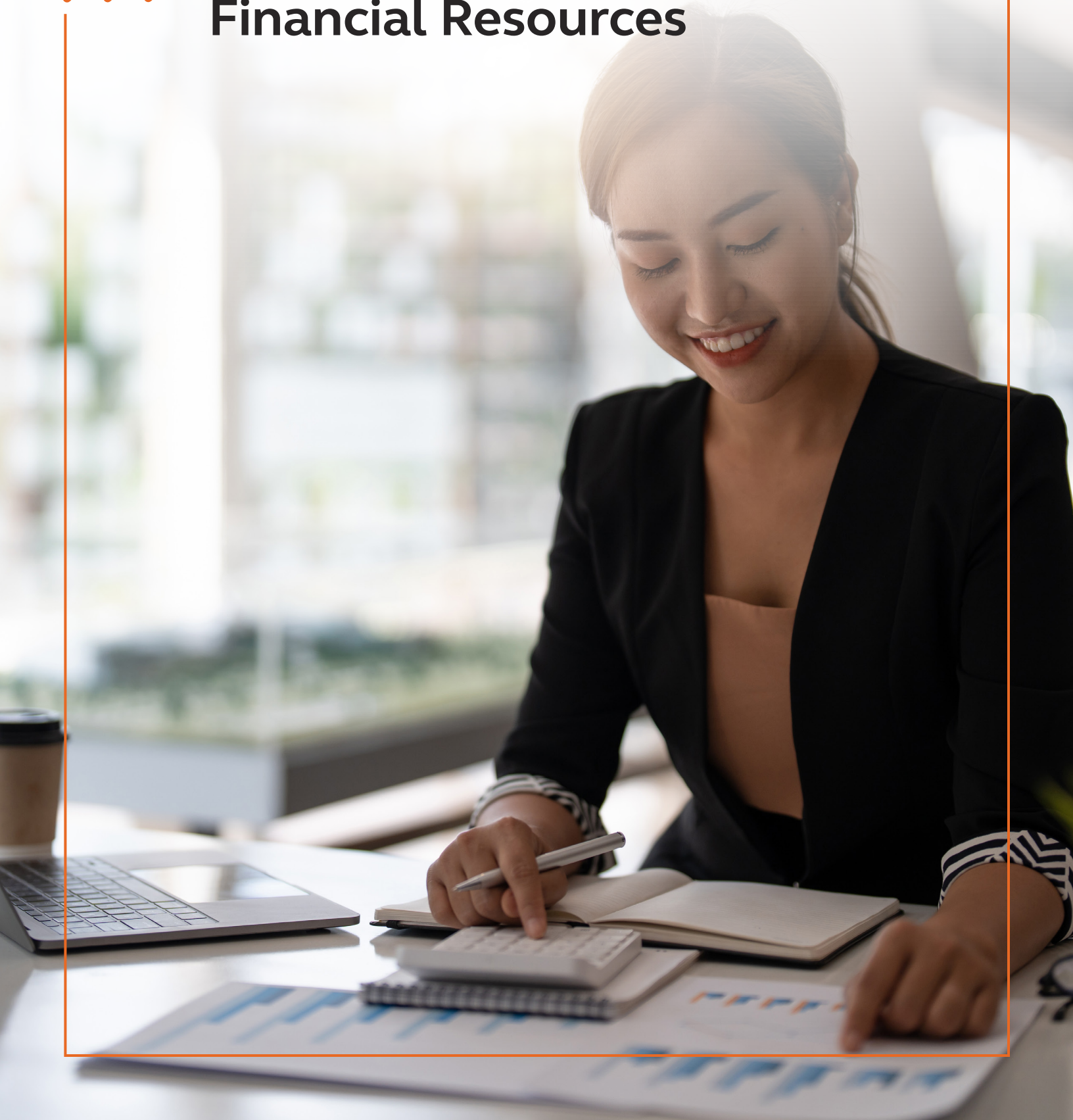
qualified personnel are the foundation of the company. Their team of Licensed Professional Land Surveyors has worked together for over twenty years. During this time, they have developed their skills and developed a team that can make accurate surveys seamlessly and efficiently. They also have developed the ability to work as part of a team, participating on large projects. They know that other professionals rely on their survey products for the basis of their projects and they take that responsibility seriously. Stoner & Associates is committed to using the latest technology. They employ the latest technology to produce high quality surveys. Their formidable arsenal of tools includes electronic and robotic total stations, automated data collection, Real Time GPS, and CADD Mapping Software.





## Section I.

# Financial Resources



# Financial Resources

## ARCADIS U.S., INC. AND SUBSIDIARIES

### Consolidated Statements of Financial Position

As at December 31

(Dollar amounts in thousands)

	Note	2022	2021
<b>Assets</b>			
Current assets:			
Cash and cash equivalents		\$ 28,782	\$ 25,985
Accounts receivable, net	2	347,048	328,589
Related-party receivables	13	146,486	167,707
Related party - income taxes receivable		—	11,234
Other current assets		11,762	8,853
Total current assets		534,078	542,368
Property and equipment	4	17,950	19,588
Right-of-use assets	5	28,595	35,486
Deferred tax assets	9	30,183	—
Goodwill and intangible assets	6	275,151	275,288
Other noncurrent assets		10,964	15,558
Total assets		<u>\$ 896,921</u>	<u>\$ 888,288</u>
<b>Liabilities and Stockholder's Equity</b>			
Current liabilities:			
Accounts payable		\$ 135,792	\$ 128,041
Accrued expenses		106,040	106,011
Related party - income taxes payable		33,569	—
Billings in excess of cost		99,118	97,136
Current portion of lease liabilities	5	12,635	15,683
Other current liabilities		2,120	10,325
Total current liabilities		389,274	357,196
Deferred compensation		9,700	12,524
Deferred tax liabilities		—	17,027
Lease liabilities	5	22,741	27,818
Other noncurrent liabilities		2,445	2,587
Total liabilities		<u>424,160</u>	<u>417,152</u>
Stockholder's equity:			
Preferred stock, \$0.01 par value			
Authorized, 1,000 shares; none issued		—	—
Common stock, \$0.01 par value			
Authorized, 9,000 shares; issued 387 shares		—	—
Additional paid-in capital		371,665	371,605
Retained earnings		101,096	99,531
Total equity		<u>472,761</u>	<u>471,136</u>
		<u>\$ 896,921</u>	<u>\$ 888,288</u>

See accompanying notes to consolidated financial statements.



**ARCADIS U.S., INC. AND SUBSIDIARIES**

## Consolidated Statements of Comprehensive Income

For the Year Ended December 31

(Dollar amounts in thousands)

	<b>Note</b>	<b>2022</b>	<b>2021</b>
Gross revenue	7	\$ 1,500,595	\$ 1,434,948
Materials, services of third parties and subcontractors		532,156	539,434
Net revenue from services		968,439	895,514
Personnel costs	8	706,012	679,343
Other operating expenses	8	129,877	92,864
Depreciation and amortization expense	4,5,6	21,356	21,347
Income from operations		111,194	101,960
Other income (expense):			
Interest income		2,145	75
Interest expense		(1,023)	(1,662)
Income from operations before provision for income taxes		112,316	100,373
Provision for income taxes	9	30,751	27,295
Profit and Comprehensive income		\$ 81,565	\$ 73,078

See accompanying notes to consolidated financial statements.

**ARCADIS U.S., INC. AND SUBSIDIARIES**

## Consolidated Statements of Changes in Equity

For the Year Ended December 31

(Dollar amounts in thousands)

	<b>Common stock</b>		<b>Additional paid-in capital</b>	<b>Retained earnings</b>	<b>Total</b>
	<b>Shares</b>	<b>Amount</b>			
Balances at January 1, 2021	387	\$ —	\$ 371,364	\$ 52,655	\$ 424,019
Comprehensive income	—	—	—	73,078	73,078
Dividends	—	—	—	(26,202)	(26,202)
Stock exercises and excess tax benefit	—	—	241	—	241
Balances at December 31, 2021	387	—	371,605	99,531	471,136
Comprehensive income	—	—	—	81,565	81,565
Dividends	—	—	—	(80,000)	(80,000)
Stock exercises and excess tax benefit	—	—	60	—	60
Balances at December 31, 2022	387	\$ —	\$ 371,665	\$ 101,096	\$ 472,761

See accompanying notes to consolidated financial statements.

## ARCADIS U.S., INC. AND SUBSIDIARIES

## Consolidated Statements of Cash Flows

For the Year Ended December 31

(Dollar amounts in thousands)

	Note	2022	2021
Cash flows provided by operating activities:			
Comprehensive income		\$ 81,565	73,078
Adjustments to reconcile net income to net cash provided by (used in) operating activities:			
Allowance on receivables		(2,430)	419
Depreciation and amortization	4,5,6	21,356	21,347
Deferred income taxes		(47,210)	(5,486)
Interest expense leases		964	1,492
Changes in assets and liabilities:			
Receivables		(29,808)	27,770
Other current assets		(2,909)	3,508
Other assets		4,594	(837)
Accounts payable		7,751	19,168
Accrued expenses		(231)	11,709
Billings in excess of cost		1,982	21,965
Income taxes payable		44,863	(88,056)
Deferred compensation		(2,824)	526
Other liabilities		(8,347)	(9,988)
Net cash provided by operating activities		69,316	76,615
Cash flows from investing activities:			
Capital expenditures	4,6	(5,398)	(5,108)
Proceeds from sale of property and equipment	4	83	333
ARCADIS cash pooling arrangement	13	35,000	(17,000)
Net cash used in investing activities		29,685	(21,775)
Cash flows from financing activity:			
Payment of dividends	13	(80,000)	(26,202)
Principal payments on lease obligations	5	(16,204)	(18,727)
Net cash used in financing activity		(96,204)	(44,929)
Net increase in cash and cash equivalents		2,797	9,911
Cash and cash equivalents, beginning of year		25,985	16,074
Cash and cash equivalents, end of year		\$ 28,782	25,985

See accompanying notes to consolidated financial statements.

See accompanying notes to consolidated financial statements.

Sincerely,

6



Leah K. Richter, PE





## Section J.

# Legal Proceedings and Performance



# Legal Proceedings and Performance

Arcadis U.S., Inc.  
150 S Pine Island Road, Ste 315  
Plantation, FL 33324  
Tel 954 525 2499  
[www.arcadis.com](http://www.arcadis.com)

Arcadis U.S., Inc. has never been terminated for default. Also, Arcadis has never paid any liquidated damages.

## 1. Arbitrations



Updated: Q2 2023

The following is a summary of requested litigation for the preceding five years. Such claims are disputed and not reasonably expected to be adversely determined, applicable insurance is available, and/or such claims are not reasonably expected to materially impact the financial condition or the operations of Arcadis.

Plaintiff	Defendant (Arcadis Affiliate)	Date Suit Filed	Nature of Incident	Type of Claim	Jurisdiction	Business Line	Government Claim (Y/N)	Resolution 1 = Case Ongoing 2 = Dismissal 3 = Resolved/Settled 4 = Judgment 5 = N/A
B.L. Harbert Int'l, LLC	Arcadis US	Jul-21	Plaintiff alleges refusal to amend contract due to change orders impacting contract price and completion date	Breach of Contract	Jefferson Cnty, AL	Infra	N	1
K.K. Machine Co., Inc.	Arcadis US	Jul-20	Plaintiff claims negligence resulting in structural damages to business property during adjacent sewer project	Prof. Liability	Queens Cnty, NY	Water	N	1
Stryker Demolition	Arcadis US	Mar-20	Plaintiff claims breach of contract and unjust enrichment	Breach of Contract	DE	Env	N	4
Posley, Donetia	Arcadis US	Mar-20	Plaintiff claims negligence against Arcadis as engineer of record regarding incident related to automobile accident	Prof. Liability	Duval County, FL	Infra	N	1
P.F. Moon Co., Inc.	Arcadis US	Aug-19	Third party complaint claiming professional negligence and breach of contract causing monetary damages	Breach of Contract	Hamilton County, TN	Water	N	1
Arcadis US	HNTB Corp.	Jun-19	Claim filed seeking damages against Defendant related to non-performance of obligations under a design subcontract agreement	Breach of Contract/ Prof. Liability	St. Bernard Parish, LA	Water	N	1

## 2. Lawsuits

Please see above.



### 3. Other Proceedings

Arcadis has not been involved in any lawsuits, administrative proceedings, or hearings initiated by the National Labor Relations Board or similar state agency in the past five years concerning any labor practices by our firm.

Arcadis has not been involved in any lawsuits, administrative proceedings, or hearings initiated by the Occupational Safety and Health Administration concerning the project safety practices of your company in the last five years.

### 4. Bankruptcies

Arcadis has not been involved in any bankruptcy or reorganization proceedings in the last 10 years.

### 5. Terminations

Arcadis U.S., Inc.

#### Terminations

Arcadis U.S., Inc., and its related and affiliated North American entities (collectively, "Arcadis"), perform thousands of contracts worth hundreds of millions of dollars annually. Occasionally, contracts terminate prior to completion due to a variety of factors, including, without limitation, client budgetary issues, project cancellation, exercise of termination for convenience clauses, and other circumstances outside of Arcadis' control. If a contract dispute arises, Arcadis works closely with the client to remedy the situation and minimize or eliminate potential adverse impacts and, if necessary, to ensure a seamless, professional transition. These occurrences represent a nominal percentage of our total projects, at a frequency commensurate with or below industry standards for companies of similar size doing projects of similar type and volume.

Project	Description
Confidential Natural Gas Client	<b>For Cause:</b> October 2021  Arcadis was engaged for emergency response work to support a pipeline spill, which was a successful initiative. Following completion thereof, the project was turned over to the client to perform derivative remediation and restoration of the site. This client division had a contractual standard of care for work and expectations that were above market standard, and which Arcadis worked diligently to meet. The client ultimately stated that they did not think Arcadis could meet their expectations at this site and elected to terminate the contract.
Confidential State Agency – Environmental Protection Division	<b>For Convenience:</b> August 2022  State agency's needs changed and going forward the requirements for the project shifted to essential project management work.
Confidential Telecommunications Client, Environmental Remediation Project	<b>For Convenience:</b> 2019  There was inability to complete planned work and close a particular site in 2019, requiring a contract extension and remobilization of the site contractor into 2020. Arcadis was tasked with working with the site contractor to complete dewatering and excavation of contaminated soils. Roles and responsibilities of the various contracted parties were unclear, especially related to dewatering, and the client asserted that it was Arcadis who was responsible for dewatering; the lack of which led to delays before winter shut down. The client then opted to conclude Arcadis' contract for further work.
Confidential Railroad Client, Environmental Site Assessment	<b>For Convenience:</b>  Confidential client elected to terminate certain Work Orders under an overarching MSA (which was not terminated), using the Termination for Convenience contractual provision.

### 6. Bonding

Arcadis has never had to used bonding moneys to complete a project or to pay a subconsultant or supplier.

Sincerely,

Leah K. Richter, PE





## Section K. Required Forms





## PROPOSAL

TO THE MAYOR AND COMMISSIONERS  
CITY OF HOLLYWOOD, FLORIDA

SUBMITTED October 2, 2023

Dear Mayor and Commissioners:

The undersigned, as BIDDER, hereby declares that the only person or persons interested in the Proposal as principal or principals is or are named herein and that no other person than herein mentioned has any interest in this Proposal or in the Contract to be entered into; that this Proposal is made without connection with any other person, company or parties making a Bid or Proposal; and that it is in all respects fair and in good faith without collusion or fraud.

The BIDDER further declares that he has examined the site of the Work and informed himself fully in regard to all conditions pertaining to the place where the Work is to be done; that he has examined the Drawings and Specifications for the Work and contractual documents relative thereto, including the Notice to Bidders, Instructions to Bidders, Proposal Bid Form, Form of Bid Bond, Form of Contract and Form of Performance Bond, General, Supplementary and Technical Specifications, Addenda, Drawings, and Local Preference Program, Exhibit A, and has read all of the Provisions furnished prior to the opening of bids; and that he has satisfied himself relative to the work to be performed.

The undersigned BIDDER has not divulged to, discussed or compared his bid with other bidders and has not colluded with any other BIDDER of parties to this bid whatever.

N/A

If this Proposal is accepted, the undersigned BIDDER proposes and agrees to enter into and execute the Contract with the City of Hollywood, Florida, in the form of Contract specified; of which this Proposal, Instructions to Bidders, General Specifications, Supplementary Conditions and Drawings shall be made a part for the performance of Work described therein; to furnish the necessary bond equal to one hundred (100) percent of the total Contract base bid, the said bond being in the form of a Cash Bond or Surety Bond prepared on the applicable approved bond form furnished by the CITY; to furnish all necessary materials, equipment, machinery, tools, apparatus, transportation, supervision, labor and all means necessary to construct and complete the work specified in the Proposal and Contract and called for in the Drawings and in the manner specified; to commence Work on the effective date established in the "Notice to Proceed" from the ENGINEER; and to substantially complete all Contract Work within \_\_\_\_\_ days with final completion within \_\_\_\_\_ days, and stated in the "Notice to Proceed" or pay liquidated damages for each calendar day in excess thereof, or such actual and consequential damages as may result therefrom, and to abide by the Local Preference Ordinance, Exhibit A.

The BIDDER acknowledges receipt of the any and all addenda.

N/A

And the undersigned agrees that in case of failure on his part to execute the said Contract and the Bond within ten (10) days after being presented with the proscribed Contract forms, the check or Bid Bond accompanying his bid, and the money payable thereon, shall be paid into the funds of the City of Hollywood, Florida, otherwise, the check or Bid Bond accompanying this Proposal shall be returned to the undersigned.

N/A

Attached hereto is a certified check on the

\_\_\_\_\_ Bank of \_\_\_\_\_

or approved Bid Bond for the sum of

\_\_\_\_\_ Dollars (\$) according to the conditions under the Instructions to Bidders and provisions therein.

NOTE: If a Bidder is a corporation, the legal name of the corporation shall be set forth below, together with signature(s) of the officer or officers authorized to sign Contracts on behalf of the corporation and corporate seal; if Bidder is a partnership, the true name of the firm shall be set forth below with the signature(s) of the partner or partners authorized to sign Contracts in behalf of the partnership; and if the Bidder is an individual, his signature shall be placed below; if a partnership, the names of the general partners.

WHEN THE BIDDER IS AN INDIVIDUAL:

\_\_\_\_\_

(Signature of Individual)

\_\_\_\_\_

(Printed Name of Individual)

\_\_\_\_\_

(Address)

\*\*\*\*\*

WHEN THE BIDDER IS A SOLE PROPRIETORSHIP OR OPERATES UNDER A TRADE NAME:

\_\_\_\_\_

(Name of Firm)

\_\_\_\_\_

(Address)

\_\_\_\_\_ (SEAL)

(Signature of Individual)

\*\*\*\*\*

WHEN THE BIDDER IS A PARTNERSHIP:

\_\_\_\_\_

(Name of Firm) A Partnership

\_\_\_\_\_



(Address)

By: \_\_\_\_\_  
(SEAL)  
(Partner)

Name and Address of all Partners:

\_\_\_\_\_  
\_\_\_\_\_

\*\*\*\*\*

WHEN THE BIDDER IS A JOINT VENTURE:

\_\_\_\_\_  
(Correct Name of Corporation)

By: \_\_\_\_\_ (SEAL)  
(Address)

\_\_\_\_\_  
(Official Title)

As Joint Venture  
(Corporate Seal)

Organized under the laws of the State of \_\_\_\_\_, and authorized by the law to make this bid and perform all Work and furnish materials and equipment required under the Contract Documents.

\*\*\*\*\*

WHEN THE BIDDER IS A CORPORATION:



Arcadis U.S., Inc.

\_\_\_\_\_  
(Correct Name of Corporation)

By: Leah K. Richter  
(SEAL)

Leah K. Richter, PE / Vice President

\_\_\_\_\_  
(Official Title)

630 Plaza Drive, Suite 200  
Highlands Ranch, CO 80129

\_\_\_\_\_  
(Address of Corporation)

Organized under the laws of the State of Delaware, and authorized by the law to make this bid and perform all Work and furnish materials and equipment required under the Contract Documents.

*Secretary Certificate*  
CERTIFIED COPY OF RESOLUTION OF  
BOARD OF DIRECTORS

Arcadis U.S., Inc.

(Name of Corporation)

RESOLVED that Leah K. Richter, PE

(Person Authorized to Sign)

Vice President \_\_\_\_\_ of Arcadis U.S., Inc.

(Title) (Name of Corporation)

be authorized to sign and submit the Bid or Proposal of this corporation for the following project:

**[Design, Construction Engineering and Inspection Services]**

**[RFQ-118-23-JJ]**

**Bid No. IFB-xxxxxxx**

The foregoing is a true and correct copy of the Resolution adopted by

*Secretary Certificate describing a Board*  
Arcadis U.S., Inc.

(Name of Corporation)

Directors held on the 24th day of February, 2022

By: Kimberly Farnicki

Title: Assistant Secretary

(SEAL)

The above Resolution MUST BE COMPLETED if the Bidder is a Corporation.



- END OF SECTION -

## SECRETARY CERTIFICATE

I, Kimberly Lasnicki, Assistant Secretary of Arcadis U.S., Inc. (the "Corporation"), a corporation organized under the laws of the State of Delaware, certify that the following is a full and correct excerpt of a resolution adopted by written consent of the Board of Directors of said Corporation, dated February 24, 2022:

*"RESOLVED, the President and each Business Area Director are authorized and empowered, in accordance with the Bylaws and other operating policies and procedures of the Corporation, to enter into proposals for fees and other contracts and obligations in the name and on behalf of the Corporation, upon such terms and conditions as may be agreed upon between the other party or parties and the Corporation, as evidenced by the approval of the President or Business Area Director. The President and Business Area Directors also are empowered to delegate such authority to other employees of the Corporation in such amounts and on such other terms as they shall determine from time to time in accordance with the Bylaws and other operating policies and procedures of the Corporation."*

**AND I DO FURTHER CERTIFY** that pursuant to the above resolution that contracts, amendments, and required documentation for **City of Hollywood Florida Design, Construction Engineering and Inspection Services RFQ-118-23-JJ** may be signed by **Leah Richter** in her capacity a Vice President of the Corporation.

**AND I DO FURTHER CERTIFY** that the above resolution has not been in any way altered, amended or repealed and is now in full force and effect.

**IN WITNESS WHEREOF**, I have signed this Certificate this 28th day of September, 2023.

(SEAL)



Kimberly Lasnicki  
Name: Kimberly Lasnicki  
Title: Assistant Secretary  
Arcadis U.S., Inc.



## Form 14

### LIST OF SUBCONTRACTORS

The Respondent shall list below the name and address of each Subcontractor who will perform work under this Contract, and shall also list the portion of the work which will be done by such Subcontractor. After the opening of Submittals, changes or substitutions will be allowed with written approval of the City of Hollywood. Subcontractors must be properly licensed.

	<b>Work to be Performed</b>	<b>Subcontractor's Name / Address</b>
1.	<hr/> Electrical and Controls <hr/>	<hr/> McKim & Creed / 3903 Northdale Blvd, Suite 1153, Tampa FL 33624 <hr/>
2.	<hr/> Survey <hr/>	<hr/> Stoner & Associates Inc. / 4341 SW 62nd Ave, Davie, FL 33314 <hr/>
3.	<hr/> <hr/>	<hr/> <hr/>
4.	<hr/> <hr/>	<hr/> <hr/>
5.	<hr/> <hr/>	<hr/> <hr/>
6.	<hr/> <hr/>	<hr/> <hr/>
7.	<hr/> <hr/>	<hr/> <hr/>
8.	<hr/> <hr/>	<hr/> <hr/>
9.	<hr/> <hr/>	<hr/> <hr/>
10.	<hr/> <hr/>	<hr/> <hr/>

NOTE: Attach additional sheets if required.

- END OF SECTION -



# CERTIFICATE OF LIABILITY INSURANCE

DATE(MM/DD/YYYY)  
09/22/2022

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

**IMPORTANT:** If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

<b>PRODUCER</b> Aon Risk Services South, Inc. Franklin TN Office 501 Corporate Centre Drive Suite 300 Franklin TN 37067 USA	<b>CONTACT NAME:</b>	
	<b>PHONE (A/C. No. Ext.):</b> (866) 283-7122	<b>FAX (A/C. No.):</b> 800-363-0105
<b>INSURED</b> Arcadis U.S., Inc. 630 Plaza Drive Suite 200 Highlands Ranch CO 80129 USA	<b>E-MAIL ADDRESS:</b>	
	<b>INSURER(S) AFFORDING COVERAGE</b>	
	<b>NAIC #</b>	
	<b>INSURER A:</b> Hartford Fire Insurance Co.	19682
	<b>INSURER B:</b> Hartford Casualty Insurance Co	29424
	<b>INSURER C:</b> Hartford Accident & Indemnity Company	22357
<b>INSURER D:</b> Twin City Fire Insurance Company	29459	
<b>INSURER E:</b>		
<b>INSURER F:</b>		

Holder Identifier :

**COVERAGES****CERTIFICATE NUMBER:** 570095470055**REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

Limits shown are as requested

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	<input checked="" type="checkbox"/> <b>COMMERCIAL GENERAL LIABILITY</b>			20ECSOL5318 SIR applies per policy terms & conditions	10/01/2022	10/01/2023	EACH OCCURRENCE	\$1,000,000
	<input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR							
	<input checked="" type="checkbox"/> Contractual Liability							
	GEN'L AGGREGATE LIMIT APPLIES PER:							
	<input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PROJECT <input checked="" type="checkbox"/> LOC						GENERAL AGGREGATE	\$2,000,000
	OTHER:						PRODUCTS - COMP/OP AGG	\$2,000,000
A	<b>AUTOMOBILE LIABILITY</b>			20 UEN OL5319	10/01/2022	10/01/2023	COMBINED SINGLE LIMIT (Ea accident)	\$1,000,000
	<input checked="" type="checkbox"/> ANY AUTO						BODILY INJURY (Per person)	
	<input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> NON-OWNED AUTOS ONLY						BODILY INJURY (Per accident)	
	<input type="checkbox"/> HIRED AUTOS ONLY						PROPERTY DAMAGE (Per accident)	
B	<input checked="" type="checkbox"/> <b>UMBRELLA LIAB</b>	<input checked="" type="checkbox"/>	OCCUR	20XHUOL5322	10/01/2022	10/01/2023	EACH OCCURRENCE	\$5,000,000
	<input type="checkbox"/> <b>EXCESS LIAB</b>		CLAIMS-MADE				AGGREGATE	\$5,000,000
	DED <input checked="" type="checkbox"/>	RETENTION \$10,000						
C	<b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b>			20WNOL5323	10/01/2022	10/01/2023	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTHER	
D	ANY PROPRIETOR / PARTNER / EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH)	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	N/A	AOS	10/01/2022	10/01/2023	E.L. EACH ACCIDENT	\$1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below			20WPROL5321			E.L. DISEASE-EA EMPLOYEE	\$1,000,000
				MA, WI			E.L. DISEASE-POLICY LIMIT	\$1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)  
Evidence of Insurance.

**CERTIFICATE HOLDER****CANCELLATION**

Arcadis U.S., Inc. 630 Plaza Drive, Suite 200 Highlands Ranch CO 80129 USA	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE  <i>Aon Risk Services South Inc.</i>

Certificate No : 570095470055



# CERTIFICATE OF LIABILITY INSURANCE

DATE(MM/DD/YYYY)  
06/23/2023

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

<b>PRODUCER</b> Aon Risk Services South, Inc. Franklin TN Office 501 Corporate Centre Drive Suite 300 Franklin TN 37067 USA	<b>CONTACT NAME:</b> <b>PHONE</b> (A/C. No. Ext): (866) 283-7122 <b>FAX</b> (A/C. No.): (800) 363-0105 <b>E-MAIL ADDRESS:</b>														
<b>INSURED</b> Arcadis U.S., Inc. 630 Plaza Drive Suite 200 Highlands Ranch CO 80129 USA	<table><tr><td><b>INSURER(S) AFFORDING COVERAGE</b></td><td><b>NAIC #</b></td></tr><tr><td>INSURER A: Indian Harbor Insurance Company</td><td>36940</td></tr><tr><td>INSURER B:</td><td></td></tr><tr><td>INSURER C:</td><td></td></tr><tr><td>INSURER D:</td><td></td></tr><tr><td>INSURER E:</td><td></td></tr><tr><td>INSURER F:</td><td></td></tr></table>	<b>INSURER(S) AFFORDING COVERAGE</b>	<b>NAIC #</b>	INSURER A: Indian Harbor Insurance Company	36940	INSURER B:		INSURER C:		INSURER D:		INSURER E:		INSURER F:	
<b>INSURER(S) AFFORDING COVERAGE</b>	<b>NAIC #</b>														
INSURER A: Indian Harbor Insurance Company	36940														
INSURER B:															
INSURER C:															
INSURER D:															
INSURER E:															
INSURER F:															

**COVERAGES**      **CERTIFICATE NUMBER:** 570100229825      **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS.

Limits shown as requested

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
	<b>COMMERCIAL GENERAL LIABILITY</b> <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR  GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:						EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	
	<b>AUTOMOBILE LIABILITY</b> <input type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> NON-OWNED AUTOS ONLY						COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	
	<b>UMBRELLA LIAB</b> <input type="checkbox"/> OCCUR <b>EXCESS LIAB</b> <input type="checkbox"/> CLAIMS-MADE DED <input type="checkbox"/> RETENTION						EACH OCCURRENCE AGGREGATE	
	<b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b> ANY PROPRIETOR / PARTNER / EXECUTIVE OFFICER/MEMBER (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below Y / N <input type="checkbox"/> N / A						PER STATUTE <input type="checkbox"/> OTH-ER <input type="checkbox"/>	
A	Contractors Pollution Liabil			US00101061E023A Professional & Pollution SIR applies per policy terms & conditions	06/01/2023	06/01/2024	Each Claim Annual Aggregate	\$5,000,000 \$5,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

For Professional Liability and Pollution Liability coverage, the Aggregate Limit is the total insurance available for claims presented within the policy period for all operations of the insured. The Limit will be reduced by payments of indemnity and expense.

## CERTIFICATE HOLDER

Arcadis U.S., Inc. 630 Plaza Drive, Suite 200 Highlands Ranch CO 80129 USA	<b>CANCELLATION</b> SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.  AUTHORIZED REPRESENTATIVE  <i>Aon Risk Services South Inc.</i>
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# ADDITIONAL REMARKS SCHEDULE

Page \_ of \_

AGENCY Aon Risk Services South, Inc.		NAMED INSURED Arcadis U.S., Inc.	
POLICY NUMBER See Certificate Number: 570100229825		EFFECTIVE DATE:	
CARRIER See Certificate Number: 570100229825	NAIC CODE		

## ADDITIONAL REMARKS

**THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,**

**FORM NUMBER:** ACORD 25 **FORM TITLE:** Certificate of Liability Insurance

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER	
INSURER	
INSURER	
INSURER	

## ADDITIONAL POLICIES

If a policy below does not include limit information, refer to the corresponding policy on the ACORD certificate form for policy limits.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YYYY)	POLICY EXPIRATION DATE (MM/DD/YYYY)	LIMITS	
	OTHER							
	<input checked="" type="checkbox"/> Claims-Made							
	<input checked="" type="checkbox"/> Pollution Liability							
	<input checked="" type="checkbox"/> and Contractors							
	<input checked="" type="checkbox"/> Professional Liability							

# Resumes





# Leah Richter, PE

## Principal-in-Charge

Ms. Richter has a diverse 25 year background in program management, business advisory and financial consulting services and civil engineering. She specializes in assisting municipal clients in South Florida with managing their planning, operational and capital program needs. Her experience includes project management and delivery, vendor procurement, contract compliance, regulatory permitting, public outreach, annual reporting to bondholders/trustees, litigation support services, environmental compliance and operation and maintenance evaluation. She currently serves as the Principal-in-Charge for the City of Hollywood. She is also the Southeast Florida Operations Leader and is located in our Plantation office, just minutes from the City and available to provide a rapid response to any request.

### Education/Qualifications

- MS Civil Engineering Florida Atlantic University 2002
- BS Civil Engineering University of Florida 1997

### Years of Experience

Total – 26

With Arcadis – 25

### Professional Registrations/Certifications

- Professional Engineer – FL

### Office Location

Plantation, FL

### Water System Master Plan and Water System Engineering Contract

City of Hollywood, Hollywood, FL

Serves as contract manager for the full breadth of services Arcadis provides as the City's engineer of record for the City's Water Treatment Plant and water distribution system. Activities and projects have included numerous capital improvement design and construction projects, feasibility studies, condition assessments, asset management and master planning activities.

## Relevant Experience

### AWIA Risk and Resilience Assessment

City of Hollywood, Hollywood, FL

Served as quality assurance manager for the development of a Risk and Resilience Assessment in accordance with the requirements of America's Water Infrastructure Act completed in March 31, 2020.

### Deep Injection Well Annual Reporting and Utilities Engineering Contract

City of Miramar, Miramar, FL

Serves as contract manager for all of our services for the City as part of our Utilities Engineering continuing services contract. Recent activities have included annual reporting for their Water Reclamation Facility deep injection wells, as required by the FDEP.

### Water and Sewer Dept. (WASD) Bond Engineering Services

Miami-Dade County, Miami, FL

Serves as project manager for WASD's Rates, Fee Analysis, and Bond Engineering Contract. Responsible for overseeing and delivering all assignments and task orders under the multi-year contract serving WASD's Executive

Leadership team. Projects and activities conducted to date include Asset Management Framework Development, Retail Rate Study, Mixed Use Customer Rate Analysis, Annual Review of the Adequacy of Rates and Fees, Annual Review of Wholesale Customer Rate Impacts and True Up, Annual Condition Assessment of all WASD Facilities, and miscellaneous other assignments for the varying divisions of the Department.

### Emergency Response Planning Services

Multiple FL Clients, Florida

Served as deputy project manager and project engineer for the development of emergency response plans for four water utilities in accordance with the Bioterrorism Act of 2002 and USEPA Guidance. Activities included: Review of vulnerability assessment and emergency management information; kickoff workshop; development of draft emergency response information; review workshops; preparation of emergency response plan.





## Victoria Lehr, PE

### Contract Manager

Ms. Lehr has more than 36 years of experience managing federal, state and local water resource and environmental restoration programs and projects. She has proven success at the executive level managing large, complex programs as both a client and consultant, including programs with extensive regulatory requirements.

Her responsibilities include the technical oversight, strategic planning, staffing, budget and schedule development and control, contract negotiation, and coordination with state and federal regulatory agencies. Ms. Lehr is highly experienced at building relationships, resolving conflicts, and obtaining stakeholder buy in.

Ms. Lehr serves as the Area Leader for the Construction Management group for the South Region, which includes the Mid-Atlantic Area. In this position, Ms. Lehr is responsible for the oversight of our Construction Management services and providing the appropriate resources for our CM projects. She is involved with each CM project team, overseeing, and advising CM personnel and working hand-in-hand with clients, ensuring successful project delivery.

Ms. Lehr's background includes the management of water and wastewater treatment facilities, major pipeline and pump station projects and environmental restoration programs.

#### Education/Qualifications

- BS Mechanical Engineering  
University of Florida 1983

#### Years of Experience

Total – 40

With Arcadis – 5

#### Professional Registrations/ Certifications

- Professional Engineer – FL

#### Office Location

Plantation, FL

### Relevant Experience

#### SR45 (US41) Improvements

Sarasota County, FL

Sarasota County entered into a Utility Work by Highway Contractor Agreement (UWHCA) with the Florida Department of Transportation (FDOT) for improvements to SR45. Arcadis provided design, permitting, administration and inspection services during construction. Arcadis was able to assist the County in meeting the stringent FDOT schedule during design and construction, working closely with the County and FDOT when unforeseen conditions were encountered. The design included trenchless construction through horizontal directional drilling (HDD) of portions of the existing mains. Overall, the close coordination allowed the project

to realize \$100k in savings to the County.

#### Patuxent Water Reclamation Facility (WRF) Enhanced Nutrient Removal (ENR) Upgrade

Anne Arundel County, Crofton, MD

Principal for the \$10M Patuxent WRF Enhanced Nutrient Removal (ENR) Upgrade, which was constructed to bring the plant in-line with ENR discharge requirements. The work included adding turbo blowers for the oxidation ditches, adding piping/diffusers and mixers in the oxidation ditches, constructing new effluent filters, constructing a methanol facility, replacing the scum removal equipment in the clarifiers, installation of effluent trough covers in the clarifiers, and replacement of the existing RAS pumps. The project also included electrical and process control improvements.

#### Pump Station A-16 Upgrades

City of Fort Lauderdale, Ft. Lauderdale, FL

Arcadis is providing the construction inspection services for the installation of approximately 2,000 LF of 30-inch HDPE watermain and 3,000 LF of 10-inch HDPE force main along SE 3rd Avenue. This project is part of the relocation of the A-16 Pump Station on SE 11th Street. The project includes two horizontal directional drilling (HDD) segments under the Tarpon River.

#### Owner's Representative for 10-mgd Reverse Osmosis Plant

City of Hialeah, FL

Owner's representative and technical advisor to the City of Hialeah for the planning, design and construction of a 10 mgd (expandable to 17.5-mgd) Reverse Osmosis (RO) plant, which was procured under a Design Build Operate contract.

**Water Main and Sewer Construction  
Management and Inspections On-Call Contracts**  
Anne Arundel County, MD

Principal for Anne Arundel County's Construction Management/Inspection (CMI) Open-End Water/Wastewater Services Contract. For more than 10 years, Arcadis has provided Anne Arundel County, MD, Department of Public Works, CEI services to oversee improvements to the water/wastewater conveyance systems throughout the County.

The services provided include constructability reviews for projects prior to bid, field assessments of current conditions which include the use of CCTV and field verification and identification of potential conflicts and inspection services for the projects under construction. The construction involved includes pipe lining, pipe replacement via horizontal directional drilling (HDD) or open cut methods and the replacement of air release valves, isolation valves and other appurtenances. The water main replacements usually require a temporary pumped bypass system to be placed into service during the removal and replacement activities.

**Construction Management On-Call Contract**  
City of Baltimore, Baltimore, MD

Principal for the City of Baltimore Construction Management On-Call Contract. Arcadis was selected to provide construction management and inspection services to the City's Office of Engineering & Construction Management Department (CMD) under a 5-year, \$9 million contract. These task orders include an embedded staff, helping the City's CMD to analyze cost proposals and claims; analyze and report on contractor's CPM schedules, perform cost analysis on the various construction projects being executed in the City for compliance with financial and MBE/WBE requirements, and performing constructability reviews. They also include providing construction inspectors and the CM supervisory staff for monitoring water and wastewater underground utility replacement and repair.

**Construction Management and Inspection  
On-Call Contract**

Washington Suburban Sanitary Commission (WSSC),  
Laurel, MD

Principal for WSSC's Construction Management On-Call contract for upgrades and expansions to advanced water and wastewater treatment facilities ( $\geq 10$  MGD), pumping stations, and storage and conveyance systems. Specialized Tank Services that are a part of this contract include tank evaluation, tank design, tank rehabilitation inspection and new tank construction inspections services. In addition to providing on-site inspections, the services include constructability reviews, cost estimating, value engineering, and assistance in exploring alternative project

delivery methods. The contract also requires project controls and CPM scheduling, including schedule reviews for logic, durations, constraints, sequencing, resource loading, and costing.

**City of Atlanta On-Call Contract**  
City of Atlanta, Atlanta, GA

Over the past 15 years, our multidisciplinary team has continued to provide engineering design and construction support for various water treatment and reclamation, wastewater collection and treatment, water distribution, stormwater, green infrastructure, and watershed protection projects for Atlanta. Services under the contract have included engineering studies, design services related to both the CIP and consent decree, survey, and construction management.

**Turkey Point Units 6 & 7 Section 408  
Permitting Support**

Florida Power & Light Co., Homestead, FL

Developed the USACE Section 408 submittal package for a nine-mile reclaimed waterline to take water from the MDWASD South District plant to the Turkey Point nuclear power plant site.

**Comprehensive Everglades Restoration Program**  
South Florida Water Management District (SFWMD), FL

As the director of project management working directly for the South Florida Water Management District (SFWMD), the agency that served as the local sponsor and partner with the USACE for the Comprehensive Everglades Restoration Program (CERP), led a team of 100+ planners, scientists and engineers in executing a \$12.8B program. Developed short- and long-term strategies to accelerate project execution, including the development of alternative funding and construction delivery methods. Also managed extensive stakeholder issues and reported progress to management and federal partners.



# Carlton Serrette, PE

## Technical Advisor

Mr. Serrette's experience includes extensive work in all phases of planning and design of wastewater collection, pumping, and treatment facilities. He has broad experience in design projects from facility planning to conceptual and preliminary designs, final detailed design, contract specifications, construction cost estimates, and construction administration services. He has supervised and coordinated civil, mechanical, architectural, structural, electrical, heating, ventilation, and air conditioning, plumbing, and hazardous materials work within Arcadis and with subconsultant firms during the design of new facilities and the reconstruction of existing facilities. As the Area Director for Water South, Mr. Serrette has ultimate responsibility for the performance of Arcadis on this contract and is readily available should he need to address any concern.

### Education/Qualifications

- MS Civil Engineering Howard University 1993
- BS Civil Engineering Howard University 1990

### Years of Experience

Total – 29

With Arcadis – 29

### Professional Registrations/ Certifications

- Professional Engineer – FL, MD, DC

### Office Location

Tampa, FL

### Southeast Water Reclamation Facility Cloth Filter Project

Manatee County Utilities,  
Bradenton, FL

Technical advisor/QA/QC for \$8 million upgrade of the SEWRF Filters at the 11.0 mgd facility. Project includes the upgrade and replacement of two Automatic Backwash Filter with new cloth media filters including repurposing an existing structure, replacing the mechanical components with a new AquaDiamond filters and adding a Canopy with monorails. The system modifications also include flow patterns expected with the cloth media filters, rehabilitation of Filter Blower Building including miscellaneous equipment and controls, plant drain pump station, dewatering slab, and providing electrical controls and

## Relevant Experience

SCADA integration in accordance with Manatee County's standards.

### Hamlin Water Reclamation Facility

Orange County Utilities, Orange  
County, FL

Technical advisor/QA/QC for the planning and design of a new "greenfield" 5 mgd Water Reclamation Facility including headworks, oxidation ditches, clarifiers, filters, chlorine contact tanks, reject & reclaim storage facilities, & solids handling facilities.

### Parham Landing Wastewater Treatment Plant Expansion and Upgrade

New Kent County, Richmond, VA

Design quality leader for expansion and upgrade of the Parham Landing WWTP. The project included new headworks, pre-equalizations tanks with pump station sequencing batch reactors, blower building, post-equalization tanks with pump station, cloth disk-type filters, ultraviolet disinfection, effluent/reclaim/non-potable pump station, alum, carbon, hypochlorite, and magnesium hydroxide addition systems. The project also included the conversion of existing clarifiers to sludge holding tanks, and modification of an existing

filter building to an administrative/storage/chemical building.

### Northeast & Northwest Water Reclamation Facilities Grit Study

City of St. Petersburg, St. Petersburg, FL

Technical advisor, QA/QC for the grit study at the Northeast & Northwest Water Reclamation Facilities. Project included on-site sampling, evaluation of the existing grit equipment removal efficiency performance, identification and evaluation of alternative solutions and recommendations to the City.

### Dale Mabry Advanced Wastewater Treatment Plant Headworks Rehabilitation Project

Hillsborough County Public Utilities  
Department, Tampa, FL

Project principal for the headworks rehabilitation project at the 6.0 mgd, AADF treatment plant. The initial phase of this project included a structural assessment of the headworks and conditioning tank, a process assessment to understand the impact of the conditioning tanks to the treatment process, and evaluation of design alternatives, as well as a design of the recommended alternative. The County opted to rehabilitate the existing headworks and install an emergency bypass to the conditioning tanks and eventually shutdown the plant and bypass flow to another AWTP.





# Melissa L. Pomales, PE, ENV SP, PMP

## QA/QC and Technical Advisor

Ms. Pomales has a diverse and broad range of experience in the civil, environmental (water and sewer), and structural engineering fields, as well as in management consulting. Her work experience includes program and project management, consulting and business advisory, procurement and strategic planning, feasibility and financial analyses, planning, and design. She is the Florida Area Leader for the Water Business Line.

### Education/Qualifications

- MBA Finance Administration  
Indiana University  
Bloomington 2014
- MS Civil Engineering Cornell  
University 2004
- BS Civil Engineering Cornell  
University 2003

### Years of Experience

Total – 21

With Arcadis – 18

### Professional Registrations/ Certifications

- Professional Engineer – PR, FL
- Envision Sustainability  
Professional
- Project Management  
Professional
- Construction Documents  
Technologist
- Lean Six Sigma Sensei
- Institute of Asset Management

### Office Location

Plantation, FL

### Program Management Consulting/Bond Engineer

**Puerto Rico Aqueduct and Sewer  
Authority, Puerto Rico, PR**

Program manager of all consulting/bond engineer annual responsibilities, including deliverables as per Master Agreement of Trust with bondholders. Project coordinator for the preparation of the 2008 Consulting Engineer's Report issued in connection with PRASA's \$1,600 million bond

## Relevant Experience

issuance. Project manager of the 2009, 2010, 2013, 2014 and 2015 Consulting Engineer's Reports; 2008-2017 annual budget review reports; and 2013-2017 cash disbursement review reports.

### Project Management of Hurricane Sandy Recovery and Resiliency Portfolio Project Controls NYC Mayor's Office of Recovery & Resiliency (ORR), New York, NY

Served as project manager responsible for embedded team within the New York City Mayor's Office of Recovery and Resiliency charged with providing monitoring and oversight services of the recovery and resiliency program, totaling over 1,000 projects with a combined program budget of \$23 billion. Managed a team of five full-time and eight part-time (remote) employees. Supported client in development of strategy and plan for transitioning program tracking, controls and monitoring activities to internal ORR team.

### Program Management Framework and Roadmap Development Los Angeles Department of Water and Power, Los Angeles, CA

Technical expert for development of a framework and implementation roadmap for program management. Evaluated

current project and program management practices for the water system, facilitated workshops and interviews with staff and in process of developing guidelines and standard operating procedures and implementing a pilot to assess and review the framework.

### Project Manager for Asset Management Framework Development Miami-Dade Water and Sewer Department, Miami, FL

Project manager for the development of an enterprise-wide Asset Management (AM) Framework to implement across water and sewer with optimized business practices, an effective technology portfolio and high-level organizational awareness for staff knowledge and training.

### Asset Management Framework Development Miami-Dade Water and Sewer Department, Miami, FL

Project manager for development of an enterprise-wide Asset Management Framework to implement across water and sewer with optimized business practices, an effective technology portfolio and high-level organizational awareness for staff knowledge and training.



## Chris Matthews, PE

### QA/QC and Technical Advisor

Mr. Matthews has designed and built multi-story commercial buildings, heavy industrial projects and wastewater treatment systems. He has more than 40 years of design build projects which span from Corporate Headquarters for International Organizations to the Ultra-Pure Water Insulation System for the Sandia National Laboratory's Fast Breeder Reactor. Mr. Matthews has worked for more than 20 years on the Engineers Joint Contract Documents Committee and has served three terms as the Chairman. He is currently an ACEC Delegate to the EJCDC, a Life Director of the Associated General Contractors of America and has held general contractor licenses in twelve states. He has owned and operated multiple private wastewater utility companies. Mr. Matthews is an engineering expert witness, has worked on many cases of contract litigation and mediation and holds a U.S. Patent for specialized concrete forming systems. Mr. Matthews has authored articles and papers on Public Private Partnerships used for the wastewater market in the United States. He has been instrumental in assisting the EJCDC develop the first Program Management Standard Contract Document for P3s in the United States. Mr. Matthews has performed Constructability Reviews as well as provided the Engineers Opinion of Probable Construction Cost for many Arcadis projects throughout the US and Canada.

#### Education/Qualifications

- BSME Mechanical Engineering  
University of Alabama 1973

#### Years of Experience

Total – 53

With Arcadis – 11

#### Professional Registrations/ Certifications

- Professional Engineer – AL, FL, GA, MD, MS, LA
- General Contractor (FL)
- Expert Witness (ACEC)
- NCEES Certification

#### Professional Associations

- AGC
- NSPE
- ACEC
- EJCDC
- CMAA
- DBIA
- Water Design Build Council

#### Office Location

Tampa, FL

#### Multiple Projects

Schneider Electric Buildings  
Americas, Inc.

Project manager for the design and construction management services for multiple design build energy conservation measure additions at existing Water Reclamation Facilities in Arizona, Texas, New Jersey, Virginia and Georgia.

#### Bush Creek Force Main and Sod Run Interceptor Sewer

Harford County, Aberdeen, MD

Mr. Matthews served as project manager for Harford County's Task Order Contract for replacement of older force mains between the Bush Creek Pumping Station and the Sod Run WWTP. The new force main has two separate crossings of Bush Creek using horizontal direction drilled (HDD) high density polyethylene pipe. The two crossings totaled 3700 feet of 36-inch HDD pipe placement. In addition, the project has over 8000 feet of pre-stressed concrete cylinder pipe force main between the two HDD pulls & more than 8000 feet of up to 48-inch gravity sewer.

#### Water Distribution & Sewer Collection Systems Upgrades

Anne Arundel County, Laurel, MD

Mr. Matthews was the project manager for Anne Arundel County's Task Order Contracts for the \$20 M Expansion and Upgrade of the

distribution and collection systems. This Five-year program included replacement, slip lining, re-lining and HDD replacement of lines.

#### Sod Run WWTP ENR Upgrades

Harford County, Aberdeen, MD

Mr. Matthews was construction manager for Harford County's Task Order Contract for Nutrient Reduction Addition at the Sod Run WWTP. The Sod Run WWTP is rated at 20 mgd dry-weather flow and 50 mgd wet-weather flow. The Nutrient Reduction Program is implementing new facilities to meet the new and future waste load allocation for its discharge into Bush River. The scope of work for the program includes total phosphorus and nitrogen control improvements, new methanol addition facility, effluent filtration addition, main plant switchgear improvements, final clarifier upgrades, aeration system upgrades, RAS pumping upgrades, bio-augmentation and new fermentation tanks and pumping facilities.



# Andrew McDonald

## Health & Safety

Mr. McDonald has 18 years of professional experience, and has worked both in the Corporate Health & Safety (H&S) Department and multiple business areas. Mr. McDonald is currently the Director of H&S for Arcadis U.S. Inc. As part of his internal corporate focus, Mr. McDonald participates in developing and preparing company-wide health and safety policies and programs. In this role, he mentors Senior Leaders in stewarding the behavior base safety program, provides technical guidance for project health and safety issues, evaluates H&S program implementation through project and office conformance assessments, and conducts incident investigations. Mr. McDonald leads the Arcadis US H&S Heavy Mechanized Equipment Operators and Competent Person (Fall Protection, Excavation, and Scaffolding) evaluations. Mr. McDonald has performed site safety officer responsibilities and supervised construction related activities on local and federal environmental projects.

### Education/Qualifications

- BA Geology and Environmental Science LaSalle University 2005

### Years of Experience

Total – 18

With Arcadis – 17

### Professional Registrations/ Certifications

- Professional Engineer – FL
- 40-Hour OSHA Hazardous Waste Health and Safety Training
- 8-Hour OSHA HAZWOPER Refresher Training
- 8-Hour OSHA HAZWOPER Supervisor Training
- 10-Hour OSHA Construction
- 30-Hour OSHA Construction
- First Aid/CPR/AED
- Bloodborne Pathogens
- Permit Required Confined Space train the trainer

### Office Location

Hanover, MD

## Relevant Experience

### DC Water Saint Elizabeths Water Tower Coating Rehab

Washington, DC

Provided health and safety oversight of Arcadis and Joint Venture. Conducted onsite audits & inspections of equipment and processes used by the Joint Venture. Helped steward Arcadis employees & subcontractors in the behavior-based safety program.

### DC Water Tunnel Dewatering Construction

Washington, DC

Provided health and safety oversight of Arcadis and Joint Venture. Conducted onsite audits & inspections of equipment and processes used by the Joint Venture. Helped steward Arcadis employees & subcontractors in the behavior-based safety program.

### Environmental, Health and Safety Support

Roanoke, VA

Provided daily health and safety oversight of Arcadis and Subcontractors. Conducted daily inspections of equipment and helped steward Arcadis employees and subcontractors in the behavior based safety program. Conducted onsite audits as well as regular updates to the onsite Health and Safety Plan.

### Emergency Response

Multiple Clients

Provided daily health and safety oversight of Arcadis and Subcontractors. Conducted daily inspections of equipment and helped steward Arcadis employees and subcontractors in the behavior based safety program. Conducted onsite audits, exposure monitoring, training, and respiratory fit testing, as well as regular updates to the onsite Health and Safety Plan.





# Darryl Dunn, PE

## Construction Manager (Water/Wastewater)

Mr. Dunn has served as a Program & Project Construction Manager (PCM) as Owner's Agent for 24 years managing owner's pre-construction and construction phase projects primarily focused on water and wastewater projects including treatment plants, pump stations and pipelines. Prior to his Construction Management career, he spent 18 years in general engineering- planning, directing, and performing civil engineering and design work pertaining to new, improvement or renovation infrastructure projects including roadways, site plans, storm drainage and erosion control, buildings and structures, water and sewer utilities, pump stations and force mains, water and wastewater treatment plants.

Experience highlights include:

- Sr Project Construction Manager for a \$165M construction program in Anne Arundel County, MD through a multi-phase contract and multiple contractors.
- Project Construction Manager for a \$68M program for water independence, Rockdale County, GA through management of four design contracts and seven construction contracts.
- Design/Project Engineer on the design of water and wastewater facilities for the US Naval Submarine Base, Kings Bay, GA.

## Relevant Experience

Mr. Dunn's construction management experience includes bid phase services, constructability reviews, establishing site CM offices, hiring staff, implementing document control platforms, communication and execution plans, administering construction contracts, conducting meetings, change and schedule management, QA/QC oversight, startup/commissioning plans, closeout and turnover for the following:

### Pump Station A-16 Upgrades City of Fort Lauderdale, Miami, FL

Lead inspector providing construction management services for the installation of approximately 2,000 LF of 30-inch HDPE watermain and 3,000 LF of 10-inch HDPE force main along SE 3rd Avenue. This project is part of the relocation of the A-16 Pump Station on SE 11th Street. The project includes two horizontal directional

drilling (HDD) segments under the Tarpon River.

### Everglades PS Monitoring Panel Replacement Project (in progress) South Florida Water Management District, Fort Lauderdale, FL

Sr. project construction manager for the replacement of engine monitoring panels and devices with modern electronic equipment for five Everglades canal pump stations with multiple engine-driven pumps originally installed in 1952.

### Cox Creek WRF Upgrade Project Department of Public Works, Anne Arundel County, MD

Sr. project construction manager (PCM) for the \$110M multi-phase, multi-year upgrade of the 30-mgd WRF to Biological Nutrient Removal (BNR) with up to 400% sludge return and including owner-purchased submerged Bio-Reactor membranes.

### Education/Qualifications

- Engineering coursework: West Georgia College and DeKalb Community College 1966-1977

### Years of Experience

Total – 48

With Arcadis – <1

### Professional Registrations/Certifications

- Professional Engineer – GA

### Professional Skills

- Civil Engineering
- Construction Management
- Buildings and Structures
- Hydraulics
- Storm drainage
- Soils

### Professional Specialties

- CPM scheduling & WBS
- Document control platforms
- Startup/Commissioning plans
- Asset management
- Building code inspection requirements
- Mgmt. & Execution Plans
- User manuals for electronic platforms
- Constructability Reviews
- Value Analyses

### Office Location

Plantation, FL

### **Mayo WRF Conversion Project**

Department of Public Works, Anne Arundel County, MD

Sr. project construction manager for this unique \$40M Mayo WRF project which de-commissioned the existing non-functioning wastewater treatment plant and installed 5mi. of 24-inch HDD force main to the Annapolis WRF. Decommissioning the existing faulty treatment plant removed a decades-long sewer moratorium on the Mayo peninsula.

### **Jennifer Road Pump Station Replacement**

Department of Public Works, Anne Arundel County, MD

Sr. project construction manager for the new larger capacity replacement pump station built on the extremely tight site of an existing pump station including a mile-long 18-inch force main and bounded by busy arterial roadways on two sides and a sensitive environmental area on another.

### **Mason Farm WWTP Upgrade**

Chapel Hill, NC

Sr. project construction manager for the \$40M upgrade including a new biological filter building, new influent pump station, new 13.3KV power service and re-powering all operating equipment onsite. Interestingly, the project included an early completion bonus after meeting an interim milestone.

### **Brooks Road Pump Station**

Gwinnett County, GA

Project construction manager for the \$25M construction of a new pump station designed to accommodate 50-mgd of flow but equipped initially for 6-mgd.

### **Water Independence Program**

Rockdale County, GA

Program/project construction manager for this \$65M project to design and construct all new water supply, treatment and distribution facilities when its water supply contract with an adjacent county was to expire. The County was squeezed with only 30 months to develop, design and construct its facilities.

### **Shenango Water Treatment Plant**

Sharon, PA

Project construction manager for the new \$25M Shenango WTP built on the banks of the Shenango River. The project comprised construction of a complete new water treatment plant and new raw water intake on the site of the existing water treatment plant- some parts of which were constructed in 1898.

### **Water Treatment Plant Upgrade**

Allentown, PA

Project construction manager for the \$20M upgrade and renovation project to completely demolish the 10-mgd treatment train and re-purpose all its facilities, and upgrade the 20-mgd train to 30-mgd. The WTP was originally built in 1927 and upgraded in 1975.

### **Klines Island WWTP Upgrade**

Allentown, PA

Project construction manager for the \$25M plant upgrade project to demolish existing Imhoff tanks originally built in 1927, construct new 150-foot-diameter Clarifiers, and return sludge pump station, new primary clarifier sludge collectors and new headworks equipment.

### **Blue Plains AWTF Expansion**

Washington, DC

Resident engineer for the 50-mgd filter expansion at the Blue Plains AWTF on the banks of the Potomac River in Washington, DC including installation of 160 concrete displacement piles.

### **Water and Wastewater Design Contract**

U.S. Naval Submarine Base, Kings Bay, GA

Design/project engineer for many of the 150 contract supplements developing designs and drawings for the 10%, 30%, 60%, 90% and Final design packages, providing responses to ROICC review comments, and implementing changes to the documents pertaining to the review comments.

**Design engineer** for improvements to the Base Area Wastewater Treatment Plant and spray irrigation system, Waterfront Wastewater Treatment Plant, Base Area Water Treatment Plant, the two deep raw water wells, and the Waterfront Booster Pump Station.

**Project engineer** for the Industrial Waste Treatment Facility designed to recover solvents and receive acidic and alkaline waste products from the various maintenance operations at the base. The discharge from the facility is sent to the Waterfront Wastewater Treatment Plant which was upgraded to handle the industrial waste discharge impact on its biological processes. The project won the GWPCA award for design in 1991.



## Jose Custodio, PE

### Construction Manager (Civil, Utilities/Pipelines)

Mr. Custodio is a professional engineer registered in the states of Florida and Puerto Rico, with background in civil/environmental engineering and construction management. Work experience includes planning, design, procurement, construction management of several Capital Improvements Program (CIP) projects for different municipalities in the State of Florida and for the Puerto Rico Aqueduct and Sewer Authority (PRASA).

#### Education/Qualifications

- ME Construction Engineering Polytechnic University of PR 2013
- BS Civil Engineering Polytechnic University of PR 2010

#### Years of Experience

Total – 15  
With Arcadis – 3

#### Professional Registrations/Certifications

- Professional Engineer – FL, PR
- Florida Department of Environmental Protection Agency (FDEP) – Qualified Stormwater Management Inspector
- OSHA – 30 Hrs. Construction Industry

#### Office Location

Plantation, FL

#### SSes and CMOM Plans for Town of Bay Harbor Islands

##### Town of Bay Harbor Islands, FL

As the public works director – town engineer, was responsible for the preparation of the Sewer System Evaluation Survey (SSes) and Capacity Management, Operation and Maintenance (CMOM) Reports for submittal to Miami-Dade County on an annual basis. Directed staff in performing night flow monitoring, visual inspection of sanitary sewer manholes, contracted smoke testing and

#### Relevant Experience

CCTV services to determine I&I sources in the system.

#### City of Fort Lauderdale – Sanitary Sewer Point Repairs Annual Contract

##### City of Fort Lauderdale, FL

Served as the City's project manager for the Sanitary Sewer Annual Point Repairs Contract. Responsible to develop Task Orders for CCTV and City point repair contractors. The majority of Task Orders were the result from CCTV inspections showing severe infiltration in the pipe joints.

#### PRASA's Capital Improvements Program

##### PRASA, Island wide, PR

Served as a project manager for the PRASA's Capital Improvements Program in Puerto Rico managing utility infrastructure projects from Planning to Construction Phase.

#### East Las Olas Blvd 12-inch Force Main Replacement – Pipe Bursting

##### City of Fort Lauderdale, FL

Responsible of managing the construction of the project through final completion and close out to comply with the FDEP Consent Order deadline and avoiding penalties fees for the City. Project consisted of the replacement of

approximately 2,300 LF of 12-inch diameter force main with a 16-inch diameter HDPE force main along Las Olas Blvd corridor. Along with the open-cut method, the trenchless method of pipe bursting was used for this project. The construction cost of the project was \$1,350,000.

#### 30-inch Force Main A-Repump Station to GTL Wastewater Treatment Plant

##### City of Fort Lauderdale, FL

Design-Build Project – Responsible of managing the design and construction of the project through final completion and close-out to comply with the FDEP Consent Order deadline and avoiding penalty fees to the City. Project consisted of the repairs/rehabilitation of approximately 20,000 LF of 30-inch diameter force main located along the Fort Lauderdale Downtown area. In addition to the typical open-cut installation, various trenchless methods were used like horizontal directional drilling and compression fit. The construction cost of the project was \$15,500,000.

#### Croissant Park Small Water Mains Improvements

##### City of Fort Lauderdale, FL

Responsible of managing the design, bidding and construction phase of the project through final completion and close-out. Project consisted of the replacement of aging and undersized infrastructure (approximately 16,000 LF of 2, 4 and 6-inch diameter cast iron water mains) with an 8-inch diameter HDPE water main,



replacement of fire hydrants, 375 service connections and relocation of water meters located in private property within the neighborhood. The installation methods used were open-cut trench for the tie-ins to existing system, and a combination of pre-chlorinated pipe bursting and horizontal directional drilling for the new water main. The construction cost of the project is \$2,600,000.

**Bermuda Riviera Small Water Mains Improvements**  
City of Fort Lauderdale, FL

Responsible of managing the design, and bidding phase of the project. Project consisted of the replacement of aging and undersized infrastructure (approximately 24,000 LF of 2, 4 and 6-inch diameter cast iron water mains) with an 8-inch diameter HDPE water main, replacement of fire hydrants, 500 service connections and relocation of water meters located in private property within the neighborhood. The installation methods used were open-cut trench for the tie-ins to existing system, and a combination of pre-chlorinated pipe bursting and horizontal directional drilling for the new water main. The construction cost of the project is \$3,800,000.

**Central New River Water Main Crossing**  
City of Fort Lauderdale, FL

Responsible for the design of approximately 600 LF of a subaqueous water main crossing under the New River Canal and Las Olas Blvd. using Horizontal Directional Drilling. The project obtained all the environmental permits from USACE, FDEP and Broward County.

**Tyndall Air Force Base**  
USACE – Panama City, FL

Responsible for the design of the water and sewer infrastructure for a new Subscale Drone Facility and Headquarters that were severely damaged during hurricane Michaels. Extensive coordination with USACE was necessary for the completion of the design.

**Water Resources Management Plan**  
Puerto Rico Aqueduct and Sewer Authority, PR

Responsible to evaluate different alternatives to increase the storage capacity of the Carraizo reservoir (60 mgd safe yield) which provides raw water to the Sergio Cuevas WTP in the metropolitan area of Puerto Rico. Assessed and recommended the best alternative and estimated implementation cost of the selected alternative.

**Asset Condition Evaluation**  
Puerto Rico Aqueduct and Sewer Authority, PR

Performed inspections and condition reports for twelve (12) water treatment plants and eight (8) wastewater treatment plants for the PRASA's Asset Condition Report. The evaluation of the facilities consisted of the condition of its water and solids treatment facilities in terms of operation, maintenance, compliance and general conditions.



## Garth White

### Construction Manager (Pump Stations, Stormwater)

Mr. White has more than 22 years of experience specializing in civil and mechanical engineering disciplines, with a focus on construction management and oversight. His experience includes construction management and inspection, operations monitoring, cost estimating, and trend analysis for large industrial facilities and infrastructure improvement projects throughout Florida and has served in many roles on a variety of water and wastewater projects. Recent experience includes water/wastewater treatment plant rehabilitation, installation of production wells and deep injection wells, installation of above grade and underground high voltage and medium voltage cables, replacement of large diameter water transmission mains, watermain and force main aerial crossings including site restoration, trenchless pipeline restoration/replacement, and paving/drainage projects.

#### Education/Qualifications

- BS Mechanical Engineer  
California State University 2002

#### Years of Experience

Total – 22

With Arcadis – 19

#### Office Location

Plantation, FL

#### Pump Station A-16 Upgrades

City of Fort Lauderdale,  
Fort Lauderdale, FL

Lead inspector providing construction management services for the installation of approximately 2,000 LF of 30-inch HDPE watermain and 3,000 LF of 10-inch HDPE force main along SE 3rd Avenue. This project is part of the relocation of the A-16 Pump Station on SE 11th Street. The project includes two horizontal directional drilling (HDD) segments under the Tarpon River.

#### Escape and Valencia Force Main Pipe Bursting Improvements

City of Sunrise, FL

Construction management services related to the replacement of over 25,000 LF of aging potable polyvinyl chloride, asbestos-cement, and ductile iron water mains located in the Escape and Valencia residential neighborhood areas within the City's service area. The project also included

#### Relevant Experience

installation of over 700 service saddles and connections to the existing residential water meters. The site restoration included installation of D curbs, roadway milling and resurfacing activities, new wheel stops and parking lot striping.

#### Consulting Engineer Facilities Inspection Services

PortMiami, Miami, FL

Project consultant for the inspection of PortMiami Facilities to meet the reporting requirements of Master Bond Ordinance 88-66. Inspected PortMiami Facilities including cruise terminals, storage facilities, parking structures, and exterior areas. Responsibilities also included development of repair and replacement cost estimates for deficient assets and development of the comprehensive deficient asset database.

#### Springtree Deep Injection Well Flow Delivery System

City of Sunrise, Sunrise, FL

Construction manager for the Springtree Water and Wastewater Treatment Plant Injection Well Flow Delivery System. CMS services include facilitating bi-weekly

construction progress meetings, preparing RFI, RFQ, and change orders, coordinating logistics of all contracting entities, and project closeout activities. The project consisted of furnishing and installing 400 Hp treated effluent pumps with VFDs; inspection of stored equipment/materials, 30-inch-diameter effluent piping to existing Injection Wells; piping of RO concentrate to chlorine contact basin; demolition and replacement of existing plant water pumping system; furnishing and installing 2 MW standby generator; installed over 200 LF of duct banks that included conduits for medium voltage cables and control wiring, furnishing and installing pad drain lift station and force main, replacing various sections of the sodium hypochlorite line, and start up and commissioning for all the systems.

#### Environmental Compliance Audit

Miami-Dade Aviation Department (MDAD), Miami, FL

The MDAD contracted with Arcadis to perform environmental compliance audits for seven tenants to monitor tenant compliance with International Standards Organization (ISO) 14001

certification for all of its operations. As part of the audit, performed site visits at each tenant's leasehold to determine compliance in several areas, including environmental management systems; hazardous materials management pesticides management; asbestos and polychlorinated biphenyls management; solid waste management; air emissions management; water supply and wastewater management; oil pollution management; and storage tank management. The findings of the audits were summarized in a report with recommendations to address any noted deficiencies related to regulatory compliance and Best Management Practices.

### **Annual Inspection and Report**

MDWASD, Miami, FL

Provided condition assessments MDWASD's water and wastewater infrastructure for the purpose of characterizing the physical condition and operating condition of major asset components. Infrastructure evaluated included waste treatment facilities, water storage and remote pumping facilities, wellfields, wastewater treatment facilities, and wastewater pumping stations. Analysed data in asset management software, Orion and Asset Hound, to generate facility inspection reports elaborating on the physical and operating conditions of system components.

### **Broward MRF Monitoring**

Broward County Waste and Recycling Services, Fort Lauderdale, FL

Project engineer. Planned and managed a MRF residue composition analysis to determine the amount of program materials that are being disposed of instead of recycled. This project required a large coordination effort on my part with Broward County officials, Wheelabrator, and Waste Management. Responsible for preparation of a MRF residue composition analysis protocol. Scheduled residue deliveries. Presented policies, procedures, and safety briefings to a field team of seven temporary workers. Sorted approximately 1,000 pounds of residue in one-day. Prepared a cost estimate which included all components of the projects. Prepared a final report to the client which summarized the activities and findings performed.

### **Broward WTE Facility Monitoring**

Broward County Waste and Recycling Services, Fort Lauderdale, FL

Project engineer. Updated the trend analysis prepared for both the North and South Facility which summarized the performance of each facility since the operation of the facilities commenced. The final report included the following: overview of processed waste, delivered waste, power production, downtime, ash production, emissions, and metals recovery for each facility through the current year of operations.

### **Consulting Engineering for North County Resource Recovery Facility**

Solid Waste Authority of Palm Beach County, West Palm Beach, FL

Project engineer. Refurbishment of this refuse-derived-fuel RDF waste-to-energy facility. Assists with demolition and construction document review and coordination and oversight of demolition and construction activities. Responsibilities include construction document management, daily construction oversight, and assistance with contract compliance review of the design/build contractor.

### **Waste-to-Energy Facility Operations Monitoring**

Office of Integrated Solid Waste, Broward County, FL

Lead inspector involved in operations monitoring efforts for Broward County evaluating the contract operator's (Wheelabrator) conformance with the terms of the Service Agreement, environmental regulations and accepted industry practices. Performed regular facility inspections, outage inspections, punchlist updates, reviewed environmental reports, and provided inspection reports, monthly, quarterly, and annual operations monitoring reports. These reports provide analyses with respect to operating trends, assessments of facility physical conditions, and opinions of environmental compliance and maintenance practices.





# Daniel Ignacio Garcia, PE

## Pump Stations/Mechanical

Mr. Garcia has extensive experience in municipal infrastructure and resiliency project engineering and management as well as financial analysis and planning. He has managed diverse projects involving stormwater and sanitary sewers, water supply and wastewater treatment, neighborhood improvement and streetscapes, traffic engineering, civil/site engineering, highways and bridges, and coastal and riverine protection. He has also served in roles as financial analyst/planner and internal auditor for large multinational banks and engineering consulting firms. Mr. Garcia currently serves as the Arcadis project manager for the 4-Log Virus Treatment project.

### Education/Qualifications

- MBA International Finance and Global Business New York University Leonard N. Stern School of Business 2009
- MS Civil Engineering Oregon State University 2003
- BS Civil Engineering Coastal/Structural Engineering University of Florida 1997

### Years of Experience

Total – 19 years  
With Arcadis – 2 years

### Professional Registrations

- Professional Engineer – FL, NY
- Envision Sustainability Professional (ENV SP)
- LEED Accredited Professional Building Design + Construction
- NASSCO Manhole Assessment & Certification Program
- NASSCO Pipeline Assessment & Certification Program
- Professional Traffic Operations Engineer

### Office Location

Miami, FL

### Lift Station No. 6 Rehabilitation Engineering, Services During Construction and Post Construction Services

City of Hallandale Beach, Hallandale Beach, FL

Project manager for rebuilding of the existing master lift station to meet current and future demand per client requirements. The Project scope is divided into the following four major tasks and the

## Relevant Experience

necessary project management activities: Design, Permitting coordination, Bidding support, Services during construction.

### 4-Log Virus Treatment Implementation

City of Hollywood, FL

Project manager for the 4-Log Virus Treatment Implementation project. The project includes the demolition of on-site generation equipment and brine tank; the installation of 5 new metering pumps and 3 new transfer pumps; modification of the feed and controls systems to accommodate the increased sodium hypochlorite dose at the blend tank; the installation of an ammonia injection point and static wafer mixer; and the installation of new ammonia tanks and a new feed system with a pressure fed and mass flow meter/controller.

### Large Diameter Pipe Evaluation and Replacement

JEA, Jacksonville, FL

Program manager for the Large Diameter Pipe Evaluation and Replacement Program – a five-year program to develop a comprehensive plan to maintain, rehabilitate, and, if necessary, replace JEA's most critical assets in a manner that

maintains a high level of service to their customers and at the same time most efficiently utilizes their funding. The program includes over 800 miles of gravity sewers, force mains and water transmission mains from 16-inch to 72-inch-diameter.

### Design-Build Palm & Hibiscus Islands Right-of-Way Infrastructure Improvements

City of Miami Beach, FL

This comprehensive neighborhood infrastructure improvement project includes major improvements to the stormwater infrastructure on both islands, including replacement of piping and addition of three pump stations. Additional improvements include replacement of water main, lighting, utility undergrounding, landscaping, streetscape, and pavement and marking.

### 54-in Wastewater Line Replacement, Consent Decree Project Number 4.5 (1)

Miami-Dade County Water and Sewer Department, Homestead, FL

Led permitting modification efforts for canal crossing and highway crossings. Extensive coordination with contractor, FDOT, SFWMD, and Army Corp of Engineers led to successful approval of the permit modifications resulting in significant time and money savings to the Owner.



# Joan Fernandez, PE, IAM

## General Civil, Stormwater

Ms. Fernandez is a licensed Professional Engineer with a diverse and broad range of experience in the business consulting, civil, and environmental fields. She has over 19 years of experience in project management, planning, design, permitting, procurement and construction management. During her professional career Ms. Fernandez has worked closely with various internal and external stakeholders staff at all levels, consultants and contractors in conducting contract negotiations, presentations, workshops, and project implementation. Ms. Fernandez continues to be involved in the development and delivery of Capital Improvement Projects (CIP) for various clients valued at more than \$15 million including City of Sunrise, City of Boynton Beach, City of Hollywood and Miami-Dade Sewer and Water Department.

### Education/Qualifications

- MS Environmental Engineering  
Florida International  
University 2007
- BS Environmental Engineering  
Sciences University of  
Florida 2004

### Years of Experience

Total – 19  
With Arcadis – 6

### Professional Registrations/ Certifications

- Professional Engineer – FL, MD
- Pipeline Assessment and  
Certification Program (PACP)
- Manhole Assessment  
Certification Program (MACP)
- Lateral Assessment Certification  
Program (LACP) Certified
- Institute of Asset Management  
Certification (IAM)

### Office Location

Plantation, FL

### American Water Infrastructure Act (AWIA) Risk and Resilience Assessment

City of Hollywood, Hollywood, FL

Project manager for the City of Hollywood AWIA Risk & Resilience Assessment project. Followed American Water Works Association J100-10 Standard Risk and Resilience Assessment Methodology, which has been endorsed by United States Environmental Protection Agency, to conduct a risk assessment of the physical and cyber assets of

## Relevant Experience

the city's water system. Oversaw project management activities and collaborated with the city and internal team members to schedule meetings, issue requests for information, prepare materials, facilitate workshops, develop meeting minutes, and provide project status updates. Worked with internal stakeholders to identify critical facilities, assets, and threats, as well as the consequences and vulnerability of the system to such threats. Reviewed the risk and resilience profile (financial and operational) of the water system and summarized results and recommendations to improve the city's understanding and preparedness for potential hazards.

### Bond Engineering Services

Miami-Dade County Water and Sewer Department (MDWASD), Miami, FL

Provided bond engineer consulting services for the largest water and wastewater utility in the Southeastern U.S., which serves nearly 2.3 million people each day, through the development of Miami-Dade WASD Bond Consultant's Reports. Organized and conducted inspections of water and wastewater infrastructure including water treatment facilities, wellfields, water storage and remote pumping

facilities, wastewater treatment facilities, and wastewater pumping stations. Analyzed data in asset management software, Orion, and Asset Hound, to process and communicate data relating to water and wastewater parameters, current flows, and future flow projections. Incorporated information into reports which highlight the adequacy of the department's capital improvement program, the adequacy of the renewal and replacement funding, the condition and operations of water and wastewater facilities, and the department's compliance with bond covenants to debt service and other financial conditions.

### Water Main Replacement Joint Participation Program

Orlando Utilities Commission, Orlando, FL

Project manager for as-needed professional services to assist OUC with the development of a joint agency program with the City of Orlando, Orange County and FDOT to identify water main replacement projects for agencies to participate jointly by sharing costs and minimizing disruptions to the residents.

### Replacement and Renewal Contract – Regional Pump Station Improvements Basis of Design Reports (BODRs)

Miami-Dade Water and Sewer Department (MDWASD), Miami, FL

As project manager, led the preliminary design for five regional pump stations, 301, 414, 415, 416 and 417, that feed the NDWWTP. The work included an inspection of the facility and preparation of a BODR to clearly identify the necessary improvements relative to the requirements of the consent decree as well as restoring long-term reliability to the station. As part of the existing facility assessment, a hydraulic evaluation was conducted to assess the range of head and flow conditions associated with the pump station's system and to develop associated system curves to be used in the evaluation of pumping equipment (existing and new) for the station.

### **Asset Management Framework**

Miami-Dade WASD, Miami, FL

Served as the deputy project manager to assist the Department with the development of the Asset Management Framework that will support its staff and align work practices, decision making and overall operations with defined goals and objectives. This project evaluated existing business practices associated with existing Asset Management efforts and provided guidance to the Department about best practices and methods needed to achieve International Standards Organization (ISO) Series 55000 certification. The scope of the Phase 1 of the AM Framework included:

- Performed an assessment that provides a high-level review of Miami-Dade WASD's current asset management practices related to Practices and Processes, Information Systems and Data and Knowledge.
- Documented 'as-is' AM business processes and identified areas of improvement.
- Performed a Strategic Asset Management Gap Analysis to identify current gaps and set priorities for the three core elements – Practices and Processes, Information Systems and Data and Knowledge.
- Developed concept level 'to-be' AM business processes to align with ISO 55000 requirements.
- Identified relevant key performance indicators (KPIs) and developed benchmarks for these KPIs.

### **Lift Station and Force Main Master Plan**

Plant City, FL

Task manager/task lead for the development of a risk-based evaluation of 40 wastewater lift stations and force mains for informed, fact-based decisions to be made with respect to capital and maintenance expenditures. The master plan includes a 20-year planning horizon with a more detailed 5-year CIP for nearer term projects. Various tasks performed include development of condition and risk assessment guidance documentation, development of equipment inventory at each lift station, and evaluation of asset condition and failure risk results for each lift station and force main.

### **Water and Wastewater Master Plan Update**

City of West Palm Beach, West Palm Beach, FL

Project manager/QA/QC team leader on the update of water and wastewater demand forecasts, and hydraulic modeling to assess the impact of planned downtown developments on the adequacy of existing pumping and conveyance infrastructures. A task of this project included the design and permitting for the connection from either the 8-in main (WSP28993) or the 12-in water main (WSP28987) to the 42-in Ductile Iron Pipe transmission main (WSP25671, WSP29646) located on the north side of Banyan Boulevard by the WTP to add redundancy to the system in case the 36-in transmission main fails.





## Chris Tilman, PE, BCEE, CDT

### General Civil and Stormwater Design, Permitting Support

Mr. Tilman provides professional engineering and consulting services in several civil engineering disciplines. He specializes in assisting municipal and industrial clients in Central and South Florida with various stormwater, site/civil infrastructure and permitting projects. His 24 years of experience includes project management and delivery, stormwater design services, mathematical modeling, regulatory permitting and compliance, and operation and maintenance evaluations. Mr. Tilman currently serves as Project Manager for the City of Sebastian Stormwater Master Plan project and is also a project team member on other stormwater projects.

#### Education/Qualifications

- BS Civil Engineering Auburn University 2000
- MS Engineering Management Troy University 1997
- BS Environmental Science Auburn University 1994

#### Years of Experience

Total – 24

With Arcadis – 21

#### Professional Registrations/Certifications

- Professional Engineer – FL, AL, GA
- Board Certified Environmental Engineer - US
- Construction Documents Technologist - US

#### Office Location

Miami, FL

#### Stormwater Master Plan

##### City of Sebastian, Sebastian, FL

Project manager, responsible for the development of a stormwater master plan for the entire City area to address long-standing drainage issues. Project work included analysis of historical City files, preparing a GIS map for the entire City stormwater system, conducting field inspections and surveys of more than 800 seawalls and more than 650 stormwater culverts, inlets and associated structures, PC-SWMM modelling of stormwater runoff flows and pollutant loading, identifying and prioritizing capital projects, grant

#### Relevant Experience

funding analysis and application preparation, and preparation of a master plan, including a comprehensive operations plan for the City's system.

##### Hamlin WWTP Design

Orange County Utilities Department, Orlando, FL

Site/civil design engineer, responsible for the site civil and stormwater system design and ERP permitting for a new \$113 million 5.0 mgd wastewater treatment plant on a 50-ac site. The stormwater design included three retention ponds designed to hold the runoff from a 100-year, 24-hour storm event, and had to account for the groundwater effects resulting from operations of adjacent Rapid Infiltration Basins (RIBs). Project work included analysis of historical site data, coordination with FDEP, SFWMD, and OCU, preparation of engineering calculations and drawings, groundwater studies using Green-Ampt groundwater infiltration calculations, 2-D and 3-D modeling for hydraulic/hydrologic flow routing and recovery analysis, permitting, and supporting documentation.

##### Dimick Road and Potter Road Improvements

City of Boynton Beach, Boynton Beach, FL

Engineer of record, responsible for the preparation of the engineering drawings, specifications, and SFWMD ERP permitting and FDOT ROW permitting for flood damage reduction improvements in an older 10-ac neighborhood on the Lake Worth Lagoon in the City of Boynton Beach. Project work includes analysis of historical rainfall and tidal elevation data, widening three existing residential streets (from 8-foot to 10-foot travel lanes), adding curbing, modifying driveways, relocating and modifying water, wastewater, gas, power, and CATV utility services, retrofitting and redesigning an inlet-and-pipe collection system to optimize flow through three existing outfalls, analysis and design of coastal structures, performing an alternatives analysis for various design options, and 2-D hydraulic and hydrologic modeling to simulate inline valve operations in all outfalls and tidal influences from the Lake Worth Lagoon



#### Education/Qualifications

- Basic Electricity, Prince George's Community College
- Drafting Courses, Northern Virginia Community College

#### Years of Experience

Total – 46

With Arcadis – 13

#### Professional Registrations/ Certifications

- Certified Construction Inspector (American Construction Inspector's Assoc. (ACIA), Div. I – Engineering and Div. IV – Public Works)
- Erosion & Sediment Control Certification – MD
- Certification for Confined Space (OSHA)

#### Office Location

Orlando, FL

#### SR 527 Improvements

##### Orlando Utilities Commission, FL

Duties include construction management, supervision of a construction inspection staff, interaction with a General Contractor, and the Client for infrastructure improvements along SR 527 in downtown Orlando. The scope of this work includes the installation, disinfection and commissioning of 20-inch, 16 inch, 12 inch and smaller water main piping, to include service connections. Also, electrical improvements include various medium voltage distribution

## Stephen Woodhurst

### Construction Management and Inspection

Mr. Woodhurst has more than 46 years of technical and management experience in the quality assurance (QA), inspection and engineering field, including surveillance of in-process and final manufacturing activities, site inspections, maintenance of construction schedules, construction inspection and construction management with specialization in water, wastewater and infrastructure projects. He has experience with project and construction management for a variety of infrastructure projects, all phases of site work, and the supervision of field personnel.

#### Relevant Experience

electrical duct banks with conduits of varying quantities, sizes and lengths, splicing manholes, and branch out electrical duct banks. The project provided streetscaping along a specified portion of SR 527.

##### Patuxent WRF Enhanced Nutrient Reduction Expansion City of Crofton, MD

Duties include construction management, supervision of full-time Construction Inspectors, and interaction with the General Contractor and Client on this \$44M capital project. Project includes construction of a new headworks facility, Influent pump station, oxidation ditch, secondary clarifier, denitrification filters, ultraviolet disinfection, along with miscellaneous upgrades to the existing process, electrical and control systems. Roadways included new base and pavement, milling and re-pavement as well as new permeable pavement. Responsibilities of the team included materials inspection, and material testing of soils compaction, asphalt placement and compaction, and piping under pavements.

##### Broadneck WRF Enhanced Nutrient Reduction Upgrade

##### Anne Arundel County, MD

Responsible for the construction management and QA and construction contract administration on this \$17.3M capital project. Project includes major mechanical upgrades to unit processes at the Facility and the addition of new denitrifying filters and ultraviolet disinfection. The completed project was designed to meet a total nitrogen limit of 3 MG for the nutrient reduction addition at the Broadwater WRF. Roadways included new base and surface course pavement, milling and pavement overlay. Responsibilities of the team and his staff included inspection of materials and coordination of material testing of soils compaction, asphalt placement and compaction, and piping under pavements.

##### Construction Management

##### Anne Arundel County Department of Public Works, MD

Construction manager responsible for the construction management of multiple capital projects. His duties included supervising and assisting construction inspection staff, conducting pre-construction and job progress meetings, monitoring the construction submittal process, evaluating, and initiating contract change requests and change orders, reviewing and validating contractor pay requests, and finalizing .

project completion. He also served as a liaison between the general contractor and the owner.

#### **Lower Potomac Pollution Control Plant Expansion**

Fairfax County, VA

Duties for the \$100M project included inspection of construction of wastewater treatment facilities and pump stations in the areas of concrete/structural, mechanical, electrical, and architectural work for compliance with plans and specifications.

#### **Broadneck WRF Upgrade Project**

Anne Arundel County, MD

Inspection of construction for a \$2M sewage treatment facility upgrade in the areas of structural, mechanical, and electrical work for compliance with the contract plans and specifications. He assisted the Project Manager with the interpreting of contract drawings and specifications, conducted job progress meetings, evaluated and initiated contract change orders, validate contractor pay requests, and attended pre-bid and pre-construction meetings. He was also on-site full-time as a liaison between the general contractor and the owner and carried out the responsibilities of an assistant resident engineer.

#### **Woodland Beach Sewage Pumping Station**

Anne Arundel County, MD

Provided full-time resident inspection/construction management services. His duties included inspection of construction in the areas of concrete/structural, mechanical and site work for compliance with the contract plans and specifications. He interpreted contract drawings and specifications, conducted pre-construction and job progress meetings, evaluated and initiated contract change orders, and validated contractor pay requests. Also served on-site, full time, as a liaison between the general contractor and the owner.

#### **Arnold Water Treatment Plant**

Anne Arundel County, MD

Provided part-time construction inspection/management services for miscellaneous repairs and modifications at this treatment plant from 1999-2001. He also provided full-time inspection from 1996-1999. His duties included inspection of the construction for the \$8M water treatment facility upgrade in the areas of structural, mechanical, and electrical work for compliance with the contract plans and specifications. Interpret contract drawings and specifications, conduct job progress meetings, evaluate and initiate contract change orders, validate contractor pay requests, and attend pre-bid and pre-construction meetings. He was also on-site, full-time, as a liaison

between the general contractor and the owner, carrying out the responsibilities of a construction manager.

#### **Elevated Water Storage Tank**

Stafford County, VA

Provided part-time construction inspection for the construction of a 1.5-MG elevated water storage tank, Stafford County, Virginia. His duties included inspection of construction in the areas of concrete/structural, mechanical, and electrical work for compliance with the contract plans and specifications.

#### **Road Operations Facility Compliance**

Anne Arundel County, MD

Provided full-time inspection/management services for the Road Operations Facility Compliance. His duties included inspection of construction in the areas of concrete/structural, mechanical and site work for compliance with the contract plans and specifications. He interpreted contract drawings and specifications, conducted pre-construction and job progress meetings, evaluated and initiated contract change orders, and validated contractor pay requests. He was on-site full time as a liaison between the general contractor and the owner. He also carried out responsibilities of a construction manager.





# Shantanu Dandane

## Buildings/Structural

Mr. Dandane is a Structural Engineer with a Master of Civil Engineering (structures) degree from the University of South Florida. He has experience in building and beam design; tunnel corrosion evaluation; and the use of design software including Auto-Computer Aided Design, REVIT, ETABS, RISA 3D, Life 365, Structural Analysis and Design -Pro, ANYSIS, and System Applications and Products in Data Processing 2000. He is familiar with design standards such as American Society of Civil Engineers 7-10, American Concrete Institute 318, American Association of State Highway and Transportation Officials LRFD, PCI Handbook, American Institute of Steel Construction Steel Manual, and Department of Transportation design standards and design manual.

### Education/Qualifications

- MS Civil Engineering University of South Florida 2018
- BCE Civil Engineering Savitribai Phule University of Pune 2015

### Years of Experience

Total – 4  
With Arcadis – 1

### Professional Registration/Certifications

- Engineer Intern (E.I) – FL

### Office Location

### Condition Assessment Services

#### City of Dunedin, Dunedin, FL

Provided structural condition assessment for all the lift stations under the jurisdiction of City of Dunedin. Using the Fulcrum Software inspected and generated report for all the structural assets of each lift station.

### Condition Assessment Services

#### PortMiami, FL

Responsible for structural visual assessment of all the Port Miami cruise terminal, administrative buildings, parking garages and sheds. Assessment was conducted using Fulcrum Application for condition system rating and developing reports.

### Relevant Experience

#### Kuehler Wastewater Treatment Plants (WWTP) Expansion

New Braunfels Utilities, New Braunfels, TX

As part of the WWTP expansion designed the new screening structure and the Aerobic digester basin and the canopy to cover the basin. Provided design support for other structures like secondary treatment unit, grit chambers and tertiary treatment unit.

#### Dessau WWTP detail design

City of Austin Water Utility, Austin, TX

Provide structural design for the Dessau WWTP consisting of headwork structure. Providing support for preparation of contract drawings.

#### Holmes Run Pump Station Rehabilitation

Department of Public Works and Environmental Services, Fairfax County, VA

Designed a new bypass vault, generator platform and monorail extension as part of the pump station rehabilitation. Provided repair method and crack repair approach for areas in the dry well and the wet well. Developed the

technical specification, contract drawings and cost estimate.

#### Savannah Design Engineering

Confidential Client, Atlanta, GA I

Provide structural design for various water retaining structures like Secondary Clarifier Feed Pump Station, Multipurpose Basin, Effluent Tank. Provide support in the preparation of technical specification and cost estimate.

#### Clarifier #4 Rehabilitation

Little Rock Water Reclamation Authority, Little Rock, AR

As a structural engineer provided the design for the rehabilitation of the Secondary clarifier damaged due to upheaving of base slab. Developed the contract drawing and specifications. by using finite element analysis provided an economic repair and rehabilitation design which helped city to save \$3 Million.

#### Sterling Natural Resource Center

East Valley Water District, Highland, CA

Provide construction administrative services – shop drawing review and RFI review for new wastewater treatment facility. Provide structural design review for various structure like chemical treatment facility, headworks, membrane facility.



# Len Sheptock

## Buildings/Structural

Mr. Mr. Sheptock has more than 35 years of professional program, project, construction management, engineering and general contracting experience throughout the Metro U.S. Holding a general contractor's license, Mr. Sheptock brings a fresh perspective to projects, focusing on constructability, overall project costs, materials availability, sequencing of construction, risk management and contracting terms and procurement methodologies. Having experience not only in the water and conveyance markets, but also with schools, healthcare, commercial properties, transit and roadways, Mr. Sheptock can apply the best practices learned on those types of project to the utility industry, incorporating efficiencies and cost saving ideas in areas where traditional designers/constructors might not have imagined.

### Education/Qualifications

- BS Civil Engineering, University of Illinois Construction Management Environmental Engineering Chi Epsilon Honor Society
- BA Biological Sciences Lehigh University

### Years of Experience

Total – 35  
With Arcadis – 15

### Professional Registrations/ Certifications

- Licensed Dual Residential / Commercial General Contractor - AZ
- Program, Project and Construction Management Training; Supervisory Stewardship Training
- Alternate Delivery Methods Training (Design-Bid-Build, Design-Build, Construction Management at Risk)
- OSHA Site Supervisor Safety Training Certification; First Aid, CPR Certification
- US Green Building Council, LEED Corporate Member
- Construction Management Association of America (CMAA) Corporate Member
- Division of State Architects (DSA), FTA Policies and Procedures

### Office Location

Tampa, FL

## Relevant Experience

**Dallas Area Municipal Authority (DAMA) Water Treatment Plant & Force Main Replacement Southeast PA Transportation Authority (SEPTA) Train Station & Electrical Substation PA Dept. of Trans (PADOT) Roadway, Site & Landscape OSHA HAZMAT Remediation.**

**DAMA, SEPTA, PENNDOT , Kingston, PA, Philadelphia, PA; Allentown, PA**

Project manager responsible for coordination and general contracting of municipal capital projects including project participation with city, county and state departments, contract design professionals, consultants and implemented standards. Directed and managed projects which consisted of water treatment facilities, transportation, roadway, site and infrastructure improvements. Construction Value: \$7 Million

**Southern California Edison Capital Improvement Facilities**

**Southern California Edison / Corporate Real Estate, Southern California Region (Rosemead General Offices)**

Senior level program manager responsible for \$125M design-build and design-bid-build capital improvement program including office buildings and tenant improvement spaces, administration / operations buildings, customer service center facilities, maintenance garages, data/operating centers, substations, critical electrical / water facilities, building garages and parking lot EV charger projects. Directed and managed program, project and construction management of planning, design, scheduling, cost control, procurement, client coordination, construction, and closeout phases on multiple projects while managing a support team of multiple project managers, construction managers, project controls and admin/project coordinators. LEED Silver certification for Ground Up California State Polytechnic University Pomona Innovation Village Office Building Facility. Construction Value: \$125 Million



## David Morgan

### Water/Wastewater, Electrical/SCADA Inspection

Mr. Morgan is a construction project management / inspector with more than 30 years of construction and operations experience. Areas of expertise include construction/project management, treatment plant operations, planning, scheduling, claims analysis and project control on projects. He has a proven ability to manage simultaneous demands efficiently. His responsibilities have included developing and updating of schedules, tracking and analyzing project progress, developing and implementing corrective procedures mitigating impacts from construction changes and delays, prepared and analyze reports for project management as needed. As a seasoned operator and supervisor in wastewater treatment, he has been involved with coordinating start-up, troubleshooting, permit compliance and serves as a liaison between the client's operation / maintenance staff and the project engineers.

#### Education/Qualifications

- University of Florida, Michigan State University, Broward CC, California State University, Numerous computer application courses, supervisory courses and safety courses

#### Years of Experience

Total – 30

With Arcadis – 9

#### Professional Registrations/Certifications

- ACI Concrete Field Test Tech-1
- Ground Water Prof
- Cert Prof Erosion and Sediment
- Certified Wastewater Treatment Plant Operator
- Standard First Aid Cert

#### SR 527 Improvements

##### Orlando Utilities Commission, FL

The scope of this work includes the installation, disinfection and commissioning of 20-inch, 16-inch, 12-inch and smaller water main piping, to include service connections. Also, electrical improvements include various medium voltage distribution electrical duct banks with conduits of varying quantities, sizes and lengths, splicing manholes, and branch out electrical duct banks. The project provided streetscaping along a specified portion of SR 527.

#### Relevant Experience

##### PS Electrical Panel/SCADA Upgrades

##### Hillsborough County, Public Utilities Department, Tampa, FL

Field inspection, site layouts, design, Tampa Electric Company coordination, construction site inspection, startup, testing and troubleshooting, as-built sketches, asset management and closeout for a \$2.3M SCADA upgrade to approximately 270 Countywide wastewater pumping stations including but not limited to the replacement of existing control panels with single combination Remote Terminal Unit/Motor Control Center and the integration of the pump stations into the existing 220 MHz radio network and SCADA system. In addition, some pump stations require additional civil, mechanical, and safety upgrades to bring them up to current industry standards.

##### Broadwater Wastewater Reclamation Facility, Enhanced Nutrient Removal Phase 2 Upgrade - 2016

##### Anne Arundel County, Annapolis, MD

Chief resident inspector for a \$5.5M wastewater facility

expansion/upgrade project. Coordinate daily construction activities with owner, contractor, engineers, and special inspectors. Maintenance of daily reports, measurements, calculations and computation of quantities. Ensuring conformance with contract documents and make recommendations to project manager concerning acceptance. Performance of daily inspection and documentation of construction activities, including those of subcontractor activities. Reviewing project schedules, schedules of shop drawing submittals and schedules of values prepared by contractor including applications of payment. SCADA integration of new equipment. Resolve conflicts and provide solutions in a professional manner to the satisfaction of our client. Utilize construction management software Primavera 13.

##### Harford County Sod Run Solids Handling Harford County, Perryman, MD

Chief resident inspector for a \$4.3M Biosolids Dewatering Upgrade project. Provide inspection and documentation services on behalf of the owner. Coordinate daily construction activities with owner, contractor, engineers, and special inspectors.



**Sod Run WWTP Biosolids Dewatering System Upgrade**

Harford County, Department of Public Works,  
Aberdeen, MD

Chief resident inspector for a \$4.3 million Biosolids Dewatering Upgrade project. Provide inspection and documentation services on behalf of the owner. Coordinate daily construction activities with owner, contractor, engineers, and special inspectors.

**Maryland City Expansion CM-201**

Anne Arundel County,  
Annapolis, MD

Chief resident inspector on a \$30M wastewater treatment expansion project. Utilize testing procedures inspection protocols, construction techniques and perform quality assurance on behalf of clients and owners. Observe, inspect and document construction work performed by others. Verify that all work is installed per contract requirements. Assist resident engineer or construction manager with contract administration activities. Read and analyse blueprints. SCADA integration of new equipment and processes.

**SC 932 - Improvements to LWR Gwynns Run Interceptor**

City of Baltimore, Baltimore, MD

Civil/utility construction inspection of the tunneling and CIPP lining installation of approximately 2,550 LF of 30-inch interceptor sanitary sewer, 48 to 60-inch steel casing, access manholes, bellmouth structure, bypass pumping.

**Baltimore City SC 875 Rehabilitation/Replacement of Southwest Diversion Pressure/Gravity Sewer Phase 3**

City of Baltimore, Baltimore, MD

Civil/utility construction inspector for the Baltimore City SC 875 rehabilitation/replacement of the Southwest Diversion Pressure/Gravity Sewer Phase 3.

**WC 1240 Water**

City of Baltimore, Baltimore, MD

Civil/utility construction inspector for the Baltimore City WC 1255 and WC 1240 project water meter setting installations and water main replacement throughout various locations within Baltimore City.

**Baltimore City WC1255**

City of Baltimore, Baltimore, MD

Civil/utility construction inspector for the Baltimore City WC 1255 and WC 1240 project water meter setting installations and water main replacement throughout various locations within Baltimore City.

**Fort Meade Reclaimed Water Project - Year 2014**

Howard County, MD, Columbia, MD

Mechanical/utility construction inspector on a \$30 million reclaimed water project. The project consists of constructing a 5-mgd reclaimed water pump station including a diversion structure and a 1 MG elevated water storage tank with disinfection, 24-inch raw water line and a 20-inch transmission main, new electrical service with ATS to a standby diesel generator and a complete automated control system.



## Tim Ware, PE

### Water/Wastewater Design and Start-Up

Mr. Ware has 19 years of experience as an Engineer, Project Manager, Operator and Facility Manager for water and wastewater collection and treatment systems. Prior to a career in consulting, he worked within municipalities and in contract operations evaluating, operating, and managing large water and Wastewater Treatment Plants (WWTPs), collection systems and pumping stations. He has successfully completed over 40 projects worth \$7.4 million through continuing engineering services contracts as a project manager since coming to Arcadis. He has experience working with facilities within Florida and throughout the U.S. on a wide variety of tasks and projects. He is a professional engineer in Florida and holds a Florida Wastewater Operator B license.

#### Education/Qualifications

- MS Environmental Engineer University of South Florida 2011
- BS Civil Engineering University of South Florida 2006

#### Years of Experience

Total – 19  
With Arcadis – 8

#### Professional Registrations/Certifications

- Professional Engineer – FL
- Certified Wastewater Treatment Plant Operator

#### Office Location

Tampa, FL

#### Howard F Curren Advanced Wastewater Treatment Plant City of Tampa, Tampa, FL

Plant manager responsible for the day-to-day operations of a 96-mgd Advanced Wastewater Treatment Plant and 223 sewage pumping stations including the San Carlos PS. Facilitated the development of 150 technical and professional staff members that work at the plant and pump stations. Interacted with Local, State and Federal regulators to ensure compliance with all NPDES permits. Plant processes include BNR using high purity oxygen, nitrification and denitrification, anaerobic digesters, and heat drying.

#### Relevant Experience

##### Central Plant Return Activate Sludge (RAS) / Waste Activate Sludge (WAS) Replacement Indian River County, Vero Beach, FL

Project manager for the design and installation of a new rotary drum thickener and the replacement of all RAS and WAS pumps for the County's Central WWTP. Oversaw the design of the improvements and provided support during construction.

##### Boyette Reservoir Algae Study Pasco County, Wesley Chapel, FL

Project manager for the evaluation and selection of an appropriate solution to resolve a problem with algae in a reservoir. Pasco County owns and operates the 500 million-gallon Boyette Reclaimed Water Reservoir. The reservoir experiences seasonal algae blooms that are difficult to control. Arcadis evaluated chemical, mechanical, operational and passive solutions to help reduce the impact on operations staff and equipment.

##### Pump Station Condition Assessment City of Dunedin, Dunedin, FL

Project manager overseeing the inspection and evaluation of the city's

43 sanitary lift stations. Project included field inspections, condition assessments, electrical tool with dashboard development and final report for use in CIP developments by the City. Electronic tool was developed to serve as the repository of city data for all their lift stations.

##### Pump Station and Force Main Master Plan City of Plant City, Plant City, FL

Project manager to complete a condition assessment and process evaluation for the City of Plant's pump station and force main system. The City's system has 43 lift stations and more than 30-mi of force mains. Review operational and maintenance history as well as field condition assessments to develop a long-term CIP program for the city to make sure long-term operation.

##### Dunn Headworks Improvements Pinellas County, Palm Harbor, FL

Served as technical lead and submittal reviewer for improvements to the existing William Ellsworth Dunn WRF headworks. The project included rehabilitating the existing piping feeding into the headworks from offsite pumping stations, lining the existing gravity pipes discharging from the headworks, cleaning and coating the existing headworks channels, installing new bar screens, and constructing a



# Benjamin Ruppel

## Electrical and SCADA Inspection

Mr. Ruppel is a highly skilled and knowledgeable master electrician with more than 30 years of electrical construction experience. He is highly proficient with the NEC (National Electrical Code), API500 (American Petroleum Institute) and NFPA (National Fire Protection Association) publications for electrical installations. His experience ranges from commercial/industrial facilities, oil field and refinery projects, to wastewater and water treatment plants. His certifications include Master Electrician (State of Maryland), Master Electrician (State of West Virginia), Journeyman Electrician (State of North Dakota), Electrical Contractors License (State of Georgia), NCCER Electrical Certification (National Center for Construction Education and Research), OSHA 30 Certification (Occupational Safety and Health Administration), NFPA 70E certification (National Fire Protection Association), PEC Core Compliance certification (Petroleum Education Council) – 2013, ISPC certification (Institute for Safety in Powerline Construction), H2S Training Certification, and Safeland Training Certification – 2016.

### Education/Qualifications

- Associated Builders & Contractors – 4 year apprenticeship September 1996 – May 2000
- Western School of Technology – Vocational Training June 1991 – June 1993

### Years of Experience

Total – 28

### Professional Registrations/Certifications

- Master Electrician License – MD, WV
- Journeyman Electrician License – ND
- Electrical Contractor License – GA
- NCCER Electrical Certification (National Center for Construction Education and Research)
- OSHA 30 certification (Occupational Safety and Health Administration)
- NFPA 70E certification (National Fire Protection Association)
- PEC Core Compliance certification (Petroleum Education Council)

### Office Location

Atlanta, GA

### Cobb County Water System, Influent Lift Station Rebuild Cobb County, GA

Provide QA/QC and inspections of electrical systems and equipment during the rebuilding phase of a 210' deep wastewater influent lift station project. Ensure adherence

### Relevant Experience

with NEC & API-500 standards, project scope & specifications, and conformed contract drawing. Inspect medium voltage motors and VFDs up to 1500 HP 4.1 KV, sodium hypochlorite & sodium bisulfite system, instrumentation and electrical controls, HVAC and odor control systems, and plant operated SCADA and PLC systems. Provide inspection reports to owner representative to resolve electrical deficiencies and recommendations for system upgrades. Assist with startup activities by navigating SCADA system for duty and drain pumps motor operation and monitor equipment vibration, temperature, and flow rates. Provide hands on testing of motor and cable insulation, fault analysis and load calculations.

### Birmingham Water Works, Shades Mountain Filter Project Birmingham, AL

Provide inspection and QA/QC of electrical systems and equipment for new drinking water filtration facility. Assist with loop checks and navigation of SCADA system to

operate valves and actuators to ensure proper feedback and operation. Compile inspection reports to highlight electrical deficiencies that need to be addressed. Provide recommendations for proper installation techniques and product selection of electrical materials.

### McKay Bay Waste to Energy Facility Tampa, FL

Assist Arcadis electrical engineering team with field data collection of electrical distribution equipment for power system analysis. Utilize arc flash PPE to open energized electrical equipment to obtain feeder and overcurrent protection device data. Compile any noted NEC code violations to review with client.

### Miami Dade Condition Assessment Miami, FL

Provide overall condition assessment of electrical systems and equipment for future capital improvement projects. Record data using Fulcrum software and highlight any NEC code violations that need to be addressed.





#### Education/Qualifications

- BS Electrical Engineering  
Virginia Commonwealth  
University 2004

#### Years of Experience

Total – 17  
With Arcadis - 9

#### Professional Registrations/ Certifications

- Professional Engineer – FL,  
GA, PR
- Certified Construction Document  
Technologist (CDT)

#### Office Location

Tampa, FL

#### Picayune Strand Restoration Project

South Florida Water Management  
District, Naples, FL

The Picayune Strand Restoration Project scope included the development of plans and specifications and engineering services during construction for three flood control pump stations totaling 4,780 cubic feet per second capacity as part of the SFWMD Acceler8 program. Mr. Battle's scope of work included producing both electrical and I&C detailed contract drawings, schematics, project specifications and construction cost estimate documentation. During construction, Mr. Battle conducted walkdowns of facility systems with contractor staff to observe progress and conformity

## Eric Battle, PE, CDT

### Electrical/SCADA Design

Mr. Battle is a senior electrical engineer with extensive and varied experience in the analysis, design and services during construction of power distribution systems, facility systems, power system analysis calculations, as well as I&C systems and SCADA. He has gained skills through the design, bidding, procurement, and construction management of many water and wastewater facility projects and upgrades. He demonstrates strong relationship management and communication skills with the ability to network and team with project managers, peers, clients, vendors and contractors. Mr. Battle is resourceful, analytical, and detail driven on every project, no matter the scale, with a goal to provide his clients with the best possible service and products.

### Relevant Experience

to the contract documents. Systems designed and inspected include Electrical distribution system including Diesel Generators, Brackett Green Traveling Bridge Screens, Duperon Screens, Diesel Pumps, Cooling Water Systems, Lubricating Water Systems, Exhaust and Supply Fans, Lube Oil Systems, Lightning Protection Systems, Fire Detection and Alarming Systems and Access Control Systems, SCADA.

#### William E. Dunn Water Reclamation Facility Headworks Pinellas County, Palm Harbor, FL

Project electrical/I&C engineer for the design and construction to replace the existing screens and implement improvements to the headworks for better inorganic solids removal. The system included power distribution modifications, variable frequency drive (VFD) driven influent mechanical bar screens, automated compactors, new programmable logic controllers (PLCs) and integration into the facility's existing SCADA system. Construction administration services included both electrical and I&C support for RFI's, submittal reviews, performance testing and documentation, etc.

#### Albert Whitted Water Reclamation Facility Influent Pump Station City of St. Petersburg, St. Petersburg, FL

Associate electrical engineer. Duties include electrical design of 30-mgd submersible pumping capability, new 30-mgd coarse bar screen equipment with conveyor system, and fine screenings compactor units at existing headworks.

#### Hillsborough County: Pump Station Electrical/SCADA Upgrades Phase II Tampa, FL

Electrical/I&C design engineer for the \$18-million rehabilitation and installation of the new SCADA control systems for 326 existing and new pump stations. The project included the installation of new control panels, underground raceway systems and power systems for the pump stations upgrades. Duties included general construction phase engineering services, inspections, as well as startup and testing.



# Lia Dombroski, EIT

## Utility/Pipeline/Stormwater Inspection

Ms. Dombroski has 5 years of civil and environmental engineering experience serving municipal and government clients in the water and wastewater industry. She has assisted in planning, condition assessments of large-scale infrastructure including water and wastewater treatment and distribution systems, renewable energy facilities, and port facilities. She has also been heavily involved in planning efforts as well as report writing focusing on local legislation, capital improvement programs, financial obligations, as well as construction oversight, including water and wastewater conveyance systems, paving, drainage, and roadway design.

### Education/Qualifications

- BS SUNY College of Environmental Science & Forestry Environmental Engineering

### Years of Experience

Total – 5  
With Arcadis – 4

### Professional Registration/Certifications

- Engineering Intern – FL

### Associations

- Water Environment Federation (WEF)
- Florida Water Environment Association (FWEA)
- American Water Works Association (AWWA)

### Office Location

Plantation, FL

### Pump Station A-16 Upgrades

City of Fort Lauderdale,  
Fort Lauderdale, FL

Lead inspector providing construction management services for the installation of approximately 2,000 LF of 30-inch HDPE watermain and 3,000 LF of 10-inch HDPE force main along SE 3rd Avenue. This project is part of the relocation of the A-16 Pump Station on SE 11th Street. The project includes two horizontal directional drilling (HDD) segments under the Tarpon River.

## Relevant Experience

### Financial Consulting and Bond Engineering Services

Water and Sewer Department (WASD), Miami-Dade County, FL

Provided bond engineer consulting services for the largest water and wastewater utility in the Southeastern U.S., which serves nearly 2.3 million people each day, through the development of Miami-Dade WASD Bond Consultant's Reports for fiscal years 2015 through 2018. Organized and conducted inspections of water and wastewater infrastructure including water treatment facilities, wellfields, water storage and remote pumping facilities, wastewater treatment facilities, and wastewater pumping stations. Analyzed data in asset management software, Orion, AssetHound, and Fulcrum, to generate facility inspection reports elaborating on the physical and operating conditions of system components. Coordinated with WASD staff and operators to process and communicate data relating to water and wastewater parameters, current flows, and future flow projections. Incorporated information into reports which highlight the

adequacy of the Department's capital improvement program, the adequacy of the renewal and replacement funding, the condition and operations of water and wastewater facilities, and the Department's compliance with bond covenants to debt service and other financial conditions.

### FEMA Hazard Mitigation Grant Program Services

Water and Sewer Department (WASD), Miami-Dade County, FL

Served a lead role in developing Federal Emergency Management Agency (FEMA) Hazard Mitigation Grant Program (HMGP) Application No. 1 and Application No. 2 to provide WASD with adequate funding for infrastructure improvement projects protecting facilities from storm surge and extreme precipitation events. Weighed selection criteria including pump station flow capacities, service populations, hazard risks, and facility vulnerability to environmental impacts to strategically select pump stations in which to incorporate system hardening. Collaborated with WASD staff, facility operators, and interdisciplinary experts to establish the scope of work for each grant to the pumping stations serving the Department's extensive wastewater collection and transmission system. Created agendas, attended client meetings, communicated HMGP

requirements and adaptation methodologies, drafted meeting summary notes, and delegated tasks to project team members. Developed individual project cost estimates and benefit cost analyses to provide FEMA with calculated evidence supporting pump station improvements. The successful completion of HMGP Applications No. 1 and No. 2 resulted in the issuance of approximately \$27M in federal funding for the Department to implement the projects laid forth in the respective applications and improve the resilience of the system.

### **AWIA Risk & Resilience Assessments**

#### **Puerto Rico Aqueduct and Sewer Authority, Puerto Rico**

Led as the assistant project manager for the America's Water Infrastructure Act (AWIA) Risk and Resilience Assessments project for the Puerto Rico Aqueduct and Sewer Authority (PRASA). Managed a team of experts to conduct RRAs and ERPs for PRASA's five large water systems serving a total population of approximately 1.4M. Facilitated workshops with internal client stakeholders to identify PRASA's minimum acceptable water system missions, critical system facilities and assets, and relevant threats. Organized, scheduled, and conducted critical facility site visits, including reservoirs, dams, intakes, WTPs, pump stations, storage tanks, and administrative support buildings, to assess existing protective measures and facility resilience. Collaborated with PRASA staff to develop threat likelihood, consequence, and vulnerability analyses. Oversaw and assisted project team members in populating risk models to assess risk and resilience profiles of the large water systems. Drafted risk and resilience reports and generated risk reduction/increased resilience strategies for inclusion in the large community water system RRAs.

### **AWIA Risk & Resilience Assessment**

#### **City of Hollywood, Hollywood, FL**

Served as the lead engineer for the City of Hollywood AWIA Risk and Resilience Assessment. Followed the AWWA J100-10 Standard Risk and Resilience Assessment Methodology, which has been endorsed by USEPA, to conduct a risk assessment of the physical and cyber assets of the City's water system. Oversaw project management activities and collaborated with the City and internal team members to schedule meetings, issue requests for information, prepare materials, facilitate workshops, develop meeting minutes, and provide project status updates. Worked with internal stakeholders to identify critical facilities, assets, and threats, as well as the consequences and vulnerability of the water system to such threats. Conducted site visits inspecting critical facilities including elevated water tanks, ground storage tanks, and the water treatment facility including the WTP's deep injection wells. Developed a risk and resilience profile (financial and operational) of the water system and drafted results and recommendations to improve the City's understanding and preparedness for potential natural and malevolent hazards.





## Jeff Luetjen

### Civil/Utility/Pipeline Inspection

Mr. Luetjen has 34 years of experience performing all types of utility project inspections, including water, wastewater, reclaimed water, stormwater, and roadway improvement type projects. Prior to joining Arcadis, Mr. Luetjen worked directly for the Sarasota County Utilities Department.

### Relevant Experience

#### Education/Qualifications

- High School Diploma

#### Years of Experience

Total – 34

With Arcadis – 1

#### Professional Registrations/ Certifications

- Advanced Maintenance of Traffic
- Earthworks Level 1 and 2
- Concentrated Course in Construction Contracts
- Practical Construction Law
- Asphalt Inspection / Maintenance
- Bloodborne Pathogens
- Pipeline Installation
- Kennedy Valve Product Seminar
- Trenching and Excavation Safety
- Introduction to Blueprint Reading

#### Office Location

Sarasota, FL

#### Construction Phase Support Services for Water Main Replacement

##### City of Tampa / Tampa, FL

City of Tampa Construction Phase Support Services for Water Main Replacement project for the Water Department. Full-time Senior Inspector to support the City of Tampa CAD CMD Team for approximately six months. Inspection services included: daily site inspections confirming

work was in compliance with City standards; daily reports; and measurement for payment of work-in-place during installation of new valves and fire hydrants throughout the City of Tampa area by Dallas 1.

#### Cocoanut Avenue Force Main Replacement Project

##### City of Sarasota / Sarasota, FL

Cocoanut Avenue Force Main Replacement Project for the City of Sarasota, FL. Project involved installation of over 10,000 feet of 24-inch force main, including 5,000 feet by HDD, as well as construction sequencing through downtown Sarasota to accommodate activity schedules, railroad crossing design, and trenchless installation on the wastewater treatment facility to connect the new force main to the headworks. Phase I which has been completed consists of 405 feet of 36-foot steel casing with 1040-foot of 24-inch C-905 PVC FM installed through the

casing and direct bury and 1310 feet of 30-inch DR-11 HDPE installed by HDD.

#### Kings Point Potable Water Valve Replacement and Installation Project

##### County of Hillsborough / Hillsborough, FL

Kings Point Potable Water Valve Replacement and Installation Project for the County of Hillsborough, FL. Inspection services included: performing daily site inspections; confirmation of work completed in compliance with County standards; daily reports; and measurement for payment of work-in-place during the installation of 116 new/replacement valves and 15 fire hydrant replacements.

#### South Pasco Caustic

##### Tampa Bay Water / Tampa, FL

Mr. Luetjen will be performing pre-construction reviews.



# Bryce Kaufman

## Civil/Utility/Pipeline Inspection

Mr. Kaufman has 35 years of experience performing all types of utility project inspections, including water, wastewater, reclaimed water, stormwater, and roadway improvement type projects. Prior to joining Arcadis, Mr. Kaufman worked directly for the City of Sarasota Utilities Department.

## Relevant Experience

### Education/Qualifications

- Associate in Arts Manatee Junior College 1983
- High School Degree Sarasota High School 1981

### Years of Experience

Total – 35

With Arcadis – 2

### Professional Registrations/ Certifications

- Stormwater Management Inspector
- Intermediate MOT Certification
- FDEP Level 1(A) Distribution System Operator, License # 0015740
- FDEP Level A Wastewater Collection Technician

### Office Location

Tampa, FL

### City of Sarasota Utilities Department: Senior Utilities Engineer

#### City of Sarasota, FL

Project manager for the utilities portion of the CIP Projects. Helped design, permit, approve pay application and manage construction for the projects. Some of the major projects are: **(1)** 10th and 14th Streets Roundabout Project. All Utilities are replaced; **(2)** US 41 and Fruitville Road Roundabout Project. All utilities were replaced; **(3)** West Area MURT at Coon Key Project. 2,500-feet of 16-inch water main; **(4)** Cocoanut Avenue

24-inch Force main Replacement Project, Phase I 2,300-feet of 24-inch force main; **(5)** Cocoanut Avenue 24-inch Force Main Replacement Project, Phase 2A, 500-feet of 24-inch force main under railroad; **(6)** Bayfront Force Main Replacement Project, 1,000-feet of 4-inch force main; **(7)** Gulfstream and Ringling 16-inch Water Main Replacement Project, 800-feet of 16-inch water main; **(8)** Main and Orange Roundabout Project. All utilities are replaced; **(9)** 1st Street Streetscape Project. All utilities were replaced.

### City of Sarasota Utilities Department: Utilities Engineer

#### City of Sarasota, FL

Managed all the Development Projects including Utility Construction Permitting, FDOH/FDEP and FDOT Permitting, shop drawing review, easement approval, backflow approval and inspection services. Also served as the Supervisor of Inspection Services for all Utility and CIP Projects.

### City of Sarasota Utilities Department: Engineering Technician

#### City of Sarasota, FL

Surveyed, designed, permitted, provided bidding requirements and inspection for contract and in-house projects. Some of the projects are: **(1)** Golden gate point Watermain Replacement, 12-inch

watermain crossing Gulfstream Avenue; **(2)** 2001 Watermain Replacement Project, various watermain throughout the City; **(3)** Hansen Street Utility Project, water and sewer provided to annexed new properties; **(4)** Siesta Key Utility Project, water replacement and sewer replaced and new lift station design; **(5)** Lift Station 52 Force Main Replacement, 5,000-feet of 12-inch force main replacement; **(6)** Osprey Avenue Force Main, 2,800-feet of 8-inch force main replacement; **(7)** Wastewater Collection, design and modify 4 existing lift stations.

### City of Sarasota Utilities Department: Construction Inspector

#### City of Sarasota, FL

Completed utility cost estimation, sewer cut sheets, Right of Way permitting approval, City forces stake out and design, inspection, and project management for major projects. Some of the major projects are: **(1)** Effluent Transmission Mai, 25 miles of 36-inch RCCP from the plant to Hi-Hat Ranch; **(2)** Wastewater Collection System, various sewer mains replaced and Lift Station 7 replacement; **(3)** Ringling Causeway Force Main replacement, 2 miles of 14-inch force main replacement; **(4)** City Wide Wastewater Replacement Project, various sewer mains and Lift Station 10 rehabilitation.

# About Arcadis

Arcadis is the leading global Design & Consultancy firm for natural and built assets. Applying our deep market sector insights and collective design, consultancy, engineering, project and management services we work in partnership with our clients to deliver exceptional and sustainable outcomes throughout the lifecycle of their natural and built assets. We are more than 35,000 people, active in over 70 countries that generate \$4.2 billion in revenues. We support UN-Habitat with knowledge and expertise to improve the quality of life in rapidly growing cities around the world.

[www.arcadis.com](http://www.arcadis.com)

***Supporting our clients in their quest to become Fit-for-Future.***

*Utilities must plan for unprecedented scenarios while navigating a changing workforce, but where should leaders focus?*

*Use the QR code below to explore the five fundamentals of becoming a fit-for-future water utility and the common thread that unites them.*



**Arcadis. Improving quality of life**



## VENDOR REFERENCE FORM

City of Hollywood Solicitation #:   
Reference for:

RFQ-118-23-JJ  
Arcadis U.S., Inc.

Organization/Firm Name providing reference:

Harford County

Organization/Firm Contact Name:

Steven Schulz, PE

Title: Project Manager

Email:

sdschulz@harfordcountymd.gov

Phone: (410) 683-3300

Name of Referenced Project:

Open End Engineering Services For Water And Wastewater Projects

Contract No: 20-001 / 22-236

Date Services were provided:

Ongoing

Project Amount: NTE \$3.5 Mil

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):

PROVIDED BOTH ENGR DESIGN & CONSTRUCTION MGMT/INSPECTION SERVICES ON NUMEROUS W/WW PROJECTS WITH CONTRACT VALUES TO \$3MILL ON SEWAGE PUMP STATION, WATER BOOSTER STATION AND WWTP FACILITIES

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):

PROFESSIONAL IN PROVIDING VALUE ENGR CPM SCHEDULE ANALYSIS AND MAINTAINING SCHEDULE WITHIN BUDGET & ON TIME COMPLETION

\*\*\*\*THIS SECTION FOR CITY USE ONLY\*\*\*\*

Verified via:	Email:	<input type="checkbox"/>	Verbal:	<input type="checkbox"/>	Mail:	<input type="checkbox"/>
Verified by:	Name:				Title:	
	Department:				Date:	

## VENDOR REFERENCE FORM

City of Hollywood Solicitation #: RFQ-118-23-JJ

Reference for: Arcadis U.S., Inc.

Organization/Firm Name providing reference:

City of Richmond, VA

Organization/Firm Contact

Name:

Bob Stone

Title:

Engineer Manager

Email:

robert.stone@rva.gov

Phone: (804) 646-8661

Name of Referenced Project:

CM Services Chimborazo3/CSO4 Project

Contract No: 21000001237

Date Services were provided:

Ongoing

Project Amount: \$17,392,050

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):

Provides CM services, Contract Administration, and Resident Inspection for City of Richmond, VA Wastewater Treatment Plant and CSO Projects.

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):

ARCADIS HAS BEEN PROVIDING CONSTRUCTION MANAGEMENT/INSPECTION SERVICES TO RICHMOND DPU SINCE 2008. THEY HAVE SUCCESSFULLY MANAGED NUMEROUS COMPLEX PROJECTS AT THE WASTEWATER PLANT AND OTHER LOCATIONS.

\*\*\*\*THIS SECTION FOR CITY USE ONLY\*\*\*\*

Verified via:	Email:	<input type="checkbox"/>	Verbal:	<input type="checkbox"/>	Mail:	<input type="checkbox"/>
Verified by:	Name:				Title:	
	Department:				Date:	

## VENDOR REFERENCE FORM

**City of Hollywood Solicitation #:** RFQ-118-23-JJ  
**Reference for:** Arcadis U.S., Inc.

**Organization/Firm Name providing reference:** Schneider Electric

**Organization/Firm Contact Name:** John Barta **Title:** Operations Manager

**Email:** John.Barta@SE.com **Phone:** (972)323-3053

**Name of Referenced Project:** Engineering & CM Services For Water And Wastewater Projects **Contract No:**

**Date Services were provided:** Ongoing **Project Amount:** multiple contracts

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

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

<b>Description of services provided by Vendor (provide additional sheet if necessary):</b>
Provides CM services to progressive design build wastewater projects/cost control.

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"/>

<b>Additional Comments (provide additional sheet if necessary):</b>
Overall Arcadis has been a fantastic partner and very easy to deal with and we will be selecting them for future work when presented.

<b>****THIS SECTION FOR CITY USE ONLY****</b>					
<b>Verified via:</b>	<b>Email:</b>	<input type="checkbox"/>	<b>Verbal:</b>	<input type="checkbox"/>	<b>Mail:</b> <input type="checkbox"/>
<b>Verified by:</b>	<b>Name:</b>				<b>Title:</b>
	<b>Department:</b>				<b>Date:</b>

## Form 14

### LIST OF SUBCONTRACTORS

The Respondent shall list below the name and address of each Subcontractor who will perform work under this Contract, and shall also list the portion of the work which will be done by such Subcontractor. After the opening of Submittals, changes or substitutions will be allowed with written approval of the City of Hollywood. Subcontractors must be properly licensed.

	<b>Work to be Performed</b>	<b>Subcontractor's Name / Address</b>
1.	<hr/> Electrical and Controls <hr/>	<hr/> McKim & Creed / 3903 Northdale Blvd, Suite 1153, Tampa FL 33624 <hr/>
2.	<hr/> Survey <hr/>	<hr/> Stoner & Associates Inc. / 4341 SW 62nd Ave, Davie, FL 33314 <hr/>
3.	<hr/> <hr/>	<hr/> <hr/>
4.	<hr/> <hr/>	<hr/> <hr/>
5.	<hr/> <hr/>	<hr/> <hr/>
6.	<hr/> <hr/>	<hr/> <hr/>
7.	<hr/> <hr/>	<hr/> <hr/>
8.	<hr/> <hr/>	<hr/> <hr/>
9.	<hr/> <hr/>	<hr/> <hr/>
10.	<hr/> <hr/>	<hr/> <hr/>

NOTE: Attach additional sheets if required.

- END OF SECTION -





# CERTIFICATE OF LIABILITY INSURANCE

DATE(MM/DD/YYYY)  
09/22/2022

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

**IMPORTANT:** If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

<b>PRODUCER</b> Aon Risk Services South, Inc. Franklin TN Office 501 Corporate Centre Drive Suite 300 Franklin TN 37067 USA	<b>CONTACT NAME:</b>	
	<b>PHONE (A/C. No. Ext):</b> (866) 283-7122	<b>FAX (A/C. No.):</b> 800-363-0105
<b>INSURED</b> Arcadis U.S., Inc. 630 Plaza Drive Suite 200 Highlands Ranch CO 80129 USA	<b>E-MAIL ADDRESS:</b>	
	<b>INSURER(S) AFFORDING COVERAGE</b>	
	<b>NAIC #</b>	
	<b>INSURER A:</b> Hartford Fire Insurance Co.	19682
	<b>INSURER B:</b> Hartford Casualty Insurance Co	29424
	<b>INSURER C:</b> Hartford Accident & Indemnity Company	22357
<b>INSURER D:</b> Twin City Fire Insurance Company	29459	
<b>INSURER E:</b>		
<b>INSURER F:</b>		

Holder Identifier :

**COVERAGES****CERTIFICATE NUMBER:** 570095470055**REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

Limits shown are as requested

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	<input checked="" type="checkbox"/> <b>COMMERCIAL GENERAL LIABILITY</b>			20ECSOL5318 SIR applies per policy terms & conditions	10/01/2022	10/01/2023	EACH OCCURRENCE	\$1,000,000
	<input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence)	\$1,000,000
	<input checked="" type="checkbox"/> Contractual Liability						MED EXP (Any one person)	\$10,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						PERSONAL & ADV INJURY	\$1,000,000
	<input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input checked="" type="checkbox"/> LOC						GENERAL AGGREGATE	\$2,000,000
	OTHER:						PRODUCTS - COMP/OP AGG	\$2,000,000
A	<b>AUTOMOBILE LIABILITY</b>			20 UEN OL5319	10/01/2022	10/01/2023	COMBINED SINGLE LIMIT (Ea accident)	\$1,000,000
	<input checked="" type="checkbox"/> ANY AUTO						BODILY INJURY (Per person)	
	<input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> NON-OWNED AUTOS ONLY						BODILY INJURY (Per accident)	
	<input type="checkbox"/> HIRED AUTOS ONLY						PROPERTY DAMAGE (Per accident)	
B	<input checked="" type="checkbox"/> <b>UMBRELLA LIAB</b>	<input checked="" type="checkbox"/>	OCCUR	20XHUOL5322	10/01/2022	10/01/2023	EACH OCCURRENCE	\$5,000,000
	<input type="checkbox"/> <b>EXCESS LIAB</b>		CLAIMS-MADE				AGGREGATE	\$5,000,000
	DED <input checked="" type="checkbox"/>	RETENTION \$10,000						
C	<b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b>			20WNOL5323	10/01/2022	10/01/2023	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTHER	
D	ANY PROPRIETOR / PARTNER / EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH)	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	N/A	AOS	10/01/2022	10/01/2023	E.L. EACH ACCIDENT	\$1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below			20WPROL5321			E.L. DISEASE-EA EMPLOYEE	\$1,000,000
				MA, WI			E.L. DISEASE-POLICY LIMIT	\$1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)  
Evidence of Insurance.

**CERTIFICATE HOLDER****CANCELLATION**

Arcadis U.S., Inc. 630 Plaza Drive, Suite 200 Highlands Ranch CO 80129 USA	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE  <i>Aon Risk Services South Inc.</i>

Certificate No : 570095470055



# CERTIFICATE OF LIABILITY INSURANCE

DATE(MM/DD/YYYY)  
06/23/2023

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

<b>PRODUCER</b> Aon Risk Services South, Inc. Franklin TN Office 501 Corporate Centre Drive Suite 300 Franklin TN 37067 USA	<b>CONTACT NAME:</b> <b>PHONE</b> (A/C. No. Ext): (866) 283-7122 <b>FAX</b> (A/C. No.): (800) 363-0105 <b>E-MAIL ADDRESS:</b>														
<b>INSURED</b> Arcadis U.S., Inc. 630 Plaza Drive Suite 200 Highlands Ranch CO 80129 USA	<table><tr><td><b>INSURER(S) AFFORDING COVERAGE</b></td><td><b>NAIC #</b></td></tr><tr><td>INSURER A: Indian Harbor Insurance Company</td><td>36940</td></tr><tr><td>INSURER B:</td><td></td></tr><tr><td>INSURER C:</td><td></td></tr><tr><td>INSURER D:</td><td></td></tr><tr><td>INSURER E:</td><td></td></tr><tr><td>INSURER F:</td><td></td></tr></table>	<b>INSURER(S) AFFORDING COVERAGE</b>	<b>NAIC #</b>	INSURER A: Indian Harbor Insurance Company	36940	INSURER B:		INSURER C:		INSURER D:		INSURER E:		INSURER F:	
<b>INSURER(S) AFFORDING COVERAGE</b>	<b>NAIC #</b>														
INSURER A: Indian Harbor Insurance Company	36940														
INSURER B:															
INSURER C:															
INSURER D:															
INSURER E:															
INSURER F:															

**COVERAGES** **CERTIFICATE NUMBER:** 570100229825 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS.

Limits shown as requested

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
	<b>COMMERCIAL GENERAL LIABILITY</b> <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR  GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:						EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	
	<b>AUTOMOBILE LIABILITY</b> <input type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> NON-OWNED AUTOS ONLY						COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	
	<b>UMBRELLA LIAB</b> <input type="checkbox"/> OCCUR <b>EXCESS LIAB</b> <input type="checkbox"/> CLAIMS-MADE DED <input type="checkbox"/> RETENTION						EACH OCCURRENCE AGGREGATE	
	<b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b> ANY PROPRIETOR / PARTNER / EXECUTIVE OFFICER/MEMBER (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below Y/N <input type="checkbox"/> N/A						PER STATUTE <input type="checkbox"/> OTH-ER <input type="checkbox"/>	
A	Contractors Pollution Liabil			US00101061E023A Professional & Pollution SIR applies per policy terms & conditions	06/01/2023	06/01/2024	Each Claim Annual Aggregate	\$5,000,000 \$5,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)  
For Professional Liability and Pollution Liability coverage, the Aggregate Limit is the total insurance available for claims presented within the policy period for all operations of the insured. The Limit will be reduced by payments of indemnity and expense.

## CERTIFICATE HOLDER

Arcadis U.S., Inc. 630 Plaza Drive, Suite 200 Highlands Ranch CO 80129 USA	<b>CANCELLATION</b> SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.  AUTHORIZED REPRESENTATIVE  <i>Aon Risk Services South Inc.</i>
--	---

Holder Identifier :

570100229825

Certificate No :





# ADDITIONAL REMARKS SCHEDULE

AGENCY Aon Risk Services South, Inc.		NAMED INSURED Arcadis U.S., Inc.	
POLICY NUMBER See Certificate Number: 570100229825		EFFECTIVE DATE:	
CARRIER See Certificate Number: 570100229825	NAIC CODE		

## ADDITIONAL REMARKS

THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,

FORM NUMBER: ACORD 25 FORM TITLE: Certificate of Liability Insurance

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER	
INSURER	
INSURER	
INSURER	

## ADDITIONAL POLICIES

If a policy below does not include limit information, refer to the corresponding policy on the ACORD certificate form for policy limits.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YYYY)	POLICY EXPIRATION DATE (MM/DD/YYYY)	LIMITS	
	OTHER							
	<input checked="" type="checkbox"/> Claims-Made							
	<input checked="" type="checkbox"/> Pollution Liability							
	<input checked="" type="checkbox"/> and Contractors							
	<input checked="" type="checkbox"/> Professional Liability							

## PROPOSAL

TO THE MAYOR AND COMMISSIONERS  
CITY OF HOLLYWOOD, FLORIDA

SUBMITTED October 2, 2023

Dear Mayor and Commissioners:

The undersigned, as BIDDER, hereby declares that the only person or persons interested in the Proposal as principal or principals is or are named herein and that no other person than herein mentioned has any interest in this Proposal or in the Contract to be entered into; that this Proposal is made without connection with any other person, company or parties making a Bid or Proposal; and that it is in all respects fair and in good faith without collusion or fraud.

The BIDDER further declares that he has examined the site of the Work and informed himself fully in regard to all conditions pertaining to the place where the Work is to be done; that he has examined the Drawings and Specifications for the Work and contractual documents relative thereto, including the Notice to Bidders, Instructions to Bidders, Proposal Bid Form, Form of Bid Bond, Form of Contract and Form of Performance Bond, General, Supplementary and Technical Specifications, Addenda, Drawings, and Local Preference Program, Exhibit A, and has read all of the Provisions furnished prior to the opening of bids; and that he has satisfied himself relative to the work to be performed.

The undersigned BIDDER has not divulged to, discussed or compared his bid with other bidders and has not colluded with any other BIDDER of parties to this bid whatever.

N/A

If this Proposal is accepted, the undersigned BIDDER proposes and agrees to enter into and execute the Contract with the City of Hollywood, Florida, in the form of Contract specified; of which this Proposal, Instructions to Bidders, General Specifications, Supplementary Conditions and Drawings shall be made a part for the performance of Work described therein; to furnish the necessary bond equal to one hundred (100) percent of the total Contract base bid, the said bond being in the form of a Cash Bond or Surety Bond prepared on the applicable approved bond form furnished by the CITY; to furnish all necessary materials, equipment, machinery, tools, apparatus, transportation, supervision, labor and all means necessary to construct and complete the work specified in the Proposal and Contract and called for in the Drawings and in the manner specified; to commence Work on the effective date established in the "Notice to Proceed" from the ENGINEER; and to substantially complete all Contract Work within \_\_\_\_\_ days with final completion within \_\_\_\_\_ days, and stated in the "Notice to Proceed" or pay liquidated damages for each calendar day in excess thereof, or such actual and consequential damages as may result therefrom, and to abide by the Local Preference Ordinance, Exhibit A.

The BIDDER acknowledges receipt of the any and all addenda.

N/A

And the undersigned agrees that in case of failure on his part to execute the said Contract and the Bond within ten (10) days after being presented with the proscribed Contract forms, the check or Bid Bond accompanying his bid, and the money payable thereon, shall be paid into the funds of the City of Hollywood, Florida, otherwise, the check or Bid Bond accompanying this Proposal shall be returned to the undersigned.



N/A

Attached hereto is a certified check on the

\_\_\_\_\_ Bank of \_\_\_\_\_

or approved Bid Bond for the sum of

\_\_\_\_\_ Dollars (\$) according to the conditions under the Instructions to Bidders and provisions therein.

NOTE: If a Bidder is a corporation, the legal name of the corporation shall be set forth below, together with signature(s) of the officer or officers authorized to sign Contracts on behalf of the corporation and corporate seal; if Bidder is a partnership, the true name of the firm shall be set forth below with the signature(s) of the partner or partners authorized to sign Contracts in behalf of the partnership; and if the Bidder is an individual, his signature shall be placed below; if a partnership, the names of the general partners.

WHEN THE BIDDER IS AN INDIVIDUAL:

\_\_\_\_\_

(Signature of Individual)

\_\_\_\_\_

(Printed Name of Individual)

\_\_\_\_\_

(Address)

\*\*\*\*\*

WHEN THE BIDDER IS A SOLE PROPRIETORSHIP OR OPERATES UNDER A TRADE NAME:

\_\_\_\_\_

(Name of Firm)

\_\_\_\_\_

(Address)

\_\_\_\_\_ (SEAL)

(Signature of Individual)

\*\*\*\*\*

WHEN THE BIDDER IS A PARTNERSHIP:

\_\_\_\_\_

(Name of Firm) A Partnership

\_\_\_\_\_

(Address)

By: \_\_\_\_\_  
(SEAL)  
(Partner)

Name and Address of all Partners:

\_\_\_\_\_  
\_\_\_\_\_

\*\*\*\*\*

WHEN THE BIDDER IS A JOINT VENTURE:

\_\_\_\_\_  
(Correct Name of Corporation)

By: \_\_\_\_\_ (SEAL)  
(Address)

\_\_\_\_\_  
(Official Title)

As Joint Venture  
(Corporate Seal)

Organized under the laws of the State of \_\_\_\_\_, and authorized by the law to make this bid and perform all Work and furnish materials and equipment required under the Contract Documents.

\*\*\*\*\*

WHEN THE BIDDER IS A CORPORATION:



Arcadis U.S., Inc.

\_\_\_\_\_  
(Correct Name of Corporation)

By: Leah K. Richter  
(SEAL)

Leah K. Richter, PE / Vice President

\_\_\_\_\_  
(Official Title)

630 Plaza Drive, Suite 200  
Highlands Ranch, CO 80129

\_\_\_\_\_  
(Address of Corporation)

Organized under the laws of the State of Delaware, and authorized by the law to make this bid and perform all Work and furnish materials and equipment required under the Contract Documents.

*Secretary Certificate*  
CERTIFIED COPY OF RESOLUTION OF  
BOARD OF DIRECTORS

Arcadis U.S., Inc.

(Name of Corporation)

RESOLVED that Leah K. Richter, PE

(Person Authorized to Sign)

Vice President of Arcadis U.S., Inc.

(Title) (Name of Corporation)

be authorized to sign and submit the Bid or Proposal of this corporation for the following project:

**[Design, Construction Engineering and Inspection Services]**

**[RFQ-118-23-JJ]**

**Bid No. IFB-xxxxxxx**

The foregoing is a true and correct copy of the Resolution adopted by

*Secretary Certificate describing a Board*  
Arcadis U.S., Inc.

(Name of Corporation)

Directors held on the 24th day of February, 2022

By: Kimberly Farnicki

Title: Assistant Secretary

(SEAL)

The above Resolution MUST BE COMPLETED if the Bidder is a Corporation.



- END OF SECTION -

## SECRETARY CERTIFICATE

I, Kimberly Lasnicki, Assistant Secretary of Arcadis U.S., Inc. (the "Corporation"), a corporation organized under the laws of the State of Delaware, certify that the following is a full and correct excerpt of a resolution adopted by written consent of the Board of Directors of said Corporation, dated February 24, 2022:

*"RESOLVED, the President and each Business Area Director are authorized and empowered, in accordance with the Bylaws and other operating policies and procedures of the Corporation, to enter into proposals for fees and other contracts and obligations in the name and on behalf of the Corporation, upon such terms and conditions as may be agreed upon between the other party or parties and the Corporation, as evidenced by the approval of the President or Business Area Director. The President and Business Area Directors also are empowered to delegate such authority to other employees of the Corporation in such amounts and on such other terms as they shall determine from time to time in accordance with the Bylaws and other operating policies and procedures of the Corporation."*

**AND I DO FURTHER CERTIFY** that pursuant to the above resolution that contracts, amendments, and required documentation for **City of Hollywood Florida Design, Construction Engineering and Inspection Services RFQ-118-23-JJ** may be signed by **Leah Richter** in her capacity a Vice President of the Corporation.

**AND I DO FURTHER CERTIFY** that the above resolution has not been in any way altered, amended or repealed and is now in full force and effect.

**IN WITNESS WHEREOF**, I have signed this Certificate this 28th day of September, 2023.

(SEAL)



Kimberly Lasnicki  
Name: Kimberly Lasnicki  
Title: Assistant Secretary  
Arcadis U.S., Inc.